

Utilization of primitive fire systems to obtain effects of aesthetic and economical value

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Abstract:

From ancient historical studies in Egypt in the prehistoric era, as well as in the Far East in the pre-Christmas period and in South Africa, Namibia, Mexico and others, it was found that the vessels found in these ages were burned in an open fire or in pit firing and not in fire furnaces in the sense we know Now, which consists chimney and a fire home separated from wares , the primitive open fire was the prelude to the emergence of ceramic fire furnaces now recognized, the systems of primitive fire resulting in forms of black effects due to carbon rising from the fire, By experience in ancient times the potters knew that carbon blocks pores And used the technique to produce vessels for storage of liquids and drinking water, and because the fire in prehistoric times was low (750-800) degrees Celsius the pots were high porosity, so they used the smoke to produce non-porous black vessels to store liquids and this appeared in the ancient Egyptian at some time Prior to the date, the pots with the black top pottery (and inside also black) were spread out and were produced for storage of liquids and for funerary use. These techniques disappeared in the following Egyptian civilizations due to the appearance of lime clays which was burned at a temperature higher than the Nile silt (850 – 1050 °c) .and so The fire furnaces with the fire home was separated from wares were appeared, and thus the vessels became porous due to the high porosity and red color due to the oxidation in furnace. Therefore, they were no need to the black-top pottery technique in which carbon was used to fill the pores. The method of carbonization is found in Egypt, Africa and Mexico and is still the same as the primitive method in Africa and Mexico. In the modern and contemporary era, the open fire or pit was spread to seek the aesthetic effect of smoke, not for use as it was in ancient times, in addition to these fire systems also have distinct aesthetic effects. They are also economical fire. Recently, in America and Japan, these systems fire spread to achieve aesthetic effects. The experimental study of researcher was an attempt to benefit from the historical study in the proposed fire and build on it to obtain effects of aesthetic value and color.

Key words:

Pit firing - Fuel - Pottery – Smoking- Reduction