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On the Use of Carbon-14 Dating in the Study of the Art History of Nepal; A note on the Use of "Old Wood" in Nepalese Carving.

by Ian Alsop

with further research and photos by Sameer Tuladhar

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Mary Slusser in her 2010 book, [The Antiquity of Nepalese Wood Carving: A Reassessment](#) (2010, University of Washington Press), made a remarkable reassessment of the previously accepted dating of the earliest Nepalese wood sculptures, relying in large part on the modern technique of carbon-14 dating. The C-14 tests she carried out on various well-known masterpieces of Nepalese wood carvings showed that art historians had been overly conservative in their dating of these wonderful works of art. The Carbon-14 tests, in almost all cases, showed dates far earlier than the dates long attributed to these sculptures, in some cases by as much as three centuries.

In a review of [The Antiquity of Nepalese Wood Carving](#) in *Marg* (2012, *Marg*, 64:1 pp 88-93), Gautam Vajracharya offered several criticisms of the book, including a section entitled "Old Wood", which I quote in full here:

“Slusser is aware of the possibility of a difference between the time at which the timber is cut and the time it is carved. Therefore, a radiocarbon test may provide us with the age of the timber, rather than of the work of art. However, she provides Jett with the following information:

The use of old wood is unlikely because its use, for many reasons, would be inconsistent with Nepalese culture. Old things are not valued for their oldness, new is always better. Thus to offer a deity something made of old wood would be thought as inappropriate as offering faded flowers. (p. 289)

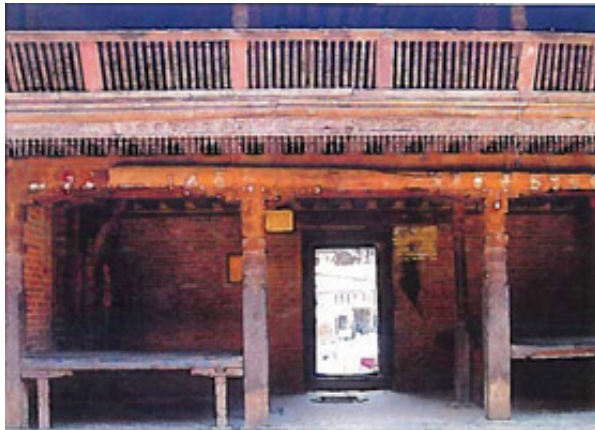


Fig. 1

construction as it was “not enough for building a temple”, but for worship because the images of gods and goddesses are made of such wood.

In light of the epigraphic evidence, John K. Locke showed many years ago that Iva Bahi was established in 1426, during the reign of Jyotir Malla (*Buddhist Monasteries of Nepal*, Kathmandu: Sahayogi Press, 1985, p. 189). It is very likely that the log has been kept there safely since that time. Admittedly, Buddhist priests of modern Nepal do not always accurately recall the significance of ancient works. But the custom of keeping a huge log protected within a monastery, and its association with divinity, disapproves Slusser’s simplistic view about the Nepali concept regarding old wood. In fact this custom may indicate the historicity of the monasterial tradition of preserving aged tree trunks for carving divine images. As we know from Japanese tradition, such a custom was indeed prevalent in ancient Buddhist monasteries.”

When I first read this analysis I was surprised, as I had never heard any mention of the “tradition of keeping old wood for future use” in Nepal during the years I lived there and on subsequent visits. Friends who were involved in producing Nepalese woodcarvings for sale and carvers themselves universally agreed that recently harvested wood

was always used, with the caveat that freshly cut “green” wood needs to be thoroughly dried before carving to avoid cracking and warping. After a drying period of as much as several years (one common rule is one year per inch of thickness), when the wood has been thoroughly dried, the wood is ready to be used for carving[1].

Vajracharya’s evidence for asserting that “old wood” was commonly saved for later use – his anecdote of the log of “*dyasim*” In Ibahahi in Patan - was even more surprising to me. Although of course his command and facility with Newari, as a native speaker and scholar, is superior to mine, still, I had never come across the interesting compound word “*dyahsim*” (Newari, presumably “god-wood”, or Vajracharya’s gloss, “divine wood”); nor could I find this compound word in any of the dictionaries I’ve consulted. I decided that on my next trip to Nepal that I would visit Ibahahi and check out this interesting log.



Fig. 2



Fig. 3



Fig. 4

So in December of 2013 I visited Ibahahi with three young Newar master sculptors (of metal, not wood) from nearby Uku Bahal. When we entered the main courtyard of the Bahal and turned around to view the log, my friends took a quick look at it (fig. 2) and immediately said that it was in fact a *yahsim*, a ritual staff on which a flag and a lamp are affixed and erected twice a year a year in front of the Bahi[2]. This compound word is attested in all of the dictionaries I consulted[3]. I was not able to track down the priests with whom Vajracharya had his conversation, but a gentleman of the neighborhood - if not of the sangha of the bahi - Mr. Amar Tamrakar, shown in my photo (fig. 3), confirmed my friends’ assertion that the log was in fact a *yahsim*. It isn’t surprising that my Uku Bahal friends were able to instantly recognize the staff, since Uku Baha also has not one, but two of these staffs which are used yearly in exactly the same way (fig 4). All three staffs are marked with ochre and white stripes. A cursory examination leads me to believe that the logs are likely of a variety of pine, a softwood not suited to fine carving; in addition the Iba Bahi log in particular is quite cracked, rendering it even less suitable (see fig 3). It seems to me likely that Vajracharya somehow

mistook the word *yaḥsim* for “*dyahsim*” in his conversation in 2008. No one I spoke with recognized the word “*dyahsim*”.

As Vajracharya notes at the beginning of his review, “Slusser is aware of the possibility of a difference between the time at which the timber is cut and the time it was carved.” This is of course true and in fact the “possibility” can be changed to “certainty”, since of course the wood can only be carved after it is cut, and indeed, when it is cut is not the only factor, since wood ages as it grows and the heart wood of a very old tree will give a carbon-14 date to the first years of its growth, often as much as a century or more before the tree dies or is cut down. Theoretically, and actually in some cases, a piece of wood might carbon date as much as 200 years before the tree was harvested and could have possibly been carved.

These serious issues in using Carbon-14 dating are dealt with not only in Paul Jett’s detailed explanation of Carbon 14 dating in [The Antiquity of Nepalese Wood Carving](#), but also by Neils Gutschow in his masterful [Architecture of the Newars, Volume I](#), where an interested reader can find several passages dealing with the intricacies of using carbon dating to help chronologically place Nepalese wooden sculptures and architectural elements[4].

Nevertheless, it seems clear that a hypothetical Newar tradition of deliberately using “old wood” for carving is not substantiated by the evidence put forward by Varjacharaya and should thus be discounted[5].

Ian Alsop
Santa Fe NM

Footnotes

1. Slusser’s remark, as quoted by Vajracharya, that the use of old wood would be “inconsistent with Nepali culture” seems to me to confuse cultural norms with the aims of the Newars as craftsmen. The Newar carvers’ preference for new, well-dried and cured wood would be motivated not by any cultural preference, but rather by a desire to use the best material for the task at hand. Old wood is subject to many vagaries and weaknesses, particularly if it has not been carefully stored and preserved, so wood carvers would far prefer to use wood that they themselves have stored and dried. To my knowledge old wood has been purposely used only by occasional modern fakers attempting to fool buyers through the appearance of the wood, and in the process, attempting to fool any future C-14 tests. These fakes are quite easily spotted for stylistic and iconographic inconsistencies.

2. I have not witnessed the erection of these poles for this purpose but hope to in the future. The same word is used for the very high staff erected to signal the beginning of the Bisket Jatra in Bhakatpur, and indeed for the staff erected at the beginning of the Indra Jatra festival.
3. Satya Mohan Joshi, *Baḥcādaṃgu newāḥ khaṃgvaḥ dhukū* (A Concise Dictionary of the Newari Language), Baikuntha Prasad Lacoul, Lacoul Publications, NS 1107, VS 2044; “piece of wood to which Indra’s flag is tied.” Thakur Lal Manandhar, ed. Anne Vergati, *Newari-English Dictionary*, 1986, Delhi, Agam Kala Prakashan; *yaḥsīm*, flag-staff erected in honor of Indra at Indra jātrā
Indra Mali, *Nepālbhāṣa taḥkhaṃgvaḥdhukū* (Practical NepalBhasha Dictionary), NS 1130, VS 2066, (Kathmandu, srimati Lhamu Amatya in memory of Bhuvaneshvar Amatya; *yaḥsīm* a tall piece of wood to which Indra’s flag is tied (also defines re. Bisket Jatra in Bhaktapur)
Iswaranand Shresthacarya, *A Concise Dictionary, Newari-English*, 1995, Kathmandu, Pilgrims Book House, *yaasi*, ceremonial pole
4. Neils Guschow, *Architecture of the Newars*, 2 volumes, 2011 (Chicago, Serindia), see especially Vol. 1 pp 30-33, and 230 – 231.
5. Vajracharya offers further criticisms of *The Antiquity of Nepalese Wood Carving* in his review, one on epigraphical and historical grounds and the other regarding stylistic analysis, but as neither deals further with the issues of carbon 14 dating or the actual age of the wood in the carvings, they are not discussed here.