Bricks have been in use in Kathmandu valley since very ancient times. The Handigaun Satyanarayan Archeological Site, explored by Italian archeologists in 1984-88, has exposed use of bricks in foundation, wall and paving constructions ranging from 1st century BC to 10th century AD. Both the dates have been established by Radiocarbon dating of trapped carbon and thus are 'proven' (Verardi, 1988: p. 181). The other 'proof' that architecture in brick and timber was standard for religious buildings is provided by the record of reconstruction of Matin Devakula issued by Mahasamanta Amshuverma in year 610 AD. In that inscription, we find use of the term *Istaka* for brick and the information that construction of brickwall was done in regular courses, or was 'panktita'.

Classical archeologists used charts and nomograms for comparative studies and draw chronological inferences. Art historians likewise took style as a basis of creating a comparative chronology. Both the methods presume culture as developing in a homogeneous field and as self-transmitting source-recipient change play; for Nepali history, this has meant taking ancient Kathmandu culture as contiguous to the built culture and art style of the Ganges plains. Nothing could be more wrong and misleading than this: when the Jayaverma statue came to light, we talked of use of Gupta script in Nepal centuries before the Gupta Empire was organized in Madhyadesa or see Kusana style or Mathura influence in Kirat works of religious arts. And when Deo dated bricks from Manamanesvori, the first archeological site of Kathmandu, he used the classical approach of comparing with nomogrami obtained from records of archaeological sites of Ganges and placed Structure III there as Late Lichchhavi. If he had used a scientific method (such as radio-carbon dating), he would have found that he had post dated the find by almost 600 years; this is now proven by the bricks from a foundation (HSN S23) from Satyanarayan Site, which are similar in size, finish and location in the cultural layer as those of Manamanesvori Structure III (56x 215-224x 315-330) dated to early Lichchhavi periodⁱⁱ.

The ancient walls found in Satyanarayan are also *panktita istaka* and show that technology of brick construction used by Amshuverma was already developed 700 years before him. As a matter of fact, the actual brickwork in the earliest cultural layer (HSN wall 30/32) in Satyanarayan may date to a still older period than indicated by the test data range of BC 167 – AD 1 for carbon sample. The size of bricks from this wall [35-45 x 170-180 x 260] is such as has not been reported from the valley as well as Ganges plains in ancient period. Nepali historical bricks do not fit into the pattern of development of the Ganges plains and therefore classical method based on size, technology or style nomograms is bound to be unreliable. And comparing style of inscriptions or scripts in inscriptions of Nepal with those in the Ganges plains would be as misleading too.



Jayaverma Statue: Sambat 100 7 Sri paramadeva pka mahArAjesu jayavamma

Inscribed Bricks (Kathmandu Valley):

Most recently, during the reconstruction of the *trayodasabhuvan* of Chabel Chaitya (reputed as Dhammade or Charumati Chaitya), several bricks inscribed with scratched letters were recovered. While one had the scratched design of a Dharmachakra and inscription of '*charuvatithup*' in scratched Brahmi letters, another had a Dharmachakra design flanked by a *Swastika* design on either side and had 'charuvati' scratched in three rows, once in Brahmi and twice in Bhujimol letters. Although the script 'Charuvati' in Brahmi characters led to such 'fantastic yet plausible' interpretations as reported in the media as (a) that the brick belonged to the time when Brahmi script was in common use, or, (b) that Charuvati built the Chaitya, or, (c) that Emperor Ashoka's daughter's marriage to Devapal brought Buddhism to Nepal; and again, quite without logic, the initial excitements in plausibility was felt greatly reduced by the second brick that had the rather late Bhujimol script too vying for space in the same brick; yet these two bricks carry the most telling home truths to researchers: the problem of inscribed brick is not as simplistic as 'reading' alone. The researcher needs to draw inferences on the historicity of





Bricks with "Charuvati" in Brahmi & "Dhandeyana" in Prachalit Newari (From Dhande Chaitya/Hermika)

the brick or the monument from a close study and scrutiny of, not only (a) the nature of script or (b) its transliteration or (c) its message, but also (d) the nature of scribing (eg. scratched before firing or

afterwards and the instrument, cast in mould embossed or recessed into brick, stamped before firing, etc.); (e) purpose of inscription; (f) quality of script; (g) technology of brick making and firing and (h) location and use in the building. There are no quick and easy ways to conclusions and several kinds of specialists would need to be brought to bear the technical burden. Since the record of last repair is provided by another brick find which is very well manufactured and inscribed with *Dhandeyana*' (in the name of *dhande*) in fine letters in *Prachalit Newari* scratched before firing, the other bricks must belong to earlier period of making as well as scratch lettering. The brick with "charuvatithupa" although quite worn out to suggest significant aging despite its good firing, is made of poor quality



An alcove in Hiranyagarbha

mud paste and its one side shows trace 'chikanapa/telia' finish (under the quote of whitewash). Such a finish was used in paving bricks in the Transitional periodⁱⁱⁱ or 10th century^{iv} and its use as cladding bricks (dachiapa) in walls is to be found only from Malla period. It is, thus, more likely a salvage brick from a mid-Malla period building scratch lettered sometime afterwards during a reconstruction. The Chaitya was apparently popular as 'Charuvatithupa' before it became known as 'dande' Chaitya. Its location in the hermika cube, which has gone

through several reconstructions, including the last replacement of *yesti* in 19th century Bikram, must mean that the brick has been reused several times. Tamot's conclusion that this brick is the oldest inscription of Nepal can be hardly accepted at all. We should remind ourselves that ancient stories can be written in ancient bricks from ancient buildings in ancient scripts as much today as in ancient periods; and, the present brick is more likely a late-Malla inscription of a mid-Malla chronicle in an early-Malla brick in pre-Lichchhavi *Brahmi* script. Also, despite the presence of a lot of Jishnu Gupta coins, artifacts from the side alcoves on level with the bottom of *yesti* (and they must belong to the time of construction of the *hiranyagarba* of the Chaitya) did not reveal anything to prove that the current hemisphere of the Chaitya belongs to a period earlier than Malla period.

Different Bricks with Same Inscription?



Maligaon Brick: RagnyAsa..

A badly broken brick (retrieved by myself) from a construction site (1993) about a hundred meters to the south east of Manamanesvori is inscribed with the letters 'ra..mA..', the middle letter looking like 'gnyA' and others following 'mA' lost to the digger's pick. In my estimate, this 2.5" thick brick was about 15" square when intact. Almost ten years earlier, an inscribed brick (15"x 10.5"x 2") had been found in Battisputali by Govind Tandon; and he has read the inscription as 'rAgnyomaradevasya'. Surprisingly, although the size and quality of brick differs, the letters in 'rAgnyomaradevasya' brick and the 'ragnyAmA' brick

are one and the same. This fact was pointed out by Tamot during the Hadigaon Brick Exhibition and clearly, the reading should be the same too. Tamot reads this as 'ragnyAsaradeva' taking cue from the roundness of 'sa'in 'sambat' of Jayaverma statue and is agreeably so. But the size is much different and its use as foundation/ceremonial Istaka for the temple of Lord 'Saradeva' in Managriha (Manesvorarajagriha in full) area could also be surmised. As a matter of fact, it would be quite illogical to imagine that the bricks would be stamped in the name of bygone King by another later on, thus, the stamp would more likely be naming a God.

Although, the making of the brick (use of rice husk or fine straw shreds) and poor firing would suggest that the brick belong to earlier centuries, its use of metal stamp forming embossed letters on the 'cut face' of the brick should indicate a later make. However, the study of bricks from HSN site shows that technical know how of firing bricks was already developed much earlier and the poor baking as well as presence of straw dust/rice husk is probably more to do with its thickness and state of know how. Battisputali brick is baked reddish but so are many other earlier bricks from HSN site; and, this character does not make our brick as of a later date.

The Bricks of Amshuverma

The very first brick with Lichchhavi inscription is the one reported by Thakur Lal Manandhar as found from spot at about fifty meters north of Manamanesvori (in what is

now a school compound) and inscribed with the letters 'mahAsAmantAmshuvermmanah'. These bricks were of size (14''x 9''x 2.5"). During the replacement of a compound wall of a house adjoining the temple plinth in Dabali of Handigaun, several broken bricks with similar inscriptions 'mahAsAmantAmshuvermmanah', 'mahAsAmantAmshuvermmana'



Amshuverma Bricks without letter 'Sri' and with letter "Sri"



and 'SrimahAsAmantamshuvermana' were discovered. These bricks show use of at least three different metal stamps. With size similar to those of Thakurlalji's bricks, most of the bricks were well baked (but some poorly baked ones were also there). Although, the exact building in which these bricks were used cannot be said, the building or built element could well have had a ceremonial purpose and was most certainly at Handigaun. The several types of stamps could well tell that the bricks were made in such quantities as to demand use of several moulds or we are seeing the case of salvage bricks from several different buildings.

For brickwork and bricks, the best dating technique is radio-carbon test, if a piece of carbon can be associated with it. But such chance occurrence is not always to be had. Inscriptions showing datable information (such as name of chronologically established ruler or event) are even more accurate than radio-carbon dates! For such reasons, Amshuverma bricks are dated to the turn of 6-7th century in mid Lichchhavi period.

It is common for epigraphists to date inscription on the basis of comparison with a standard of development, a nomogram of style. As we can hardly take the development of ancient period Nepal as an extension of development of Ganges plains, this nomogram will have to be built internally. To make such a nomogram reliable, the number of occurrences needs to be many more than two. So we can hardly say the two bricks with the same inscriptions and the letter 'sa''s being similar to 'sa' of Jayavermma proves them to be of Verma period. But Verma period itself deserves to be taken seriously as an alternate nomenclature for the period of rule from Vaskerverma to Vrishadev!

King Jayaverma and his palace Madhyama Rajakula

In my book, The Brick and the Bull, I have written why the Nepalese Lichchhavi state should be taken as starting with Bhaskerverma. The palace built by his adopted son Bhumi Dattaverma was called Madhyama Rajakula and was located in the Tangal palace grounds just west of this hall. The fourth ruler in this line was the illustrious Jayaverma, whose statue was discovered in Maligaon in 1994. This statue and its inscriptions have instilled reality into legends and chronicles.

The reading of the inscription became a matter of immediate controversy: it was like a ghost rising from the graves for many who thought Nepali culture was a post Gupta affair, it used 'underdeveloped Gupta script', etc. The first reading given by the

Department of Archaeology was: "Samvat 107 šrī paramadeva...mahäräjesujayavamma". DC Regmi gave a slightly different reading: "Samvat107 šrīparamadeva[añka] mahäräjasyajayavarmma[na:]". SS Rajvamshi and SM Rajvamshi read: 'Samvat 107 šrī pan`cadevapka mahäräjasya jayavarmana". HR Shakya said (in Rajamati), it was: "Samvat 107 šrī paramadeva pka mahäräjasa jayavarma". KN Tamot/ I Alsop have now revised their earlier reading (Samvat 107 šrī paramadeva pka mahäräjasya jayavarma) to "Samvat 107 grīpa 7 divapka mahäräjasya jayavermm[na:]"

Regmi has unconvincingly tried to suggest that the year 107 could belong to Gupta Samvat reasoning that the developed nature of the script must postdate similar epigraphic parallels in India. Ramvamsi's readings were prompted by the astrological meaning of 'deva' and interprets 'pan'cadeva pka' as 'the fourth day of the bright moon of the fifth lunar month', whereas the inscribed word in question is dearly paramadeva pka'. Now, with several readings of letters revised, sri>gri, rama>7, de>di, Tamot/Alsop take a dating cue to make it mean 'Sak samvat 107 Summer solstice 7 or Asad Sukla Chaturthi, the great king Jaya Varma'. We can hardly agree that Jayaverma statue's message was as innovatively composed as Tamot and Alsop interpretation or whether the scribe was as intelligent as to use the same abbreviated approach as twentieth century grammarian, this reading falls into the same trap as Rajvamsi and loses ground. Whereas Rajvamsi had failed to explain the use of the respectful "sr" to qualify the date and overlooks the letter 'su' suffixed to the second to last word 'mahäräjesu, Tamot/Alsop make the former as an abbreviation for grisma. They also discover a new numbered fortnightly calibration of year! Tamot and Alsop have read the letter suffixed to the second last word as 'sya' making it 'mahäräjasya' but offer no interpretive translation. Whereas earlier they took the same letter 'numeral four', indicated by the combined letter 'pka', to qualify the name of the king and accordingly interpreted as Jaya Verma the fourth, now its is taken as Chaturthi!

I take the reading as: 'Samvat 107 šrī' paramadeva pka mahäräjesu jayavarmma.' Use of the word 'paramadeva' in the inscription means Jayaverma was dead. Thus the term 'paramadeva' could be generally translated as 'late'. The word 'mahäräjesu' obviously translates as 'among the kings'. The combination letter 'pka', meaning four, qualifies 'mahäräjesu' and therefore 'pka mahäräjesu' should be translated as 'among the kings, the fourth'. Dated statues of kings are not common; they normally indicate some important happening in connection with the subject. Here, the epithet "paramadeva" denotes that in the year 107, Jayavarmma died. Thus the inscription informs us that Jayavarmma was the fourth king ruling the Lichchhavi state of Nepal and that he died in year 107. Thus the literal translation of the inscription on the pedestal of the life size statue of Jayaverma from Maligaon should be: "Year 107. Among the Kings, the Fourth, Late Sri Jayavarmma". The year is on the Samvat set rolling by Bhumi Dattaverma and is Sakara samvat. (See Brick and Bull/ Saka samvat started Apr/May; Sakara samvat started Oct/Nov)

We can show from a projection of the *Pashupati Stele* of Jayadeva II that Jayaverma would belong in the last quarter of second century AD. Jayadeva II places Jayadeva as

the 20th Lichchhavi king^{vi} starting with King Lichchhavi; the *gopalarajavamsavali* places Jayaverma as 20th in the hierarchy starting with King Vishal. The inscription makes Jayaverma as the fourth king of Nepal and for this to be so, we have to take Bhaskerverma as the first king of the Nepalese Lichchhavi kingdom. Gopalrajavamsavali tells us that there were two other kings, Bhumigupta and Chandraverma, between Bhaskerverma and Jayaverma and make Jayaverma as the fourth king in the new lineage.

The Gopalarajavamsavali gives the reigns of the four kings up to the death of Jayavarmma as follows:

King Sri Vaskerdeva - 74 years King Sri Bhumigupta - 41 years King Sri Chandravarmma - 21 years King Sri Jayavarmma - 45 years

It is seen from the above account that the three latter kings ruled a total of (41+21+45)107 years. This obviously means that the year shown in the Jayavarma statue belongs to the epoch started at the beginning of the rule of Bhumivermma. This could not be the Saka Samvat, as that was started by Kaniska and not Bhumiverma. This was 'Sakara or Sakaraja Samvat', as referred to in *Sumatitantra* or the *Harivamsa*^{vii}. Javaverma died on Sakara Samvat 107. This would be AD 185/186, because of the six-month gap between the Sakara and Saka samvats.

Thus we find that early Lichchhavi period was actually a rule of the Verma. Bhaskerverma was followed to the throne by his adopted son Bhumiduttaverma, Chandraverma, Jayaverma and ten other Verma before Vrisadev took power. This period should certainly be given a new name, the Verma Period (ca. 79 AD-365 AD).

¹ The nomogram system, which assumes the archeological field south of Himalayas as a uniform technocultural terrain, is, for brick, built around its size and baking technology.

ii HSN S23, just a flood down and at the latest 300 years after HSN 30/32, would have to be dated to ca. 300 AD by way of radio-carbon date interpolation.

iii In Satyanarayan Site, 'Chikan appa' type quality was already in use in Period IV, carbon dated to about AD995.

iv See Verardi, 1988.

V It was because of its large size that when I showed it late Mr. Naya Raj Pant in his RNA office, he had commented 'it could not be a usual building brick...may be made for making vedi or some commemorative works like foundation laying'.

vi The phrase of the inscription expressing the number of kings between Supuspa and Jayadeva seems translated wrongly as 'twenty-three'. 'Sardham Bhupativistrivih kshitibhritam tyaktvantare vimshatim khyatah srijayadeva...' should be translated as 'adding three more kings before (Supuspa) and leaving out three more after (Supuspa), thereafter came the twentieth and famed king named Srijayadeva. Note that the term is 'Vimshatim' (=twentieth) and not 'Vimshati' (twenty).

vii The treatise called *Harivamsa* was copied in NS 775 (AD 1655) [NR Pant,1: pp. 4].