Spatial Orientation in Pottery Kilns

Monty G. Warren
Professor McDaniel
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Typed by E.B. Robinson III
Analysis of an excavated pottery site is a complicated process which encompasses numerous factors. The archaeologist must consider types and quantities of shards and kiln furniture. The kiln structure and any other features are also very important. All of these are frequently written about, but strangely enough spacial arrangement has not been studied. This is very important because the location of features in relation to one another can determine the manner in which a pottery operated. Once operating techniques have been established, the archaeologist is free to investigate effects that the pottery may have had on its community.

There are many different ways in which potteries were arranged. Many potters operated out in rural small communities, and others catered to larger towns and cities with their pot shops located in the middle of town. One example is a potter from North Yonmouth, Maine named Nathaniel Foster. He operated his pottery from 1807 until his death on December 27, 1853. From the time of his death until 1888, Nathaniel's sons, Benjamin and William Henry operated the pottery which, occupied the northeast corner of Main Street and Gooch's Lane, now East Elm Street. It was housed in a long building.
The Foster Pottery was obviously in town and everything necessary for pottery making was included in the big building. Such a self-contained pottery contrasts interestingly with potteries that separate facilities for the various steps in making pottery. An example of such an arrangement is Norman Smith's operation in Lawley, Alabama. The site is still fully intact because the operation is a recent one which is either still operating or has shut down within the last year. The Smith arrangement is significant because it is similar to some formats from the past that interest us. Mr. Smith is one of few folk potters still surviving. He has been a potter since the early 1930's. Figure 1 reveals Norman's operation with the function of each area labeled. The mud mill is separate from all other areas. Storage and drying areas are both separated from other parts of the pottery. The "shop" contains several areas, with each serving a different purpose. Like Norman's shop, most potteries have a shop in which all turning, glazing, painting, and sometimes milling is done. These functions are housed together for
PLATE 301 Overall layout of Norman's operation.

Figure 1
convenience. Norman's klin is now under a roof attached to the shop, making the operation more centralized than in the past, as the two abandoned kilns reveal. Although Norman Smith's operation is more recent than we are interested in, it is a good example to use because it shows a good basic special arrangement of an American folk potter. The two potteries that have been discussed are useful to us to the extent that we have been able to see the difference between an urban pottery, which exists under one roof, and a rural one with numerous sheds and location for the various processes used in pottery making.

Spatial arrangement becomes a very important factor during an excavation. In the past two cases, the spatial arrangement of the potteries was implied or given. When excavating though, we must analyze the results found and attempt to piece together some sort of basic layout for the site. This is often neglected because the main interest of excavation in the past has been to reveal and the study the kiln. Spacial arrangement of the entire site is never treated as a significant factor alone.

In the Spring of 1973 the Virginia Historic Landmarks Commission's Office of Archaeology conducted salvage excavations at the site of a seventeenth
In this excavation, the kiln foundation was the only feature that was uncovered, making it difficult to consider spacial orientation. It is unknown whether any more features could have been excavated because the excavation took place only in the kiln, and in the immediate surrounding soil. This can be seen in Figures 2 and 3. Excavation in other areas of the site probably would have been beneficial to at least attempt to discover other features of the pottery. Edward Chappell agreed when he wrote,

*Only the kiln itself was uncovered in 1973, and further excavation at the site might provide evidence of the other activities associated with seventeenth century pottery production in Virginia.*

Spacial orientation at Glebe Harbor would be impossible to study with the present available information because the kiln was the only feature that was excavated.
FIGURE 2. Overhead view of kiln in later stages of excavation.
FIGURE 4  Kiln plan: hatching—upstanding walls; light stippling—elevated firemouths and pedestal; heavy stippling—lower firemoulins and ducts
Failure to excavate a site fully is not the only reason that spatial arrangement may be overlooked though. In Tennessee, one of the Haunted Hollow Kiln Sites (40JE31) was excavated. The kiln was found as well as three postholes forming a right triangle to the south of the kiln. The dimensions of the figure calculate to approximately 4' x 7', which is quite small (see figure 4). Mr. Polhemus says that the

Three postholes present in this area may represent a loading platform or part of a protective shed covering the kiln complex.

It is possible that the postholes are remains from a loading area, but the reader is left no explanation regarding what may have been loaded and where was it loaded to and from. He doesn’t leave any evidence that the area where the postholes lie is a good place for a loading platform. Secondly, he claims that it could possibly be part of a cover for the kiln complex. The orientation of the holes in relation to the kiln does not suggest that these holes ever covered the kiln. There are no corresponding holes on the other side included in the excavation. Instead, considering the dimensions of the area enclosed by the postholes, they
FIGURE 2
BLAZIER KILN (40JE31)
EXCAVATION PLAN

- A Profile
- Brick with Fired Clay
- Compacted Ash
- Pot Chamber Floor
- Slag
- Stoneware Sherds
- Shale Rubble Fill
- Flue Vent Location
weren't likely loading or shelter for the kiln. With the evidence that Polhemus presents to the reader, it appears that the postholes were part of a structure used for storage. It would have been a prime storage space for wood since a stoke pit and firebox lie right beside it. Mr. Polhemus may be correct in his assumptions about the postholes, but had he approached the spacial orientation as an important factor, he would have made it clear to the reader why he reached his assumptions they would have been based on practical reasoning.

The final excavation that will be examined is an 1860 pottery in Rockbridge County, Virginia. It is believed that Isaac Lam ran the pottery. Three features were discovered during the excavation, the first of which was the kiln foundation. The kiln was dome shaped and had no covering. Two postholes were found in the immediate area of the kiln, but Kurt Russ concluded that they were made after the pottery had ceased operations. Approximately five meters northeast of the kiln, a clay pit was discovered. Some rocks and wood fragments were also found in the pit. Because the feature had no identifiable form, Mr. Russ concluded that this feature was some type of foundation, because the placement of the rocks and bricks formed a pattern. The northern edge of this foundation is parallel to the road. It has been established that the road did exist when the pottery
operated. These factors lead one to believe that the foundation supported some type of structure requiring easy access to the road. It may have been a shed used for storing finished wares, allowing easy loading access onto carts. There are other possibilities for the foundation, but there seems to be a connection between the use of the road and the use of the foundation, considering their parallel lines. Perhaps if this site is analyzed with spatial orientation in mind, a better picture of the operation techniques of the pottery may be acquired.

Earlier, the reader was confronted with pottery layouts form sites that were unexcavated. The rural folk potter was considered in contrast with a Maine urban potter. Differences in their operations were noticed. The spacial orientation of each pottery was a result of the environment in which it existed. When we later examined various excavation sites, spacial orientation was not evident because the potteries were not intact. Had each site been more fully excavated and then analyzed in a fashion that incorporated spacial arrangement of the excavated features, a fuller understanding of the pottery trade in the past could be had. Although spacial analysis has not documented, it seems to have a basis for merit because it is a logical use of all of the known features and findings within a pottery site. With more extensive research, it is quite possible that spacial orientation
could become an important key to understanding the pottery trade of centuries.

Pledged in full.

Monty J. Warren
Endnotes


5. Kurt Russ was the presiding field archaeologist throughout the excavation
Bibliography


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*I also consulted Kurt Russ several times for help.