

トガウ式土器とケチ・ベーク式土器、
およびその他のパキスタン先史土器群
— 愛知県陶磁資料館寄託のパキスタン先史土器群 (4) —

Report on the Survey of the Archaeological Materials of Prehistoric Pakistan,
stored in the Aichi Prefectural Ceramic Museum.

Part 4: Togau Ware, Kechi-Beg Ware and Other Wares
of Prehistoric Pottery of Balochistan

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Part 4: Togau Ware, Kechi-Beg Ware and Other Wares of Prehistoric Pottery of Balochistan

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要旨：

本稿は、愛知県陶磁資料館に寄託されている彩文土器に関する調査報告である。前稿 (Kaonasukawa *et al.* 2011; Shudai *et al.* 2009, 2010) で述べたように、総数133点におよぶ彩文土器は、現在のパキスタン・イスラーム共和国の南西部、パロチスターン丘陵部に展開した先史文化の所産であると考えられる。この土器群は、紀元前4千年紀後半から前2千年紀初頭までの長期にわたる時間幅と、それぞれに個性豊かな彩文と製作技法によってパロチスターン先・原史文化の多様性を示し、パロチスターン丘陵部で長期間にわたり展開した地域間交流と土器製作技法の復元に多大な考古学的情報を提供するものである。こうした理由から、筆者らは愛知県陶磁資料館に寄託されているこれらの土器群をいち早く共有・活用できるデータとするために、その資料化を進めてきた。

前回までにナル式土器 (Shudai *et al.* 2009)、クッリ式土器 (Shudai *et al.* 2010)、エミール式土器およびクエッタ土器様式 (Kaonasukawa *et al.* 2011) を報告してきたが、今回報告するのは、ケチ・ベグ式土器やトガウ式土器を含むその他の土器群である。いずれの土器型式も紀元前4千年紀後半頃に位置づけられるパロチスターン先・原史文化における最古級の彩文土器であると考えられている。前者は黒色スリップ上に白色で描く幾何学文様を特徴とし、後者は鳥やコブウシの文様を横一列に連続的に描く彩文手法を特徴とする。ただし、筆者らでは、型式を識別できない一群も含まれており、それらについては個別に土器の特徴を記述するに留めた。資料の増加を待ち、再検討することが妥当であろう。

以下では、愛知県陶磁資料館に寄託されているケチ・ベグ式土器やトガウ式土器と帰属型式不明の土器群について、特に彩文要素とその構成パターン、および製作技法に着目して報告する。

なお、今回の報告で行なうとしていたエミール式土器とクエッタ土器様式の文化的意味合いを含めた、パロチスターン先・原史文化における土器編年についての検討は、次号にて詳細に考えてみることにしたい。

また、愛知県陶磁資料館に寄託される人物や動物を中心とする土偶に関しては、機会を改めて報告する予定である。

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Introduction

As mentioned in the last three reports [Kaonasukawa *et al.* 2011; Shudai *et al.* 2009, 2010], 133 prehistoric painted pottery of Balochistan region in Pakistan have been stored in the Aichi Prefectural Ceramic Museum, Japan. The pottery are private collection own by an individual who lives in Tokyo and entrusted to the museum. Almost all of them are preserved in entirety, not in fragments, and we suppose that they would be unearthed from burials by illegal diggings. The pottery could be classified in the Wares of Togau, Kechi-Beg, Nal, Emir, Kulli and Quetta Style Pottery including Faiz Mohammad Ware, and belong to the duration ranging the later half of the 4th to the beginning of the 2nd millennium B.C. We have not seen these fine and good conditioned prehistoric materials even in Pakistan itself. On the light of its archaeological precious meaning, whatever it is the pottery derived from the illegal digging, we are convinced that these materials will be useful to better understand the cultures of ancient Balochistan and Indus Civilization.

We had firstly surveyed some of the collection in the exhibition hall and others packed in wooden cases made of a paulownia tree like caps for the tea ceremony in the storeroom of the museum on 8th September 2005, and started to draw and take photographs of these materials for making the catalog of the pottery in the working space of the Aichi Prefectural Ceramic Museum in 2007. We report here Togau Ware, Kechi-Beg Ware and pottery of other types.

And we will discuss the typological changes of pottery of prehistoric Balochistan cultures as a summary of our works on the pottery stored in the Aichi Prefectural Ceramic Museum in the final report of following volume.

As far as figurines that can be also belonging to the prehistoric Balochistan cultures stored in this Museum are concerned, we will report them in the other volumes.

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(Research Institute for Humanity and Nature), KIMURA Satoshi (Numazu City Cultural Heritage Research Center), UENO Tsuyoshi (Graduate Student of Tokai University), YONEYAMA Akane (Cyber University) and SHUDAI Fukiko.

1. Togau Ware, Kechi-Beg Ware and pottery of other Wares of prehistoric Balochistan stored in the Aichi Prefectural Ceramic Museum

History of the study on the related pottery presented in this paper was already described previously in this journal vol. 46 and 48 (Shudai *et al.* 2009; Konasukawa *et al.* 2011). We would like to add important researches by W. A. Farirsevis in Quetta and Zhob-Loralai regions, and by de Cardi in Kalat region in 1950s.

Fairservis had firstly explored and excavated major sites of northern Balochistan, Kili Gul Mohammad, Damb Sadaat, Kechi Beg in Quetta region, and Periano Ghundai, Rana Ghundai in Zhob-Loralai region. He had reported many pottery styles from stratified layers of those sites (Fairservis 1956, 1959), and suggested the development of Quetta culture from the aceramic Neolithic to the formation of city on the results of these excavations (Fairservis 1975).

de Cardi also had explored and excavated major sites of central Balochistan, Anjira, Siah Damb and Togau. She indicated developmental process of Togau painted motif on excavated pottery from the stratified layers (de Cardi 1965, 1983).

① figure. 2-① and plate. 1-1, 2 (collection no. 012)

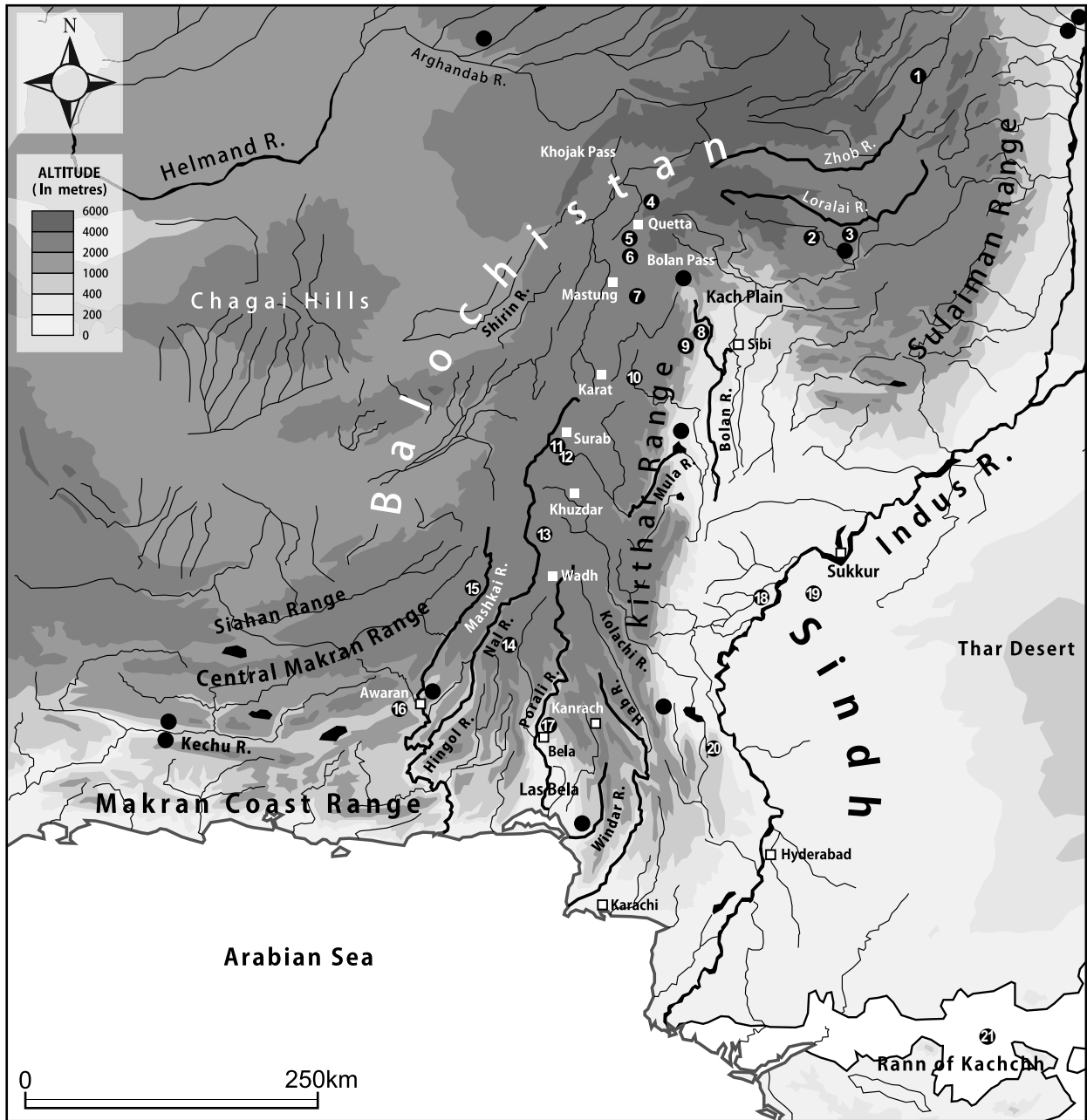
Form: Bowl

Rim Diameter: 24.0cm, **Base Diameter:** 7.2cm, **Height:** 8.8cm, **Thickness:** 1.0 to 0.7 (around rim) cm

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil are observed on the internal surface. The rim is smoothed by fingers on the slow turn-table. The middle part of the internal body is smoothed horizontally by fingers or a spatula on the slow turn-table or non-turning anvil.

We can trace the following manufacturing steps depending on the observations on the external surface.



- | | | |
|----------------------|---------------|----------------|
| 1. Periano Ghundai | 8. Mehrgarh | 15. Mehi |
| 2. Sur Jhangal | 9. Nausharo | 16. Kulli |
| 3. Rana Ghundai | 10. Togau | 17. Niai Bhuti |
| 4. Kili Gul Mohammad | 11. Anjira | 18. Moenjodaro |
| 5. Damb Sadaat | 12. Siah Damb | 19. Kot Dijji |
| 6. Kechi Beg | 13. Nal | 20. Amri |
| 7. Ispelenji | 14. Nindowari | 21. Dholavira |

Figure. 1 Map showing the related Sites

Table. 1 Chronological chart of Related Regions

	Mesopotamia	South Turkmenia	South-East Iran / Makran	Afghanistan	Middle / South Balochistan	Kachi / Quetta	Sindh	Punjab West	Punjab East	Gomal / Bannu	Gujarat / Saurashtra
1800BCE	Ishin-Larsa	BMAC	Shahr-i Sokta IV(0)	Mundigak V	Mehi (BMAC)	Mehrgarh VIII	Amri IID	Harappa 5	Mitathal IIB Banawali III		Rangpur III Rangpur IIC Kammer III
2000BCE	UrIII		Bampur VI		Kulli	Nausharo IV	Mohenjodaro B (late) Chanhudaro Ic Amri IIIC	Harappa 4			Rangpur IIA-IB Lothal B Surkotada IC Kammer IIB Dholavira V-VI
2200BCE	Akkad		Shahr-i Sokta IV(1)			Nausharo III	Mohenjodaro B Chanhudaro Ib Amri IIIB	Harappa 3C	Rakhi Garhi II Bhorrana IIB Banawali II		Lothal A Surkotada IA-IB Kammer IIA Dholavira IV
2350BCE	Early Dynastic IIB	Kelleli Namazga V	Miri Qalat IV		Nindowari Nal IV	Nausharo II	Mohenjodaro A Kot Dijl L1-2 Amri IIIA	Harappa 3B	Mitathal IIA Bhorrana IIA Farmana II Kalibangan II	Ghandi Umar Khan Maru II	Dholavira II-III Kammer I
2500BCE	Early Dynastic IIIA					Nausharo ID	Chanhudaro Ia	Harappa 3A			
2600BCE	Early Dynastic II		Bampur V Rud-i Biyaban Shahr-i Sokta III Miri Qalat IIC	Mundigak IV3		Nausharo IC Mehrgarh VIIIC Damb Sadaat III	Amri ID • IIA • IIB Kot Dijl L4-3 Kot Dijl L7-5	Harappa 2	Mitathal I Farmana I Kalibangan I	Gumla IV Lewan Late Rehman Dherti IIB	Dholavira I Moti Pipli
2700BCE	Early Dynastic I	Namazga IV	Bampur III • IV Shahr-i Sokta II Miri Qalat IIIB	Mundigak IV2	Nal III	Mehrgarh VII		Sarai khola II	Kunal Ic Rakhi Garhi Ib Bhorrana IB Banawali I	Gumla III Lewan Middle Rehman Dherti IIIA	
3000BCE	Jemdet Nasr		Bampur I • II Shahr-i Sokta I Miri Qalat IIIA	Mundigak IV1 Said Qala II Mundigak III	SD III Anjira V SD II iii Anjira IV Nal II	Mehrgarh V Damb Sadaat II Mehrgarh VI	Kot Dijl L16-8	Harappa IB	Kunal Ib Rakhi Garhi Ia		
3300BCE	Late Uruk	Namazga III				Damb Sadaat I	Amri IC Balakot I Roheljo Kund			Rehman Dherti II Gumla II Lewan Early Rehman Dherti IB Rehman Dherti IA	Loteswar
3500BCE	Middle Uruk	Namazga II	Miri Qalat II	Said Qala III Mundigak II	SD II /ii Anjira III Nal I	KGM IV Mehrgarh IV KGM III Mehrgarh III	Amri IB Amri IA	Jalipur II Jalipur I Harappa IA Sarai khola I	Bhorrana IA Kunal Ia Girawad		

*1 SD : Siah Damb

*2 KGM : Kili Ghul Mohammad

*3 This chronological table is a relative chronology, based on investigations of the pottery types excavated from the Indus valley and neighboring regions. Adopting dates are not exact one, they are roughly estimated dates.

pre- Harappan phase

Transitional phase

Formation phase of Harappan culture

Early phase of Harappan culture

Middle phase of Harappan culture

Late phase of Harappan culture

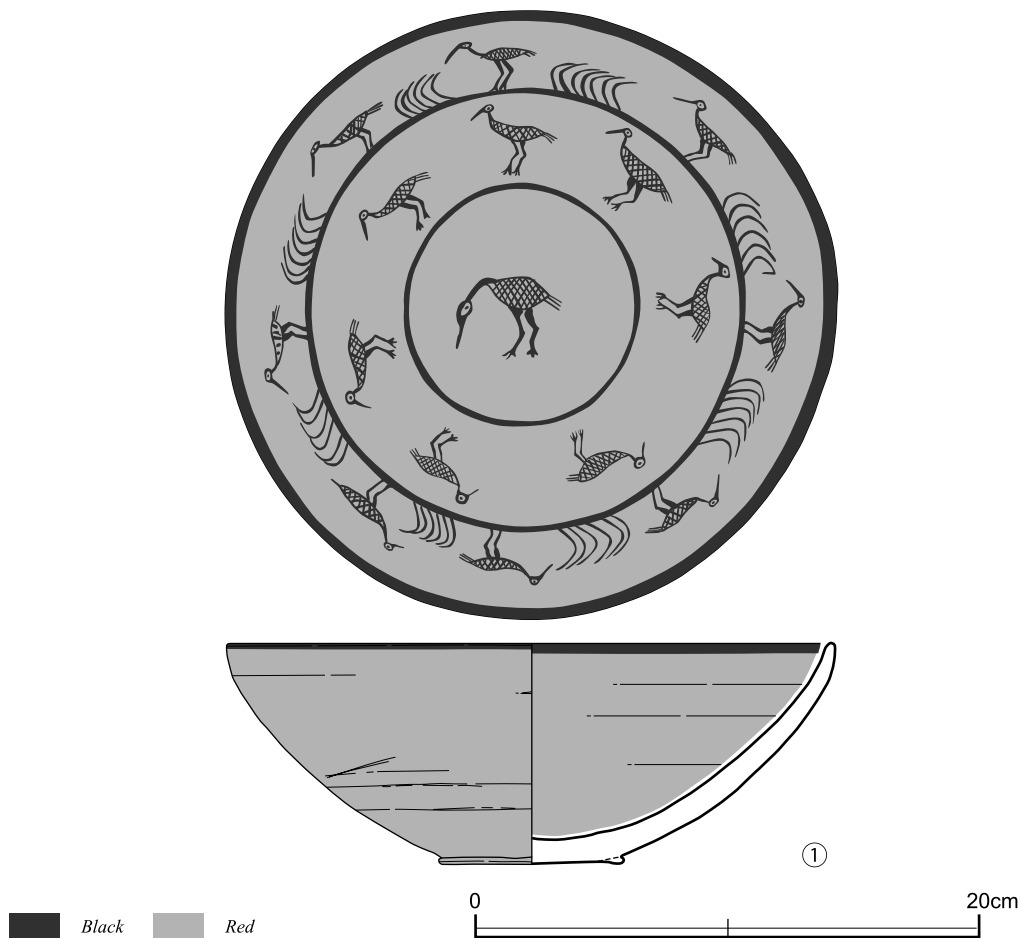


Figure. 2 Togau Ware in the Aichi Prefectural Ceramic Museum

Firstly, the coil building technique on the slow turn-table or non-rotating anvil forms a rough shape of the vessel. Secondly, the smoothing with a spatula or fingers after the scraping with a spatula completes the forming of a vessel. While we can not observe scraping marks on the upper part of the vessel because of the smoothing with a spatula after the scraping, the scraping could be done from bottom to rim. Scraping marks are visible on other part of body, especially on lower part. We can understand on our observations that the direction of the scraping is basically done horizontally, and whatever the wheel was used, a turning speed is slow. A clay cord is attached on the base for making a ring base, and finished by the scraping with a spatula on setting a vessel upside down.

Colours of the body indicate 10R5/8 to 6/8 (surface), 7.5R4/6 (slip) and 10R3/1 to 2/1 (painting) on the both surfaces. A colour of the core is 2.5YR6/8.

The fabric of pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

Red Slip is visible on the both surfaces and base part is also. Black colour band is painted on the rim. Main motifs consist of left-facing birds and C-shaped motifs that are painted in black on the internal surface.

We can understand that this painting motif is similar to that of Togau C-type (de Cardi 1965; Ute Franke 2008, etc.).

② figure. 3-② and plate. 1-3, 4 (collection no. 034)

Form: Deep bowl

Rim Diameter: 22.8cm, **Base Diameter:** 8.5cm, **Height:** 13.7cm, **Thickness:** 1.2 to 0.8cm

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula

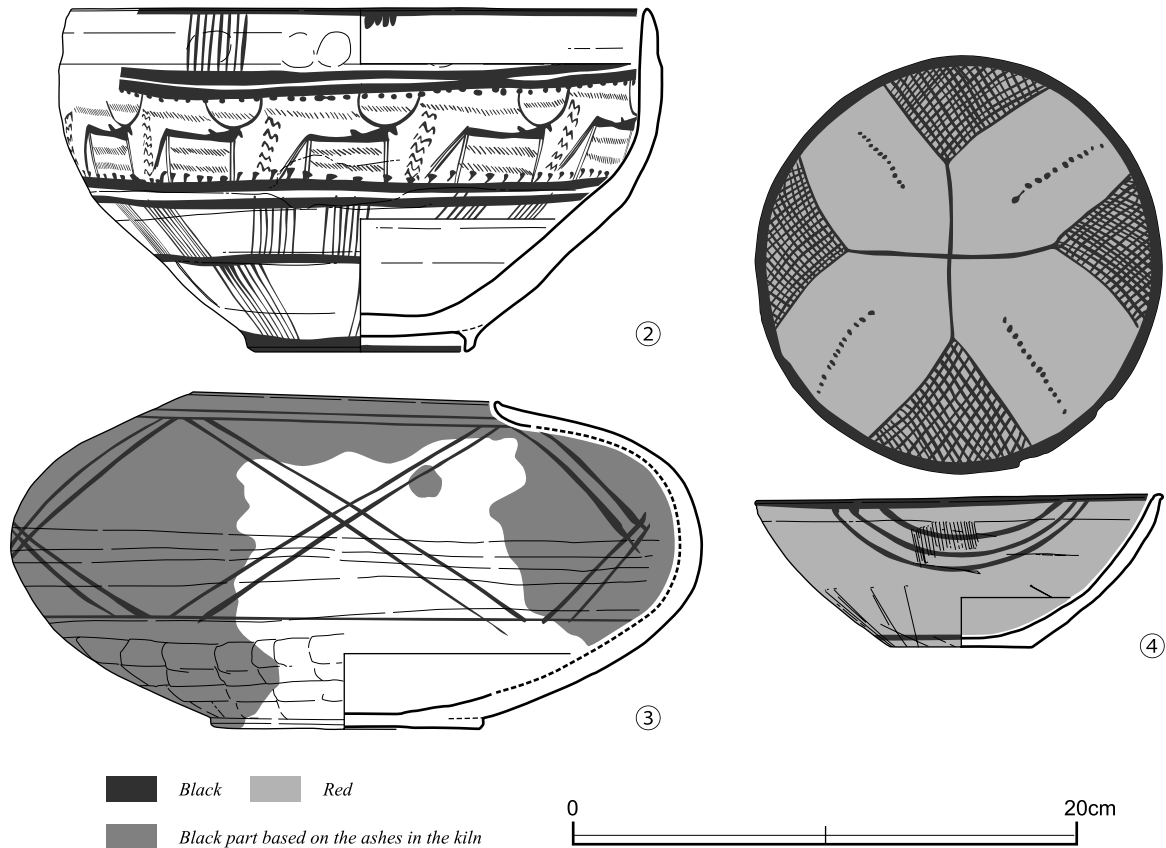


Figure. 3 KGM Ware and Other Wares in the Aichi Prefectural Ceramic Museum

by using the slow turn-table or non-turning anvil are observed on the rim and upper part of the internal surface. The rim is smoothed by fingers on the slow turn-table. The middle part of the internal body is smoothed horizontally by fingers or a spatula on the slow turn-table or non-turning anvil after the shaping by fingers. Finger impressions are clearly visible on this part.

We can trace the following manufacturing steps depending on the observations on the external surface.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. Secondly, pottery is finished by the smoothing with a spatula or fingers after the shaping by fingers and scraping with a spatula on the slow turn-table or non-rotating anvil. We can understand that using a spatula for smoothing of lower part of the body because the marks of it are visible. The continuous fingerprints left around the rim indicate the parts of rim and body were joined together with here. Whatever the wheel was used, a

turning speed is slow on the observations. A clay cord is attached on the base for making a ring base, and finished by the smoothing with a spatula on setting a vessel upside down.

Colours of the body indicate 10YR8/2 to 8/3 (surface), 10YR4/1 (paint) on the internal surface and 2.5Y8/3 to 8/4 and 7.5YR8/4 (surface), 7.5YR3/1 to 3/2 (paint) on the external surface. A colour of the core is 2.5YR7/6.

The fabric of pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

A slip is not seen on the both surfaces. A black colour band is observed on the rim part. Black colour short vertical strokes are also painted on the rim part of the internal surface. Main motifs consist of right-facing humpted bulls and M-shaped motifs, dots and short vertical strokes that are painted in black in a panel consisted of black horizontal bands on the middle part of the external surface.

We can understand that this painting motif is similar to one of potteries discovered from the site of

Rana Ghundai (Fairservis 1959; Ross 1946, etc.).

③ *figure. 3-③ and plates. 1-5 to 8, 2-1, 2 (collection no. 052)*

Form: Non-necked pot

Rim Diameter: 12.0cm, *Base Diameter:* 10.5cm, *Height:* 13.4cm, *Thickness:* 0.5 (around rim)cm, thickness of other part can not be scaled because this pottery is complete one.

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil are observed on the rim and upper part of the internal surface. The rim is smoothed by fingers on the slow turn-table.

We can trace the following manufacturing steps depending on the observations on the external surface.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. Secondly, the upper part of the vessel is finished by the smoothing with a spatula or fingers after the scraping with a spatula on the slow turn-table or non-rotating anvil. And it could be said that the external surface, excluding the rim, is not smoothed after the scraping because the marks of it are clearly seen. According to our observations, the direction of the scraping is done from left to right horizontally.

Whatever the wheel was used, a turning speed is slow on the observations of the scraping and smoothing marks. A clay cord is attached on the base for making a ring base, and finished by scraping and smoothing with a spatula on setting a vessel upside down.

Colours of the body indicate 5YR6/8 to 10R5/8 and 5YR3/1 (surface), 5YR3/1 (paint) on the external surface, but the external surface can not be observed because of mud. A colour of the core is 2.5YR6/8.

The fabric of this pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

A slip is not seen on the both surfaces. A black colour cross-like motifs and horizontal bands are observed on the external surface. And black colour part of surface is originated in the ashes on vessel in the pottery kiln.

④ *figure. 3-④ and plate. 2-3 to 5 (collection no. 076)*

Form: Shallow bowl

Rim Diameter: 16.0cm, *Base Diameter:* 5.6cm, *Height:* 5.1cm, *Thickness:* 0.5 to 0.4cm

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil are observed on the rim and upper part of internal surface. The rim is smoothed by fingers on the slow turn-table.

We can trace the following manufacturing steps depending on the observations on the external surface.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. Secondly, vessel is finished by the smoothing with a spatula or fingers after the scraping with a spatula on the slow turn-table or non-rotating anvil. And it could be said that the external surface, excluding the rim part, is not smoothed sufficiently after the scraping because the marks of it are seen. The marks of the smoothing by a spatula are also visible on the lower part of the body. According to our observation, the direction of the smoothing is done from left to right horizontally.

Whatever the wheel was used, turning speed is slow on the observation of the scraping and the smoothing marks. A flat base is formed by the scraping, and finished by the scraping and the smoothing with a spatula on setting a vessel upside down.

Colours of the body indicate 10R5/8 to 4/8 (slip), 5YR3/1 to 2/1 (paint) on the internal surface, 10YR8/2 to 8/3 (surface), 10R5/8 to 4/8 and 2.5YR6/6 to 6/8 (slip), 5YR3/1 to 2/1 (paint) on the external surface. A colour of the core can not be observed.

Fabric of this pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

Reddish slip is seen on the both surfaces. Black colour festoon-like motifs are painted on the external surface and the combination of black colour cross-like motif, dots and hatched-triangle motifs are painted on the internal surface.

Some potteries that are similar to this pottery are reported from the site of Kili Ghul Mohammad (Fairservis 1956, 1975, etc). They are called as KGM Ware.

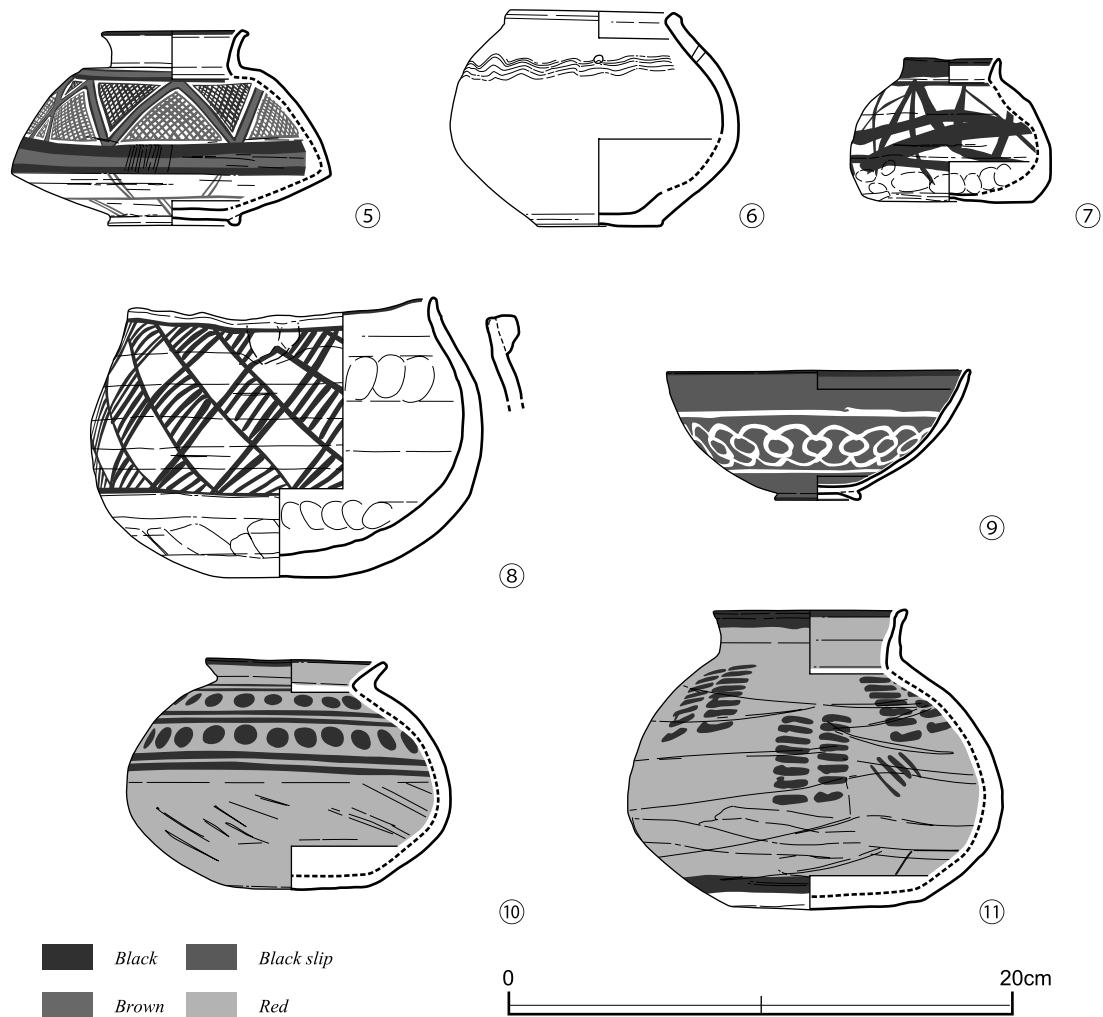


Figure. 4 Other Wares in the Aichi Prefectural Ceramic Museum

⑤ figure. 4-⑤ and plate. 2-6 to 8 (collection no. 082)

Form: Carinated small jar

Rim Diameter: 5.5cm, **Base Diameter:** 3.0cm, **Height:** 7.3cm, **Thickness:** 0.5 (around rim)cm, thickness of other part can not be scaled because this pottery is complete one.

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil are observed on the rim and upper part of the internal surface. The rim is smoothed by fingers on the slow turn-table.

We can trace the following manufacturing steps depending on the observations on the external surface.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or

non-rotating anvil. The carination of the lower part of the body indicates clay-coils were joined there. Secondly, vessel is finished by smoothing with a spatula or fingers after the scraping with a spatula on the slow turn-table or non-rotating anvil. And it is possible that the external surface, excluding the rim and upper part, is not smoothed sufficiently after the scraping because the marks of it are seen. The smoothing of upper part of the body is better than the lower part.

Whatever the wheel was used, turning speed is slow on the observation of the scraping and smoothing marks. A clay cord is attached on the base for making a ring base, and finishing by the scraping and smoothing with a spatula on setting a vessel upside down.

Colours of the body indicate 5YR6/8 (surface), 2.5Y8/2 to 8/3 (slip), 10R3/4 (paint) on the internal

surface, 5YR6/8 (surface), 2.5Y8/2 to 8/3 (slip), 7.5R4/6 to 4/8 to 3/6 and 2.5YR3/2 (paint) on the external surface. A colour of the core is 5YR6/8.

The fabric of this pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

A whitish slip is seen on the both surfaces. Main motifs consist of hatched triangles and horizontal bands. And radiated motif consisted of two short strokes are expressed on the lower part of the body.

⑥ figure. 4-⑥ and plate. 3-1, 2 (collection no. 095)

Form: Perforated small Pot

Rim Diameter: 6.5cm, ***Base Diameter:*** 5.0cm, ***Height:*** 8.6cm, ***Thickness:*** 0.6 (around rim)cm, thickness of other part can not be scaled because this pottery is complete one.

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil are observed on the rim and upper part of internal surface. The rim is smoothed by fingers on the slow turn-table.

Although the external surface is covered by mud, we can understand the following manufacturing steps depending on the observations of this pottery.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. Secondly, the vessel is finished by smoothing with a spatula or fingers after the scraping with a spatula on the slow turn-table or non-rotating anvil.

Whatever the wheel was used, turning speed is slow on the observation of the scraping and smoothing marks. A clay cord is attached on the base for making a flat base, and finishing by smoothing with a spatula on setting a vessel upside down.

Colours of the body indicate 10YR7/3 to 7/4 (surface) on the both surfaces. Colour of the core can not be observed because this pottery is complete one. Fabric of this pottery is fine and firing condition is well.

Slip Paste and Decorations:

Although the surface of this vessel indicates buff or white colour, we could not distinguish this mud paste was slip or not. A wavy line, 5 to 6 strokes as

one set, and four perforations in equal interval are observed on the upper part of the body.

⑦ figure. 4-⑦ and plate. 3-3 (collection no. 096)

Form: Small pot

Rim Diameter: 3.8cm, ***Base Diameter:*** 6.1cm, ***Height:*** 5.6cm, ***Thickness:*** 0.5 (around rim)cm, thickness of other part can not be scaled because this pottery is complete one.

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil are observed on the rim and upper part of the internal surface. The rim is smoothed by fingers on the slow turn-table. Finger impressions for forming the vessel before the smoothing are also observed.

We can understand the following manufacturing steps depending on the observations of this pottery.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. Secondly, the vessel, excluding the lower part, is finished by the smoothing with a spatula or fingers after the scraping with a spatula on the slow turn-table or non-rotating anvil. Finger impressions for forming the vessel are seen on the lower part.

Whatever the wheel was used, turning speed is slow on the observation of the scraping and smoothing marks. A base is formed by the scraping and smoothing with a spatula on setting a vessel upside down.

Colours of the body indicate 2.5Y8/2 to 8/3 (slip), 2.5YR4/1 to 3/1 (paint) on the internal surface and 2.5YR6/8 (surface), 2.5Y8/2 to 8/3 (slip), 2.5YR4/1 to 3/1 (paint) on the external surface. The colour of the core is 2.5YR6/8.

The fabric of this pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

Whitish slip is seen on the both surfaces. Main motif consists of combination of black colour strokes and bands that are painted on the slip.

⑧ figure. 4-⑧ and plate. 3-4, 5 (collection no. 097)

Form: Bowl with a projection

Rim Diameter: 12.0cm, ***Base Diameter:*** 4.7cm, ***Height:*** 11.1cm, ***Thickness:*** 1.2 (lower portion of body) to

0.5cm (around rim)cm.

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil after the forming by finger impressing are observed on the internal surface. Finger impressions for forming the vessel before the smoothing are seen by the insufficient smoothing.

We can understand the following manufacturing steps depending on the observations of this pottery.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. Secondly, a rim part of this vessel is finished by the smoothing with a spatula or fingers after forming by fingers on the slow turn-table or non-rotating anvil, and then body is scraped horizontally with a spatula. Scraping marks are seen because the smoothing after the scraping is not sufficient. Finally, a small clay lump was attached to the rim for making a projection.

Whatever the wheel was used, turning speed is slow on the observation of scraping and smoothing marks. A base is formed by the scraping and smoothing with a spatula on setting a vessel upside down.

Colours of the body indicate 10R6/8 (surface), 5YR3/2 to 4/2 (paint) on the internal surface and 10R6/8 and 5YR6/8 to 5/8 (surface), 10YR8/2 to 8/4 (slip), 5YR3/2 to 4/2 (paint) on the external surface. The colour of the core can not be observed because this vessel is complete one.

The fabric of this pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

A whitish slip is observed on the external surfaces. Main motif consists of the combination of black lines and horizontal bands that are painted on the slip. Black lines form hatched lozenge and triangle motifs.

⑨ figure. 4-⑨ and plate. 3-6 to 8 (collection no. 105)

Form: Small bowl

Rim Diameter: 12.0cm, **Base Diameter:** 3.4cm, **Height:** 5.1cm, **Thickness:** 0.4 to 0.25cm

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula

by using the slow turn-table or non-turning anvil are observed on the internal surface. The rim is smoothed by fingers on the slow turn-table.

We can trace the following manufacturing steps depending on the observations on the external surface.

Firstly, rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. Secondly, a vessel is finished by the smoothing with a spatula or fingers after the scraping with a spatula on the slow turn-table or non-rotating anvil. But marks of the smoothing is not seen because surface of vessel is covered by mud. A clay cord is attached on the base for making a ring base, and finishing by the smoothing with a spatula on setting a vessel upside down.

Colours of the body indicate 10R4/8 (surface), 7.5YR3/1 (paint) on the internal surface, 10YR8/4 and 10YR3/1 (slip), 2.5Y8/2 (paint) on the external surface. The Colour of the core is 10R6/8.

The fabric of this pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

A black slip is seen on the both surfaces. A black colour band is painted on the rim part. Main motifs consisted of white colour bands and a combination of circles are painted on the black slip of external surface. And it is possible that a vessel was covered by a whitish slip under a black one.

Some pottery that are similar to this vessel are reported from the sites of Balochistan region such as Mehrgarh (Jarrige, *et al.* 1995, etc). They are called as Kechi Beg Ware which are belong to the period IV of Mehrgarh, later part of the 4th millennium BC.

⑩ figure. 4-⑩ and plate. 4-1, 2 (temporary no. 014)

Form: Short-necked globular pot

Rim Diameter: 7.0cm, **Base Diameter:** 5.6cm, **Height:** 9.1cm, **Thickness:** 0.8 (around rim)cm, thickness of other part can not be scaled because this pottery is complete one.

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil are seen on the internal surface. The rim is smoothed by fingers on the slow turn-table.

We can understand the following manufacturing

steps depending on the observations of this pottery.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. Secondly, the vessel, excluding lower part, is finished by the smoothing with a spatula or fingers after the scraping with a spatula on the slow turn-table or non-rotating anvil. Marks of the scraping in oblique direction are observed on the lower part of the vessel because the smoothing after the scraping is not sufficient.

Whatever the wheel was used, turning speed is slow on the observation of the scraping and smoothing marks. The scraping and smoothing with a spatula in uncertain direction on setting a vessel upside down form a base.

Colours of the body indicate 7.5R3/4 (slip), 7.5R2/1 (paint) on the internal surface and 5YR6/6 (surface), 7.5R3/4 (slip), 7.5R2/1 (paint) on the external surface. The colour of the core is 5YR6/8. The colour of the internal surface is not clear in mud covering.

The fabric of this pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

Dark reddish slip is seen on the external surface and internal neck, excluding around the base of external surface. Main motifs consist of black colour dots and horizontally bands on the external surface. And a black colour band is seen on the rim.

① figure. 4-① and plate. 4-3 to 5 (temporary no. 015)

Form: Globular pot

Rim Diameter: 7.6cm, ***Base Diameter:*** 7.6cm, ***Height:*** 11.9cm, ***Thickness:*** 0.6 to 0.25cm, thickness of almost all part can not be scaled because this pottery is complete one.

Surface Finishing, Colour of the Body and Other Features:

Marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil are observed on the internal surface. The rim is smoothed by fingers on the slow turn-table.

We can understand the following manufacturing steps depending on the observations of this pottery.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. Secondly, a vessel is finished by smoothing with a spatula or fingers in uncertain direction after the scraping with a spatula on the slow

turn-table or non-rotating anvil. Marks of the scraping by a spatula in uncertain direction are observed on the lower part of vessel because the smoothing after the scraping is insufficient. And the middle to upper part of the body is polished in uncertain direction over the painting slip.

Whatever the wheel was used, turning speed is slow on the observation of the scraping and smoothing marks. A base is formed by the scraping and smoothing with a spatula in uncertain direction on setting a vessel upside down.

Colours of the body indicate 7.5R4/8 to 3/6 (slip), 7.5R2/1 (paint) on the internal surface and 5YR7/6 (surface), 7.5R4/8 to 3/6 (slip), 7.5R2/1 (paint) on the external surface. The colour of the core is 5YR7/6. And the colour of the internal surface is not clear because of mud covering.

The fabric of this pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

Dark reddish slip is seen on the both surfaces, excluding the upper to lower part of the internal surface and the base of the external surface. Main motifs consist of black colour dot-like motifs and horizontal bands on the external surface. A black colour band is painted on the rim.

② figure. 5-② and plate. 4-6 to 8 (temporary no. 016)

Form: Short-necked globular Pot

Rim Diameter: 12.7cm, ***Base Diameter:*** 13.7cm, ***Height:*** 32.4cm, ***Thickness:*** 0.8 (around rim)cm, thickness of almost all part can not be scaled because this pottery is complete one.

Surface Finishing, Colour of the Body and Other Features:

Although marks are unclear, marks of rotating smooth with fingers or a spatula by using the slow turn-table or non-turning anvil are observed on the internal surface. The rim is smoothed by fingers on the slow turn-table.

We can understand the following manufacturing steps depending on the observations of this pottery.

Firstly, a rough shape of the vessel is formed by the coil building technique on the slow turn-table or non-rotating anvil. One of the joining points of clay coils is observed on the ridge between the rim and the body. Secondly, vessel is finished by smoothing with a spatula or fingers after the scraping with a

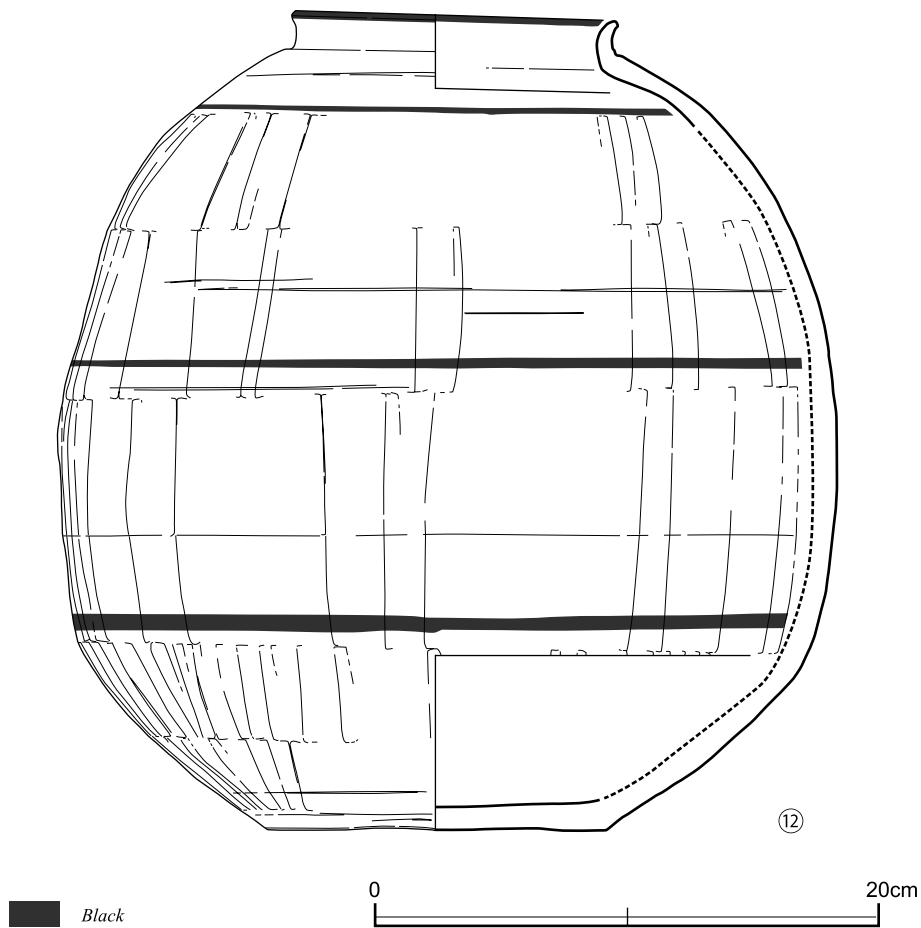


Figure. 5 Unidentified Pottery Type in the Aichi Prefectural Ceramic Museum

spatula on the slow turn-table or non-rotating anvil. Marks of the scraping by a spatula in horizontal direction are clearly seen on the external surface of vessel, especially on the lower part, because the smoothing after the scraping is insufficient. According to our observations of the surface and form of this vessel, it is possible that the lower part of body, including the base, was formed by a mold.

Whatever the wheel was used, turning speed is slow on our observations of the scraping and smoothing marks. A base is formed by the scraping and smoothing with a spatula in uncertain direction on setting a vessel upside down. Marks of scraping are seen.

Colours of the body indicate 10YR8/2 to 8/3 to 8/4 (slip of rim part), 10YR3/1 (paint) on the internal surface and 5YR6/8 (surface or slip), 10YR3/1 (paint) on the external surface. The colour of the core is 2.5YR7/8. And the colour of the internal surface,

excluding rim part, is not clear because of mud covering.

The fabric of this pottery is fine and firing condition is well.

Slip Paste and Painting Motif:

A whitish or buff slip is seen on the both surfaces, excluding the body part of the internal surface. Main motifs consist of only black colour horizontal bands on the external surface. And black colour band is painted on the rim.

2. Some Remarks

We reported here Togau Ware, Kechi-Beg Ware and other types of prehistoric Balochistan pottery. The following is a short summary on these vessels. ① has painted motives of Togau C-type in black over the red slip. Red slip was used on the KGM black on red ware of Quetta region, which ware belong to KGM III ~ IV period (Fairservis 1956). It is possible

that ④ is also belonging to same period. The pottery type of ② is similar to Periano painted ware, and has same painted motives and form with a bowl unearthed from Rana Ghundai (Ross 1946) which is parallel to Damb Sadaat I period in Quetta region.

Although pottery style of ③ and ⑤ are belonging to Nal Ware which are already reported in the previous volume, they could be classified in new ware type. And the whitish slip employed on ⑤ was used frequently in Kalat region, central Balochistan (de Cardi 1965). Whitish slip is also used vessels of ⑥ to ⑧ and ⑫. It is possible that these vessels of ③, ⑤ to ⑧ are belonging to Balochistan Culture of Kalat region which had intimate cultural relations with Nal Culture. Pottery of ⑨, Kechi Beg Ware flourished in KGM III ~ Damb Sadaat I which is parallel to Mehrgarh IV. Kechi Beg style pottery, especially polychrome painted pottery, appeared from northern to central Balochistan through wide cultural interaction that had developed at that time. So, we suppose that vessels of ③ and ⑤ to ⑨ are made with cultural interactions in Balochistan.

Vessels of ⑩ and ⑪ are painted some motives on body and a band on rim by black over the dark red slip. It is uncertain that vessels of ⑩ and ⑪ are the type of KGM black on red, they have same characters to ④.

Our research on the pottery stored in the Aichi Prefectural Ceramic Museum is almost carried out. We have to discuss, however, the importance and meanings of the pottery stored in the Aichi Prefectural Ceramic Museum for the comprehension of the typological changes of pottery in cultural interactions in prehistoric Balochistan culture. We will present our view on the prehistoric Balochistan pottery and culture as a final summary in the next volume.

KONASUKAWA Ayumu and SHUDAI Hideaki write the main body of this paper. KONASUKAWA Ayumu, ENDŌ Hitoshi and KIMURA Satoshi had done drawing of pottery. SHUDAI Hideaki and ENDŌ Hitoshi had taken photographs of pottery.

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References

- de Cardi, B. 1965 "Excavation and Reconnaissance on Kalat, West Pakistan". *Pakistan Archaeology* 2: 86-182.
- de Cardi, B. 1983 *Archaeological Survey in Baluchistan, 1948 and 1957*. London: Institute of Archaeology, Occasional Publication No. 8.
- Fairservis, W.A. 1956 "Excavation in the Quetta Valley, West Pakistan". *Anthropological Papers of American Museum of Natural History* 45(2): 162-402.
- Fairservis, W.A. 1959 "Archaeological Survey in the Zhob and Loralai Districts, West Pakistan". *Anthropological Papers of the American Museum of Natural history* 47(2): 277-448.
- Fairservis, W.A. 1975 *The Roots of Ancient India*. New York: Macmillan.
- Franke, U. 2008 "Baluchistan and the Borderlands". in Pearsall, D.M. (ed.) *Encyclopedia of Archaeology*, Vol. 1: 651-670. New York: Academic Press.
- Jarrige, C., J.-F. Jarrige, R.H. Meadow and G. Quivron 1995 *Mehrgarh Field Reports 1974-1985. From Neolithic Times to the Indus Civilization*. The Department of Culture and Tourism, Government of Sindh, Pakistan in Collaboration with the French Ministry of Foreign Affairs.
- Konasukawa *et al.* 2011 "Report on the Survey of the Archaeological Materials of Prehistoric Pakistan, stored in

Report on the Survey of the Archaeological Materials of Prehistoric Pakistan, stored in the Aichi Prefectural Ceramic Museum.

the Aichi Prefectural Ceramic Museum. Part 3: Emir Ware and Quetta Style Pottery". *The Bulletin of Tsurumi Univ.* 48(4): 73-110. Tsurumi Univ. Yokohama. Japan.

Ross, B.E.J. 1946 " A Chalcolithic Site in Northern Baluchistan". *Journal of Near Eastern Studies* V: 248-315. Chicago: The University of Chicago Press.

Shudai *et al.* 2009 " Report on the Survey of the Archaeological Materials of Prehistoric Pakistan, stored in the Aichi Prefectural Ceramic Museum. Part 1: Painted Pottery of Nal Ware". *The Bulletin of Tsurumi Univ.* 46(4): 75-108. Tsurumi Univ. Yokohama. Japan.

Shudai *et al.* 2010 " Report on the Survey of the Archaeological Materials of Prehistoric Pakistan, stored in the Aichi Prefectural Ceramic Museum. Part 2: Kulli". *The Bulletin of Tsurumi Univ.* 47(4): 53-115. Tsurumi Univ. Yokohama. Japan.

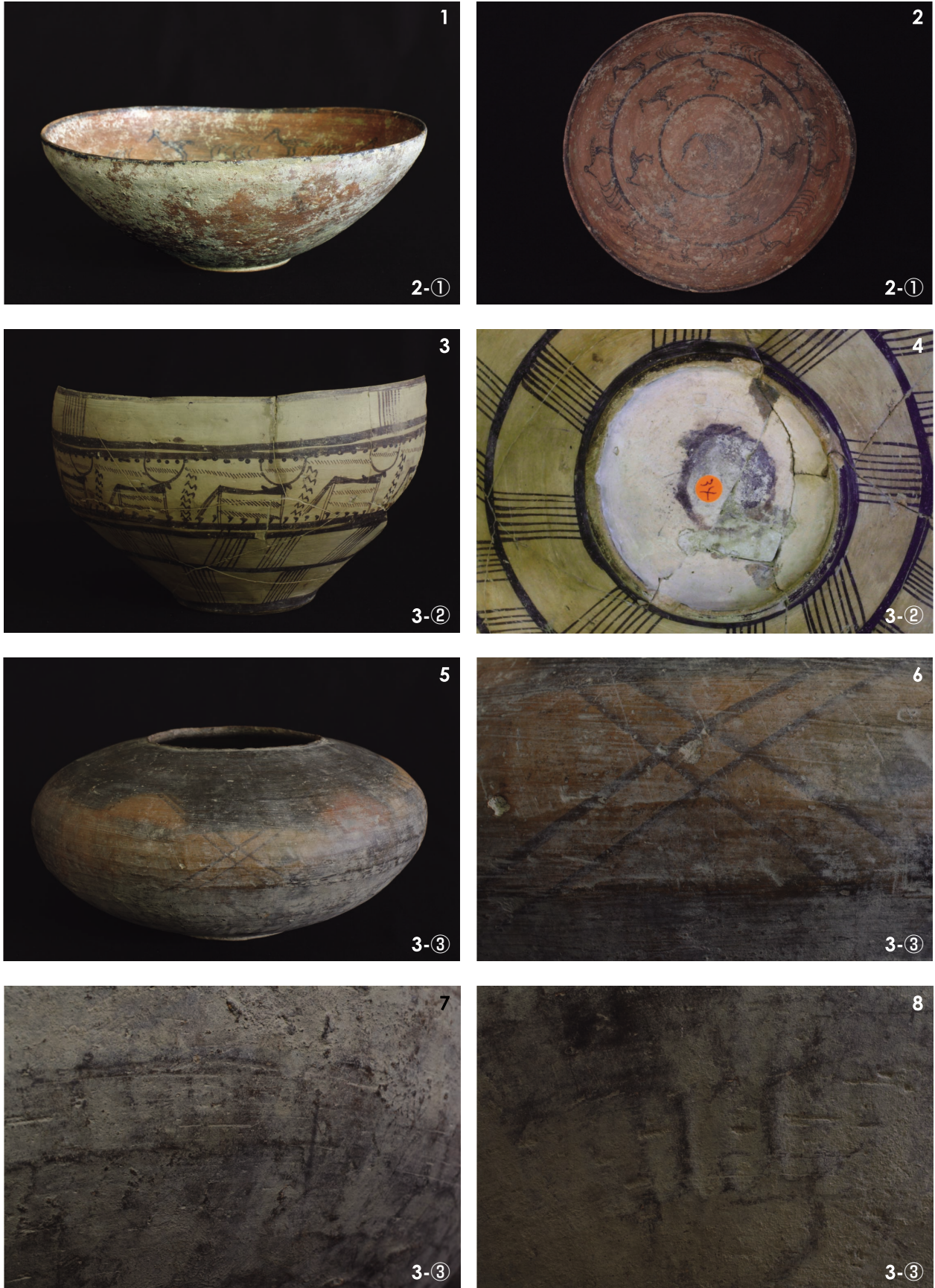


Plate. 1 Prehistoric Pottery in the Aichi Prefectural Ceramic Museum (1)
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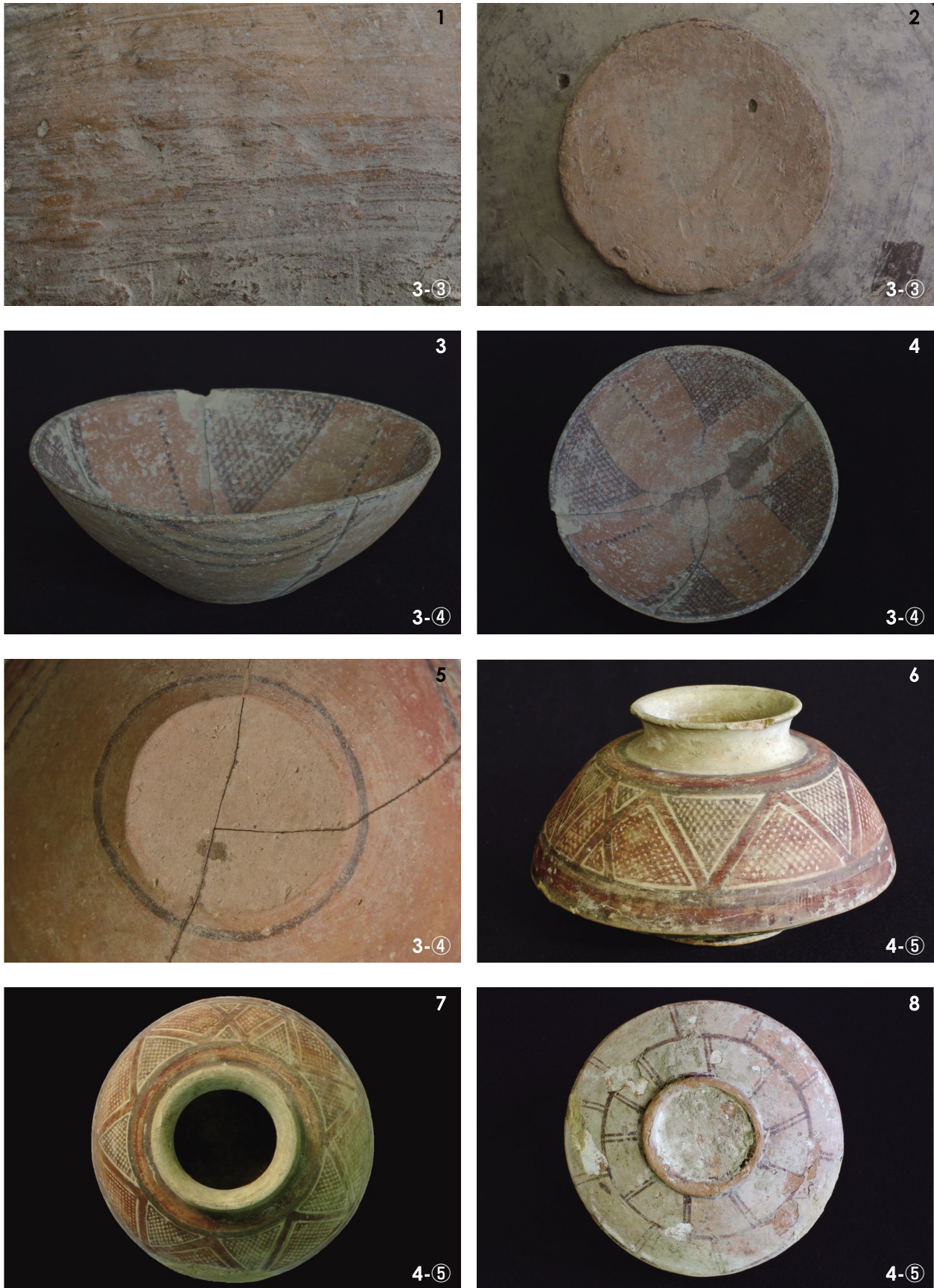


Plate. 2 Prehistoric Pottery in the Aichi Prefectural Ceramic Museum (2)
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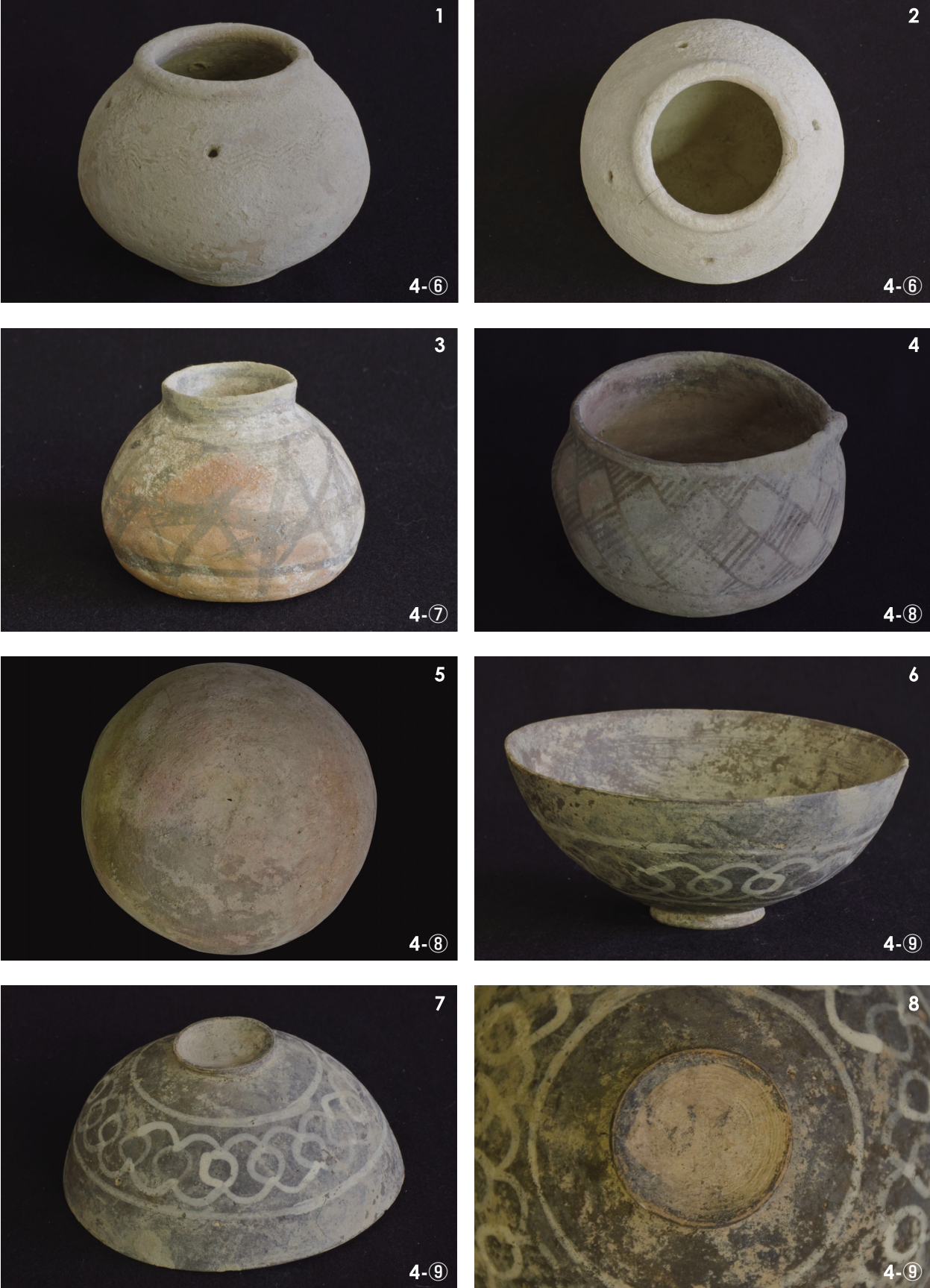


Plate. 3 Prehistoric Pottery in the Aichi Prefectural Ceramic Museum (3)
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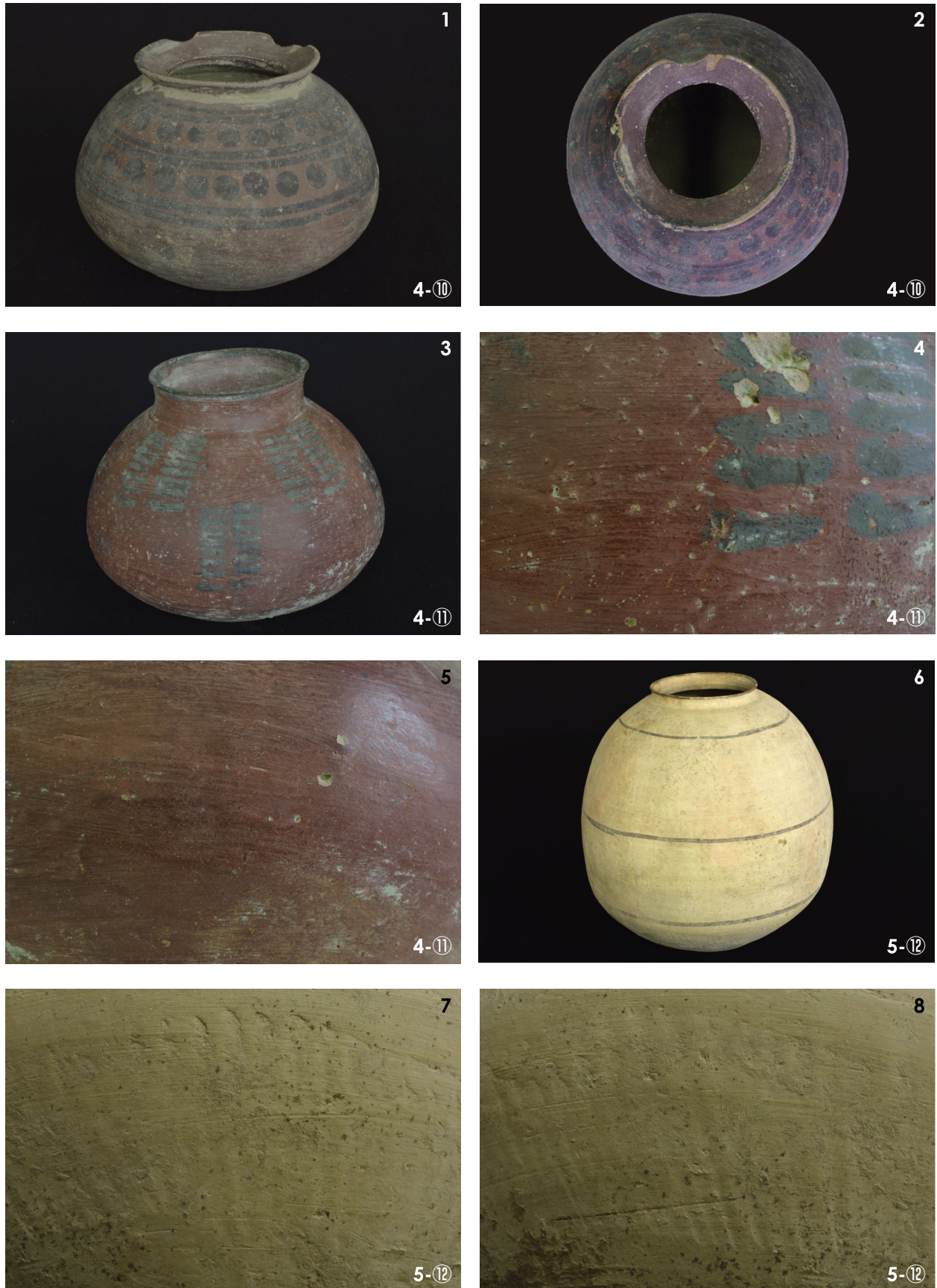


Plate. 4 Prehistoric Pottery in the Aichi Prefectural Ceramic Museum (4)
(number in lower right indicate the figure number)