HEIRLOOM BLUE-GLASS MELON BEADS OF THE TANI TRIBES, NORTHEAST INDIA

Barbie Campbell Cole

The Tani tribes of Arunachal Pradesh in India's remote northeast wear various heirloom necklaces including those composed of highly distinctive melon-shaped beads of wound turquoise-blue glass. These are unique to central Arunachal and were already of considerable age and very highly prized in the early 19th century. The Tanis believe their beads were made by a mythical ancestor in Tibet, but their bubbly opaque blue glass and wound method of production suggest a Chinese origin. The beads have local names which appear to link them to Tsari, one of Tibet's most important Buddhist pilgrimage sites. For centuries, the hostile animist Tanis were bought off by the Tibetan government with ornaments and other gifts in return for not robbing the Tsari pilgrims. This article seeks to determine if the Tani melon beads were part of this Tsari "barbarian tribute," as well as where and when they were made, and why they were traded into this region of Northeast India and not elsewhere.

INTRODUCTION

In the early 19th century, British colonial informants frequently remarked on the profusion of beads worn by tribes living in Arunachal Pradesh, India. Of particular note were melon-shaped beads of bubbly opaque turquoise-blue glass which are greatly valued today by tribes collectively known as the Tani group (the Apa Tanis, Nishis, Hills Miris, Adis, Tagins, and Mishmis). According to British colonial informants, the beads were already of considerable age in the early 19th century and were rarely available. They are unique to central Arunachal and are not worn as traditional heirloom beads elsewhere. While they are not the only beads or ornaments valued by the Tanis, the blue glass melons are regarded as their oldest and most valuable beads and are a symbol of wealth and Tani ethnicity.

The Tanis wear two sizes of melon beads (Figure 1). The smaller ones (Plate IA top) are irregular in size but average about 10 mm in diameter and 6.5 mm in length. They have large perforations, deep irregular indentations, and flattened ends, making them almost disc-shaped in some cases. The flattened nature of the small Tani melon beads has been increased considerably by wear. The glass generally has a smoother surface and fewer bubbles than the larger beads.

Although considerably flattened at the ends, the larger beads (Plate IA bottom) have a more spherical profile. Though also irregular in size, they generally measure 20-22 mm in diameter and 18-20 mm in length. The irregular indentations are shallower, probably due to heavy strands of beads wearing against each other. The perforations are large and the glass contains more bubbles and impurities than that

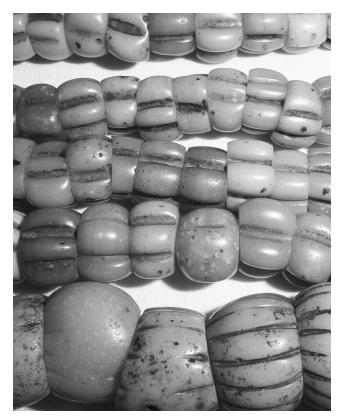


Figure 1. Small and large Tani blue melon beads (all photos by author).

of the smaller beads. Some large beads exhibit distinctive circular to horseshoe-shaped marks on the surface, probably bubbles in the glass that have been accentuated by natural abrasion. In both sizes, there is an inconsistency in the color and quality of the opaque bubbly glass. Occasionally both sizes are found in different colors.

Melon beads like the Tani specimens are made by winding molten glass around a mandrel and pressing a metal blade or tongs into the sides to form the indentations while the glass is still in a soft state. The ends may have been flattened by pressing them with a blade or paddle while the glass was still soft or by grinding when hard, although the latter method is less economical. The presence of numerous bubbles in the glass is indicative of furnace winding where liquid glass is taken directly from a pot in the furnace and worked on the end of the mandrel (K. Karklins 2012: pers. comm.).

This article seeks to determine where and when these distinctive beads were made, and why they were traded into this remote mountainous region of Northeast India and not elsewhere.

ASSAM: ITS HISTORY AND GEOGRAPHY

Assam forms a physical and cultural bridge between India, Tibet, China, and Burma (Figure 2). No other part of India has such ethnic diversity and nearly 200 separate tribes still live in the region today. Assam's earliest inhabitants, the Austro-Asiatic peoples, were followed by Indo-Aryans and successive waves of Mongoloid Tibeto-Burmans who controlled the Brahmaputra plains. In the 13th century, the Ahom, a Tai Shan group, entered Assam from northern Burma. The Assam valley remained under Ahom control until it was annexed by the British in 1830s. Assam was subsequently divided by independent India into seven separate states (Figure 3).

Through Assam's fertile plain winds the mighty Brahmaputra River which flows south from the Tibetan plateau to the Bay of Bengal. The valley is almost encircled by a range of formidable hills (Figure 4) which rise to the north to meet the snow-clad eastern Himalayas and the border of Tibet. Acting as a physical barrier to invasion, these remote hills formed a refuge for a mosaic of tribes whose language, race, and culture remained Tibeto-Burman and quite distinct from the Hindu and Muslim peasantry of the Assam plains below. Hostile and warlike, the hill tribesmen maintained their independence, attacking intruders, plundering and raiding, and causing constant irritation to the peoples living in the plains. Only very gradually during the 19th century were the British able to penetrate the hills to put a stop to



Figure 2. The location of Arunachal Pradesh in Northeast India.

the constant raiding and inter-tribal feuding. To the north, the Subansiri region of Arunachal, home to the Tani tribes, was the last to come under British control and remained one of the most remote and unexplored regions in southern Asia (Bower 1953:xii, xiii).

EARLY BLUE MELON BEADS OF THE TANIS

As the British began to penetrate the southern foothills of Arunachal, they brought back reports of tribes wearing goods said to be of Tibetan origin, including huge necklaces of blue beads of "porcelain" which were highly valued. The earliest report dates to 1825:

All the more wealthy Abors (Adis) have... large necklaces of blue beads which they esteem very highly, and they profess that they are not procurable now; they look exactly like turquoises, and have the same hue of greenish blue; but a close examination discovers in them minute bubbles, marking the agency of fire. They are extremely hard, but the only one I could get possession of I broke with a hammer, and it had exactly the fracture of fine Chinese porcelain (Wilcox 1832:403).

Many reports followed in subsequent years. In 1845, Dalton informs us that both men and women in the Subansiri region wore around their necks "an enormous quantity of beads, mostly of blue, like turquoise, but also of agate, cornelian, and onyx and glass beads of all colours." He also mentions "fine blue beads" worn by the Meris (Miris) which

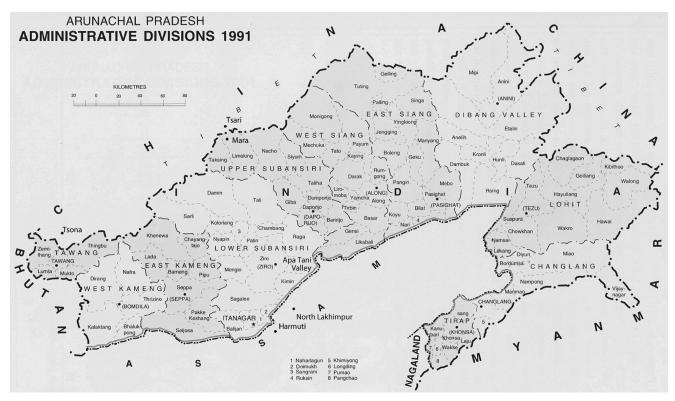


Figure 3. The political divisions of Arunachal Pradesh.



Figure 4. The Arunachal landscape; steep, heavily forested hills which rise toward the Eastern Himalayas.

they regard as heirlooms, adding that they were unaware of the origin of their beads and that they were seldom obtainable other than occasionally from the Abors (Adis) (Dalton quoted in Verrier 1959:152-153).

Krick reports in 1853 that Padam (Adi) men "wear but one kind of necklace... of blue stone... of unusually neat cut. This article is highly valued, and transmitted from father to son, as they pretend to have received it directly from God" (Krick 1913 quoted in Verrier 1959:245). Dalton later recounts a Padam (Adi) myth sung by their shaman priests:

The human family are all descended from one common mother. She had two sons, the eldest was a bold hunter, the younger was a cunning craftsman; the latter was the mother's favourite. With him she migrated to the west, taking with her all the household utensils, arms, implements of agriculture and instruments of all sorts, so that the art of making most of them was lost in the land she deserted; but before quitting the old country she taught her first born how to forge *daos* (swords), to make musical instruments from the gourd, and she left him in possession of a great store of blue and white beads. These beads and the simple arts known to him he transmitted to his posterity (Dalton 1872:26).

In the early part of the 20th century, we have several reports from Dunbar. He refers to "blue or green porcelain beads... from the north" worn by the Abor and Gallong (Adis); large round porcelain beads worn by the Subansiri clans which differed in shape but not in substance from the Abor and Gallong beads and were highly prized as heirlooms; and strings of immense blue porcelain beads of Tibetan origin worn by the Daflas (Nishi), some of which were of considerable age. Finally, he mentions strings of "square beads of blue porcelain frequently carved into what appears to be the wheel of life in its simplest form." Dunbar probably refers here to the "wheel of law," a Tibetan Buddhist sacred symbol represented by a circle with projecting spokes, highly reminiscent of the smaller Tani blue melon beads when seen end on (Dunbar 1915:3, 5, 13, 30, 32).

These reports span nearly 100 years and confirm that by the early 19th century, the Tani blue glass beads were of considerable age, highly valued, and rarely obtainable. The author's recent fieldwork reveals that while the Tani group also value necklaces of conch and carnelian, as well as more recent spherical and oblate beads of opaque blue glass (Fürer-Haimendorf 1955:224), the beads that they value above all others, and which they consider to be of the greatest age, are the two sizes of blue glass melon beads.

THE TANI TRIBES

The Tani tribes all trace their descent to a common mythical ancestor known as Abo Tani. They claim to have migrated over many centuries from somewhere to the north in the eastern Himalayas, carrying their blue melon beads with them and arriving at their present areas of occupation by at least the 15th century or possibly much earlier (Blackburn 2003-2004:19; Dalton 1855:151; Fürer-Haimendorf 1962:59). The Tanis speak dialects of the Tibeto-Burman language, have no writing, and share the same animist beliefs, contacting the spirit world through *nyibos* or priests.

There is, however, a striking difference between the culture of the Apa Tanis and that of the rest of the Tani group. Prior to the 1950s, the Nishis, Hills Miris, Adis, Tagins, and Mishmis were warlike and independent, living in scattered isolated villages over a vast stretch of forested mountain territory (Dutta Choudhury 1981:121), dependent on slash-and-burn agriculture. They had no concept of privately owned land and no attachment to permanent village sites. Wealth and prestige were gained by acquiring wives, oxen (*mithun*), Tibetan swords, clapperless bells, and beads through raiding and kidnapping (Bower 1953:xv, 48; Fürer-Haimendorf 1955:82, 146-147; Shukla 1959:69, 70).

In contrast, the Apa Tanis lived (and still do) in seven large, permanent villages in a small, densely populated valley some 10 km in length. Their well-watered valley allowed sedentary rice cultivation (Figure 5). The Apa Tanis also valued oxen and beads, but unlike the other tribes, their main source of individual wealth lay in their land. Unlike their neighbors, Apa Tani women tattooed their faces and wore large nose plugs of bamboo (Plate IB). They also owned fewer beads and wore them only at festivals (Fürer-Haimendorf 1955:16, 143, 231; 1962:4, 57, 58).

TANI BEAD TRADITIONS AND MYTHS

The Tanis believed that their beads were made in Tibet by a mythical ancestor known as Abo Loma who "had no bones, worked only at night and never slept." Abo Loma is said to have learned the technique of metallurgy from a deity called Wiu Loma who also made the Tanis' precious swords and clapperless bells (Sarkar 1999:39; Shukla 1959:129). All these goods were referred to by the Tani tribes as *nyaloma*, meaning "from Tibet," and were considered to have a sacred origin.

Although the men of some Tani tribes wore beads, women (normally married or widowed) wore more beads



Figure 5. The Apa Tani valley, ringed by the remote forested hills inhabited by the other Tani tribes.

than the men. Heirloom beads were regarded as symbols of prestige and wealth and were rarely sold other than in times of great need (Srivastava 1988:9, 32, 91). Great value could lie in a single precious bead (Fürer-Haimendorf 1955:140, 155), its size, color, and luster dictating its worth. Blue glass melon beads of a darker turquoise blue had the most value. Some beads were regarded as "dead" and were said to cause bad luck. These were sometimes given away. Cracked beads were considered to have lost their value and it was bad luck to give them as presents (Anya Ratan and Ratan Yak, Itanagar 2010: pers. comm.; Fürer-Haimendorf 1955:154).

Tani heirloom beads were believed to have protective powers. The Hill Miris had their beads blessed by a *nyibo* or priest in order to make the beads powerful (Damnya Ligu, Hill Miri *nyibo*, Ligu village, Daporijo 2010: pers. comm.). Millet wine and rice flour were sometimes thrown onto beads by the Nishi to make them yet more "alive" and powerful; the more wine that was used, the more the beads acquired power. Beads also increased in power if they were owned by one family for many years (Anya Ratan and Ratan Yak, Itanagar 2010: pers. comm.). When asked to seek help from benevolent *wiyus* or spirits, *nyibos* were often paid with beads. Tani blue melons were the most desired as payment. Only if the *nyibo* was happy with his reward would his requests to the spirits be answered (Dutta Choudhury 1981:110). With some variation between the tribes, beads played an important role at birth, marriage, and death. Because "the eyes of love as well as the evil eye" could harm a baby, a Nishi mother would always have ready a small bracelet or anklet of protective beads (Figure 6) which she would put on her baby immediately after the umbilical cord was cut (Anya Ratan and Ratan Yak, Itanagar 2010: pers. comm.). Blue melon beads were thought to be the most suitable for this purpose, although sometimes Venetian eye beads and cowrie shells were used. The baby was given more beads at the age of one to wear around the neck or waist, and these were often still worn as the child grew older (Figure 7).

The Adis gave one type of beads to boys and another to girls. Beads were also believed to give protection to adults. Once blessed by the *nyibo*, they were worn to prevent illness and other misfortunes (Srivastava 1988:101). The Nishis also gave a present of beads to relatives or friends setting out on a journey (Anya Ratan and Ratan Yak 2010: pers. comm.). In the past, because of their protective powers, most Tani women wore their heirloom beads all the time. When working in the fields they stored their beads in a basket. In the evening, when they returned home, they would remove their heavy beads, but smaller, less valuable beads would still be worn when sleeping (Aka Murtem Ratan, Daporijo 2010: pers. comm.).



Figure 6. Child's protective bracelet containing a Venetian black eye bead and a cowrie shell.

Beads were given during the protracted exchange of gifts between the families of the bride and bridegroom preceding marriage (Sarkar 1999:79). A Nishi boy might take a present of meat, a sword, and beads to the father of his intended bride in the hopes of winning his approval (Dutta Choudhury 1981:130, 131). The gift of half a broken bead was sometimes regarded as a token of attachment, the boy and girl each keeping one half (Dunbar 1915:55; Shukla 1959:69). Because of their value and protective powers, it was vital for a father to give his daughter beads as part of her dowry (Dutta Choudhury 1981:134; Sarkar 1999:119). Along with clapperless bells, dowry beads were worn by the bride at her wedding. Once married, an Adi Gallong bride would receive a large blue melon bead hung on a red cord from her new mother-in-law. Dowry beads and any beads given to a woman by her husband remained her personal property, usually the only share of family wealth that daughters received (Fürer-Haimendorf 1955:82; 1962:99). If a girl eloped or left her husband, she had the right to take her beads with her (Sarkar 1999:91). A man who had several wives would keep his clothes, weapons, and beads by the hearth of his favorite wife (Sarkar 1999:78).

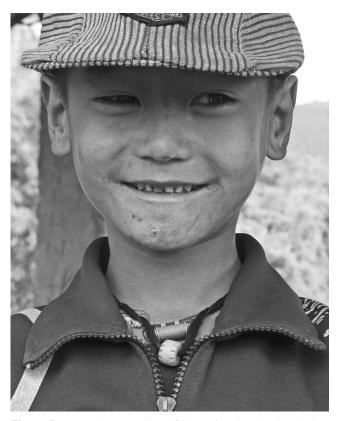


Figure 7. Young boy wearing a fake Tani melon bead and other amulets.

The Lhopa Bokars in Toka village recount the following legend about their beads:

Many years ago, there was a man called Nu Pu, who was to the Lhopa like a living Buddha. He had two daughters called Yabi and Yari. In ancient times, the Lhopa were very poor and Nu Pu's daughters asked how they could help him. The father had a dream and said to them the following morning: "Come outside and see the big rock in the east, and go there and pray." When the girls got half way they saw something shining on the rock. They took these shining objects to their bodies and suddenly they became beads. Since then pokchi are the ornaments for the Lhopa. So now, when girls get married, their parents must give them beads for protection and good fortune, and a prayer should always be said before they put their beads on (Ji Wenzhang 2010-2011).

When a woman died, her valuable beads were inherited by her daughters or daughters-in-law, and a man would leave his beads to his sons (Dutta Choudhury 1994:98, 109). It was considered a mark of respect to bury a relative with beads (Anya Ratan and Ratan Yak, Itanagar 2010: pers. comm.), but less valuable beads were used rather than prestigious ones from Tibet (Sarkar 1999:95; Anya Ratan, Itanagar 2010: pers. comm.). Before burial, the Nishis and Tagins sometimes placed two beads strung on a thread in each ear of the deceased (Shukla 1959:118, 120).

Among the Nishis and Hill Miris, the family's most valuable beads, clapperless bells, and other ornaments were kept in the care of the first wife. Because of the fear of raids from hostile neighbors, the most valuable heirloom beads were never left on display. They were hidden in the rafters, sometimes stored in a large ox horn, or wrapped in a cloth buried in the ground in a place known only to the heads of the family (Dunbar 1915:37). There was always the risk that if they died unexpectedly, the beads might never be found (Bower 1953:50, 51; Fürer-Haimendorf 1955: 143, 155; Shukla 1959:15, 17, 60).

The importance of beads is reflected in the oral traditions of the Tanis including their migration myths (Dalton 1872:26), and there are many references to beads as items of trade in their myths and legends. The beads referred to are always "from Tibet" rather than from the plains. Beads often appear as sources of wealth. In a few stories, beads are made from the fingers, kneecaps, or toes of spirits and were given to a girl who then becomes rich (Blackburn 2003-2004:37). For the Nishi, to dream of beads brought bad luck. If a Nishi man dreamt of giving away his beads, his wife or child might die. If he dreamt of putting many beads around his neck, he feared that the *wiyus* or spirits were planning to put ropes around him and he would fall sick and die (Shukla 1959:107, 109).

INTER-TRIBAL TRADE WITHIN THE HILLS

Within the hills, each tribal village remained an independent unit which accepted no outside authority (Dutta Choudhury 1994:256). Trade was undertaken on foot because the terrain was too harsh for pack animals. Because of the constant risk of inter-tribal feuding, ambush, and kidnapping, it was dangerous for a man to travel to another village unless he had an established trade partner there who could guarantee his safety and help him find customers. Vital commodities such as salt and luxuries such as beads arrived through the slow trickle of village-to-village barter, traveling along a complex network of tracks throughout the hills. The occupants of each village acted as middlemen, guarding their individual trade monopolies by obstructing access to the villages beyond their own (Dalton 1855:151; Fürer-Haimendorf 1962:58).

Until the 1960s when the use of currency began to penetrate the hills, trade was carried out exclusively through barter. High value items such as oxen, slaves, salt, Tibetan swords, clapperless bells, and beads were all used as currency (Dunbar 1915:35, 37), the value of each item varying according to availability and the needs of both parties. Beads were used to buy valuable goods such as slaves, or used to pay compensation for murder, ransoms demanded for kidnappings, or fines imposed for theft (Shukla 1959:86, 93). Trade relations fluctuated between intense activity and periods of feuding and hostility (Fürer-Haimendorf 1955:177, 199; 1962:121). If a feud became too burdensome, a peace pact known as a dapo would be negotiated which often involved the transfer of goods of considerable value from one party to the other, such as oxen, clapperless bells, and beads (Fürer-Haimendorf 1955:154, 155, 171, 217). The peace pact would be sealed by a formal ceremony in which mutually binding oaths were made by both parties (Dutta Choudhury 1981:272).

From the late 19th century, the colonial British began to import glass beads into Assam via Calcutta. The great majority of these beads came from Italy, presumably Venice, and a small proportion came from China and Austria (Bohemia) (Francis 2002:177).¹ The beads were sold in the bazaars of the Assam plains and the most popular were small, light, and inexpensive, often red-on-white Venetian beads commonly known as "white hearts." These became known as "bazaar beads" (Bower 1953:13) or tamintaya and would gradually make their way to the tribes in the hills where they became popular among the tribeswomen for daily wear (Sarkar 1999:5; Anya Ratan, Itanagar 2010: pers. comm.). But most highly sought were the nyaloma or beads "from Tibet." Their supposed magical origin, protective powers, rarity, and high value made them the source of much prestige and envy (Fürer-Haimendorf 1955:139). Yet the harsh terrain and dangers of traveling far from one's village meant that Apa Tanis, Nishis, Hills Miris, and Adis had no direct trade with, or even any knowledge of, Tibet. Rumors gleaned from trading partners to the north provided reports of hostile tribes wearing clothes made of skins or plant fiber from whom valuable blue glass melon beads could occasionally be obtained, but through whose territory it was impossible to pass (Bower 1953:xiii; Dalton 1872:28; Fürer-Haimendorf 1955:85, 188; 1962:50, 59). Who were these tribes and from whence did they obtain the beads?

THE LHOPA TAGINS TO THE NORTH

The tribes living in the remote regions far to the north of the Subansiri region near the Tibetan border were known in Arunachal as the Tagins.² The Tagins were the northernmost branch of the Tani tribes. Because they had neither direct nor indirect contact with the Assam plains and were entirely dependent on Tibet for vital goods such as salt and cloth, the Tagins are barely mentioned in British colonial records (Dutta Choudhury 1981:86).

Since the 11th century, the Tibetans have referred to all the non-Tibetan, non-Buddhist animist tribes living along their southern border with Arunachal as Lhopas or Lobas, a derogatory name meaning "savage" or "barbarian of the south" (Blackburn 2003-2004:25; Huber 1999:129, 172). For the Lhopa tribesmen, martial success brought status and prestige, but the peaceable Tibetans had the greatest contempt for the Lhopas' constant raiding and killing and regarded them as wild, warlike, uncivilized, and dangerous (Huber 1999:172). Within Lhopa territory were forest products which were much desired by the Tibetans, but the Lhopas guarded their trade monopoly by attacking any Tibetan who dared to enter their territory. To trade, the Lhopa tribesmen would cross the high passes of the Himalayas to Tibetan villages on the border. Because the Lhopas were greatly feared, the Tibetans would often not allow them to sleep in their villages and rarely allowed them to venture further into Tibet (Bailey 1957:142, 158; Desideri 2010:240).

THE TSARI PILGRIMAGE

The position of the Lhopas along the border gave them privileged access to Tibetan goods such as salt and Tibetan swords, clapperless bells, and beads (Dutta Choudhury 1981:216; Krishnatry 2007:180; Sarkar 1999:5, 6 [notes 4, 5]) which were so highly valued by the Tani tribes further south. The Lhopa Tagins living in the village of Mara, situated in the border region of the Upper Subansiri, had a significant trade advantage over their Lhopa neighbors, making their village a nodal crossroads in the trade of Tibetan goods. Within their homeland lies the sacred peak of Tsari which straddles the Upper Subansiri-Tibet border adjacent to the most remote and rugged part of the Tibetan province of Dakpo. Tsari is one of the most important pilgrimage sites for Tibetan Buddhists, ranking alongside Mount Kailash and Mount Amnye Machen. From the earliest Western account (Desideri 2010:239, 240) we know that since at least the early 1720s, and probably earlier, two pilgrimages took place around the sacred Tsari mountain: an annual pilgrimage known as the Kingkor circuit which was within Tibetan territory and could be completed within a week or ten days, and a second, far more grueling circuit known as the Rongkor which could take up to a month. The Rongkor pilgrimage was held every twelve years in the Tibetan year of the Monkey and was undertaken by up to 20,000 pilgrims, or perhaps as many as 100,000 according to some informants (Bailey 1957:200), who came from Tibet, Bhutan, and Sikkim (Desideri 2010:239, 240; Huber 1999:129). Both the Kingkor and Rongkor pilgrimage circuits involved intense physical hardships, crossing several passes of over 4,900 m on precipitous tracks which often led to fatalities (Krishratry 2005:167), but the longer *Rongkor* circuit involved far greater dangers; beyond the high passes, the latter route crossed the Tibetan border and descended into the unfamiliar, semi-tropical terrain of the hostile Lhopa Tagins whose habit was to attack and rob or murder the pilgrims. Because of the great dangers involved, to undertake the Tsari pilgrimage was regarded as an act of very great merit.

THE TSARI RONGKOR "BARBARIAN TRIBUTE"

The Tsari *Rongkor* pilgrimage and the formal payment of a *lodzong* or "barbarian tribute" to the Lhopa Tagins are thought to have been introduced in the 17th century in the time of the Great Fifth Dalai Lama (1617-1682) (Huber 1999:153). He had several personal and political associations with Tsari and is often depicted holding a sacred Tibetan bell. His successor, the Sixth Dalai Lama, composed a song about the Tsari region (Huber 1999:158; Sorensen 1990:113-142).

Since at least the early 18th century, the Tsari *Rongkor* pilgrimage received the direct patronage and support of the central Tibetan government and aristocracy (Huber 1999:129, 131, 167). Part of this patronage involved the payment of a "barbarian tribute" to the Lhopa Tagins. In return they swore an oath not to attack the Tsari pilgrims and to allow them safe passage through their lands (Krishnatry 2007:100, 101). The exact amount of the *lodzong* varied and discussions were protracted and tense. Though knowing that attacks would probably still take place, the Tibetans were obliged to pay whatever was demanded to lessen the likelihood of the deadly ambushes, extortion, enslavement, and kidnappings that would inevitably follow along the pilgrimage route if the Mara Lhopa Tagin clan chiefs were not satisfied with their tribute.

Once the amount of the *lodzong* was decided, a ritual oath-swearing ceremony or *dapo* took place similar to the *dapo* peace pacts made between feuding tribesman further south, and each Lhopa Tagin clan chief would receive an ox, a Tibetan woollen blanket, a Tibetan sword, and the most valued type of ancient clapperless bell. Their followers, the occupants of most of the valley around Mara, demanded bags of salt, cloth, Tibetan swords, and large quantities of "colored beads and shells" (Huber 1999:136,138; Krishnatry 2007:139).

Once the *lodzong* had been distributed and the pilgrimage began, the Mara Lhopa Tagins would extract a small "toll" from each pilgrim at the point where they entered Lhopa Tagin territory and at other points along

the pilgrimage route where access was restricted and the pilgrims were vulnerable. The form of payment was not fixed (Huber 1999:107, 145), but it was often paid with beads (informants, Gintong village 2011: pers. comm.). If the tribesmen were unhappy with their toll, extortion and robbery often took place in which the pilgrims were relieved of all their jewelry (Dunbar 1915:6). By tradition, every year the Mara Lhopa Tagins also received an annual payment of beads, salt, and other goods from inhabitants of the village of Lo Mikhyimdun, the gateway to Tsari on the Tibetan border (Krishnatry 2007:98). This regular and reliable influx of valuable Tibetan goods, including beads (Huber 1999:172-173, b212; Krishnatry 2007:180), into Mara made it the focal point of trade for the whole of the Subansiri region and even further afield. But how did the beads distributed to the Lhopa Tagins reach Tsari and from where were they obtained?

TRADE ROUTES TO TSARI

Although traditionally both Tibetan men and women wear large necklaces of coral, turquoise, dzi, amber, and pearls, and almost every Buddhist monk and layman owns a string of prayer beads, the Tibetans have no beadmaking tradition. Leh in Ladakh to the west of Tibet was the great trade entrepot for the coral, turquoise, and amber so valued by the Tibetans (Clarke 2004:37), but from early times, trade caravans had also traveled to Tibet from ports on the Bay of Bengal along trade routes through Darjeeling, Sikkim, Bhutan, and far western Arunachal near the Bhutan border. The ancient caravans carried conch shell and pearls, and later beads of amber and coral. Some of these goods were sold at Tsona, a town just across the Tibetan border where an important annual fair took place, attended by thousands of traders from throughout Tibet, Bhutan, Sikkim, Kashmir, Nepal, China, and northwestern Arunachal (Passan, Tawang 2010: pers. comm.). From the early 20th century and probably a little earlier, "English manufactured beads"3 were sold at the Tsona fair (Tsybikoff 1904:745) which the Lhopas were sometimes allowed to attend (Dunbar 1915:8). From Tsona, some trade caravans would proceed north for a further two months to Lhasa, the capital of Tibet, which was a thriving trade center.

An important trade item brought by caravans from the ports on the Bay of Bengal were conch shells from southern India. In whole form, conch shells (*Turbinella pyrum*) were used in Buddhist monasteries as horns (*dungkar*) to accompany ritual dances and summon the monks to prayer (Clarke 2004:38, 39). Small, carefully crafted conch-shell beads were used in Tibetan Buddhist rosaries (Waddell 1895:206, 534), but cruder and much larger conch-shell

beads were valued by the Tani tribes. Some of these larger beads were a rough barrel-shape, but beads made by drilling the central axis or columella of the shell were the most highly prized. Although conch-shell beads were also available on the Assam plains⁴ (Campbell Cole 2008:17), the Tanis regarded their conch-shell necklaces as nyaloma or sacred beads "from Tibet" which were passed from generation to generation as heirlooms. They were also worn by nyibo or priests during Tani rituals (Plate IC). One necklace of about 40 glossy conch-shell beads was said to be worth an ox. Sections of shell in various sizes and shapes were also used as fasteners for necklaces. Conchshell beads were a popular item sought by Lhopa traders along the Tibetan border (Bailey 1957:214). It is likely that the "shells" mentioned above in the list of goods given to the Lhopa Tagins at the Tsari Rongkor lodzong tribute were conch-shell beads, although they may have been cowries. The considerable age of some of the heirloom conch-shell necklaces that are still much valued by the Tani tribes today (2010: pers. obs.) suggests that they may have formed part of the Tsari *lodzong* for a considerable time.

Venetian beads were imported into Calcutta and Assam by the colonial British from the second half of the 19th century. These beads were also traded north via Tsona to Tibet and probably formed the majority of the glass beads given to the Lhopa Tagins as part of the Tsari lodzong and the "toll" beads extracted from pilgrims. Venetian black eye beads are found in many Tani heirloom necklaces and are known by the Apa Tani as bimpu ami or "eyed" bimpu⁵ (Plate ID top). Wound glass beads known as either "dogtooth" or nyime taju ("Tibetan" taju) (Plate ID bottom) are also valued by the Tanis. Unlike the smaller and less valued tamintaya (white-heart beads) from the Assam plains which were used for daily wear, Venetian black eye beads, and dogtooth beads were highly valued and regarded by the Tani tribes as nyaloma ("from Tibet"). Like the more valued Tani blue melons, these Venetian beads were believed to have a magical origin. In 1956, Krishnatry (2007:162) reported the consternation of the Lhopa Tagins when they learned that beads given to them at Tsari, which they believed to have a sacred origin in Tibet, were in fact obtained by Tibetan traders from the Assam plains.

Informants living in the Tibetan villages just to the north of Tsari report that prior to the 1950s, itinerant Tibetan traders would arrive on foot with sacks of beads which they sold to the Tsari pilgrims for use as toll payments. Among the beads were some known as *ani mani (mani [Sanskrit]*: bead or pearl). Although some informants report that these beads were green, it is probable that they were *bimpu ami*, the Venetian black eye beads mentioned above which the same informants remember seeing being worn by the Lhopa Tagins. The Tibetan bead traders also sold conch toggle clasps used in Tani necklaces (informants, Gintong and Ladok villages 2011: pers. comm.).

British colonial informants reveal that in the early 20th century, Tsari pilgrims also paid their passage with "strings of the blue porcelain beads" (Dunbar 1915:6). We know that the Tani tribes' much-valued melon beads were no longer available by the 1820s so the "porcelain" beads were probably the spherical, oblate, or disc-shaped beads of turquoise-blue glass produced in China until the late 20th century for the tribal market. These beads were also valued by the Tani tribes. They may have been imported into Tibet directly from China or they may represent the small percentage of "Chinese beads" mentioned previously which were imported by the colonial British into Calcutta starting in the late 19th century. In the 1950s, Tibetan traders also sold plastic copies of these beads for use as Tsari toll beads (informants, Gintong and Ladok villages 2011: pers. comm.).

In the early 20th century, necklaces of "imitation turquoise" made in "Birmingham, Germany, or India" (Dunbar 1915:6, 8) were also given by the Tsari pilgrims to the Lhopa Tagins. The Tibetan market for turquoise was a highly lucrative one and imitation turquoise was already made in the 19th century (Clarke 2004:39) although it is not known what material was used. Neither true nor imitation turquoise is worn or valued by the Tani tribes, but we know from informants that imitation turquoise necklaces were bought by Lhopa tribesmen both at the Tsona fair (Dunbar 1915:8) and from Tibetan traders along the border (informants, Gintong village near Tsari 2010: pers. comm.). It is possible that the Lhopas traded these imitation turquoise beads though middlemen to western Arunachal's Buddhist Monpa or Sherdukpen tribes which, like the Tibetans, value turquoise beads.

CAN BLUE MELON BEADS BE LINKED TO THE TSARI PILGRIMAGE?

It has been established that many of the 19th- and early-20th-century beads valued by the Tani tribes were likely acquired by way of the Tsari pilgrimages, but is it possible to link the much older Tani blue melon beads to Tsari? Tibetans in the villages nearby refer to the blue melon beads as *dolo* or *yu dolo* ("blue" *dolo*). One informant (Gintong village 2011: pers. comm.) suggested that the meaning of *dolo* was "god stone" from the Lhopa words *do* (stone) and *ha* (god). This suggested derivation is an interesting one because the small "Indo-Pacific" heirloom beads of red glass used by the Naga tribes living in the hills of southeastern Assam are known as *deo moni* or "god beads" (Sanskrit: *deo*

[god]; *mani* [bead]) (Campbell Cole 2008:8). On the other hand, Krishnatry (2007:ix, 70, 119, 182, 184), who spent several weeks with the Lhopa Tagins in Mara village during the 1956 Tsari *Rongkor* circuit, relates the Lhopa Tagin meaning of *dolo* as "pilgrimage" and uses it in this context on several occasions. This suggests an association between the Tani melon beads and the Tsari pilgrimage, although *dolo* may later have become a generic name for beads given by the Tsari pilgrims to the Lhopa Tagins.⁶

Some 160 km to the east of Tsari, just to the north of the Tibetan border, Lhopa Metong tribespeople (*see* cover) in the Lhopa village of Tselbar call the large blue melon beads *dapo*, the Tani word for peace pact ceremonies. According to Krishnatry (2007:ix, 101, 102, 140, 153), the Mara Lhopa Tagins referred to the Tsari *lodzong* tribute as "the *dapo*," a second link between the Tani blue melons and the Tsari pilgimage. The Lhopa Metongs call the smaller blue melons *buma*. In their language, both *buma* and *dapo* also mean "currency." The blue melon beads, as well as oxen, Tibetan swords, and slaves were used as currency by the Tani tribes. The Tani melons are mentioned in traditional Lhopa songs which are still sung by older Lhopa women today (Tselbar village, Menling 2011: pers. comm.; Ji Wenzhang 2011: pers. comm.).

Unlike the Tani tribes in Arunachal who insist that their blue melon beads have a magical origin in Tibet, the Lhopa Metong now living in Tselbar village and the Lhopa Bokar from the nearby mixed Lhopa-Tibetan village of Toka all insist that their old blue melon beads came from the Arunachal side of the border. The traditional homelands of the Metong and Bokar Lhopas lie just to the south of the Tibetan border some 160 km east of the Tsari region. There are several passes across which the Lhopa Bokar traded with Tibet (Dutta Choudhury 1994:319) and through which in the distant past they could have obtained the blue melons, had these beads been widely traded along the length of the Arunachal-Tibet border. Again, this suggests that the Tsari pilgrimage was the main source of the blue melon beads. Older Lhopa Bokar informants report that prior to the 1950s, when they still lived on the Arunachal side of the border, of all the borderland Tani tribes, the Lhopa Tagins possessed the most beads (Tselbar and Toka villages 2011: pers. comm.).

WHERE DID TIBETAN TRADERS OBTAIN OLD BLUE MELON BEADS?

In Lhasa today, informants also refer to the blue melon beads as *dolo* (Tibetan: *dolo ngonpo* or "blue" *dolo*; Chinese: *lan zhoudze* or "blue beads"), and some report popular Tibetan songs which link the melon beads to the Tsari pilgrimage (Dorje Gien Tsing, senior monk, Summer Palace, Lhasa 2012: pers. comm.). Several informants stated that blue melon beads of both sizes are occasionally seen worn as hair ornaments by Tibetan nomads from Shigatse, Sakya, and Dakpo, all to the north of Tsari. Tibetan nomads are more eclectic in their choice of beads than their settled counterparts, wearing a variety of odd beads as hair ornaments or in necklaces, particularly during the many horse-riding festivals which are held in the summer. Another informant reported that some 20 years ago the small blue melons, and less often the larger ones, were worn as hair ornaments by lower-status Khampa nomads,7 particularly from Derge (Dege). One or two of the beads were also occasionally worn in their necklaces among beads of dzi, turquoise, banded agate, and Peking and Venetian glass (Thom Mond 2012: pers. comm.). The Derge region is just across the presentday Tibetan border in the autonomous Tibetan region of Garzê in Sichuan, China, but it was formerly a kingdom in Kham or Eastern Tibet. Its capital, also known as Derge, is located on one of the two ancient caravan routes into Tibet from China (Freeman and Ahmed 2011:5). Khampa nomads are traders and often combined trading trips with pilgrimages throughout Tibet. In former times they had contacts with the trade caravans which brought in tea and silks from China and left with Tibetan pastoral and forest products. The same informant also reported that the blue melon beads were sometimes worn by Golok nomads living in neighboring northeastern Amdo. Like Derge, Amdo is historically, culturally, and ethnically Tibetan but now forms part of the Chinese province of Qinghai.

According to informants in the jewelry shops in Lhasa's Barkhor district, until some 10 or 20 years ago, Tibetan nomads would occasionally offer the large blue melon beads for sale. The beads were sold to the nomads of Shigatse, Sakya, and Dakpo, in the region to the north of Tsari. It seems likely that some of these beads would have been traded on to the Lhopa Tagins across the Tibetan border. Barkhor informants reported that the price in Lhasa for the large blue melon beads was always very high: at least 300 Chinese yuan or US\$48 per gram for a single bead which might weigh perhaps 16 g, a total of US\$770 per bead. This is considerably more than the price paid for the coral, amber, and turquoise beads so valued by the Tibetans and suggests both rarity and age. Sadly, Barkhor informants had little knowledge regarding the origin or age of the blue melons. One suggested they were 100 years old and another 1,000. Another informant stated that the blue melons were made of very old turquoise and came from Kashmir or Bhutan. Yet another reported that their melon-shape suggests a Chinese origin (informants, Barkhor, Lhasa 2011: pers. comm.), perhaps due to melon-shaped beads of carnelian known as pemaraka that are worn and revered by some Tibetans and believed to come from China (Thom Mond 2012: pers. comm.).

The occasional appearance of the blue melon beads in the jewelry of nomads living in the regions to the north of Tsari as well as in the Derge area on one of the main caravan routes from China into Tibet might seem to confirm a Chinese origin for these beads. Yet, the scarcity of the blue melon beads among the Tibetan nomads and the large quantities still owned by the Tani tribes suggests otherwise. Rather than having been brought in from China by independent traders who were free to sell the beads to middlemen along the way, the beads could have been ordered by agents for a specific purpose and, as a result, their distribution was controlled. Perhaps the blue melon beads owned by the nomads were lost along the trading route from China to Tsari and picked up by chance by traders, or alternatively acquired by bandits such as the Goloks who raided the caravans which passed through their territory. Is it possible that the blue melons were ordered specifically for distribution to the Lhopa Tagins as part of the Tsari Rongkor lodzong tribute and, if so, were they obtained from China?

ARE THE BLUE MELON BEADS CHINESE?

With a history of glassmaking dating back to the late Yuan (1271-1368) or early Ming (1368-1644) dynasty (Francis 2002:31, 58, 76-80), Boshan became China's major beadmaking center (Francis 2002:85). Located in Shandong Province some 400 km to the southwest of Beijing, it is thought to be the source of the large quantities of beads identifiable as Chinese by their leadless, opaque bubbly glass, irregular outlines, large perforations, and wound method of production (Francis 2002:83). The beads were both furnace and lamp wound by relatively crude methods. These beads are widely distributed throughout Southeast Asia and beyond, and many are still valued as heirloom beads in island Southeast Asia.

Boshan glass produced during the Ming dynasty (1368-1644) is described as "clear, smooth and lovely" (Yang 1987:74), and was made into a wide array of luxury items including beads. It is, however, unlikely that such luxury items would have found their way into the hands of tribal peoples. While no melon beads were recovered from the early glassmaking site excavated at Boshan, such beads of blue and white glass attributed to the Yuan dynasty (1271-1368) have been found in Jilin Province to the north of Boshan (Plate IIA) (Kwan 2001:81) and in burial tombs at Sunjia Shan, Yiliang County, Yunnan, some 30 km southeast of Kunming, Yunnan's capital (Kwan 2001:81, 368).

Numerous, more complex melon or lobed glass beads in both blue and white are being offered today on the Kunming antiquities market (Plate IIB top). Purportedly from a nearby Tang site (A.D. 618-907), but probably later in date, they are said to have been found with combed glass polychrome beads similar to Yuan beads found in the Philippines, Sarawak, Singapore, and Thailand (Liu 2009:22-24). More significantly, Kunming informants report that up to ten years ago, large Tani blue melon beads were occasionally brought in from the countryside and sold for around 100 Chinese yuan or US\$16 each. Unlike in Tibet and Arunachal, the blue melon beads do not appear to be worn today in an ethnographic context in Yunnan. All Kunming informants insist that the large blue melon beads date to the Yuan dynasty (1271-1368), although no one was able to attribute these beads to a particular source or archaeological site which might help date them. Yet, comparing them to the melon beads from early Chinese archaeological contexts, there is little similarity beyond the basic melon shape, and there is equal similarity with melon beads subsequently produced in China during the late 19th and early 20th centuries. Although glass melon beads similar in form to the small blue ones of the Tanis were found at the Yuan site of Sunjia Shan in Yunnan, their limited number there (only 22 in 91 tombs) (Kwan 2001:368) suggests they were luxury goods with a very limited availability. That the Tani blue melons reached Tsari in considerable numbers suggests that they are of a later date.

ARE THE BLUE MELON BEADS FROM INDIA?

Wound beads of opaque bubbly glass with large perforations are generally thought to have been made at Boshan in China (Francis 2002:83), but can we be certain that the ancient Tani blue melon beads were not made elsewhere, perhaps in India? Two major beadmaking centers remain in India today: Papanaidupet in Andhra Pradesh, South India, where drawn glass beads are produced, and Purdalpur in Uttar Pradesh, North India, some 100 km from Aligarh where fake Tani melons are made today. Purdalpur's glassmaking history is said to go back several hundred years – long enough to have produced the Tani melons in the 18th century or earlier – and its northern location and use of both furnace-winding and drawing techniques make it a possible candidate. Purdalpur beadmakers obtain their glass from Firozabad⁸ (Francis 1982:12-16).

Conch and carnelian beads were imported from India into both Assam and Tibet from an early period, as were Venetian beads from the late 19th century. These beads were all widely traded, particularly throughout Northeast India, and are still found today in the heirloom necklaces of many of its tribal peoples (Campbell Cole 2008:16, 17), including the Tanis. If the Tani blue melons were also imported from India along the same trade routes, how can we account for the fact that they are worn exclusively by the Tani tribes, who did not trade directly with the Assam plains? The Tani blue melons do not appear in traditional heirloom necklaces in India except in the Tani regions of Arunachal. Nor does there appear to be a "trade trail" of the Tani blue melons stretching back from Arunachal southeast into India, and there is no evidence of a melon-beadmaking tradition at Purdalpur. Bead dealers in Delhi, only 150 km from Purdalpur, are not familiar with the Tani melons (Manoj Kumar, Delhi 2010: pers. comm.) which do not appear on the Delhi antiquities market.

In contrast, Tani myths and legends consistently mention Tibet as the source of their antique melon beads which they claim to have brought with them when they migrated from the north to their present location. While myths and legends cannot be regarded as proof of a northern origin, the content of tribal oral traditions is taken seriously by ethnographers and is generally regarded to hold at least partial truths (Blackburn 2003-2004:16, 26). For example, the legends of the Kachin and Chin tribes of Burma that relate their heirloom beads were goat droppings or found "fully formed in the ground" as a magical product indicate that the beads came from under the ground (Campbell Cole 2003:124, 2008:6).

The presence of Tani melon beads on the antiquities market in Lhasa and the trade trail of these beads along the ancient caravan routes from Tsari east through Tibet to Kunming in southwest China also suggest a Chinese origin. Indeed, beads and other ornaments of opaque turquoise blue glass – including melon-shaped beads – were a feature of Chinese glass production from the Yuan dynasty (Kwan 2001:82, 368) and continued to be made until the late 20th century.

DATING THE TANI BLUE MELON BEADS

While a Chinese origin for the Tani melons is likely, when were these beads made? British colonial reports reveal that large blue "porcelain" beads observed in the Tani region in the 1820s were highly valued and already of considerable age, suggesting that the Tanis have worn these beads since at least the 18th century. Although we cannot be certain that the beads observed were of the melon form, it seems highly likely that the heirloom beads most valued by the Tanis today – namely the two sizes of blue melons – would be the same as those most valued some 200 years ago. The Tanis claim to have arrived at their present location by at least the 15th century, bringing their blue melon beads with them (Blackburn 2003-2004:19; Dalton 1855:151; Fürer-Haimendorf 1962:59). While there is no proof to verify these dates, beads that play an important role in the rituals and oral traditions of a particular tribe, and are the only beads to express that tribe's ethnicity, have generally been in their possession for a considerable time. The very high price of Tani blue melon beads among Tibetans who otherwise do not value glass beads also tends to support a degree of antiquity.

Can we learn anything about the age of the Tani melon beads from the beads worn with them? Throughout Southeast Asia, heirloom necklaces often include more recent beads as well as older, more highly valued ones (Francis 2002:182), so the presence of Venetian or Chinese glass beads of the late 19th or early 20th century in some Tani heirloom necklaces does not mean that the Tani melons are the same age. Indeed, Venetian eye and feathered beads are traditionally worn in Kachin heirloom necklaces along with Indo-Pacific beads which are some 2000 years old (Campbell Cole 2008: Plates IB, IC, IIB). In general, heirloom beads that are the most revered are the oldest, although this is not always the case; in Indonesia the elite value more recent but rarer Chinesemade *mutiraja* beads, rather than more ancient but more plentiful *mutitanah* Indo-Pacific beads (Francis 2002:187).

Could the Tani blue melon beads be contemporary with the introduction of the "barbarian tribute" given to the Lhopa Tagins at the Tsari Rongkor lodzong when it was formalized by the Fifth Dalai Lama (1617-1682) in the 17th century? It was during his reign that Tibet gained control of Kham in eastern Tibet through which the ancient trade caravan routes passed from China into Tibet. The conquest of Kham must have increased the Fifth Dalai Lama's extensive trading links with his agents in China (Desideri 2010:321), perhaps allowing access to beads from Boshan or another Chinese glass-beadmaking site which were specifically destined for the Tsari "barbarian tribute." This could account for the large quantities of blue melons found among the Tani tribes and their very limited occurrence elsewhere. It is known that beads formed part of the Tsari Rongkor lodzong tribute in the early 20th century (Huber 1999:136, 138) and, given the Tani tribes' great fondness for beads, it is likely that this followed a tradition established considerably earlier. The use of the names dolo and dapo - both associated with Tsari - for the Tani blue melon beads certainly suggests an early link to the Tsari pilgrimage. Attempts to trace and date traditional Tibetan songs about the Tsari pilgrimage which are said to mention *dolo* beads are ongoing (Sorensen 2012: pers. comm.).

TANI MOON BEADS

It is not clear if the skills to create large and perfectly symmetrical round beads were known at Boshan or if they were developed at the Beijing Imperial Glassworks established in Beijing in 1696. This point is of interest in assigning dates to the Tani blue melon beads because large, symmetrical, round beads of opaque dark blue and white glass are also valued as heirlooms by the Tani tribes (Plate IIB bottom). Called "moon" beads by the Nishi and "egg" beads by the Apa Tanis, they are not considered by the Tanis to be either as old or as precious as their blue melon beads (Anya Rattan 2010: pers. comm.). The distinctive circular to horseshoe-shaped marks found on the large Tani melons are also sometimes seen on the surface of moon beads (Figure 8). Six large spherical beads of opaque white, blue, and reddish brown glass in the Bristol City Museum, England, exhibit the same distinctive marks (PortCities Bristol 2012). They are loosely dated to the Ming (1368-1644) or Qing (1644-1911) dynasty. The beads were acquired by the museum in 1950 but, sadly, lack provenance data.

The presence of the horseshoe marks on the large Tani melons, the moon beads, and the Bristol beads strongly suggests that they were all made using the same or very



Figure 8. Tani blue "moon" beads showing horseshoe-shaped marks on the surface.

similar production techniques (furnace winding), quite possibly in the same production center and around the same time period. The moon beads may have been rolled along a trough mold to achieve their symmetrical spherical outline while the glass was still molten. It is possible that the large Tani melon beads were produced in the same manner, their indentations added by pressing the soft glass with a blade or tongs as in the case of the small melons. The ends of the moon beads are also truncated due to wear.

The Tani consider their moon beads to be "*nyaloma*" or beads "from Tibet." In 1836, Griffith (1847:57) reported "huge glass beads, generally blue or white" which the Mishmis obtained from "the Lamas" (Tibetans). The Mishmi tribes are part of the Tani group and live in eastern Arunachal. They traded with both the Tibetans to the north and via middlemen with the other Tani tribes to the east. The "huge" beads could have been recently made or old moon beads obtained from Tibetan traders, though by 1825, many Tani beads were already prized as heirlooms and rarely available or not at all (Wilcox 1832:403).

LATER OPAQUE BLUE GLASS BEADS

The Tani tribes also value small wound beads of opaque, turquoise-blue glass in spherical, oblate, and disc shapes (Plate IIC top) which they regard as more recent than either the blue melons or moon beads. They probably date to the 19th or early 20th century. In the far northwest of Arunachal, blue glass beads of this type are worn at the three-day sacred *chamm* dances performed once a year by monks of the Tawang monastery (Plates IIC bottom, IID top). During two of the dances, the traditional costume of the monks includes strings of spherical blue glass beads known as ngo phrang-a which are worn bandolier-style across the chest (Plate IID bottom). The original costumes for the chamm dances (which are copied in new fabric when they become worn) are said to have been brought from Lhasa in the 17th century when the Tawang monastery was first established (Yashi Khao, senior monk, Tawang 2011: pers. comm.). While it is possible that the blue glass chamm dance beads date to this period, spherical blue wound beads of this type are generally thought to date from the late 18th or early 19th century. They continued to be made in large quantities until the mid-20th century and are widespread in southwestern China and beyond. The Akha tribes of northern Thailand wear both the "coil" and "sphere" types in several colors, although blues predominate (Plate IIIA top) (Lewis and Lewis 1984:32). Akha heirloom necklaces occasionally contain blue glass melon beads different from those of the Tanis. These are thought to be from the 19th or early 20th century (Lewis 1980s:4; Buckley Bell, Chiang Mai 2011: pers. comm.). Plain turquoise-blue glass beads are also worn by the Kachin in northern Burma, along with an occasional blue glass melon bead of the "Akha" type (pers. obs. 2009) (Plate IIIA bottom). British colonial informants relate that "blue coloured composition beads" were obtained by the Konyak Naga at a trading entrepot called Longha on the Naga Hills-Burma border during the mid-19th century (Hannay 1873:312). Relatively small quantities of these beads are found in Naga necklaces (Jacobs 1990:252), but they were valued by the Khasi, Garo, and Lyngngam tribes in the hills to the south of the Assam plains (Gurdon 1907:194).

Spherical blue glass beads were also traded by the Chinese to Manila in the Philippines from where the Spanish shipped them to America where, in the Southwest, they are known as "Padre" beads, supposedly because they were associated with Spanish missionaries. The same beads are also known as "Canton" (Guangzhou) and "Peking glass" beads, and are generally thought to be made of leadless glass from Boshan. Yet five visually identical beads excavated in the American Northwest proved to belong to two different glass groups – a lead-barium group and a high potash lead glass (Burgess and Dussubieux 2007:69) – indicating multiple manufacturing sites or the use of recycled glass.

FAKE TANI MELON BEADS

In 1962, the brief Sino-Indian border conflict led to the closing of the border between Arunachal and Tibet. When the conflict was settled, the border remained closed and heavily militarized on both sides. This put a stop to the steady flow of cross-border trade which had existed for centuries between the Lhopas and the Tibetans. The closing of the border also put an end to the Tsari Rongkor pilgrimage which spanned the international border, as well as the lodzong tribute so valued by the Lhopa Tagins. Vital commodities such as salt which the northern Arunachal tribes had always obtained from Tibet now had to be traded up from the Assam plains, but precious Tibetan swords, clapperless bells, and "Tibetan" beads, new and old, were not obtainable from the plains and the supply of these prestigious goods came to a sudden halt. From this period, communication and trade with the Assam plains gradually began to increase, but Arunachal remained a remote hinterland and beads continued to play an important role in Tani rituals and exchange. Tani traditions required that a daughter should receive beads from her parents when she married. If a father had several daughters, he might be obliged to acquire more beads in order to provide suitable dowries.

As the shortage of prestige Tibetan goods grew, a Nishi tribal chief of unusual ability called Binni Jaipu was appointed *zemindar* or local magistrate at Daporigo in central Arunachal. Already a very wealthy man with 25 wives, he was one of the few tribal chiefs in central Arunachal to visit the plains. He was respected by both the Indian government and the local tribal people, for whom he did many favors. During a visit to the Assam plains to order bracelets from a Bihari goldsmith called Kailash Shah, Binni Jaipu complained of the interruption in the supply of prestige beads caused by the closing of the Tibetan border. Pointing to his necklace of valuable antique spiral conchshell beads, Jaipu asked Shah if he could produce modern copies. Shah was an enterprising trader and managed to obtain a supply of raw conch shell which he shaped and ground to imitate the patina and polish of much-worn antique beads (Plate IIIB top). Encouraged by Shah's abilities, Jaipu paid him well, ordered more conch-shell beads, and asked him to produce copies of the Tani blue melon beads.9 Having failed in this task in Calcutta, Shah approached Bihari Muslim beadmakers in Aligarh, Uttah Pradesh, about 150 km southwest of Delhi and only some 100 km from Purdalpur, one of India's major glass beadmaking centers. Both Aligarh and Purdalpur obtain their glass from nearby Firozabad. Had there been a tradition of making glass melon beads at Purdalpur, it seems likely that Kailash Shah would have selected this far-better-known glass beadmaking center to obtain the fake Tani melons, a further reason to suggest that Purdalpur was not the source of the antique Tani beads. The Aligarh Biharis produced copies of the Tani blue melons by cutting irregular grooves in spherical blue glass beads. Back home in North Lakhimpur, Shah used hand lathes powered by bicycle wheels to grind, polish, and age the new glass beads to imitate centuries of wear (Plate IIIB bottom).

The new Tani melons were purchased by Binni Jaipu, but soon enterprising hill men were making the five-day journey on foot to the plains to buy Shah's new beads. These traders were mostly Apa Tanis who at the time were beginning to visit the plains (the fake Tani melons are still known by the Hill Miris as "Apatani *tissi*" or Apatani "beads"). Lodging on a specially built bamboo platform outside Shah's house, the Apa Tanis would stay for three or four days to complete their purchases before returning to the hills to sell the beads. Unaware that they were new, many villagers were persuaded to swap one antique Tani melon for two or three new beads.

Communication in the hills was still very poor, but as knowledge slowly spread that the beads traded by the Apa Tanis were new, the value of antique Tani melons increased. Nevertheless, with the supply of antique beads from Tibet interrupted and only a limited amount in circulation in Arunachal, demand for the new Tani melon beads also increased from those who could not obtain or afford antique beads. As business grew, Shah began to employ outworkers, supplying them with grinders and polishers. In the late 1980s, he began to sell at Harmuti, a Sunday market in the plains (Plate IIIC top), which was more accessible for Apa Tani traders than North Lakhimpur. About ten years ago, Nishis and Adis as well as Apa Tanis began to come to the plains to buy the new beads. By this time, Shah had widened his production, obtaining copies of moon beads, Venetian feather and Peking glass beads (Plate IIIC bottom), carnelian beads from Cambay which are aged with acid, and imitation clapperless bells. For a while he also supplied red glass bugle beads from Aligarh to the Nagas (Ao 2003:13). Over the years, many of Shah's former employees began to order new beads from Aligarh and age them in their own small workshops, and today the Harmuti market is packed with buyers from the hills, as well as dealers who take the new beads as far as Darjeeling in northern India, Kathmandu in Nepal, and Chiang Mai in northern Thailand. But Tani informants still consider that Shah, now succeeded by his son (Plate IIID), produced the best quality "antique" melon beads using ever more sophisticated lathes, polishing drums, and other undisclosed ageing processes, although he and his family have never sought to disguise the fact that their beads are new.

In the late 1970s, the fake Tani melon beads even reached the Bokar and Toka Lhopas in Tibet, probably via bead dealers in Kathmandu. The price was very high: 3000 Chinese yuan or US\$470 for one strand, a huge mark-up on the US\$10 price per strand of small fake melons at the Harmuti market today. Some Lhopa informants reported that they knew the beads were new but believed that they would "become old." Today few Lhopas living on the Tibetan side of the border are lucky enough to have true antique beads. In 1951, China formalized its sovereignty over Tibet and during the Cultural Revolution (1966-1976), the Lhopas were forced to hand over their beads to Red Guards who put them in sacks and threw them in the river, an uncomfortable reminder of the activities of evangelical missionaries in Assam who also insisted that tribal people dispose of their beads when they became Christians (Campbell Cole 2008:19; informants at Tselbar and Toka villages 2011: pers. comm.).

Today the Tanis refer to the new melon beads as "duplicates" and the true antique beads as "originals." In the early days, some Tanis could distinguish between new and old beads because the new beads were heavier and made a different noise when two strands were rubbed together. The "duplicate" beads also broke more easily than the "originals." But every year new techniques are introduced which make it more and more difficult to distinguish between the new and true antique beads. More confusion is caused by older "duplicates" which have been worn since the 1960s and

1970s and have acquired a patina of their own. These older "duplicates" have more value than new beads. Some Tani informants report that they have stopped buying antique melon beads because it is so difficult to distinguish between "originals" and "duplicates."

TANI HEIRLOOM BEADS TODAY

Because of its mountainous terrain and poor roads, much of Arunachal remains remote and thinly populated. Yet, as access to education increases and traditional dress is set aside, heirloom beads - above all the blue melons - have remained an important part of Tani traditions and rituals. With only a limited supply of true antique beads available and an increasing population with more disposable wealth, the price of the Tani blue melons has become very high. Today, a single large blue melon bead is worth 25,000-30,000 Indian rupees or US\$540-\$650 each, while a small blue melon bead costs 10,000 Indian rupees or US\$220. At weddings and festivals, for both educated urban and more traditional rural Tanis, their melon beads remain a symbol of prestige, status, and ethnicity. Their ownership has come to declare old rather than new wealth, attracting more respect than the possession of a large house or car (Anya Ratan 2010: pers.comm.).

At the *murung* and *miida* festivals held in the Apa Tani valley each year, the heirloom necklaces of the clan wives are still worn as a public display of the festival sponsor's wealth and his clan's fertility (Figure 9; Plate IVA top) (Blackburn 2003-2004:36). When the festival food is about to be served, the clan wives remove their necklaces and hang them in the sponsor's house in a secure display case, each set of beads labelled with its owner's name (Figure 10; Plate IVA bottom). To increase the clan's prestige, guests may be informed that no "duplicate" beads are present in the clan wives' heirloom necklaces.

For educated urban Nishis in Itanagar, Arunchal's capital, Tani blue melon beads (and clapperless bells) remain a vital part of a bride's dowry and both are still worn in great profusion at weddings. Nishi informants report that because of the rarity and high price of true Tani melon beads, the wedding ceremony is often delayed while parents acquire the required costly beads. The large number of necklaces worn at weddings can weigh 20-30 kg, but Nishi traditions state that if the beads are too heavy for a bride, she is not worthy of being wealthy, and that the more beads she can wear, the wealthier she will become (Anya Ratan, Itanagar 2010: pers. comm.). Well-off Nishi women add to their collection of heirloom beads if true antique beads become available. A large collection of "original" heirloom beads can be worth up to US\$200,000 (Plate IVB) and are often stored in bank safes. Less wealthy Tanis buy "duplicate"

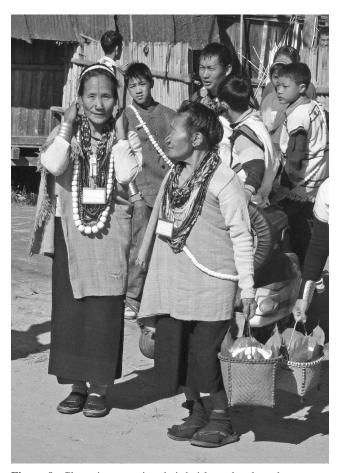


Figure 9. Clan wives wearing their heirloom beads at the *murung* festival in the Apa Tani valley.

beads, each new bead inspected in great detail in order to select those that most resemble antique "original" beads.

CONCLUSION

Many questions remain unanswered. Is there a link between the larger Tani blue melon beads and the somewhat similar melon beads of opaque yellow glass thought to be of Chinese origin and found in heirloom necklaces in East Indonesia and Irian Jaya? These beads are loosely dated to the 17th-19th centuries (Adhyatman and Arifin 1993:85). Are the two sizes of Tani melon beads contemporary? The Tanis believe they are, but they value the larger ones more highly. Is this because of their larger size, or because in the distant past they were known to be older and as a result acquired a higher value? When and why did the supply of the Tani melon beads cease? Was it when the moon beads became available or are the moon beads the same age and from the same source as the large Tani melons?

Chemical analysis of the Tani blue melon beads might reveal their place of manufacture, but because of the rarity

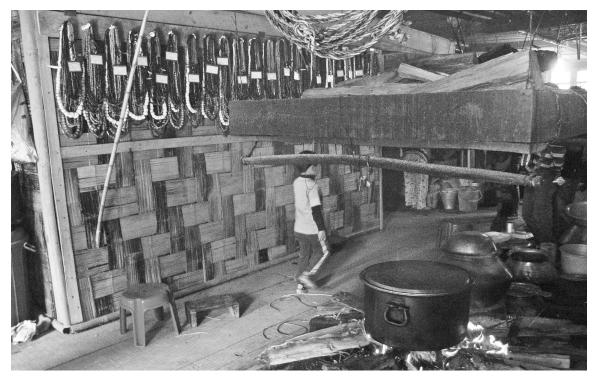


Figure 10. *Murung* festival in the Apa Tani valley; the clan women's heirloom necklaces on display in the festival sponsor's house before being secured in their display case. The festival food is cooking on the hearth.

and high cost of true antique Tani melon beads and the ready supply of excellent fakes, glass analysis is problematic and has yet to be undertaken. Beads that are still valued as heirlooms are not often found in archaeological contexts, and the author has been unable to find either the small or large Tani melon beads in museum collections. Without a known archaeological context or chemical analysis, the age and origin of the Tani blue melon beads remains unclear. Taking all the facts into account, the author tentatively suggests that they were produced in China during the mid-17th to 18th centuries. Obviously, much more research needs to be undertaken to substantiate this. It is hoped that more information will come to light as a result of this article.

ACKNOWLEDGEMENTS

I am grateful to Icomos UK for an Intach Trust Travel Grant which contributed towards the costs of my research in Arunachal Pradesh. I would also like to thank Richard Blurton, Head of the South Asian Section, Department of Asia, British Museum, for help in planning my field trip to Arunachal, Rajan Dowerah, my translator in Arunachal, and Anya Ratan, Ratan Yak, and Aka Murtem Ratan for sharing their wide knowledge of Tani beads. I am grateful to Dr. Gyurme Dorje of Trans Himalaya for help planning my fieldwork in Tibet, and to Jime Kalsang, my translator. Useful information was provided by Kate Newnham, Curator of Eastern Art and Culture, Bristol City Museum, on Ming and Qing glass beads; and by Thom Mond on the blue melon beads worn by Tibetan nomads. I am grateful to Dr. Simon Kwan for allowing the reproduction of images from his book *Early Chinese Glass*, and to Valerie Hector for sharing Jeff Keller's translations. Lastly, this article would not have been possible without the help of many people living in the villages and towns of Northeast India, Tibet, and southwestern China who welcomed me into their homes, gave generously of their time, and shared their knowledge of local beads and bead history.

ENDNOTES

- 1. Between 1879 and 1884, the import of European glass beads into India nearly doubled. This proved to be devastating for India's ancient glass beadmaking industry (Francis 2002:177).
- 2. To avoid the confusion caused by the different names used in Arunachal and Tibet for the non-Tibetan border tribes, the Tagins are referred to as "Lhopa Tagins."
- Sadly we lack further details of these beads which may have been imported into England for export rather

than made there. I am grateful to Toni Huber for this reference.

- 4. The conch-shell beads traded to Tibet may have been made in Bengal by Indian craftsmen, but they were also made by Angami Nagas in the village of Khonoma. The Angami excelled in this work and traded these beads over a wide area, even as far as Burma (Hutton 1921:66).
- 5. *Bimpu* is the generic name for medium-sized glass beads (Hage Dollo, Ziro 2010: pers. comm.).
- 6. Other suggested derivations for the word *dolo* are as follows: a) From the Tibetan *dolam* (*bgrod lam*) which means "passage" (Gyurme Dorje, London 2012: pers. comm.); b) *Yu dolo* ("blue" *dolo*) or *yu do lo* may translate as "turquoise stone:" *yu* may derive from *g.yu*, Tibetan for "turquoise", *do* may be from *rdo* (stone), and *lo* may just be a syllable used for assonance (Per Sorensen 2012: pers. comm.); and c) a Tibetan informant in Lhasa (2012: pers. comm.) stated that *dolo* meant "tax," i.e., a toll payment from Tsari pilgrims.
- 7. Khampa nomads plait their hair with red or black tassels which are wrapped around their heads and decorated with rings, beads, and other ornaments. The melon beads are not worn by aristocratic Khampas who prefer *dzi* beads, turquoise, coral, and gemstones (Thom Mond 2012: pers. comm.).
- Glass manufacture in Firozabad, Uttar Pradesh, is said to date back to the 15th century. It was encouraged during the British colonial period and today Firozabad is often referred to as the glass capital of India (Francis 2002:249 n. 44, 250 n. 45).
- 9. The information on fake Tani blue melons was provided in 2010 by Ratan Yak and Anya Ratan, Itanagar, and Jamuna Prasad Shah, Kailash Shah's son, North Lakhimpur.

REFERENCES CITED

Adhyatman, Sumarah and Redjeki Arifin

1993 *Manik-Manik de Indonesia (Beads in Indonesia).* Penerbit Djambatan, Jakarta.

Ao, Ayinla Shilu

2003 Naga Tribal Adornment. The Bead Society of Greater Washington.

Bailey, F.M.

1957 No Passport to Tibet. Travel Book Club, London.

Blackburn, Stuart

- 2003- Memories of Migration: Notes on Legends and Beads in
- 2004 Arunachal Pradesh, India. European Bulletin of Himalayan Research 24/25:15-60.

Bower, Ursula G.

1953 The Hidden Land. John Murray, London.

Burgess, Laurie E. and Laure Dussubieux

2007 Chemical Composition of Late 18th- and 19th-century Glass Beads from Western North America: Clues to Sourcing Beads. *Beads: Journal of the Society of Bead Researchers* 19:58-73.

Campbell Cole, Barbie

- 2003 Ornaments of the Past. The Bead Study Trust, London.
- 2008 Heirloom Beads of the Naga and Kachin. *Beads: Journal of the Society of Bead Researchers* 20:3-25.

Clarke, John

2004 *Jewellery of Tibet and the Himalayas*. Victoria and Albert Museum, London.

Dalton, E.J.T.

- 1855 Correspondence and Journal of Capt. Dalton, of his Progress in a Late Visit to a Clan of Abors on the Dihong River. *Selections from the Records of the Bengal Government* XXIII:151.
- 1872 Descriptive Ethnology of Bengal. Thacker, Spink, London.

Desideri, Ippolito

2010 Mission to Tibet: The Extraordinary Eighteenth-Century Account of Father Ippolito Desideri S.J. Translated by Michael Sweet; edited by Leonard Zwilling. Wisdom Publications, Boston.

Dorje, Gyurme

1996 Tibet Handbook. Footprint, London.

Dunbar, G. Duff-Sutherland

1915 Abors and Galongs: Notes on Certain Hill Tribes of the Indo-Tibetan Border. Memoirs of the Asiatic Society of Bengal 5:1-113.

Dutta Choudhury, S.

- 1981 Arunachal Pradesh District Gazetteers: Subansiri District. Government of India, Arunachal Pradesh.
- 1994 Arunachal Pradesh. District Gazetteers. East Siang and West Siang. Government of Arunachal Pradesh.

Francis, Peter, Jr.

- 1982 Glass Beads of India. *The World of Beads Monograph Series* 7. Lake Placid.
- 2002 Asia's Maritime Bead Trade: 300 B.C. to the Present. University of Hawai'i Press, Honolulu.

Freeman, Michael and Selena Ahmed

2011 Tea Horse Road. River Books, Bangkok.

Fürer-Haimendorf, Christoph von

- 1955 Himalayan Barbary. John Murray, London.
- 1962 *The Apa Tanis and their Neighbours*. Routledge and Kegal Paul, London.

Griffith, William

1847 Journals of Travels in Assam, Burma, Bootan, Affghanistan and the Neighbouring Countries. Calcutta.

Gurdon, P.R.T.

1907 The Khasis. Macmillan, London.

Hannay, Capt. S.F.

1873 No. 37, dated Jaipore, 17 March 1846. From Capt S.F. Hannay, Commanding First Assam Light Infantry to Capt T. Brodie, Principal Assistant Agent. Selection of Papers Regarding the Hill Tracts Between Assam and Burmah and on the Upper Brahmaputra 311. Bengal Secretariat Press.

Huber, Toni

1999 The Cult of Pure Crystal Mountain: Popular Pilgrimage and Visionary Landscape. Oxford University Press, New York.

Hutton, John H.

1921 The Angami Nagas. Macmillan, London.

Jacobs, Julian with Alan Macfarlane, Sarah Harrison, and Anita Herle

1990 *The Nagas, Hill Peoples of Northeast India*. Thames and Hudson, London.

Ji Wenzhang

- 2010- Menbazu Geyao. National Territory of Tourism Resources
- 2011 of Yarlung Zangbo Grand Canyon. Geological Publishing House, China.

Krick, Father N.M.

1913 Account of an Expedition among the Abors in 1853. Translated by Father A. Gille. *Journal of the Asiatic Society of Bengal* IX:107-122.

Krishnatry, S.M.

1997 Border Tagins of Arunchal Pradesh. Directorate of Research, Government of Arunachal, Itanagar. Reprinted in 2005 and 2007 by National Book Trust, India.

Kwan, Simon

2001 *Early Chinese Glass*. Art Museum, Chinese University of Hong Kong.

Lewis, Elaine

1980s Akha Beads: From Whence to Whither. Unpublished manuscript.

Lewis, Paul and Elaine Lewis

1984 *Peoples of the Golden Triangle.* Thames and Hudson, London.

Liu, Robert

2009 Paiwan and Southeast Asian Combed Polychrome Beads. Ornament 32(3):22-24.

PortCities Bristol

2012 One of Six Beads. http://discoveringbristol.org.uk/browse/ glass/one-of-six-beads (accessed 11 Oct. 2012)

Sarkar, N.

1999 *The Tagin: A Monographic Study*. Directorate of Research, Government of Arunachal Pradesh, Itanagar.

Shukla, Brahma Kumar

1959 The Daflas of the Subansiri Region. North-East Frontier Agency, Shillong.

Sorensen, Per K.

1990 Divinity Secularized: An Inquiry into the Nature and Form of the Songs Ascribed to the Sixth Dalai Lama. Arbeitskreis für Tibetische und Buddhistische Studien, Wiener Studien zur Tibetologie und Buddhismuskunde 25. Vienna.

Srivastava, L.R.N.

1988 *The Gallongs*. Directorate of Research, Government of Arunachal Pradesh, Itanagar.

Tsybikoff, G. Ts.

1904 *Lhasa and Central Tibet*. Annual Report of the Smithsonian Institution from 1903:727-746.

Verrier, Elwin

1959 India's North-East Frontier in the Nineteenth Century. Oxford University Press.

Waddell, L. Austine (ed.)

1895 The Buddhism of Tibet. W.H. Allen, London.

Wilcox, R.

1832 Memoir of a Survey of Asam and the Neighbouring Countries, Executed in 1825-6-7-8. Asiatic Researches XVII:403.

Yang, Boda

1987 A Brief Account of Qing Dynasty Glass. In *Chinese Glass* of the Qing Dynasty, 1644-1911, by Claudia Brown and Donald Rabiner, pp. 71-86. Phoenix Art Museum.

> Barbie Campbell Cole 7 Churton Place London SW1V 2LN United Kingdom E-mail: barbie@barbiecampbellcole.com