

SHELL TRADE AND EXCHANGE IN THE PREHISTORY OF THE RYUKYU ARCHIPELAGO

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ABSTRACT

Due to the presence of the Kuroshio Current, a warm ocean current emerging from the northern equatorial zone, the environment of the Ryukyu archipelago is tropical despite its relatively high latitude. Numerous large, tropical shellfish species are found in the archipelago and were modified and used as symbolic items, personal ornaments, and/or craft items in prehistory. Exchange relationships based on these shell species developed in prehistory between the Ryukyus, China and Japan. The history of the shell exchange system can be subdivided into four phases. Phase I (2000-700 BC) saw exchange with the Yellow River area of China and resulted in the introduction of Chinese-like personal ornaments into the Ryukyus. In Phase II (300 BC-AD 600), crops and iron tools were exchanged from western Japan. During Phase III (AD 650-800), Chinese coins were brought into this region from the Yellow River region. Finally, Phase IV (AD 800-1300) witnessed the development of agriculture and kiln technology, after which stratified societies emerged in the Ryukyu archipelago. The elites engaged in intensive exchange with China and mainland Japan in the 13th century and developed a maritime trading system in the 14th century. These "chiefdoms" were unified by the Ryukyu Kingdom. After the 15th century, while shells were no longer major trade items, yellow cowrie shells and a green snail were still items of exchange.

The objective of this paper is to describe the intermittent exchange of shells between the Ryukyu Islands and surrounding regions over a period of more than three thousand years from the prehistoric age to the 13th century, and to discuss the historical meaning of that exchange.

The Kuroshio or Black Current, a strong, warm current that has its origins in the northern equatorial currents, flows

north past the Ryukyu Islands (Figure 1). Due to the presence of this current, the archipelago can be characterised as a tropical environment and it marks the northernmost limit of coral reefs in the northern hemisphere. In other words, the Ryukyus can be called a tropical zone surrounded by temperate regions.

The reefs and seas around the Ryukyus are inhabited by many tropical fish and shellfish that have been used for food by humans. There are many large shellfish such as the green snail, cone shell and trumpet shell whose meat was not only consumed but which were also used to make containers, tools and ornaments, their beautiful thick shells serving as the raw material for these items. Since these shells are not found in the temperate zone, they were sought after by the people living in the regions surrounding the Ryukyus. The people of the temperate zone traveled to the Ryukyus to search for shells, traded with the islanders, and then processed the shells they obtained into ornaments and craft goods. This relationship can be inferred from the presence of Ryukyuan shells in sites of the temperate zone, and from the presence of temperate zone artefacts in sites in the Ryukyu Islands.

From the classification of shells alone, however, it is very difficult to determine if the tropical shells found in temperate regions actually derived from the Ryukyu Islands. The only way to decide this is to seek the source of the non-local artefacts found together with the shells in these temperate regions. Through the identification of shells and archaeological materials, and a general consideration of the historical contexts of the surrounding regions, it should be possible to determine the nature of the Ryukyu shell trade.

Table 1 lists the four phases of the Ryukyu shell trade that have so far been clarified using the above archaeological approach. For the sake of convenience, these phases are numbered from I to IV. The rest of this paper discusses these phases in more detail.

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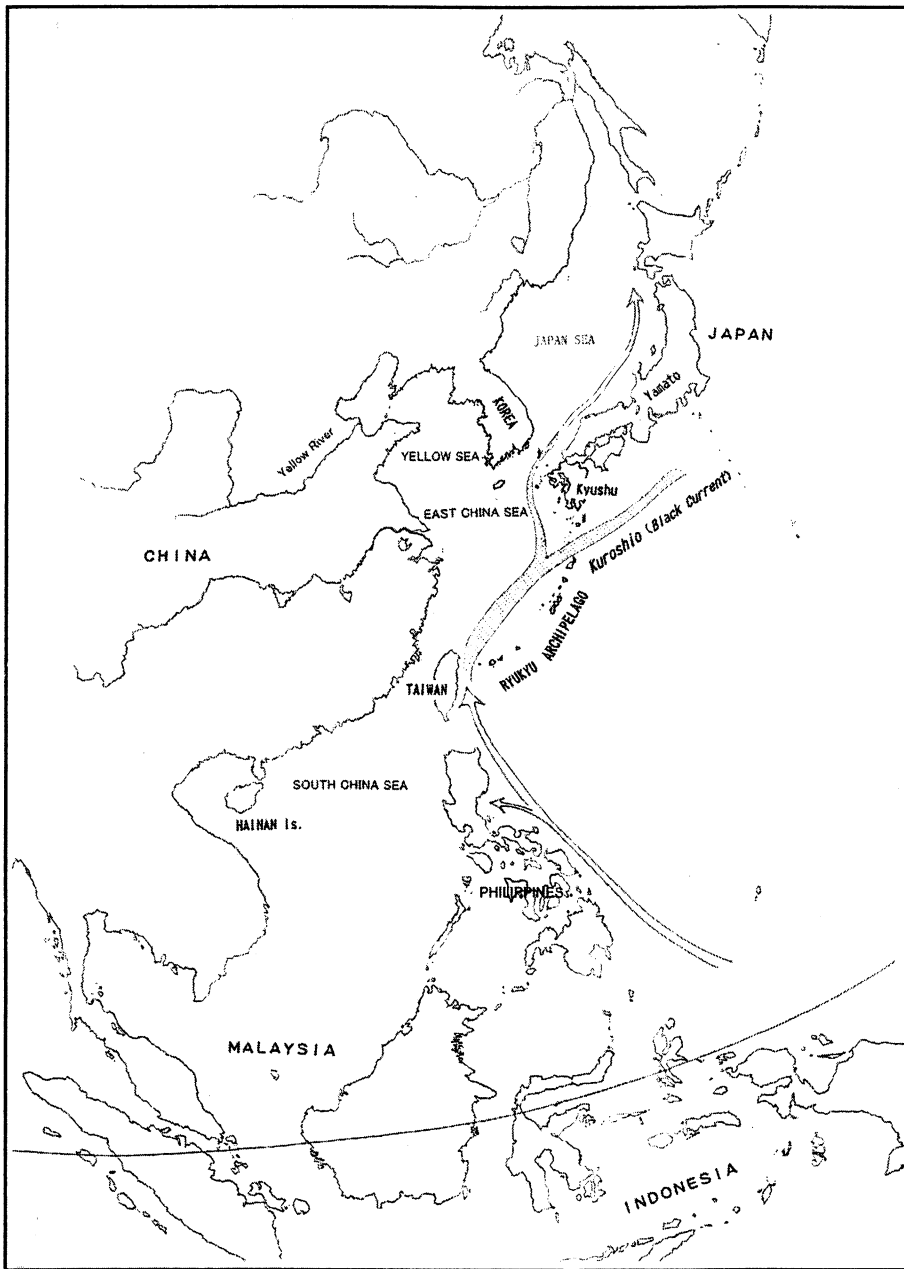


Figure 1: The location of the Ryukyu Islands and the warm Kuroshio Current

PHASE I

The shell trade in Phase 1 was conducted with the people of the coastal regions of China who wanted to obtain cowrie shells (*Monetaria moneta*) (Figure 2). This trade is thought to have occurred intermittently between about 2000 and 700 BC. Based on the following five pieces of archaeological evidence, I infer that there was trade in cowrie shells between China and the Ryukyus (Kinoshita 2002a).

1. This phase saw the intensive utilization of the cowrie shell *Monetaria moneta* (Linnaeus) in the Yellow River region.
2. The only sources of cowrie shells near to China are Taiwan, Hainan Island and the Ryukyus.
3. This phase saw the appearance throughout the Ryukyus of disc-shaped shell beads made by a distinctive technique. These beads are not found in Kyushu (southern Japan), but are common in the Neolithic of the Yellow River region.
4. Bracelets and ornaments similar to those found in the cultures of coastal China appear in the Ryukyus in this phase.
5. The same style of ritual tooth ablation was shared between the Ryukyu Islands and the lower reaches of the Yellow River in this phase.

I assume that some of the cowrie shells that were used in the Yellow River region were transported to China from the Ryukyus, across the East China Sea. A project is currently underway by researchers in Japan and China which is attempting to clarify the source and route of transportation of the cowrie shells found in China. I will leave further comments on this topic until the results of this project are known.

PHASE II

The shell trade of Phase II was conducted with the farmers of Kyushu who wanted to obtain the Broad Pacific Conch (*Tricornis latissimus*

Linnaeus), a big, white spiral shell, and cone shells (*Lithoconus litteratus* Linnaeus) from the Ryukyus (Figure 2). This trade continued from the 3rd century BC to the 7th century AD. The people in Kyushu used these shells to make distinctively-shaped bracelets. Persons wearing bracelets made from Ryukyus shells are often found buried in graves in Kyushu in this phase. These individuals were in charge of agricultural rituals and their shell bracelets are

Table 1. Shells exchanged in the Ryukyu Islands

| Phase | Date | Shells Exchanged | Regions where the shells were in demand | Use/Meaning of shells |
|-------|---------------|------------------------------------|---|--|
| I | 2000-700 BC | Cowries | China (Yellow River region) | Prestige goods; coins |
| II | 300 BC-AD 600 | Broad Pacific Conch; cone shells | Western Japan, Korean Peninsula | Raw material for bracelets; prestige goods |
| III | AD 650-800 | Great Green Turban | China (Yellow River region) | Mother-of-pearl |
| IV | AD 800-1300 | Great Green Turban; Trumpet Triton | Japan | Mother-of-pearl; Buddhist trumpets |

Dates are based on a combination of radiocarbon dating, ceramic chronology and historical records (Kinoshita 1996, 1998).

thought to have been special ornaments with a religious meaning.

In the Ryukyus in this phase, discoveries are often made of pottery from Kyushu, of concentrations of the shells that were being traded, and of shell bracelet blanks; these are believed to be remains left by farmers from Kyushu who came south in search of shells. The fact that these remains are found on all the islands shows that the Kyushuans moved south from island to island looking for shells. It seems, however, that it was not the farmers themselves who performed these journeys, but fishing people who lived on the coast of Kyushu. This can be inferred from the presence in the Ryukyus of distinctive graves of coastal peoples from Kyushu.

From the above it can be seen that the farmers of Kyushu entrusted trade goods to fishing peoples who island-hopped down the Ryukyu chain to obtain shells. The fishermen probably used seasonal winds on their outward journey and the Kuroshio current on their return. Through this process, trade goods from Kyushu regularly reached the Ryukyus; these goods included iron tools, bronze weapons and glass beads. A large quantity of Kyushu pottery is also found in the islands and it is likely that it originally contained cereals and other foodstuffs. Although there is no archaeological evidence, it can also be assumed that cloth and other perishable items were traded at this time.

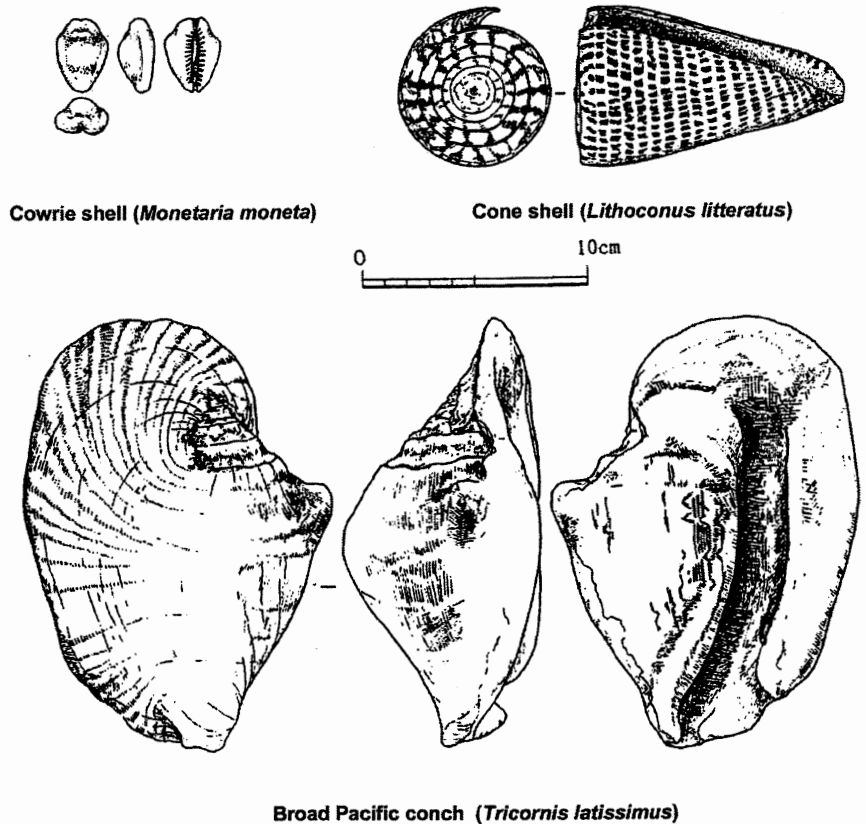


Figure 2: Traded shells of Ryukyuan origin, Phases I and II.

The custom of wearing shell bracelets, begun in Kyushu, continued after the political centre moved to Yamato (central Japan) in the 3rd century AD. With this shift in power, the shell bracelets from the Ryukyu Islands changed from religious ornaments to become symbols of political authority. From the 1st to the 7th centuries, these large shells were also taken via Kyushu to the Korean Peninsula where they

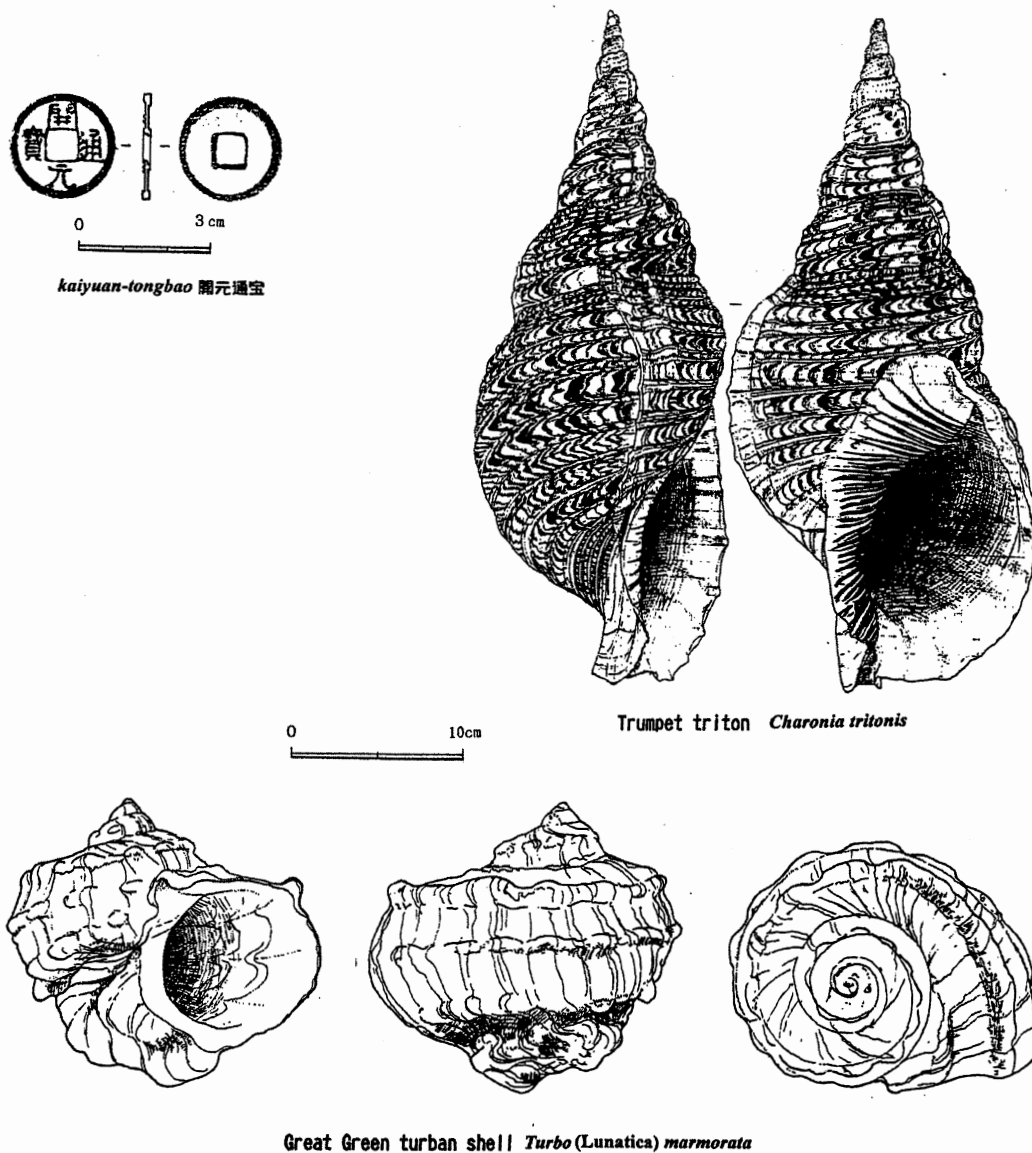


Figure 3: Traded Ryukyuan shells and Tang Coin, Phases I and II.

were highly prized (Kinoshita 2001a). The shell trade between Yamato and the Ryukyus thus continued for nine hundred years, but basically came to an end when an archaic state was established in Yamato in the 7th century. More than 600 shell bracelets have been discovered in Japan so far as a result of this trade.

PHASE III

In Phase III, an intermittent trade in the Great Green Turban shell (*Turbo [Lunatica] marmoratus* Linnaeus) (Figure 3) was carried out between the Ryukyus and coastal China, from the 7th to the 9th centuries. In China, the Tang empire

was at its height during this stage and the turban shell was used for mother-of-pearl furniture inlay, a technique that developed at the Tang court. Abalone was also used for this technique but, as a result of a detailed analysis of Tang mother-of-pearl, it is clear that almost all examples from this dynasty used the Great Green Turban shell.

From the following three points I assume that trade in the Great Green Turban was conducted between the Ryukyus and China.

1. From the 7th to the 9th centuries, a large quantity of turban shell mother-of-pearl was used in Tang China.
2. Sources of the Great Green Turban shell close to China comprise Taiwan, Hainan Island and the Ryukyus, but

large numbers of high-quality turban shells suitable for mother-of-pearl inlay can be found in the Ryukyu Islands.

3. Tang dynasty coins known as *kaiyuan-tongbao* are commonly found in Ryukyu sites in this phase, all from locations that produce the turban shell (Kinoshita 2000).

Apart from the *kaiyuan-tongbao* coins, there is no clear evidence that people from coastal China directly visited the Ryukyu Islands. There are, however, certain unusual iron objects known from the Ryukyus that may provide a clue to trading relationships in this phase.

PHASE IV

Phase IV also saw trade in the Great Green Turban, but this time it was not the Chinese but the inhabitants of central Japan that wanted this shell. From the 9th century, the Japanese developed the mother-of-pearl technique they had inherited from Tang China, producing high-quality, inlaid lacquered goods. The objects produced were craft items that included furniture, Buddhist utensils and saddles. These objects were exported to Song China and Koryo Korea as major trading items. Since by this time the mother-of-pearl technique had already declined in China and had not developed on the Korean Peninsula, Japanese mother-of-pearl was highly valued across East Asia. Large quantities of turban shell were also used within Japan for other decorative purposes.

In order to fulfill the demand for turban shell in Japan, merchants competed with each other to prepare trading vessels to sail to the Ryukyus. This continued from 9th to the 13th centuries. Sites from this period in the Ryukyus have produced the Japanese ceramics, talc bowls and Chinese porcelains that were brought to the islands by the Japanese merchants involved in the turban shell trade. It should be noted also that during this phase the people of the Ryukyus began to farm, producing rice, wheat and barley.

The trade in the Great Green Turban shell came to an end after around 400 years. From the 13th century onwards, abalone became the main raw material for mother-of-pearl inlay. The influence of the turban shell trade on the Ryukyus over four centuries had, however, been significant, and had resulted in the spread of agriculture and the establishment of a standardized culture down the 1200 km length of the archipelago. This was one of the reasons why the Ryukyus went on in the following stage of their history to suddenly develop a state.

The Trumpet Triton (*Charonia tritonis*) (Figure 3) appears as a trade item in historical documents from the 10th century onwards. In Japan, Song China, Koryo Korea and other Buddhist countries of East Asia, the shell became necessary through its use as a musical instrument (trumpet) in Buddhist ceremonies. Like the turban shell, the trumpet

triton was also brought from the Ryukyus to each part of East Asia. Trumpet tritons bearing 14th-century dates are preserved in the Todai-ji and Horyu-ji temples in Japan. The trumpet triton trade continued even after the decline in the trade of turban shells (Kinoshita 2001b).

CONCLUSIONS

It has been shown that the shell trade in the Ryukyus continued for a long time against the environmental background of a "tropical zone surrounded by temperate regions". What I would like to stress here is that all of this trade resulted not from the actions of the Ryukyu islanders themselves, but from the active desires of people living outside the islands. At least with respect to the shell trade, the Ryukyu islanders were passive and, even though they were surrounded by the ocean, they were not long-distance ocean voyagers. The islanders did not voyage to distant places on their own initiative nor attempt to obtain materials from outside the archipelago. This is a significant difference from the long-distance canoe voyaging conducted by other Pacific peoples.

The shell trade of the Ryukyus was a trade in which the islanders supplied the shells sought by people in surrounding regions. The society of the Ryukyu archipelago did not undergo major changes as a result of the shell trade, nor did the Ryukyu islanders take the opportunity to voyage actively beyond the islands. The biggest change brought about by the shell trade was the introduction of agriculture into Ryukyu between the 9th and 10th centuries. Class distinctions developed on the basis of this stable food production system. Powerful leaders appeared and it was they who obtained large sailing vessels to trade with China and Japan. In the 15th century, the leader who had proven the strongest established an independent kingdom with a territory that stretched across 1200 km of sea. Another major characteristic associated with the Ryukyu shell trade was thus the transmission of agriculture that rapidly led to state formation in the islands. An understanding of the shell trade is indispensable for an understanding of the historical development of the Ryukyu archipelago (Kinoshita 2001a, 2002a, 2002b).

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