

The Religious and Societal Importance of Bread Ovens inside the Temples of the New Kingdom

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Abstract

The bread is considered one of the basic elements of human life throughout the ages. Bread was the basis of food for the ancient Egyptians, and was a major ingredient in offerings made in tombs and temples. The ovens inside the temples played an important role and had their religious significance in terms of providing bread as an offering to the gods, giving bread to the priests and workers inside the temple, and a societal importance in providing food to workers of the royal tombs and filling the state's needs of bread.

This research discusses the bread ovens inside the temples of the New Kingdom through various points represented in their names, shapes, locations inside the temple, the quantity of bread that the oven produces per day, and the shape of the bread that depends on the shape of the oven during the New Kingdom.

Key words: Bread, ovens, Temples, New Kingdom.

Introduction

The ancient Egyptian considered bread a basic food upon which his life was based, and therefore bread occupied a major center, and was even on top of the daily food of the ancient Egyptians. When we look at the lists of offerings that the ancient Egyptian left on the walls of temples and tombs, we find bread ranked first.

The temples possessed their own ovens for making their needs from breads.¹ Making bread relied on the food grains that were grown in the lands of the temples, which had the greatest impact in achieving the economic sufficiency of the industrial temple.²

The bread represented a major element in the life of the Egyptians,³ and their religious beliefs,⁴ and it had an important role in economic life due to its use as a means of barter in commercial transactions and to pay the salaries of workers, employees, and soldiers.⁵

The bread industry passed through several stages, starting with purifying and filtering the grains, then grinding and mixing them, and finally forming loaves, putting them and settling them in the Ovens, and for this, the bread production process required collective work.

¹ S. Delwen, Bread making and social interactions at the Amarna workmen's village Egypt (1999), in: WA, vol 31, 1999, pp. 121-144.

² ايهاب جميل, النشاط الاقتصادي للمعبد في الدولة الحديثة, ص 217.

³ R. Drenkhahn (1975), "Ein Brot", in LÄ I, 1975, p. 871.

⁴ Delwen, Bread making, p 125.




⁵ إيمان محمد المهدي (2009)، الخبز في مصر القديمة، القاهرة ٢٠٠٩، ص ١٣.

The number of workers inside the Ovens depends on the size of the bakery and the quantity of bread to be produced,⁶ Men worked in Ovens alongside women, although the share of women was greater than men in some work, such as milling and sieving. As for baking bread inside the ovens, both men and women participated in it.⁷

The era of the New Kingdom witnessed the participation of children in preparing bread, so the tomb of Qun-Amun at Thebes depicted Children sifting and sieving operation.⁸

The names of Bread Ovens:

Ovens were known in ancient Egyptian texts by several names:

	hAty ⁹
	rtH ¹⁰
	wabt ¹¹

Bakeries in ancient Egypt can be divided into three types; home bakeries, royal bakeries and temple bakeries

Temple's Bread Ovens

The bread was necessary for Temples to make daily offerings to the gods. Feeding the priests who perform the daily rituals of the temple gods, it was necessary to have ovens attached to the temples, which was confirmed by excavations in which wabt and nAyt Ovens were found attached to the temples to produce bread.

The temples of the New Kingdom had a lot of ovens for examples:

- The ovens of Karnak Temple in the southern part of the pillared hall (Temples of Tuthmosis I and II) where Round, conical, and rectangular furnaces have been found.¹²

In the southern part of the pillared hall in Karnak, a group of rectangular rooms separated by corridors, and each room contains a number of Ovens, There are two types of these ovens: cylindrical and rectangular, and thus they are suitable for preparing two different types of bread. In the first ovens, round-shaped bread was made. As for the second type, it was built of mud bricks - which were burnt due to frequent use - and were used to heat the molds in which conical bread was made.¹³

⁶ إيمان محمد أحمد المهدي، المرجع السابق، ص ١٣٠

⁷ إيمان محمد المهدي، الخبز في مصر القديمة، ص ١٣٠ .

⁸ Davies, The Tomb of Ken-Amun at Thebes, pl. 8.

⁹ Wb. II: 476(14).

¹⁰ Newberry, Beni Hassan I, pl. XXX.

¹¹ Wb. I: 284(3).

This last name was also given to the place of eating in the temple or the kitchen, see:

Ward, n. 986; FCD, p. 54.

¹² إيمان محمد المهدي، الخبز في مصر القديمة، ص 176 .

¹³ إيمان محمد المهدي، الخبز في مصر القديمة، ص 182 .

J. Jacquet, Fouilles de Karnak-Nord, quatrième champagne, in: BIFAO 71, 1972, pp.151-160.

- In the Temple of Ramses III at Medinet Habu six bakeries, were found next to the western gate.¹⁴

A group of six Ovens was found beside the western gate of the Temple of Ramses III in Madinat Habu. They are large pots, part of which are sunken in the ground and covered with a prominent part of silt. At a medium height, there is a small opening for ventilation. Large quantities of charcoal were found next to it. It is possible that they were used as stoves and sometimes to heat the molds, and the lower part of these furnaces served as the fuel place where there was a hole for making a fire.¹⁵

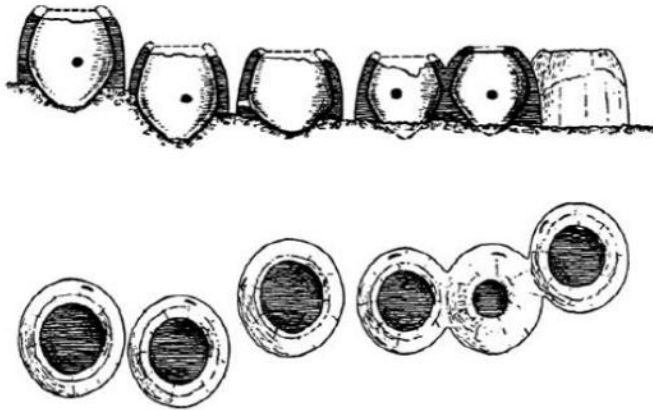


Fig. 2: Six Ovens found next to the western gate of the Temple of Ramses III at Medinet Habu.

After: U. Hölscher, *Excavation of Medinet Habu II*, P. 73, Fig. 63.

- Two types of Ovens were found cylindrical and square were found in the southern part of the Amarna Temple.¹⁶

In the southern part of the Amarna temple (Temple of Aten) two types of Ovens were found. The first is represented by a cylindrical clay kiln with a small round opening facing the northwest,¹⁷ and the second is represented by a rectangular kiln made of a wall in the northeastern corner, and on the eastern side of it there is a small, prominent opening. As for the western side, it was left open as a door or entrance, and in front there is a circular pit filled with ashes, and the floor of the furnace is also covered with a layer of ash.¹⁸ In order to light the fires, what is known as Al-Sharaqi wood was used, and this type of wood was rare, and the Temple of Amun in Karnak only got sixty pieces of this wood monthly, that is, on only two pieces per day.¹⁹

¹⁴ إيمان محمد المهدي، الخبز في مصر القديمة، ص 178.

¹⁵ إيمان محمد المهدي، الخبز في مصر القديمة، ص 182.

¹⁶ إيمان محمد المهدي، الخبز في مصر القديمة، ص 178.

¹⁷ B. Kemp (1987), Amarna Reports, IV, 1987, p. 73, Fig 6.3.

¹⁸ Kemp, Amarna, IV, p74, Fig 6.4.

¹⁹ بيير مونتيه، الحياة اليومية في مصر في عهد الرعامسة، ترجمة عزيز مرقس، ص 112.

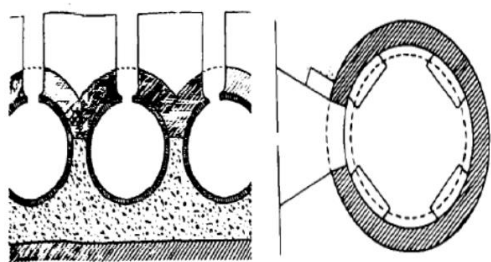


Fig. 4: Ovens from Tell el-Amarna.

After: Borchardt, Ein Brot, in: ZAS 68, p. 75.

- The ovens of Ramesseum Temple. In the huge field of mudbrick ruins surrounding the temple, excavations have identified the kitchen and bakery quarter.²⁰ (fig. 2)



Fig. 2: The kitchens and Ovens of the Ramesseum Temple.

After: L. Christian., "Les cuisines, les boulangeries et l'intendance", in: Memnonia X, Dar El-Kutub, le Cairo, 1999.

We note that the shapes of ovens used in ancient Egypt in general and in temples during the New Kingdom, in particular, are identical to the mud-brick ovens that exist so far in the Egyptian countryside.

The amount of bread produced per day:

The bread was a major component of the offerings that were offered in temples, whether in daily, monthly or annual offerings, in addition to offering it as part of the daily service rituals in the temple.²¹

²⁰ L. Christian(1999) ,Les cuisines, les boulangeries et l'intendance, in: Memnonia X, Dar El-Kutub, le Cairo, 1999.

²¹ إيمان محمد المهدي، الخبز في مصر القديمة، ص 231.

So the Ovens attached to the temples had to prepare the quantities of bread needed to make these offerings, as well as for the priests performing the daily rituals of the temple. Whereas the Temple of Ramses III at Madinat Habu, when celebrating the Opet Festival, required 11,641 loaves of bread and 85 pancakes a day.²²

As for the grants that the king gave to the priests performing rituals in front of the royal statue in the temple, each priest took 10 loaves of Sat bread, 10 loaves of different types of bread, and one pie.²³

The production capacity of these Ovens depended on the size of the temple, and perhaps there was a kind of arrangement between large temples and small temples, as was the case in the Middle Kingdom, Through a text found on the panel of Senusret III, we find that the bakery of the Temple of Mentuhotep II in Deir el-Bahari was produced daily about fifty loaves, fifty round pies, and three jars of beer, and this amount was not enough for it, so the temple of Amun on the eastern side supplied it with ten loaves and two jars of beer a day.²⁴

The shapes of bread:

Temple Ovens produced many forms of bread. The shape of the bread depended mainly on the oven in which it was baked. Most of them were round shapes due to the widespread use of cylindrical Ovens in which these shapes were baked.²⁵

Borchardt sees in a study of one of the types of loaves of a round shape that the loaf is on the upper side of a circular or spherical shape of 19 cm resulting from the drying process of the bread, and that such types of bread contain a circular cavity resulting from the presence of several protrusions, and the base of the loaf is soft and thin up to Its surface is about 5 cm and there is no trace of ash or wood charcoal on it.²⁶

While Gruss sees that there are some light traces of wood charcoal sticking to the upper and lower sides of the bread and on the upper side more than on the lower side.²⁷

64 bread-making molds were discovered in the Amarna temple. These molds gave us an idea of the shapes of bread inside the temples in the New Kingdom. Most of these molds, specifically 30 of them, were cylindrical with a circular base.²⁸

The pointed loaves were widespread among the shapes produced by the temple ovens, as well as the conical shapes that appear in the scenes of offerings.²⁹

Oval shapes were among the most stable forms of bread found in the temple of Queen Hatshepsut in Deir el-Bahari, as well as in triangular shapes and semi-circular shapes.³⁰

²² إيمان ، الخبز ، ص152

²³ إيمان، الخبز ، ص153

²⁴ ايهاب جميل، النشاط الاقتصادي في الدولة الحديثة ص225.

²⁵ إيمان، الخبز، ص77.

²⁶ L. Borchardt, "Ein Brot", in: **ZÄS** 68, 1932, p 73.

²⁷ J. Gruss (1932), Untersuchung von Broten aus der Agyptischen Sammlung", in: **ZÄS** 68 1932, P. 73.

²⁸ B. Kemp, *Amarna Reports*, p 76.

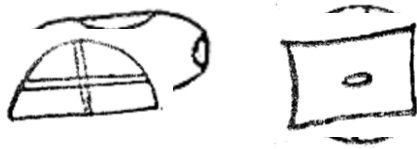
²⁹ See: E. Naville, *Temple of Deir El Bahari*, V, Pl. CXLI, CXLIII, CXXX.; Davies, & Gardiner, *Ancient Egyptian Paintings II*, pl. XC; N. Davies, *The Tomb of Rehk.mi.Re at Thebes*, p 39, P1 XLI.

³⁰ 104. إيمان محمد المهدي، الخبز في مصر القديمة، ص

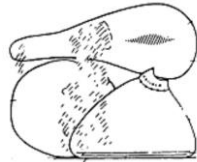
Because of the expansion in the use of cylindrical ovens during the New Kingdom, round and semi-circular shapes of bread spread, and the appearance of conical bread decreased in contrast.³¹

Through the scenes of offerings, we are able to identify some forms of bread produced by temples during the New Kingdom, as follows:

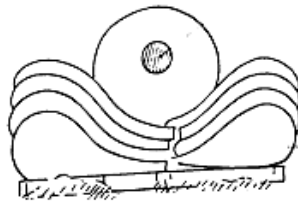
- Hatshepsut Temple at El-Deir el-Bahari.³²



- Temple of Amenhotep III at Kom El-Hitan.³³



- Temple of Thutmose IV at El-Qurna.³⁴



- Temple of Ramses II at Abydos.³⁵



³¹ إيهاب جميل, النشاط الاقتصادي للمعابد, ص 226

³² إيمان محمد المهدي, الخبز في مصر القديمة, ص 104 وما بعدها.

³³ L. Borchartd (1932), Ein Brot, in: ZÄS 68, 1932, p 73.




³⁴ L. Borchartd, Ein Brot, in: ZÄS 68, p 73.

³⁵ إيمان محمد المهدي, الخبز في مصر القديمة, ص 104 وما بعدها.

Bakery workers:

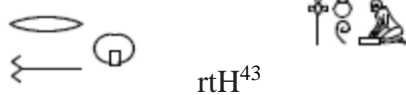
Bread makers represented an important sector among other sectors for workers doing various jobs inside temples. Given the multiplicity of stages of bread making from purifying, pounding, sifting, grinding, kneading, shaping, and flattening bread. A large number of that sect had to be present inside the temple Ovens.

● **The Gran miller:**

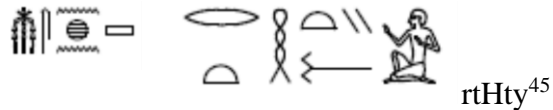
The miller used to grind grain to make bread, and he was known as  nDy³⁶. While the word  nDty was used to express the lady who performs the grinding process, this word continued to be used in the Middle Kingdom.³⁷ During the New Kingdom, the word  nD³⁸ used to express the miller who grinds anything, including the grinding of flour, and another word also appeared in the New Kingdom refer to the miller, which is msxn.³⁹ The word bnwt appeared in the scenes of bread making in the tomb of Khnty-Ka, James⁴⁰ think that it is the feminine of bnw which appeared in Berlin dictionary means miller⁴¹. Sometimes the miller was the baker.⁴²

● **The Baker:**

The baker was known in ancient Egypt by several names since the old kingdom. During the old kingdom called:



During the middle kingdom called:



During the middle kingdom called:



³⁶ Wb. II: 370 (14).

³⁷ This word came in the tombs of Bani Hassan during the Middle Kingdom, see: Newberry, Beni Hassan, I, pl. 29.

³⁸ Wb. II: 370 (14).

³⁹ Wb. II: 146 (9).

⁴⁰ James, The Mastaba of Khentika Called Ikhekhi, pp. 69-70, pl. XLII.

⁴¹ Wb. I: 457(5).

⁴² إيمان محمد المهدي، الخبز في مصر القديمة، ص 136.

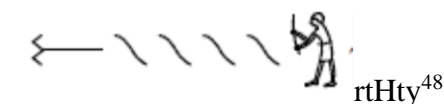
⁴³ Wb. II: 459(13).

⁴⁴ Wb. II: 459(14); FCD. p. 154.

⁴⁵ Ward, Index of Egyptian administrative and religious titles, p. 860.

⁴⁶ Wb. II: 459(12).

⁴⁷ AEO. I, 65*146



This word was used in the New Kingdom to express bakers who specialize in certain types of bread and pies. It may mean “a popular pie baker.”



Due to the importance of the baker's work inside the temples, these bakers had supervisors who monitored the progress of work and the quality of production, so we find the title of xrp anty Htp "chief baker" and the title imv-r xnt xnumHtp "Supervisor of the bakery Khnumhotep" This title has appeared since the Old Kingdom.⁵¹

There are many examples of bakers who worked inside the Ovens of the temples like Hr MS,⁵² who worked as a baker in the Temple of Amun, and sA ist, the baker of the Temple of Osiris, during the 20th dynasty.⁵³ In addition to the title of baker of the funeral temple of Ramses III in Medinet Habu.



rtH Hr- ms n tA Hwt wsr-mAat-ra mry-Imn.

Hor ms the baker of the temple of wsr maat ra mry imn.⁵⁴

The Religious importance of bread for the temples:

Many Ovens have been attached to the temples to meet their needs of bread and pies for the daily service offerings of deities and the bread used in the feasts that take place in the temples.⁵⁵

Deities were equal with humans in their need for food; Bread was used as food for them. Many texts and books of the other world indicated this meaning.⁵⁶ The two mascots. (1116 and 1117) in the pyramid text mentioned that the holy ennead has his bread.

- "He came to the Ennead to the sky, so that he might eat their bread".⁵⁷
- "He came to the Ennead to the Earth, so that he might eat their bread".⁵⁸

⁴⁸ Peet, *Great Tomb Robberies II*, pl. XVII: 1(2).

⁴⁹ إيمان محمد المهدي، *الخبز في مصر القديمة*، ص 146

⁵⁰ *AEO*. I, 64*141; *Wb*. I: 552(12).

⁵¹ إيمان محمد المهدي، *الخبز في مصر القديمة*، ص 147

⁵² ايهاب جميل، *النشاط الاقتصادي للمعابد*، ص 229

⁵³ Helck, *Materiellen Zur Wirtschafts geschichte des neun Reiches*, pp. 437-445.

⁵⁴ Peet, *Great Tomb Robberies II*, pl. XVIII: 1(2).

⁵⁵ محمد موسى، *الالاقاب والوظائف بمعابد طيبة*، ص 273; 147; إيمان محمد المهدي، *الخبز في مصر القديمة*، ص

⁵⁶ *Pvr*. §1116 d, 1117 b, 866 a, 1063 a; *Coffin Texts*, 165, 460, 215, 178, 179; *Pap. Ani*, nos.10470(15), *Pap. Nu*. *Brit. Mus.* n. 10477 (8).

⁵⁷ *Pvr*. 1116 d.

⁵⁸ *Pvr*. 1117 b.

In coffin text, mascots (no: 460):

- "I kissed the earth before the Master of Deities, that I might eat bread with him"⁵⁹

In book of the dead chapter no: (26:106)

- "I will not feed Osiris pies on the east bank of the Lake of Flowers"⁶⁰
- "Greetings to you, great deity, master of the food of heaven and master of the heavenly house, who supplies the deity Ptah with bread."⁶¹

That is why the priests made sure that the offerings offered to the deities contained different types of bread.

These offerings were presented in daily service rituals and religious celebrations in temples. In addition to daily offerings, bread was offered on the offerings of the monthly and annual feasts. The quantity of bread used in daily offerings is much greater than that used in religious feasts since it continues throughout the year.

During the reign of King Ramses III, the Medinet Habu temple used to get 5,679 loaves and 54 pancakes, while 11,341 loaves and 85 pancakes daily used to be required of the temple when celebrating the Opet festival.⁶²

Among the other feasts in which types of bread were offered as offerings to deities, were the victory feasts, in which kings celebrate victory in their wars by offering sacrifices to the main deities that gave him victory over his enemies.⁶³

King Thutmose III, after his victory over the peoples of Asia, presents to the god Amun-Ra offerings of bread and white bread. He also decided to increase the old offerings of loaves of bread to about 1,000 loaves after his victory in his first campaign.⁶⁴

The Ovens made bread for their employees, including priests, employees, and workers, these loaves differed in their quality from the loaves offered in the offerings. The larger temples dispensed with their surplus for other smaller ones.⁶⁵

We find that King Senusret III mentioned on a plaque that the bakery of Mentuhotep II in Deir el-Bahari produces only 50 loaves and 50 round pies daily. And that this quantity was not enough, so the temple of Amun on the eastern side served ten loaves every day.⁶⁶

⁵⁹ Coffin Texts, (460).

⁶⁰ والس بدج(1988)، كتاب الموتى الفرعوني (عن بردية أنى بالمتحف البريطاني)، ترجمة فيليب عطية، مكتبة مدبولي، الطبعة الأولى، القاهرة ١٩٨٨، ص ٦٧

⁶¹ Pap. Nu. Brit. Mus. n. 10477 (8).

⁶² H. Nelson & U. Holscher (1934), Work in Western Thebes 1931-1933, (Chicago 1934), p.19;

272 محمد موسى، الالقباب والوظائف بمعابد طيبة، ص

⁶³ 272 محمد موسى، الالقباب والوظائف بمعابد طيبة، ص

⁶⁴ 205 إيمان محمد المهدي، الخبز في مصر القديمة، ص

⁶⁵ 139 إيمان محمد المهدي، الخبز في مصر القديمة، ص

⁶⁶ Navile, XI th Dynasty temple. P. 59.

The social role of the temple Ovens:

The temples had an important social role. It were not isolated from life outside the walls. The ovens of the funerary temples were obligated to deliver bread, cakes, and pies to the tomb workers in western Thebes.⁶⁷ In addition to extending a helping hand to the smaller temples, as we mentioned before.⁶⁸

There are four documents from the New Kingdom that show the contributions of the funeral temples by delivering bread to the tomb workers. These documents are:

Document	Year	Temple	Quantity
O.DM101	24 th year of the reign of RamsisIII	Temple of Thutmose IV	36
O.Gardiner AG69	26 th year of the reign of RamsesIII	Temple of Thutmose IV	Not known
O.DM 447	34 th year of the reign of RamsisIII	Temple of Thutmose III	152
Giornale v.3rt 2,7,8	3 rd year of reign of Ramses X	Temple of Ramses III	23

O.DM101 , O.Gardiner AG69, O.DM 447, Giornale v.3rt 2,7,8. Haring⁶⁹ summarized these documents as follows:

Table 1: Delivering bread from funeral temples to royal tomb workers.⁷⁰

The delivery of bread and cakes took place during the period from the reign of Ramses II to Ramses X. The delivery of bread and cakes took place during the period from the reign of Ramses II to Ramses X. The delivery continued through the 19th and 20th dynasties.⁷¹ The village workers of Amarna did not produce their bread at all but rather relied entirely on the bread produced by the temple Ovens, which indicates that the temple economy has transcended its role to the economy of the surrounding areas.⁷²

Conclusion:

For the ancient Egyptians, bread was the basis of food and the main ingredient on the dining table and the offering table. Bread ovens appeared since the ancient state and had different shapes.

Funerary temples and temples for the deity contained special ovens to produce bread and meet the needs of priests and workers. We find famous temples such as Karnak Temple, Medinet Habu Temple, and Ramesseum Temple, which contained Ovens for bread production.

⁶⁷ B. Haring, *Divine Households*, p 259.

⁶⁸ ايهاب جميل, *النشاط الاقتصادي للمعابد*, ص 230.

⁶⁹ B. Haring, *Divine Households*, p 259.

⁷⁰ ايهاب جميل, *النشاط الاقتصادي للمعابد*, ص 230.

⁷¹ ايهاب جميل, *النشاط الاقتصادي*, ص 231.

⁷² B. Kemp (1972), "Temple and town in ancient Egypt". In: *SU*, Cambridge, 1972, pp. 657-80;

Kemp (1977), "The city of el-Amarna as a source for the study of urban society in ancient Egypt". In: *WA*, 1977. PP 123-39.

The bread ovens had religious and societal importance as follows:

Religious importance

The religious significance of the bread ovens inside the temples was represented in the following points:

- a) Fill the needs of priests and workers inside the temples to help them do their sacred work.
- b) Offer daily offerings to the gods.
- c) Bread is offered in various religious ceremonies.

Societal importance

The temples had an important social role as they were not isolated from life outside the walls. The ovens of the funerary temples were obligated to deliver bread, cakes, and pies to the tomb workers in western Thebes. In addition to helping small temples.

In times when there was a shortage of food, the temples used to provide wheat and bread to the people.

الأهمية الدينية والاجتماعية لأفران الخبز داخل معابد الدولة الحديثة

المستخلص

يعتبر الخبز من العناصر الأساسية لحياة الإنسان عبر مر العصور. كان الخبز أساس الغذاء عند المصريين القدماء، وكان عنصر رئيسي في القرابين المقدمه في المقابر والمعابد. لعبت الأفران داخل المعابد دورا هاما وكان لها أهميتها الدينية من حيث توفير الخبز كقربان للالهة، وتوفير الخبز للكهنه والعمال داخل المعبد، وأهميه مجتمعيه في توفير الغذاء للعمال في المقابر الملكيه وسد احتياجاتهم وسد احتياجات الدولة في الخبز.

يناقش هذا البحث أفران الخبز داخل معابد الدولة الحديثه من حيث اسمائها وأشكالها وأماكن تواجدها داخل المعبد وكميه الخبز التي ينتجها الفرن في اليوم وشكل الخبز الذي يعتمد على شكل الفرن، ويناقش البحث أيضا أسماء العاملين في المخابز، أهميه الخبز للمعبد، وأخيرا الدور المجتمعي الأفران الخبز داخل المعابد خلال الدوله الحديثه.

الكلمات الدالة: الخبز, الأفران, المعابد, الدولة الحديثة

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