CHAPTER SEVEN

From Functional & Religious Items to Aesthetic Art Works: The Shift in the Metal Craft Tradition of Assam

"It may be true that one has to choose between ethics and aesthetics, but it is no less true that whichever one chooses, one will always find the other at the end of the road"- (Jean-Lue Godard)

7.1 The Prelude

This part of the thesis deals with the commercialization of bell and brass metal craft of Sarthebari and Hajo. The importance of the metal craft in the society of Assam is presented in Section 7.2. Sub-section 7.3 gives a detailed account of the earlier products made in Sarthebari and Hajo following which section 7.4 presents a comparative picture of the stylistic changes in crafts. Section 7.5 discusses change in functionality of the craft while Section 7.6 presents a discussion on innovation in the product line. Sections 7.7 & 7.8 discuss raw material use and influence of external audience and intermediaries in the commercialization of the crafts. Section 7.9 concludes the chapter.

7.2 Importance of Bell and Brass Metal Objects in Assam

Brass and bell metal crafts represent the rich metal glory of Assam. Metal objects are a part and parcel of every household's domestic life as well as ritualistic settings. The importance is so profound that even in the age of steel and ceramic objects, people still prefer to dine on traditional metal dishes and plates. The metals' health benefits surmount its archaic nature and are acknowledged over modern dining sets. Bell metal objects in Assam are very dear to the people and are only considered next to gold or silver items (Kalita, 2007). Made of a mixture of 78% copper and 22% tin, the alloy is known as *kah* in Assamese terminology. Gifting of *kah* objects has always remained the core tradition in the social sphere. Brides, as a social practice even today, carry traditional bell metal products to her in-laws house (ibid). Brass objects are also equally significant in the socio-cultural backdrop of Assam. An alloy formed by fusing 70% copper and 30% zinc, the items made of brass are much valued and equally used items in social and religious sphere.

7.3 Reflection on Some Earlier Products Made in Sarthebari and Hajo

Some research works on brass and bell metal craft of Assam (Deka, 2012; Kalita, 2007; Sah, 2011; Sarma, 198l; Sarma, 1989) offer information about the production of several varieties of utensils, some utilitarian while some ritualistic in many places of Assam. However, mention has almost always been made about Hajo and Sarthebari in Kamrup and Barpeta districts respectively for its still thriving cultural legacy of the metal crafts. The artisans, in general determine the shapes of the utensils and everyday use objects based on their utility; some may also be ritually or symbolically influenced (Sarma, 1989).

Ancient metal utensils of Assam are much influenced by Tibetan and Muslim cultures (Das, 1968). However, similarities in many of the metal items can be also observed with that of South East Asia and China (Sarma, 1989). The metal items have an inalienable linkage to the *Ahom* regime (DasGupta, 1982) that bears its lineage to the South East Asian country of Burma (present day Myanmar). Bell metal utensils greatly flourished during the *Ahom* rule and, as such, artisans introduced some new shapes and designs to the then existing items by introducing base and stand (ibid) to otherwise circular shapes. Due to *Tai* [1] influence each plate or bowl were produced with a stand at the bottom giving it the look of chalices and goblets and as such the prefix 'ban' came in use (ibid). Field records, as well as, old objects found in museums, present ideas about the types of the products that were in use in olden times (refer to Plate 7.1). Some of the items made in medieval times were *tow* (a large basin for washing rice or other edibles), *xorai* (dishes on stand with a tapering handle and hemispherical lid used for offerings to gods), *ban-bati* (small bowls with stand), *bati* (small bowls for curries), *bhogjara* (ewer) and water jugs (ibid). Other important shapes produced since *Ahom* rule were *gacha* and *saki*, a kind of lamp with stand used in religious settings (ibid).

Gait (1884) and Allen's (1905) work on Assam's craft culture give information on the items produced in the late 19th century and earlier part of 20th century. As mentioned in Table 7.1, some bell metal products in the later part of 19th century included common items for daily use (Gait, 1884). According to Allen, *bati, lota, kalasi,*

[1] *Tai* refers to a group of ethnic people belonging to South East Asia. Tai prince Sukapha established *Ahom* kingdom in Assam in 1228 A.D. They are the descendants of *Shans* from Burma.

gagari, *xorai*, *tema-temi* (to carry betel-nuts and lime) and *thals* or *thalis* (which are large vessels to boil rice) were made by artisans of Sarthebari and Hajo (Allen, 1905). Similarly, Hutchison also mentions about large *thalas* and *lota* made of brass (1909). The brass *thalas* (similar to meal serving *kahi* but larger in size) were large platters used to keep *prasadam* or other sacrament to the deities in temples (field survey). The elaborate accounts of metal items produced in Assam, as found in Edward Gait's account of the 1896, are listed below in Table 7.1.

Table 7.1: Traditional Bell & Brass Metal Products

Brass Metal	Bell Metal
1. Berha: *A circular three-legged frame about a foot in diameter, used as a tripod 14 inches in height. Flat dishes are mounted on it to offer meals. It is generally used by aristocratic section of the Assamese populace*	1. Kalah or Kalsi: *Vessel for carrying or holding water, with the top either plain or flower shaped like ghagari*
2. Tema: *Box to keep areca nuts*	2. Pikdan: *Spittoon*
3. Temi: *A box smaller than tema used to keep lime*	3. Chariya (Soria): *a kind of wash bowl*
4. Con: *A weight holding 5 seers of grains*	4. Lota: *A small water holding vessel*
5. Ghagari: *A decanter shaped water storing vessel with 8 petal shaped ornamental mouth*	5. Tema: *Box to keep areca nuts*
6. Kalah or Kalsi: *Vessel for carrying or holding water, with the top either plain or flower shaped like ghagari*	6. Temi: *A box smaller than tema used to keep lime*
7. Ghati: *Small pot for holding liquid*	7. Bati: *Bowl for curry*
8. Karla: *A milking pot*	8. Banbati: *A bowl with a stand*
9. Chariya (Soria): *A kind of wash bowl*	9. Kahi: *Dish for having food*
10. Tou: *A basin shaped vessel used for cooking large quantity of food*	10. Ban thal: *A concave shaped round dish*
11. Khundana (Urul): *Handy mortar & Pastel for pounding betel nut and leaf.*	11. Maipong: *A vessel similar to banthal but has a cover in addition*
12. Khorahi: *A vessel with many holes used as a sieve to drain water from rice*	12. Barkah: *Gong, a kind of percussion instrument*
13. Thali: *A large boiling vessel*	13. Tal: *Cymbals used in religious orchestra*
14. Seta (Heta): *Ladle*	14. Dug-dugi lota: *A small water holding vessel similar to lota*
15.Sarai (Xorai): *A dish on stand with a tapering handle (with or without) a hemispherical lid used for offerings to gods*	15. Bota: *A generally ornamented flat circular basin with raised rim mounted on a stand used to offer betel-nut and leaf.*

Table 7.1: Traditional Bell & Brass Metal Products

Brass Metal	Bell Metal
16.Lota: *A small water holding vessel*	
17.Chaki (Saki): *a lamp*	
18.Gacha (Gosa): *A lamp with a stand*	

Source: Gait (1896, p.3)

The list includes items used as utilitarian vessels (such as *lota*, *seta* or *heta*, *khorahi*, *karla*, *khundana*) as well as ritualistic ones (such as *saki*, *tal*, *xorai*, *gacha* or *gosa*, *bota*). Apart from this, as from field survey, it is found that artisans of Hajo also produced other religious objects of the Hindus like the *kalasi* (container with nozzle that is hung from ceiling to offer continuous water to the deity in temple) and *nagara* (large musical drums) for temples. A kind of water vessel bigger than the *tekeli*, called *mathiya kalah* is also recorded from interview with old artisans of Hajo. Images of some of the old products taken on field and from institutions like Assam State Museum, *Kalashetra*[2] and other museums are shown in Plate 7.1.

The production of some objects produced in the earlier times has ceased, but the primary items from earlier days are still produced. The *Morias*[3] of Hajo produce *Kalasi, tou, heta, khorahi, xorai* (Sarma, 1989). Some other principal brass items are *kalah, khorahi, soria, ghati, kahi, bati, lota, heta-samus* (ladle of several kinds), *saki, dhuna-dani* (Das, 1968), etc. The other kinds of *heta* were *karas-heta* (spoon shaped with bulbous head), *khanti* (a kind of ladle with a flat head) and *phuta loga heta* (ladle with holes). The size of the products depended on the use of the item. However, these utilitarian brass wares mainly remained confined to the Muslim *Moria* community (Sarma, 1989) though some old brass artisans from Sarthebari are found to have narrated about these utilitarian wares. Plate 7.2 shows some other traditional products still produced in Hajo.

[2] *Kalashetra* also called as Srimanta Sankardev *Kalashetra*, is a cultural institution located in Guwahati. It is named after the medieval saint Srimanta Sankardev. The institution includes a museum along with library which preserves and demonstrates cultural items and crafts.

[3] *Moria*s are Muslim community people are believed to have migrated to Assam along with the Muslim invaders during the *Ahom* regime. They were braziers by occupation

Plate 7.1: Old Utilitarian Brass Items

A) Spittoon, 19th Century, (Image taken at Assam State Museum), B) *Khorahi* (Image taken at *Kalashetra*), C) *Karla* (Image taken at Assam State Museum), D) *Pokua*, 100 Yr old (Hajo, Field Survey), E) *Mathia Kalah* (Image taken at *Kalashetra*), F) *Lota*, 100 Yr Old (Hajo, Field Survey), G) Large *Tow*, 19th Century (Image taken at Assam State Museum), H) Cooking Pot (Image taken at *Kalashetra*), I) Cooking Pot (Image taken at *Kalashetra*), J) *Kalah*, 100 Yr Old (Hajo, Field Survey), K) *Pitha Patora* or *Puni Soru* from Sivasagar District, 20th Century (Cultural Studies Dept. Museum, Tezpur University), L) *Ghati* (Image taken at Assam State Museum), M) *Temi*, 100 Yr Old (Hajo, Field Survey), N) *Ural*, 70-80 Yr old (Hajo, Field Survey), O) *Tema*, 100 Yr Old (Hajo, Field Survey)

In brass, the *xorai shilpa* particularly flourished among the Hindu people at Hajo and Sarthebari. From the field survey, it is found that some Hindu artisans produced several items for ritualistic purposes like the *xorai* and *dunori*. Gait seems to have escaped introducing *dunori* in his brass items list for its similarity with the lidded *xorai*. The difference lies in the stand of the *dunori* on which the dish is mounted resembling more to the bell metal item *bota*. *Xorais* produced were both lidded and

un-lidded. The hollow lids were basically carved with leave patterns (Das, 1968) giving way for planted lamp to radiate light from inside.

Plate 7.2: Other Utilitarian and Religious Products (Field Survey)

A) *Tow* with handle, B) *Tow*, C) *Soria*, D) *Nagara*, E)*Tekeli*, F) *Samus-Heta*, G) *Phuta Loga Heta*, H) *Kalasi*, I) *Kalasi*, J) *Kalasi*, K) *Khanti Heta*

Plate 7.3: *Xorai* & *Dunori* in Brass Metal

A) *Xorai* (Image taken at Assam State Museum), B) Stacked *Xorais*, 200-300 Yr Old (Field Survey, Hajo), C) *Dunori* (Image taken at M.C. Goswami Museum), D) *Dunori* (Image taken at Assam State Museum)

Artisans of Sarthebari excelled in the production of several kinds of bell metal utensils. One and half century back, artisans like Pushparam Kahar were so famous that some of his hand-made items like the *pikdan* (spittoon) are displayed in the British Museum (Tamuli, 2009). He produced excellent varieties of products like the *bhogjara*, *nakpheti bota*, *tema bota*, *jat kahi* or *bera kahi*, *maihong*, *hukkah*, etc. (ibid). Besides producing all necessary household utensils out of this alloy, other products made by the artisans were *dapon* (mirror), *bhortal* (large cymbals), *gosai asan* (a kind of sacred seat for deities placed at the sanctum sanctorum of the place of worship), and *monikut* (a sanctuary having a hipped roof constructed on four vertical columns) as well as cufflinks (ibid).

Plate 7.4: Bell Metal Objects *(Source: Field Survey)*

A) *Kahi*, 120 Yr Old (Image taken at *Kalashetra*), B) *Berha* or *Jat Kahi* on *Berha* (Tripod) (Image taken at *Kalashetra*), C) *Ban Bati*, (Image taken at *Kalashetra*), D)Glass with Lid (Image taken at *Kalashetra*), E), F) & G) Glass, 70 Yr Old (ACBMUMSL Records), H) *Pikdan* (Field Survey), I) *Ban-Bati*, 200 Yr Old (Field Survey), J) *Dophla Bati* (Field Survey), K) *Jat Kahi* (Image taken at *Kalashetra*), L) *Jat Kahi*, 70 Yr Old

Utilitarian items in bell metal further consisted of several kinds of *kahi* and *bati* depending on its size and design and the name varied accordingly. Items having little or no design (*uka*) are called *bajoruwa* and those having designs are called *phulam* (decorative). *Pandhowa kahi* is small with its rim left un-carved (*uka*) or sometimes

engraved with one or two circles on the entire periphery, called as *khap kata*. *Sus kahi* was slightly bigger than *pandhowa kahi* but was primarily *uka* that is plain or sometimes engraved with small circles with a dot within. *Bar kahi* can be either *uka* or *phulam* (richly engraved) but is little bigger than normal ones. Plain *kahi* is also known as *jail kahi* since it was produced by Pushparam Kahar of Sarthebari when being in jail during the British regime in the year 1889.

Likewise, *batis* can be small or big and *uka* or *phulam*. Das (1968) mentioned about a kind of *ban bati* known as *kordoisaria ban bati* resembling the blooming lotus. *Batis* further varied in names depending on its depth. *Hati khujia bati* was larger than other *batis* whereas the *julkhunda bati* had depth. Each of the item's use varied depending upon its structure and shape. The one larger in size, produced especially for the customers of Arunachal Pradesh was called *dophla bati*. Likewise the larger *kahi* was known as *dophla kahi*. *Jat-kahi* or *berha kahi*, as the name suggests had *berha* or tripod on top of which the large meal *kahi* (dish) was placed. It reflected the aristocracy or royal aura. The tripod made of brass, again came in different style. One *berha* stand, the shape of which even looked like a human figure holding the circular frame, is found displayed at *Kalashetra* museum (refer to Plate 7.4 K). Some *berha* even had provision to hold up to ten *ban-batis* (refer to Plate 7.4 B). The hollow stand were either simplistic or had a cup like provision in the shape of lotus (refer to Plate 7.4 M). This is a 70 year old product made by Bhagwan Deka of Sarthebari. The lotus shaped provision was an intuitive expression of the artisan provided in the *berha* to hold the *bati*. Several other bell metal items made were *glass, ghati, lota, kalah, gagari, bhogjara* (Das, 1968).

Tals were also of several kinds, the bigger ones known as *bortal* while the smaller ones called as *khuti tal*. *Tals,* along with other bell items, have remained an item of export since the days of the *Ahoms* most of which are still exported to

Plate 7.5: *Tal*

A) *Tal* of Several Different Sizes (Image taken at *Kalashetra*), B) *Bortal,* 50 Yr Old (Field Survey)

countries like Bhutan and popularly known as *Bhutia tal* (Kalita, 2007). The *Bhutia tal* or cymbals are slightly different than the Assamese *tal* as the former has the surrounding flake bigger than the latter's. Others such as *bati, kahi, soria* and *lota* are exported to Nepal, Sri Lanka, Thailand and Malaysia (ibid). Domestically these products have good market in Manipur, Bihar, Jalpaiguri and adjacent regions (ibid).

Plate 7.6: *Tema Bota*

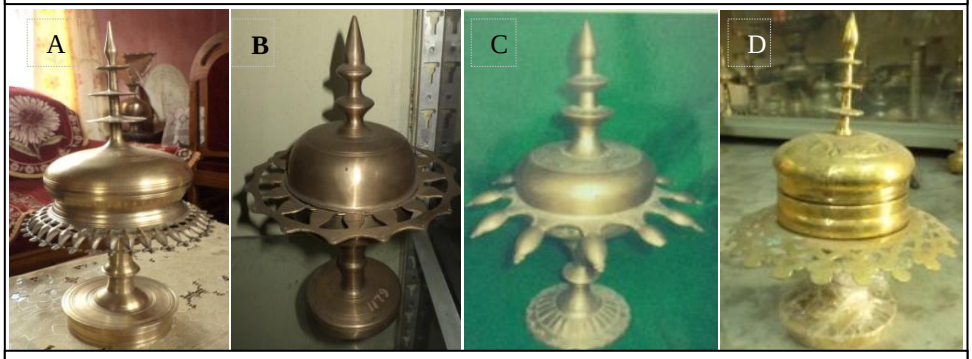
A 70 Yr Old Piece from Sarthebari (Field Survey)

In earlier days, there was no exception to making *xorai* only in brass. *Xorai* was also made in bell metal by the artisans of Sarthebari and a few artisans at Hajo. However, high cost of the raw material stretches the price of the final bell metal product. As a result, the demand for bell metal *xorai* has subsequently reduced. *Bota* was another item made in bell. Like the *kahi* and *bati*, *botas,* in earlier days, were also of different shapes and structures. Their names varied based upon the features. Produced no more today, *owkhulia bota*, its dent resembling the concave cover of the medicinal fruit *owtenga* (Elephant apple, its scientific name is *Dillenia indica L.*) when peeled, was a beautiful artistic piece created by the artisans of those times. Its denting process that gives it its peculiar shape is difficult to replicate today as new generation of artisans have lost those skills now. Similarly, *hophura bota* is also not under production any more. *Tema bota* has also ceased to exist now, at least in the study area.

Plate 7.7: Different Types of *Bota*, Bell Metal

A) *Owkhulia Bota*, 200 Yr Old (Field Survey, Hajo), B) *Owkhulia Bota*, (Image taken at *Kalashetra*), C) *Ban-Bati*, 200 Yr Old (Field Survey, Hajo), D) *Saras Nakpheti Bota*, 200 Yr Old (Field Survey, Hajo), E) *Pan Bota*, 100 Yr Old (Field Survey), F) *Hophura Bota*, 200 Yr Old (Field Survey, Hajo), G) *Hophura Bota*, 200 Yr Old (Field Survey, Hajo), H) *Saras Bota*, 80 Yr Old (Field Survey)

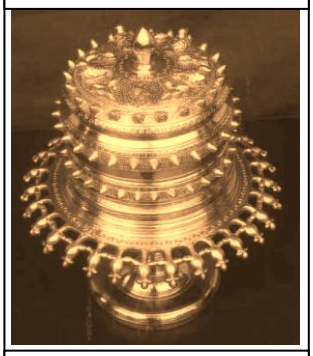
Plate 7.8: Different Varieties of *Manipuri Bota*



A) 200 Yr Old (Field Survey), B) Image Taken at M.C Goswami Museum, C) 60 Yr Old, (ACBMUMSL Records), D) A Piece Made in 1975 (Field Survey)

Artisans also produced Manipuri *bota* in bell which is evident from a 200 year old piece found at Bishnuram Medhi's (1888 A.D-1981 A.D) descendant's house at Hajo. Probably, the trade with people from Manipur region and its peculiar form, different from the traditional Assamese *bota* brought to use the name *Manipuri bota* among the local artisans of the place. The *bota* looks similar to *senga*, a kind of metal craft object produced in the Heirangoithan cluster of Manipur (refer to Plate 7.9). It seems that *bota* was probably customized in the form of *senga* by the artisans in Assam to cater to customers in Manipur. However, that will require further in-depth studies to ascertain the exact association between the two objects. Another piece of *manipuri bota* from circa 1975 (refer to Plate 7.8 D) is obtained at Hajo that establishes the production of the item till that year. This piece, however, is made of brass metal.

Plate 7.9: *Senga* from Manipur



Source: Ministry of Textiles, Crafts Cluster of India Website, Govt. of India

Plate 7.10: Other Bell Metal Items Produced in Earlier Times

A) *Dug-dugi Lota*, (Image taken at *Kalashetra*), B) *Lota*, (Image taken at M. C. Goswami Museum), C) *Bhogjora* (Field Survey), D) *Phuldani* (Image Taken at *Kalashetra*)

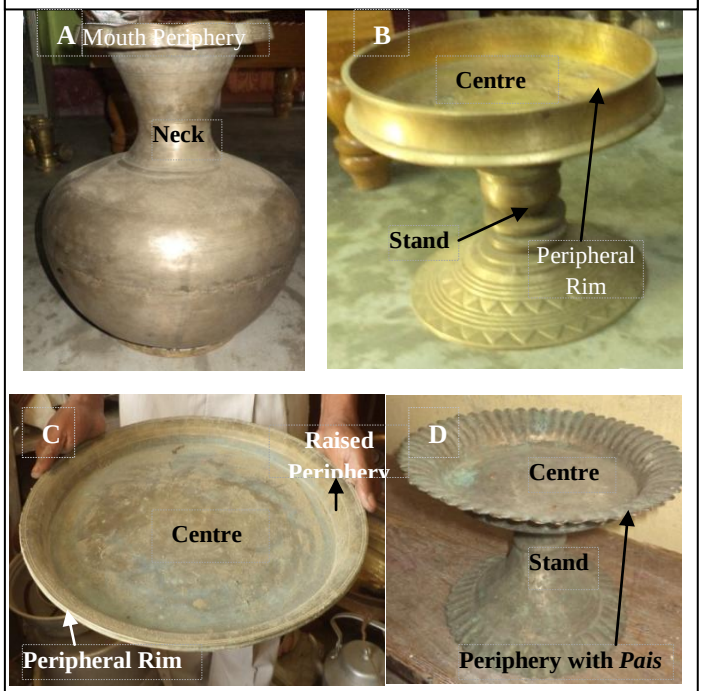
Kalah in bell metal, similar to the brass one having beautiful carvings, were also produced which is testified through some 80 to 100 year old samples found at Sarthebari and Hajo. According to oral history of artisans, some yester century artisans also produced *phuldani* (flower vases) to satisfy their creative urge. One piece of *phuldani* is also found in *Kalashetra* museum at Guwahati as an example of the metal culture of Assam. The production of this item might be possibly due to British influence.

Bhogjora is yet another artistic masterpiece produced by Sarthebari's bell metal artisans, the production of which like the *owkhulia bota* has totally ceased today. Another sample of this beautiful piece is preserved at *Kalashetra* and Assam State Museum in Guwahati with beautiful engravings on the metal surface reflecting upon the opulence of metal art of the bygone era.

7.4 Stylistic Modifications in Metal Products: The Continuity and Discontinuance of Tradition

To understand the commercialization led changes in metal craft crafts, it is important to look into the orthogeneous aspects of the metal objects. In this section, some prominent aspects of the design elements (in the form of carvings and denting) will be presented. The anatomy of the metal objects is shown in the Plate 7.11, to highlight the places on which designs and motifs were (are) carved or embossing is done understand the design aspects of the craft.

Plate 7.11: Anatomy of Objects (Source: Field Survey)



A) ***Kalah*****, B)** ***Xorai*****, C)** ***Kahi*****, D)** ***Bota***

7.4.1 Stylistic Features in Old Products: A Reflection on Old Carvings, Shapes and Forms of Traditional Metal Objects

A) Embossed Works

One of the most prominent features of earlier products was its use of heavy metal sheets. Due to good quality and thickness of the metal sheet, it was quite pliant to the force of the hammer and the chisel. The use of good quality and heavy metal sheets also made embossing easier and prominent. The embossed patterns through indenting were done on the reversed side to create a new pattern on the front. These embossed patterns were primarily done on the *xorai* lids and basal part of *lota*, *xorai* and *bota*, on the neck of *lota*, sometimes on body, and on the periphery of the raised circumference of *bota* and *kahi*. Some of the *botas* and *xorais* had raised floral patterns achieved through denting in the central part other than the peripheral denting. Some *kahis* had their raised periphery dented to produce the effect that the *bota* had. The *jat kahi*, as shown in Plate 7.4 K had such embossed pattern.

Plate: 7.12: Raised Centre Motif on 200 Yr Old *Bota*

Source: Field Survey

Plate 7.13: Raised Pattern through Denting On More than 100 Yr Old Objects

Source: Field Survey

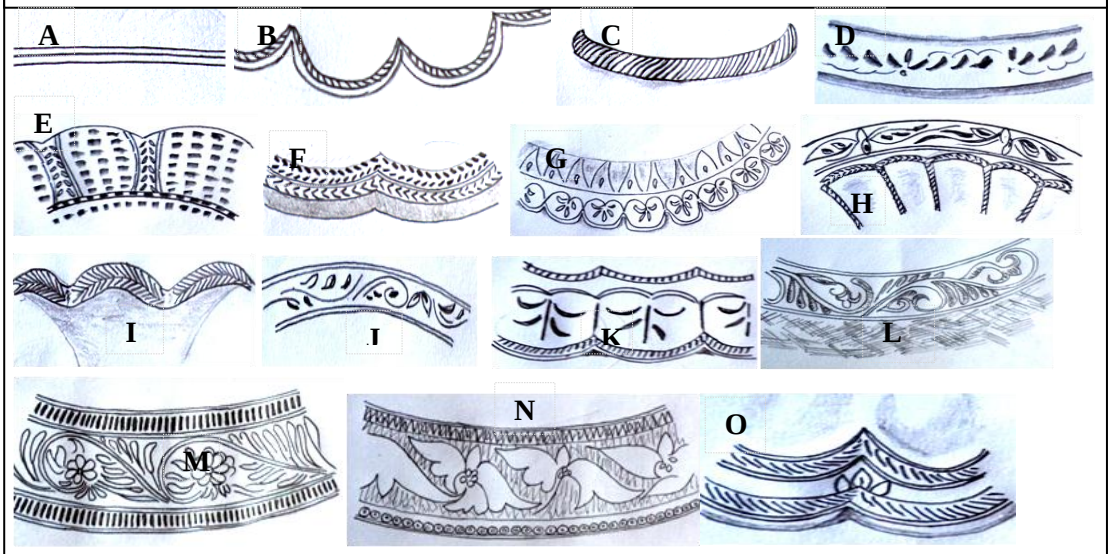
The items intended with artistic pursuit in earlier times had much sharper embossing features. In the *phulam* (decorative) *botas* and *kalahs*, the circular peripheries had series of curvature (called *pai* in local terms) in its entire circumference. The arrangement of curvatures or *pais* based on distance between two individual *pais* resulted in several patterns in *bota*. The curvature or *pai* can be seen in images given in Plate 7.11 C. The *pais* were deep and denting gave prominent impression on the raised patterns. *Pais* could also be found on *kahis*. In *bati* and *ban-batis*, the thickness

of the peripheral rims allowed multiple *khap-kata*. Similarly, the rest of the embossing works on the objects were also prominent. Various patterns were produced through embossing, some of which are shown in Plate 7.13.

B) Carvings and Chisel Works

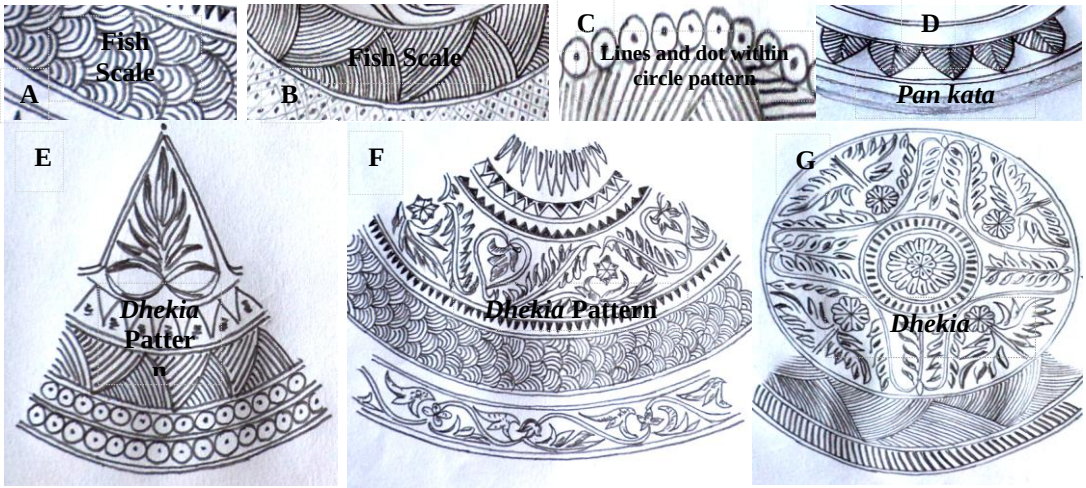
Other than designs through denting, motifs were also c arved through chiseling. On artistic pieces, designs were spread throughout while those kept simple had circular rims chiseled on the entire circumference of the periphery. These circular rims were chiseled either singly or in a series of two, three or even more circles and were known as *khapkata* in local terms (refer to Plate 7.4 C, Plate 7.14 A), the outer circular chiseling on the surface). *Kahi* and *bati* having one or two such circular chiseling were called *sada* or *uka* (plain) *kahi-bati*. Designs were also chiseled on inner mouth line of the *kalah*, on the periphery rims as well as sometimes between dented spaces, especially on *bota* and *kahi* and wherever it seemed possible and looked fit. Some old peripheral designs are enlisted in the Plate 7.14 given below. Chisel marks were forced into the metal in a way that it created powerful design enhancing the beauty of the product. The central designs on the body of the craft also had intricate carvings. Motifs consisted of flowers and petals arranged in sequences resembling creepers. Fish scale, ziz-zag lines, crisscross lines and design having a dot within a circle (refer to Plate 7.15) were the most common to fill spaces between two patterns.

Plate 7.14: Some Peripheral Carvings on Old Objects above a Century Old



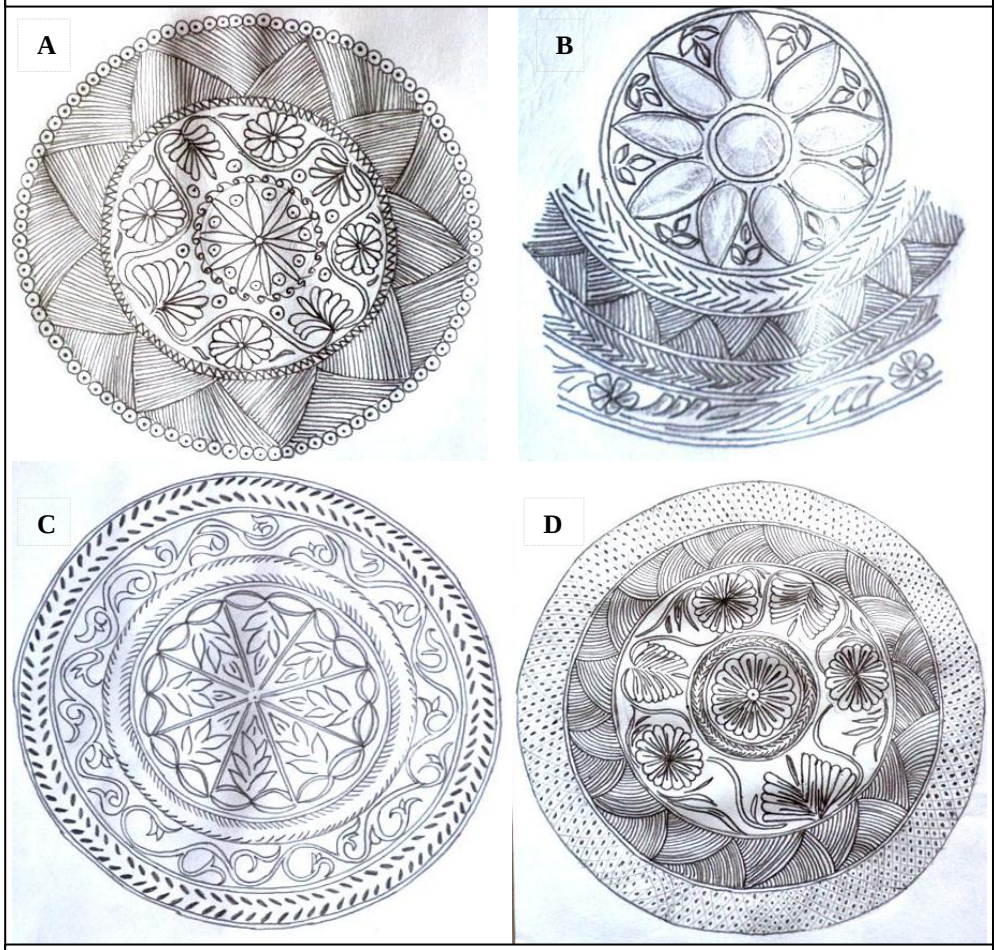
A) *Khap Kata*, B) Peripheral Rim, 80 yr, C) Periphery Rim, 80-100, D) *Kahi* Periphery, 100 yr, E) *Kalah* Mouth, 80 yr, F) *Bota* Periphery, 80-100 yr, G) *Kahi* Periphery, 70-100 yr, H) *Bota* Periphery, 80 yr, I) *Dugdugi Lota* Mouth, 200, J) *Bota* Periphery, 70 yr, K) *Bota* Periphery, 200, L) *Bhogjora* Periphery, 70, Yr, M) *Kahi* Periphery, 100 yr, N) *Kahi* Periphery, 200 yr, O) *Bota* Periphery, 200 yr (*Source: Sketched by the Author Based on Old Sample Objects*)

Plate 7.15: Cross Section of Designs on Old Products ***(Source: Sketched by the Author Based on Old Sample Objects)***



A) Fish-scale, B) Fish Scale, C) Dot within Circle, D) ***Pan-kata,*** **E) Central Design on** ***Bota*****,100 Yr Old, F) Central Design on** ***Tema-Bota*****,70 Yr Old, G) Central Design on** ***Bota*****, 200 Yr old**

Plate 7.16: Central Body Designs on *Bota*

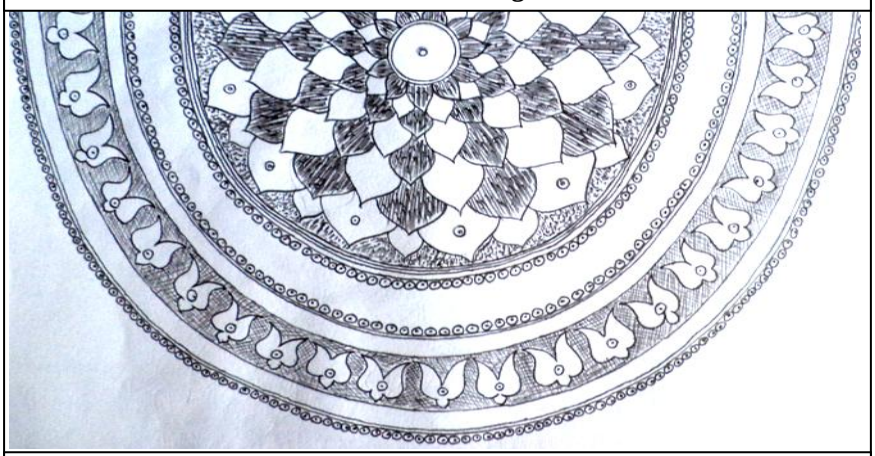


A) 80 Yr Old, B) 80 Yr Old, C) 100 Yr Old, D) 200 Yr Old ***(Source: Sketched by the Author Based on Old Sample Objects)***

Dhekia (fern) in various styles was also a very common motif in the yester year carvings. These designs were also arranged in alternating sequences to create a new

design. Plate 7.15 E, F and G shows images with *dhekia* motif alternating between other patterns. Some other common designs and arrangements of patterns chiseled onto the surface of the old objects are given in Plate 7.16. The designs indicate very narrow, refined and impactful chiseling works on the metal surface. Likewise, the surface of body of the *dug-dugi lota* and *kalah* were also chipped with alternate patterns of fish-scale, *pan-kata*, lines, etc (refer to Plate 7.18). Different shapes of flowers can also be found on earlier designs while leaves also consisted of several styles.

Plate 7.17: Decorative Chiseling Work on a *Kahi*



Source: ***Sketched by the Author Based on Old Sample Obtained from the Image Taken at Kalashetra***

Kahi, when considered for full carving, had its design spread out till the raised periphery. The central designs of the *bota* are also found as designs on the *kahi*. However, the dispersion of the design was profound due to repeat of select individual motifs in circular pattern throughout the circumference spreading from inner to the outer edge of the *kahi*. Design resembling a blooming flower as seen in Plate 7.16 is one of the most spread-out design on *kahi*. Design on *kalah* and *lota* were also spread throughout its entire length from mouth to the base. Triangular and diamond shapes were also not uncommon to find somewhere in the design. Designs were minutely carved and the space in-between the chipping and scratches remained narrow which is clearly observable in fish-scale and *pan-kata* patterns, *dhekia* (fern) and patterns of similar types (refer to Plate 7.15 & 7.16). The *dot within the circle* design was also narrowly spaced to create a dense pattern circumnavigating the surface.

Artisans, in earlier times, produced items during leisure and hence produced different designs in intricate patterns. The craft was rather a leisure time activity than a pure economical one. Some artisans like Bhagwan Chandra Deka even won *Shreshtha*

Shilpa award in 1984 for their bell metal products (Tamuli, 2009). Overall, the designs in old products had complicate forms yet ensuring beauty and simplicity in its entirety. The most important difference in chipped design in present days is the spacing between the chiseled patterns. Though elaborate, the designs on *phulam* objects have broad spacing to cover more space in lesser time. The changes are discussed thoroughly in section 7.4.2 of this chapter.

Plate 7.18: Sketch of Few Old Designs

A) Design on *Kalah*, *Kalashetra*, B) Design on Raised Periphery of *Xorai*, C) *Lota* Surface, 200 Yr Old, D), *Kalah* Surface, 200 Yr Old, E) *Kahi* Centre, 200 Yr Old, F) Surface Design on *Lota*, 200 Yr Old, G) *Lota*, 200 Yr Old, H) *Dug-dugi Lota*, I) *Kalah* Surface, 200 Yr Old, J) *Kalah* Surface, 100 Yr Old, K) *Dug-dugi Lota*, 200 Yr Old, L) *Bhog-jora* surface, 70 yr Old, M) *Kalah* Surface, 200 Yr Old (*All Images Sketched by Author. Developed from Images of Old Objects*)

7.4.2 Commercialization and Stylistic Modification in Metal Crafts

Stylistic changes in metal craft can be described with respect to the design or motif aspects carved on the object surface, the size of the objects, as well as the structural modifications of the craft itself. As found from field survey, commercialization of the craft, by and large, has not affected the structural aspect of the bell and brass metal crafts to a great extent, except for some consideration on the weight and size of the objects. In the surveyed areas, artisans continue producing some of the earlier objects like *kalah, xorai, bota, lota, ghati, kahi, bati, ban-bati, tow, soria, heta, khorahi,* etc. In the 2005 records of *Kahar Silpi Sangha*, Sarthebari, a society of Bell metal workers, a few products made in Sarthebari were *saras nak pheti bota, soria, bortal, kahi,* and *khuti tal*. Some traditionally made items like *dophla bati* known as *Rumtun* and *dophla kahi* are sold since centuries and have stayed unmodified. However, some priceless objects like *bhogjora, tema bota, owkhulia bota*, etc. are no more produced at present (field survey). Design changes are the eminently observed in the metal objects which are articulate but different in its presentation.

A) Change in Carvings and Designs

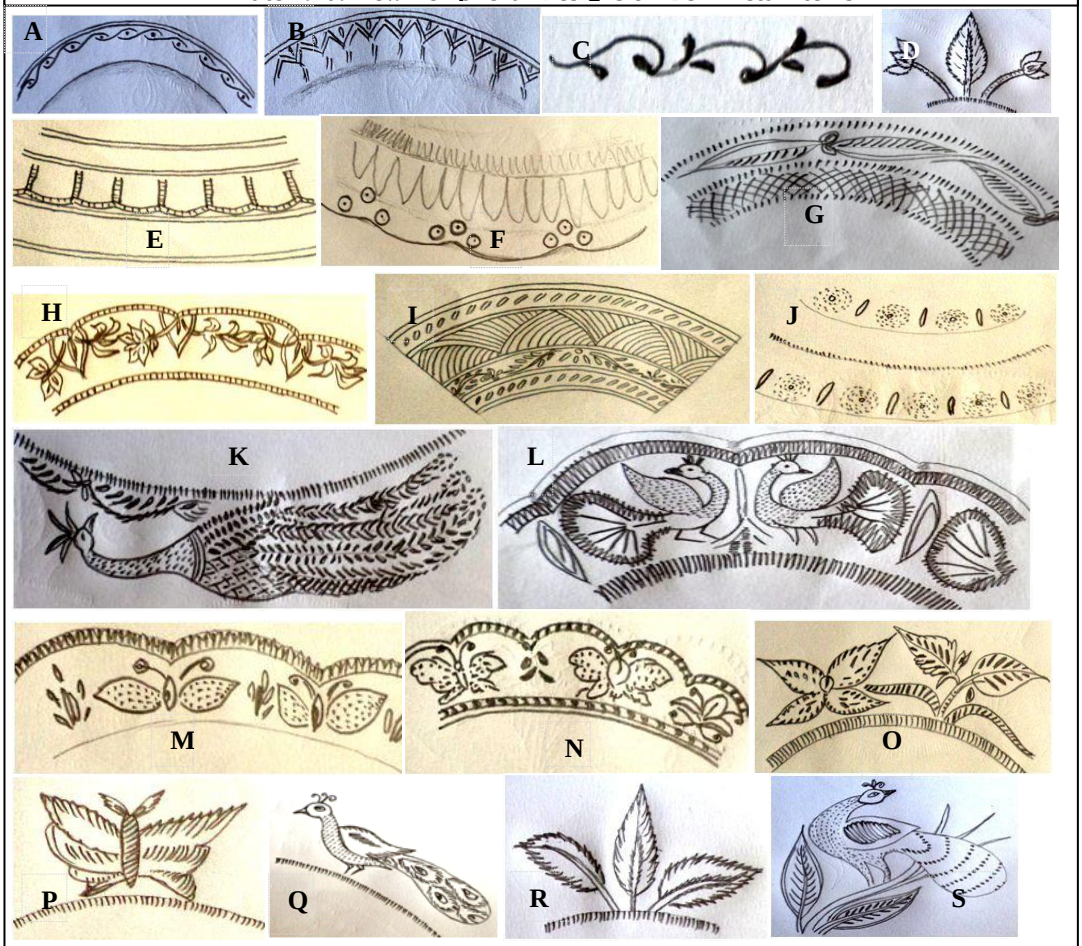
The changes in the surface design are most obvious on *xorai, bota* and *kahi* especially on the crafts' periphery, neckline, body, centre and the periphery rim. Design through chipping is rarely done nowadays on items like *kalah* and *lota*. Plain *kalah* and *lota* with slight structural modification is preferred over decorated ones even among customers. Artisans, as found during survey, do not find it very remunerative to carve on *lota* and *kalah*. But elaborate designing is done on *kahi* and *bota* and on the flat surface as well as on the lid of *xorai*. Also, on several occasions, forceless chipping is done to create designs which resemble more like scratch marks than original carvings. Some designs like *dot within a circle, dhekia, pan-kata* and fish scale are continued till date, but new motifs have also emerged giving rise to heterogeneous design elements. Old designs still find patronage amongst local customers and hence are etched religiously on the metal objects. Bell metal artisans expressed that *lata* or creeper patterns in various forms are an

Plate 7.19: *Ban-bati* with Lotus Pattern in Cavity

Source: From kahi-bati.com (website)

inspiration from old Indian one Rupee notes. *Khap-kata* on the peripheral rims of the *batis* and *ban-batis* is reduced to one or two lines due to reduction in its thickness of the metal. But on the items deliberately made thick, *dot within a circle* pattern can also be seen carved on the entire peripheral rim. When carved on the raised periphery of *kahi*, the *kahi* is called as *sonamukhi kahi*. The difference is seen in the spacing of the chisel marks which has widened in present design forms. *Pokhila* (butterfly) and *mayur* carved on the hollow lids of *xorai* and *dunari* are nowadays translated into chipped designs on plain surfaces. In *phulam kahis*, the designs are spread throughout the peripheral edges to the raised periphery and even on the rims. These highly ornamented *kahis* are targeted for customers willing to pay more for dense ornamentation.

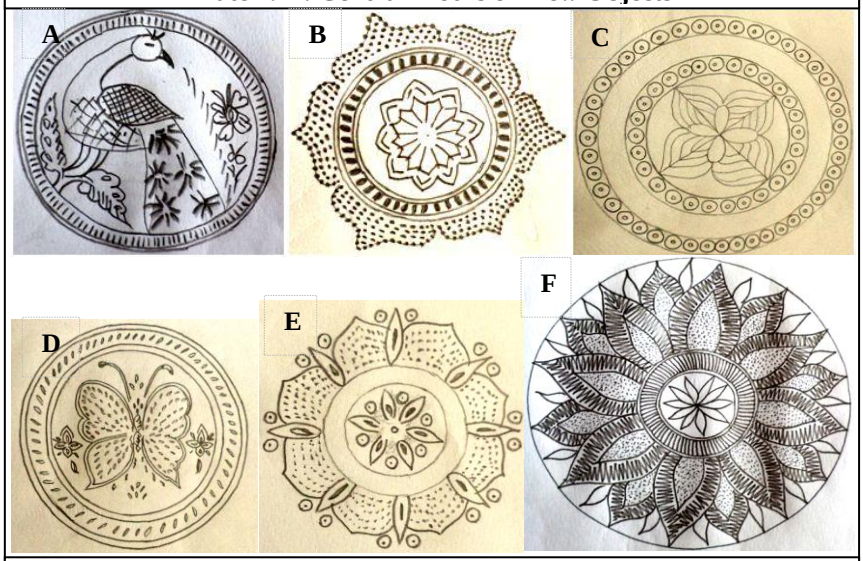
Plate 7.20: New Peripheral Designs on Bell Metal Items



A) *Kahi,* B) *Kahi,* C) Peripheral Rim of *Bati,* D) Motif s on Peripheral Edge of *Kahi,* E) Raised Periphery of *Bota,* F) Raised Periphery of *Bota,* G) Peripheral Edge, H) Raised Periphery of *Bota,* I) Fish Scale on Periphery, J) Raised Periphery, K) *Mayur* Motif on Peripheral Edge, L) *Mayur* Motif on Peripheral Edge of *Bota,* M) *Pokhila* or Butterfly Motif on *Bota* Periphery, N) *Pokhila* or Butterfly Motif on *Bota* Periphery, O) Flower and Leaf Motif on *Kahi* Periphery, P) *Pokhila* Motif on *Kahi,* Q) *Mayur* Motif on *Kahi,* R) Leaf Motif, S) Peacock Motif (*All Images Sketched by Author. Developed from Images of New Objects)*

Similarly, elaborately designed *botas* are made for customers who want both aesthetics and utility. Chipping is spread throughout the surface, on raised peripheries as well as on basal surface. Surface designing has become more prominent in *bati* and *ban-batis*. In some newer *ban-batis*, lotus pattern is visibly noticed in its concave cavity (refer to Plate 7.19). Similarly, peripheral edges on both concave and convex surfaces are carved with different patterns. Orthogenetic pattern such as the *dot within circle* are chipped on the peripheral rims on the entire circumference to give opulence to the metal objects.

Plate 7.21: Central Motifs on New Objects



B) Central Motif on *Bota*, B) Central Motif on *Kahi*, C) Central Design on *Kahi*, D) Central Motif on *Bota, E)* Central Motif on *Bota*, F) Central Motif on *Kahi* (*All Images Sketched by Author. Developed from Images of New Objects)*

However, it must be mentioned here that the spacing in between the chisel marks has increased to cover more and more space in lesser time and with lesser effort. Most often, the chiseling is also lightly done instead of forceful etching (refer to Plate 7.20 F, G &J, Plate 7.21 C). The *pan-kata* design is produced with several variations and is enlarged to fill more space on the object (refer to Plate 7.20 D, O & R). The spacing in the fish scale design is also increased (refer to Plate 7.20 I & 7.22 C). Even butterfly and peacock designs (refer to Plate 7.20 K, L, M, N, P, Q & S) are carved bigger in several ways to increase the spread of the designs. The trend is towards gigantism (Schadler, 1991; Clifford, 1994) of designs for its easier chipping on metal surface. The peripheral edges are nowadays carved with individual motifs (refer to Plate 7.20 D, L to S) sometimes in combination with orthogenetic straight and slant lines and *dot within a circle* patterns.

In Plate 7.21 central motif carved on *bota* and *kahi* are shown. It must be observed that the chiseled works though remain beautiful but has become wide spaced and simple. Artisans simply etch the motifs on surface without giving due emphasis on its exact replication in successive layers. Designs are also lavishly etched (refer to Plate 7.22) throughout the surface but seems to lack uniformity of the chiseled patterns. Craftsmen, in earlier days, enjoyed creating beautiful things irrespective of the time it consumed as quantity mattered the least. On the contrary, present artisans require balancing quantity as well as style to stay competitive.

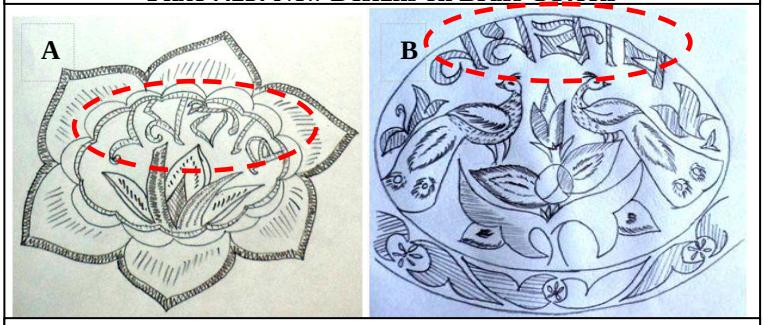
Plate 7.22: New Designs in the Central Body Surface of Some Metal Items

A) *Mayur* on a Tree Design on *Kahi,* B) *Mayur, Phuldani, Dhekia Design* on *Kahi, C) Mayur, Kalah, Dhekia Design on Kalah, D) Pan-kata* & Fish Scale Design in *Bota* *(All Images Sketched by Author. Developed from Images of New Objects)*

Designs are more elaborately made on bell metal objects and usually see a fusion of orthogeneous but simplified patterns and heterogeneous design elements. Some newly introduced motifs like *kalah* (refer to Plate 7.23) can also be seen in metal products. *Mayur* motif in several variations viz. singly or paired with *phuldani* (flower pot), *lota*

or *kalah*, tree, leaf and *dhekia petals* are preferred designs of artisans as well as the buyer because of its elaborateness and beauty. On brass *kahi* and trays, one can find heterogenetic designs on the surfaces. Some bell metal designs are also replicated on brass objects. The inscription of letters like *namaskar* (a form of greeting in India) (refer to Plate 7.23) and 'welcome' is a new design trend on metal objects, especially on *kahi* and trays practised only since the past 30 to 35 years. These inscriptions are highly demanded in trays used to serve tea and snacks to guests. Other heterogeneous designs include *nartaki* (dancing girls), folded hands, swimming ducks, etc.

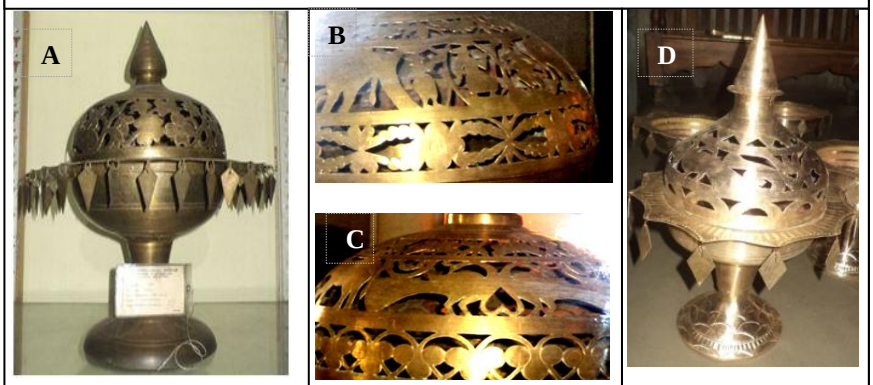
Plate 7.23: New Designs on Brass Objects



A) Tray with *Namaskar* Inscribed, B) *Kahi* with *Namaskar* Inscribed (Encircled in Red Color) *(All Images Sketched by Author, Developed from Images of New Objects)*

The carvings on the *dunori* lid have also become simpler. *Dunori*, similar to *bota* but having a lid, is used as a lantern during religious occasions. In 1968, Jugal Das observed that ornamentation done on its lid has become richer which increases its adaptability as decorative item and its new feature is its extreme lightweight. It was basically used as a symbolic lantern in marriage rituals. The image (Plate 7.24 D) presents a very lightweight fresh piece of *dunori* with carvings on the lid while denting is seen on the base. However, present day artisans state that the ornamental pattern has rather become more simplistic but more spread out. The flower and leaf originally carved on the lid are difficult to be produced, as artisans find it difficult to carve it on light surface. Floral patterns, elephant, butterfly,

Plate 7.24: *Dunori*



A) *Dunori* Lid, (Image Taken at M.C Goswami Museum), B) *Dunori* Lid with *Mayur* Design (Image Taken at *Kalashetra*), C) *Dunori* New, (Image Taken at *Kalashetra* (Field Survey), D) *Dunori* New (Field Survey)

mayur (peacock) design as well as design depicting rural life on the hollow lids are hard to find. But artisans have introduced newer motifs like *gadh* (rhino) due to their belief that it represents Assam and its natural bounty.

The picture in Plate 7.24 A is that of a 50 to 60 year old *dunori* whereas image 7.24 D shows a new *dunori* piece. One can also see the difference in designs on *dunori* lid preserved at *Kalashetra* in Guwahati. The designs are much more simplified now due to the use of light metal sheets. *Xorais* also have ornamental lids. In 1968, Jugal Das mentioned that artisans produced several varieties of *xorai* by keeping the structure same; more ornamentation on the lid is added by engraving a variety of flowers (p. 64). *Dunoris* also come with handles for easy use and supplanting.

B) Modifications in the Embossing Works

Plate 7.25: Increased Number of *Pais* in *Bota*

Source: Field Survey

Creating design patterns through indenting in brass as well as in bell metal, in earlier times, was surprisingly easier than today due to the thickness of metal sheets. However, in present times, high cost of the raw material and customers' inclination toward light weight objects which eventually leads to low price has led to the increasing use of lighter metal sheets. Moreover, present day artisans do not wish to dedicate more time on stages that require much effort and time. Hence, embossed pattern created through denting has changed to a great extent. In Plate 7.25, increased number of *pais* can be seen on *bota*. The depth of its curvature has also reduced considerably. Yet again, it is important to highlight here is that objects which are made larger are often made with heavy sheets to keep its holistic structure and form intact. In such cases, denting reflects the same aura found in earlier items. This seems mostly in case of *xorais* which are as high as 2 feet to 3 feet in size wherein heavy metal sheets are used keep the structure intact. The indenting styles to form embossed patterns in the larger *xorais* have similar beauty in its raised pattern as was found in earlier *xorais*.

The central embossed patterns sometimes made on *bota* (refer to Plate 7.12) and *kahi* also seem to be missing in present bell metal objects. Even when items are dented, the raised patterns are not very prominent. Also, the series of curvature on the periphery of *bota* and *kahi* fail the depth that artisans created in yester years. The reason as mentioned by artisans during field survey is straight. Devoting time is an issue with artisans as quantity justifies the income; the other being the use of thin metal sheets. Some artisans however, mention loss in the knowledge of denting among young artisans to be the reason for this knowing escape. The lightness of the metal also restricts chipping of some patterns on the surface. However, the curvatures or *pais* have increased in number on *botas* since it enhances the artistic quality of the item, and is, therefore, much liked by customers. But, curvature depths of the *pais* along the mouth and periphery of the metal objects are also made shallow for economic reasons. Other reason for this modification, as mentioned by the artisans, is the preference of the women customers for metal objects with shallow curvatures since it facilitates easy cleaning

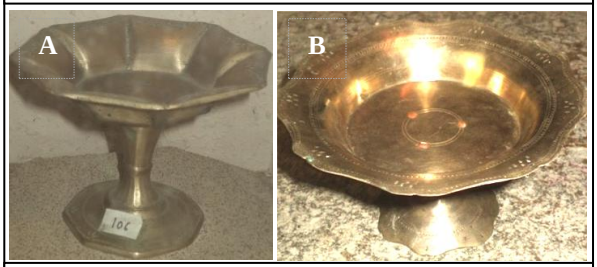
C) Structural Modifications in the Objects

Plate 7.26: *Ban-bati* with Lid Placed Below

Source: From kahi-bati.com (website)

Structural modifications, though not very significant, are noticeable in some of the metal objects. One such inconspicuous modification noticeable only to the keen-sighted eyes, can be seen in the slightly reduced openness of the mouth of the *ban-bati* (refer to Plate 7.26). By making the circumference more upright, the depth of the *ban-bati* is increased to make it resemble more like a cup than a bowl which artisans believe give more artistic appeal. This type of *ban-bati* is more in demand among customers as dessert cups. Artisans also gave into some inconspicuous structural modifications for example, in *kalah* to transform its aura of a water carrying vessel to that of a decorative vase. It is made a little *petua* (bulged from the belly) with a slimmer neck to convert its functionality to that of a flower

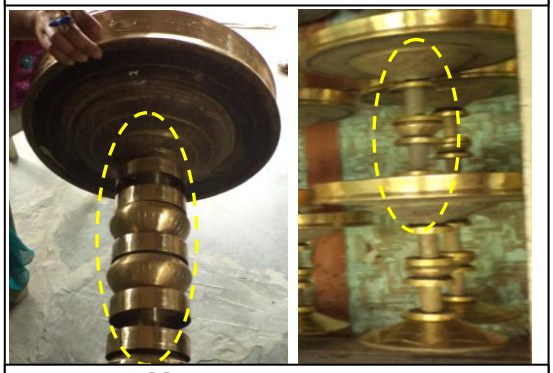
Plate 7.27: Plate *Bota*



***A) Bota* (Image Taken at *Kalashetra)*, B) *Plate Bota*, 30 Yr Old (Field Survey)**

vase. Likewise, *plate bota* (refer to Plate 7.27 B) was introduced in bell, the structure of which slightly differed from the conventional *bota* on the raised peripheral part. This however, seems to be simply artistic persuasion of craftsmen that drive them to experiment with their creations. Somewhat similar piece of such *bota* is found in the *Kalashetra* records (refer to Plate 7.27 A). This craft is also no more in production now.

Plate 7.28: Extra Knots in *Xorai*



Source: Field Survey

Structural modifications can be found in *xorais* to enhance its beauty. Artisans have introduced extra knots in between the mounted dish and the base (refer to highlighted section Plate 7.28), sometimes even elongating the individual knots. If one is to carefully observe the earlier objects, the stands in *xorai* consisted of only one knot (refer to Plate 7.11 B). These structural considerations are done keeping in view the inclination for more aesthetics among customers.

Soria which remained a simple wash bowl is nowadays reproduced as fancy *soria* or *phul soria* with rim decorations particularly through denting. This enhances the appeal of this ware. Usually artisans try producing things that they feel might garner attention. Artisans understand that women customers in present times search for products which fulfill both functional and aesthetic requirements. *Phul soria* is one of such products which are a well sold item now and has been in market almost for two decades. Though artisans do not deny this artistic impression to be present in earlier objects, it is

Plate 7.29: *Phul-soria*

Source: Field Survey

Plate 7.30: *Phuldani Kalah* (Source: Field Survey)

A) Large *Kalah*, B) Small *Kalah*, C) Machine made *Kalah*

again reintroduction of the old pattern but for commercial success. There has been reference in work by Baishya (1986) where it is mentioned that artisans produced *soria* and *tow* having (such) designs.

Similarly, *kalah* is modulated at the neck and the belly parts to be reintroduced as *phuldani* (flower pot) *kalah* (refer to Plate 7.30 A & B). Likewise, sizes also vary accordingly. The handmade *phuldani kalah* lack the polished finish as found in machine made imported products (refer to Plate 7.30 C), but are yet in good demand among local customers. Earliest structural modification in *lota* could be seen when the object was considered for use as flower vase as against its original purpose of storing liquid. The ACBMUMSL records have around 60 year old samples of *lota* (refer to Plate 7.31). The stylistic change is in its mouth opening which is more artistically molded than before for its adaptation as flower pots. However, the production of this commercialized item stopped once its demand ceased in the market.

Plate 7.31: Modified *Lota*

60 Yr Old. ACBMUMSL. Sarthebari

Bota and *xorai* are celebrated metal objects of Assam. Customers visiting Assam often seek replica of these objects which are easy to carry and are comparatively less expensive. Due to dearth of such products, either the market is lost or it's fulfilled by imported wares. Realizing this, local artisans have been trying to produce *bota* (refer to Plate 7.32) and *xorai* that can be easily dismantled and assembled. The external customer's requirement for this feature led artisans to introduce *bota* that has two joints. Yet again, it is important to note here that this dismantling feature is introduced only in the medium sized *botas* but not in smaller *botas* since it is difficult to infix this feature in the later due to its small size. The earlier *botas* had three joints and could not be dismantled. Local artisans, however, have not yet achieved full perfection in this regard. Artisans understand the importance of small items as souvenirs and see great market potential.

Plate 7.32: Dismantled *Bota*

Source: Field Survey

7.5 The Change in the Functionality of Metal Products: Addressing New Requirements of Customers

The production of the traditional wares is still targeted mostly to the local customers of Assam. However, the utility of many traditional metal wares have changed. Traditional objects which could be fitted to emerging utility survived while items which could not be accommodated to the new utility disappeared or are on the verge of disappearance today. Brass items like *kalah, soria, khorahi* and *tow* have transmuted from its nature of being utensils to religious gifts for marriages. Of course, the size of the item varies nowadays depending on the function it is supposed to serve. Artisans nowadays produce items keeping in view customers willingness to pay. At one end, there are customers willing to pay more for quality products and on the other continuum there is a group seeking quality at lesser prices. This emerging need in the society drove artisans to produce items accordingly. Customers do not prefer to pay higher prices, especially when it is for gift giving, and hence want lighter metal articles.

Plate 7.33: Old Miniaturized Products (Source: Field Survey)

A) *Ghati*, 30 yr Old, B) *Hajolia Kalah*, 1955, C) *Ban-bati*, 100 Yr Old, D) *Horu-bati*, 100 Yr Old

As per the oral testaments of elderly artisans, it is found that brass *kahi* for dining purpose was never produced in earlier times. Only bell metal dishes were used for meals. However, large platters in brass for keeping sweets and sacramental objects in temples were in production. These *kahis* were rather very large to serve meals to an individual. But due to comparative cheapness of brass metal than bell metal, pair of *kahi* and *ban-bati* is also produced in brass nowadays. This utensil set is especially used as a gift item. Functional dimension of the brass platters have changed into gift objects. If the views of old artisans are concerned, bell metal artisans also agree to have been getting stiff competition from brass artisans for this add-on. Customers are driven by the low price of brass *kahi* for usual gifting purchases which otherwise would have been in bell metal.

Miniaturization of metal products is not a new phenomenon in the bell and brass metal production regions. As recorded by Gait in the year 1896, samples of old bell metal *lota* of large as well as miniature sizes are also seen preserved at M.C. Goswami Museum, Gauhati University. Old miniaturized versions of almost century old *bati* and *ban-bati* are found in Hajo and Sarthebari. Similarly, small versions of *kalah* known as *hajolia kalah* (belonging to circa 1955) *lota* and *ghati* are also found during field survey. A small 30 year old six inches in height *ghati* is a very common item in households to keep lime used with *tamul-pan* (betel nut and leaf). These creations, however, were artistic desire to create beauty around. But in recent times, miniaturization has become a necessity due to customer's inclination towards 'small and beautiful' objects. It is overtly in production now for its use as souvenir objects and gifts in institutional celebrations due to which items are produced in small sizes.

Plate 7.34: *Horu* or *Gazi Khorahi* (Source: Field Survey)

A) *Horu* or *Gazi Khorahi*, B) *Sof Bota*, C) *Xorai*

From field observations, it is observed that artisans have started producing *xorais* as small as six inches in size to stand in competition with miniaturized products from renowned metal items producing places like Moradabad. Even *bota* is nowadays produced in 6 inch size. Small *bota* known as *soru phulam bota* or *sof bota* are made keeping in view the tradition to offer fennel seeds to guests. The weight of this *bota* stands at a meager 100 grms (from filed survey). These small *botas* and *xorais* are also used as institutional gifts for many celebrations. Artisans often get bulk orders for such small pieces from institutions as gift items. Brass *khorahi* (refer to Plate 7.34 A) also come in small sizes which can be accommodated in palm. It is called as *gazi-khorahi*. This item is particularly targeted for singly staying bachelors and maidens who need to wash rice in small quantities. Likewise, *tows* come in several sizes ranging from 12 inches to as large as 26 inches. Sometimes, even 6 inch *tow* is made when demanded. The smaller ones are nowadays sought for drawing room decorations rather than for use as kitchen requirement. The bigger *tows* still perform the same service. Artisans sell brass *tows* to customers from Nepal where these are

used as feed containers for animals. According to artisans, small versions are an inspiration from television media. Similarly, designs are also sometimes influenced by surroundings.

It is observed that customers knowing little about Assam's culture and material traditions are not inclined towards metal crafts. However, those who wish to purchase rather prefer items which are light, well-polished and small to be carried easily. Interviews with metal craft sellers show that Moradabad made small items like *xorai* and *bota* catch the customer's attention more as compared to handmade products made by traditional artisans due to the former's low cost, svelte surface in intricate designs and easy transportability. These products, since in parts, are easy to detach and fix which is yet un-assumable with locally crafts miniaturized crafts. However, identifiability of imported products as machine-made is the chief issue rather than the local crafts being less-svelte. Such customers, when available, might consider traditional crafts provided that they fit their requirement of aesthetic brilliancy and smallness.

Utensils with lid are not a new feature introduced in bell metal. Lidded *bowls, glass* and *lota* existed in earlier times as found in the records of museums (refer to Plate 7.4 E). Talukdar's (2006) article mentioned about production of decorative utensils, especially *bati* and *ban-bati* with lids. It is mere reintroduction of the old features in present times but is produced in a way to be placed atop or bottom of the bowl or *banbati*. The lid made in earlier times could be placed only atop due to a raised hood mounted on the centre of the lid. Artisans find lid giving sophisticated appearance which is often preferred by customers from cities searching for traditional bell metal products.

The rise of gift giving culture during celebrations like marriages, birthdays and several other occasions, created the demand for metal items like *kahi* and *bati*. The practice of gifting a set of bell metal *kahi* and *bati* during *anna-prasanna* (celebration of administering of solid food to a newborn for the first time) has been there in Assam since very long time. However, the custom is practiced more religiously nowadays which has led to the conception of a set of small *kahi*, *bati* and *glass* in brass metal as well. The notion of cost effectiveness as a gift item added to its address as representing cultural traditional of Assam is what this set represents. It is also a

prestigious gift item for birthday celebrations today. Small *kalah* which is in demand for a celebration called *tuloni biya* (a girl's coming-of-age celebrations), is targeted for women customers who would like to simply simulate the act of bringing water in *kalah* for the ritual. *Dunori*, just like the *xorai*, has also become an object of home decoration nowadays.

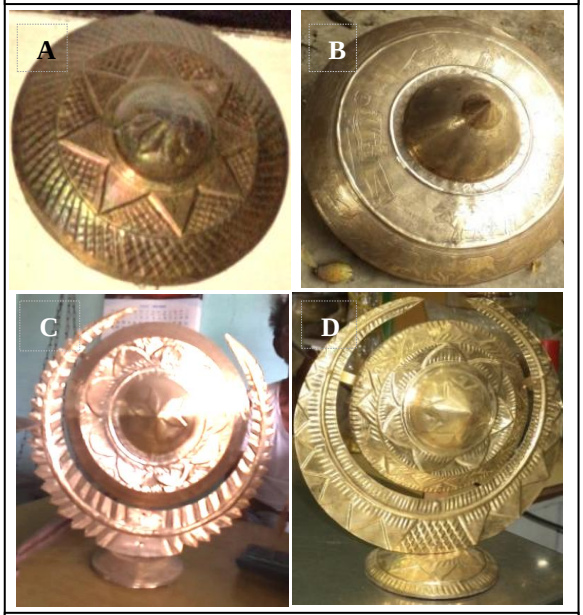
Plate 7.35: Decorative *Gosa*

Source: Field Survey

Outright modification and innovation on already existing product can be seen in the *gosa*. Practically used as a lamp held on a stand, *gosa* has transformed into aesthetic lamppost in modern times. Customers' search for beauty in devotion led to increasing the number of lamps on the *gosa* along with other additional features like flowers and petals. *Gosas* with as many as 101 lamps are also made for religious decorations in temples and *naamghars* (institutions of worship).

Traditionally, *dunori*, *xorai* and *bota* were, and are, objects used for religious reverence. This is a permanent symbolic tag attached to the crafts as long as Assam and its culture flourishes. However, these crafts emerged as decorative and aesthetic objects following the efforts of artisans to commercialize them as objects of decorations while retaining their structural forms. Another reason that artisans cite is to compete with machine made metal items that slowly started building inroads since the late 1970s period. The first item from Moradabad was the *ghati* molded on traditional bell and brass metal *ghati* called as *amhara ghati* from Assam. Keeping in view customers inclination towards lightweight aesthetic pieces, artisans claim to have introduced changes to keep abreast of new requirements of the customers.

Plate 7.36: Different Types of Brass *Japi*



A) Brass *Japi* for Wall, 35 Yr Old, in Split Bamboo Plaiting Design, B) 2 Yr Old Piece, C) & D) Table *Japi (Source: Field Survey)*

Functional change in the use of a traditional craft is more likely to result in commercial success (Parezo, 1982).

7.6 Innovation in Product Line

Use of traditional metal utensils in regular lifestyle, especially for cooking, storing, and dining has become outdated now, even in rural village settings. The demand for traditional utensils and the old fashioned bell and brass metal products are no more, especially among the well-to-do citizens of the cities (Kalita, 2007). But from field observations it is found that the demand for traditional utensils among local customers of Assam for symbolic and religious uses is still intact. At the same time, metal objects are fast becoming items of aesthetics and exhibit. Traditional artisans hence started opting for new products for customers driven by such needs. Few artisans like Tapas Deka and Khanin Deka in Sarthebari have started creating a whole gamut of innovative bell products today. Similarly, brass artisans of Sarthebari like Haridas Das and Parikshit Nayak have also followed the trend. Artisans of Hajo, however, are mostly stuck with producing traditional wares with few modifications.

Plate 7.37: Brass *Japi* (Source: Field Survey)

A) Design on *Japi* Depicting Lotus, Lily & farmer, B) Design on *Japi* Depicting Tea Plucking

According to artisans, a noticeable addition in traditional brass product line was initiated in the early 1970s period. Brass *japis* were introduced as decorative wall pieces. These *japis* were designed on the traditional bamboo *japi* of Assam. Brass artisans started replicating this already established art form in metal. its similarity to its bamboo counterpart allowed its easy absorbance in the traditional products line. It remains a glorified art work in brass even today and finds unfazed attention as a traditional brass product of Assam. The rise of brass *japi* replicating the bamboo model around 35 years back was a shift in artisans' desire towards creating newness in their product line. The design, as shown in Plate 7.36 A,

Plate 7.38: *Piris* Plates

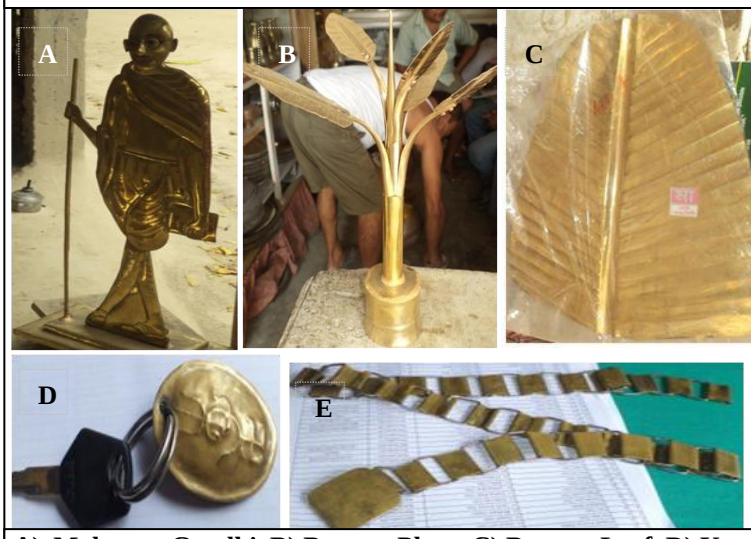
Source: Field Survey

is an inspiration drawn from the plaiting of the bamboo slits in the *japi*. Since then, several more transformations and makeover has taken place in this innovative art form. The designs engraved on its surface have changed from normal embossed pattern produced through denting to carving of national figures, and representation of various aspects of the village life and deities. There is no specific design pattern as it was in the brass *japi* of previous period. Artisans chip what fascinate them and catch their attention. The brass *japi* is also produced as a table or showcase piece. Metal *japi* has gained much popularity just like the bamboo *jap*i and is a wall decoration object as well as a table piece. The earlier *japi* is also replicated in toto along with the stylistically modified ones. The *japis* come in various sizes ranging from 3 inches to 36 inches. Small *japi* is treated as a gift item. Trays in *chaturbhuj* (square or rectangular) shapes were introduced by some artisans at Sarthebari which are an addition only since the last 30 to 35 years. It was much influenced by the steel trays of that time. Round and oval shapes came later. Hoarders dealing in antique metal products too believe trays to be non-traditional since never found among old scrap metal products (*bhangar maal*). Introduction of trays in brass also led to initiation of letter writing suggestive of the welcoming spirit of the hosts. Letters like *namaskar* (a kind of greeting term used in

Plate 7.39: Institutional Logos in Bell Metal

A) Brahmaputra Board, B) National Rural Health Mission (Source: Field Survey)

Plate 7.40: Decorative Art Work in Brass

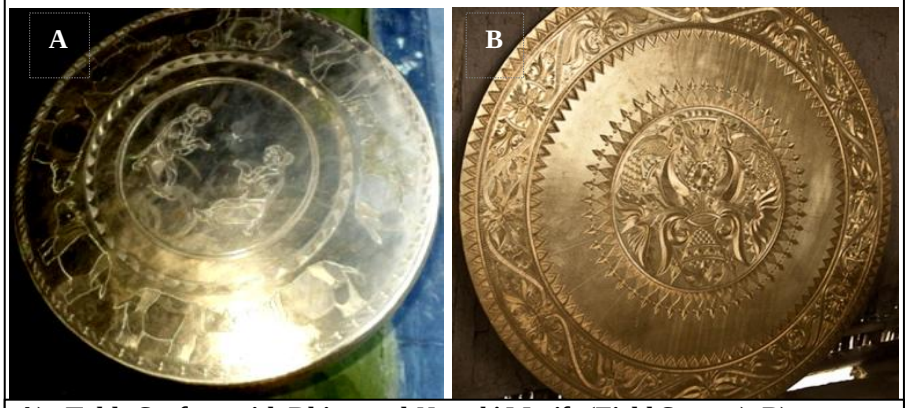


A) Mahatma Gandhi, B) Banana Plant, C) Banana Leaf, D) Key Chain, E) Belt (Source: Field Survey)

India, refer to Plate 7.23 A) and *welcome* with combinations of other motifs were chiseled on metal surface which still continues.

Likewise, *piris* plates (a kind of saucer developed on concept of bone china plate, refer Plate 7.38), are also produced in Sarthebari as snacks dishes. Intricate designs are also introduced on its surface. These dishes are made in sizes of 8", 9" and 11" for tea, coffee and snacks. Artisans are trying to introduce further light-weight characteristic to entice customers to purchase these plates against melamine plates. The product, as understood, has been there only since the last 15 years. Some chief artisans are reported to have received order from customer also create dinning sets weighing up to two quintals.

Plate 7.41: Flat Table Surface in Bell Metal



A) Table Surface with Rhino and *Nartaki* Motifs (Field Survey), B) Elaborate Designs on Flat Surface (Source: Punekar, Kire & Das, n.d)

Prompted by advancement of decorative items from Moradabad, some Hindu artisans at Hajo like Ashwini Chandra Bharali tried producing decorative brass items like *murtis* (idols of gods and goddesses) during late 1990s. But lack of finishing and polishing in their handmade items failed them in competition with items from outside Assam created in moulds which gave them superior finish. Inspired by non-traditional gift items in shops, some instances of innovative bell metal products are also observed in the year 1998. The production of decorative items was infrequent and only when orders were placed. Institutional demand for Innovative bell metal objects as emblems featuring logos helped artisans to enter into the innovative bell metal products business. Some of the emblems found to be produced by artisans during the survey are logos of 4th *Granth Mela* under *Assam Prakashan Parishad* (Publication Board of Assam), 2012-13, Guwahati Refinery Silver Jubilee trophy, Brahmaputra Board logo, Students Union of Arunachal Pradesh, etc. Similarly, institutional customers like

schools and colleges often place orders for logos in bell which artisans create on directives.

Plate 7.42: Decorative Products in Brass and Bell Metal (Source: Field Survey)

A) Mahatma Gandhi, B) Swami Vivekanand, C) Srimanta Sankar Deba, D) Jesus Christ, E) Lord Krishna, F) Greeting Card, G) Table Piece, H) Logo Tikhor, I) & J) Jewellery, K) Wall Clock, L) Show Piece, M) Wall Clock, N) Wall Clock, O) Key Chain & Lockets, P) Show Piece Representing *Bihu* Dance, Q) Show Piece

Production of innovative items is again seeing a spurt among few young artisans who are creating a range of decorative and functional objects in brass as well as bell metal. Young artisans taking part in exhibitions and trade fairs organized by government organizations from time to time realize the changing aesthetic needs of the customers. It influences their creative productions. Hence, many innovative objects are produced. Art works depicting famous people, Hindu Gods, other religious piece works and works showcasing tradition of Assam are some of the new artistic imaginations of

traditional bell metal artisans of Sarthebari. Other art pieces in bell metal are key chains, table pieces and greeting card. These items are produced through inspirations received from customers who seek gift items for New Year eves and other such occasions but want the item in bell metal. Similarly, brass metal artisans of Sarthebari are also creating a niche market for their items by trying to be more innovative and artistic. Decorative items in brass are yet to gain proper market share. But some items like banana leaf and banana plant (refer Plate 7.40 B & C) are receiving good attention as drawing room objects. The inspiration to produce these items came due to the influx of similar models from Moradabad. Yet, comparatively, banana plant from Moradabad is more attractive with refined finishing and is light weight.

The production of decorative items also brought into use oil based paints to highlight certain features in the art objects. Some of the decorative and innovative bell and brass metal products are presented in Plate 7.42. Some artisans like Parikshit Nayak from Amrikhowa have also produced centre table in brass metal. Artisans also produce table surface with intricate designs as shown in Plate 7.41depicting *nartaki,* rhino and various other motifs. These pieces are also used as wall decorations.

7.7 The Change in the Raw Materials Used

As time progressed, artisans specialized in developing new designs. The inflow of machine made high finished metal items made artisans recognize the need to create light weight and high finishing products. Artisans developed means to coincide their aesthetic tastes with that of the buyer's. Heavy metal sheets are still in use, however, increasing use of light metal sheets can be seen nowadays since it is cost effective and lightweight. In some countries like Japan and Sri Lanka and neighboring states like Arunachal Pradesh, old metal products are considered as antique products. Customers from these places look for old products. In order to give antique look to the items, artisans sometimes smear its back surface with black color. In certain cases, the back surface of the metal is kept unpolished to give it the antique glaze. Laquer used to fix the joints of *ban bati, bota* and *xorai* are often substituted with bitumine now since it is easily available and cheap. Artisans also use oil paints on certain decorative items and functional products like jewellery, cards, portraits, etc. to add more aesthetics to these products.

7.8 Source of Inspiration: Who Influences the Design and Make of Brass and Bell Metal Crafts?

Metal products of Sarthebari and Hajo have been commercialized and sold in neighbouring states like Arunachal Pradesh, and Bihar and in Buddhist countries like China, Myanmar, Bhutan and Nepal since ages. Even today, bell metal products like *bati, ban-bati, kahi, tow* and *soria*, as found during field survey, have good demand in neighbouring states like Arunachal Pradesh and Bihar. Different sizes of cymbals known by different names such as *pasang, bheri* and *cingeng* are also much sought after products in Bhutan. But most of the sale is processed through middlemen and agencies. Artisans produce according to the quantity sought and size demanded. Similarly, artisans receiving orders through middlemen are also guided by the agents on quantity, size and about the design in demand. But as far as the transmutations in designs are considered, it is a spontaneous occurrence mostly due to artisans' inclination to produce objects of beauty but with economic returns. In earlier times, artisans produced patterns on surfaces with leisure. Now, the aesthetics are directed more towards economics. Enlargement of designs is most economic than miniaturization. Artisans, hence generally enlarge the designs to save effort and time. They have also introduced new range of designs by keeping in mind the modern tastes of customers. Motifs like welcome, *namaskar*, etc. were etched to arrest attention of the customers from towns and cities. Increased flow of information about changing habit and requirements of people as well as communication with outside world led to spontaneous emergence of new products and designs. Some traditional structures continue but conventional designs have undergone changes due to artistic pursuit of craftsmen in competitive markets.

In literature it is found that in earlier days prior to the 1st World War, the artisans of Sarthebari received direct customers at their doors (Talukdar, 1990). Even today, on certain occasions, direct customers do visit Sarthebari and Hajo and buy the products directly from the artisans. A highly placed government official from Malaysia, as reported by artisans, is understood to have bought some tows as planters. He instructed the artisans to add holes on its bottom for drainage of the extra water from this traditional tub. The idea of *tow* as planters however, could not be materialized later in the local markets. Artisans state that external customers like the products but stay unsatisfied with the hand done polishing. They question the objects functional

suitability with their requirements. The hesitance to buy also arises due to metal's weight and transportability. Foreign customers rarely visit places like Sarthebari and Hajo. However, when that happens on some occasions, artisans often get to know their inclination and requirement for quality, price and finishing. During one such expedition by a Japanese group to Sarthebari around the year 2011, they sought *ban-bati* and drinking glass with stands but with certain modifications. The items were never bought due its weight but that probably might have opened the doors for flat lidded *ban-bati* and glass that is made today.

Some customers from Guwahati and other places of Assam also seek modern products directly from artisans of these places. Tray based on a model was sought from Haridas Das by a customer from Guwahati. Similarly, Haridas also got order for *panchmukhi* (5 faced) hanuman from a person based in Germany. Customers, especially institutional ones, also seek brass and bell metal made medals as well as symbolic logos for their organizations. Students union of Arunachal Pradesh ordered for 50 logos of their union from Khanin Deka in bell metal. However, such instances of direct interaction with customers is very few as major clientele of the products are the wholesalers and vendors who buy the products and sell them in various places in and outside Assam. They basically act as intermediaries who facilitate the sale of the products. Innovative products are also a result of artistic inclination of artisans to produce new items. Yesteryear artisans also produced non-traditional products like cufflinks. Likewise, a few young breed of artisans also introduce new objects from time to time. Commercialization has remained mostly spontaneous in Hajo and Sarthebari with modification and change bring brought about by artisans. Innovation in product line, heterogeneous elements in design and modification of old designs is found to be effort of the master artisans. Chief artisans often introduce elements which are experimented in the market. When well-received, the production continues with few others joining the process. Commercialization, however, is not totally isolated from limited influences of external agencies.

7.8.1 The Influence of Intermediaries and External Agents in Commercialization of the Crafts

Involvement of external agents such as NGOs as well as Government bodies can also be found to some extent in the area of study. But such efforts in design and product

modification are found to be basically sporadic in nature and have been since the late 1980s. In 1988, Small Industries Service Institute (now MSME) had arranged a study tour to Patna accommodating 10 artisans from Sarthebari and official of SISI. They studied the techniques of bell metal crafts at Surenja and Parev near Patna, the capital city of Bihar (Govt. Letter No. DI (1) 82/87/61 dated the 17th Aug. 1988). Similarly, to give a market exposure to the artisans and traders of Hajo, Small Industries Service Institutes, Guwahati had organized an Exhibition-Cum-Sale Promotion Programme at NEDFi Haat, Guwahati in 2005. NEDFi also roped in three German experts on handicraft products design to train a select group of artisans in Sarthebari and Hajo. The German Design Engineers visited Hajo and Sarthebari area during September 2001 and November 2004 who gave practical training and guidance to bell metal artisans of Sarthebari area in November 2004 for design and skill up-gradation. However, artisans find such workshops of limited scope as it emphasizes on learning through seeing rather than actual learning.

Likewise, Ad-Hoc Pacifist, an NGO, also gave training to 20 artisans at Sarthebari on jewellery making in metal 2004. Artisans created bangles, chains and ear rings in bell metal to compete with metal jewellery. In such instances, organizations like Ad-Hoc Pacifist worked as an external agent helping in modification of products. But, artisans like Parikshit Deka discontinued it for want of demand. Even prior to the training, artisans like Khanin Deka and Deepun Bhuyan had been making decorative items since 1998. Metal clock has been in existence since then. Varieties of novel metal items in existence are due to artists' exposure to customers in places like Delhi and Bhopal through exhibitions organized by government agencies under various schemes. During field survey, it was found that some artisans, on few occasions, received government funding under certain development schemes to visit well-known decorative items producing places like Moradabad in Uttar Pradesh. Such trips enhanced their perception regarding the demand for decorative items. Under Government of India's various support schemes, registered artisans also get chance to participate in various exhibitions and trade fairs. Coming in contact with customers during such occasions help artisans understand customer requirement which artisans claim try to utilize back home.

Cooperative societies also play a decisive role in the sale of the products throughout Assam. They act as agents of sale while purchasing the products from the artisans. Societies like ACBMUMSL and Government agencies like Jagran managed by Artfed have been helping artisans sell their products through their sales outlets in Assam as well as in other states. These intermediaries at times also bring in information about market demand. Customers sometimes ask for modern objects in bell and brass metal. When sought more frequently by customers, such information is passed on to the artisans. Apart from cooperative societies, artisans primarily sell through wholesalers, retailers, middlemen as well as local vendors. These intermediaries, in general, communicate about quantity and size and the adoption of the product and designs created by the artisans in the market. Intermediaries are simply a link between artisans and customers for marketing and selling of the products.

7.9 Wrapping up the Chapter: Commercialization, Stylistic Modification and the Continuity-Discontinuity of Tradition

Commercialization brings adjustment in arts and craft objects when positioned for different customer bases (the clientele). It is affected by type of requirement in the market place (the utility of the craft), and on the most, artisans' own disposition towards production they find economically viable (the style and use of raw materials). Bulk of demand for traditional metal products, at large, is from the local populace of Assam leaving aside a few international buyers. Artisans, as found from field observation, do not seem very bothered about the lack of demand for their traditional products among external customers since their main market is the customer from Assam.

Craft production among traditional artisans of Sarthebari and Hajo changed from the dynamics of little surplus production to a level of production where crafts became a major source or a supplemental source of income for existence. The widely postulated economic need is main motivator for commercialization of metal crafts. Commercialization has led to substantial changes in the design of the craft as artisans derive ways to reduce time and cost through simplification in the embossing and chiseling patterns. While orthogeneity in baseline designs and style is maintained through replication of *pankata*, *dot within circle*, and fish scales motifs, heterogeneity can also be seen in several stylistic patterns on *kahi* and *bota*. The designs have been

enlarged and the spaces between the etched patterns have increased to cover more space on the surface within less time. New patterns have also emerged in the form of individual motifs like *mayur, nartaki*, letter inscriptions, etc. In terms of design creation through embossing, the prominence of design is found to have reduced. This is also due to the use of light metal sheets to reduce cost of production. Customers are also inclined towards buying light weight objects.

Understanding of local customers' attachment to brass and bell metal items led artisans to innovate products like tray, greeting cards, *japi* and decorative pieces. Miniaturization is, yet again, experimented to reach broader customer base in some items like *xorai* and *bota*. The shift in the functional dimensions of the crafts from utilitarian and religious items to objects of decoration and gifts led artisans to apply necessary modifications in the form of miniaturization or enlargement. Artisans looked out for new customer bases. As such, utilitarian wares like *soria* and *tow* were articulated into small forms and beautified for young customers. Similarly, *botas* and *xorais* were also made smaller to convert it into souvenir products. Also, due to stiff competition from imported products that which are easily detachable and easy to assemble, local artisans also tried making easy to carry products. However, complete success is yet to be seen in this regard.

The imperatives of the market necessitated variety and variability. But articles like *tema bota, bhogjora* and *owkhulia bota* which could not be adapted for newer functional or aesthetic requirements have ceased to exist. Indeed, the brass products at Hajo have stayed simple but within that aesthetic pretensions could be seen in *tow* and *soria*. The enlargement of market in case of brass and bell metal articles at Sarthebari was not only an artistic pursuit but also to create a monopolistic advantage by expert artisans over other local artisans. Productions for the earlier regional markets continue to remain uninterrupted but multiplication of market has taken place since artisans are trying to expand the market share.

In the case of raw material use, change can be seen with respect to use of lighter metal sheets and oil paints to enhance certain aspects in innovative metal objects. Similarly, bitumine is used nowadays instead of lacquer to fix joints and artisans also smear some black paint on the back surfaces to give antique look to the products.

Commercial continuity of brass and bell metal items at Hajo and Sarthebari are driven due to craftsmen's inclination to stay competitive in market. Field study brings to foreground the observations that commercialization of metal products is a well-driven process led by the traditional artisans. Inspiration to introduce new designs or translate the old motifs into new forms is the innate ability of the artisans. Expert artisans introduce new elements in the items which are experimented in the market. When sold well, its production persists while production ceases when it does not garner much demand. It is a fact that artisans are inspired through the happenings in their surroundings. The influx of metal products from other regions like Moradabad created the need for artisans to introduce the concept of light weight objects. Similarly, their understanding of customer's change in functional needs drew them closer to bringing structural changes.

In terms of the process of commercialization, it is seen that changes have encrypted spontaneously as artisans tried to introduce newness in designs and forms to fit emerging market segments. Artisans mostly remained dependent on middlemen and local retailers and wholesalers for the sale of their products who seldom suggested any design modification except for bringing orders from customers. They behaved mostly as agents of sale. However, at times, sporadic interventions from government agencies and NGO could be seen as artisans started getting instructions and training on certain innovative item making. Role of government agencies and cooperative societies was majorly towards facilitating sale through sales outlets and arrangement of exhibitions for artisans.