

Nalanda Metal Icon Art (*Dhatu-Silpa*)

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The eastern Indian school of the Palas¹ produced, simultaneously with stone sculptures, a remarkable series of bronze images of which the principal centers were Nalanda and Kurkihar. As bronze is a more handy and pliable medium than stone and susceptible to more minute execution and precise definition, it was easy to transport from one place to another by the devotees and pilgrims. Elegant in form and richness in spiritual expression characterized the bronzes of the Pala period. The metal images were cast by the *cire-perdue* or lost wax² process, so-called as the subject was first modeled in wax and the model was then coated with clay, then it was placed over the fire and after the wax melted out, the liquid metal was poured into the mold. This was the technique employed in making all images of bronze or brass. The process as described by Shri Bhikhuraj, the owner of an image factory in Nepal is worth mentioning here. The first stage of the casting is the preparation of the wax model (Madhuccista-Vidhanam). The Object to be cast is first modeled in wax, which is wrapped in a thick coating of clay mixed with cow dung applied in two or three layers. When sufficiently dry, a few more coatings of clay mixed with husk are applied over it. When dry again, the wax model is melted by the application of heat, which leaves a vacuum into which the molten amalgam is poured. After the amalgam has set and cooled the clay mold is removed and the figure is chiseled in rough outline. The finishing touch is given later on. This process would very nicely suit the making of image in solid casting as prevalent in South India and Sri Lanka.

A close parallel in the present-day, mention may be made of the straw core of the clay icons of modern times in Bengal, Orissa and Bihar the stuff remains within the mold even when the wax is melted. The molten amalgam drips in the crevices between the mold and the stump incasing the latter. The non-metallic substances, like husk in the stamp, assumes a charred character, blackish or reddish or complexion and sufficient hardness in the process of casting to high temperature. This technique is known as *cire-perdue* hollow casting. The Nalanda School seems to have specialized in producing smaller pieces, giving scope for detailed work finish of execution in bronzes. This particular art depends for its success upon metallurgical process and metal casting. The best of the Nalanda bronzes. This particular art depends for its success of Dharmapala and Devapala (CE 780 to 892). The lines and soft curves of the fingers are pleasing and their expression has an appeal, which justifies the modern enthusiasm for Pala bronzes.

In Nalanda³ however, as appears from the inner core of the damaged image, a sort of non-metallic substance of clay mixed with husk, cow dung in the charred form exists in the majority of the images, Images were cast in hollow, the inner core has been stuffed with

non-metallic substances. The colossal copper Buddha from Sultanganj exhibits similar inner stuffing. It appears that the wax model was worked over and around a stump of husk and other combination.

The improvised technology of metal in India may be traced in Kautilya's *Arthashastra* (c.321-296 BCE) with ores of gold, silver, copper, lead, tin and iron in smelting, refining, alloying with artisan workmanship. The practice of alloying metals may be traced since the use of bronze came in vogue. Copper and tin were used for preparing bronze and that was discovered long back in human history. For impurity metal images use of eight metals (*Astadhatu murti*) like gold, silver, copper, lead, tin, iron, zinc and brass was most common. Six metalled icons were also composed.

The metal, icon-casting in bronze and other metals or materials was to be modelled in moist clay, wax and plaster. Again, clean and smooth, moist clay inconsistent texture was generally preferred. Casting is wrapped of the artisan work. The piece mold process was applied if necessary for decoration of an icon. The composite multi-metalled elements in an icon are believed to represent various powers and forces attributed to the deity. For instance, *bhagavan* holds six forces and *ishvara* is possessed with eight attributive powers. Besides the composite base metals, the technique of gilding and enamels of the cast form generally exuberate the quality of the metal product. The Nalanda icon-gilt technique is said to have excelled that of other metal-producing centres as Kanchipuram and Mathura etc. The Bangala and the Magadhan metal artisan workmanship had been famous in those days.

According to records of the Chinese travelers like Xuanzang, several important Nikayas (factional groups) had prevailed. The inmates of Nalanda Mahavihara were both Hinayanists and Mahayanists. Separate enclaves within the extensive campus were established in which each group could maintain its doctrinal specialties from the others along with specified rituals. The Sthavira Nikaya had been bifurcated as Vibhajyavadin Sthavira (Theravada In Pali), and Mahayana Sthavira to which Xuanzang belonged. Also, Mahasanghikas, who invited schism in the Vaishali council held in the 4th century BCE, had been strong in South India though they were divided in subgroups like Purva Saira and Aparasaira. Among the Sarvastivadin Sthaviras, who was mentioned as Hinayanists, both Mulasarvastivada and Sarvastivada factions prevailed. The mahasammatiya, generally named sammitiya, were mentioned with their separate disciplinary code. Above that, the Indian Buddhist followed what the Buddha had allowed to preserve his teachings in one's own speech. As such the vast Buddhist scriptures and subsequent literature were composed in various languages: Prakrt, Apabhramsa, and Sanskrit in its mixed form with Prakrt and Apabhramsa, or in pure Sanskrit according to the Paninian grammar.

However, the recluse adherents to different Buddhist⁴ Nikayas lead a cooperate life with a spirit of integrated co-existence of fourfold discipline. Those aspects were material, academic, spiritual and esoteric expedencies. The trade of icon-making could coordinate every aspect of the monastery to disseminate what Nalanda Mahavira was. The Icon, being a sacred image of the introvert mind, used to be the 'means'(upaya) for Bhavana towards the withdrawal of the extrovert mind from multi-diversions. The extrovert mind generally wavers from one item to another like a jumping monkey from branch to branch. For concentration of the mind, every recluse was instructed to ponder over quietly in a lonely place, or in a vacant room. Despite

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that, the functional mind runs here and there to discriminate the phenomenal characteristics. For spiritual awakening and esoteric visualization, icon –making and icon worship had been regarded important means.

Sakyaputra Gautama could forego the birth-based caste divisions, but he admitted the psyche stratification under three heads: persons with low intelligence, mediocre quotient and those with sharp intellect. In Analogy, the word of the sentient beings is like a water-plant to which lotuses belong. Many of the lotuses have blossoms, some are on the water- level, yet blossom and the remaining are in the mud in buds. That refers to the process of advancement towards fully blossomed status of the perfect mind. A painter or sculptor endeavors to represent the vision with form and colour. In the case of an esoteric in-vision it manifests within with effulgence in the introvert mind under deep meditation. That becomes sanctified by rituals as the sacred deity for the person concerned to experience bliss. That is the superior state of the introvert mind, but not the sublime. Thereafter, the said in-vision manifestation is represented in paintings, drawings and icons. These are made of some material objects like paper, linen, silk for painting, and clay, stone, wood and metal for sacred icons. An Icon of a deity is creative and concentrate in the manifestation of an in-vision within the introvert mind. In another way the image that engages within, tends to be the unification of the formlessness with phenomenal forms and colours, as visualized by the concerned person. Unique aesthetic excellence is noticed in Nalanda's iconic art motifs. The back slab decorated with flowers and sparks of light protects the open space in the structural balance. Similar tendency may be traced in the Mahayana tantra image of tribhanga-asana Siddhaikavira icon model (size 21.5X8.4X6.7cm). Its aureole flamed with sparkling radiance in a bead pattern (typical designs of Nalanda metal-icons).

- 1.) The image stands on a pedestal covered by blossomed lotus.
- 2.) The matted hair of the Siddhaikavira being locked falls on the shoulder despite a high crown on the head. The ornamentation of Manjusri being engaged in strenuous austerities is symbolized by tiger-nail necklace.

MANDALA-VIDHANA: MEASURES OF SPHERIC-UNIVERSE AROUND

The external descriptions of the images hold no efficacy in understanding their symbolic significance. Mahayana-Mantrayana is a culmination of spiritual esoteric in which the individual becomes a part of the whole and the whole inculcates within the part. That means a capable envision experiences the radiance of the universal effulgence within spheres to which the image affiliates. A new world sphere appears in the vision of the contemplative mind in which the specific rays are visualized. In this respect the radiance of colours refers to the Five Tathagatas.

Precisely speaking, Manjusri, Tara, Prajnaparamita manifested out of the in-vision of the esoteric practitioners of high capabilities do not belong to the same spheric universe(mandala). The mandala is significant in respect to a practitioner with reference to the family of the deity concerned. For instance, the Garbhathatu mandala, the Vajradhatu mandala, and the Guhyasamaja mandala have separate spherical jurisdictions. These deities hold different mantra and mudra applications as relevant to their respective mandalas. The universe is conditional for being a-formed or non-formed. A form may be either physical or caitasika because matter

and mind in this solar globe are always generated by cause and effect. That refers to the law of Dependent Origination (Pratityasamutpada) in respect to each Dharma (phenomenon). In other words, the sphere of desire (kamavacara), that of form (rupavacara) and the sphere of no-form (arupavacara) are conditioned by the spiritual purifications and respective effectuation. The spherical realm mandala may be conditional and beyond (lokottara). The latter is experienced through higher contemplation. That is the status of the anuttarayoga in which the relativeness and non-relativeness undergo no distinction. That is otherwise named unification (Yuganaddha). In visual art total unification of the psyche with the physical universe is explicit in Kalacakra mandala. That is the Mahamudra sadhana which is also undertaken in the Guhyasamaja mandala, the spherical diagram for the Yogatantra practice with different emanations.

The metal-icons of Nalanda foundry had once high demand for its art-value and spiritual negotiations among the Buddhists in India and abroad. Some of them reached South China through the bamboo-road of the Eastern Himalayas and by sea-route as well. Moreover, those metal-icons had interface reference in developing the Buddhist images in South-East Asia. A wider out-turned exchange in the spread of the India Buddhist metal-icons in China, Central Asia and in South-East Asia may be traced and that requires further searches on the metal technology what Nalanda had developed since the 5th century CE.

So, Nalanda metal Icon Art is so important as yet.



fig.1 Tara Patna Museum (Arch no 837)



fig.2 Loknath Patna Museum (Arch no 8344)

References

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fig. 3 Buddha Patna Museum (Arch no 8452)



fig. 4 Buddha Patna Museum (Arch no 8452)