

Food Fit for the Soul of a Pharaoh

The Mortuary Temple's Bakeries and Breweries

BY VANESSA SMITH

EGYPTIAN MORTUARY TEMPLES were more than just religious centers. They also served as the local representative of the state, combining both civil and religious administration. Often associated with towns, temples were provided with farmland by the state to employ large numbers of people and to produce agricultural goods. Largely self-sufficient, these temples were often called upon to provide revenue and labor for state projects. An example can be seen during the 20th Dynasty (ca. 1200–1080 BCE), when the temple of Medinet Habu paid the workmen who built and decorated the tombs in the Valley of the Kings.

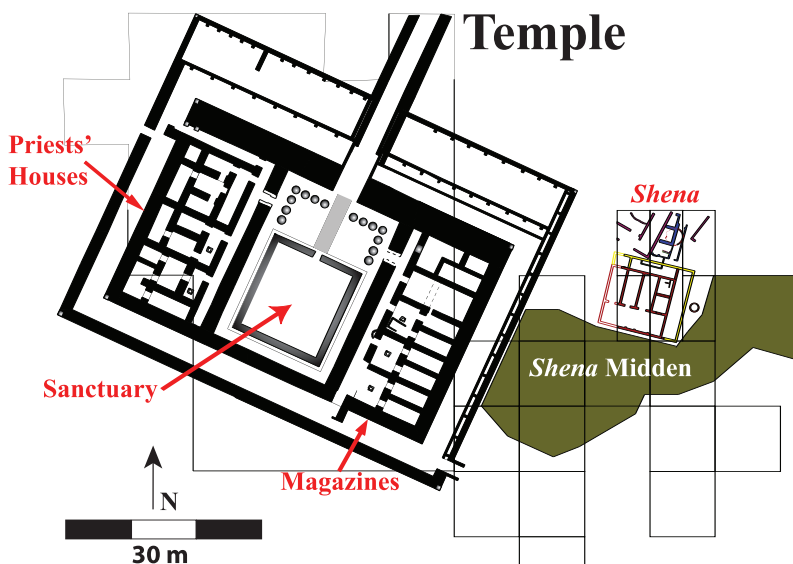
Despite the large number of temples excavated, little is known about their secular activities. In order to understand these, in 2004 we excavated the bakeries and breweries attached to Senwosret III's mortuary temple.

THE OFFERING RITUAL

Senwosret III's mortuary temple, more than a monument to his memory, was also the means by which the deceased pharaoh communicated with the world of the living, preserving *maat*—the ancient Egyptian concept of truth, law, and order in the universe. Through daily rituals the pharaoh's *ka* (spirit) entered the living plane, received vital nourishment, and became receptive to prayers and appeals by the living.

A key element in these rituals was the offering of a meal to the pharaoh's statue. Numerous temple inscriptions record the types and quantities of foods offered, including several varieties of bread and beer, as well as beef, fowl, goat, fruits, vegetables, honey, milk, wine, water, and salt. For example, the New Kingdom (ca. 1175 BC) temple of Ramses III records the daily preparation of over 2,000 loaves of bread, 144 jars of beer, 100

bundles of vegetables, 30 birds of various kinds, 10 fruit baskets, and 4 liters of honey. On festival days, these offering amounts could triple. The quantities were such that only a small portion could fit in the sanctuary to be presented directly to the divine images. The rest, though designated as offerings, went as payment for the upkeep and benefit of the temple as a whole.

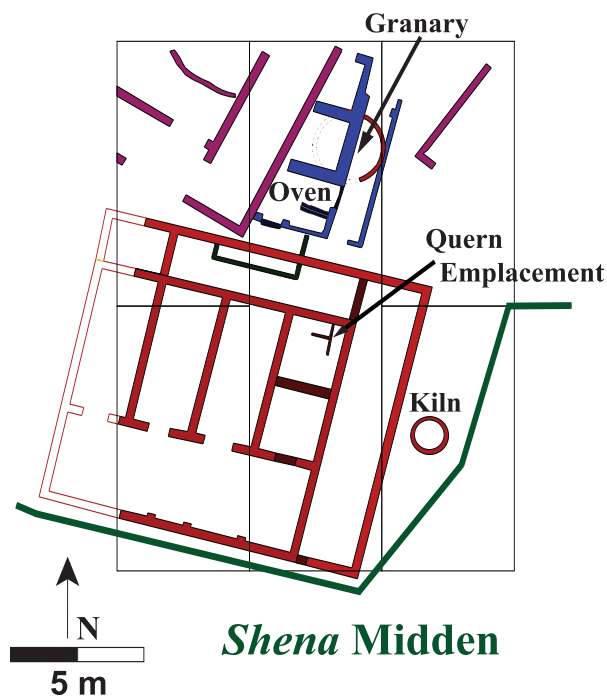


Map showing the temple's storerooms and the *shena*.

THE SHENA

As a non-monetary society, Egyptian wages, pensions, and taxes were paid in kind, usually in the form of food. Dealing with such bulk goods required standardized sizes and weights to ensure that employees received their fair wages. Every temple had an economic wing known as the *shena* to coordinate the provisioning and distribution of these supplies. Besides cooking foods and producing some crafts, the *shena* also oversaw agricultural lands, animal husbandry, and trade with other temples and government institutions.

The *shena* attached to Senwosret III's mortuary temple is the first one from a late Middle Kingdom (1850–1650 BCE) temple context to be excavated. Although every temple had a *shena*, fewer than ten have been archaeologically identified,



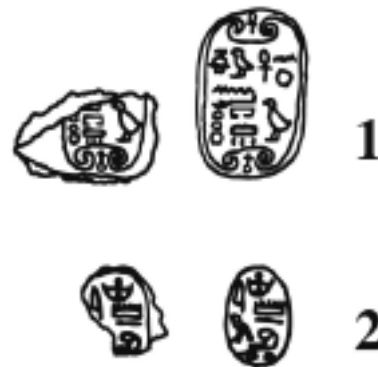
Plan showing the *shena*'s three different construction phases.

even fewer have been investigated, and none have been published. Recent textual studies reveal some of the functions of the *shena*. Our excavations at the *shena* substantiate that it provisioned the temple, feeding on-duty staff and producing

many different goods for distribution and payment of the temple's workforce. Over its lifetime, the *shena* was completely rebuilt at least three times, but its primary function was always to bake bread and brew beer.

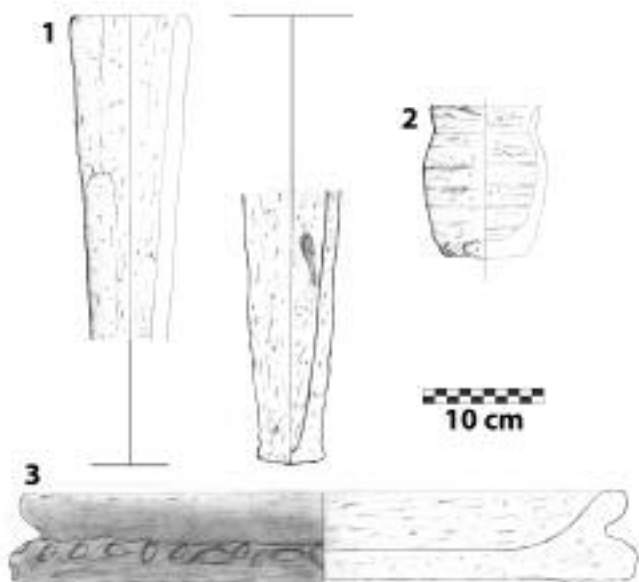
FOODS PROCESSED IN THE SHENA

Bread and beer were staple components of the Egyptian diet, the offering ritual, and the currency of wages. Manufactured from the same raw ingredients, primarily barley and emmer wheat, their production was often paired. Structures found within the *shena*, such as ovens and quern (grinding stone) emplacements for grinding grain, attest to the baking activities carried out there. Although the mortuary temple had large storage facilities, the *shena* had its own internal granary to ensure the efficient production of bread and beer. Finished goods were then stored inside the temple in a series of rooms to the west of the sanctuary. As indicated by a seal impression found with the title "steward of the bread storeroom," specific storerooms may have been dedicated to storing specific products.



Two seal impression fragments were discovered in the *shena*. Their reconstructions translate as (1) "steward of the bread storeroom" and (2) "The beer brewer (named) Amenemhat." Other seal impressions indicate that the *shena* received goods from the temple of Osiris at Abydos, from the *ka* chapel of Senwosret I at Abydos, and from the probable temple or *ka* chapel dedicated to the 17th Dynasty pharaoh Sobekemsaf I.

The ancient Egyptians preferred their bread in the form of breadsticks—sometimes over a meter in length—baked in long ceramic cylinders called bread molds or as large flat loaves—sometimes a meter in diameter—formed on bread trays. Bread molds and bread trays had standardized shapes and sizes to ensure equal portions for wages. It was frequently necessary to break the bread molds in order to remove the



These three ceramic types were among the most common found in the *shena*: (1) the top and bottom of a cylindrical bread mold (never found intact), (2) a beer jar, and (3) a bread tray.

breadsticks whole. As a result we recovered about 17,200 broken bread molds, as well as numerous bread trays from the *shena* debris.

Another seal impression reveals that a man named Amenemhat brewed the beer for the temple. Unlike bakeries, which have ovens, beer brewing did not require specific architectural features. Beer was made in large storage jars where mashed grain and water could ferment for a couple of days. The resulting watery porridge, though not very alcoholic, was rich in nutrients. A version of this porridge-beer, called *bouza*, is still made in Egypt today. The porridge mixture was then strained and poured into beer beakers of a standard volume, roughly equivalent to a modern pint, to ensure the equal distribution of beer rations to workers. Excavations in the *shena* unearthed about 12,500 beer beakers.

Wine was another important beverage processed in the *shena*. Used as an offering in the daily ritual, this luxury item was imported primarily from the Nile Delta and the Fayum where grapes were cultivated and fermented. It arrived in large storage jars sealed with mud stoppers. We recovered hundreds of stoppers from the *shena*, indicating that the wine was probably decanted at the *shena* into smaller containers before sending it on to the temple.

The discovery of large numbers of flint knives and animal bones also indicates that meat processing took place within the *shena*. Although the large majority of these remains came from cows, we also found sheep, goat, gazelle, dog, donkey, and pig remains.

Fish procurement and processing was another *shena* activity as indicated by copper fishhooks, limestone and ceramic fishing net weights, and fish bones from catfish, tilapia, and Nile perch.

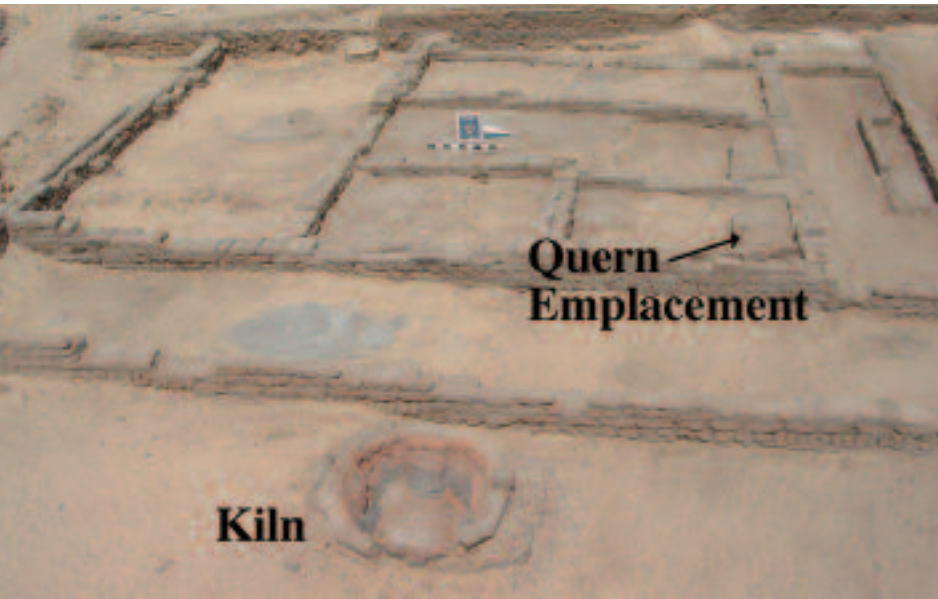
Fruits and vegetables were also components of the offering and of wages. We hope that soil samples taken from within the *shena* will eventually yield seeds or other material to help us discern any plants that were also processed there.



Copper fishhooks were recovered from the *shena*.

CRAFT PRODUCTION IN THE *SHENA*

The *shena* also witnessed craft production. Copper slag and copper implements suggest that metal objects were at least modified, if not actually made, here. The presence of whorls and copper needles may indicate that linen—used to anoint and clothe the pharaoh's statue and also to pay temple workers—may have also been produced here. And with the high incidence of ceramic debris generated from broken bread molds, it seems likely that the *shena* would also have had its



The middle phase of the *shena* had a kiln and a quern emplacement.

own means to produce pottery. The large circular oven immediately to the east of the *shena*—almost identical to kilns found at Amarna during the 18th Dynasty (*ca.* 1370–1355 BCE)—might have served this purpose.

THE CRUX OF THE EGYPTIAN ECONOMY

The *shena* was the crux of economic relations in ancient Egypt. Through it Egyptian temples interacted with each other and with the state and peasant economies. Besides procuring and processing the divine offerings that sustained the temple's cult, it provided work for laborers, paid their wages, pensions, and private mortuary cult endowments, and coordinated the tax base for the ancient Egyptian state. Our investigation of the *shena* at Senwosret III's mortuary temple presents a glimpse of how archaeological study can further our understanding of the economic and administrative organization of religious institutions. 🏠

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For Further Reading

Smith, Vanessa. "Recent Excavations of the *Shena* adjacent to the Mortuary Temple of Senwosret III at Abydos." *Bulletin of the American Research Center in Egypt* 186 (2004):20-22.

Wegner, Josef, Vanessa Smith, and Stine Rossel. "The Organization of the Temple Nfr-KA of Senwosret III at Abydos." *Ägypten und Levante* 10 (2000):83-125.

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 A black ceramic figurine of a seated female figure, possibly a goddess or a deity, displayed on a white geometric pedestal.

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