

DISTRIBUTION NETWORKS IN THE OKINAWA ISLANDS IN THE PERIOD PARALLEL WITH THE YAYOI (300 BC TO AD 300)

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ABSTRACT

The early part of the Late Shellmidden period in Okinawa ran parallel with the Yayoi to Kofun periods in Japan (about 300 BC to 7th century AD). At this time, various non-local items reached the Okinawa Islands from Kyushu. During the Yayoi period, about 300 BC to AD 300, shell bracelets were exported from Okinawa to Japan (Figure 1). Therefore, it is argued that Okinawa and Kyushu were linked by a shell bracelet trading system during the Yayoi period (Kinoshita 1989, 2003). This paper attempts to interpret the inflow of Yayoi objects into the Okinawa Islands by examining the distributional networks for each artefact type, utilising a model of base and branch settlement sites.

POTTERY FROM KYUSHU AND AMAMI AND ITS EXCAVATION CONTEXT

Four styles of pottery have been recognized in the Okinawa Islands in the period parallel to the Yayoi and Kofun periods (Figures 2 and 3, Table 1). The first is the "Okinawa style pottery", made locally on Okinawa island and its offliers. The other three are imported wares. The first belongs to the traditional style in the Amami Islands and is called "Amami style pottery", although in many publications it is referred to as "Yayoi style pottery" (e.g., Azama 2000). The second, "Kyushu style Yayoi pottery", is mainly distributed in the southern part of Kyushu. Finally, the so-called "Lelang style pottery", named after the Han commandery in Korea, is still poorly known (Shimoji 1999). In this paper I analyse the excavation contexts of the imported Amami and Kyushu Yayoi styles of pottery in Okinawa.

There are major differences between the amounts of Amami and Kyushu Yayoi pottery from different sites and through time. Four patterns are evident. Type A sites have

much Kyushu Yayoi pottery; type B sites have much Kyushu Yayoi and Amami pottery; type C sites have much Amami pottery; and type D sites have little imported pottery. Generally, in Okinawa Island there is more Kyushu Yayoi pottery in the Middle Yayoi phase, and more Amami pottery

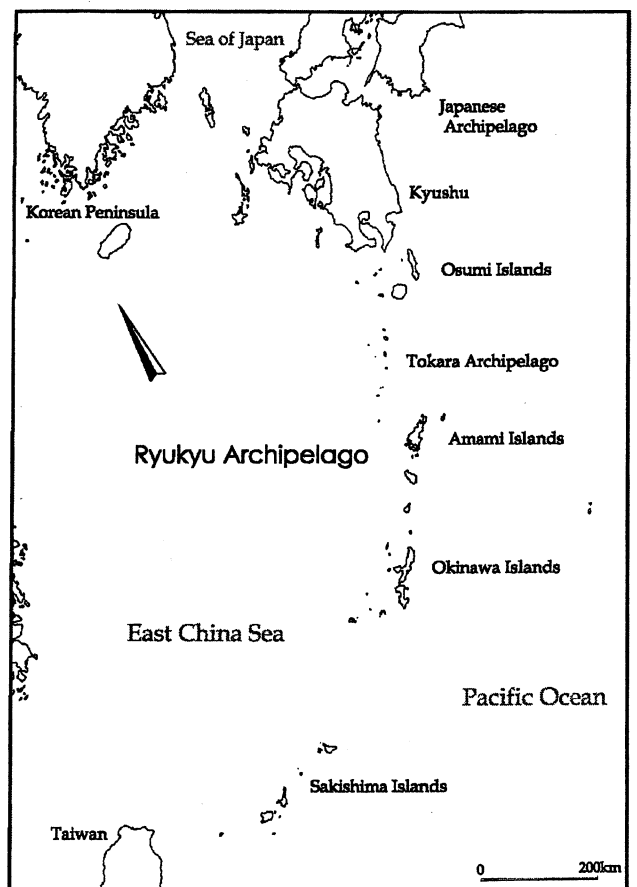


Figure 1: Map of the Ryukyu Archipelago.

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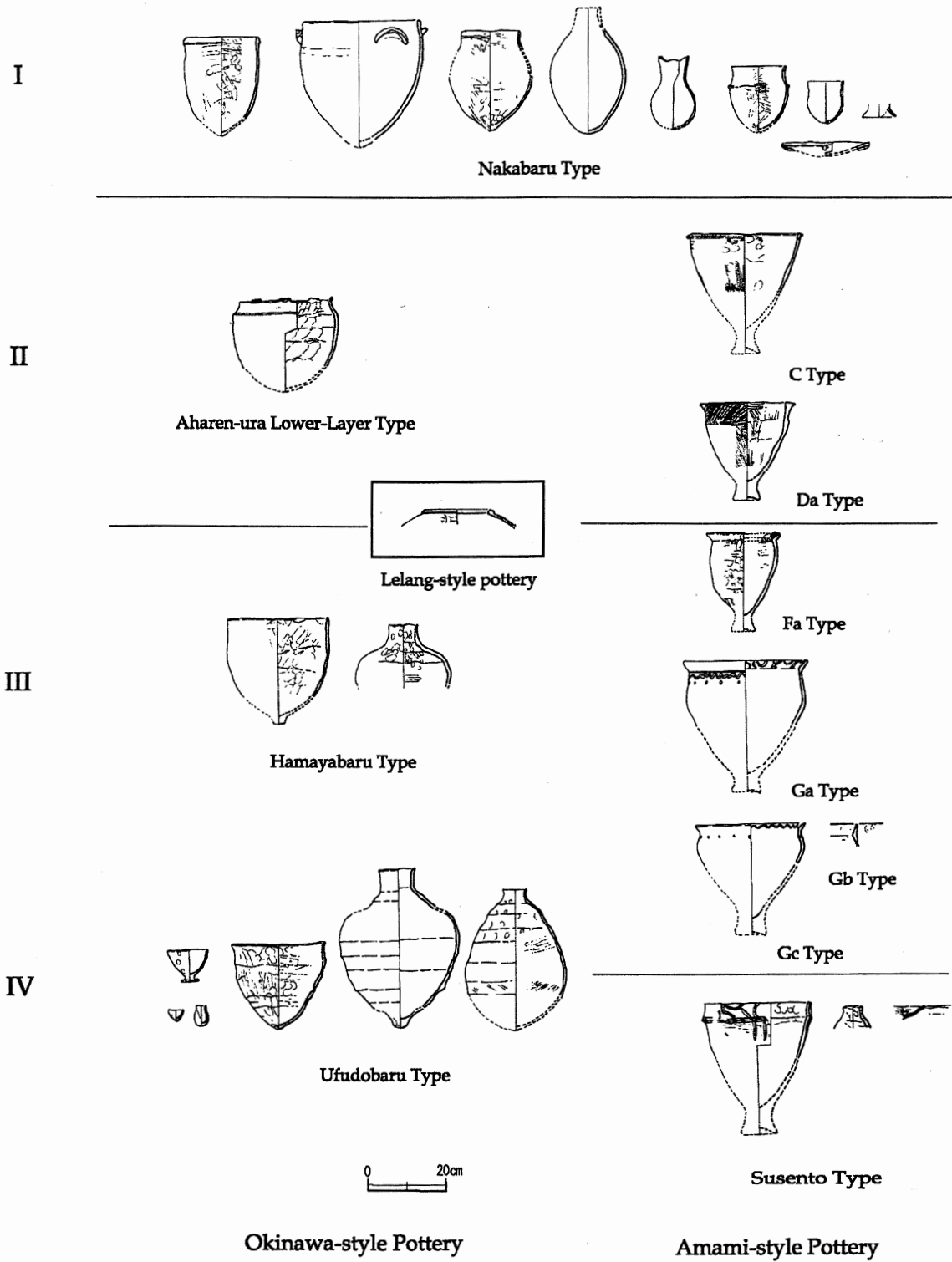


Figure 2: Okinawa style pottery and Amami style pottery.
(Scale: 1/16)

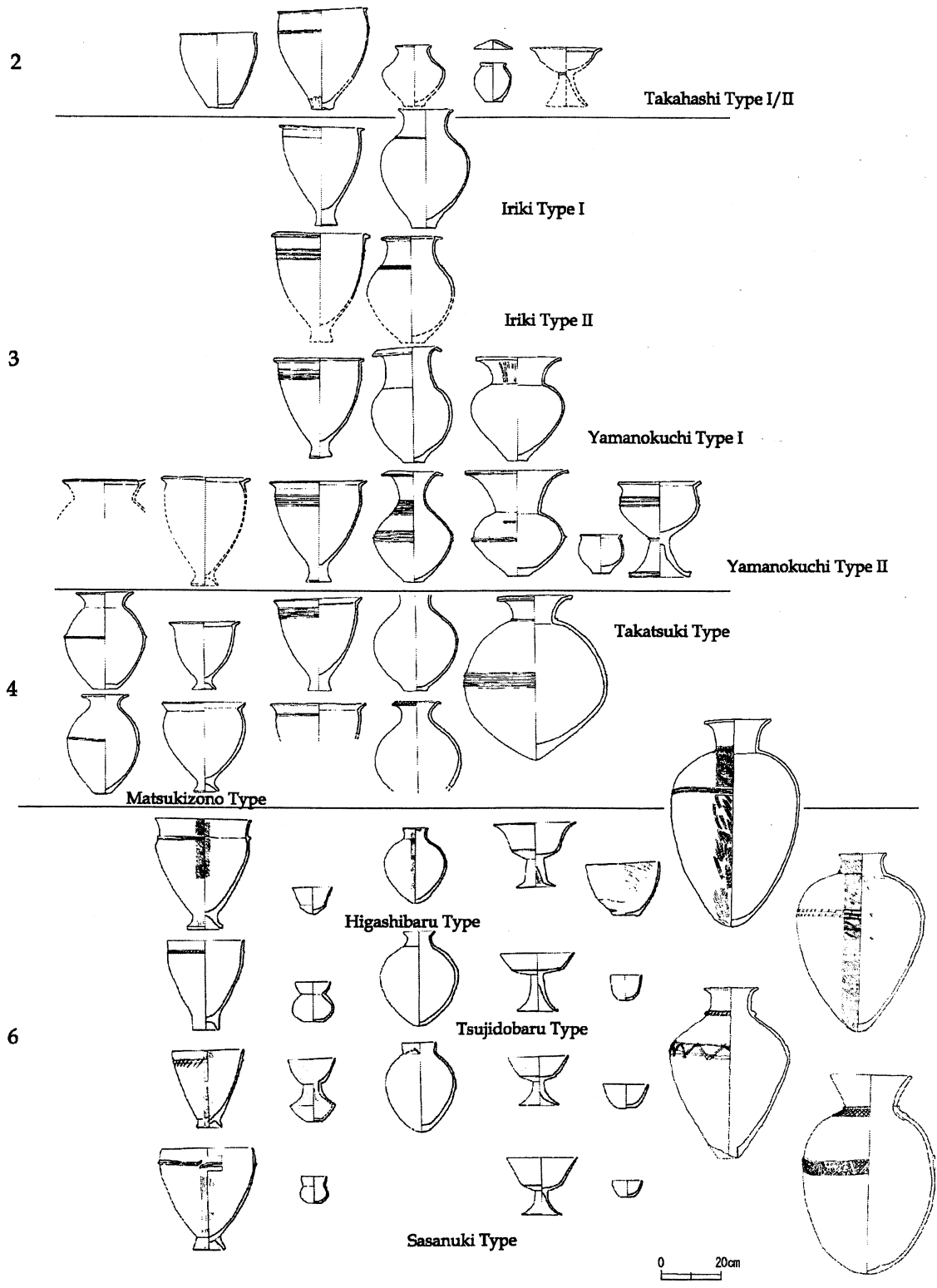


Figure 3: Southern Kyushu style Yayoi and Kofun pottery.
 (Scale: 1/20)

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Table 1: Chronology of pottery styles in Okinawa, Amami and Kyushu

Date	Okinawa Is. Period	Okinawa style Pottery	Amami style Pottery	Southern Kyushu style Yayoi Pottery	Kyushu Yayoi Period		
BC.350	The first half of the Late Stage, Shellmidden Period	Nakabaru	I Nakabaru Type	(Yusu Type)	The last stage of the Jomon period	1	
BC.300				Takahashi Type I	The first half of Early stage, Yayoi period	2	
BC.1		Aharen-ura Lower Layer Type	II	A/B Type, βType, Type 2	Takahashi Type II	The latter half of Early stage, Yayoi period	3
				C/Da Type	Iriki Type I/II	The first half of Middle stage, Yayoi period	
AD.1		Hamayabaru Type	III	Db/E Type	Yamanokuchi Type I/II	The latter half of Middle stage, Yayoi period	4
AD.300				Ufudobaru Type	IV	F/G Type	
	Takatsuki Type, Matsukizono Type II	The latter half of Late stage, Yayoi period					
AD.700			Susento Type	Narikawa Type	Kofun period	6	

The numbers I to IV and 1 to 6 refer to chronological periods

in the Late Yayoi (Figures 4, 5). The tendency in Okinawa is for a change through time from type A to type D sites (Shinzato 1999, 2000, 2001).

If the imported pots are considered primarily as containers for imported goods, then sites with large quantities of them perhaps record movements of people bringing them from Kyushu and Amami. Such sites can be considered focal points for trade. In this respect, the large quantity of imported pots at the Gushiken shell midden on the Motobu Peninsula, Okinawa, is highly significant.

CACHES OF CONCH SHELLS AND SHELL BRACELETS FOR EXCHANGE, AND THEIR FABRICATION PROCESSES

There are three species of shell found in caches in the time period parallel to the Yayoi and Kofun periods in the Okinawa islands (Kishimoto and Shima 1985). These are conch shells (*Tricornis latissimus*), cone shells (*Conidae*), and *Conomurex luchuanus* shells. Caches of shells intended for trade to Kyushu (Figure 6) have so far only been found in the Okinawa Islands. These caches are common over a wide area and are often located in good fishing places where large-scale gathering activities may have been performed. The 30 or so caches discovered at the Kajo A and B shell middens would seem to reflect such large-scale extraction activities. From the present condition of these caches, however, it is hard to judge the duration of the time period during which they accumulated. Conch shell bracelets are also distributed across a broad area in the Okinawa Islands.

I wish to focus on conch shell bracelets and their fabrication processes (Figure 7). Two main types can be distinguished by the portion of the shell used to make the bracelet: a back side type and a front side type. Three types

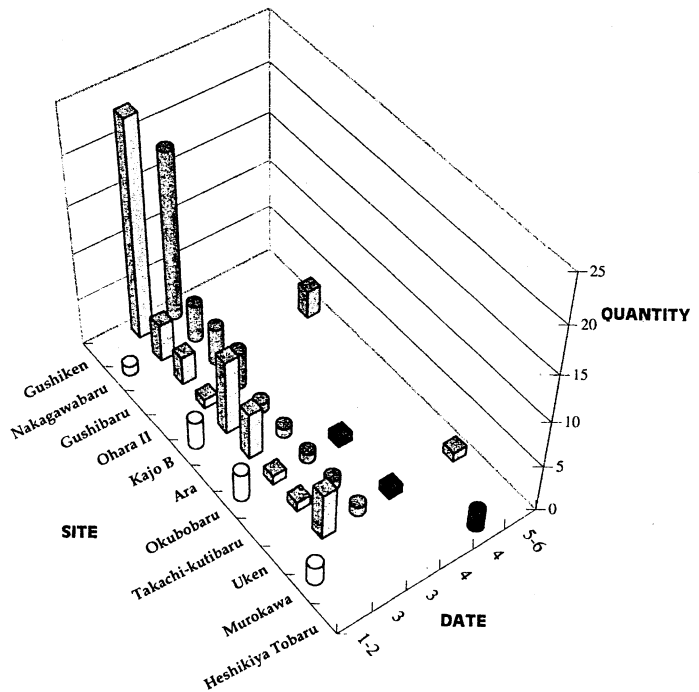


Figure 4: Excavational contexts and dates for Kyushu Yayoi Pottery.

of sites can be recognized based on the stages of bracelet fabrication present in them:

1. sites with the original shells not processed in any way;
2. sites that have shells discarded during manufacture; and
3. sites that only produce finished bracelets.

Sites of all three types occur in time periods II-IV on Okinawa, but in Period I (350 to 250 BC) and Period IV (AD 250 to 600) there are no sites of type 1, and sites of types 2

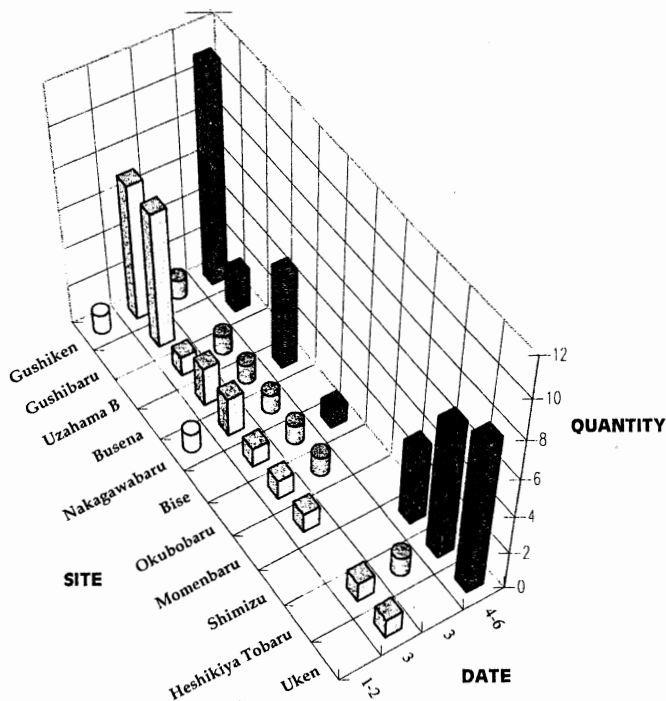


Figure 5: Excavational contexts and dates for Amami pottery.

and 3 are also rare. It is suggested that the shell trade with Kyushu and Honshu was at its peak in Periods II (250 BC to AD 1) and III (AD 1 to 250). During these two periods the work of collecting and processing the shells was to some extent shared between different settlements (Kinoshita 1989; Kamita 1999; Shinzato 2002). Furthermore, almost all sites have produced bracelet blanks, demonstrating the possibility that blank production was carried out in each settlement.

IMPORTED YAYOI-TYPE ARTEFACTS OTHER THAN POTTERY

Compared with imported pottery, imported non-ceramic artefacts are rare and are limited to certain sites. It is often unclear exactly when these latter items were brought to the Okinawa Islands. Some sites have produced a large quantity of various types of imported non-ceramic objects, whereas at others both quantity and diversity are low. Several types of imported goods have been excavated from some sites and the possibility that such items were brought in at regular intervals cannot be denied, as for instance at the Uken shell midden (Oshiro 1990). Moreover, the presences of local leaders and rank differences are suggested by the distributions of certain imported articles, such as the concentration of *Wushu* coins on Kumejima Island. Sites with high concentrations of imported goods may have been

directly involved in trading negotiations with northern Kyushu.

DISCUSSION

From the data presented, it is clear that a trade system existed between Okinawa and Kyushu during Yayoi times. As well as the more tangible objects discussed already, it can be supposed that cereals and rice wine were imported from Kyushu. The discovery of imported items at only certain sites in Okinawa shows that differences existed in access to trade goods. We can propose the existence of a settlement system with three ranks:

- I. base settlements;
- II. base settlements used for exchange purposes and
- III. other branch settlements with few imported articles (Figures 8, 9).

Base settlements often have caches of conch shells, demonstrating that large-scale gathering activities were conducted. The presences in these sites of slab coffin graves suggests the existence of people with a special social status. At these sites, the apparent ability to import goods continuously from Kyushu may show that these sites retained substantial control over the region in general, and the shell trade in particular. The distribution of Rank I base settlements in the Okinawa Islands shows regular separation by distance, and choice of locations considered good places for trading.

Rank II settlements have large numbers of shell caches, much imported pottery and numerous slab coffin graves. It is thought that relations with Kyushu were close, but imported articles other than pottery are hardly present. Imported ceramics are most common at the Gushiken shell midden, suggesting that this site may have been a base settlement for exchange. Rank II settlements rarely produce imported pottery and it is difficult to consider that these sites had frequent connections with the exchange system.

The above differences suggest that the diversity of features excavated from sites in the Ryukyus reflects real differences between sites, and not just the areal extents of excavations. Viewed from the perspective of exchange, the differences between sites may be reflecting the prehistoric social structure of the Okinawa Islands. This possibility is also suggested from data on the extraction and commercial production of the large shells that were exchanged from the Okinawa Islands. Based on present finds, unmodified conch shells are unknown in Kyushu and there is no evidence that they were used in Okinawa in their natural state (except perhaps for food). As discussed above, there may have been a division of labor between sites involved in the

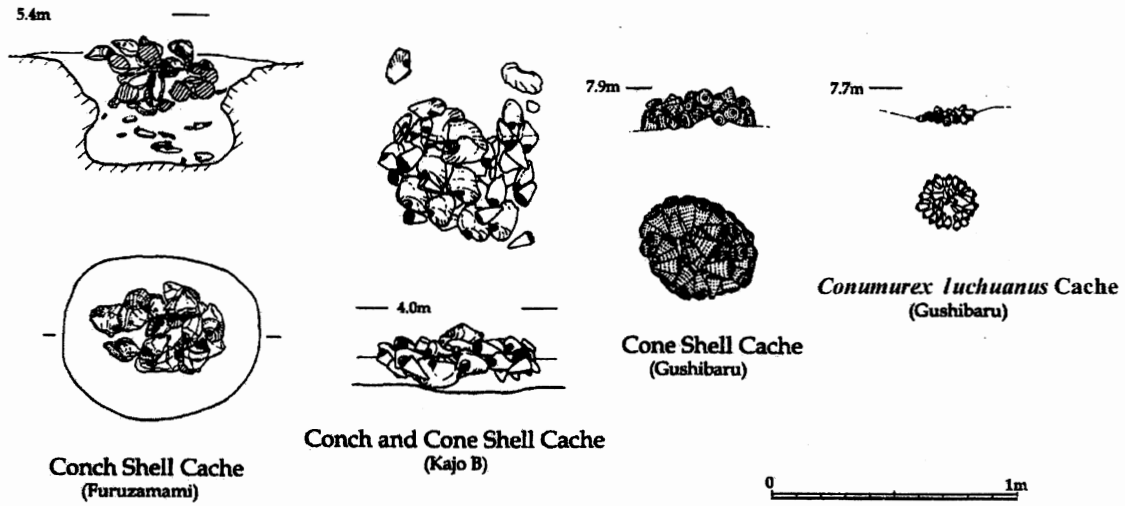


Figure 6: Shell caches.

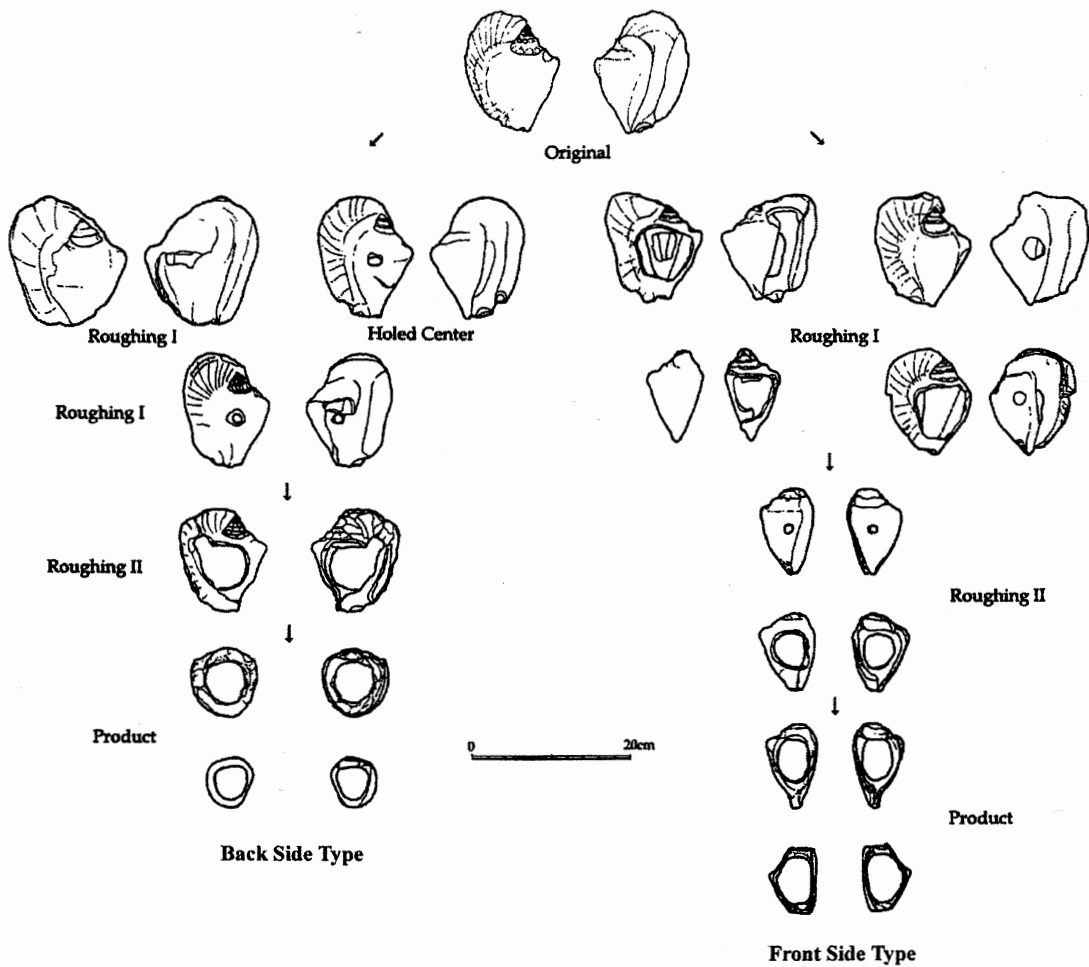


Figure 7: Reconstructed fabrication processes applied to conch shells to make rings and bracelets.

extraction, initial processing and final manufacture of shell bracelets. For instance, at Uzahama B shell midden, there are no finds of imported articles, only unmodified shells, and thus the site is placed in Rank III. Unmodified shells were carried to Rank I and II settlements from Rank III sites. Rank III settlements have evidence of bracelet blank production. If this can be seen as one step in the production of bracelets, with further processing carried out elsewhere, then it suggests a high level of efficiency within the manufacturing system.

Let us return once again to consider imported pottery and what it may be able to tell us about the exchange system. From the Kyushu Yayoi pottery and the Amami wares being brought to Okinawa, it seems clear from almost all sites that exchange was being carried out between Kyushu and the Okinawa Islands. As mentioned above, however, the differences in the quantities of imported ceramics between settlements were remarkable. Imported pottery was mostly brought into Rank II settlements, followed next by Rank I and Rank III settlements in that order. This may mean that the imported ceramics were distributed through Rank II sites onwards to Ranks I and III. It is hard to imagine that each trading group traveled to each base and branch settlement in the Okinawa Islands in order to exchange their pottery for shell bracelets. In spite of the fact that there are no non-ceramic imported articles in the Rank II settlements, it is easy to envisage a situation in which the trading groups visited the sites for a fixed period and exchanged goods with native groups who were under the control of Rank I settlements. In other words, powerful local groups based in Rank I settlements collected and processed large shells at surrounding Rank III settlements. Trade was then conducted at Rank II sites with shells exchanged for cereals stored in pots, rice wine, and non-ceramic items. The goods received were brought back to the Rank I base settlement from where they were redistributed to Rank III sites, with the exception of non-ceramic items used as prestige goods. Figure 10 models the distribution networks between these settlements.

From the archaeological data available at present, there are six network distribution patterns that can be modeled, based on exchange relationships between settlements in the Okinawa Islands (Figure 9). Pattern A has three variations. A1 is the most typical pattern for connections between base and branch settlements on Okinawa Island. A2 is for the surrounding small islands, and A3 connects Okinawa Island with the neighboring small islands. These patterns show the networks between the base settlements (Rank I) and branch settlements (Rank III). Pattern B links the base settlements of Rank II with neighbouring branch settlements through the frequent movements of people involved in exchange. Thus Pattern B can be seen as the network between settlements of Ranks II and III, or Ranks I and II.

Pattern C centers on base settlements where large-scale fishing was conducted; non-ceramic imported articles are not found at these sites, but they are also classed as Rank II. Pattern D represents branch settlements that have almost no connection with Kyushu from the perspective of exchange. They have possible minor network links with neighboring Rank I settlements.

CONCLUSIONS

Although at present there is no evidence that Okinawa groups themselves engaged in intensive, long-distance trade, the Ryukyu shell exchange system appears to have been based around a highly structured settlement pattern that maximized the production and exchange of shells for bracelets. Incidentally, the exchange pattern seen at the Gushiken shell midden on the Motobu peninsula is considered to date from before the shell trade and to have been based initially on local lithic materials. If this movement of shell bracelets can be understood as a type of trade between Kyushu, then at the initial level of state organisation, and the less complex Ryukyu societies (Ikeda 1995), then it seems likely that there was an internal exchange network between sites within the Ryukyus themselves. There is also a trend for Yayoi-related sites and artefacts to be found in the Okinawa Islands rather than elsewhere. There is a strong possibility that this shell trade was centered on the Okinawa Islands, although the many finds of Amami pottery in the Okinawa Islands suggests that people of the Amami region also played an important role as intermediaries in the exchange system.

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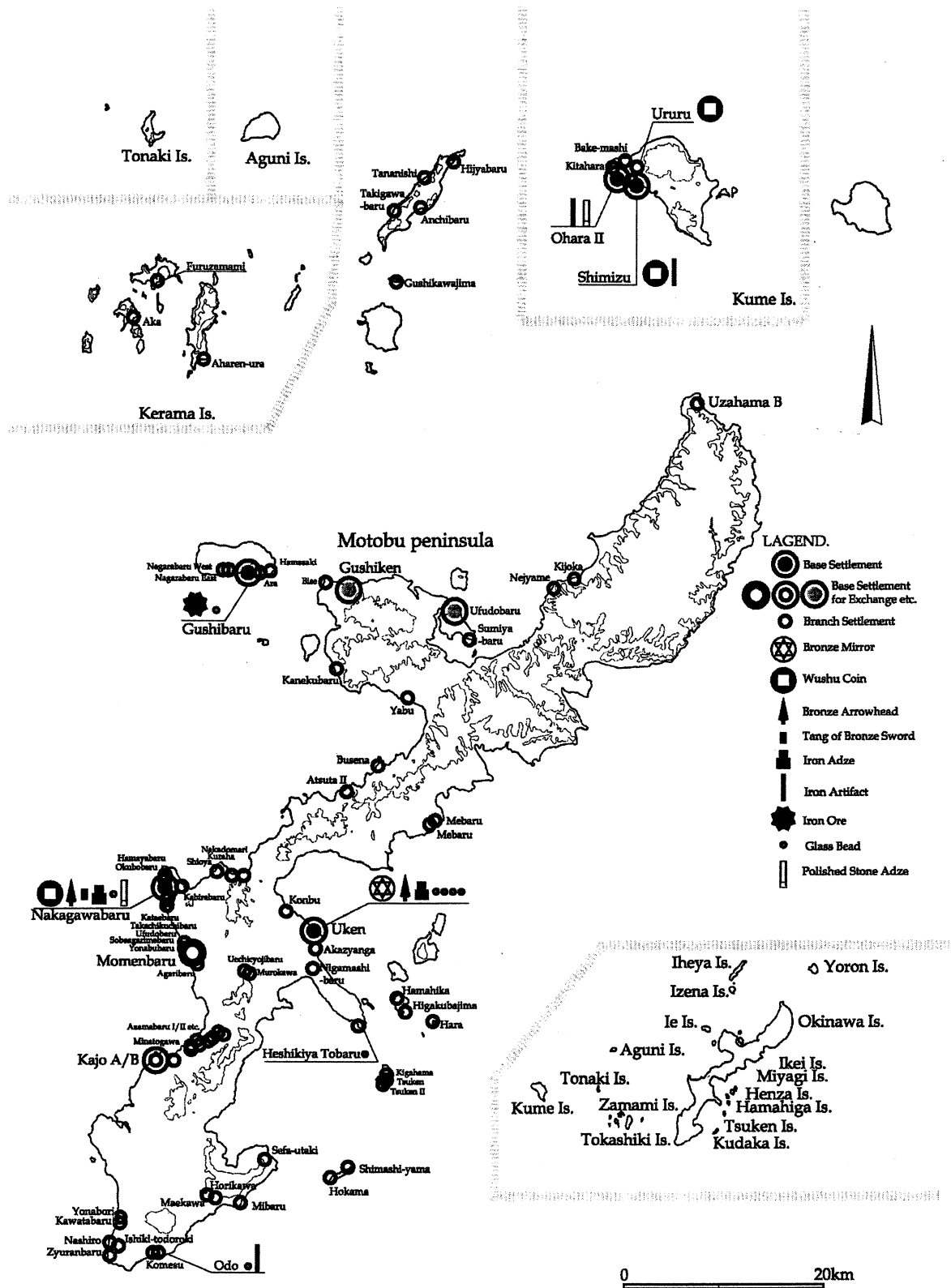


Figure 8: Locations of various sites and trade artefacts in the Okinawan Islands.

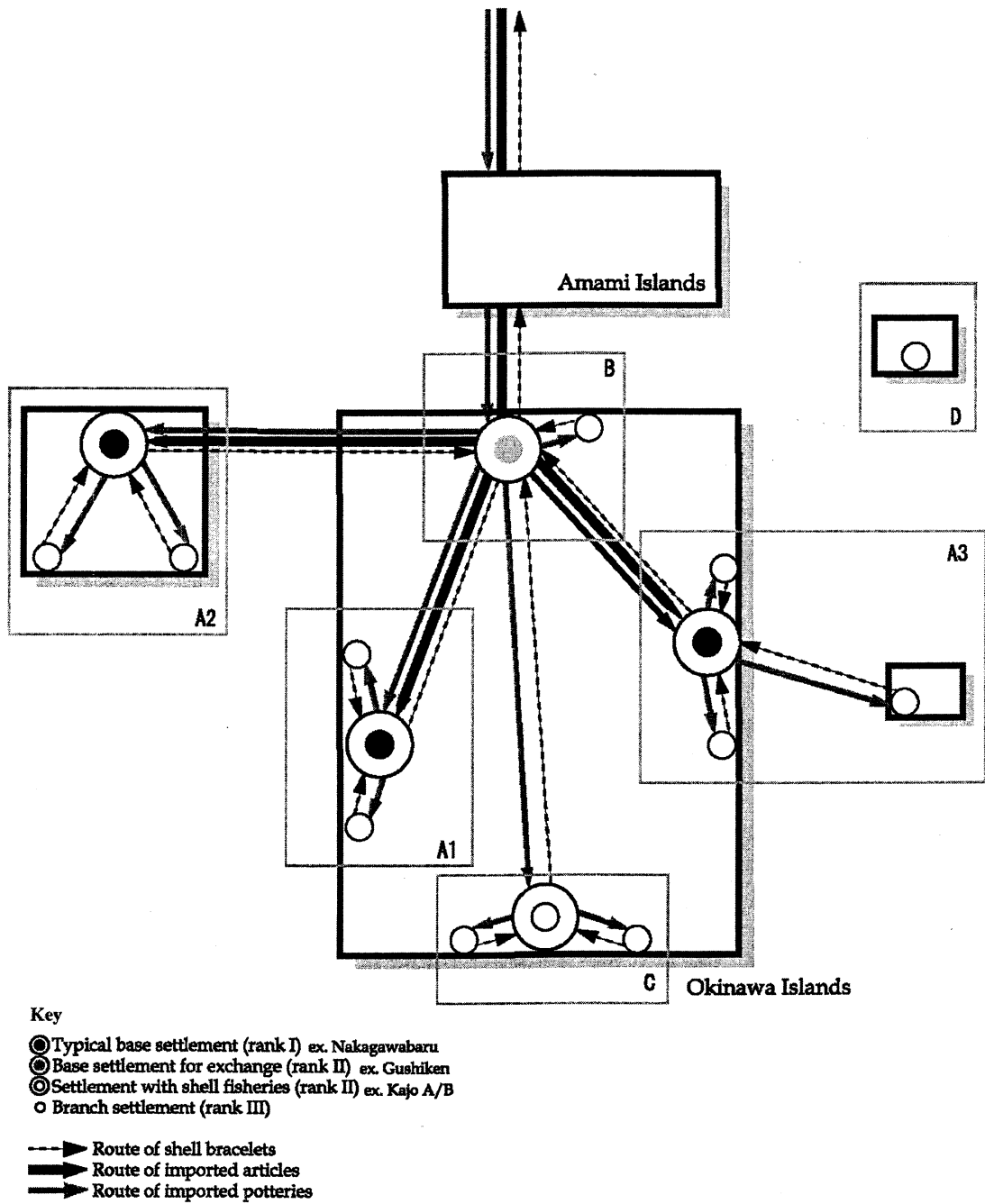


Figure 9: A model of inter-settlement distribution networks in the Okinawan islands.

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