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メタデータ	言語: eng 出版者: 公開日: 2020-12-10 キーワード (Ja): キーワード (En): 作成者: 野林, 厚志 メールアドレス: 所属:
URL	https://doi.org/10.15021/00009622

The Diversity of Taiwanese Indigenous Culture Seen in Bead Products

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Abstract

The use of beads is regarded as one of the features of modern human behaviour. Bead products have many functions: as decoration, indicating social class or status, and as markers of identity and of belonging to a particular group or society. Austronesian-speaking peoples demonstrate the abundant use of beads in what can be called a ‘bead cultural complex’. In particular, Taiwan’s indigenous peoples are well known for using a great diversity of beads; this diversity is found in both the materials and the functions. Animal materials, such as teeth, bones, insects, and shells; plant materials, such as stems and seeds; and inorganic materials, such as bronze, ceramics, and glass are used. Some are readily available nearby in the natural environment and others can only be obtained through trade. In this article, the author introduces the diversity of materials and functions of beads among Taiwan’s Austronesian-speaking groups and compares this with the bead cultures of neighbouring island regions in order to discuss the Austronesian culture in Taiwan from the viewpoint of the use of bead products.

I. Taiwanese Indigenous People and Beads

The Austronesian-speaking indigenous peoples who make up approximately 3% of Taiwan’s population are called the Yuangzhumin, which conveys that they originally lived in Taiwan. Currently, 16 ethnic groups are officially recognised based on language, social relations, customs and beliefs, material culture, and identity differences. Most have lived in the central mountain range of Taiwan and part of the east coast. Historically, hunting and slash-and-burn farming were their main subsistence activities. The indigenous peoples were called Takasagozoku during the Japanese colonial period. Colonial governance policies during this time severely restricted them to continue their customary life. On the other hand, some parts of their life were retained to some extent because they were kept away from the outside society. After the end of World War II, their lives changed drastically with the increasing penetration of the money economy. Many became migrant workers and immigrants to urban areas to earn cash income. The population of the homeland was dwindling and people became less connected in their own culture and

natural environment that nurtured their culture.

Along with the progress of democracy in Taiwan since the late 1980s, indigenous peoples have also developed campaigns to assert their indigenous status in Taiwan. They have been most concerned with the rights of land and culture. Land rights were claimed for traditional tribal areas where they practiced conventional subsistence activities or ritual ceremonies; most of these traditional tribal areas, including settlements, are located in mountainous areas.

Against this background, various challenges to cultural revival have been undertaken. Connections with nature are frequently emphasised as characteristic of the indigenous culture. At the same time, the indigenous societies does not exist in a closed system and interactions between the indigenous groups and the wider world are continuous.

This chapter introduces the relationship between the indigenous people, nature and outside society through the material culture of beads. Research on the bead culture in Taiwan has mainly been conducted in archaeology and anthropology (Chen 1966; Takoshima 2005; Hu 2012; Liou et al. 2014). Most of those studies have focused on Paiwan glass beads and those excavated from archaeological sites. This article also discuss the natural and artificial resource of beads of the indigenous people. Indigenous peoples were connected to nature when selecting raw materials to make the beads. Further, they obtained other materials, which they could not have acquired locally, through contact with the outside world. Beads and related accessories combined local and foreign materials, giving new meaning to beads in their society. It can be better described as ‘a continuum of human-prostheses inter-relations’ (Ihde 2012: 374).

In this chapter, beads are defined as objects with a regular size and shape and connected by a string that passes through a hole in the body. After introducing the materials and social functions of beads, I discuss the creativity and imagination of the indigenous peoples of Taiwan. It would be a mode of being in between the imposed national frontiers of ‘nature’ and ‘culture’ or ‘mind’ and ‘matter’ (Ihde and Malafouris 2019: 195).

II. Bead Materials

A characteristic of Taiwanese indigenous beads is the great variety of materials used to make them. These include animal, plant, mineral, and metal components.

Among the utilised animal elements, the teeth of mammals and shells are relatively common. Mammalian teeth are usually pierced and used without any change to their original shape. The incisors of boar and deer, canines of boar, bear, and dog, and human incisors and molars are connected with a string. Beads of glass and other materials are often inserted into teeth-beaded trinkets. The vertebrae of large saltwater fish such as the brassy chub are also used for beads. Regarding shells, different parts of different shells are utilised; for example, the largest part of the thread portion of the cone shell is cut into a disc shape, a square plate of a nautilus shell is cut to preserve the pattern of the shell on the surface, and cylindrical shaped beads, regardless of shell species, with a diameter of several millimetres are all used. Some smaller conch shells are also pierced

and used as beads without changing their natural shape. Animal teeth and shells are difficult to process and deform due to their hardness, but this also has the advantage that these bead products can be used keeping their shape for a long time.

Soft tissues from animal are also often used as beads. Wild boar's tail or skin attaching hair is inserted between glass beads to make an armlet. The Yami people make necklaces by stringing tufts of goat's hair together. Among the various bead materials, the hornet's head stands out as the most distinctive.

Taiwanese indigenous peoples commonly used Job's tear, otherwise known as *Coix lacryma-jobi* or adlay millet, to make bead products. They connected the seeds in a series or placed chains in parallel with spacers. Additionally, the seeds of jequirity, box bean, and yellow oleander are used to make bead products. Instead of seeds, which have a solid shell, the Bunun people cut the stalk of plants such as grass-leaf sweet flag (*Acorus gramineus*) to the same length, and create beads and connect them to make a necklace or arm decoration for infants.

Seed shells and dried plants are expected to be used as materials of beads while they keep their shape. Puyuma people use fresh flowers, leaves, and vines, to make accessories like those with beads: headgear with accessories of flowers and leaves are typically used in rituals or marriage ceremonies.

Further, it is important to note that plants are utilised in both beadmaking and in the strings that connect the beads together. The strings are constructed from ramie fibre, which is cultivated from plants in the nettle family.

Typical minerals used as beads among the indigenous people are carnelian and agate. Additionally, glass beads are produced by processing minerals. Two groups, the Amis on the east coast and the Yami on the island, exclusively use beads of carnelian and agate (Photo 1), while the Paiwan are the most popular users of glass beads (Photo 2).

Beads made from metal materials include decorations of silver or silver alloy attached to Paiwan costumes, brass coloured round bells attached to the waistband of Ami and Puyuma women, and clapper bells made of bronze. Often old Chinese and Japanese coins are not processed and are made into necklaces and other types of jewellery.

Beads made from minerals and metals are generally considered to have been introduced from outside the indigenous society. This is because full-scale metallurgical techniques and glass manufacturing techniques have not developed in Taiwanese indigenous society. The different materials and forms of beads used by each indigenous group also means that each group had different interactions with the outside world, which developed and changed with the times.

Resin products have also become a material for indigenous beads. Many of the resin products are industrial products, created by civilized society. In other words, it may be explained that the indigenous peoples introduce the products, which the civilisation make from ecological resources into their cultural context. A typical resin product used as a bead is a button. The buttons, the diameter approximately 1 cm, and have four holes. The reason buttons with four holes are used is because the Yuangzhumin can make a cross pattern in the button by intersecting the yarn when affixing the button. The buttons may



Photo 1 Yami women's carnelian necklace (1996, Nobayashi)



Photo 2 Paiwan's glass beads and their names; Weaving, Teeth of moon, Dragonfly's eyes, Light of the sun, Limbs, Eyes, Peacock, Smooth comb, Warriors, Land, Teardrops of the Sun, Butterfly chrysalis (from the left side) (2017, Nobayashi)

include casein buttons, made from a protein in cows' milk, and were used before World War II.

The provenance of a bead's material in Taiwanese indigenous society is varied: some beads were sourced from the surrounding natural environment, and those which were impossible to obtain from the surrounding environment or difficult to manufacture have been acquired from outside Taiwan through trade, exchange, and looting.

III. Social Functions beaded produces

Excluding some specific cases, a bead does not have any social functions or meaning by itself. Beaded products perform a social function when they are worn by the people who should be wearing them. The social significance of Taiwanese indigenous bead products concerns faith, social relations, and goods. However, it should be noted that certain bead products do not always have the same specific function. The basic role of a beaded product is to indicate some attribute of the owner to other people. As time passes and roles that demonstrate specific meanings are gradually lost, the bead's function as a decoration is strengthened. However, memories of the underlying significance could be evoked. The social functions of various beaded products can be understood in terms of ethnography and contemporary phenomena that have been inherited partly.

1. Belief and Beads

Beaded products have been used as amulets to protect the wearer from invisible evil spirits or the evil eye. Parents and grandparents often let children own bead products as amulets.

The Atayal people made an armlet by connecting the heads of the Taiwanese big hornet (*Vespa mandarinia*) with a string of ramie; this was used as an amulet (Photo 3).

The Atayal people have lived in mountainous regions from the northern to central part of Taiwan and used hunting and slash-and-burn agriculture as subsistence. In Taiwan, bears and wild boars are two mammals that pose a threat to humans, and thus these animals have been good hunting game for the indigenous peoples, including the Atayal. As capturing these animals is dangerous, those who captured a large number of bears and wild boars are often honoured by others in society as a good hunter. However, when hornets attack en masse, there is no way of confronting them and only escaping from them. Therefore, in a sense, it is thought that the most feared wildlife is the hornet, and hence it has a strong power to overcome evil spirits. Armlets or necklaces that connect the heads of the hornet have been used as amulets. They used it as the following.

In the days, before more than half a century, when Atayal people routinely farmed in cultivated mountainside plots, they often went to the mountainside to work with their baby in a cradle, as it was thought that an evil spirit lurked in the outside world and threatened the life of the baby. It was thought that when the evil spirit tries to enter the child, the child will begin to cry non-stop. Therefore, as a way of protection from such spirits, a bracelet was placed on the neck and arm of a child. The important feature of the amulet was not that the head of the hornet did not function as a single unit, but a fixed amount of head is connected and functioning. However, Christianity penetrated indigenous society after World War II, and many of the Atayal also began to believe in

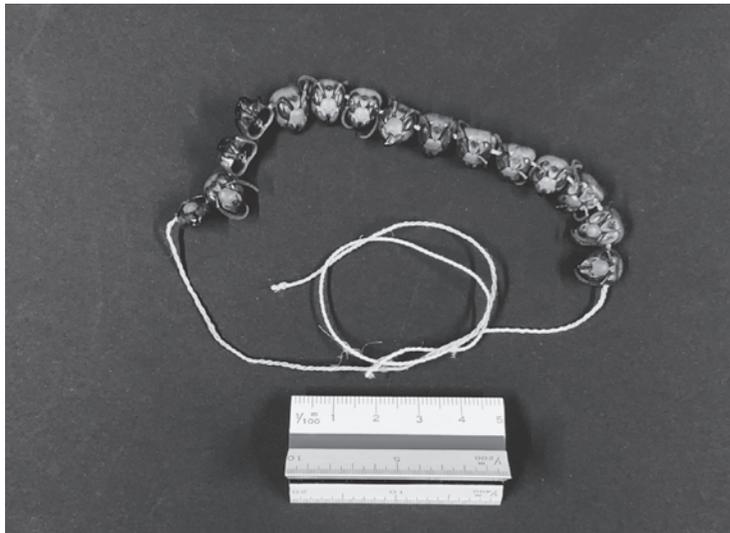


Photo 3 Big hornet heads as beads, by the Atayal. (2019, Nobayashi)

Christianity; aboriginal faith was denied and the existence of evil spirits was not affirmed. However, before being baptised an infant is not necessarily subject to Christian teachings, and thus it is interpreted that the amulet is still effective for children.

The Bunun people, who neighbour the Atayal but have different social relations, use bead armlets made by linking cut stems of grass-leaf sweet flags (*Acorus gramineus*) as children's amulets. The Bunun have expanded their residential area to regions higher than other groups and are well known to have a different view of nature from those of other indigenous groups. They have a unique culture that uses distinctive mountain words and recognises magical properties in flora and fauna. The Bunun use a necklace of grass-leaf sweet flags during the naming ritual for their children. This plant has a strong aroma and its essential oil ingredients include sedation and effects of calming gastric disorders: it is used for herbal medicine and prescribed for high fevers and convulsions in children. The Bunun people believe that it brings good things and that it is effective for guarding children against the evil eye. They are particularly conscious of the effect of its scent.

2. Beads as Property

Indigenous peoples recognise that the beads themselves are valuable due to their symbolic richness or high monetary value, and treat them as such.

Atayal clothing is an example of a beaded product treated as goods or currency, as it had shell beads sewn throughout. In the indigenous society, the custom of head hunting existed; there were various reasons for the occurrence of head hunting and men who succeeded many times in this activity were often admired in their society. They were allowed to wear a garment with no sleeves, with shell beads sewn on it. Shellfish of bead material sewn to clothes has been thought to be giant clam among the Atayal peoples. The Atayal people themselves did not produce these beads, but obtained them through trade with the Ami, who lived on the plains near the east coast. Since to produce or acquire the beads was not easy, the beads are treated as very valuable and a beaded chain and a piece of cloth attached it could thus be treated as currency. The men's costume is made by leaning off the beads chains and clothes.

A necklace that utilises the canines of pigs, as worn by Yami adult men, is another example of a bead product that symbolically demonstrates the owner's wealth. The Yami are an indigenous people who live on Orchid Island, which is tens of kilometres east of Taiwan. There are no customs of headhunting among the Yami people, unlike other Taiwanese indigenous peoples, and they had relatively little contact with Han groups. Although it is customary to honour elder people, there are no chiefs who govern the entire community in the Yami, there is no social relationship that accompanies a difference in people's status. Instead of institutionalized social inferiority relations, the special ritual activities play an important role in maintaining order in Yami society. Yami people have inauguration ceremony when large-scale houses and carved fishing ships are built.

At inauguration ceremonies, a massive spending spree is carried out similar to the Potlotti of the northwest coast of North America. Large amounts of taro, grown in paddy fields, and the meat of pigs and goats, fed over a long period of time, are distributed to

the participants, as well as their relatives and friends. The scale of an inauguration ceremony reflects the economic power and personal connections of the organiser, and is recognised as a form of social wealth. Canines of pigs that were slaughtered for the ceremony are used to make men's accessories, since the number of canines shows the number of slaughtered pigs, the number of accessories made demonstrates the scale and time of the inauguration ceremony.

3. Social Relations and Beads

A typical example that concerns social status is the glass beads of the Paiwan. The Paiwan are the second largest group of indigenous peoples, approximately 90,000 people, and who live in the southern part of Taiwan. A characteristic of Paiwan society is that it has developed a hierarchical society divided between the chiefs, aristocrats, and commoners. A similar social system is also found in the neighbouring Rukai and Puyuma populations; however, the Paiwan society is unique in that the position of chief can be passed between male and female, depending on the gender of the firstborn child. The superiority of the chiefs and aristocrats is considered to be exclusively due to magical elements, thus, only a chief or an aristocrat can take part in important societal rituals. The chief is also required to control the community and redistribute food and property to community members; for example, the chief is responsible for children and elderly people who do not have a family. For this reason, aristocrats and commoners have the custom of taking a part of the harvest, such as millet and game, as taxes to the chief.

The chiefs and aristocrats owned objects that are difficult to obtain in daily life as a means of demonstrating and maintaining their status and authority. Glass beads are one such example of rare goods. Each glass bead in Paiwan society has a distinct pattern and shape that conveys to the world the identity of the wearer. However, this means that different sections of society may not wear the beads of another class. The beads with wavelike patterns of various colours are called *Millimiridan* and considered to be the most exalted of beads; only members of the chief class are allowed to own this type of bead. Glass beads that the chiefs were allowed to own have an 'eye', a pattern of concentric circles that means 'ancestor', and also a square shape with different colour patterns for 'land'. Beads called 'tears of the sun', which belonged to the noble class, have the following ancient myth: when a tribe cooked millet on the ground, the smoke rose up into the sky and entered the eyes of the sun, causing its tears to fall on the ground, which then became beads.

They have 'warrior' beads given to men with remarkable achievements in war and hunting, and 'peacock' beads meaning eternal love that shall be given and received between those who are related by marriage. They are allowed to hold regardless of owner's social class. We can see that the former is for those who rendered a deed of valour, and the latter is for those who are married. Both of them are along with the owner's social condition.

Examples of these colourful beads are rarely found in other indigenous groups, and have been seldom found in archaeological sites in Taiwan. It is highly probable that these beads were unique to the Paiwan population. Chen Chi-lu focused on different names

among glass beads of the Paiwan. He analysed the amount of lead and barium contained of them. He noted a possible introduction of the beads from outside of Taiwan and hypothesised that they were accompanied with the ancestral populations of the Paiwan when they migrated to Taiwan, or that they were introduced through trade or exchange (Chen 1966). Through trading with Han Chinese merchants and the Dutch East India company, glass beads made in China and Java were used in exchange for animal and plant resources; thus, the Paiwan gained animal leather and traditional Chinese medicine through hunting and collecting. Glass beads, therefore, played the role of linking indigenous culture and outside civilisation.

4. Beads as a Means of Information Transmission

As beads are visible for all to see, they easily display information about the wearer and the context in which they are used. As mentioned above, Paiwan glass beads demonstrate the social class of the wearer, and the Yami male's necklace made with pigs' canines reflect the owner's ritual history and wealth.

In addition to exhibiting the attributes of the wearer, there are beaded decorations that will let people know the condition their village or community. The Atayal have a custom wherein they hang a bamboo frame with several bead chains under the eaves of their house when they send out their hunters. The beads are made from the stem of the rice-paper plant (*Tetrapanax papyriferus*), while the shape of the hanging decoration is different depending on the context; for example, leaving for the hunt or when a hunter is successful in taking a human head. Even though the villagers did not speak about the result of headhunting, this method would share the result of the task with everyone.

Beads may be more than just visual decoration. Metal beads hit each other and sometimes make sounds depending on the behaviour of the wearer. For example, several bronze bells are attached to the waistband worn by Puyuma women and they dance by raising and lowering their hips, thus making the bells hit against each other and ring. In this way, we may be able to regard beads as instruments rather than decorations. A necklace consisting of cocoon-shaped metal plates worn by Yami men during ceremonies also makes a quiet metal sound as they collide when the men walk. This sound makes the surrounding people feel the Yami's ritual season. Therefore, beads work as a transmitter of information through both visual and aural methods.

IV. Taiwanese Beads in Austronesian Perspectives

As mentioned above, the beads of Taiwan's indigenous peoples demonstrate diversity among ethnic groups in terms of materials, social functions, and forms. When we compare Taiwanese indigenous beads with those that have been used by other ethnic groups in Southeast Asia and mainland China, we might be able to view similarities in order to understand the basis of the Austronesian cultural complex.

A distinctive feature of the necklaces worn by the Naga people of Assam, North East of India is that they consist of a single chain of side by side ornaments; in order to prevent each chain from twisting or overlapping, they insert spacers along the chains

(Photo 4). People had to wear bead necklaces to keep chains side by side. The use of such spacers is also commonly found in Taiwanese indigenous beaded ornaments. Another similarity discovered in this region is found between Paiwan necklaces (Photo 5) and the shin bands of the Atayal and Paiwan, all of which have the same structure. There are also other common features of beaded ornaments between Taiwan and Assam, such as using a semiprecious stone like carnelian, or attaching a disc-like part through the top of the concentric shell.

Further, the beaded products of the Southeast Asian islands share common features with those of Taiwan's indigenous people. Sarawak's Ivan uses carnivore canines and boar canines and incisors inserted between glass beads; the Atayal use a similar combination of materials to make their necklaces.

The process of natural resource selection by each ethnic group should be further examined, but it should be kept in mind that similar material culture characteristics can be seen in several geographically isolated places. The Southeast Asian region where Austronesian populations do not exist is currently excluded in the discussion of the origin and spread of Austronesian populations. As Tadao Kano indicated (1947), from southwest China to the mainland of Southeast Asia, there seems to be room to argue for the existence of the Austronesian cultural complex, including the possibility of a subsistence complex of hunting and gardening.

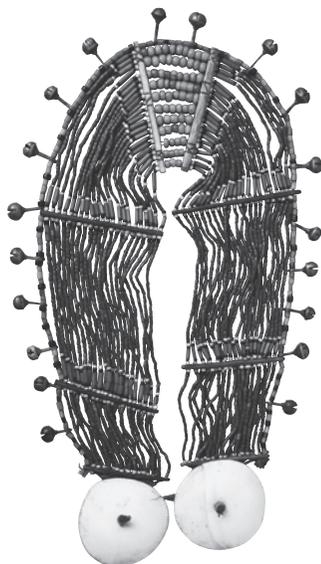


Photo 4 Beads of the Naga People (NME109309: Courtesy of the National Museum of Ethnology, Japan)



Photo 5 Glass beads Neckless of the Paiwan Aristocrats (Courtesy of the Shung Ye Museum of Formosan Aborigines, Taiwan)

V. Beads of Taiwan in the Modern Context

The indigenous peoples of Taiwan utilised a wide range of objects as bead materials and adopted a variety of significant elements for their beaded products for a multitude of uses. Ecological resources are defined as what is necessary for survival of human beings, and this develops from natural resources. Although beads are not necessarily essential for survival, they are ecological resources. It can be said that beads and beaded products have continued to exist as a 'quite human' resource for establishing human society. Which materials are processed and how they are used for what purpose are also integral parts of material culture where human imagination and creativity are greatly demonstrated. Such qualities are not limited to the conventional and traditional use of bead products, as indigenous people living in the present are also developing bead culture, supported by their imagination and creativity.

The tradition of beads use was historically inherited by the Paiwan people and is a unique cultural illustration of foreign materials entering society through trade or a similar international network. These beads soon became established within the context of a hierarchical society. The value of Paiwan beads as antiques was recognised during the Japanese colonial periods. Paiwan beads became to popular souvenirs in Taiwan (Railway Department, Office of the Governor-General of Taiwan 1930). It led to the loss of the original meaning of beads in Paiwan society, and placed them in the context of Japanese values. They were reused in the Japanese method, such as in sash clips and Japanese hairpins. This demonstrates that indigenous society has played a role as a type of intermediary between different peoples in material culture.

As mentioned above, the Paiwan's coloured glass beads are thought to either have been carried with the Paiwan population when they migrated to Taiwan, or have entered the Paiwan society through trade before or during the Qing Dynasty period. It is unlikely that glass beads, which were luxury items to the Paiwan people, were exported from the Paiwan society as trade items. Thus, old fashioned glass beads have been kept within their society. This created an antique value for outsiders.

This value continued during the governing period of the Republic of China after the World War II. The monetary economy permeated to the indigenous society all at once, and Han merchants bought colourful beads that had been inherited from among the Paiwan people. A large amount of small glass beads and cheap plastic beads suitable for sewing to clothes were brought into the Paiwan society instead of traditional glass beads. Beads lost their position as luxury items that was privileged to be used by a limited class of people.

The Paiwan themselves attempted to create a new bead culture in response to this social changing. In the 1970s, in Pingtung County in the southern part of Taiwan, a Paiwan male succeeded in making glass beads that were similar to traditional Paiwan beads with the cooperation of a Han Chinese bead collector (Yang 2008). The subordinates, who learned the technique of making beads from him, then began to set up their own bead workshops. The buyers or consumers of these beads were limited to the indigenous peoples themselves, as the few tourist and external markets were undeveloped at this time. A series of historical events, including the aboriginal movement in the

1980s, the social recognition of indigenous peoples by the amendment of the Constitution in 1994, and the promotion of indigenous peoples' culture motivated the classification of glass beads as symbolic items relevant to indigenous culture, particularly to the Paiwan's. Since glass beads are easy to handle, they also became familiar as indigenous souvenirs. For example, the bead accessory played an important role in the movie 'Cape No. 7' (2007), which was a big hit in Taiwanese society. The use of beads in the film led to a bead boom in Taiwan and indigenous bead production gained its position as a cultural industry. Furthermore, the indigenous peoples themselves continue to have a strong interest in beads as the core of their culture in various places.

An example of modern bead making is Mr. Lu, who manages a bead production studio in Taitung Taimali town, on the eastern coast of Taiwan. Mr. Lu was born in 1989 and is among those in the new generation who wish to further the Paiwan bead culture (Photo 6). Mr. Lu saw his father making beads when he was young. This led him to journey back to his hometown after some time in the military. He learned to make beads and reopened his father's bead studio in 2011. He has worked on the creation of beads with monochrome colour tones and new patterns, while respecting the patterns of glass beads that have been passed down in Paiwan society. In addition, the work studio is used not only as a place for his creations, but also as a bead production classroom for everyone. Neither age nor ethnic group matters to Mr. Lu. A new tradition that he tries to establish is the production of beads with free ideas and rich sensibilities, while at the same time honouring his father's skills. It is a good illustration of the history of ethnic culture that has always changed with imagination and creativity, and continues to be a living creature.



Photo 6 Mr. Lu in his workshop (2018, Nobayashi)

VI. Conclusion

Thus far, the interest in the beads of Taiwanese indigenous people tends to be concentrated on the glass beads. The exchange and distribution of glass beads in Taiwan has continued for at least one to two thousand years, according to archaeological evidence. The range extends from the plains to the mountain regions, and also to the islands, such as Lan-yu. It involved people of different languages and cultures, sometimes depending on their relationship with outside society. This article discussed the historical background of the introduction of beads into Taiwan, and explains the interaction between indigenous society and material culture. Hu (2012) explained indigenous bead culture and that a continuous cross-border chain may be the root of this culture, and further, that bead culture is a medium, through conscious actions of different actors, for the display of various shapes conveying decorative beautification, state of wealth, or ancestral powers in different regions.

Concurrently, we can discuss the dynamics of the bead culture that has been created autonomously on Taiwan Island, which includes bead production and use that indigenous peoples have created from the surrounding natural environment. It might be expected that the knowledge of indigenous nature, social relations, and material culture is linked therein. Austronesian ground culture as a complex of the natural environment and human society is expected to be discussed in the cross-cultural comparative study of beads in the future.

Acknowledgements

This work was supported by JSPS KAKENHI Grant Number JP16H06411.

References

English

Ihde, D.

2012 Postphenomenological Re-embodiment. *Foundations of Science* 17: 373–377.

Ihde, D. and L. Malafouris

2019 *Homo Faber* Rivisted: Postphenomenology and Material Engagement Theory. *Philosophy and Technology* 32(2): 195–214.

Chinese

Chen, Chi-Lu

1966 Taiwan Paiwan qun de guliulizhu ji qi chuanru nian day de tuice (Old Glass-beads Possessed by the Paiwan Group of Taiwan and Their Date of Introduction). *Bulletin of the Department of Anthropology National Taiwan University* 28: 1–6.

Hu, Chia-Yu

2012 Taiwan nandaominzu bolizhu shipin de kua wenhua fenxi bijiao: duiyu xingshi, jiazhi, yu wuzhixing de yixie sikao (Comparative Analysis of Glass Beads Used among Austronesian Groups in Taiwan: Some Thoughts on Forms, Values and Materiality).

Journal of Archaeology and Anthropology 76: 97–134.

Liou, Ying-San, Shih-Chung Wang, and Yi-Chang Liu

- 2014 Hualian chongde yozhi chutu gubolizhu kexue fenxi de chubu chengguo (Preliminary Scientific Results of the Ancient Glass Beads Unearthed from the Chungde Site, Hualien). *Journal of the National Taiwan Museum* 67(1): 53–69.

Yang, Xin-Hao

- 2008 Wucai binfen Paiwanzu de liulizhu. *Yuan zazhi* 70: 74–83.

Japanese

Kano, T.

- 1946 *Tonan ajia senshigaku minzokugaku kenkyu dai 2 kan* (Studies in the Ethnology and Prehistory of Southeast Asia Vol.2). Tokyo: Yajima shobo

Railway Department, Office of the Governor-General of Taiwan

- 1930 *Taiwan testudo ryokou annai*. (Taiwan Railway Travel Guide) Taihoku: Railway Department, Office of the Governor-General of Taiwan.

Takoshima, S.

- 2005 Taiwan senjumin Paiwan ni okeru iwayuru tonbodama no Yurai. *Ningenbunka* 20: 480–454.