# Journal of Neolithic Archaeology

4 May 2020 doi 10.12766/jna.2020.1

# Kutahi: A Pottery Neolithic Culture on the Shiraz Plain, Fars, Iran

Majid Mansouri

### Abstract

The British Council in Shiraz was established in 1960 and Paul Bevan Gotch was appointed as its regional director until 1966. During this time, he regularly met, hosted and corresponded with archaeologists working in the Fars region. These relationships as well as the reports of the archaeological fieldworks conducted on the Fars, especially in the Kor River Basin, inspired Gotch to do some regional surveys on the Persepolis and Shiraz plains. He identified a total of six prehistoric sites on the Shiraz plain, of which the site of Kutahi was one of the most important. As Gotch mentioned this site as being ploughed and regularly bulldozed during his surveys, it is likely that it was later levelled and subsequently vanished forever due to the growth of the city of Shiraz. However, Gotch collected some sherds during his 1966 survey and also during a repeated visit in 1972. The location of the 1966 survey collection is unclear, but the 1972 collection is kept at the Narenjestan museum in Shiraz. Gotch's notes on the Narenjestan collection show that he has separated some diagnostic sherds for reference as he was aware of the ensuing destruction of the site. This collection kept in a small box was reviewed by the author in 2016. Closer scrutiny shows that Kutahi was a local Pottery Neolithic culture dating to the first half of the sixth millennium BC.

#### Introduction

The first prehistoric site excavated in Fars was the site Bakun A on the Persepolis plain (Herzfeld 1928). Further excavations on this site followed in 1932 and 1939 (Langsdorff/McCown 1942). The first extensive survey in Fars that led to the identification of prehistoric sites was conducted by Sir Aurel Stein from November 1933 to May 1934 (Stein 1935; 1936). Stein's survey was mainly focused on the eastern part of Fars and only included small sections of its south and north. Moreover, Erich Schmidt mapped the Persepolis plain by aerial photography in 1937, but he never had a chance to complement it by ground surveys (Schmidt 1939, 138–139). With the beginning of World War II, archaeological fieldwork in Fars ceased for 15 years. After the war, Louis Vanden Beghe carried out three seasons of surveying in the Kor River Basin (hereafter KRB) in 1951, 1952 and 1954, which recorded a total of 131 sites, including 60 termed "prehistoric". These surveys were followed by excavations at 25 prehistoric sites (Vanden Berghe 1952; 1954). Moreover, some Pottery Neolithic sites in the KRB were excavated by Japanese teams from 1956 to 1965 (Fukai et al. 1973; Egami 1967; Egami/Masuda 1962).

These investigations inspired a detailed survey of the Marv-Dasht and Shiraz plains carried out in 1966 and 1968 by the British Council director in Shiraz, Paul Bevan Gotch (Simpson 2013). Gotch recorded a total of 231 sites on the Shiraz and Marv-Dast plains, but his survey Article history:

Received 26 August 2018 Reviewed 30 December 2018 Published 4 May 2020

**Keywords:** Kutahi, Pottery Neolithic, Fars, Shiraz, Museum collection

**Cite as:** *Majid Mansouri: Kutahi: A Pottery Neolithic Culture on the Shiraz Plain, Fars, Iran JNA 22, 2020, 1–14 [doi 10.12766/jna.2020.1]* 

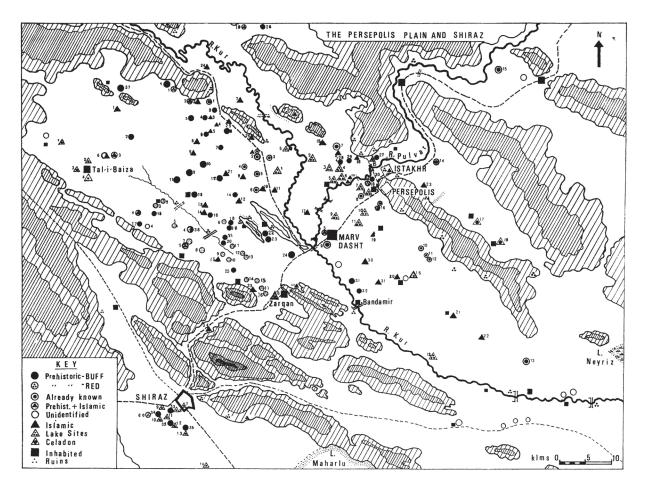
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material was never fully published (Fig. 1). However, a full coverage survey carried out later on the Persepolis plain established a complementary relative chronology for the prehistory of Fars (Sumner 1972). Nonetheless, Gotch was the first researcher who did a detailed survey on the Shiraz plain which led to the recording of six prehistoric multi-layered sites (Gotch 1968; 1969). A recent survey conducted on the Shiraz plain and directed by Alireza Askari Chaverdi, recorded only one prehistoric site, Poustchi (Askari Chaverdi 2008). It seems that Poustchi, which has recently been excavated by a team from the Art University of Shiraz, is identical with the site Shah Qoli Beigi A recorded by Gotch. Poustchi, the only remaining prehistoric mound on the central plain of Shiraz, has been dated to the Shams Abad (ca. 5500-5000 BC) and Bakun (ca. 5000-4000 BC) periods (Hamzavi/Zeidi 2016). Although the other five prehistoric sites of the Shiraz plain have now vanished due to the growth of the city of Shiraz, Gotch fortunately collected some material that is helpful for understanding the prehistory of Fars.

Fig. 1. Sites on the Marv Dasht and Shiraz plains located by Paul Bevan Gotch during his survey in 1966. Site number 35 near Shiraz is Kutahi (after Gotch 1968).



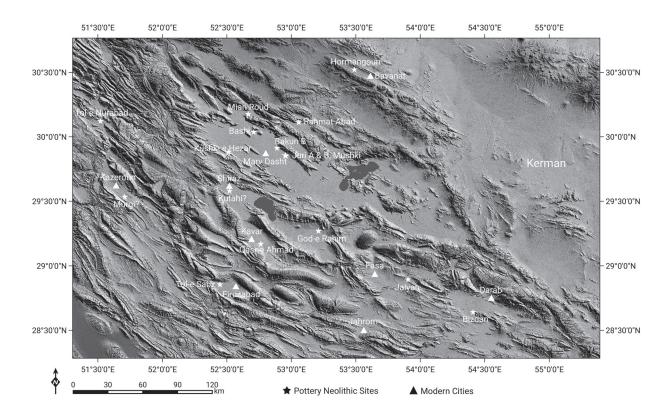
# **The Pottery Neolithic of Fars**

The Pottery Neolithic of Fars was initially defined by Louis Vanden Berghe after his surveys and excavations in the KRB in the early 1950s (Vanden Berghe 1952; 1954). However, only some years later, with the Japanese excavations at some diagnostic sites such as Tal-e Mushki (Fukai et al. 1973), Jari A and B (Egami 1967) and Bakun B (Egami/Masuda 1962), a coherent sequence was available. The relative chronology of the Pottery Neolithic of Fars as first suggested by Vanden Berghe was amended due to the results of the Japanese excavations, of Sumner's survey and recent investigations. In the

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KRB, the Pottery Neolithic lasts from 6200 to 5000 BC and consists of the phases Mushki, Bashi, Jari and Sham-Abad. It seems that there were some local variants in other regions of the Fars including Jalyan in Fasa, Bizdan in Darab, Murgi in Kazeroun and, last but not least, Kutahi in Shiraz (Fig. 2).

Fig.2. The location of the most important Pottery Neolithic sites in Fars (map: author).



The earliest ceramic tradition known from the Neolithic period of Fars is the Mushki red ware. It is red or rarely buff burnished (Fukai et al. 1973, 22–29) and has black or brown painted linear decorations (Sumner 1977) which mainly cover the upper part of the vessels (Fig. 3). In terms of form, the vessels are mostly plain or carinated bowls (Fukai et al. 1973, 22–29). In the KRB, only eight sites from the Mushki phase are documented, but similar ceramics have been identified in Shiraz (Gotch 1968), Mamasani (Weeks et al. 2006), Sarvestan (Stein 1936), Bavanat (Khanipour 2016), and Sa'adat Shahr (Azizi et al. 2014). This distribution shows that the Mushki culture was wider spread than the other Pottery Neolithic cultures of Fars. New radiocarbon dates have fixed the Mushki phase at 6200 BC (Nishiakia 2010). In general, it seems that the Mushki phase spans from 6250/6200 to 6100 BC.

The recent excavation at Tol-e Bashi (Pollock et al. 2010) and the review of the Mushki and Jari A excavation data (Nishiaki 2010a; Nishiaki/Mashkour 2006) indicate that the Mushki phase was not followed directly by the Jari phase. Instead, it seems that there was a short phase between the Mushki and Jari phases that is called Bashi after the eponymous site in the KRB. The Bashi ceramics share features of both Mushki and Jari wares (Fig. 4). Excavations at Tole Bashi revealed six occupation layers of which layers I and II are attributed to the Jari phase and the remaining ones (III–VI) to the Bashi phase. Although the radiocarbon dating of this site is problematic, especially for layer VI, the earliest date for the Bashi phase is 6100 BC (Bernbeck et al. 2003; Pollock et al. 2010, 262–265). Therefore, it is likely that the Bashi phase covers the time period between 6100 and 6000 BC.

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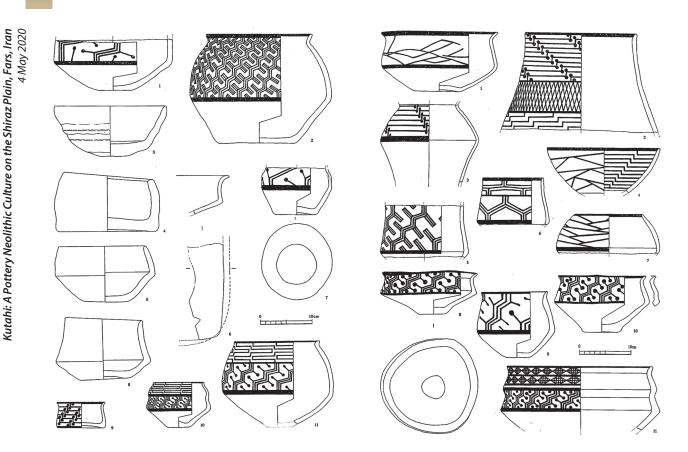
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The Jari ware was also first documented by the KRB surveys and excavations (Vanden Bergh 1952; Egami 1967). It is chaff-tempered and of buff colour. The black, red or brown painted decoration features linear patterns similar to the Mushki ones but they are drawn with less precision using a thinner instrument (Fig. 5). Typical forms are bowls with straight or slightly everted rims (Sumner 1977). With the beginning of the Jari period, severe changes in subsistence strategy, architecture and settlement system occurred (Nishiaki 2010b; 2013). The architecture of this phase is more developed than that of the Mushki phase and includes square and rectangular rooms. During the Jari phase (ca. 6000–5500 BC), the number of settlements in the KRB multiplied by more than 50, which indicates that the population grew rapidly (Sumner 1994). Furthermore, Sumner believes that during the Jari phase irrigation system was introduced (Sumner 1990). It seems that the seasonal or probably semi-sedentary way of life of the Mushki phase changed to fully sedentary in the Jari phase and agriculture became the dominant subsistence strategy.

In the KRB, the Shams Abad phase (ca. 5500-5000 BC) was first documented in Tal-e Bakun B. The earliest phase of this site was introduced as Bakun B1, but Sumner later suggested the local name Shams-Abad (Sumner 1977). The Shams-Abad ware is chaff-tempered, coarse and buff-red, sometimes with lime and sand inclusions. The surface of the ceramics is mostly smoothed (Fig. 6). In the KRB, painted decoration is completely unknown during this phase (Sumner n. d), but some painted sherds have been documented in Mamasani (Weeks, pers. comm.) and Fasa (Mansouri 2018). The excavation data from sites of the Shams-Abad phase is very scant, so subsistence strategy and architectural patterns of this phase are unclear. Considering the 102 identified sites in the KRB, Sumner believes that the population has doubled during this phase and that river water was used for agriculture, although the settlements located on the edge of the plain could use small springs (Sumner 1977).

Fig. 3. Mushki ceramics (after Fukai et al. 1973, pl. XLVII–XLVIII).



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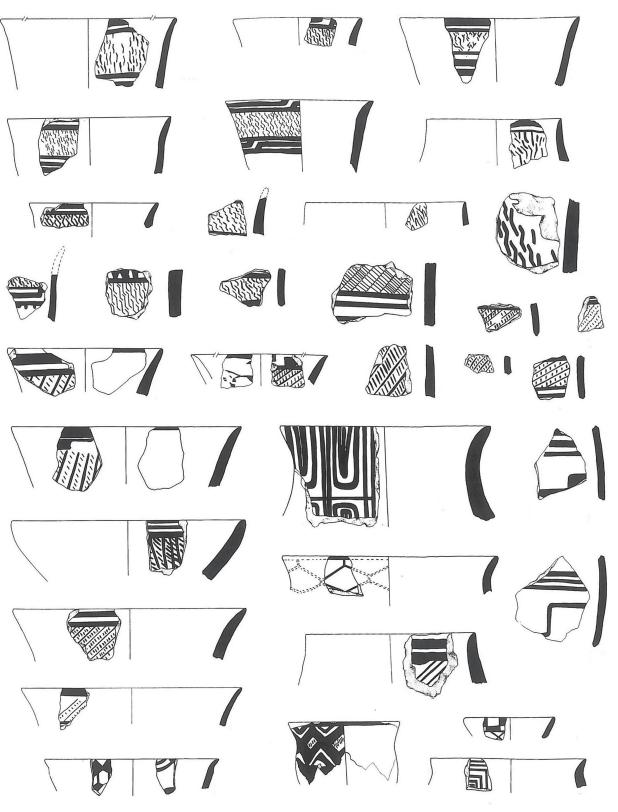


Fig. 4a. Bashi ceramics (after Pollock et al. 2010, 150–151).



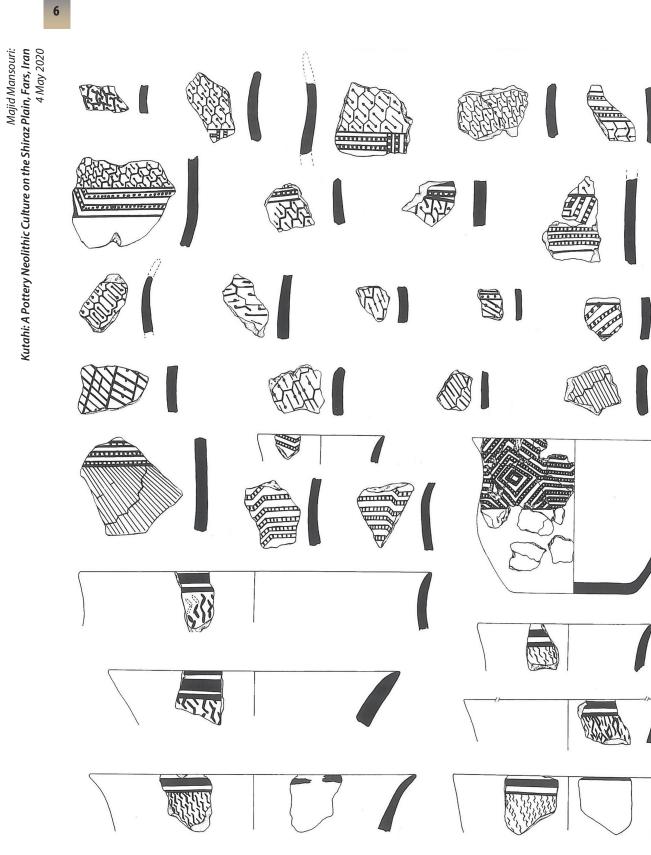


Fig. 4b. Bashi ceramics (after Pollock et al. 2010, 150–151).



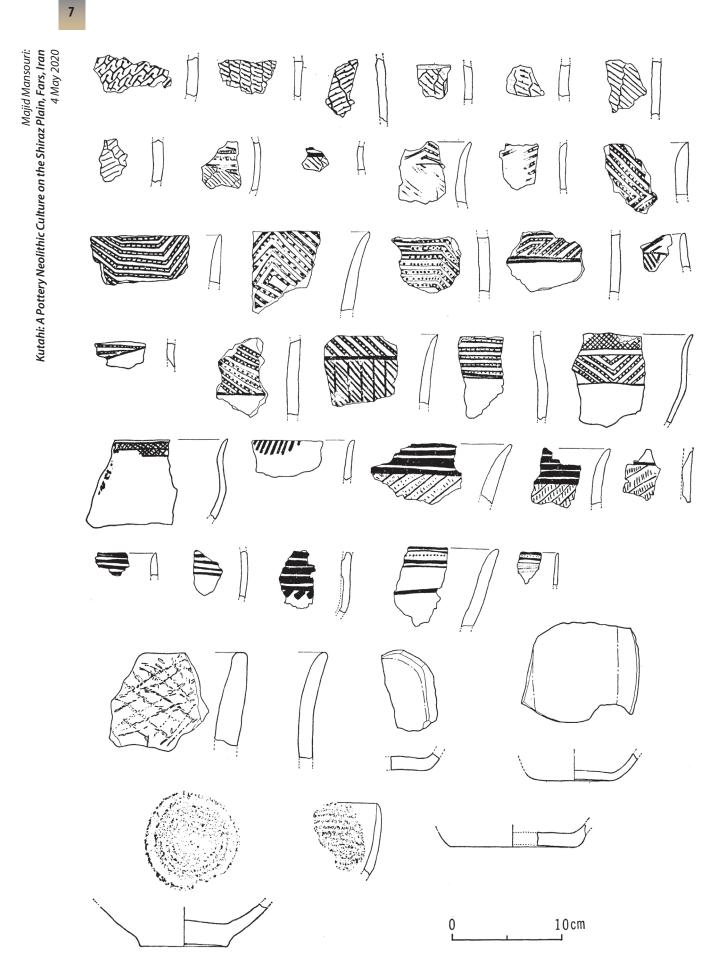


Fig. 5. Jari ceramics (after Eagami et al. 1977, pl. V).



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Before the Iranian revolution in 1979, some Pottery Neolithic cultures were also documented in other regions of Fars, including Jalyan in Fasa, Bizdan in Darab (Miroschedji 1972), Murgi in Kazeroun (Sumner 1977) and Kutahi in Shiraz (Gotch 1968; 1969; see Fig. 2).

The Jalyan ware is low fired, painted or unpainted, with a buff paste and both-sided burnished red slip. Buff-slipped ware is very rare. The forms consist mostly of plain and carinated bowls. The most diagnostic painting pattern on the Jalyan ware is parallel zigzag lines.

The Bizdan ware is low fired with a brown-red paste and a buffbrown slip. The vessels are mostly painted and sometimes burnished. In one case, the inside of the vessel is covered with a red slip and its outside with a buff slip, similar to the Mushki ware. Both sides of the vessel have been painted and the inside is burnished. The most common motifs on the Bizdan ware are hatched bands and zigzag lines. The firing temperature of the Bizdan ware was even lower than that of the Jalyan ware and, therefore, their core is mostly grey (Mansouri 2018).

The Murgi ware has not been described in detail, and the Kutahi ware was only superficially dealt with by Sumner (1972; 1977).

However, recent investigations have revealed more new local Pottery Neolithic traditions, including Qasr-e Ahmad in Kavar (Azizi/ Khalouei 2012) and Tol-e Sabz in Firuzabad (Mansouri/Ahmady 2015). In general, the ceramics of these traditions are characteristically handmade using chaff-tempered clay, have thick walls, are low-fired and are very crumbly. There appear to be local variations in the density of the fabric, the size and density of the chaff temper, the painting decorations, and the degree of surface finishing, but this material belongs to one overarching pottery tradition (Petrie 2011).

#### Geographical setting of the Shiraz plain and the site of Kutahi

The Shiraz plain, with an area of almost 505 km<sup>2</sup> and an average elevation of 1450 m above sea level, is located in the central south of Iran (Fig. 6). This intermountain plain is delimited by the Maharloo Lake in the southeast and by mountains in all other directions (Fig. 7). In general, Shiraz is considered as a semi-arid region which receives considerable seasonal precipitation, with yearly rainfall varying between 200 to 400 mm, most of which falls in winter. The Khoshk and Chenar Rahdar are two rivers passing the Shiraz plain that both have dried up in recent years due to drought. It seems that in antiquity there had been many springs in the Shiraz plain but most of them have dried up as well. However, a total of 16 permanent springs have recently been documented (Water and Waste Water Organization of Fars 2003, 52).

It is clear from Gotch's notes that during his time of survey the site of Kutahi was already in danger of being levelled (Gotch 1968). Gotch revisited the site in 1972 and noted that "this is last stage of mound now ploughed as well as regularly bulldozed for brick fuel." He also pointed out that he collected some diagnostic sherds "for reference when mound has completely gone" (Fig. 8). The recent survey conducted on the Shiraz plain revealed only one prehistoric site, Poustchi (Askari Chaverdi 2008). Therefore, it seems that the site of Kutahi was levelled by ploughing and bulldozing and later vanished due the growth of the city of Shiraz. However, based on Gotch's schematic map and the old name of the Kutahi district in Shiraz, it seems that the site of Kutahi was located in the south-west of the modern city of Shiraz (Fig. 9).

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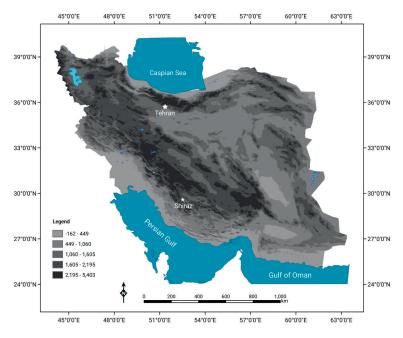
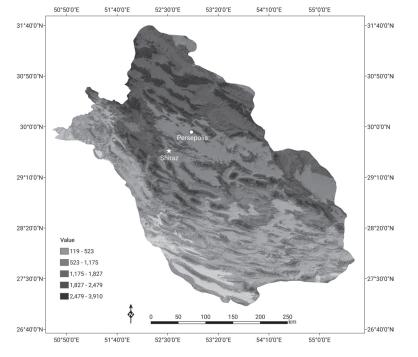


Fig. 6. The location of the Shiraz plain on the DEM map of Iran (map: author).

Fig. 7. The location of the Shiraz plain on the DEM map of Fars province (map: author).



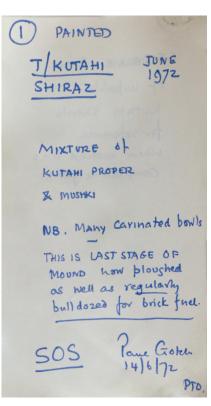


Fig. 8. Paul Bevan Gotch's notes on the Kutahi collection in the Narenjestan museum, Shiraz.



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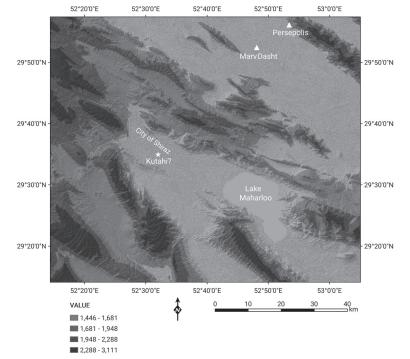


Fig. 9. The possible location of the site of Kutahi (map: author).

# The Kutahi ware

The Kutahi ware was first documented by Gotch in 1966, but he never described it in detail (Gotch 1968). In general, the Kutahi ware is of buff colour, low-fired and grit-tempered (Fig. 10). The paintings are geometric linear patterns drawn in black and sometimes red. The patterns appear mostly on the upper part of the vessel and are plain horizontal bands, parallel vertical zig-zag bands, scattered dots, diagonal lines of dots between two lines and net motifs (Fig. 11). Sumner (1977, 295) has remarked on "an unusual way of creating patterns, where black bands have been painted on and then incised lines have been drawn through the paint to form linear zig-zag or step motifs within the black painted areas". However, this kind of decoration is not present in the Narenjestan collection. The forms mostly encompass shallow and deep bowls with straight or slightly everted rims, but Gotch noted that he also found many sherds of carinated bowls. Sumner (1977, 295) states that the Kutahi ware is very similar to the Jari ware in paste, surface treatment and forms. However, the painting patterns on the Kutahi ware are very distinct from those on the Jari ware.

It is somewhat difficult to suggest a date for the Kutahi culture based on this small collection. The typology of the Kutahi ware is identical to the Jari ware and some characteristics such as fabric, firing, surface finishing and forms show that they belong to the same pottery tradition. Therefore, it is likely that Kutahi was a local culture synchronous to the Jari phase in the early sixth millennium BC. Mushki ware has also been documented on the site of Kutahi which indicates that is was first occupied in the late seventh millennium BC. Sumner (1977, 295) remarks that there were sherds of both the standard black on burnished red kind as well as the buff coloured, red slipped variant of Mushki ware. However, there is no Mushki ware in Gotch's collection at the Narenjestan museum. It seems that the site of Kutahi was occupied from 6200 to 5500 BC.



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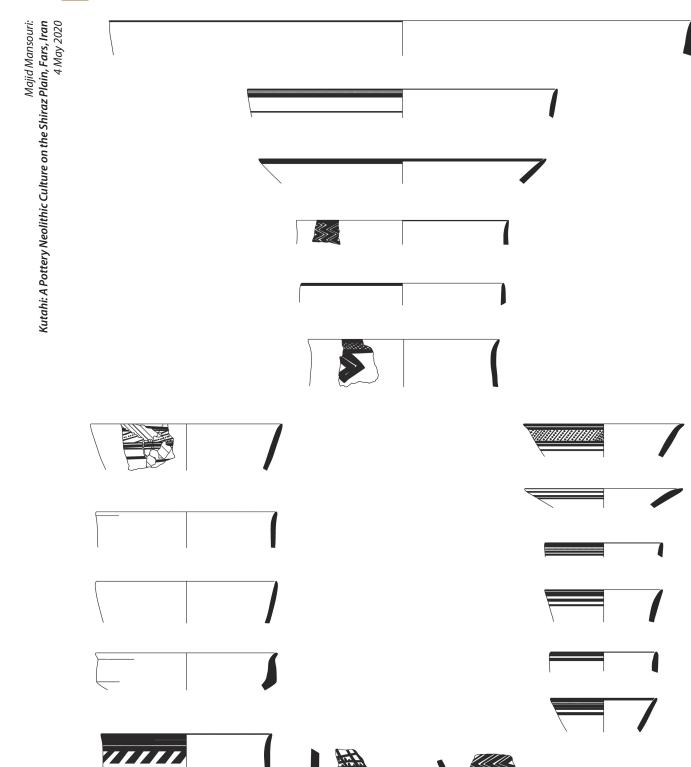
## Conclusion

Before the Iranian revolution in 1979, some local Pottery Neolithic cultures were identified in the regional surveys conducted in the Fars province, Iran. These cultures consist of Mushki, Jari and Shams Abad in the Kor River Basin, Jalyan in Fasa, Bizdan in Darab, Murgi in Kazeroun and Kutahi in Shiraz. The first three cultures have been well-documented and described by some pioneer scholars (Vanden Berghe 1952; 1954; Fukai et al. 1973; Egami 1967; Egami/Masuda 1962; Sumner 1972; 1977). The Jalyan and Bizdan cultures were shortly introduced and described by de Miroschedji (1972), but the Murgi culture is still unclear.

The site Kutahi on the Shiraz plain was first identified by Gotch in 1966 (1968; 1969). Its ware was introduced by him and later shortly described by Sumner (1977). Gotch revisited this site in 1972 and noted that this site was regularly ploughed and bulldozed, and it is likely that it later vanished due to the growth of the city of Shiraz. The location of Gotch's 1966 survey collection is not clear, but he had collected some sherds for reference in 1972, which is now kept at the Narenjestan museum in Shiraz. Based on the Gotch notes, it seems that the Kutahi ware has been only documented from the site Kutahi itself.

The small collection of Narenjestan shows that the Kutahi ware is buff, painted and unpainted low-fired grit-tempered ware. The paintings are geometric patterns including simple and zig-zag bands, horizontal lines and linear and scattered dots. The closest parallel to the Kutahi ware is the Jari ware at the Kor River Basin. Though its decoration differs, it seems that the Kutahi and Jari wares belong to one pottery tradition. Based on pottery typology, it is likely that the Kutahi culture was synchronous with the Jari phase in the early six millennium BC. Fig. 10. Kutahi ware, Paul Bevan Gotch's collection in the Narenjestan museum, Shiraz. Not to scale (photo: Pegah Manochehri).





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Fig. 11. Kutahi ware, Paul Bevan Gotch's collection in the Narenjestan museum, Shiraz (drawing: Habibeh Abbasi and

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#### Imprint

#### ISSN 2197-649X

Layout draft: Holger Dieterich, Ines Reese Technical edition: Agnes Heitmann Language revision: Nils Müller-Scheeßel © 2020 Majid Mansouri/UFG CAU Kiel Published by the Institute of Prehistoric and Protohistoric Archaeology, Kiel University; All rights reserved. For further information consult www.jna.uni-kiel.de



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