

Asianart.com offers pdf versions of some articles for the convenience of our visitors and readers. These files should be printed for personal use only. Note that when you view the pdf on your computer in Adobe reader, the links to main image pages will be active: if clicked, the linked page will open in your browser if you are online. This article can be viewed online at: [http://asianart.com/articles/new\\_bronze\\_age](http://asianart.com/articles/new_bronze_age)

Image Casting in Oku Bahal

## A New Bronze Age for Nepal

by "Alexander Duncan"

This article was originally published in the Jan/Feb 1980 issue of *Asia* magazine, then the bimonthly publication of the Asia Society (at that time still at its original address on 64th St in New York). The original illustration photos were by James Kittle, who accompanied me on visits to the casters in Oku Bahal in Patan. I wrote the article in a journalistic mode under the pseudonym Alexander Duncan. We've left the original text as it was, but have added images from my archives, some of which have also been used in the online version of my original CNAS article, **Image Casting in Oku Bahal**. This article attempted to describe the historical forces at work in the history of image casting in Nepal, but resulted in certain oversimplifications, omitting for instance the all-important role of Tibetan Buddhist patronage during the great centuries of fine Nepalese metal art, and the similar role played by expatriate Tibetans after the Chinese takeover in the 1950s.  
Ian Alsop, October 2023

text and images © the author except as where otherwise noted

republished: October 19, 2023

(click on the small image for full screen image with captions.)

### Images of deities that recall the finest work of the past emerge from glowing cauldrons as local artists relearn half-forgotten skills.



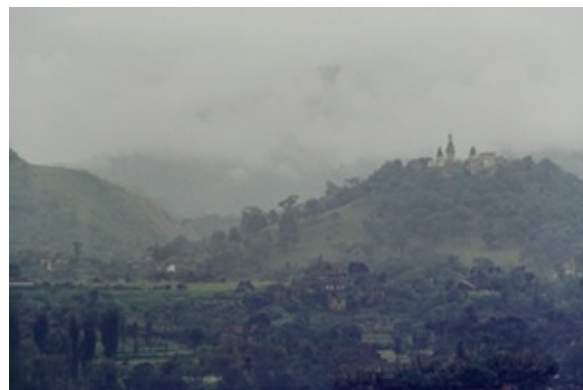
*The moment of the pour.*

The climax of a bronze casting in Nepal is an exciting moment. As workers scurry to and fro through a sulfurous haze, the master caster lifts the tiles covering his furnace, and, reaching down into the glowing inferno with a pair of tongs, gently levers out a bright orange crucible with its freight of shining liquid metal. Gripping the tongs with water-soaked lengths of cloth, he carries it to the mold, straining under the weight and whispering urgent instructions to his helpers. Ever so carefully, he tilts the crucible over the pour hole, releasing a thin steady stream of incandescent orange liquid. For long, breathless minutes, he pours; then the metal drips over the mold, and the casting is finished.

Over the centuries, this scene has been repeated countless times in the Kathmandu valley. Flaming furnaces and glowing crucibles have given birth to the forms of Nepal's many gods and goddesses, concrete embodiments of a complex religious system. Traditionally, the sculptor was an honored intermediary, a key link in a religious and social chain that extended from patron king through learned priest to the great mass of devotees who swarmed to the temples to honor the gods.

Today, the ancient and practically unchanged technique of image casting in Nepal is wedded to a radically new, modern society. This odd marriage has permitted Nepal's casting tradition to remain healthy while similar traditions in neighboring countries have disappeared.

The technical process, though difficult to carry out successfully, is easy enough to describe. It is the same "cire perdue" or "lost wax" process that has produced most of the world's great metal sculptures, from those of the Greeks to those of Rodin. A wax model of the sculpture is made and then covered with a mold of fire-resistant clay. After the wax is melted out of the mold through a hole left for that purpose, metal is melted and poured into the mold through the same hole.



*The magnificent Kathmandu valley provides almost all the materials its bronze casters need.*

In Nepal, this entire process, which has not changed appreciably for a thousand years, is accomplished with materials found close to hand. The wax for the original model is gathered from bees' hives around the country and brought to the Kathmandu valley, where the sculptors buy it and mix it with stiffening natural resins. Warmed and softened over a simple clay pot filled with charcoal embers, the wax is then worked with the simplest of tools – the sculptor's fingers and a few splinters of buffalo horn shaped into miniature spatulas. Farmers from various areas of the valley, operating on a contract basis, supply the caster with the clay for the mold. Straining the clay and mixing it with such readily available materials as cow dung and paddy husks, the casters produce the correct consistency for each layer of the mold.



*Bodhi Raj Sakya adds a detail to a magnificent large figure of Tara.*

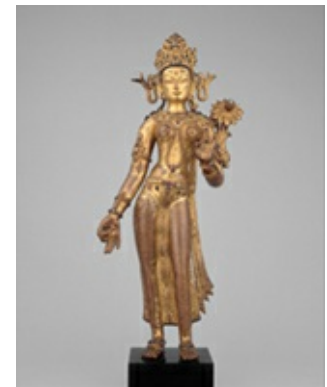
Even the melting of the metal, technically the most difficult part of the procedure, relies on indigenous materials, with two exceptions: The crucibles used for melting copper are now imported from India, although the old style of a closed crucible made from local clay is still used for brass castings; and the skin accordion bellows of the past has now been replaced at the melting furnace by a mechanical paddlewheel type.

Aside from these two items in the casting yard, tradition holds. The casters build their own furnaces from brick and mud. The tongs and other tools used for handling the hot molds and crucibles are ordered from neighboring blacksmiths. And the metal itself is bought in the market in the form of old plates and vessels, although bits of wire and other remnants of the industrial age are now also tossed into the furnace.

I remember being impressed with the simplicity of this process when I first saw it through from beginning to end. A statue emerges from a succession of marvelously rustic vignettes, each taking place somewhere within the caster's own house. Scene one, the sculpting, is staged on the second or third story, where the sculptor squats on the floor in front of a charcoal brazier, surrounded by his apprentices. While the master works at creating a new image, his helpers roll out pieces of soft wax on stone slabs, or press out pieces from molds to recreate copies of earlier statues that have been reordered.

Once the sculpture has been completed in wax, the workers move up to the roof, where they apply layer upon layer of clay and then set the mold out in the sun to dry. The final scenes take place below, in the casting yard attached to the house. First the wax is melted over a gentle fire, and then the casting takes place, master and apprentices moving quietly and surely through the smoke and heat of oven and furnace, often pouring in their bare feet. In each of these scenes, as I looked around, I saw little that I could not imagine being there a few hundred years ago.

In fact, convinced of the superiority of a bit of technology, I hoped to improve upon these ancient methods. After reading several modern treatises on the art of metal casting, I decided to set up my own casting workshop and give it a try. Collaborating with a young, self-taught engineer in the Kathmandu bazaar, I built a diesel-fired furnace that I believed would cut down on the melting time required by the traditional coal-fired furnaces. I experimented with modern mold materials that I thought would give a clearer surface to the metal, removing the necessity for smoothing the finished casting.



*A 14th century Buddhist Tara.*



*Applying the final coat of clay to the mold.*

When all was ready, I invited my Nepalese sculptor friends to help me out with my first attempts. They were impressed, as was I, by the roar my furnace made, a roar boosted by my unique air supply system - an old vacuum cleaner turned on reverse and fed into the furnace. But they were a bit puzzled by my molds, which were perforated with many vents to allow harmful gases to escape without pitting the metal. We were all puzzled, and none of us impressed, by my results.

My newfangled plaster-of-paris molds fell apart instantly when I tried to remove them from the oven, and the manifold vents did not prevent my castings from being severely damaged. I learned the hard way that bronze casting is more a matter of experience and intuition than technology. An easier way to learn this, which I have also tried, is to show

a well-equipped modern founder a piece of Nepalese metalwork of typical complexity and ask him if he can reproduce it. The answer - usually, "Are you kidding?!" - is convincing proof of the adequacy of ancient techniques.

Although they still adhere to their traditional casting methods, however the image makers of Nepal have witnessed enormous changes since the great day of their art. The crucial change has been in the final destination of the finished product - who pays for the statue. Today, outsiders have replaced the Nepalese themselves as the principal consumers of Nepalese art.

In order to understand the roots of the transformation, it is necessary to dip a bit into Nepalese history. Up until the mid-18th century, the Kathmandu valley was Nepal. Throughout the kaleidoscopic history of the Indian subcontinent, this valley retained a distinct cultural identity under a succession of royal dynasties. When we speak of Nepalese art, we are speaking of the art of the Newars, the inhabitants of the Kathmandu valley. Their society was headed by a religious king who was usually the leading patron of the arts.



*Bodhi Raj Shakya removing mold from the oven.*



*The head of a statue appears to rise out of the steam of the cooling mold.*

During the 18th century, unprecedented historical forces threatened to disrupt radically the traditional social patterns of the entire Indian subcontinent. The entrance of the British into the schema of Indian political affairs was the most important single element of this change. Expanding their territory rapidly, the British established first a commercial and then a political hold over most of North India. The Kathmandu valley, with its riches and its trade routes into Tibet, naturally attracted their attention.

Luckily for Nepal's sovereignty, these same riches also attracted the attention of another power, the kings of the tiny state of Gorkha, situated in the hill to the west of the Kathmandu valley. Under the determined leadership of their brilliant young king, Prithivi Narayan Shah, the forces of

Gorkha captured the Kathmandu valley in 1768, dispossessing the line of Newar Malla kings who had ruled the valley since the early medieval period.

The new king and the lineage of kings he replaced were a study in contrasts. Prithivi Narayan, descended from Rajput warriors who had fled India rather than serve under foreign Muslim masters, was a Spartan, accustomed to a life of hardship and discipline. The Malla kings he disinherited were lovers of poetry and the arts, great patrons, and to judge from the famous erotic carvings on the valley's temples, rather more inclined to make love than war. Hardly political geniuses, they often preferred to be remembered for their cultural achievements: One king referred to himself on his coins as "The Great Poet King," and another as "He Who Has Crossed the Ocean of Music."

Prithivi Narayan's temperamental lack of sympathy with the valley's urban life style is manifest in a valedictory address he delivered in 1774:

*This three-cities Nepal is a cold stone. It is great only in intrigue. With one who drinks water from cisterns, there is no wisdom; nor is there courage. There is only intrigue. My wish is to build my capital at Dahachowk ... In these cities, apart from my capital, let there remain empty pomp and pleasure.*

This soldierly attitude, passed down to Prithivi Narayan's successors, was responsible for the eventual consolidation of what is now Nepal, and the protection of that newborn state from the ever-encroaching British. Prithivi's Malla predecessors, no matter how skilled in poetry or music, could never have managed either Nepal's unification or its defense. But alas for Nepal's art, the attitude of the valley's new rulers, combined with the realities they confronted, ended an epoch of building and activity in the arts that had left the valley dotted with magnificent durbars and temples, and had given artists of every field work and glory.

The early Shah kings were, in fact, patrons of the arts, though on a lesser scale than the Mallas, but their royal treasuries were increasingly taken up by the modern problems of their large and expanding kingdom, a kingdom always threatened by the British colossus in the south. The new kings were faced with a situation unknown to the Malla kings, and they quite naturally chose sovereignty, defense, and development over the arts. By the late 18th century, the days of the patron kings of Nepal were over.

Artists of the succeeding decades suffered from a severe drought in demand. The arts that depended directly on royal patronage disappeared, and today no new temples or monolithic stone sculptures are being made. The lesser arts, painting and bronze casting, limped along on private patronage, deprived of the prestige and financing attending employment at the royal court.



*The god Indra emerges from the mold.*

In the mid-19th century, the artists of Nepal were indirectly dealt another blow when the Shah dynasty was thrown out of power in a palace coup engineered by a ruthless young courtier, Jung Bahadur Rana. The line of hereditary prime ministers he installed systematically exploited the country for nearly a century. Their taste for a bizarre combination of European and Oriental styles punctuated the valley with neoclassical and Italianate palaces but gave little work to traditional artists and craftsmen.

The rapid decline in the quality of bronze casting during this period can be readily detected from an examination of the statues themselves. Seventeenth-century images, though neither as aesthetically appealing nor as skillfully wrought as earlier pieces, are nevertheless well made and finely finished. Like earlier pieces, they are almost always made of gold-plated copper. During the 18th century, however, copper was increasingly replaced with cheap, easy-to-cast brass. Gold plating also became rarer and rarer; finishing became rougher; and the setting of semiprecious stones, which impart such a luster to earlier Nepalese statues, vanished altogether.



*Vajrasattva  
by Bodhi Raj Shakya, 1973.*

During the early 20th century, image making all but disappeared. The few pieces to be found from this period are almost all roughly made, poorly finished, and artistically inferior. Families that previously were employed in sculpting had to fall back on the casting of copper, brass, and bronze utensils, so that finally there were only one or two image casters left in the country.

Then, in the late 1950's, the casters were again affected by political developments. The Rana regime, which had ruled the country since the 1840's, was overthrown after a period of widespread unrest. A brief flirtation with parliamentary democracy ended when the Shah dynasty resumed power in the person of King Mahendra, father of the present king, Birendra. From the point of view of Nepal's sculptors, the most important aspect of this change was the opening of the country to tourists, who flocked to the valley in ever-increasing numbers.

Like tourists everywhere, visitors to the valley wanted something to take home with them to remind them of their journey. Noticing that the few recent brass images they had in stock were quickly sold, owners of the new curio shops perceived a demand. Soon they were paying visits to the casters to place orders not for pots but statues. As demand grew, more and more casters engaged in utensil making switched over to image sculpting. Technically, this was not a difficult transition since the casting process is much the same for both.

Almost every time I have asked a sculptor what his father did, the answer is that he made pots and plates. Were it possible to follow the family occupation back several more generations, it would almost certainly be found that the original family occupation was image making. Now the earlier trend from statues to utensils has been reversed, and sculptors are rediscovering the skills of their ancestors, which for two centuries lay in hibernation.

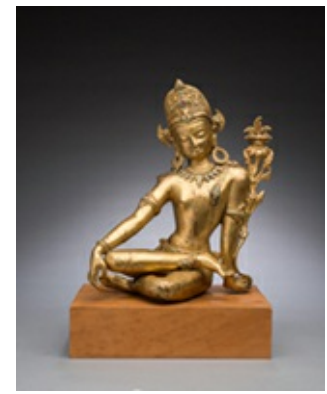
Little by little, the casters relearned the techniques they had lost. Once again, they began work in copper and took up gold plating. As the castings became finer, the finishing work kept pace. Most important, modeling skills improved. Working from antique examples, the sculptors began to recapture the grace and elegance of earlier Nepalese statues. The best images being produced today, though they cannot be compared with the great masterpieces of Nepalese art, certainly are superior to the work produced during the years of decline - making this something of a renaissance.

Much, of course, has changed, and the peculiar set of circumstances that produce great religious art will probably never again be seen in Nepal, or anywhere else in the world. Years ago, images were made to be placed in a temple or on the altar of a private home. An image made to be placed on the shelf of a curio show will never inspire an artist to reach for his best in quite the same way as the orders his forefathers received. Iconographical correctness is bound to suffer under such secular circumstances; the tourist from afar who purchases a souvenir is much less likely to demand perfection of symbolical detail than is the priest or devotee, to whom each image is a deity.

But despite these changes, there is a vitality in the art today that is surprising and gratifying. Though the majority of buyers might not demand adherence to the finer points of a complex iconography, the best of the artists feel that demand within themselves. A quicker piece of work might appeal to the untrained eyes of most tourists, but there are still artists in Nepal who refuse to cast an image they themselves are not fully satisfied with.

For the enthusiast like myself, it is a great pleasure to work with such men. Whenever I go to their houses to order a statue, I find them eager to explore a new theme and pleased by the interest I take in every phase of their work. They are ready to work in a relationship that has largely disappeared from the world, the relationship between artist and patron. Together, we decide on the posture and details of the image, and the final product is a blending of individual aesthetics with traditional form. In this way, I am included in the process of creation, from wax model to final pouring – a far more satisfying experience for an art lover than buying an object ready-made.

Much of Asian culture has disappeared under the onslaught of modernization and development. Many old and valuable ways of life have succumbed. The bronze casters of Nepal, by a selective adaptation to a new way of life, have managed to keep their ancient art alive. They are guardians of the magic inherent in all objects lovingly and laboriously made by the hand of man.



*Indra*  
by Bodhi Raj Shakya, 1972.