Ancient Egyptian Bread from the Predynastic to the Old Kingdom

Kyoko Yamahana

Introduction

Bread was one of the most essential food in ancient Egypt. Many tomb reliefs and paintings bear bread-making scenes. In the literature known as the "Eloquent Peasant", bread was mentioned as for a daily provision. Also in the Middle Kingdom, there is a record which tells that a certain amount of bread and beer was provided to farmer and worker as a daily allowance (Erman, 1923, 105; 163: Suzuki, 1979, p. 11). Bread was therefore a main diet among all classes of people.

It was not only important in Egyptian diet, but also in the ritual context. Several phrases in the Pyramid Text describe bread as a principal offering to the deceased king. Moreover, Egyptian hereditary funerary stela has a motif which a deceased sitting in front of an offering table filled with bread. Most of the stelae in the Early Dynastic period actually indicate the deceased extending his or her arms over to the offering table, as if the deceased were about to take one of the bread from the table.

According to Dr. Nakao, bread is divided into two categories, raised bread with yeast and unraised. The former has comparatively soft and pleasant taste. There are two subdivisions in the latter category, namely thick porridge type and dry buscuit type (Nakao, 1979, pp. 126-129). There is no doubt that various kinds of raised and unraised bread have existed in ancient Egypt, but we have too little information to determine the types of bread existed in the ancient Egypt.

In this paper, I focused my subject on the raised bread which is called t/t^c. This t/t^c bread appears from the very beginning of the First Dynasty as one of the oldest hieroglyphs on the stelae from Abydos (Petrie, 1901, pl.XXXI). T/t^c invokes our interest since it requires a special mold in order to make a hemisphere shape. We now know from the later tomb reliefs that the mold is called *bd3*. The use of *bd3* type of mold seems to have been the most common method to make raised bread. The organic remain of bread is scarce (see Table 1), but if we add the information of bread mold, we may be able to see the history of t/t^c type of bread making more clearly.

Making of t/t^c type of bread can be seen frequently in the tomb reliefs. The commonest method of baking bread was depicted. In the method of bak-

ing, a servant places a dough in a heated bread mold. Then he covers it up with a lid, and leaves it for a while to be baked. Two or three kinds of bread molds are used in order to make some different shapes of bread. Amongst these molds, *bḏ3* is the most distinctive type of mold that we can follow the archaeological evidence (see Figure 1).

Putting stress on the origin of bread and bread making, I determined the period of my subject from the Predynastic to the end of the Old Kingdom. First, I would like to consider on bread and other corroborating evidence chronologically. Table 1 is prepared as a visual summary. Next, let us focus on the history of the bread mold. The archaeological remain of the bread mold would complement the information of *t/t*^{c} bread making. After discussing on *t/t*^{c}, let us turn our eyes to the kinds of bread. There are many kinds of bread mentioned besides *t/t*^{c} during the Early to the Old Kingdom. The last chapter is to consider the variation of bread appearing literally in the 1st to the 6th Dynasties.

Bread and other corroborating evidence

Several stages are required in the process of bread making. In order to secure the stable food source, cereal domestication is the principal procedure for obtaining grain. Then we require pounding and grinding to turn grain into flour. After these comes keading and the dough is put in heated mold. This whole process is depicted in the Old Kingdom tomb reliefs.

Some of these stages are traceable archaeologically. In Table 1, I intend to corroborate the evidence for bread and bread making using this table. Since the organic remains of bread are scarce, we are obliged to depend on the other sources which corroborate with bread. I arranged the evidence chronologically, although I found it difficult to determine the exact chronology. Because most of the publications do not give us the authentic datings, chronological order in this table would partly be ambiguous. I set 8 columns to expose the evidence of harvesting, grinding/milling, pounding, wheat/barley organic remain, other evidence of cereal, bread organic remain, baking scene, and bread miscellaneous. Dating and chronological division of this table is based on W. Willoughby and E. Stanton ed., *The first Egyptians,* McKissick Museum, The University of South Carolina, 1988, pp. 8-9.

In this table, initials A,R,S, and L are used to indicate the material's nature. A stands for an archaeological object, R stands for a relief, painting, or carving. S stands for a stela, and L stands for a literally evidence. These initials are attached with numbers. The letter and a number combination is the reference number in the *Bibliography for Table 1.* On the right of the reference number is a location from which was found.

Next, let me explore the evidence for bread and bread making in Table 1.

Harvesting

Harvesting correlates with grinding/milling, pounding, and cereal organic remain. A-1 and A-2 are now considered to be the oldest evidence of harvesting. From Tushka, stone tools with lustrous edge were found along with grinding stones. The site of Tushka, Kubbaniya, Esna, and Kom Ombo are all dated to the Late Palaeolithic period.

R-1 has a scene of harvesting. The process of harvesting seems to have been unchanged throughout the dynastic periods.

Grinding/Milling

A-1, A-2 are as stated above. A-3 is of Fayum A site. A-4 and A-5 are fortunately published, but many grinding stones of the later period were totally neglected and have not been published as everyone took the presence of querns for granted. S-1 and S-2 are the statues of grinding women. In those days, women servants were more often to be in charge of grinding.

Pounding

A-4 has a pounder, which was reportedly unearthed from Tasian village site. R-2, R-3 and R-4 are the interesting pieces. These are ivory and wooden labels obviously depicting some kind of royal ceremonies. It is not absolutely certain to state that these scenes indicate poundings. In Emery's *Ḥor-ahᶜ*, he gives two possible interpretations, "Man pounding a mortar, or perhaps stirring the contents of a cauldron." (p. 84). Later in the Old Kingdom, pounding scenes flourished in the tomb reriefs (R-1, R-11).

Wheat and Barley Organic Remain

Remains of cereals were fround from the Late Palaeolithic period. However, Wendorf revised his dating in his later article on *Science* that the grain found from the Late Paleolithic site was of much later in date. Grain has been found constantly since the Neolithic period onward. However, there is a controversy over identification of its species.

Other Evidence of Cereal

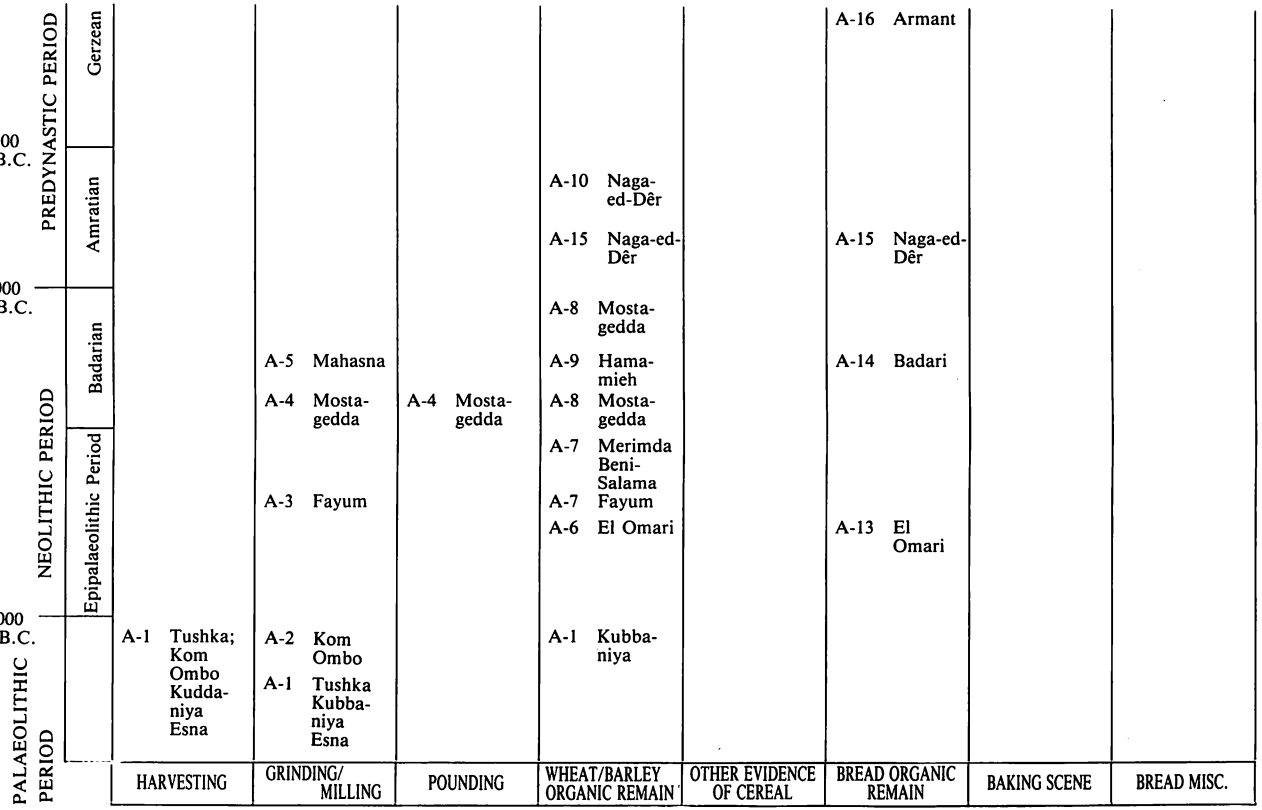
In addition to the organic remain, there are some reliefs depicting cereal. The earliest one would be on Scorpion's mace head. One official is holding a bundle(?) of wheat/barley up to his sovereign Scorpion (R-5). R-6 is curvings of cereal spikes. Because of the controversy noted above, it is difficult to identify their species by merely looking at these reliefs or curvings.

Bread Organic Remain

Due to Egypt's dry climate, some bread which were put in tombs of the deceased have survived with remarkable conditions. The oldest find is from El-Omari (A-13), and appears sporadically but constantly during the Neolithic

Table 1

2,230 B.C.	OLD KINGDOM	Dyn. 3–6	R–1 Saqqara	S-2 Saqqara(?) R-1 Saqqara S-1 (?)	R-1 Saqqara R-11 Giza	A-12 Saqqara	R-1 Saqqara		R-12 Saqqara S-5 Giza S-4 Giza R-11 Giza R-10 Giza R-9 Giza R-8 Giza	L-1 Saqqara L-2 R-18 Aswan R-17 Abusir R-16 Saqqara R-15 Saqqara R-14 Saqqara R-70 Helwan
2,700 B.C.	EARLY DYNASTIC PERIOD	Dyn. 1–2			R-4 Abydos R-3 Abydos R-2 Naqadeh	A-11 Saqqara	R-6 Abydos R-50 Hiera-conpolis	A-17 Saqqara	S-3 Nagadeh	R-13 Abydos
3,100 B.C.										
3,200 B.C.										



時代区分に関しては， K. Willouhby and E. Stanton ed. *THE FIRST EGYPTIANS*, McKissick Museum, The University of South Carolina, 1988, pp.8–9 に準拠した

to the Early Dynastic period. Figure 3 shows that 25 kinds of bread were present during the 1st to 6th Dynasties. However, we are able to identify none of these remains with any of the names in Fig. 3.

Baking Scene

It is not until the Egyptians started to build large elaborated tombs with reliefs that we see scenes of their daily lives including baking scenes. R-8 ~ 12 are the well-known tomb reliefs presenting bread-making and brewing. S-3 is a notable example of a woman kneading in a large BT jar. It is now in the Berlin Museum (No. 13832, 13833). This earthern figure apparently indicates a process of baking or brewing.

Bread Misc.

This colomn is for the picturesque evidence and a few literal evidence of bread. These evidence derived from the standardized baking scene category. Stelae of R-13 denotes that the word t/t^c had already been used as a phonetic symbol. R-13 ~ 15 are the stelae, R-16 is painted on the wall, and R-17 is a fragment of the relief. L-1 is a literature expressing early Egyptian's religious thought and his integrated universe. PT 61, 63, 655, and 1929 refer bread as a principal food offering for the deceased king. L-1 and R-18 are of the same personage called Karkhuf.

From these information metioned above, we see clearly that bread has a long history. Although the apparence of wheat or barley does not suggest bread-making directly, obtaining flour by means of crushing grain on the grinding stone is closely linked together with bread-making. We can assume from these evidence that the bread has been made since the Neolithic period or possibly earlier.

All the bread organic remains before the dynastic period have circular flat shapes. They do not resemble to the later t/t^c hemisphere bread. Next chapter is to seek after the prevalence of bread mold which had begun to flourish around the time of the unification.

Bread Mold

In Fig. 1, I listed the bread mold chronologically. As for a literal evidence, we see the first appearance of bread on the stelae from the 1st Dynasty. In these stelae, bread signs were purely adopted for the phonetical use. The shape of bread depicts a side view of a hemispherical object which is equivalent to the later t/t^c in hieroglyph. Since these stelae are attributed to the 1st Dynasty, it may be proper to suggest that the general concept of bread and its shape had already been developed by the time of the 1st Dynasty.

Unfortunately, we haven't had enough number of organic remains to hypothesize the appearance of t/t^c type of bread. However, the presence of

a bread mold shows a definite evidence for bread (t/t^c) making.

In the tomb relief of Ti, the bread mold is called *bḏ3*. The *bḏ3* type of mold can be seen in many tomb reliefs of the Old Kingdom (Fig. 1, R-1, R-8, R-9, R-10, R-11). The bread mold is generally a rough ware, badly baked with its color ranging from greyish brown to red brown. The rim shape is normally flat or flared, but sometimes projects inward giving the bread shapes like the one on the offering table which is narrowed at the bottom. Two types of bread molds are known, one with blunt point base and another with flat base. Both of them have crudely finished outer surfaces, usually not smoothed while the inner surface of the vessel is well-finished. The former mold seems to have longer history than the latter. In Figure 1, some of the bread molds were datable since the other material finds from the tomb bore kings' names. However, many others were impossible to pin-point their dates. For the molds which occured from the Late Predynastic to the Early Dynastic period, I quoted the SD dates as suggested by the authors.

The earliest presence of the bread mold is from Naga-ed-Dêr. This brown ware/rough brown ware cups co-appear with bag-shaped RB beaker (Dulham ed., A. Lythgoe, 1965, Fig. 138k) which is comparable to Kaiser's R81 type. Since R81 is attributed to Stufe IIb-IId1, the most probable date for these molds would be the Late Predynastic.

Some bread molds (Fig. 1; 1, 2, and 3) are dated to the very beginning of the Early Dynastic period. From the cemeteries of Armant, only one of this type of mold was unearthed. The SD date for this type is uncertain, but Mond and Myers put it in the Protodynastic period (Fig. 1; 2). Also from Mostagedda, the pottery of this type and W19 type jar were found together from the Grave No. 219. The dating of the latter jar was determined to be from SD 77-80 or the earlier (the 0 to the 1st Dynasty). Nos. 4-12 are attributed to the 1st Dynasty. Among these molds, Nos. 4-10 were from the royal cemeteries at Abydos. Therefore, the strict datings were possible according to the other material finds. Nos. 13-23 are put in the 2nd Dynasty to the 6th Dynasty range. These datings were determined in reference with the other datable context. Nos. 24-27 are roughly dated as the Old Kingdom period. No. 26 is a miniature bread mold with its height 14.8 cm while the others are in actual size.

These bread molds are found both from the cemetery site and the occupational site. Since the bread mold is evidently used for baking bread in the daily life, it may interpret that the bread mold was buried with the deceased in the prayer of the eternal food supply.

In the course of time, the bread mold tends to transform its shape. It was comparatively shallow vessel at the beginning. Then it became deeper. In the tomb of Antefoker (the Middle Kingdom), the bread mold is depicted as a long, narrow candle-like shape which resembles to *dpt* in Table 2, No. 13 (Davies and Gardiner, 1920, pls. VIII-IX). For example, the other bread

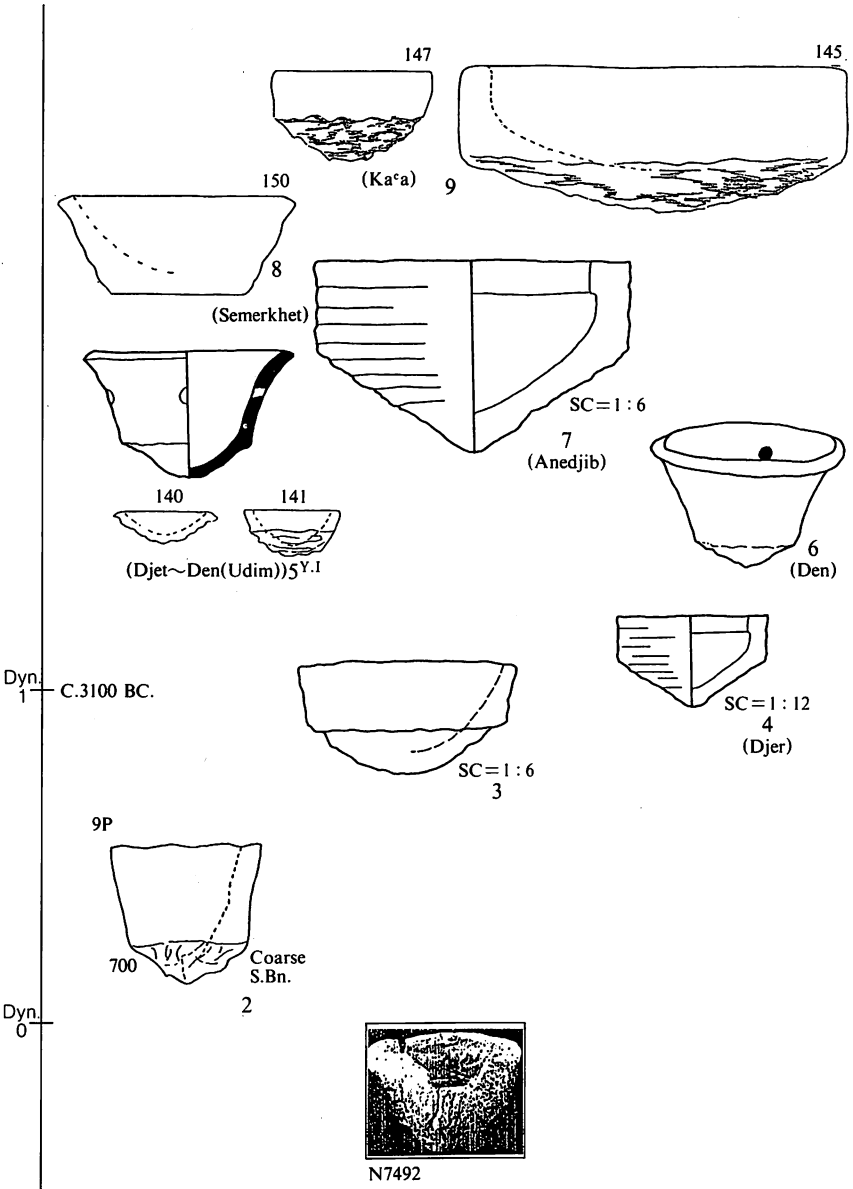

147
145
150
(Ka^a)
9
8
(Semerkhet)
SC=1 : 6
7
(Anedjib)
140
141
(Djet~Den(Udim))5Y.I
6
(Den)
Dyn. 1
C.3100 BC.
SC=1 : 12
4
(Djer)
SC=1 : 6
3
9P
700
Coarse S.Bn.
2
Dyn. 0
N7492

Figure 1-①

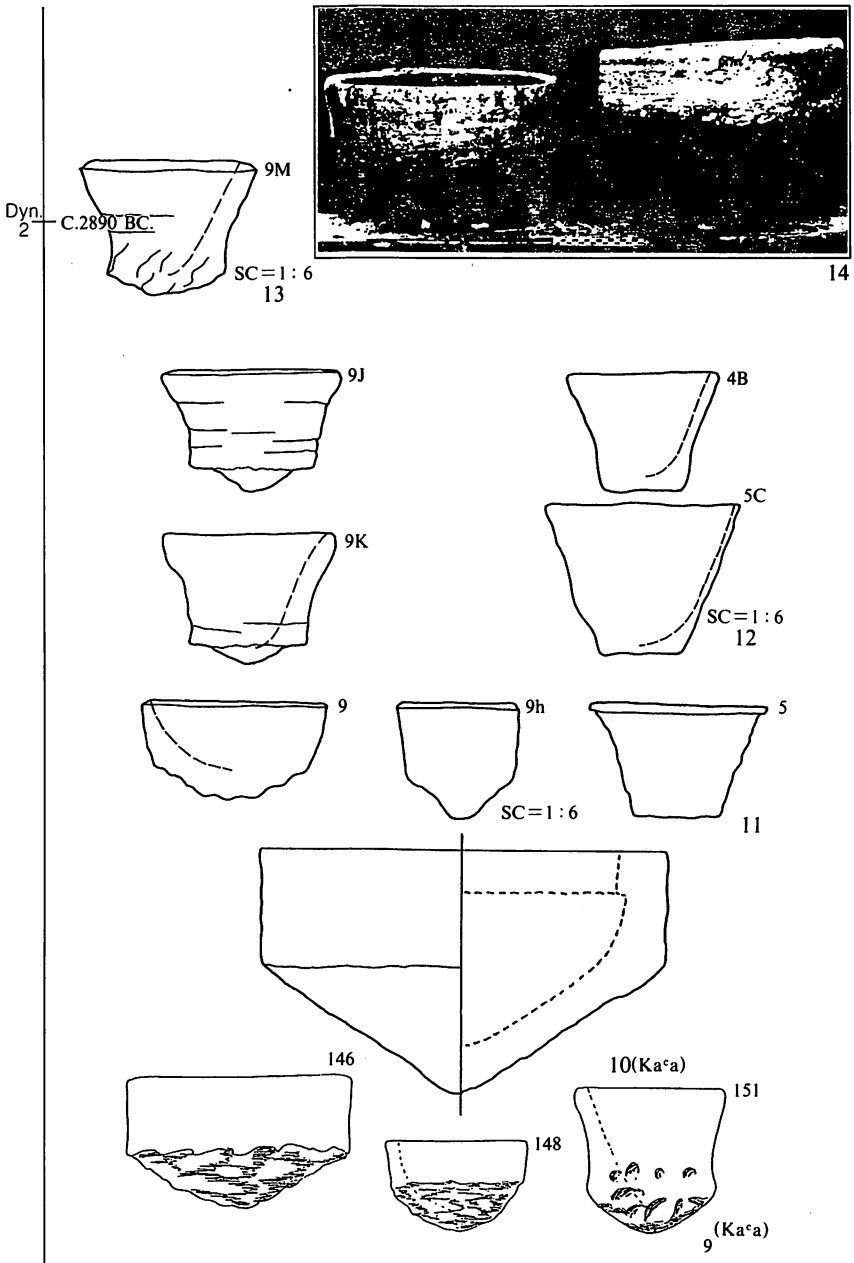
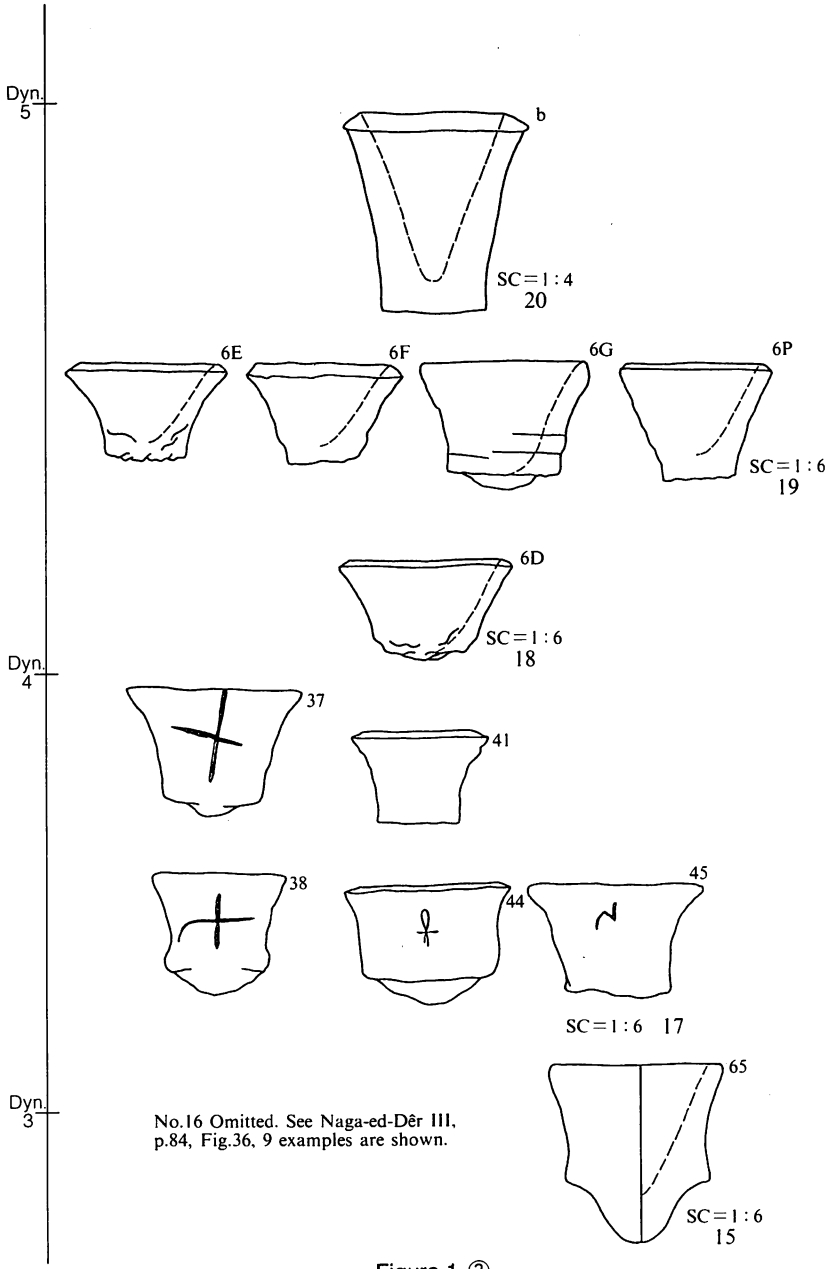

Dyn.
2
C.2890 BC.
9M
SC=1:6
13
14
9J
4B
5C
9K
SC=1:6
12
9
9h
5
SC=1:6
11
146
10(Kaᶜa)
151
148
9(Kaᶜa)

Figure 1-②



No.16 Omitted. See Naga-ed-Dêr III, p.84, Fig.36, 9 examples are shown.

Figure 1-③

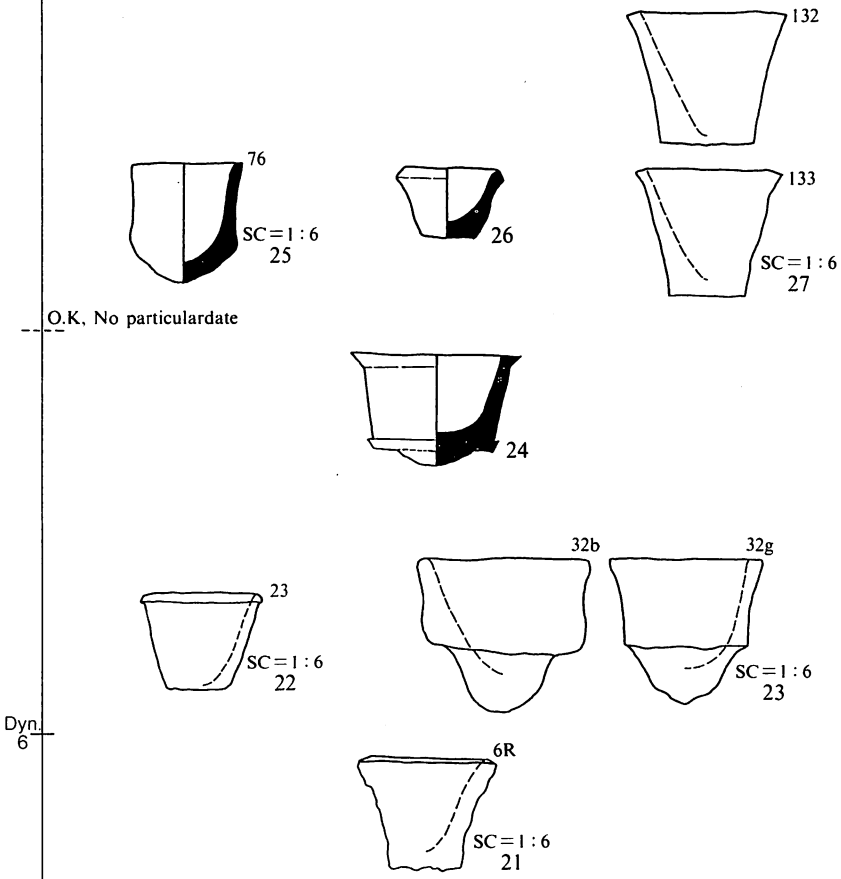

132
76
133
SC=1:6
25
26
SC=1:6
27
O.K, No particulardate
24
32b
32g
23
SC=1:6
22
SC=1:6
23
Dyn.
6
6R
SC=1:6
21

Figure 1-④

mold of the Middle Kindgom period that I saw at the Oriental Institute, Chicago, had a narrow cylindrical shape. Therefore, the change of the mold makes it more difficult to determine the name of its product.

We see cleary from Figure 1 that this *bḏ3* type of mold is used in the purpose of making hemisphere *t/tᶜ* bread. However, the later evidence shows us that the shape of bread has a wide variation. The early hemisphere form of *t/tᶜ* seems to have transformed to the conical shape. The conical bread also varied from the low, dull triangle shape to the high, acute triangle shape. In the Old Kingdom, four distinctive shapes are known, conical, cirular, hexagonal, and rectangular with round corners. Various kinds of bread were already present in the Old Kingdom, and we see that these are over 25 kinds of bread presented in Table 2. Among these bread, the commonest shape is the conical one. A few of them take forms of the circular, and the only one type is depicted as hexagonal. As for the recutangular bread with round corners, I hardly see its presence in Table 2 in spite of frequent appearence in the tomb reliefs. Therefore, most of the conical bread are probably the variation of *t/tᶜ* type of bread. The differences which we see in their names are the most likely came from the differences in ingrediants.

Bread in Variation

Next, I would like to note the variation of bread which may have derived from the *t/tᶜ*. In the Table 2, I listed the names of the offerings from the First to the Sixth Dynasty. The bread offerings are the main concern, but also I listed the grain offerings since I could hardly distinguish the grain from its product because of the following reason. For example, we see grain called *nbs* from the First Dynasty. The consonants for the word *nbs* are purely adopted used for the phonetical use, but the use of the determinative suggests appearance of material. The word *nbs* is sometimes attached with grain detrminatives, but it can as well indicate bread (Table 2 shows the word *nbs* is applied to both grain and its product (bread). These *nbs* and *tᶜ-nbs* are the distinctive examples, but there are several others with the same usage. The difficulty also lies when distinguishing bread from cake. There is a certain confusion caused by researchers' random usages of these terms. To avoid any confusion or misunderstanding, I would prefer to use the term "bread" solely.

Offering Lists examples Nos. 1-12 ranges from the Early to the Old Kingdom. No. 13 is an addition for reference. *Pth-Nfr*'s offering table from Hawara gives a useful information in determining the names of the offerings and their shapes. Each word in hierogryph is copied from offering list. The entire bibliography is attached. The determinatives are put in parentheses, to indicate the shapes and characters of offerings.

Table 2–①

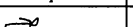
	f–wr	*f–rtḥ*	*šᶜt*	*f–wt*	*ḥtw*	*nḥrw*	*dpt*	
(13) Dyn. 12 Ptah-Neferu Hawara								(13)
(12) Dyn. 6, late S127 / 129 Giza								(12)
(11) Dyn. 6 Mereri Saqqara								(11)
(10) Dyn. 5 User-Neter Saqqara								(10)
(9) Dyn. 5 Ateta Saqqara								(9)
(8) Dyn. 5 Ptahshepses II Saqqara								(8)
(7) Dyn. 4 G4140 Giza								(7)
(6) Dyn. 3 Sekerkhabau Saqqara								(6)
(5) Dyn. 2 T.No. 3477 Saqqara								(5)
(4) Dyn. 2 Sahnesr Saqqara								(4)
(3) Dyn. 2 Ceiling Stelae Helwan	pl. xxvii P. 47	pl. xxvii			P. 17; pl. IX P. 31 pl. xvii			(3)
(2) Dyn. 1 Hemaka Saqqara								(2)
(1) Dyn. 1 Royal Tombs Abydos								(1)

Table 2–②

	psn	*šns*	*ỉˁ–imy*	*ḫnfw/ḫfnw*	*ḥbnnw*	*kmḥw–kmȝ*	*iȝḏt–hȝk*	
(13) Dyn. 12 Ptah-Neferu Hawara								(13)
(12) Dyn. 6, late S127 / 129 Giza								(12)
(11) Dyn. 6 Mereri Saqqara								(11)
(10) Dyn. 5 User-Neter Saqqara								(10)
(9) Dyn. 5 Ateta Saqqara								(9)
(8) Dyn. 5 Ptahshepses II Saqqara								(8)
(7) Dyn. 4 G4140 Giza								(7)
(6) Dyn. 3 Sekerkhabau Saqqara								(6)
(5) Dyn. 2 T.No. 3477 Saqqara								(5)
(4) Dyn. 2 Saḫnesr Saqqara								(4)
(3) Dyn. 2 Ceiling Stelae Helwan								(3)
(2) Dyn. 1 Hemaka Saqqara								(2)
(1) Dyn. 1 Royal Tombs Abydos								(1)

Table 2–③

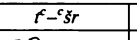
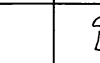
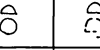
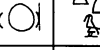
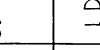
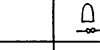
	pꜣᶜwt	*fᶜ–syf*	*fᶜ–ᶜšr*	*fᶜ–nbs*	*ᶜk*	*šnw*	*fᶜ–kbḥw*	
(13) Dyn. 12 Ptah-Neferu Hawara								(13)
(12) Dyn. 6, late S127 / 129 Giza								(12)
(11) Dyn. 6 Mereri Saqqara								(11)
(10) Dyn. 5 User-Neter Saqqara								(10)
(9) Dyn. 5 Ateta Saqqara								(9)
(8) Dyn. 5 Ptahshepses II Saqqara								(8)
(7) Dyn. 4 G4140 Giza								(7)
(6) Dyn. 3 Sekerkhabau Saqqara								(6)
(5) Dyn. 2 T.No. 3477 Saqqara								(5)
(4) Dyn. 2 Sahnesr Saqqara								(4)
(3) Dyn. 2 Ceiling Stelae Helwan					 pl. XVI			(3)
(2) Dyn. 1 Hemaka •Saqqara								(2)
(1) Dyn. 1 Royal Tombs Abydos								(1)

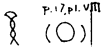
Table 2–④

	sḫt	*sṯt*	*swt–ḥtp*	*sbht-ḥtp*	*nbs*	*išd*	*sšt wʒd*	
(13) Dyn. 12 Ptah-Neferu Hawara								(13)
(12) Dyn. 6, late S127 / 129 Giza								(12)
(11) Dyn. 6 Mereri Saqqara								(11)
(10) Dyn. 5 User-Neter Saqqara								(10)
(9) Dyn. 5 Ateta Saqqara								(9)
(8) Dyn. 5 Ptahshepses II Saqqara								(8)
(7) Dyn. 4 G4140 Giza								(7)
(6) Dyn. 3 Sekerkhabau Saqqara								(6)
(5) Dyn. 2 T.No. 3477 Saqqara								(5)
(4) Dyn. 2 Sahnesr Saqqara								(4)
(3) Dyn. 2 Ceiling Stelae Helwan								(3)
(2) Dyn. 1 Hemaka •Saqqara								(2)
(1) Dyn. 1 Royal Tombs Abydos		 Petrie, Tarkhan pl. xl	i.e.. sšt(?)					(1)

Table 2–⑤

	sšt ḥḏ	*ʿgwt*	*npʒt*	*phʒt*	*phʒ*	*bʒbʒt*	*mst*	*bd*
(13) Dyn. 12 Ptah-Neferu Hawara								(13)
(12) Dyn. 6, late S127 / 129 Giza								(12)
(11) Dyn. 6 Mereri Saqqara								(11)
(10) Dyn. 5 User-Neter Saqqara								(10)
(9) Dyn. 5 Ateta Saqqara								(9)
(8) Dyn. 5 Ptahshepses II Saqqara								(8)
(7) Dyn. 4 G4140 Giza								(7)
(6) Dyn. 3 Sekerkhabau Saqqara								(6)
(5) Dyn. 2 T.No. 3477 Saqqara								(5)
(4) Dyn. 2 Sahnesr Saqqara								(4)
(3) Dyn. 2 Ceiling Stelae Helwan								(3)
(2) Dyn. 1 Hemaka Saqqara								(2)
(1) Dyn. 1 Royal Tombs Abydos								(1)

Table 2–⑥

	w3ḥ							
(13) Dyn. 12 Ptah-Neferu Hawara								(13)
(12) Dyn. 6, late S127 / 129 Giza								(12)
(11) Dyn. 6 Mereri Saqqara								(11)
(10) Dyn. 5 User-Neter Saqqara								(10)
(9) Dyn. 5 Ateta Saqqara								(9)
(8) Dyn. 5 Ptahshepses II Saqqara								(8)
(7) Dyn. 4 G4140 Giza								(7)
(6) Dyn. 3 Sekerkhabau Saqqara								(6)
(5) Dyn. 2 T.No. 3477 Saqqara								(5)
(4) Dyn. 2 Sahnesr Saqqara								(4)
(3) Dyn. 2 Ceiling Stelae Helwan								(3)
(2) Dyn. 1 Hemaka Saqqara								(2)
(1) Dyn. 1 Royal Tombs Abydos								(1)

t^{c}-wr
Nos. 3, 4, 7.
Leprohon states that this is "*wrt* cake" (Leprohon, 1985, No. 12. 1510). *Wrt* is literally the "great loaf", indicating circular shape. It doesn't seem to last long, since there is no occurrence of it from the Fifth Dynasty onward.

t^{c}-rth
Nos. 3, 4, 6, 8, 9, 10, 11, 12.
Murray, M. suggests this word as "Cake of dates" (Murray, M., 1904, p. 37; 21), while Davies et al. cite as "baked bread" (Davies, et al. 1985, pl. 13). No. 7 does not mention this species, but it is denoted in another stela of the 4th Dynasty, (Bibliography for Figure 2, No. 26, p. 56, 57).
It appears as early as the 2nd Dynasty, and its traditional shape appears to be circular.

š^{c}t
Nos. 6, 7, 8, 9, 10, 11, 12, 13.
It is simply mentioned as "bread or cake" by Murray, M. (1904, p. 39; 61), or " *š^{c}t* bread" (Leprohon, 1985, NO. 12. 1510; Davies et al. 1984, pl. 13).
The shapes of bread are conical with acute and round tops. It appears from the 3rd Dynasty onward.

t^{c}-wt
Nos. 8, 9, 10, 11, 12, 13.
"a loaf of cake" by Murray, M. (1904, p. 37; 21), and "*wt* loaf" by Davies, et al. (1984, pl. 13).
The shape of bread seems to be the same as *š^{c}t* with the exception of No. 13 which indicates a peculiar shape.

ḥtw/hwt
Nos. 3, 4, 6, 7, 8, 9, 10, 11, 12.
"Bread or cake" by Murray, M. (1904, p. 38; 32), and simply "bread" by Leprohon and Davies et al.
All the determinatives except No. 3 are conical. It appears from the 2nd Dynasty.

nhrw
Nos. 7, 8, 9, 10, 11, 12.
Murray, M. states as "cake" (1904, p. 38; 33), while Leprohon and Davies et al. agree on "bread".
No. 5 has a peculiar hexagonal shape, while others have the ordinary conical shape. It appears from the 4th Dynasty onward.

dpt
Nos. 3, 4, 7, 8, 9, 10, 12, 13.
Leprohon determines this as "bread". Murray, M. says "bread or cake" (p. 38; 34), and Davies et al," *[D]pw (sic)* bread".
No. 13 shows a long, thin loaf. Others indicate the ordinary conical shape. It appears from the 2nd Dynasty.

psn
Nos. 7, 8, 9, 10, 11, 12, 13.
"bread", by Davies et al. "cake" by Leprohon, and "bread or cake" by Murray, M. (P. 38; 35).
Nos. 7-13 show its circular shapes. It appears from the 4th Dynasty.

šns
Nos. 8, 9, 10, 11, 12, 13.
Murray, M. takes *šns* as "cake" (p. 38; 36), while Davies, et al. take as "bread".
It seems that *šns* is the major bread for breakfast as it is often mentioned in the list from the 5th Dynasty. Its determinative shows a conical bread on cups, while No. 13 has a gourdy figure which looks similar to *t^{c}-wt*.

t^{c}-imy
Nos. 8, 9, 10, 12.
"Bread of that which is in the ground(?)" (Murray, M., 1904, p. 38; 37).
No. 8 indicates a circular object. No. 10 has an oval rectangular shape. It appears from the 5th Dynasty.

ḫnfw/ḫfnw
Nos. 7, 8, 9, 10, 11, 12, 13.
Simply "bread" by Davies et al., while Murray, M. suggests "cake or bread" (p. 38; 38). Leprohon states *ḫfnnwt* as "fruit".
All the determinatives except No. 13 seem to indicate grain or fruit. No. 13 only depicts the product from *ḫnfw/ḫfnw* grain or fruit. It appears from the 4th Dynasty.

ḥbnnw
Nos. 7, 8, 9, 10, 11, 12, 13.
"Bread or cake" (Murray, M., 1904, p. 38; 39). "*ḥbnnwt* bread" (Leprohon, 1985, and Davies et al. 1984, pl. 13).
Most of the determinatives bear cups or baskets. No. 13 shows a circular object which must be the product from *ḥbnnw* grain. It appears from the 4th Dynasty.

kmḥw/km3
Nos. 8, 9, 10, 11, 12, 13.
"Bread or cake" (Murray, M. 1904, p. 38; 40).
Nos. 9, 11, 12 have interesting hexagonal shapes while No. 13 shows a convex lens object. This type of hexagonal bread are depicted in many tomb reliefs of the Old Kingdom. It appears from the 5th Dynasty.

i3ḏt-h3k
Nos. 8, 9, 10, 11, 12.
"Bread or cake" (Murray, M., p. 38; 41). Maspero suggests "Le gâteau de derrière le double". Davies et al, state simply "bread".
Nos. 8-10 show its circular shape. It appears from the 5th Dynasty.

p3ᶜwt
Nos. 9, 10, 11, 12.
"Bread or cake" (Murray, M., p. 38; 42), and "bread" (Davies et al. 1984, pl. 13).
The shape is probably circular as indicated in No. 10. It appears from the 5th Dynasty.

tᶜ-syf
Nos. 8, 10, 11, 12, 13.
"Bread or cake" (Murray, M., p. 39; 60), and "*zf* bread" (Davies et al. 1984, pl. 13).
Nos. 8, 9, 11, and 12 show the conical shapes of bread. No. 13 has a circular shape. It appears from the 5th Dynasty.

tᶜ-ᶜšr
Nos. 8, 10, 11, 12, 13.
"Roasted bread" (Murray, M. 1904, p. 38; 43). "Cooked bread" (Davies, et al. 1984, pl. 13).
The shape of this bread doesn't seem to have standardized. No. 8 shows it is a circular shaped object. No. 9 shows an acute edge of determinative. No. 13 has a shape similar to *kmḥw-km3*. It appears from the 5th Dynasty.

tᶜ-nbs
Nos. 7, 9, 10.
Murray, M. states "bread or loaf of sycamore figs," (p. 40; 79). Leprohon, "bread from Christ's thorn fruit", and Davies et al. "cake of *nbs* fruit". It apparently shows a product made from *nbs*. It appears from the 4th Dynasty.

ᶜk
No. 3.
Saad claims that *ᶜk* bread appears from the 2nd Dynasty (Saad, Z., 1957 p. 29, pl. XVI). However, the appearance of *ᶜk* is scarce in the Early Dynastic and the Old Kingdom. It is better known in the New Kingdom offering lists (see Brestead, *Ancient Record of Egypt*).

šnw
No. 7.
"bread" (Leprohon, 1985, No. 12. 1510).
Snw only appears in No. 7. It may be a phonetic rendering of the other bread.

tᶜ-kbḥw
Nos. 10, 12.
It sporadically appears from two examples of the 5th and 6th Dynasties. No. 10 takes circular shape.

sḫt
No. 7.
Sḫt only appears in No. 7. It may be a phonetic rendering of the other bread.

stt
No. 7.
"cake" (Leprohon, 1985, No. 12. 1510).
Stt only appears in No. 7. It shows circular shape.

swt-ḥtp
Nos. 8, 9, 10, 13.
Nos. 8, 10 and 13 have the circular shape except, No. 9 which depicts a side view of two bread on the table. It appears from the 5th Dynasty.

sbḫt-ḥtp
Nos. 9, 10, 13.
Depiction similar to *swt-ḥtp*. It is probably a variant of the former species. It appears from the 6th Dynasty.

nbs
Nos. 1, 2, 6, 7, 8, 9, 11, 12, 13.
Nos. 1 and 2 are inked on pottery. No. 2, contents of the pottery were examined, and it turned out to be the "*nbk*" fruit (Saad, Z., 1938, p. 52). Leprohon states that this as "Christ's thorn fruit" (Leprohon, 1985, No. 12, 1510), and Davies, et al. as "*nbs* fruit" (Davies, et al. 1984, pl. 13). *nbs* is regarded

identical to Christ's thorn fruit or Zizyphus fruit according to Manniche, L., *Ancient Egyptian Herbal,* 1989, p. 157.
It appears from the earliest time. In the 1st Dynasty context, it had phonetical value "*bs*". Owing to Emery's organic analysis, we now know *bs* is equivalent to *nbs.*

išd
Nos. 2, 4(?), 6, 8, 10, 11, 12, 13.
In Davies, et al. "*ᶜisd* fruit" (pl. 13). No. 2 read *ds,* inked on pottery. Contests are examined to be "grain of wheat" (Saad, Z., in Emery, 1938 p. 52). In Manniche's *Ancient Egyptian Herbal,* "*išd* is generally taken to designate the persea tree and its fruit," (1989, p. 122).
It appears from the 1st Dynasty, although it is uncertain. Since its phonetical order is slightly different from others. No. 4 seems to be the product of *isd.* To suppliment No. 7, *iš(?)* appears in another stelae of the 4th Dynasty (Bibliography for Figure 1, No. 26, pp. 56, 57).

sšt w3d
Nos. 1, 6, 7, 8, 9, 10, 11, 12.
"green *sšt* grain" (Murray, Leprohon, and Davies et al.).
Sšt w3d and *sšt hd* are indistinguishable in the early time. Both of them appears from the 1st Dynasty. Both the these must be one of the major grain in archaic Egypt.

sšt-hd
Nos. 1, 6, 7, 8, 9, 10, 11, 12.
"white *sšt* grain" (Murray, Leprohon, and Davies et al.).
As stated above.

ᶜgwt
Nos. 1, 6, 7, 8, 9, 10, 11, 12.
Murray, M. calims as "seed corn" (p. 36; 33, p. 35; 64). Griffith in *Beni Hasan III,* p. 30, says "yellow corn". Raisner G. in *A History of Giza Necropolis I* (1942), p. 462, fig. 280 claims "roasted grain", and Davies et al. interpret as "parched wheat/barley". It appears from the 1st Dynasty.

np3t
Nos. 7, 8, 9, 10, 11, 12, 13.
"seed corn(?)" (Murray, M., 1904, p. 39; 62). "*np3t* cake" (Leprohon, 1985), and "*np3t* bread" (Davies, et al. 1984, pl. 13).
It appears from the 4th Dynasty. Nos 7-12 indicate grain, while No. 13 shows its product.

pḫ3
Nos. 3, 9, 10, 13.
"lit. Divided Two Baskets" (Murray, M., 1904, p. 39; 62). In Wörterbuch, "split bread" (Brugsh, 503).
It sporadically appears in the 5th Dynasty and the 12th Dynasty. An example from the 2nd Dynasty suggests that *pḫ* is a kind of drink. Saad, Z. notes *pḫ* as "juice of the pekha fruit" (Saad, Z., 1957, p. 31).

b3b3t
Nos. 8, 9, 10, 11, 12, 13.
In *Beni Hasan III,* p. 30, Griffith states as "green corn". Maspero, M., suggests "lentils", and Davies et al. as "*b3b3t* grain".
It appears from the 5th Dynasty. No. 11 reads "*wwt(w)*", but it may take as one of the variant of *b3b3t.*

mst
Nos. 8, 10.
In Davies et al., "*m[z]wt* bread" (pl. 13).
It appears only in the 5th Dynasty context.

bd
Nos. 6, 10.
It scarcely appears from the 3rd Dynasty.

w3ḥ
Nos. 1, 2, 3, 6, 7, 8, 9, 11, 12.
Nos. 1 and 2 are inked on pottery. Saad states that this is "probably a variant of Carob" (Saad, Z, in Emery, W., 1938, p. 51). Murray, M., interprets as "Dourra corn/grain" (Murray, M., 1904, p. 36; 35, p. 40; 48). In *Saqqara Tombs I* says, "Carob beans" (Davies, et al. 1984, pl. 13). Manniche, L. denotes in her *Ancient Egyptian Herbal* that *w3ḥ* is rhizome of Cyperus grass (*Cyperus esculentis L.), (1989, p. 98).*
It appears from the 1st Dynasty. No. 3 seems to be a product of *w3ḥ.*

Conclusion

Hecataeus noted that Egyptian is "ἀρτοφαγος", lit. "bread-eater" at around 500 BC. (frg. 290). However, we are already aware that the habit of bread-eating goes far beyond Hecataeus. In this paper, I emphasized to summarize on bread which occurs from the Predynastic to the end of the Old Kingdom.

The first sign of making flour was found from the Palaeolithic site of Upper Egypt. Then the first remain of bread turned up from the Neolithic

El-Omari, Lower Egypt. Most of the bread remain of the predynastic period have circular flat shapes. From this evidence, we can assume that the circular flat bread is the common species throughout the Predynastic period.

We do not know exactly when Egyptian started to make t/t^c type of the bread. T/t^c is obviously raised with yeast and associated with the bread mold. Raised bread might have been common at least among the ruling class at the time of the unification. If this assumption is right, it would be a plausible explanation for the circulation of raised bread at the very beginning of the Dynastic period.

Although it would seem easier to make an unraised bread than to make a yeast-raised bread, it is certainly natural to observe that fermentation starts out easily in a hot climate like Egypt. So there has probably been existed a tradition to use fermentated food or drink since the earliest time. For an instance, one of the bread remains from Badari shows a sign of fermentation (Bibliography for Table 1, A-14). According to the ethnographical research, villagers in modern Egypt make bread by putting a bit of leftover dough as a starter (for quicker fermentation) (Wilson, 1988, p. 14).

As I have already stated, the apparence of the bread mold might be a good corroborating evidence of t/t^c making. The earliest find of the bread mold is from the Late Predynastic period (Bibliography for Fig. 1, 1). However, we cannot go beyond the Late Predynastic period since there is no mold of this type reported. Consequently, bread mold purely appears in the dynastic context. In other words, this bread mold issue reinforces the hypothesis that the culture represented as the Late Predynastic would be the direct ancester to the dynastic period.

From the Table 2, we now know that there were at least 25 kinds of bread presented by the end of the Old Kingdom. It is impossible to identify their ingredients except a few of them. It is also difficult to determine their shapes by their names (see Table 2). The bread which are designated by conical shapes are almost certainly made with the *bd3* bread mold.

The time before and after the unification is one of the darkest period in Egyptian History. More information is expected to be revealed for the study of Egyptian Predynastic to the Early Dynastic periods. In this paper, I dedicated to make a data-base of the bread, one of the most important food in Egypt. I sincerely hope that this paper would complement the study of archaic Egypt.

BIBLIOGRAPHY FOR TABLE 1

A-1
Wendorf and Schild, "The use of ground grain during the Late Palaeolithic of the Lower Nile Valley, Egypt.", in Harlan ed., *Origin of African Plant Domestication,* 1976, Stone tools with lustrous edges and grinding stones

A-2
Wendorf, F., et al., "Use of Barley in the Egyptian Late Paleolithic,", *Science* vol. 205 (1979), pp. 1341–1347, Grinding Stones from Tushka, Kom Ombo, and Kubbaniya

A-3
Caton-Thompson, and Gardner, E., *Desert Fayum,* Royal Anthropological Institute, 1934, vol. I, pp. 31, 32, vol. II, pl. VII; 2

A-4
Brunton, G., *Mostagedda,* London, 1937, 18 grinders from Tasian sites; pounder from 2800

A-5
Aryton and Loat, *Pre-dynastic cemetery at El-Mahasna,* London, 1911, pl. XIII; 3 (Grave H49, SD before 56), pl. XIII; 1 (Grave H45, SD before 41), Grinding stones

A-6
Barakat, H., "Plant Remains from El Omari", Appendix IV. pp. 109–114 in Debono and Mortensen ed. *El Omari,* AV 82 (1990), from A72

A-7
Caton-Thompson, and Gardner, E., *Desert Fayum,* vol. II, 1934, pl. XXV-XXVII, granaries, See also, Dixon, A., "A note on cereals in Ancient Egypt" in Ucko and Dimbley ed., *The Domestication and exploitation of plants and animals,* London, 1969,. pp. 131–142, Fayum; from the granary pits, Merimda Beni-Salame, Saqqara; from underground gallary of the step pyramid

A-8
Brunton, G., *Mostagedda and the Tasian Culture,* 1937, p. 33 (Tasian, pot contents), p. 58 (Badarian, abdominal remain)

A-9
Brunton and Caton-Thompson, *Badarian Civilization,* 1928, p. 63, No. 2000, contents of pot R81

A-10
Dunham, D., ed., Lythgoe, A., *The Predynastic Cemetery N7000 Naga-ed-Dêr,* Part IV, University of California Press 1965, p. 242, 246 (barley/oats)

A-11
Saas, Z., "The Pottery", Chapter XI in Emery, W., *Tomb of Hemaka,* 1938, p. 52 (1st Dyn., reign of Udim)

A-12
Lauer, Laurent, and Åberg, "Les Plantes D'ecovuertes dans les Souterrains de l'Enceinte du roi Zoser à Saqqarah", *Bulletin de l'Institut d'Égypte,* Tome XXXII, pp. 121–170
Helbeak, H., *Queen Icheti's Wheat. A Contribution to the study of Early Dynastic Emmer of Egypt,* Copenhagen, 1953

A-13
Debono and Mortensen ed., *El Omari,* Archäologische Veröffentlichungen 82 (1990), p. 71, pl. 50; I

A-14
Brunton and Caton-Thompson., *Badarian Civilization,* 1928, p. 14, 16, 63 (contents of pots)

A-15
Dunham, ed., Lythgoe, A., *The Predynastic Cemetery N7000 Naga-ed-Dêr,* Part IV, University of California Press 1965, p. 179; Fig. 79j, p. 348, 349; Fig. 157e, dummy examples dated to SD 55-60 (Naqada II). p. 388, 389; Fig. 176c, autual remains

A-16
Mond, and Myers, *Cemeteries of Armant,* I, London, 1937, p. 60, Bread and grains, emmer-wheat and barley, SD 42–59

A-17
Emery, W., *A Funerary Repast in an Egyptian Tomb of the Archaic Period,* 1962, Tomb 3477, a trianglar bread

R-1
Wild, H., *Le Tombeau de Ti* Memoires Tome LXV, Fac. III, 1966, pl. CLII, CLIV, CLV

R-2
Vikentiev, "La tablette en ivoire de Naqâda", Tome XXXIII, *Ann. du Serv.,* Vol. XXXIII, pl. I, an ivory label

R-3
Petrie, W., *Royal Tombs,* I. London, 1900, pl. XV; 16, pl. XIII; 5 (reign of Djet), a wooden label

R-4
Petrie, W., *Royal Tombs,* I, London, 1900, pl. VIII, a wooden label

R-5
Quibell, J., *Hieraconpolis I,* London, 1898, pl. XXVc; 6, A cereal depiction on the Scorpion's mace head.

R-6
Dixon, A., "A note on cereals in Ancient Egypt", in Ucho and Dimbleby ed., *The Domestication and exploitation of plants and animals,* London, 1969, p. 134, From the tomb of Djer, ivory/wood carving of cereal spikes

R-7
Saad, Z., *Ceiling Stelae in Second Dynasty Tombs from the excavations at Helwan,* 1957

R-8
Simpson, W., *The Mastaba of Western Cemetery,* Part I, 1980, Tomb of Iasen (G 2196), 4th dynasty.

R-9
Simpson, W., *The Mastaba of Qau and Idu,* 1976

R-10
Dunham and Simpson, *The Mastaba of Queen Mersyankh III,* Museum of Fine Arts, Boston, 1974, pl. XVIII; 27-5-6, p. 23

R-11
Mousa und altenmüller, *Das Grab des Nianchchnum und Khnumhotep,* AV 21 (1977)

R-12
Wild, H., *Le Tombeau de Ti,* 1966, pl. LXVI

R-13
Petrie, W., *Royal Tombs,* II, London, 1901, pl. XXXVI; 61, 64, 77, 82, 76, 96, 106, Stelae from the Tomb of Djer

R-14
Quibell, J. *Archaic Mastabas,* Excavations at Saqqara, vol. 6, 1923, Tomb No. 2146, 2nd Dyn., lintel of Sahnesr

R-15
Murray, M., *Saqqara Mastabas,* Part I, 1904, rep, in 1989, Tomb of Seker-kha-bau, Saqqara

R-16
Quibell, J., *The Tomb of Hesy,* Excavations at Saqqara, vol. 5, 1913, 3rd Dyn.

R-17
Borchardt, *Das Grabdenkmal des Königs Sa3hu-Reᶜ,* Band II, 1913, Blatt 63, 4th Dynasty, Absir

R-18
Brestead, J., *Ancient Records of Egypt,* 1962, vol. I; 336, 6th Dynasty. Reign of Mernere. "Inscriptions of Karkhuf", Aswan

S-1
Brestead, J., *Egyptian Servant Statues,* The Bollingen series XIII, 1948, pl. 15; b, grinding statue, Province unknown, now in Museo Archeologico, Florence. For dating, see p. 18, footnote 6. 5th–6th Dynasty.

S-2
Brestead, J., *ibid.,* pl. 25; d (6th Dyn.), grinding statue, supposedly from a tomb at Saqqara (p. 24, footnote 39).

S-3
Brestead, J., *ibid.,* pl. 31; a, Nagade, kneading figure, Predynastic.

S-4
Brestead, J., *ibid.,* pl. 25, a (5th Dyn., p. 25; province unknown), b (4th Dyn., p. 25; province unknown), c (5th Dyn., p. 25; Giza, Tomb of Zasha), pl. 30; a (5th Dyn., p. 31; Giza, Tomb of Zasha), sieving statues

S-5
Brestead, J., *ibid.,* pl. 28; a (5th Dyn., p. 28; Giza), pl. 28; b, (5th Dyn., p. 27; Giza, G2415), baking statues

L-1
Sethe, K., *Die altägyptischen Pyramidentexte,* Hildesheim, 1987, 60b, 60c, 61c, 63c, 64a

L-2
Pritchard ed., *Ancient Near Eastern Texts,* 1955, p. 443 Inscription of Harkhuf, 6th Dyn.

BIBLIOGRAPHY FOR FIGURE 1

1. Naga-ed-Dêr
Dulham ed. A. Lythgoe,
The Predynastic Cemetery N7000 Naga-ed-Dêr, Part IV
The University of California Press, 1965p, 310, Fig. 138j.

2. Armant
Mond, and Myers,
Cemeteries of Armant, I, London, 1937, pl. XXIX; 9P, coarse brown pottery from cemetery 700, protodynastic period.
3. Mostagedda
Brunton, G.,
Mostagedda 1937, pl. XXXVI; 4
4. Saqqara
Emery, W.,
Great Tombs of the First Dynasty, II, 1956, Fig. 222; EE1
Total number 7 were found. For the dating of this pottery, he put this in the reign of Djer (Part III, p. 128, Chapter V).
5. Abydos
Petrie, F.,
Royal Tombs, I, London, 1900, pl. XLIII; 140, 141
6. Saqqara
Emery, W.,
Tomb of Hemaka, 1938, pl. 26, pl. 27; 17
Red Ware, Type 17, pl. 17; 17 is identical to No. 7 (Biblio. for Fig. 2), left.
7. Saqqara
Emery. W.,
Great Tombs of the First Dynasty, I, 1949, p. 95, Fig.
Total number 15 Rough Brown vessels were found. Tomb of Sabu, No. 3111, reign of Udim and Anedjib.
8. Abydos
Petrie. F.,
Royal Tombs, I, London, 1900, pl. XLIII; 15
9. Abydos
Petrie. F.,
Royal Tombs, I, London, 1900, pl. XLIII; 145, 146, 147, 148, 149, 151
10. Saqqara
Emery, W.,
Great Tombs of the First Dynasty, III, London, 1958, pl. 32; R1
Total number 9 were found. Tomb No. 3505 is dated to the reign of Ka'a (Part II, p. 5, Chapter I).
11. Tarkhan
Petrie, F., et al.
Tarkhan and Memphis, V, London, 1913, pl. XLVI; 9h, 9, 5.
12. Qau/Badari
Brunton, G.,
Qau and Badari, I, London, 1927, p. 15, pl. XIII; 9J, 9K, 5C, 4B,
5C has red slip inside; SD 80. 4B is coarse grey ware; SD 81, 82. 9K is grey in color; SD 80–82. 9J has brown color; SD 80–81. For Brunton's remark on "bread pot", see p. 15; 45
13. Qau/Badari
Brunton, G.,
Qau and Badari, I, London, 1927, pl. XIII; 9M
Half baked mud pottery with a pot mark; SD 83, 84.
14. Helwan
Saad, Z.,
Ceiling Stelae in Second Dynasty Tombs, 1957, pl. XXXLX; B, Tomb 1067H8
15. Meydum
Petrie, Mackay, and Wainwright,
Meydum and Memphis III, London, 1910, p. 36, pl. XXVI; 65, For the dating of this pottery, see Petrie's remark on Chapter XI, p. 36.

16. Naga-ed-Dêr
Reisner, A.,
Naga-ed-Dêr, III, p. 84, Fig. 36, Various types of bread mold which ranged from the 2nd to 4th Dynasties.
17. Abydos
Peet, and Loat,
The Cemeteries of Abydos, Part III, London, 1913, p. 17, pl. IV; 37, 38, 41, 44, 45, dated III-IVth dyn.
18. Qau/Badari
Brunton, G.,
Qau and Badari, II, London, 1928, pl. LXXXII; 6D
19. Qau/Badari
Brunton, G.,
Qau and Badari, II, London, 1928, pl. LXXVI; 6E, 6F, 6G, 6P, a pot mark on 6F.
20. Abydos
Naville, E.,
The Cemeteries of Abydos, I, London, 1914, p. 23, pl. VI; b, Unbaked pottery from the Tomb. 285. The date is attributed to IVth dynasty from other Red Polished ware.
21. Qau/Badari
Brunton, G.,
Qau and Badari, II, London, 1928, pl. LXXVI; 6R, with a pot mark 5
22. Matmar
Brunton, G.,
Matmar, London, 1948, pl. XXIX; 23 Tomb 3314
For Brunton's remark on this type of pottery, see p. 45.
23. Sedment
Petrie, F. and Brunton, G.,
Sedment, I, London, 1924, pl. XXIX; 32b, 32g
24. Saqqara
de Rachewiltz, B.,
The Rock Tomb of Irw-K3-Pth, Leiden, 1960, Fig. 6; right
The tomb is located on the southern side of a causeway of pyramid of Unis. It probably dates to the late Old Kingdom.
25. Naqada/Ballas
Petrie, F. and Quibell,
Naqada and Ballas, London, 1986, p. 42, pl. XLI; 76, SD 79, prob. of IVth Dynasty, This type is classified as "Later N. R. pottery", SD L50–96 (late Gerzean to the 3rd/4th dynasty).
26. Anna Maria Donadoni Roveri ed.,
Egyptian Museum of Turin,
Egyptian Civilization Religious Beriefs, Turin, 1988, p. 73, pl. 87, O. K. tomb of unknown owner excavated by V. Rosa, 1911.
27. Abydos
Petrie, W.,
Abydos, Part II, Lodon, 1903, p. 39, pl. XLV; 132, 133, dated to VIth to Xth Dyn. Conical Rough vessels.

BIBLIOGRAPHY FOR TABLE 2

1. Petrie, W. F., *Royal Tombs,* I, London, 1900, pl. XLII; 57, 61, 63
2. Saad, Z., "The Pottery", Chapter XI in Emery, W., *Tomb of Hemaka,* 1938, pp. 51, 52
3. Saad, Z., *Ceiling Stelae in Second Dynasty Tombs,* 1957
4. Quibell, *Archaic Mastabas,* Excavations at Saqqara, vol. 6, 1923, pl. XXVII
5. Emery, W., *A Funerary Repast in an Egyptian Tomb of Archaic Period,* 1962, pl. 6
6. Murray, M., *Saqqara Mastabas,* I, London, 1904, rep. 1989, pl. I

7. Leprohon, R., "Stela I" in *Corpus Antiquitatum Aegyptiacarum,* Museum of Fine Arts, Boston, Fascicle 2, Mainz, 1985 No. 12. 1510
8. Murray, M., *Saqqara Mastabas,* I, London, 1904, rep. 1989, pl. XXIX, XXX
9. Murray, M., *Saqqara Mastabas,* I, London, 1904, rep. 1989, pl. XVIII
10. Muray, M., *Saqqara Mastabas,* I, London, 1904, rep. 1989, pl. XXI, XXIII
11. Davis, W., El-Khouli, A., Lloyd, A., and Spencer, A., *Saqqara Tombs I, The Mastabas of Mereri and Wernu,* 1984, pp. 16–18, pl. 13
12. *Corpus Antiquitatum Aegypticarum,* Lieferung 8, Pelizaeus-Museum, Hildesheim, 1980, No. 3257
13. Kamar, A., *Tables d'Offrandes,* Catalogue Général des Antiquités Égyptiennes, Caire, 1909, pl. VII

古代エジプト先王朝期から古王国時代までのパンについて

ANCIENT EGYPTIAN BREAD FROM THE PREDYNASTIC TO THE OLD KINGDOM

東海大学文学部文明学科大学院　山花京子

日本語要旨

〈重要性〉

古代エジプト人はパン喰い民族であると書き残したのはヘカタイオスである（frg. 290)。しかし、パン好きの伝統は彼がエジプトの風俗を見聞するよりずっと以前から存在している。ヘルワンより出土した第2王朝の奉献碑（以下、ステラとする）には、いく種類ものパンが見られる。また、これらのステラの構図の中心には、死者がテーブルの上に盛られたパンに手を延ばしている場面が浮き彫りされている（Saad, Z., 1957, pl.II～XXX.)。来世での生活にあたって決して飢えることの無いようにという祈願のたあらわれであろう。

ピラミッド・テキスト(以下、PT）においてもパンの重要性が示されている。例えば、PT61には、「おお、オシリスとなりたもうた王よ。(ここにある)ホルスの目（供物）を受け取り給え。(そして）汝を清め給え。(この）ホルスの目によって汝の口を開き給え。……おお、王よ。汝にとってのホルスの目であるパンを受け取り給え。」(Sethe, K., 1908：Pritchard. ed., 1955)。また、死せる王には、「徴びないパンと腐らないビール。」(PT 655）と「焼きたての暖かいパン」(PT 1929）が棒げられる（Sethe, K.,1908：鈴木 1979 pp.118-126)。以上より、死せる王が蘇った際に最初に手を着ける食べ物としてパンが棒げられていることがわかる。この様な

宗教文書においてもパンは重要な位置を占めているのである。

パンは日常生活でも欠かせない存在だった。日常食としてのパンは、墓の壁画や浮き彫りで表されているパンづくりの場面によって伺い知ることが出来る。また、庶民文字として中王国時代に編纂されたとされる『雄弁な農夫の物語』には、農夫が旅行中の糧としてパンとビールを作るように妻に要請しているくだりがある（Simpson, W., 1973, R5)。同時代の農夫と労働者の日当として、労働者にパン3個とビール2壺、農夫にはパン4個にビール2壺が支給されたという記録がある（Erman, A., 1923, 105；163：鈴木　1979, p. 119)。

〈本稿でのパンの定義付けと研究法〉

中尾佐助氏によると、パンはまず大きく二種類に分けられる。つまり、醱酵させて焼き上げられたものと無醱酵のまま焼に上げられたものである。後者の中には濃い粥状を呈し、固まるとういろう状になるものと、堅く乾燥した状態で焼き、ビスケット状になるものとがある（中尾 1979, pp. 126-129)。古代にはもちろん両方のタイプのパンが存在していたと考えられる。しかし、現在では若干の遺存体（乾燥した供物のパン）と壁画や浮き彫りが残っているのみで、詳細についてはわからない。

本稿で考察していくのは前者の醱酵させて焼き上げられたものである。このタイプのパンはtまたはt^c（以下t/t^cとあらわす）という音価を持っており、現在最古とされるアビュドスの第1王朝期のステラにも表されている（Petrie, 1901 pl. xxvi)。t/t^cパンは、半球体のパンを真横から見たかたちを表している。この形状のパンは、王朝が成立した頃には一般的に普及していたため象形文字の中に取り入れられたと考えられる。t/t^cタイプのパンと$bd3$と呼ばれる特殊なパン型については本論で詳しく述べることとする。古王国時代のパンには、他にも円形のものや三日月のものなどが知られている。これらの平たいタイプのパンが果たして醱酵させてあるものであるのかは定かではない。初期王朝期から古王国時代にかけてパンの種類はTable 2で取り扱っている。

焼き方に関しても様々な方法があったと推測される。パン型を熱して焼く方法、釜の中にパン生地を入れて焼く方法、熱い灰の中で焼く方法、釜の外壁に張り付けて焼く方法などが墓の浮き彫りや壁面にあらわされている。古王国時代には、パン型を熱しその余熱でパンを焼く方法が一般的であったようだ。前述の$bd3$タイプのパン型を熱して中にパン種を流し込み、焼き上げると、ちょうど象形文字のt/t^cの形と同じものが出来上がる。平たい形のものに関しては平たいパン型を使用したのかそれとも直接手で成形したのか、判然としない。

本稿では先王朝期から古王国時代末期までにわたるパンとパンづくりに関連する遺物や壁画などを年代順にまとめ(Table 1)、初期のパンづくりに重要な役割を果たした$bd\ 3$タイプのパン型の出土状況を追ってみた（Figure 1)。そしてTable 2

では文字資料の発見される第1王朝から第6王朝期までのステラや奉納物リストの中からパンのデータをとりあげた。本論では主にこれらの表の解説および補足をおこなう。同時に問題点も列挙する。古代エジプトの王朝成立期に関する問題は暗中模索の状態が続いている。しかし、現在までに報告されているデータを出来る限り整理し、基本資料として何時でも活用できるようにしておくことが必要と思い本稿にまとめてみた。

General Bibliography

Erman, A.,
Die Literatur der Aegypter, Leipzig, 1923
Davies, and Gardiner,
The Tomb of Antefoker, 1920
Hecataeus,
Fragmenta Historicorum Graecorum, vol.I;20.
Jacquet-Gordon, H.,
"A tentative Typology of Egyptian Bread Moulds" in
Studieren zur altägyptischen Keramik, pp.25-42, 1981
中尾佐助　季刊人類学　第10刊3号　コメント2、1979. pp.126-9
Pritchard, ed.
Ancient Near Eastern Texts, 1955
Saad, Z.,
Ceiling Stelae in Second Dynasty Tombs, 1957
Sethe, K.,
Die altägyptischen Pyramidentexte, Leipzig, 1908
Simpson, W.,
The Literature of Ancient Egypt, 1973
鈴木八司　季刊人類学　第10刊3号 コメント1、1979. pp.118-126
Wilson, H.,
Egyptian Food and Drink,Shire Egyptology, 1988