

Functional Archaeological Pottery Analysis Thailand

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Ceramics are almost always found in quantity at every archaeological site. Pottery is a kind of ceramic that has been produced and used by man since prehistoric times. Archaeologists use it as a prime source of evidence for understanding the past and the socio-cultural development of humans. Early vessels were formed by a simple paddle and anvil method and then placed in an open fire. Later, when civilizations became more sophisticated and technology developed, vessels were formed with the aid of a potter's wheel and fired in kilns.

Determinants of Pottery Shape

The shape of pottery is generally determined by four factors: (1) function; (2) raw materials; (3) cultural contacts; and (4) the date of production.

Function is normally the main factor that determines the shape and other physical characteristics of pottery. A cooking pot, for example, needs to have a wide opening at the mouth, a rim for supporting a cover to retain the heat so that the required temperature can

be reached during cooking, a suitable shape and size for containing quantities of food for cooking, etc. The most common form of a cooking pot is a globular body with a round base that fits over the opening of a stove.

Pottery used for rituals generally differs from that used for utilitarian purposes. Some types of domestic pottery, though, may have been transformed into ritual vessels, such as those used for burials as grave offerings.

Raw Materials determine the final form and characteristics of pottery. Clay is the primary raw material used for pottery. Clay must be prepared properly by adding certain materials, or temper, to give it a satisfactory texture. Different sizes of vessels require different proportions and types of clay and tempering material. A larger pot, for example, needs larger grains of sand and grog must be added to the clay so the tempering material can act as a bonding agent to help in holding the clay particles together during the forming and firing procedures. A large pot also requires a coarse-textured clay which lends itself to simple forms with thick walls. Conversely, small and medium pots can be

formed from fine clay with high plasticity and an adhesive quality. Therefore, they can easily be formed into more complex shapes with applied elements such as a spout, handle, or pedestal, and elaborate decoration can be applied to the surface.

Cultural Contacts between different potting centres promote the exchange of ideas. New techniques in pottery methods, forms, and designs can result from an interchange of ideas amongst cultures, and often both new forms and imitations result from the exchange.

The Date of Production can be used as a determinant because potting techniques and forms serve as chronological markers which may help to define an evolutionary development.

Determinants of Pottery Functions

The function of each type of pottery is generally determined by at least two cultural factors: the economy and tradition.

Economy can be further divided into two major types: (1) a food foraging economy, which is an economic system that depends on the natural surroundings. Societies with this type of economy are usually mobile and make seasonal movements to fulfill their dietary needs; and (2) a food producing economy, a system that depends more on domesticated plants and animals than the natural environment. Societies with this type of economic system are normally sedentary ones

with a complex form of social organization. The economic system seems to be the cultural factor that has had the most influence on the manufacture of pottery.

Tradition is generally characterized by basic ideas shared by the entire society; controlling power that can effectively regulate the activities and attitudes of its members; social and cultural standards which serve as models for its members; and a significant relationship with the lives of its members. Research suggests that the development of pottery production paralleled that of society as both became increasingly more complex.

Functions of Pottery

Humans developed the technology of making pottery to fulfill their basic requirements for daily life. Certain types of pottery were used for ritual ceremonies, or as status markers, or as luxury items for inter-regional trade. The technology of pottery played a supporting role in the early development of society. Pottery is normally found in archaeological sites on the surface of the ground, or in stratigraphic excavations, or in human burials, particularly containers for the bones of children.

Based on function, ancient pottery can be classified into two main groups: (1) domestic pottery; and (2) special purpose pottery. It should also be noted that sometimes the two functions overlapped and domestic pottery

was transformed into special purpose pottery such as a ritual vessel.

Domestic pottery comprises vessels made for the needs of daily life such as preparing, cooking, and storing food and liquids. Different activities sometimes require vessels of different forms or materials. The forms are mainly simple and plain. Cooking vessels are usually unglazed.

Special purpose pottery includes vessels and objects produced for a specific and limited purpose, such as those made for grave offerings.

Method of Pottery Study and Analysis

The methods used for analyzing pottery range from simple, such as using the eyes and hands to see and touch the specimens, to complex methods which employ sophisticated scientific instruments to identify the chemical and physical properties of the body. The most commonly used methods are typological analysis where an attempt is made to classify pottery into types based on form and function; and textural analysis where components of the raw material are identified and classified.

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