

## Chapter 7

# **The origins of Lower Egyptian Neolithic pottery. A model**

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The oldest Lower Egyptian pottery was recorded at sites on the northern shore of Lake Qarun, dating back to the middle of the 6<sup>th</sup> millennium BC. In the light of the latest research, the groups that produced and used it did not resemble typical farming communities known from the Near East area at that time. Although the bones of domesticated animals (sheep, goats, and cattle) are known in Neolithic archaeological assemblages, the role of animal husbandry as one of the subsistence strategies was rather minor. During the 6<sup>th</sup> millennium BC, domesticated plants were probably not known in Lower Egypt, or were known on a very small, experimental scale, being undistinguishable in the archaeological evidence (see Shirai, 2017). Fayumian groups, thanks to the abundance of natural resources in the vicinity of the lake, relied on food resources offered by the environment, including, in particular, fish available in the lake. The lack of permanent settlement structures in this area is interpreted in the context of a partially mobile way of life. Moving within the Fayum Depression and adjacent desert areas, people were able to use the resources of the natural environment, including raw materials used for tool production.

The origins of the Fayumian groups are not clear. The subsistence strategies and mobile way of life bring them closer to desert groups that occupied central and northern part of the Western Desert in the final part of Holocene humid phase (6,000-5,300 cal. BC). They belonged to the so-called Bifacial technocomplex and were characteristic for their lithic assemblages and the presence of pottery. The northern part of the Western Desert, probably including the Fayum, lay

in the zone of migration for hunter-gatherers and herders during the Early and Middle Holocene periods. Traces of their presence have been recorded within the Siwa and Qattara depressions and even further to the northwest. The latest C14 dates indicate that people had already reached the northern shore of Lake Qarun in the Early Holocene period. The rich ecological niche of the Fayum Depression may have been positioned on routes travelled by desert groups, as it offered access to the water, wild plants and animals on which their survival depended.

Approximately in 5,300 BC the process of desiccation in the desert began, forcing hunter-gatherers and herders to look for new habitats. Some people found shelter in oases where water was still available thanks to artesian springs. People moved also to the Nile Valley or southern Egypt and northern Sudan. It has also been suggested that desert groups may also have made their way further north, to Lower Egypt.

The northern shore of Lake Qarun or Wadi Gamal offered the desert people everything they were looking for, namely water and access to many resources, including food and raw materials. It was then that the depth and surface area of Lake Qarun was greater than ever due to the restored connection with the Nile.

In the opinion of the author, the ceramic vessels of the Fayumian culture may have desert roots. Pottery production in both regions is linked by a similar organisation of the pottery production process (taking into account mobility and subsistence strategies), as well as by technological and typological similarities. One of the arguments that has made it difficult to combine Lower Egyptian pottery and undecorated thin-walled pottery is the lack of ceramics in the area north of the Farafra Oasis, despite the presence of other traces of human activity. However, such a situation may be associated with the fact that pottery production was discontinued in the area due to certain limitations (i.e. insufficient access to water and raw materials, climate) and not to the lack of pottery-making skills and knowledge. Under favourable conditions, when access to the necessary raw materials was ensured, pottery may have become needed again.

Thus, 'refugees' from the desert came to Lower Egypt with their cultural 'equipment'. Due to the specific nature of the environment, they settled down and reduced their mobility to some extent. They moved within a well-known environment, relying on its rich resources. Although they owned domesticated animals, their diet was based on fish. They did not set up permanent settlements but stopped for longer stays in places where their needs could be satisfied. Moreover, pottery production was adjusted to local conditions. Among the most important factors influencing it, one should mention mobility, subsistence strategies, as well as weather and climate. The production of vessels in places of prolonged stay, confined to a favourable warm and dry period, along with the practise of caching vessels, were the reason why vessels secured a permanent place among other utensils.

Undoubtedly, their popularity increased there when compared with the Western Desert. The character of pottery production was influenced by the change in demand for ceramic containers. Even before domesticated plants had been introduced and become an important food source in this area, ceramic vessels could have been used in exploring abundant lake resources, mostly fish. Their production in the summer, when fishing was most effective, fits this demand quite well. Indeed, intensive use of water resources may have resulted in the development of pottery production (e.g. at Sais I). It seems, however, that it was the emergence of intensive cereal cultivation during the 5<sup>th</sup> millennium BC and the intensification of animal husbandry (sheep, goats, pigs, and cattle) that caused changes in pottery production in Lower Egypt. Thus, vessels could have been used in many activities related to processing, consuming or storing domesticated products.

The pottery of the 5<sup>th</sup> millennium BC is known from two sites located in the western Nile Delta at Merimde and Sais. The exact beginning of the settlement at Merimde is unknown and is currently dated to approximately 5,000 BC. Treated as a daughter site of Merimde, Sais is associated with fishing and is where the refugees from Merimde may have settled after leaving the site in 4,850 BC due to cold and arid conditions. Recent research suggests that groups occupying the site at Merimde Beni Salame at the beginning of the Neolithic resembled groups of the Fayumian culture in terms of subsistence strategies and ways of life. Natural resources played an important role in their diet, whereas domesticated animals and plants were merely an addition to it. The absence of permanent settlements and other traces of activity in the Wadi Gamal area may indicate, at least, a partially mobile way of life and movement within well-known environments. Ceramic vessels are known from the oldest phase of the Merimde site, namely the Urschicht phase and at Sais I. In terms of technology and typology, they resemble Fayumian pottery (a simple mode of household production, open firing, mostly open forms, similar surface treatment), although Sais pottery shows a greater diversity, probably related to the specialisation of the site and the intensive use of fish. Moreover, the organisation of pottery production was probably similar to that known from the Fayum (seasonal production during longer stays, similar function). What distinguishes the oldest ceramics from Merimde and Sais is the presence of the herringbone decoration, which could be linked both to the southern Levant and the Eastern Desert (Fig. 22).

The presence of domesticated plants and animals of Levantine origin at Merimde and Sais, the herringbone pattern, as well as some features of the ceramic assemblages, are most often interpreted as a consequence of the presence of Levantine newcomers who introduced these items into Lower Egypt. Although domesticated animals were known in Lower Egypt in the 6<sup>th</sup> millennium BC and may have come together with desert groups, it was during the 5<sup>th</sup> millennium

BC that the second wave of their introduction into Egypt took place, probably directly from the Near East (Linseele *et al.*, 2014; 2016; Garcea, 2016; Garcea *et al.*, 2016). Together with domesticated animals, domesticated grains could also have reached Lower Egypt. The process of introducing and adapting domesticates is not clear, while the available evidence does not allow for any detailed hypotheses. Excessively profound social and economic differences between the communities of Lower Egypt and the southern Levant, as well as the lack of evidence of migration among the archaeological remains, currently excludes a Levantine origin for these Lower Egyptian communities. However, they may have been influenced by the newcomers, with the interactions between resulting in the introduction of some new ideas into existing local traditions. The parallels between local pottery and Levantine pottery may be one of the results of such interactions.

Although the introduction of domesticates was crucial for the development of Lower Egyptian communities, it did not initially reduce the use of the wild resources. Pottery vessels were used in many activities related to the use of natural resources, on the one hand, and domesticated plants and animals, on the other, including processing, serving, consuming and storage. It seems that large jars were directly associated with domesticated plants, as they were used to store cereals. New practical uses increased the demand for vessels, thus triggering the more intensive development of their production.

The Merimde settlement was abandoned in approximately 4,850 BC due to cold and hyper-arid climatic conditions. Thus, the occupation of Sais could be linked to the migration from Merimde. In the middle of the 5<sup>th</sup> millennium BC, the site was resettled. During this period, the first signs of settlement stabilisation and a gradual increase in the role of domesticated plant and animal species are already visible. Some features of the lithics from phase II indicate possible influences from the Western Desert. Once again more and more inhospitable conditions in the eastern Sahara could have been responsible for the arrival of desert groups to Lower Egypt. Although during phase II pottery was still produced and used, influences from the desert have not been found (contrary to the lithic assemblage). Moreover, the incised herringbone pattern is no longer used to decorate pottery, although these vessels have many features in common with the pottery of the Urschicht phase and Fayumian culture, in terms of organisation production, as well as its technology and typology (see Mączyńska, 2017). New forms, a gradual increase in the number of closed forms, an increase in the diversity of surface treatments (burnishing, smoothing, roughing), and gradually improved control of firing conditions, all indicate the development of pottery production which would continue during the next, third phase of the Merimde culture.

Social and economic changes in the Lower Egyptian Neolithic community, consisting of abandoning the mobile lifestyle, establishing a stabilised settlement

pattern, the growing role of domesticated plants and animals accompanied by the intensive use of natural resources, are mostly visible in the remains from the youngest phase of the Merimde culture. As the size of the settlement grew, a variety of stable settlement structures were introduced, including circular huts, clustered to form compounds with family storage facilities. The emergence of crafts and ideology have also been suggested at that time (Tassie, 2014: 212-226). As regards pottery, there was an increase in the diversity of ceramic assemblages and an associated increase in potters' skills. New open and closed vessel forms were emerging, including characteristic bottles with a globular body and a long neck. Burnished and smoothed pieces are present in similar quantities, alongside numerous vessels with rough surfaces, indicating functional differentiation of the assemblage. Improved control of the firing process resulted in more diverse and more uniform surface colours, including red, grey and black. Incised, impressed, plastic and painted decorations appeared on pottery. Similar changes in pottery assemblages are also visible in Wadi Hof, where human groups settled probably around the middle of the 5<sup>th</sup> millennium BC (4,600 BC). Wadi Hof offered easy access to water and other resources. Its location in the vicinity of the Nile also allowed for the use of resources located in the area between the river and the wadi, as well as in the flood plain and the river. Despite the use of natural resources, the el-Omari community kept domesticated animals and grew cereals on the flood plain. The settlement activity in Wadi Hof was fairly stabilised with a permanent settlement and some activity sites in the area around it. The main settlement area moved within the wadi. The abandoned parts of the settlement served as burial grounds, or as storage areas. Pottery production no longer resembled that of the Fayum and the Urschicht phase of Merimde. Only two kinds of calcareous clays available within the wadi were used for the production of vessels, while the small amount of pottery made of Nile clay may be associated with the seasonal presence of people in the vicinity of the Nile, associated with cereal growing or fishing. Although open forms continued to prevail, the percentage of closed forms, including jars, is high. The range of vessel shapes is much larger than at the beginning of the Neolithic. Most of the inventory consists of ceramics covered by slip and burnished, while smoothed vessels represent 1/3 of the inventory. Also of note is the high firing temperature (800°C), poorer quality of burnishing and the addition of ochre to clay.

At the end of the 5<sup>th</sup> millennium BC, the sites both in the Fayum and Wadi Hof were abandoned. The northern shore of Lake Qarun was probably deserted because of a lowered water level and the need for adapting earlier subsistence strategies. Groups of Fayumian people could have moved towards the Nile Valley or into the Nile Delta. The reasons for the end of the occupation of Wadi Hof are unknown. The continuation of settlement activity into the 4<sup>th</sup> millennium BC has

been suggested for two sites (Merimde and Sais). Although the end of settlement activity of the Merimde culture is dated to ca. 4,100 BC, traces of the Chalcolithic Lower Egyptian culture have also been confirmed at the site. (Hawass *et al.*, 1988). Moreover, as recent excavations at Sais have shown that the Merimde people occupied the site for a longer period of time, its demise is dated to 3,900 BC.

The emergence of pottery in Lower Egypt in the middle of the 6<sup>th</sup> millennium BC was, from our contemporary point of view, an important cultural event and involved multiple benefits. It is generally accepted that pottery was introduced to this region as an innovation, rather than as an invention. However, the emergence of clay vessels alone did not guarantee their entry into common use and local production. This process was affected by many factors, both environmental and cultural. The production of clay vessels had to be adapted and integrated into the social and technological system of past societies. It became one of their traditions, constituting a set of technological practices forming the entire production sequence, from collecting raw materials through to firing them into a durable vessel.

From the moment of the introduction of pottery to Lower Egypt, its production developed dynamically throughout the Neolithic period. This was also connected with social and economic changes within Neolithic societies, as well as with external influences from the Western Desert and the southern Levant. Therefore, by the end of the Neolithic period in Lower Egypt, pottery had become one of the most important elements of Lower Egyptian communities.