

POTTERY PRODUCTION IN ANCIENT GREECE

Christina Dimitrova

University of Sofia, Faculty of Philosophy, 1113 Sofia; christina_petkova@abv.bg

ABSTRACT. Clay has been used by the humankind since the Neolithic. This period is specified as the Age of ceramics. A short review of the pottery utilization and different types of clay in ancient Greece has been made with stress on the importance of painted vases, which give an idealized but probably true picture of everyday life and ancient cults.

Clay has been used by the humankind since the Neolithic. Ancient painted pottery has an important place in the heritage the past – and especially in the Mediterranean artistic culture. Painting on pottery vases is familiar to people from the dawn of pottery production – from the Neolithic (VII mill. BC) to the I mill. BC when it reaches its highest perfection in the ancient Greek society during the Antique period – VIII-IV c. BC (Fig.1). Three main styles of Greek ceramics are known: geometric (XII-VIII c. BC), black-figure (VIII-V c. BC and red-figure (from the middle of the V c. – IV c. BC).

The clay from which the vases are produced, in particular, during the flourishing Age of ceramic art (VI-V c. BC), possesses very high qualities. The vases were utilised in antiquity not only for their practical shape as vessels for daily

use. Their decoration serves as a vivid picture, giving today useful information about the every day life and the rituals of the past. The vases show one idealized but possible picture of the ancient Greek culture. No other branch of ancient culture is in a position to give in such a comprehensive way enough information about ancient life as the ceramic art. The artefacts made of gold or other metals may have been lost or destroyed.

According to archaeological data it is not known how exactly a pottery workshop had looked like. The technology of ancient pottery can be explored by studying the numerous vessels and fragments that have survived. The preserved pottery kilns, moulds, as well as pictures on the vases and written sources are considered as important sources of information in this respect (Fig. 2).

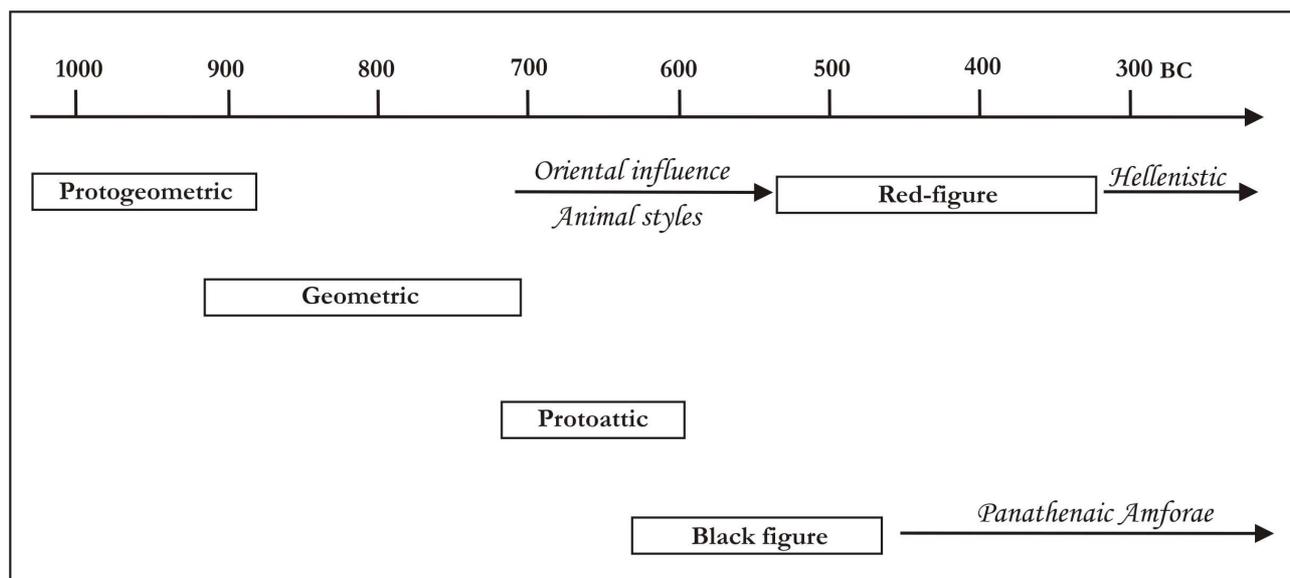


Fig. 1. Chronology and styles of Athenian pottery (after Beazley, 1951)



Fig. 2. Fragment of a vase illustrating a pottery oven (after Paul, 1982)

Most of the vases that are still preserved are made on a hand wheel and in this process the master gives the form of the vase and his helper spins the wheel (Fig. 3).

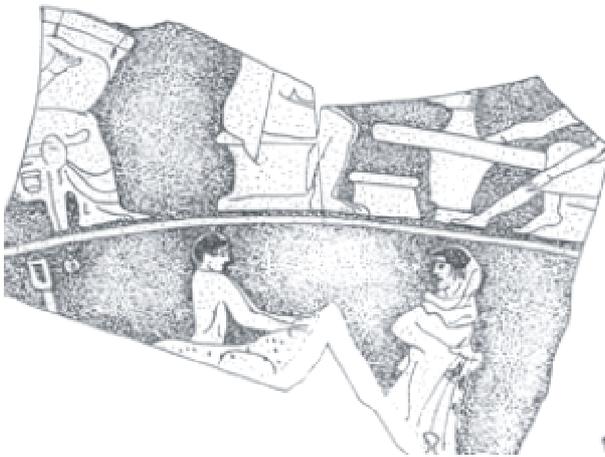


Fig. 3. Fragment of vase illustrating a pottery workshop (after Paul, 1982)

Vases with complex form were produced in separate parts. The clay is well prepared in advance and is of especially high quality, particularly in the period of flourishing pottery art (VI-V c. BC). Clays from different parts of Greece can be distinguished by their colour, admixtures and consistency. The process is not always easy, because of the fact that during the firing process the primary clay tints often mix (Blavatsky, 1953) and change.

On a red-figured hydria, which is to be found in a private collection in Milano, four artists are presented. Their achievements are appreciated with the visit of their patroness – the Goddess Athens, accompanied by two goddesses of victory who endow the artists with wreaths (Fig. 4). In spite of the allegory, the viewer can see a real workshop – two of the artists are ornamenting a krater, while the other two are painting the main picture (Paul, 1982). On the right side of a big volute krater there is a woman, which is rather atypical for the ancient way of painting. That is the reason why Paul presumes that it is not a maid (slave), but an artist. Women-artists are not accepted appropriately by scholars despite the fact that history has preserved their names – Tamatora and Telezia, and it is even claimed that they have run workshops after their husbands or fathers have died (Paul, 1982). This fact is confirmed, however, by a woman on the krater from Munich.



Fig. 4. Fragment illustrating ornamentation of vases (after Paul, 1982)

Rarely vase-painters draw the entire workshop, more frequently separate figures or stages of a given process are displayed. One may see potters and the potter's wheel with a vessel, or other pictures showing how the clay is being prepared.

Two red-figured bowls, preserved in Berlin and Boston, contain very rich information in this respect. On the Berlin bowl the artist is sitting in front of a shelf on which one can see black vessels. The red ground coating of the small stamos in the master's hand is still light-coloured and has to be glazed. On the Boston bowl the artist is working with brushes in his right hand and the bowl in his left hand.

In the Munich Museum of Antiquity there is a large double vessel, where together with Hector's portrait one can see an inscription in Greek, saying "Outemidis did it so well as Oufronius would never do". The fact that the artist is not anonymous helps the classification and is a very happy circumstance for the archaeologists. These inscriptions are related to the design and to the author or another person, connected to the time of the creation of the vessel.

The inscription on the Munich amphora shows not only the name of the artist (potter), but the name of another master whose achievements are not worse than the first one. This confession enlightens the growing self confidence of vase makers during VI c. BC, but still there is little evidence for this period of potential pottery boom.

It is not an easy task to distinguish various types of clay, as during the firing process the pots often get different tints from the basic colour. Nevertheless several main differences may be observed, fact that helps discerning the basic types of clay used. Keeping in mind that this is a rather imperfect and undeveloped terminology, one could follow Boardman who characterises the different types of clays on the basis of their compactness and colour (Simon, 1986).

The antique vases possess two types of coating. On the red-figured ones the coating is very long lasting and is not prone to water destruction. The colour is white and often with yellow or grey hues. The coating of the ancient white lekythos is very fragile. They are specially intended to serve the death cult. During the pottery flourishing period the glaze is black and shining, reaching to brown in colour.

The shining black lacquer with a metallic hue on the ancient Greek vases is a result of the same type of clay, which is used for the production of pots. The clay, used for varnish, is being washed up several times in order to become a fine emulsion without any mixtures. After the pot is shaped on the potter's wheel, it is left to dry up in a wet (humid) room. A preliminary (carving) is done, with a sharpened lead or charcoal stick, which usually disappears after the firing process. Then the already dried pot is covered with the mentioned fine emulsion, leaving the figures uncovered. The same emulsion is used to outline the details by a snipe feather or a brush. Then the vase is placed into a kiln, observing different temperature for three phase firing process. In the middle of the firing cycle, by stopping the oxygen flow and putting additional woods or wet twigs (branches) in the kiln, carbon oxide appears. This gas contacts the ferrous oxide of the clay (FeO) and transforms to magnetite. The result is the shining metallic black colour. During the following phase of firing (hardening) by introducing oxygen and keeping a particular temperature the uncovered part of the pot (vessel) receives the ordinary red colour (Boardmann, 1975).

Greek pottery, unlike today's pottery, was only once fired, but that firing had three stages. After the pottery is stacked inside the kiln, the potter can start the first stage. He heats the kiln up to around 800°C with all the vents open to let air in. This turns the painted pottery red. Once the kiln reaches 800°C the vents are closed and the temperature is raised to 950°C and then allowed to drop back to 900°C. This turns the pottery all black. The potter then starts the third and final phase by opening the vents and allowing the kiln to cool all the way down. This last phase leaves the slip black but turns the pottery back to red. This happens because when the clay receives air it turns red, but when the black slip is heated to 950°C it no longer allows air in. So the slipped area stays black while the bare areas stay red (Beazley, 1962).

It is not an easy task at all, particularly concerning multi-figure compositions. The use of preliminary drawing is absolutely necessary, but in this process the artist does not always follow these preliminary drawing and allows himself a lot of major deviations from the original. In return, the possibilities to reach an easier presentation of the volume of the figure, to show it in motion and in perspectives multiply. Besides the black lines white paint is also used, produced from very fine white clay. Red paint is also applied from crimson ochre and after firing it results in a milky-brown colour, used for emphasizing the muscles on human figures.

When the lacquer is very black, sometimes a green, brown or bluish tint may appear (Beazley, 1962). Colours and particularly tints of different lacquers are easily distinguished,

but it is very hard to describe them in words. The main varieties of Greek black lacquer determine the basic phases (stages) in pottery development – the period of geometric style, the Classical period and the Hellenistic period (Boardmann, 1985).

Production of antique lacquer reaches its maximum in the V c. BC. During this period the artists achieve an absolutely even and glistening surface. Lacquer is of such a high quality that it can be used as a mirror. The wide spread use of "glaze" lacquer for framing pictures is characteristic for the antique period. This lacquer possesses different colour tints – red, grey-yellow, golden and brick-coloured (Blavatsky, 1953).

During the next century (IV c. BC) the quality of the lacquer is not so high any more. Still glorious samples of bluish-black lacquer can be found, but the outstanding "mirror effect" does not exist. The black lacquer of the Italian vases, imitating the ancient samples, has a specifically intensive brilliance and bluish-black colour shades. Finally the glaze that is relatively rarely met in ancient Greek ceramics has to be mentioned. On the vases imitating the Egyptian faience one can see blue, white and black varnish (glaze).

Clay was a very important part of the ancient Greek culture. Clay was easy to find in Greece. If once clay is fired, it is almost indestructible (unless broken) and also fairly waterproof. These features made the clay a perfect material for production of containers. It was used for big storage containers, cups, perfume bottles, wine bottles, jewellery boxes, and all other type of containers. All of these utilizations made the potters in ancient Greece very busy. Their skills became refined and were considered as very important (although they were often poor people or even slaves).

References

- Beazley, J. 1951. *The Development of Attic Black-figure*. Univ. of California Press, Berkeley – Los Angeles; Cambridge Univ. Press, London, xiv + 127, 49 pls.
- Beazley, J. 1962. Attic red figure vase. – *Painters*, 1-3.
- Blavatskii, V. D. 1953. *Istoriya Antichnoi Rospisnoi Keramiki*. Moscow (in Russian).
- Boardman, J. 1985. *Greek Sculpture. The Classical Period*. Thames and Hudson, London, 251 p.
- Bothmer, D. von. 1975. *Greek and Roman Art*. London.
- Simon, E. 1986. *Die griechischen Vasen*. München.
- Paul, E. 1982. *Antike Keramik. Entdeckung und Erforschung bemalter Tongefäße in Griechenland und Italien*. Koehler & Amelang, Leipzig.