STUDIES ON THE PREHISTORIC SITE OF OKAMOMO, SUKU IN THE PROVINCE OF CHIKUZEN

Ву

Sadahiko Shimada

With

ESSAY ON THE ANCIENT MIRRORS FROM SUKU

Ву

Suyeji Umehara

APPENDIX

Illustrated Description of Ancient Objects

Found at Mikumo Village, Ido-gun in Chikuzen Province

By Tanenobu Aoyagi

THE KYOTO IMPERIAL UNIVERSITY
1930

PREFACE

Since The Tenth Volume of our Archaeological Reports, Studies on the Remains of Ancient Bead-workers in Idzumo, was published in 1927 nearly three years have passed into the Ewigkeit, this rather long interruption caused mainly by my own as well as Mr S. Umehara's absence abroad. But now as our Institute has returned to its normal routine we wish hereafter to issue our Report more regularly, as it used to be, and also with the hope of making up for the occasional disregarding of our native archaeology, in favour of Chinese or Far-Eastern archaeology, which is becoming a more and more popular subject of investigation among scholars of the world.

This volume offers the report of our excavation of the prehistoric site at Suku in the province of Chikuzen, which was conducted by Mr S. Shimada, an Assistant of the Institute, and others. Though unfortunately I myself was not able to attend to the field work, all materials brought back have been examined and Mr Shimada's manuscripts carefully revised with the addition of an English resumé which was translated by myself rather freely from Mr Shimada's original text. Mr S. Umehara, Lecturer on Archaeology of the University, has also contributed a paper about his study on the mirrors from Suku, together with an English résumé.

At the end of the volume Tanenobu Aoyagi's Illustrated Description of the Ancient Objects found at Mikumo Village, Ido-gun in the Province of Chikuzen is reproduced from a copy in our Institute which is a faithful reproduction of the late Mr Tomioka's facsimile made after the original manuscript of the author in the possession of the late M. Kurokawa, but which unfortunately was destroyed by the catastrophic fire of Sept. 1, 1923. As this monograph is frequently referred to in our report and as we have no entire text printed yet, we thought it would be of service to students of archaeology to include it here.

I shall not repeat here the names of the many gentlemen who have kindly assisted us in every way such as Professor H. Nakayama and Mr H. Motoyama, President of the Osaka Mainichi Shimbun, &c., as they have already been mentioned in the text. But I must not forget to mention the names of Mr M. Suzuki, who prepared some of the photographs, and of Mr S. Nakagawa, who made some of the drawings, in this volume. It is my welcome duty to express our hearty and sincere thanks to all these friends, both those named here and those more particularly acknowledged in the text.

Kosaku Hamada,

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STUDIES ON THE PREHISTORIC SITE OF OKAMOTO, SUKU IN THE PROVINCE OF CHIKUZEN

CHAPTER I. INTRODUCTION

Studies of ancient bronze objects in Japan, such as daggers and halberds, have stimulated so keenly the interest of our native archaeologists that they have tire-lessly carried on investigations into the sites themselves where those objects were found, especially in the northern part of Kiushû; as there the distribution of relics is most numerous. A peculiar kind of funeral urn in brown pottery which appears very frequently from those districts is now considered as the production of the eneolithic period, having also a close relation with those bronze weapons. So the remains found in these sites may be said to show the newly arisen metallic culture introduced from the Continent, and the funeral urns can be regarded as the forerunner of the later tumulus-burial, belonging to the period just after the Stone Age. It has, therefore, a peculiar interest in the history of sepulchral development in Japan, reflecting the cultural phase of the people who practised this particular method of burial in their social life.

The site of Okamoto, Suku, which was the object of our researches, lies a few miles south-east of Fukuoka City and has been one of the most renowned among similar sites of the period, yielding very precious remains of every kind since 1899, only comparable to that of Mikumo, not far from our Suku, which is ever remembered because of an interesting find made in the year 1822, and a monograph about it written by Tanenobu Aoyagi. Since the first discovery the Okamoto site has been repeatedly visited and studied by several archaeologists, such as

^{1.} His monograph, Illustrated Description of the Ancient Objects Found at Mikumo Village, Ido-gun in the Province of Chikuren, is reproduced at the end of this volume.

Messrs S. Yagi, K. Furuya, R. Morimoto, and especially by Dr H. Nakayama who has made most painstaking researches into the site and remains. We had the happy chance to carry out a more thorough excavation of the site, under the superintendence of S. Shimada, with Messrs. H. Higo and K. Arimitsu and also the untiring assistance of Dr H. Nakayama and others, discovering eleven sets of funeral urns and a bronze dagger in one of them, which, we believe, is the first discovery of a bronze weapon ever made under the direction of a scientific expedition.

CHAPTER II. SITE OF OKAMOTO, SUKU

1. Topography

(Plates I-III)

Okamoto of Suku is a small group of houses in the village of Kasuga, Tsukushi-gun in the province of Chikuzen. It lies about a mile west of Zasshonokuma, a country town situated midway between Fukuoka City and Futsukaichi. Near the latter town once existed Dazaifu, which had been the centre of administration for the whole of Kiushû from the 8th century down to a later period.

According to the *Wamyôshô* 和名抄, the district Tsukushi-gun belonged formerly to Naka-gun, and consisted of nine counties of which some of the names still survive as village-names. Though we do not find the name Suku 須孜 in that old book, Dr Nakayama puts forward his conjecture that it was probably derived from the ancient Taku 田來. However that may be, there is no doubt that this part of the province included the ancient prefecture of Na 奴, which played an important rôle in the history of the intercourse between Proto-historic Japan and the Han court of China, mentioned frequently in the historical annals of both countries.

^{1.} See Mr S. Yagi's notes in his Japanese Archaeology and Kôko-scisetsu.

^{2.} Mr K. Furuya's article in the Kôkogaku-zasshi or the Archaeological Journal, (Vol. II., No. 3).

^{3.} Amongst many articles published in the Kôhogaku-zasshi by Dr Nakayama on the sites and remains of the encolithic period in Northern Kiushů, the following are the most noteworthy: "Condition of the Objects Discovered at Okamoto, Suku in 1899," (Vol. II. Nos. 10-12), "Ancient Objects Collected Thereafter" (Vol. XVIII. No. 7), "Studies on the Fragments of Ancient Mirrors from Okamoto, Suku." (Vol. XVIII. Nos. 10 & 11).

^{4.} Dr Nakayama's article on Ancient Hakata, (The Kôhogaku-zasshi, Vol. VIII, No. 6), and Dr T. Yoshida, Japanese Geographical Dictionar.

The district Tsukushi-gun is situated on a plain between the shallow valleys of the two rivers Mikasa and Naka. While Fukuoka City now flourishes on the alluvial deposits of the rivers close by the sea, Suku lies on a diluvial flat at the foot of a range of hills undulating from Mt Ushikubi (448. m.) two miles south. The hamlet of Okamoto is the northernmost habitation of Suku lying north-west of a small hill (30 m.) on which stands a Kumano shrine. We excavated several spots near by and in the hamlet. (Fig. 1)

3. Excavation of the Site

(Plates II-XII)

Our excavation began on the 7th of September, 1929 and finished on the 14th of the same month. Under the superintendence of Mr S. Shimada, Messrs Higo and Arimitsu, who came from Kyoto, helped in our field work. We unearthed, first, A spot at the north end of the diluvial flat, and then attacked B, north of the hamlet, where the result was most fruitful, yielding ten sets of funeral double urns. Meanwhile C and D spots were also examined, the former bringing us a set of urns, the latter some fragments of mirrors as well as a cylindrical horn bead. The last two days were engaged in taking up all the jars till then discovered, and it was rather an unexpected pleasure to find a bronze dagger in the No. I coffin at the last moment of our work. More details of our excavation and the objects found will be given in the following pages.

(a) A Spot (Plates III & IV)

This is the northern extremity of the diluvial level, about 6 feet higher than the rice-field, cut off by a road, but originally connected with the high level southwards where the houses are grouped. We dug along the line north to south at the west side which marks the limit of the half-lowered farm. Surface soil here measures 2 feet on an average, then comes black earth about 3 feet deep. In the former we came across later Iwaibe ware and some much later porcelain sherds as well, but in the latter black earth simply brown Yayoi-type pottery (Fig. 2). In one spot, about midway of the line, pottery fragments were especially abundant, in spite of which we are not inclined to suggest it was the site of an

ancient pit-dwelling or the like. Some may think the pottery in this spot is the result of later transportation, but the condition of the layers containing the potsherds, etc., puts at rest all such doubts.

(b) B Spot (Plates III—XI)

The spot lies north of the hamlet, just opposite to A, separated by a road, some 10 feet higher than the neighbouring rice-field. In the year 1914–15, villagers accidentally found some 40 double-urns, together with two mirrors and one jasper bead, when they were engaged in planting mulberry trees. Though the exact area of the discovery cannot be traced at present, it is quite certain that it was a part of the level west of a standing stone. Dr Nakayama has suggested already a further westward distribution of urns, and Mr R. Morimoto's find of a set of jars in the place, just a month before our excavation, justified our expectation that the spot would be most fruitful in funeral urns, we having planned to excavate here two years previously. We unearthed about 78×60 square feet at the spot, finding ten sets of double-urns. (Fig. 3 & 4)

Coffin No. 1: came out from the southernmost spot of our excavated area, lying nearly on the level underground, less than a foot from the surface. Two jars are joined at the rims, though when found they were separated 3 inches, which was evidently caused after burial. Both jars are nearly of the same size, but the upper parts are broken off by farmers' ploughing. A bronze dagger was found extending between the joint lengthwise, though broken in two pieces. The joint of the jars seemed to have been surrounded by clay. (Plate V & VI)

Coffin No. 2: discovered quite close to the former, in a similar axis and inclination. The shape of the urns is also the same, only a little smaller in size. From these considerations one is inclined to suggest that these two coffins are those of closely related persons. (Plates V & VI)

Coffin No. 3: about 8 feet north-west of the former. The axis is S-E to N-W, the inclination being just opposite to that of Nos. 1 and 2. Though the upper jar is partly destroyed, its entire length measures about 6 feet. The joint

The late Mr Tomioka also proposed to make an excavation at this spot, but his untimely death frustrated its realization.

fits comparatively well, ringed at the neck also with clay. (Plate VIII)

Coffins Nos. 4-7: these four make one group found east of the first specimen. No. 4 consists of two big jars nearly of the same size, of which the lower one is about two-thirds filled with fine soil, like potter's clay, mixed with red ochre and some white substance which seems to be the remains of human bone (Plates VII & XII). No. 6 jar is slender and smaller in form, while Nos. 5 and 7 are of broader shape (PlateVIII). They are all broken.

Coffins Nos. 8-10: lay scattered in the northern area of our excavation. No. 8 is the smallest example, only a portion of the lower urn remaining. Both Nos. 9 and 10 are half broken and the upper jar covers the lower. (Plate IX)

To sum up the distribution of the funeral urns above-mentioned, it is noticeable that some of them lay more or less in groups, lying near by each other, leaving vacant spaces here and there. But after careful examination we came to the conclusion that the vacant spaces did not originally contain any urns, for if any jars had once been extracted, some fragments would have remained judging from our own experiences in the exhumation of jars. The cemetery, however, extended westwards, as the former discovery shows, and also northwards, as some urns were found when the road was cut.

The urns seem not to have been buried deep in the ground. Four specimens were found only about a foot below the surfa e, while others were even less than that. In one case, No. 5, the upper jar must have lain a foot above the present surface. This fact confirms the observation that the former surface level was about 2 feet higher than the present one, and to bury a set of double-urns inclined at 30 degrees it was necessary to dig 5 to 7 feet deep underground. Though a few examples showed very slight inclination, being almost horizontal, most of them were placed in a position inclined some 30 degrees from horizontal. The direction of the axis of the jars is not uniform, being different in each case.

(c) C Spot. (Plate III & XI)

This is the margin of the diluvial level, south-west of B spot and close to the place which some fifteen years ago yielded a set of urns with a quantity of glass beads. We found here, near a stone wall, one example of urn-burial, No. 11, the upper jar being half broken. It belongs to a type, like Nos. 9 and 10 of

B spot, with the lower urn covered by the upper. And it is interesting to know that the rims, or at least a part, should have been broken off intentionally at this place for the convenience of overlapping the lower jar, as we found some fragments of the very rims near the coffin.

Two granite slabs were unearthed 4 feet north of the urns, and one similar slab already taken out lies on the ground. These are probably stones used for burial purposes, measuring about 5 feet when joined together, and somewhat resembling those discovered at Ijiri in the same province.

(d) D Spot. (Plates III & X)

Situated north of B spot, between the houses of Okamoto, this is a small elevated area now planted with mulberry trees. Here was a huge stone with a smaller one which Mr Yoshimura removed for building his house in 1899, and accidentally found underneath, about 3 feet deep, a funeral urn or urns, containing mirrors, bronze daggers and fragments of a glass disc, pi, and also bronze daggers without any jar. Dr Nakayama's minute researches have confirmed these conditions of discovery as well as adding certain items of remains from the spot, though unfortunately the original finds have now become much scattered. We made a renewed examination of the place, finding a few fragments of mirrors and a horn bead.

The said stones have been twice removed from the original spot, once quite close to it, but they now lie near the road leading to the Kumano shrine. The big stone is a flat granite, II by 6 feet long and I foot thick, and probably had been in situ from time immemorial, and the urn found underneath must have been buried quite shallowly, at an inclination of 30 degrees or thereabouts, like most of the urns we unearthed. So it is very probable that the big slab was a kind of covering stone to protect the urn-burial like a capstone in a trench-grave.

The smaller stone, 2 feet high, stood originally by the big stone, as Mr Umehara's sketch shows (Fig. 6). It may be a portion of the side stones of a primitive walled grave, but there are no signs of the existence of other pieces of similar stones. So we are rather inclined to consider it as a stone erected to indicate a grave or a cemetery. The same interpretation can be applied to the standing stone we described at B spot.

CHAPTER III. REMAINS FOUND BY OUR EXCAVATION

1. Stone Implements

Having described our excavation at different spots at Okamoto, we shall now treat of the remains discovered by ourselves, before we come to the general remarks.

First of all, as regards stone implements, we got only one fragment of a slate knife, (Fig. 7, 1) and one doubtful piece of slate which looks like an unfinished knife. This came out near the bottom of No. 3 coffin (Fig. 7, 2). But it is reported that a few slate knives as well as two stone celts have been picked up in this place. Fragments of obsidian are also plentiful on the site and a few complete specimens of arrow-heads of the same material have been obtained. They are all triangular in form (Fig. 7). So it is evident that at this site stone implements are to be found, though the quantity is rather scarce. As to what interrelation they have with the funeral urns, we shall touch upon in a later chapter.

2. Pottery of Yayoi-type

(Plates XII & XIII)

The pottery found here is almost all of the brown-coloured ware of the so-called Yayoi-type with scanty fragments of Iwaibe, grey-coloured hard ware, etc. But there is no need to say that the latter belongs to a later age not contemporaneous with the funeral urns. The Yayoi-type pottery can be conveniently classed in two groups, *i. e.* smaller vases, and larger vessels including funeral urns. The smaller vases were found mostly at A spot, all broken in pieces. Hitherto only one complete specimen, a long-necked vase, has been reported by Dr Nakayama (Fig. 8). We roughly distinguish the fragments as of four forms, jars, high-footed bowls, stands and bowls, of which the two former are the most numerous (Fig. 9).

(I) **Jars:** a few different kinds of rims are distinguishable among the fragments (Fig. 9). (a) Flat rims with standing walls, with or without additional belts, seem to belong to the large open-mouthed, somewhat cylindrical vases (Pl. XIII, I-3.; Fig. II, I-IO). (b) Also flat rims with the bulging body of big pots. In one case, holes are perforated through the rims for suspension. (Fig. II, II-I4)

- (c) Flat rims, with the walls tapering inside, probably of a neck of wide-open mouthed pots (Pl. XIII, 4.; Fig. 15-19). (d) Rims of large jars of widely opened mouths (Fig. 11, 21). (e) Rims of long-necked vases, of two kinds, one open and the other turned inside. (Fig. 11, 23) Bottom pieces vary in size but nearly all belong to the flat bottom class, except one which is very high (Pl. XIII. 19; Fig. 11, 28).
- (2) Bowls with high stands: this form is comparatively frequent and can be divided into two classes. (a) High slender-footed variety with shallow bowl and flat rim, (b) short thick-footed ones of which there are unfortunately no bowl parts extant. The former is made of fine material and superior technique, while the latter is made of rough material. (Pl. XII, Fig. 10)
- (3) Pedestals: cylindrical tubular stands with mouth and bottom open. Similar vessels we see not seldom in the neighbourhood or in northern Kiushû.¹ (Pl. XIII, 22, 23)
- (4) **Bowls:** one nearly complete specimen was obtained, but this particular vase seems hand-made. Its irregular rims might have been intentionally shaped for the convenience of pouring out the contained liquid. (Pl. XII)

In short, we may say there were two kinds of pottery work-shops, one with superior technique and material for small vases, and the other with coarse technique and material for large vessels. Though A spot did not yield any funeral jars, it held pottery quite similar in technique to those jars.

2. Double Funeral Urns.

(Plates XIV & XV)

Though these jars also belong to the Yayoi-type of pottery, it is more convenient to deal with them under this separate heading, because of their special form as well as their use in funeral ceremonies. As we have mentioned, we found ten sets at B and one at C spot. Each burial consists of a couple of large jars, in size and form not much different from each other. When the pair correspond in size, the joints of the jars match at the rims of the mouths, but when the size is more or less different, the larger one, whether upper or lower, overlaps the smaller. In

^{1.} Much similar pedestals are noticed in the Tripolye pottery, &c. (Gordon Childe, The D ron of European Civilization, p 157)

this latter case, the rims of the overlapped urn are broken off, and this fact indicates that the lower urn was buried first; then, after the corpse had been placed in it, the upper urn was capped on and the rims broken off for the better fitting at the moment (Fig. 12).

The shapes of the jars do not show much difference from each other, only varying in details. The rims are flat and broad with two variations, one more often found in the form and of 7 the other in the form of T and generally a belt surrounds the neck, for decoration as well as strength. The body has usually one or two belts in the middle where it is sometimes slightly narrowed (Pl. XV). The bottom is very small and flat. Each jar measures roughly 2 to $2\frac{1}{2}$ feet in diameter and is about 3 feet high.

These jars are made of clay mixed with a quantity of sand, but finely baked and uniformly red in most cases. Though the rim parts are thick enough the body seems a little too thin. To manufacture such a big vessel presupposes the existence of large kilns and the skilful hands of a potter. They had of course potter's wheels, even if we do not know exactly of what form they were, and probably they must have been made, generally speaking, like those in present use in this country. We are told that to shape such a big urn, it is necessary to make two or three zones separately and put them together afterwards. Moreover, each zone must be made at first much thicker, or it will be easily put out of shape, and when the zones are being joined together in a partly dry condition, the whole body is made thinner. Anyhow, manufacturing such huge vessels is not an easy task even at the present day, so our specimens show the zenith of development of the potter's craft in respect of the Yayoi-type of that age.

The Yayoi-type pottery was the product of the latter phase of neolithic culture in Japan, succeeding the blackish hand-made ware of the earlier phase. It is reddish-brown pottery finely made on wheels but simpler in form and usually lacking in ornament, while the earlier blackish ware is hand-made and displays varieties of shape as well as of ornamentation which usually take the from of mat-patterns and curved lines. The former was an entirely industrial production, aiming for large markets, while the latter was more artistically fabricated in family

^{1.} One of present-day work-shops of pottery in Kyoto is shown in Fig. 13. The potter is moulding a jar of similar shape as our funeral urns, but much smaller in size.

circles. We are inclined to consider that the technique of the Yayoi-type pottery was introduced from the Continent, probably together with ethnic elements, because it shows too great a degree of progress to be ascribed to spontaneous development among aboriginees. The appearance of bronze associated with this ware also confirms this view. In fact the potter's wheel was used already in China before the time of the Han dynasty, and it seems not quite absurd to consider that the high-footed bowl form was influenced by the *tou*-shaped vase in China, where this form was prevalent in the Han period or thereabouts.

MEASUREMENT OF THE FUNERAL URNS

Coffin	Upper Urns		Lower Urns		Whole	Inclina-	Direction	Associated
Nos.	diameter	height	diameter	height	Length	tion	Direction	Objects
Ві	69.1	cm 100.0	72.7	cm. 100.3	200.3	3°	NW-SE	Bronze dagger
" 2	63.6	90.9	66.7	94 0	184.9	5°	MN-SE	
,, 3	68.2	100.3	72.7	97.0	197.3	31°	SE-NW	
,, 4	66.7	97.0	63.6	97.0	194-0	30°	N-S	red ochre, & bone
,, 5	53.0	83.0	60.6	87.9	190.9	31°	S-N	
,, 6	63.6	90.9	63.6	87.9	178.8	2°	SE-NW	
,, 7	72.7	100.3	78.8	104.0	204.9	32°	SE-NW	
,, 8	54.5	72.7	45.4	. 57.6	130.3	58°	E-W	
, , 9	66.7	94.0	72.7	97.0	191.0	32°	E-W	
,, 10	-	63.8	68.2	84.4	148.0	30°	N-S	
C 11	72.7	90.7	69.7	81.8	172.6	42°	NE-SW	

3. Bronze Dagger and Other Remains

(Frontispiece & Pl. XVI)

The bronze dagger discovered in the No. I coffin is broken in two places in the middle, but is as a whole in a tolerably well-preserved condition. It is about one foot long with a peculiar-shaped blade and a short tang. Both sides of the blade have a slightly concave part, intended originally for giving a severer wound

to the enemy, and then treated as an ornamental or threatening form, more and more exaggerated, as we see in weapons everywhere. The tang is indented for the convenience of fastening to the hilt though it seems too short for the purpose (Fig. 16). We see in a similar dagger the short tang scraped off and a hole made for fastening to the hilt. So we can not help supposing that this dagger which we discovered, from the rough condition of its tang, etc., was an article only preserved as a kind of treasure, because it was too precious a thing, being imported from China, to employ in daily use.

The dagger was placed horizontally in the urns extending over two jars, the dagger-point being in the lower jar and the butt in the upper (Fig. 17). It lay by the left side of the supposed corpse, the head and upper body being in the upper jar. So if it were natural to wear a sword or dagger at the left hip with its point downward, then the custom would be, in these urn-burials, to place the lower part of the body in the lower jar, and the upper part of the body in the upper jar, though some scholars hold a quite contrary opinion. However, this dagger is of the slender type, which is a shape quite commonly discovered in these parts of the country, and shows nothing peculiar in itself, but it is the only bronze weapon actually found in a scientific excavation, thus furnishing detailed records of archaeological value.

Fragments of mirrors collected at D spot are very tiny pieces, but containing four different outer circles and two bits of a so-called *Ch'ing-pai* mirror and a "Star-cloud" mirror (Pl. XVI, 3). They are undoubtedly scattered fragments like those which Dr Nakayama has hitherto collected. So we shall deal with it in the next chapter.

A horn cylindrical bead or kndatama from D spot is half an inch long and inch in diameter. This seems quite similar in nature to the 12 pieces found by Dr Nakayama at this same spot. It is made from a deer's antler and perforated from both ends (Pl. XVI, 4). We know also in the description of Aoyagi on the Mikumo find, already mentioned, there were, besides the mirrors and bronze weapons, a magatama and a kulatama bead in the urns. "The beads, in question" he says, "are roughly made of 'paste' and the only specimens preserved from the others which were decomposed in the urn like clay." It is most probable, as Dr Nakayama noticed, that these so-called 'paste' beads were decomposed

horn, like the beads found at this place. We may mention another instance of the discovery of beads, though not of the horn-made variety, namely 19 specimens of jasper *kudatama* from an urn-burial at Kushihara.

CHAPTER IV. OBJECTS FOUND BEFORE OUR EXCAVATION

1. Objects found at Okamoto, Suku

(Plates XVIII-XXXIX)

Before we reach our conclusion, it is our duty as well as necessity to describe the remains discovered previous to our excavation in the same Okamoto site, and also certain related objects unearthed in the neighbouring localities.

(1) Okamoto Discoveries. (a) Some twenty years ago about 40 sets of funeral urns were brought to light with mirrors and a bronze dagger at B spot, as we have mentioned already. Though exact record of the discovery is lacking it may be assumed that the daggers and mirrors occurred from different burials. (b) In 1893, however, a more important find had already been made at D spot, under the big stone, consisting of mirrors, bronze daggers and glass disc, pi and beads, &c. All these items came out with earth blocks mixed with red ochre from a set of funeral urns, and outside of the jars, also a dagger or daggers. (c) Dr Nakayama has since collected a quantity of fragments of mirrors at the same D spot, which seem to be the scattered contents of burial-urns. A set of jars with many glass beads was dug out at C spot. Besides the above-mentioned discoveries, there are some other objects thought to have been found in the site. We give a list of all these finds according to the objects as follows:

I.	Double funeral urns	40 or more sets	D spot
2.	Double funeral urns	2 sets?	C spot
3.	Bronze dagger (slender from)	I D spot (Pl. XVI, 2)	
4.	Bronze dagger (kris form)	1)	
	Bronze halberds (slender form)	1 D spot (Fig. 20; 2-6)	
5.	Bronze halberd (slender form)	I D spot	(Fig. 20, 2)
6.	Bronze dagger (unusual form)	Ι ,, ,,	(Fig. 20, 7)
7.	Bronze dagger (slender form)	ı frag. ,, ,,	

8.	Glass disc, pi	2 frag.	,, ,,	(Fig. 22, 1)
9.	Glass beads (small)	many	C spot	
IO.	Glass magatama bead	I	D spot	(Fig. 22, 3)
II.	Horn kudatama beads	I 2	" "	(Pl. XVI, 3)
12.	Bronze mirrors	2	"	(Pl. XXX, 1)
•	One is a mirror with a square frame a	and spiral design, and	the other with	a pattern of concate

One is a mirror with a square frame and spiral design, and the other with a pattern of concatenated ares and jih-kuang 日光 characters. Both seem to have been made in Japan.

- 13. Bronze mirror (Phoenix-like pattern) I D spot (Pl. XVII, 2)
- 14. Bronze mirror I B spot (Pl. XXX, 3)

Concatenated arcs pattern, also Japanese made. According Dr Nakayama, this can not be ascribed to the find from an urn-burial, as it was taken from a very shallow level of the ground.

- 15. Bronze mirror (Star-cloud pattern) I D spot (Pl. XVII, 2)
- 16. Fragments of bronze mirrors many " " (Pl. XVIII-XXIX)

After Dr Nakayama's scheme some 33 to 35 mirrors can be reconstructed, but Mr S. Umehara, on the other hand has reduced the number to 21 or thereabouts, as follows:

I Phoenix-like pattern; z Double-circled, four-nippled, leaf-shaped pattern; I Square-framed, four nippled, leaf-shaped pattern; z Double-circled ch'ing-pai 精白; 3 Double-circled ch'ing-pai 清白; 4 or 5 with Concatenated-arcs & ch'ing-pai 清白; 2 Double-circled jih-kuang 日光; 5 or 6 with Star-cloud patterns and, besides the above-mentioned, more than 4 ch'ing-pai styled, I with concatenated-arcs & dragon; and I Leaf-shaped pattern are recognized.¹

Most of these mirrors are of fine workmanship with "black lacquer" patina and assumed to be the former Han style made in China.

- (3) Other Okamoto Discoveries. The chief discoveries made outside B, D and C spots are the following: (a) At the spot called Sakamoto, a bronze halberd yielded in 1917, and (b) at Tsuji a depôt of 9 halberds was exposed in 1923, buried in a bundle.
 - I. Bronze halberd (slender form) I Sakamoto (Fig. 20, 8)
 - 2. Bronze halberds (broad form) 9 Tsuji (Fig. 21, 5)

Each piece placed alternately, the point upward and downward. Similar depôts of bronze weapons have been reported from Antoku in Chikuzen and Nukadake in Tsushima.

- 3. Bronze halberd (slender form?) I Banjakujin Mentioned in the Chiku-zen-zoku-Fudoki.
- (4) Discoveries of Moulds: At Okamoto and in the vicinity several moulds

I. See Mr Umehara's article Essay on the Ancient Mirrors from Okamoto, Suku, contained in this volume.

of bronze weapons, halberds and daggers, have been reported. All these are made of sand-stone.

- I. Mould for a halberd I half (in 2 pieces) (Fig. 21, 1)

 This is the best known specimen, and thought to have been discovered at Kôgô-no-mine at the end of the 18th century. It is a complete one-half of a sand-stone mould for a broad-type halberd, nearly 3 feet long, and the two pieces are to be exactly joined in the middle. Collection of the Kumano Shrine, Okamoto.
- 2.–8. Fragments of moulds of halberds and daggers. (Fig. 21, 2-4)
 Thus the objects found at Okamoto and in the vicinity are very numerous including such items as bronze daggers and halberds, bronze mirrors, glass disc, pi, magatama and kudatama beads, and moulds of bronze weapons. So we can understand to what class of remains the objects found in our excavation belong.

2. Urn-burials and Associated Remains in Other Places

In addition to our Okamoto, there have been discovered in northern Kiushû, not far from Suku, several sites which yielded urn-burials and relics similar to those of our site. Among them, the Mikumo site is naturally the most famous with its remarkable remains, but more recently we have added some important Korean examples to our knowledge, as described in the following paragraphs with some Japanese examples.

Description of Ancient Objects found at Mikumo Village, Ido-gun, in the Province of Chikusen by Tanenobu Aoyagi (1766-1830) of the discovery in the 5th year of Bunsei (1822). Three feet deep under the surface, according to him, two bronze daggers, one of slender form with hilt and the other of the kris type, were found. A set of double urns lying underneath, which contained 2 slender bronze halberds, 35 mirrors, glass disc, pi, I each kudatama and magatama beads, etc. Each urn, he says, was about 2 feet in diameter and 3 feet deep, both being nearly of the same size and having two belts on the body, seemingly for fastening to a rope. Thus, the shape of the urns is quite similar to that of our Okamoto specimens. The remains, however, have been since scattered, as we know only of a dagger and a mirror preserved in Shôfuku-ji Temple in Fukuoka.

This dagger is of slender form furnished with a bronze hilt (Fig. 23, 1).

We have two instances of a hilted dagger, one found at Kashiwazaki (Fig. 23, 2) in Chikuzen, and the other at Nyushitsuri in Korea. Though our Mikumo dagger resembles the Korean specimen and differs from the Kashiwazaki one, all three are evidently of Chinese make, as shown by their form as well as technique. The mirror is the so-called ch'ing-pai mirror with concatenated-arcs pattern. (Fig. 37, 3) Judging from Aoyagi's monograph, the other mirrors which have now disappeared, must be one Double-circled, one Meander patterned, and the remainder all ch'ing-pai, or at least 26 of the concatenated-arcs design.

- 2. Ihara Site. This is quite close to the previous site mentioned also in the same monograph. In the Temmon era (1781-88) an urn-burial was unearthed with some 50 mirrors, all of square-frame pattern with four figures of deities, and the so-called "whorl-shaped" bronze ornaments, armour plates and iron weapons. It is noteworthy to see here the weapons in iron, instead of bronze, and the mirrors in a later style as compared with the Mikumo specimens. The "whorl-shaped" ornaments are discovered chiefly from ancient tumuli in other parts of Japan, though occasionally from eneolithic sites too.
- 3. Itatsuki Site. About 6 sets of funeral urns with 3 bronze halberds and 4 daggers, both of slender form, yielded here in 1916. Near the spot a stone celt and a slate knife were also found.
- 4. Yoshii Site. By the year 1912 many funeral urns and much Yayoi-type pottery were discovered (Fig. 26, 5). According to Dr Nakayama a bronze dagger of slender type and an iron weapon of a peculiar shape were also found.
- 5. Shishibu Site. Two bronze daggers, one kris-shaped and the other of slender type, were discovered in a double-urn in 1928.
- 6. Kuriyama Site. In 1921 and 1923 five sets of double urns and two single jars were unearthed, the latter containing 22 shell-rings and some human bones (Fig. 29, 1). A kris-shaped iron dagger was also discovered at a neighbouring spot.
- 7. Yosu Site. In a cemetery of urn-burial a kris-shaped iron dagger and a bronze mirror, ch'ing-pai style, with concatenated-arcs design (Fig. 37, 2), were uncovered in 1926.
- 8. Futsukaichi Site. This is mentioned in an old manuscript Hoko-no-ki 鉾の記 or "Notes on a Halberd." In 1856 a set of double-urns buried at a high

inclination was dug out. The urns were all red-coloured inside containing a bronze dagger and a mirror in the lower urn. After a sketch in the monograph, the dagger, slender-typed, seems to have had the point in upward position, quite opposite to our find in Coffin No. 1, already mentioned (Fig. 24). We believe, however, this was the result of falling in the urn when the corpse decomposed. The mirror is of the pattern with concatenated-arcs. These relics are now untraceable, but the places near Fushukaichi are rich in urn-burials as, Dr Nakayama has men- tioned.

- 9. Kushihara Site. In 1927 a double urn was unearthed, though the upper half had been already destroyed. Outside the jars at the joint 19 pieces of jasper Kudatama beads were found, which had seemingly fallen out (Fig. 22, 4) The beads are slender, betraying an earlier type of the kind resembling the Okamoto specimens made of horn.¹
- 10. **Tashiro Site.** A number of funeral urns were discovered in 1913, and one of them contained a *kris*-shaped bronze dagger and red-ochre. It is said a pair of iron swords were also brought out. The urns are entirely of the same style as that of the Okamoto site.
- 11. Beiten Site in Korea. About the year 1913, we are informed, a bronze dagger of slender type was found in a kind of clay coffin. The site is in the province of Keiki.
- 12. Bannan-men Site in Korea. Bannan-men of Rashû is situated in the south-western part of the peninsula, in Zenra-nandô province, and was explored by Mr S. Yatsui in 1917. In the mounds, square and round, several big double-urns were unearthed. They were lying horizontally in a row, each bigger outer urn being some 6 feet long and 3 feet in diameter, and covering the smaller inner urn. (Fig. 28, 3) The contents are such as gilt bronze crowns and shoes, gold ear-ornaments, iron swords with ring-shaped pommel, &c., all resembling those of the Japanese or Shiragi tumuli in Korea.

Besides the above-mentioned sites which yielded remains with funeral urns, there are still many places where simply funeral jars or similar objects in bronze were uncovered.²

See Studies on the Remains of Ancient Be d-workers in Idzumo (Report on Archaeological Research, Kyoto Imperial University, Vol. X).

^{2.} See Mr R. Morimoto, List of the Bronze Age Sites in Japan. (Tokyo, 1929)

CHAPTER V. CONCLUDING REMARKS

1. Burial Conditions of Double-urns

The funeral urn, a device for preserving human remains so wide-spread in the world, can be classified into two kinds, *i.e.* single urns and joined or double-urns. We deal here especially with the latter class, double-urns, because of their being, with their particular form, a product of a particular period of civilization in Japan.

The distribution of these double-urns, as we have already mentioned, is thickest in the northern part of Kiushû, particularly in the provinces of Chikuzen and Chikugo (Fig. 25), these sharing more than half of the total number, though some scattered examples are found in other parts of Japan, and in Korea as well.

They are usually buried on high level plains where more often there occur stone implements and Yayoi-type pottery, and are found in groups of a few up to several dozens, as exemplified at Okamoto, Tashiro and elsewhere. Graves in such a cemetery can be assumed to belong to an age, not much different from each other, and when coffins are placed very close together, like Nos. 1 and 2 at Okamoto, it may be considered that some intimate relationship existed between the persons so interred. In another case, however, as shown at Hiratsuka, where two sets of urns were found one above the other, it can be taken that each was buried at a different period, a period so distant at least that all signs or memory of the former burial had already been lost.

What was then the sign of urn-burial on the ground? Unreasonable is it to think there was no sign at all on the surface of the ground. It might have been a wooden pole, a stone or group of stones, as we still see in country graveyards. But these things easily disappear in the course of centuries. The big stone at D spot of Okamoto, as we have seen, may have been most probably a sign of urn-burial underneath, even if not a common mark. A mound or round tumulus would have deen raised occasionally, as suggested at Mine and Itatsuki. But in these cases it would not be the sign of an individual tomb, but of group or family graves. No definite direction of burying urns is evidenced as far as our knowledge goes.

They are buried generally at an inclination of some 30 degrees, and not on a horizontal level. Why was this position preferred? It is very natural for a

jar to be deposited underground vertically, otherwise it will be easily broken. So a single urn of the stone age and of the eneolithic period are usually found deposited in a vertical position. Double-urns, however, intended originally for extended burial, but for a contracted corpse as of the stone age, should have been placed on the level, if possible. But the inclined position of some 30 degrees became more common, as it was the best way of keeping the jar from breaking and at the same time preserving the possible horizontal meaning. In fact our excavation shows that the more or less level urns were most broken, while the inclined ones, were usually in a better state of preservation. Some have proposed the theory that the inclined burial is the most economical way of digging the earth, but such a remark contradicts our experience, as the easiest way is to dig a shallow trench for horizontal interment. The convenient deposing of the corpse in a jar at the graveyard also must have been a consideration in preferring this position.

The size of a set of double urns, usually 6 feet long, itself tells that the burial in extended position was the custom of the people, though we find usually no skeletal remains in the urns. At Hiratsuka, an exceptional case, the cranial bones were found in the upper half and limb bones in the lower half.

2. Origins and Types of Double-urns

Our double-urns measure, the smallest 2 feet and the largest 7 feet, both urns together. It is natural to associate the smallest with a child and the larger with an adult, because we have no evidence at all to prove the existence of the custom of cremation and the use of cinerary-urns in those days in Japan. They are to be classified into two kinds and one variety, as follows:

- (a) Those where the upper and lower urns are similar in shape and size. (Fig. 26, 1)
- (b) Those where the upper urn is much smaller in size taking the shape of a lid. (Fig. 26, 2-4)

[Variety] Those in which the upper urn is omitted. (Fig. 26, 6)
Even in (a) class, as our Okamoto examples show, the upper halves are more often a bit smaller than the lower halves. Urns have generally a pair of raised belts. In (b) class the shape of the lower urns locally differs, as at Jifukudô, where it is the same as in (a) class, at Mine more slender and at Yosii much

smaller and round in form, &c. Though some regard the variety of this class as a primitive single urn, it is really a decadent or simplified type, as at Hirata the lid is replaced by a stone slab, while the lower urn has a fully developed form.

Urns of the first class were intended for burial in extended position. When, however, the inclined position was adopted for the preservation of the urns, the corpse itself had to be crouching in the urn, leaving more or less vacant space in the upper urn. Since this fact was observed by the people, it gradually led them to modify the upper half into something smaller and lid-shaped, resulting at last in the development of the second type. The idea of burial in extended position became eventually less esteemed, and finally ignored. In a word, when a coffin was first made it was conditioned by the burial position, but later, on the contrary, the shape of the coffin conditioned the burial method.

That the single urn is the oldest form of urn-burial is theoretically natural and justified by archaeological evidence. Ancient people utilized an open-mouthed jar in daily use for the coffin of an infant to protect and preserve the remains of their dearest little one. This custom evolved among them until it was used for an adult corpse. But the jars they used daily were too small, and they had to manufacture specially large jars for the purpose. This, on the other hand, must presuppose the development of the ceramic art to a certain degree, though it reciprocally stimulated its progress. The civilization of Yayoi pottery makers was in a stage just suitable for it. It is of course impossible to determine absolutely whether our particular urns were made specially for burials or for daily use, yet we can not help inclining toward the view that they were specially made for burial purposes, for so many big jars would hardly have been used in those days.

Now we come to the important problem, whether the idea of extended burial and the use of double-urns was introduced from a foreign country or indigenously developed in Japan. This method of burial was not usual in the earlier phase of our neolithic age but is seen in China and Korea some time in the first century A. D. But how can we attribute such a rather common method of burial to a particular foreign influence? We know from old Chinese literature that "clay coffins" 瓦棺 or urn-burial existed in the time of Shun 舜, and also that a set of double-urns was dug up in 508 A. D. at the northern foot of Tanyang-shan 丹陽山, which seem very similar to our Kiushû examples in size and

shape, and was commented on by one Ch'ên Yo 沈約 as resembling the burial of the "Eastern Barbarians" 東夷.1 Perhaps he knew the fact that some Eastern tribes practised urn-burial, though we are not surer whether it implies our Kiushû people or not. And we can not deny that the Chinese themselves before his time also used funeral urns. We found, if not exactly the same as our double-urns, very primitive double-urns near Mu-ch'êng-j, Port Arthur in South Manchuria (Fig. 28, 2), at the end of the Chou period or thereabouts in a land where Chinese culture existed. But all these various bits of information are not enough in themselves to confirm the fact that our double-urns were introduced from China, until more contemporary evidence is brought to light; because we know, on the other hand, that more or less similar urn-burials are found in other parts of the world. Anyhow, it is wise at present to leave this problem for future settlement, or at least to treat it as a spontaneous devlopment in our country, although the ceramic art of the Yayoi-type must have been influenced by Chinese or Continental civilization.

Age of Double-urns and Their Significance in the History of Sepulchral Development in Japan

Our remaining problem concerning the double-urns is their age. We have no data to confirm it by the urns themselves, except a vague notion of the sequence suggested by technological as well as *typological* considerations. Fortunately, however, they are associated occasionally, as we have seen, with bronze objects, etc., which mostly consist of Chinese imports, and are dated more or less accurately.

First of all, we have bronze mirrors. Almost all of them, the majority of which came from Suku and Mikumo, are original specimens imported from China. According to the chronology of mirrors established by our archaeologists with much sound evidence in recent years, the oldest ones, Meander-patterned and Star-cloud patterned, can be dated back to the early Han dynasty; Ch'ing-pai and Jih-kuang styled to the period centering about Wang Mang, and the newest mirrors, such as the Phoenix-patterned, to the earlier part of the later Han. So the sites yielding these mirrors, without any later specimens, can be dated

^{1.} Original Chinese texts are referred to in the Japanese columns of this volume, pp 67-8.

to the periods above-mentioned. But the Mikumo site seems a little earlier than the Suku, if we may conjecture from the mirrors found, as there occurred the earlier ones only.

Next come the **bronze daggers and halberds**, etc. It is naturally diffcult to fix the exact dates of these things; but if we may suggest a not too definite chronology we can say that the slender form belongs to the Han dynasties, and the broader type typologically to a little later phase. In Korea, at Kokkyo-men, a bronze halberd of slender form was found with certain Wu-chu 五鉄 coins, minted in 60 A. D. of the former Han (Fig. 23, 3 & 4), and in Japan at Kajikuri-hama in Nagoto, one appeared with a special sort of mirror, having very fine zig-zag lines, which is thought to date back at least to the former Han time. Thus, by means of these bronze weapons the age of the double-urns can be ascribed to a period corresponding to the former Han dynasty.

Though it is only a single instance, the glass disc, pi from Mikumo suggests to us also the age of the urns, by the Han nature of the object. All the above-mentioned evidence leads us to suggest the probable date of the double-urns as belonging to the period 100 B. C. - 100 A. D. i. e. the period centering about Wang Mang.

We are now able to understand without diffculty what significance the double-urns have in our archaeology, especially in the history of sepulchral development in Japan. They of course come after the mat-ceramic phase of the neolithic age, belonging to the Yayoi-type phase of the encolithic period. They are associated occasionally with bronze objects, but at the same time come out in the sites where stone implements recur—though this is not conclusive, as there is no case in which stone implements were found inside the urns. And our encolithic period is dated at other sites, by the finds of Hua-ch'üan 資泉 coins of Wang Mang, to be the 1st century A. D. or thereabouts.

Bronze daggers and halberds, on the other hand, occur associated with another kind of burial, that is to say, stone cist tombs. (Fig. 30) These tombs are distributed more widely than the urn-burial, in Kiushû, Tsushima Island, and Korea towad the west and in Shikoku Island and Chûgoku districts in the east.¹

^{1.} Even in the neolithic period this kind of tomb is seen as exemplified at Uki in Hizen. (Fig. 30, 2)

They seem to have prevailed till sometime later than the urns, as broader-typed bronze weapons often occur within, while in the urn-burial they are confined to slender or older types only. We may say, therefore, that this cist-burial first coexisted with the urn-burial, but the former, being a more convenient method of inhumation, as materials were more widely available, succeeded the former and prevailed until a later time. The Suku site, then, where broader type weapons also were found separately from the burial, must have been occupied in this later period too.

The lower limit of urn-burial is suggested by the fact that no later mirrrors of the Three Kingdoms appear with it, though they crop up abundantly in mound-burials in Japan. The sporadic discoveries of some modified form of urns mean only their survival till a later age. (Fig. 31) They can not be grouped with our Kiushû style of urns, but are somewhat akin to that of the Korean example at Bannan-men.

The development of sepulchres in Japan since then can be said not to be the continuation of urn-burial, but of the evolution of cist-tombs. It evolved gradually into stone sarcophagi, solid or joined blocks, hand in hand with the development of mounds into huge tumuli. Then stone chambers appeared, probably through Continental influence. Urn-burial was in fact an ephemeral phenomenon in a restricted locality and for a limited time. But the art of making Yayoi-type pottery itself, of which our urns are specimens, did not die out at all, as may be seen from the Haji vessels, and finally made itself manifest in another direction of the same funeral rites, namely the Haniwa cylinders and figures for decorating tomb-mounds, these being the oldest plastic works of the Japanese, so primitive and crude they were. The occasional appearance of clay sarcophagi in a later age, derived from the stone coffin, can be regarded as an atavistic revival of the double-urns of an earlier period.

In a word, double-urns were a special kind of burial which originated with the introduction of the Yayoi-type of ceramic art. The localities where this burial was practised are in the western corners of Japan, where Continental civilization freely touched. Chinese bronze weapons and mirrors furnished in the burials eloquently testify to this influence, and it is not necessary to emphasise that this was one of the marks of the Han civilization which spread along the

coasts of the Liao-tung peninsula to southern Korea and western Japan, and of which recent archaeological researches have taught us exceeding much. We must add here, however, that, as the ancient harbour of Hakata (present Fukuoka) and its vicinity have long been in historical ages one of the most important inlets of Continental civilization into this country, so was it also in the prehistoric or eneolithic period a flourishing station for the importation of Chinese culture. A century or two after the age of our urn-burial, these parts of the country were mentioned in the Chinese historical annals, Wei-chih 魏志, with the names of states, such as Ito 伊都, Matsura 末盧, Na 奴 and others, the latter being identified as just south of the locality of Suku. The famous golden seal discovered at an islet Shiga-shima at the end of the 18th century, and considered to be that given by the Emperor Kuang-wu in 59 A. D. to the "King of Na" 委奴國王 is the most brilliant relic of the Sino-Japanese intercourse of those days (Fig. 32). Our Suku district, in fact, was a part of the stage for the important drama of international relations played in succeeding periods.

S. Shimada, K. Hamada.

ESSAY ON THE ANCIENT MIRRORS FOUND AT OKAMOTO, SUKU

Ancient mirrors found at the prehistoric site of Okamoto, Suku, of which Mr S. Shimada has already given an account in the other part of this volume, both of his own excavation finds as well as of former discoveries, can be roughly grouped into two classes. The one consists of three mirrors unearthed in 1917 at B spot, north of the village, and the other of those which came to light with many other remains under a big stone in the village, at our D spot, in 1899. Notwithstanding the importance of mirrors in these groups, numbering nearly thirty in all, they had been long ignored, because of their miserable broken state, until at last in 1917–18 the late K. Tomioka and the late Dr K. Takahashi came upon the stage to investigate them in connection with their studies on the general history of Chinese mirrors as well as bronze weapons. Mr Tomioka was the first scholar to notice that these were of Early Han make, while Dr Takahashi classified eleven of them into seven different kinds on the basis of materials collected by himself.

Since 1918, Dr Nakayama, Professor of the Kiushû Imperial University, on the other hand, having been especially interested by the ancient remains in Northern Kiushû, has followed the fcotsteps of his two predecessors, and having devoted himself for several years to collecting even minute fragments of mirrors scattered in the Okamoto site, has finally succeeded in restoring more than thirty-three mirrors, among them some fine specimens measuring about 31 cm. in diameter, all from his own newly obtained materials. Though his studies were very successful and are quite reliable, we have undertaken a fresh study of the Suku mirrors, after adding certain new fragments obtained by Mr Shimada's field work and favoured also by Dr Nakayama who most kindly placed all of his materials at our disposal. I have also availed myself of other materials which I had a chance to examine while acting as assistant of Mr Tomioka some years ago, among them being

See his "Investigation of the Fragments of Ancient Mirrors Found at Suku in the Province of Chikuzen." (The Kôkogaku-Zasshi, Vol. XVIII. No. 10 to XIX. No. 2, 1928)

some fragments once possesed by the Literature College of Tokyo Imperial University, one nearly complete specimen in the Tokyo Imperial-Household Museum, some broken pieces in our Kyoto Imperial University presented by Mr Konomi in 1917, et caetera.

During my restoration of mirrors from the fragments, I took special pains to compare them, on the one hand, with as many Chinese mirrors in complete state as possible, and, on the other hand, to note their inscriptions, when present, though naturally we have learnt much from Dr Nakayama's results already published. After a rather careful investigation I have at last restored twenty-one (or twenty three) mirrors belonging to eight different pattern-groups, as follows:

- (1) Phoenix-like pattern 蘗鳳鏡
- I. (Pl. XVII. 1)
- (2) Double-circled, four-nippled, leaf-shaped pattern 重圈四乳葉文鏡
 - 2. (Pl. XVIII, XIX)
- (3) Four nippled, leaf-shaped pattern 四乳葉紋鏡 I. (Pl. XX)
- (4) Double-circled ch'ing-pai inscription 重圈精白鏡 2. (Pls. XXI, XXIV)
- (5) Double-circled ch'ing-pai inscription 重圈清白鏡 3. (Pl. XXI, XXIV)
- (6) Concatenated-arcs & ch'ing-pai inscription 內行花紋清白鏡 4 or 5. (Pl. XXV)
- (7) Double-circle jih-kuang inscription 重圈日光鏡 3. (Pl. XXV)
- (8) Star-cloud pattern 星雲鏡 5 or 6. (Pls. XVII, XXVI, XXVII)

Besides the above-mentioned we are able to recognize about 4 of the *ch'ing-pai* style, I with Concatenated-arcs, I with Concatenated-arcs and dragon and I Leaf-shaped pattern among about 40 remaining fragments, (Pls. XXVIII–XXIX), though we can not say this with absolute confidence. Thus we see before us two Double-circled, four nippled, leaf-shaped pattern mirrors, restored from the bosses to the rims, three different sorts of *ch'ing-pai*, etc.¹

Two prominent types which we observe among the restored mirrors, namely the ch'ing-pai 清白 inscribed and the star-cloud or hsiung-yün 星雲 patterns, seem evidently Chinese originals, if we compare their exact inscriptions and fine technique with those found in China or the examples illustrated in the catologues of Chinese bronzes compiled from the Sung dynasty down. The mirror with square frame and T, L, V-like patterns from B spot (Pl. XXX, I) is also to be

^{1.} Details of the process of restorati n are given in the Japanese text.

regarded as of Chinese make, while two small specimens from D spot (Pl. XXX' 2 & 3) are very likely Japanese copies of those days, judging by their inferior and inexact technique, so different from the others.

As we have already mentioned, the late Mr Tomioka was the pioneer in the investigation of the dates of Chinese mirrors, the most important as well as interesting field of study in connection with these objects. He studied these Suku mirrors together with those found at Mikumo in the same province, as the latter possess very similar features with the former. Not only did he differentiate between the various types, but he tried to decipher their inscriptions by constantly comparing with those of other authentic Han relics where we have positive proof of the dates. Besides that, he tried to know their metallurgical compostion, helped by Professor M. Chikashige in their chemical analysis. He finally reached the conclusion that the chief types of mirrors found at Okamoto, our D spot, Suku, must have belonged to Ea ly or Western Han.¹ He also previously proved that those typical mirrors with square frame and T, L, V-like patterns are of the period of Wang Mang,² as evidenced by the dated inscriptions on several specimens. Dr Nakayama also reached similar conclusions from his typological studies of the Han mirrors.³

More than ten years have elasped since these valuable studies were published, and now most scholars accept his proposed dates of mirrors, as supporting evidence of his theories has gradually increased, with the exception of the Phoenix-like pattern mirror, which, it is thought, after a fresh decipherment of its special inscription could be of a little earlier date than he proposed.

Among new evidences furnished on the subject since his death, we may mention first of all the remarkable discoveries in the ancient Lo-lang sites of northern Korea, and also the so-called T'sin 秦 mirrors which have been actually found in China. The former brought to us more than a hundred specimens of mirrors with other important relics from the ancient tombs of Chinese settlements there,

 [&]quot;On the Mirrors found together with Bronze Weapons and Yayoi-type Pottery in the Northern Part
of Kiushû." (The Kôkogaku-Zasshi, Vol. VIII, 1918)

^{2. &}quot;On the Chinese Mirrors of Wang Mang Period and Those with the Dates of the Eastern Han Dynasty." (Ibid. Vol. VIII, No. 6)

^{3. &}quot;On the Historical Study of Chinese Mirrors of the Han Period." (The Kôkogaku-Zasshi, Vol. IX. 1910)

providing us with the data for tracing the continual development of mirror-types during the four hundred years from the latter half of Early Han down to the Wei and Tsin periods, because the Lo-lang colonies flourished only during this limited period of history. From these ample specinens we may say that the principal types of Lo-lang mirrors are square-framed with T, L, V-like patterns and concatenated-arcs patterns with *chang-i-tsu-sun* inscription. But the principal types of our Suku mirrors, as we saw, do not belong to these Lo-lang series, though there is only a single specimen of the square-framed type older than the Korean finds, and on the other hand, the two predominant types in the Suku mirrors are seldom found among the Lo-lang specimens.

So-called T'sin mirrors are quite newly proposed items in Chinese archaeology. Though there are many points awaiting future study, we can now assume that certain archaic styles are to be ascribed at least to the Pre-Han period, for example, mirrors with meander or schematized animal patterns which cover the whole ground, and more advanced styles of the former in a more symmetrical design with added nipples, and also more refined and elaborate designs with dragon-like ornaments or concatenated arcs on similar ground patterns. designs of the so-called T'sin mirrors have somewhat the same character as bronzes of the Pre-Han or "T'sin" styles, and their earlier date is supported by the observation of Mr Kerlbeck of Sweden, who noticed these kinds of mirrors so abundantly in the sites along the Huai 淮 valley in Honan province, referring them to the end of the Ch in dynasty.2 Our Suku mirrors, of course, are later than these so-called T'sin styled specimens, but one can trace some stylistic connection between them, especially those having the star-cloud pattern. One very T'sin styled specimen appeared in the Mikumo find, which site similar in its general aspect with Suku.

In short, our Suku mirrors are generally speaking of Early Han make, but somewhat earlier than the period of the Lo-lang specimens and in certain poinst much nearer the T'sin style than the usual Han mirrors. This dating of mirrors, I believe, may contribute important evidence to confirm the age of the

^{1.} S. Umehara, "On the Ancient Mirrors in Northern Korea." (The Tôyô-Gakuhô, Vol. XIV, No. 2) and "Supplements" of the above-cited article. (Ibid, Vol. XV, No. 2)

^{2.} See "Documents d'art chinois de la collection Osvald Síren." (Ars Asiatica, Vol. VII, 1925)

cemetery at Okamoto from which most valuable materials for the study of mirrors have been made available for archaeological circles.

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