Standardization in Khmer Ceramic: a case study of Thnal Mrech Kiln Site.

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In January 2007 and March 2008, the Department of Monuments and Archaeology of Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA Authority), in collaboration with the National University of Singapore (NUS), conducted an archaeological studies, include mapping, excavating and analyzing the Thnal Mrech Kilns (TMK), their morphology, their productions, their chronology, and their typology. The radiometric dating on various charcoal samples collected from these kilns, suggesting different dates ranging from the mid tenth century to early thirteen century.

The ancient kilns structures (TMK 01 and 02) using a crossdraft technology, as the sloped floors with inclination approximately 27º, so the air intake at the front of the kiln is lower than the exit point at the back, a natural draft will occur, and The higher the exit point take the draft as vent of the kiln.

Amount the surface collection at TMK site and the total of 10,009 artifacts were recovered from TMK 02, could be classified according to Khmer linguistic terms for ceramics, defined by both shape and function, such as *Kpoeurng*: roof tile, *Danlap, Kotth, Khuoch, Ak kambor*, and *Chan*: Small container, *Tho, Ka-am, Chhnang, Krala,* and *Phoeng* and *Peang*: Large containes, and unidentifiable pieces.

Evidences on ceramic walls suggest three techniques used in making pottery at Thnal Mrech, within the decoration which consists of profiles cut into the vessel wall and of combination of lines, motifs incised or impressed, and molding.

In general, glaze observed on ceramics taken from TMK 02 comes in four varieties: common Kulen green, hay yellow, milky white, and light brown. Green glaze is the majority color, but we could think that all of these colors just come from the same glaze, but they had firing in two differences atmosphere (Oxidation/Reduction Atmospheres). The green is the reduced color of the iron present in the glaze and the yellow is the oxidized color of iron, and the clay colors will differ as well, the reduced clay will have a grey or darker color and the oxidized clay will have a light sandy or whiter color.

This presentation is divided into two study ceases. In the first cease we will examine pottery technology: the physical and characteristics of clay and temper and the art of decorated ceramic vessels in clay. In the final we will work out on the standardization hypothesis: We use measurement of standardization in ceramic as evidence for specialized craft production. The analysis and interpretation of ceramic wasters remains at Thnal Mrech kiln Site, in Angkor region, Cambodia, allows archaeologists to accomplish varied result: establish a time scale, document interconnections between different areas, and suggest what activities were carried out at particular sites. These techniques and theories used to bridge the gap between the recovery of ceramics and their interpretation within archaeological contexts.