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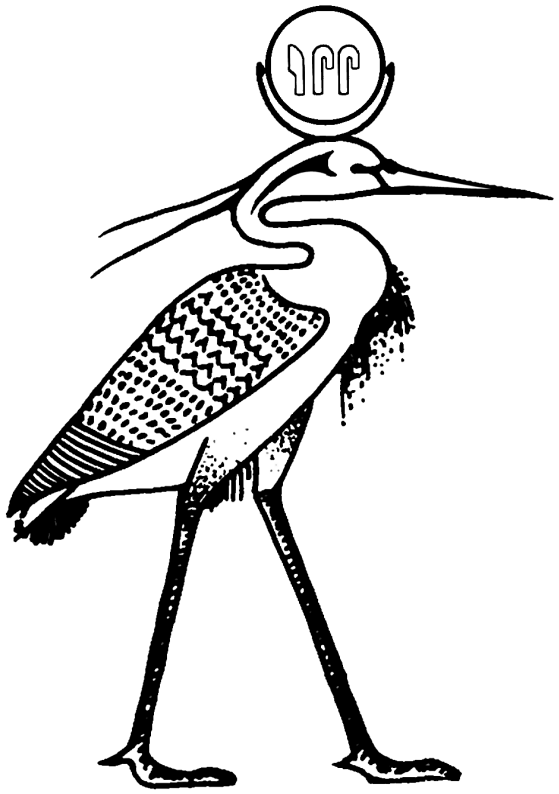


IN THIS ISSUE ...

Ancient Egyptian Hair and Wigs

Joann Fletcher

The hair of the ancient Egyptians has only relatively recently become the subject of long-term, serious study after long being regarded as a rather "frivolous" subject when compared to the texts and chronologies pored over by generations of learned men. Unfortunately such an attitude created something of an imbalance in Egyptology, and although of immense importance, literary evidence is by no means the only way to understand a culture. And given literacy rates of less than 1%, it can hardly be the best way to study the lives of the ancient Egyptians themselves.

Yet this of course depends on whom one imagines the Egyptians to be. Certainly for many scholars, ancient Egypt seems to have been populated by a literate male elite of kings, priests and scribes while the silent majority have simply been dismissed as little more than illiterate "peasants". But these same "peasants" who built the monuments and produced the wealth on which the culture was based deserve to be the subject of serious study too, regardless of their ability to produce convenient written evidence.

As an alternative source of information the remains of the people themselves provide a wealth of evidence, with Egypt's democratic climate preserving both the artificially mummified bodies of the elite and the remains of the poorest individuals. Simply buried in the sand, the hot dry conditions promoted natural mummification by allowing the fluids responsible for decomposition to drain away while at the same time desiccating and preserving the soft tissue of skin, hair and nails. Not only were these features subject to various forms of adornment, they also contain a great deal of information which can be extracted using virtually non-destructive techniques of analysis.

With scientific research becoming increasingly detailed, each part of the body is beginning to tell its own fascinating story. This is particularly the case with hair, which Egyptians of all social groups treated in a wide variety of ways for a wide variety of reasons. The way they chose to portray it and the resulting development of hair styles can also be used to establish a useful chronology for the whole dynastic period, which can then be compared to the various types of hair remains that have survived.[1]

Yet it is clear from both the archaeological remains and the artistic and literary record that the Egyptians' hair was not always their own, a choice dependent on personal preference, wealth and social status and influenced by the fashions which inevitably changed over several millennia. The wigs and hair extensions worn as items of both daily and funerary attire combined the desire for ornate and impressive styles with the practicalities of cleanliness. In Egypt's extreme climate, the coolest option of a shaven or cropped head could be shielded from the harmful effects of the sun with a wig, a choice preferable to a simple linen head cloth as it would allow body heat to escape through its net-like foundation base while keeping the head protected. The removal of the natural hair and subsequent adoption of wigs was also a hygienic measure and greatly reduced the health risks associated with parasitic infestation, particularly head lice (*Pediculus humanus capitis*). Indeed, the Greek historian Herodotus stated that "Egyptian priests shave their bodies all over every other day to guard against the presence of lice, or anything else equally unpleasant, while they are about their religious duties."[2]

The hair used in the construction of wigs and hair extensions was human, and was either an individual's own hair or had been traded for, hair itself being a valuable commodity ranked alongside gold and incense in account lists from the town of Kahun.[3] Once the required amounts of hair had been collected, it would be sorted into lengths and any tangles removed with fine-toothed combs which also removed any

Hairdressing scene of Queen Nefru, 11th Dynasty,
Deir el-Bahari, Brooklyn Museum.
Photo copyright Dr. Joann Fletcher.

lice eggs, traces of which can still sometimes be found between their teeth. Using an impressive array of hairdressing tools, the wigmakers would then work the prepared lengths of hair into an assortment of braids, plaits or curls depending upon the style required, with each piece coated in a warmed beeswax and resin fixative mixture which would harden when cooled. Since the melting point of beeswax is 140°–145°F, this method of securing the hair would have been effective even in Egypt's extreme climate.

The individual locks or braids could then be attached directly to the natural hair in the form of extensions, or alternatively they could be used to create a whole wig by fastening the individual sections of hair onto a mesh-type foundation base manufactured on a head-shaped wooden mount. Although linen strings or leather strips were occasionally employed in its construction, the base was most often made from fine lengths of plaited or woven hair. The separate locks could then be attached by weaving them directly into wefts of hair which in turn formed part of the net base, or alternatively knotting them into position. A further method was to attach each lock by looping its root end around a part of the net and pressing it back on itself, securing it by winding a smaller substrand of hair around it and applying a further coating of the beeswax and resin mixture. Such construction techniques and the obvious skill of the wigmakers themselves produced wigs of a standard often equivalent to modern examples, and despite continued speculation that their weight might be sufficient to cause parietal thinning of the skull(!), their lightweight construction would have made them as equally easy to wear.[4]

Our recent discoveries at the manual workers' cemetery at Hierakonpolis reveal the use of hair extensions as early as 3400 BCE[5], with the earliest fragments of actual wigs dated to the very beginning of the dynastic period. These have been found in relatively large numbers at the Umm el-Qa'ab necropolis at Abydos and, despite their fragmentary nature, nevertheless reveal highly complex construction techniques that involved lengths of hair weft to which a wide variety of curls, ringlets and plaits were attached.

Although there are relatively few "hair finds" from the Old Kingdom, the 11th Dynasty necropolis at Deir el-Bahari has produced a wealth of fascinating examples relating to the court of Mentuhotep II (c. 2061-2010 BCE).

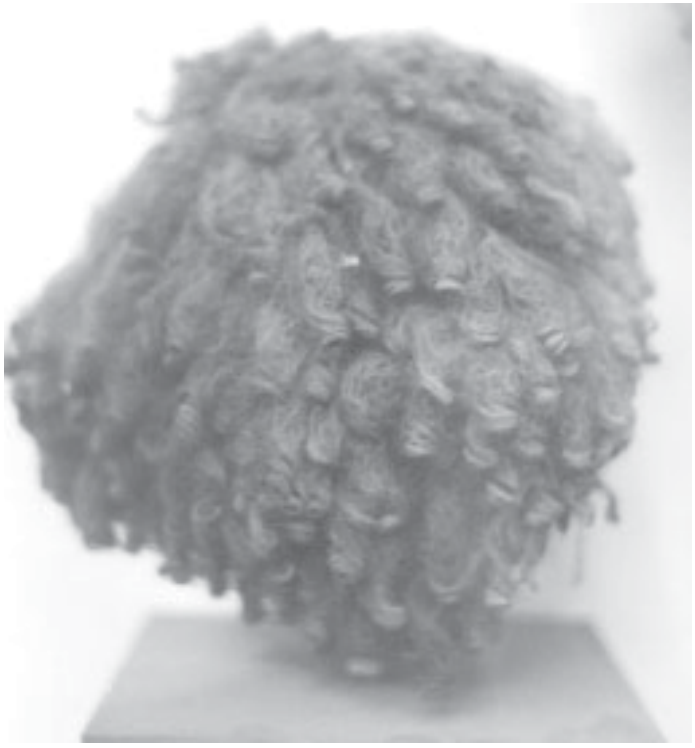
Several of the king's wives were discovered in a wonderful state of preservation, including his 20-year-old "Great Royal Wife", Ashayet, whose own short, bobbed hair had been set in numerous fine plaits. The ends of each had been secured with a drop of resin fixative and her natural dark brown colour had been enhanced with an application of dark brown vegetable colorant. Yet perhaps the most interesting example

Man's double-style wig, New Kingdom, Thebes, British Museum. Photo copyright Dr. Joann Fletcher.

was found in the mass grave of the king's soldiers, one of whom was found to have supplemented his own hair with short curled extensions of false hair. Since his burial seems to have been hastily carried out following battle, this cannot be explained as a post-mortem feature and must have been worn in life, supporting the theory that hair was the soldier's only protection prior to the introduction of helmets.[6]

The oldest intact wigs also date from this period, the earliest of which would appear to be that found in the tomb of the priestess Amunet. Wigs were also discovered within their wooden storage boxes in a number of 12th Dynasty tombs around the cemetery site of el-Lisht, and despite their poor state of preservation they all appear to have been made of human hair coated in a resinous fixative substance.[7]

By the New Kingdom, the range of wigs and false braids that have survived reflect the large number of styles fashionable at the time for both men and women. A particularly fine example from Thebes and now in the British Museum



Short curled wig of Istemkheb, 21st Dynasty,
Deir el-Bahari cache (DB 320), Cairo Museum.
Photo copyright Dr. Joann Fletcher.

is composed entirely of human hair set in two distinct sections: an upper part of light brown curls set over an undersection of several hundred dark brown plaits which originally measured up to 38cm (14.96 inches) in length. This is clearly an example of the "double" (or "duplex") style so favored by male officials and noblemen of the period, but repeated references to "a noblewoman's wig" reflect a tendency to assign anything vaguely decorative as having belonged to a woman.[8]

A similar unprovenanced example of slightly later New Kingdom date, now in Berlin, again features this arrangement of curls and plaits set on a net base, with a further fragmentary example of the same double style formed by the portions of Yuya's wig found in his tomb (KV 46) in the Valley of the Kings. An intriguing sample of "artificially curled ringlets", suggestive of a shorter wig, was discovered in a small calcite chest among the funerary equipment of Yuya's probable great-grandson, Tutankhamun.

The Nubian fan bearer, Maherpra, was also buried in the Royal Valley, but in contrast to the previous highly artificial styles he wore a unique coiffure of short tight spirals of his own heliotrichous (Negroid) hair set over his shaven head, creating the impression of a totally natural style.[9]

It is also quite apparent that women's wigs were considerably less elaborate than those worn by men and consequently appear more natural. The best preserved example of the long full style so favored by New Kingdom women was found inside the tall wooden wig box of Meryt in the Deir el-Medina tomb she shared with her husband Kha. It is made of numerous wavy braids of dark brown hair a little over 50cm (19.68 inches) long, set by means of complex knot work around the narrow plait which forms a central parting. A similar wig of long plaits was found on the head of the mummy of the princess Hontempet who had also been provided with a second wig, made up of artificially curled locks complete with a fringe of small ringlets.[10]

In addition to complete wigs, individual braids were employed to create wider and longer dimensions. The hair of a man buried at el-Mustagidda had been artificially lengthened with human hair attached to his own hair with thread, while the wavy brown hair of Queen Meryet-Amun had been filled out around the crown and temples with numerous tapered braids to produce the "top-heavy" effect fashionable at the time. She had also been buried with a duplicate set of braids as part of her funerary equipment, and similar sets of false braids were found in the burials of the female relatives of Hatshepsut's great official Senenmut. A large number of tapered plaits of dark brown human hair had been attached to the short grey curls of his mother, Hatnefer and, arranged in two thick masses at each side of her head, the ends had been set in two rounded sections to create the so-called "Hathor" curled, bouffant style featured in artistic representation.[11]

False braids could also be worn to denote religious affiliation, with devotees of the goddess Hathor sometimes attaching a triple strand of braids at the back of the head. And on a more practical level, such braids could also be used to disguise areas of baldness most often caused by old age. The mummy identified as Queen Tetisheri was found to have substantial plaits of brown hair woven into her own sparse white locks, and a similar technique had been employed by the hairdressers of Queen Ahmose-Nofretari and Hontimihou.[12]

Wigs clearly remained high status items during the Third Intermediate Period, with the double style well represented by the enormous wigs on display in the Cairo Museum that were discovered in the Deir el-Bahri cache of priests' mummies discovered in 1881. One such wig was found inside a box bearing the seals of High Priest Menkheperre, and despite its huge double-part structure of curls and plaits, it was assumed to have belonged to his wife, Istemkheb. Yet the wig that was recently identified as hers is much smaller, a simply creation of curls and typical of the short, feminine styles of the time. A further seven huge examples of the male double style from the same cache again exhibit the two-part construction of curls and plaits of human hair, al-

though small bundles of date palm fiber were used as an internal padding in order to create impressive dimensions while economizing on hair.[13]

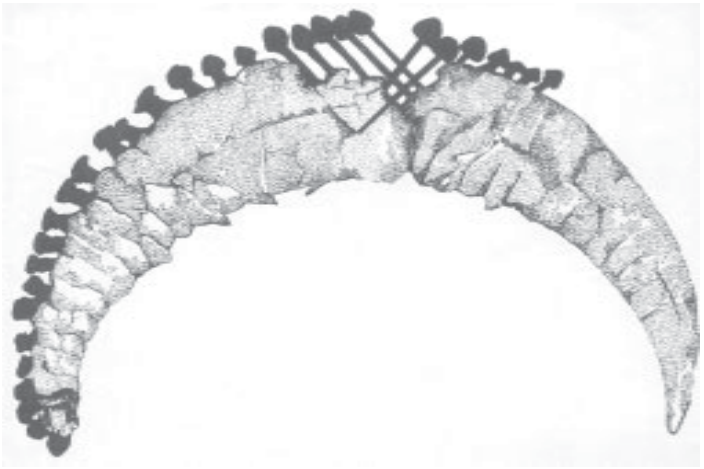
The same trend can be found in the construction of many of the women's wigs of the period, the dark brown plaits of Queen Nodjmet's wig being described as being "tied to strings" to form the foundation base. Linen was also employed as the base for the plaited hair which made up the wig of Nany, Chantress of Amun-Ra, while a wig composed entirely of "black string" set in narrow spirals was found at the head of Queen Hentawy.[14]

Despite losing popularity during the Late Period, the fashion for wigs was revived during Roman times. Although the most elaborate examples were again made entirely of date palm fibre or grass, hair was still used in the production of other wigs and smaller hairpieces. A section of plaited hair set in a rigid crescent shape and supported by 62 bronze pins was found at the settlement site of Gurob, and known as an "orbis", was described as "probably the only example surviving of a well-known hairdressing of the period of Trajan".[15]

Despite such wonderful examples of the hairdresser's art, it seems surprising that hair had never received the detailed treatment it so obviously deserved. When not ignored altogether, it had tended to be misinterpreted, as exemplified by the way in which many archaeologists and curators often assume that all hair fragments are "wigs" when closer examination can reveal that this is simply not the case.

Rather more disturbing are the attempts to use hair to prove assumptions of race and gender, one of the most extreme examples involving the 1888 Gurob excavations of Sir W.M. Flinders Petrie. Having discovered a body of unspecified sex, he noted that the head was covered by "a copious wig of black hair, reaching down to the waist, but beneath this on the scalp was yellow or light brown hair". He goes on to conclude that "the person was light-haired during life, and wore a wig of black, hiding the foreign token" ... an interesting comment given Petrie's attempts to find evidence to support his theories of Aegean settlers. Yet our analysis of the "black wig" has shown that it originally formed part of a dark blue woollen head cover, and far from disguising his or her fair hair, the individual in question had actually accentuated its lightness with a yellow vegetable colorant.[16]

Unfortunately, such attitudes have by no means disappeared and there is still the tendency to assume that bodies with short or shaven hair are male and those with long or intricately styled hair are female, when again this is simply not the case. Human hair was treated in a wide variety of ways for an equally wide variety of reasons, and so all aspects should be carefully considered.



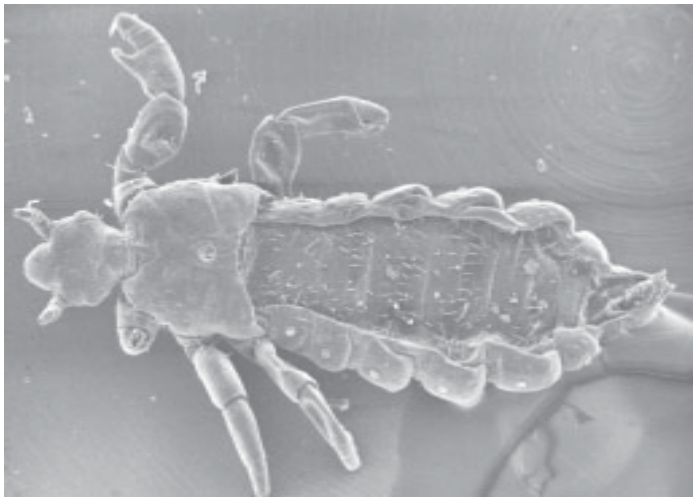
Line drawing of "orbis" hairpiece, Roman Period, Gurob, Petrie Museum. Photo copyright Dr. Joann Fletcher.

First and foremost it is necessary to ascertain the precise nature of the hair in question and decide if it is the natural scalp hair, albeit desiccated and possibly separated from the scalp itself. Alternatively, the hair could be described as "false", i.e. originally part of a wig or separate extensions. There is also the possibility that the hair could be one of the many votive or funerary deposits buried separately from the body, a practice found from Predynastic to Roman times despite its frequent omission from excavation reports.

Once the nature of the sample has been established, it is then possible to undertake examination using a variety of techniques, all of which can provide some incredible details about the individual in question, from their general state of health and quality of diet to their social status and even profession.

A simple visual examination can establish basic facts such as condition, color and length, evidence of styling techniques and any parasitic infestation, particularly the presence of head lice. Capable of transmitting diseases such as typhus and relapsing fever and so useful in the study of disease transmission, we have found evidence for lice in the hair of kings and commoners alike, demonstrating that lice are no respecters of social status. And contrary to popular belief, they much prefer clean short hair which gives easy access to the scalp's blood supply on which they must feed five times each day in order to survive. Their presence in hair samples can also be used to confirm the identification of natural hair rather than a wig, since lice can only thrive in the natural hair rather than in a wig which could be removed at any time and thus proving a totally unsuitable habitat.[17]

Such parasitic infestations can be examined in greater detail using scanning electron microscopy (SEM) which is also used to look at the surface of the hair shaft to identify and



SEM photograph of ancient head louse, c. 3000 BCE, Abydos, Manchester Museum. Photo copyright Dr. Joann Fletcher.

distinguish between animal hair of different species and human hair of varying ethnic types and individuals. The hair of the mummified "Elder Woman" found in the tomb of Amenhotep II (KV 35) has been identified as Queen Tiy after scanning electron microprobe analysis and ion etching were used to compare a sample of the mummy's hair with a lock of the queen's hair found in an inscribed coffinette in the tomb of her probable grandson, Tutankhamun.[18]

Further examination of the hair's surface structure can also help to ascertain the original hair color which may have faded over time, been changed by environmental conditions, the process of mummification or by the use of dyes which we have found in a number of samples and extracted and identified by absorption spectrophotometry and thin-layer chromatography. Microscopic examination of the hair ends can also reveal details of specific styling techniques, with recent analysis having revealed the use of very sharp blades to cut the hair as early as c. 3000 BCE. SEM can also indicate the individual's health, with specific areas of interest followed up using trace element analysis to provide information regarding diet and nutritional deficiencies, diseases, levels of environmental pollution and even the use of drugs and poisons which remain in the hair shaft long after they have left the rest of the body. And almost all of this is possible using a single hair as a biopsy material or a sample size of <0.1mg, literally the size of a pin head.[19]

Over the past few years, careful examination of various hair samples has provided much fascinating information. In 1998 the plundered burial of a middle-aged woman from the predynastic workers' cemetery at Hierakonpolis proved particularly revealing after numerous scattered fragments of skull and hair were reconstructed to allow us to recreate her original hairstyle. This was clearly the result of many hours' work undertaken by someone other than the lady in question, her natural hair of slightly more than shoulder-length having been turned into an imposing crest-like coiffure using numerous hair extensions, providing the earliest evidence of false hair yet found in Egypt.

The find was even more significant when we discovered that the woman's graying brown hair had been dyed either shortly before death or as a post-mortem treatment, the dye turning the brown parts auburn while transforming the unpigmented white hairs bright orange. Those familiar with the vegetable dye henna (*Lawsonia inermis*) will recognize its characteristic effect, and indeed henna shrubs still grow at the site and continue to be used for the same purpose by the local population. They kindly showed us where the best leaves were to be found and, allowing us to help ourselves, they demonstrated the heavy stone they use to grind them to a fine powder which is mixed with water to color the hair, skin and nails. Inspired, we decided to undertake comparative tests using modern hair samples kindly supplied by members of our team, and our tests replicated exactly the effects observed in these ancient samples.[20]

Our most recent field season, earlier this year at the site of the mysterious royal tomb KV 39 in the Valley of the Kings, revealed more wonderful hair finds, with the remains of at least four carefully plaited wigs of early 18th Dynasty date demonstrating a range of shades from the darkest brown to a mid-brown, almost blond color which may once again be the result of vegetable dyes. Although we have only just begun our work on these finds, the ongoing results are continuing to provide clues to previously unanswered questions, not only regarding the hair but also the nails, soft tissue and indeed the linen mummy wrappings and mummification materials which are being studied in detail.

As the most modern analytical techniques are starting to reveal the secrets of these ancient people, it is well worth remembering that what at first may appear as nothing very special can often have an interesting tale to tell, if only we pay such material as much attention as the ancient Egyptians themselves so obviously did.

Dr. Joann Fletcher has a B.A. in Egyptology and Ancient History from University College London and a Ph.D. in Egyptology from Manchester University. She specializes in human remains which she has studied in museum collections around the world and on site in Egypt, Yemen and South America. She is Egyptologist at Harrogate Museum and field director of York University's Mummy Research Project. As well as her own publications, Dr. Fletcher writes regular features for the Guardian newspaper and the BBC's History Online Web site.

NOTES

1. As documented in the author's 1995 doctoral thesis: *Ancient Egyptian Hair: A Study in Style, Form and Function.*
2. For Herodotus (Histories II.36) see de Sélincourt 1954 p.143, with lice described in Fletcher, 1994.
3. Griffith 1898, p. 39, 48-50, pl. XIX-XX.
4. For tools and construction methods see Cox 1977 and Laskowska-Kusztal 1978, parietal thinning suggested by Smith 1912, p. 36 and the work of hairdressers and wigmakers described and illustrated in Riefstahl 1952 and Fletcher 1995, p. 431-463.
5. See Fletcher 1998, p. 4.
6. Ashayet discussed in Fletcher (forthcoming), with reference to soldier's hair in Winlock 1945, p. 9, similar "protective" qualities of wigs mentioned in Kanawati & Abder-Raziq 2001, p. 69.
7. Amunet in Lucas 1930, p. 196 and one of the wigs from Lisht described in Lansing 1933, p. 26, fig. 39.
8. Cox 1977, p. 67-70, fig. 1, pl. X.1, Fletcher 1994, 32-33 and Fletcher 2000, fig. 20.1, p. 497.
9. Yuya's wig in Lucas 1930, p.195, the hair remains from Tutankhamen's tomb in Fletcher & Montserrat 1997 and Fletcher in Vogelsang-Eastwood 1999, and Maherpra's wig in Daressy 1903, p. 74-75.
10. Meryt's wig in Chiotasso et al. 1992, Carpignano & Rabino Massa 1981 and Fletcher 2000, fig. 20.2, p. 497, and Hontempet in Smith 1912, p. 20-21, pl. 16-17.
11. Mostagedda male burial in Brunton 1937, p. 123, MeryetAmun in Winlock 1932, p. 9, 34, 47, 75-6, pl. 13, 32-3 and Riefstahl 1952, p. 15, fig. 4 and Hatnefer in Fletcher 2000, p. 498.
12. The triple braids portrayed in artistic representations have also been found in the hair of mummified individuals, in Fletcher 1995 and in Fletcher, forthcoming. For Tetisheri's false braids see Smith 1912, p. 14-5, fig. 2, pl. 9-10, Ahmose-Nofretari in Smith 1912, p. 13-4, pl. 7 and Hontimihou in Smith 1912, p. 19, pl. 14.
13. See Lucas 1930, p. 190-192 and Fletcher 2000, fig. 20.3, p. 498.
14. Nodjmet's wig in Smith 1912, p. 96, pl. 69-71, Nany's wig in Winlock 1932, p. 55, 81-2 and Hentawy in Smith 1912, p. 103, pl. 75-6.
15. Vegetable fiber wigs in Lucas 1930, p. 194-195 and orbis in Petrie 1927, p. 5, pl. 4 and Fletcher 2000, p. 499, fig. 20.4.b.
16. Petrie 1890, p. 39 and Fletcher & Montserrat 1997.
17. See Fletcher, 1994.
18. See Harris et al. 1978, although their identification is not totally conclusive and their results criticized due to the lack of comparitive data, in Germer 1984.
19. For hair analysis see Rabino Massa & Conti Fuhrman 1980, Carpignano & Rabino Massa 1981, Hrdy 1978, Paris 1985, p. 224-30, 240-1, Brothwell & Spearman 1963, p. 432-3, Gössler et al. 1995, p. 269-273 and Fletcher 2000, p. 499-500; analytical work by S. Buckley and J. Fletcher ongoing as part of York University's Mummy Research Project with initial findings outlined in Buckley and Evershed 2001.
20. See Fletcher 1998, p. 4.

REFERENCES

Brothwell, D. and R. Spearman. 1963. "The Hair of Earlier Peoples." *Science in Archaeology* (ed. Brothwell, D. and E. Higgs, E.), pp. 427-436. London: Thames and Hudson.

Brunton, G. 1937. *Mostagedda and the Tasian Culture*, London: Quaritch.

Buckley, S. & R. Evershed. 2001. "The Organic Chemistry of Embalming Agents in Pharaonic and Graeco-Roman Mummies." *Nature* (vol. 413, issue 6858), pp. 837-841.

Carpignano, G. & E. Rabino Massa. 1981. "Analisi di un campione di capelli della parrucca appartenente alla moglie dell'architetto Kha." *Oriens Antiquus*: 20, pp. 229-230, pl. 25.

Chiotasso, L., P. Chiotasso, L. Pedrini, G. Rigoni & C. Sarnelli. 1992. "La parrucca di Merit.", *Sesto Congresso Internazionale di Egitto, Atti I,* Turin, pp. 99-105.

Cox, J.S. 1977. "The Construction of an Ancient Egyptian Wig (c. 1400 BC) in the British Museum." *Journal of Egyptian Archaeology* 63, pp. 67-70.

Daressy, G. 1903. "Observations prises sur la momie de Maherpra." *Annales du Service des Antiquités de l'Egypte* 4, pp. 74-75.

Fletcher, A. J. 1994. "A Tale of Hair, Wigs and Lice." *Egyptian Archaeology: the Bulletin of the Egypt Exploration Society*: 5, pp. 31-33.

Fletcher, A.J. 1995. *Ancient Egyptian Hair: A Study in Style, Form and Function.* Unpublished doctoral thesis, Manchester University.

Fletcher, J. 1998. "The Secrets of the Locks Unravelled." *Nekhen News: Newsletter of the Friends of Nekhen,* Vol. 10 (Fall), p. 4.

Fletcher, J. 2000. "Hair." *Ancient Egyptian Materials and Technology*, eds. P. Nicholson & I. Shaw, Cambridge University Press, pp. 495-501.

Fletcher, A. J. (forthcoming). *Ancient Egyptian Hairstyles and Wigs*. Austin: University of Texas Press.

Fletcher, J. & D. Montserrat. 1997. "The Human Hair from the Tomb of Tutankhamun: a Re-evaluation." *Proceedings of the Seventh International Congress of Egyptologists*. Peeters, Leuven, pp. 403-407.

Germer, R. 1984. "Die angebliche mumie der Teje, probleme interdisziplinärer arbeiten." *Studien zur Altägyptischen Kultur* 11, pp. 85-90.

Gössler, W. et al. 1995. "Priest, Hunter, Alpine Shepherd, or Smelter Worker?" *Mann im Eis: Neue Funde und Ergebnisse* (ed. K. Spindler et al.), Vienna, pp. 269-273.

Griffith, F.Ll. 1898. *Hieratic Papyri from Kahun and Gurob*. London: Egypt Exploration Fund.

Harris, J.E., E. Wente, C. Cox, I. Nawaway, C. Kowalski, A. Storey, W. Russell, P. Ponitz & G. Walker. 1978. "Mummy of the 'Elder Lady' in the Tomb of Amenhotep II: Egyptian Museum Catalog Number 61070." *Science* 200, pp. 1149-1151.

Herodotus (translated by de Sélincourt, A.). 1954. *The Histories*, Harmondsworth: Penguin.

Hrdy, D.B. 1978. "Analysis of Hair Samples of Mummies from Semna South (Sudanese Nubia)." *American Journal of Physical Anthropology* 49, pp. 277-282.

Kanawati, N. & M. Abder-Raziq. 2001. *The Teti Cemetery at Saqqara VII: the Tombs of Shepsipuptah, Mereri (Merinebti, Hefi and Others)*. Warminster: Aris and Phillips.

Lansing, A 1933. "The Egyptian Expedition 1932-3: The Excavations at Lisht." *Bulletin of the Metropolitan Museum of Art – Egyptian Supplements* (November 1933), pp. 4-38.

Laskowska-Kusztal, E. 1978. "Un Atelier de Perruquier à Deir el-Bahari." *Études et Travaux* 10, pp. 84-120.

Lucas, A. 1930. "Ancient Egyptian Wigs." *Annales du Service des Antiquités de l'Egypte* 30, pp. 190-196.

Paris: Musée de l'Homme. 1985. *La Momie de Ramsès II*. Paris.

Petrie, W.M.F. 1890. *Kahun, Gurob and Hawara*. London: Egypt Exploration Society.

Petrie, W.M.F. 1927. *Objects of Daily Use*. London: British School of Archaeology in Egypt.

Rabino Massa, E. & A.M. Conti Fuhrman. 1980. "Early Egyptian Mummy Hairs: Tensile Strength Tests, Optical and Scanning Electron Microscope Observation: A Paleobiological Research." *Journal of Human Evolution*, 9, pp. 133-137.

Riefstahl, E. 1952. "An Ancient Egyptian Hairdresser." *Bulletin of the Brooklyn Museum*, 13 (4), pp. 7-16.

Smith, G.E. 1912. *The Royal Mummies*, Cairo: Service des Antiquities de l'Egypte.

Vogelsang-Eastwood, G. 1999. *Tutankhamun's Wardrobe: Garments from the Tomb of Tutankhamun*, Rotterdam: van Doorn & Co.

Winlock, H.E. 1932. *The Tomb of Queen Meryet-Amun at Thebes*. New York: Metropolitan Museum of Art.

Winlock, H.E. 1945. *The Slain Soldiers of Neb-hepet-Re' Mentuhotep*. New York: Metropolitan Museum of Art.

The Musician-Priestesses of Ancient Egypt

Suzanne Onstine

During the 3,000 years of pharaonic history, Egyptian attitudes toward women remained much more "female-friendly" than some of the other cultures of the ancient Near East and Mediterranean. Women had the same human and legal rights as men. They could enter into business contracts regarding land and movable property, make wills, divorce, testify or be tried in court, etc. all without the patronage or sponsorship of a male relative or husband. The legal word of a woman was worth the same as that of a man. Although she had the same legal rights and responsibilities, there was certainly a gender-based division of labor.

Egyptian civilization was still male-oriented. The political and religious institutions were run by men. Additionally, the artistic and written sources we have concerning ancient Egypt were produced mainly by and for the male participants in these institutions who were bureaucratic officials and scribes. Consequently, our view of women and their role in society comes from biased sources. For example, tombs of the nobility, which we so often use for information about their society, were built for men and served as a monument to the man and his career. Women seldom had their own tombs. More often they were buried with their husbands or fathers. The scenes in the men's tombs revolve around his life and duties and portray women and family in a supporting role. Further, ancient Egyptian art is idealistic for both men and women. The images we see in tombs contain more information about how Egyptians thought things should be than about reality.

Literature also provides us with information about the social climate between the genders. A genre of writing called wisdom literature is comprised of advice, usually from father to son, detailing a righteous life. This sometimes included advice on how to treat women, and gives us an impression about how women were viewed.

A saying from the Middle Kingdom text, *The Instruction of Any* reads, "Rank creates its own rules; a woman is asked about her husband, and a man is asked about his rank". (Lichtheim 1976:140) This seems to summarize the prevailing attitude about the ideal woman. Her primary responsibilities and worth came from the private world of home life, not the public world of administrative work and civic duty. However, one never senses that society viewed this private life of women as unimportant. There is no derision of the housewife in literature or art. Her importance simply came from an entirely different place than that of officials with rank and titles.

With such a situation, refining our knowledge about the lives and pursuits of women becomes difficult. The best way to do that is by examining the contexts where the lives of women intersect with the official, male-dominated world.

One area of public life on which women made some impact was religion. Although men dominated the priesthood throughout ancient Egyptian history, a significant number of women held various titles indicating religious vocations. Most of these had to do with music.

One of the most popular, non-royal titles found during the Old Kingdom was *ḥmt nṯr* ("Hemet netjer"), used from the 4th Dynasty until the end of the Middle Kingdom. The title Hemet netjer means the female servant of the god, a feminized version of the extremely common male title title *ḥm nṯr* ("Hem netjer"), the male servant of the god, or priest. These priests carried out most of the regular duties of the temple assisted by various specialist priests and (*wʿb*) or "pure" priests.

The Hemet netjer priestesses served in the cults of many deities but were especially prominent in the cult of Hathor. It appears that the early cult of Hathor was served predominantly by women, as fewer men from the Old and Middle Kingdoms held the title title *ḥm nṯr n Ḥwt-ḥr* ("Hem netjer of Hathor"). (Robins 1993:142) There were male administrators and high priests at the top of the hierarchy because these positions had administrative duties as well as priestly ones, and were therefore filled by men who were part of the bureaucratic structure. But the daily duties of the cult rituals – the responsibility of men in any other cult – seem to have been performed mainly by women who were Hemet netjer of Hathor.

The priestesses seem to have been particularly musically inclined, probably not by accident, considering that Hathor was the patroness of music. The image of a woman holding the sacred symbols of Hathor, a sistrum and menat, in her hands is very common throughout Egyptian history. The priestesses would have used these to create rhythm for the temple rites. They might also have sung or chanted along with the rustling of the menat beads and the jingle of the

Chantresses participating in temple rites at Karnak in Tuthmosis III's festival temple. Photo by author.

metal sistra rattles. Both instruments were believed to be sacred symbols of the goddess and imparted her special blessings and power – distinctly feminine attributes.

In fact, non-royal men are rarely depicted with a sistrum or menat although exceptions do exist. This might be because of the objects' association with Hathor, a goddess closely linked to women's concerns. Perhaps it was taboo or unconventional for a man to use the sistrum and menat because they were so deeply imbued with feminine power. If that were the case, and if the daily offering to Hathor had to include the use of these objects, men would have been unable to perform the proper offerings to the goddess in daily cult rites. It may very well be that the duties of the job necessitated women's participation.

The middle of the second millennium BCE marked the beginning of the New Kingdom, a dramatic new age for the Egyptians and one marked by many changes in religious practices. At first glance, it would appear that in the New Kingdom women stopped playing a serious role in the religious life of ancient Egypt because the ubiquitous Hemet netjer title all but disappears. In the New Kingdom, the Amun priesthood had become more powerful than any cult in previous periods, so an increasingly professional cadre of priest-administrators was needed to run the growing system. The positions were also increasingly hereditary rather than being appointed by the king or high priests. These factors marginalized women to some extent since administration was not a traditional role for women, nor did they inherit titles. However, this professionalism also meant that the priesthood had become somewhat secularized (Myíliwiec 1985:30) still leaving room for the participation of women in some form.

It was at this moment in history that the title (*šmꜥyt*) (*"shmayt"*), or "Chantress", became common. (Onstine 2001) Although there were sporadic instances of the title chanter/chantress for both men and women in the 12th Dynasty, it was not until the 18th Dynasty that it became the most common title for a woman after *nbt pr* ("nebet per"), or "Lady of the house". The use of the title Chantress lasted into the Ptolemaic era, although it is rare after the late 21st Dynasty.

With the changing political and religious climate of the early 18th dynasty, women's roles in the temple hierarchy needed to be reevaluated and integrated into the new systems. This process can even be traced back to the late 12th Dynasty, hundreds of years earlier, when Senusret III instituted a series of governmental reforms which were probably intended to break up the power of the established elite. Since the women of these wealthy families usually held the title Hemet netjer, this position may have been a casualty of larger issues at the end of the Middle Kingdom.

The first appearances of the title shmayt in the Middle Kingdom are on crude stelae, indicating a less-than-elite position for the women involved. Perhaps they were from new bureaucratic families who had taken over the posts previously held by hereditary nobility.

Because of the absence of the Hemet netjer title and the need to offer music to the gods, the new designation of chantress seems to have been created. It almost seems that the chantresses took the place of the Hemet netjer priestesses in the religious hierarchy.

Despite these early beginnings, the title's real rise in popularity began during the reign of Hatshepsut many years later. During her unusual 18th Dynasty reign, there were many innovations in state and temple administration. (Spalinger 1998:251; Assmann 1989:71-82) There were also societal changes. In general, since the beginning of the 18th dynasty, women played a more visible role in society, with many famous royal women making a name for themselves in history. The wives and mothers of the early founders of the 18th Dynasty – Ahmose-Nefertari, Ahotep and Tetisheri – played significant roles in the reunification and character of the 18th Dynasty. Late 18th Dynasty queens such as Tiye and Nefertiti also seem to have exercised great influence in their own right.

It was also during Hatshepsut's reign that officials began to be buried in great numbers in the Theban hills, now popularly known as the Tombs of the Nobles. And, contrary to the decorative styles of previous periods, women were now afforded a much more prominent position in the tomb, offering to the gods and partaking of the funerary offerings along with male family members. They even dedicated their own stelae at sites such as Aybdos.

These trends have been interpreted as evidence of an increase in social or public roles for women. While hardly a women's liberation movement, it may represent a slight shift toward a greater acceptance of women in religious roles, both on a personal or family level and in larger, state-sponsored cultic activities. (Whale 1989:241)

Hatshepsut popularized such state-sponsored cult activities in the form of huge processions to accompany the festivals of Opet (a royal and divine rejuvenation ceremony) and the Beautiful Feast of the Valley (an elaborate festival of the dead). New Kingdom processions were elaborate affairs in which the images of the gods were taken out of the temples and paraded through the streets for the populace to see. The gods were still hidden behind draperies, but this was the closest most people ever got to their gods, as entrance into the temple sanctuaries where the gods resided was strictly forbidden to non-initiates. The processions were always accompanied by a large contingent of musicians, acrobats and dancers of both sexes, including the chantresses. In Thebes, the gods Amun, Mut and Khonsu were taken from their temples at Karnak and paraded to Luxor temple for the Opet festival. For the Beautiful Feast of the Valley they were also taken across the river to visit the mortuary temples of dead kings, bestowing blessings on the private tombs they passed as well. Mortuary temples, such as Hatshepsut's at Deir el-Bahari, were important resting places along the route where the gods could commune with the souls of the dead kings.

These processions were a perfect way for women to serve their gods. As musicians, they did not need to be full time priestesses; they were employed as needed.

Even during the Amarna Period, musicians were still frequently portrayed in ritual scenes and in depictions of the palace. Music was part of the new religion, as the cultic scenes from Amarna and on the talatat blocks from East Karnak demonstrate. (Leprohon in Redford 1988: 47-51; Manniche 1991b: 62ff; Gohary 1992: Pl. L, LI, CVII) A few chantresses of the Aten are known, but with fewer gods and temples to serve, the number of musician-priestesses briefly declined.

The demise of Atenism and the return to orthodoxy is evidenced by the numerous women who held the title chantress of Amun in the short time period encompassing the reigns of Tutankhamun, Aye, and Horemheb. The succeeding Ramesside Period sometimes appears to be a continual reassertion of orthodoxy as the period is marked by a resurgence in personal piety. Large numbers of women from more diverse economic backgrounds held the title of chantress and were involved not only in the cult of Amun but of many other local and state gods. Previously, only women from elite families had held the titles of musician-priestesses. But in the late New Kingdom, an increasing number of women who were married to simple scribes and stable masters also became chantresses.

Singers

Another New Kingdom title associated with temple worship was *ḥsyt ("*Hesyt*").* This title was probably a more general term for singer. The root of the word means to praise. The Hesyt priestesses also served the gods through singing and the use of sistra and menats. However, when we compare the contexts of the two titles, it is clear that chantresses were mainly involved in religious or royal ceremonies and were accompanied by percussion instruments – hence the translation as chantress rather than singer. The Hesyt, however, were also found in both religious contexts and less formal entertainment scenes where they sang along with any combination of musicians playing lutes, lyres, oboes and harps. (Onstine 2001:13-16)

Where the Hemet netjer priestesses of the Old and Middle

Kingdoms mainly served Hathor, and the chantresses of the New Kingdom were largely in the service of Amun, the Hesyt-singers of the New Kingdom were particularly devoted to Mut, Amun's consort at Thebes. New Kingdom and Third Intermediate Period women sometimes concurrently held the titles of chantress of Amun, singer of the temple of Mut at Karnak, and "nurse of the child Khonsu". In this way they aligned themselves with the entire Theban triad, a very politically savvy thing to do as the cult of Amun was the most powerful in the country at that time.

Sistrum Players

There were also a few different titles that meant sistrum player, *iḥyt, sḫmyt, ssty* being the main three. These titles were not popular until the Third Intermediate Period and later, although they are occasionally found in the New Kingdom as well. The title chantress is rarely found after the 22nd Dynasty so it seems that the popularity of the new sistrum player designations coincides with the decline of the chantress title, similar to the situation with the decline of the Old and Middle Kingdoms Hemet netjer title and the rise in popularity of the chantress title.

The Khener

There was also another institution associated with temple music: namely the *ḫnr* ("khener"). The term is often mistranslated as harem, a misleading word to use since the title had nothing to do with either the segregation of women from society or of women being the sexual property of any individual. Most scholars now agree that the institution, and the women who bore titles associated with it, were performers: musicians, dancers and acrobats. (Nord 1981) One specific title, *wrt ḫnrt* ("weret khenert") "the great one of the musical troupe," was held by some of the most prominent women of ancient Egypt including queens, princesses and noblewomen.

It might be that khener was an overall term given to a group of chantresses, singers and sistrum players as well as dancers and acrobats, who came together in the service of a specific god. During processions or other state occasions where music was required, they could be called upon as a group to provide the proper atmosphere and music for the occasion.

Temples

Music was an integral part of religious ceremony, both in public displays and in private temple ritual. One of the teachings from The Instruction of Any reads, "Observe the feast of your god ... song, dance, and incense are his foods". (Lichtheim 1976:136)

Epithets like the one given to Nefertiti show how crucial the role of music played in worship and interaction with the god: "She who pacifies the Aten with a sweet voice and those hands of hers which carry the sistra". (Troy 1986:192) Other, similar epithets like "The one who pacifies the god (Horus, Amun, or just the generic netjer) with her voice" were used by many royal women. (op. cit.) Non-royal women usually did not have epithets like these associating them with deities.

One Hellenistic observer noted that the priests sang hymns to their gods 3-4 times a day, during the prescribed daily rituals at morning, noon, evening and night. (van der Horst 1982:69) The officiants purified themselves by washing with water from the sacred lake at each temple. The priests and priestesses then approached the shrine of the god, kept hidden in the heart of the temple away from the uninitiated. They purified the shrine with incense and a libation of water to clear away the sand. Then they opened the doors of the shrine. For the morning rites, the priests changed the god's clothes (linen draped around the statue and any jewelry that had been offered) and offered him or her food, drink and incense. Subsequent rites during the day were probably less elaborate and consisted of food and drink offerings, incense purification and song. During all the rituals, the musicians offered hymns as prayers to the accompaniment of sistra and menats or clapping.

As discussed above, a main pattern that evolved throughout Egyptian history was the switch from one title to another during succeeding periods, such as the transition from the Hemet netjer priestesses of the Old and Middle Kingdoms to the chantresses of the New Kingdom, and from chantresses to the later sistrum players. These changes may have been influenced by politics. The king or his representatives in the priesthood may have encouraged women to participate in cultic activities as a way to strengthen the power base of certain cults associated with kingship, specifically Hathor in the Old Kingdom and Amun in the New Kingdom and Third Intermediate Period.

This is especially probable because the increase in the number of women who held musician-priestess titles coincided with times when rulers were trying to build support. For example, Hathor was closely associated with kingship in the Old Kingdom. The priestesses of Hathor became most numerous at the end of the Old Kingdom, when many scholars theorize that the central government was falling apart. Similarly, Amun was the state god of the New Kingdom and the chantresses of Amun in the New Kingdom become numerous during the reign of Hatshepsut, a woman who definitely needed to build some bridges with the establishment. The number of chantresses increased again in the post-Amarna and early Ramesside periods – an era recover-

ing from the damage of Akhenaten's policies and an age of extreme devotion to the traditional gods.

The musician-priestesses were not only taking part in religious duties, they were also supporting the state religion and the king by participating in the dominant economic and political institutions of their times. This is important to recognize because it gives us a tiny glimpse of the political nature of women's behavior, an aspect that is otherwise not evident in art or literature where the ideal woman was not supposed to be concerned with affairs of state. Although the musician-priestesses never held the same authority or power as male priests, they nevertheless played an important role in the religious and perhaps political life of ancient Egypt.

REFERENCES

Assmann, J. 1989. "State and Religion in the New Kingdom," in *Religion and Philosophy in Ancient Egypt.* Yale Egyptological Studies 3. New Haven: Yale University.

Galvin, M. 1981. *Priests and Priestesses of Hathor in the Old Kingdom and First Intermediate Period.* Doctoral Dissertation, Brandeis University.

Galvin, M. 1984. "The Hereditary Status of the Titles of the Cult of Hathor". *JEA* 70: 42-49.

Gillam, R. 1991. *Topographical, Prosopographical and Historical Studies in the 14th Upper Egyptian Nome.* Doctoral Dissertation; Toronto: University of Toronto, Department of Near Eastern Studies.

Gillam, R. 1995. "Priestesses of Hathor: Their Function, Decline and Disappearance". *JARCE* 32: 211-237.

Gohry, J. 1992. *Akhenaten's Sed-festival at Karnak.* London: Kegan Paul International.

van der Horst, P. W. 1982. "The Way of Life of the Egyptian Priests According to Chaeremon," in *Studies in Egyptian Religion Dedicated to Professor Jan Zandee,* M. Heerma van Voss, ed., pp. 61-71. Leiden: E. J. Brill.

Leprohon, R.J. 1988. "Cultic Activities in the Temple at Amarna", in D. Redford, *The Akhenaten Temple Project.* Volume 2: Rwd-mnw, Foreigners and Inscriptions. *ch. 5, p. 47-51.* Toronto: Akhenaten Temple Project and the University of Toronto Press.

Manniche, L. 1991. "Music at the Court of the Sun-Disk". *Amarna Letters 1: 62-65.*

Myíliwiec, K. 1985. *Eighteenth Dynasty Before the Amarna Period.* Leiden: E. J. Brill.

Nord, D. 1981. "The Term *ḫnr:* 'Harem' or 'Musical Performers'?" in *Studies in Honor of Dows Dunham.* Studies in Ancient Egypt, the Aegean, and the Sudan, W.K. Simpson and W. Davis, eds., pp. 137-145. Boston: Museum of Fine Art.

Onstine, S. 2001. *The Role of the Chantress (Šmʿyt) in Ancient Egypt.* Doctoral Dissertation; Toronto: University of Toronto, Department of Near and Middle Eastern Civilizations.

Robins, G. *Women in Ancient Egypt.* Cambridge: Harvard University Press.

Spalinger, A. 1998. "The Limitations of Formal Ancient Egyptian Religion". *JNES* 57: 241-260.

Troy, L. 1986. *Patterns of Queenship in Ancient Egyptian Myth and History.* Boreas 14. Uppsala, Sweden: Acta Universitatis Upsaliensis.

Whale, S. 1989. *The Family in the Eighteenth Dynasty of Egypt: A Study of the Representations of the Family in Private Tombs.* Sydney: The Australian Centre for Egyptology.

Dr. Suzanne Onstine is an Associate Director of the University of Arizona Egyptian Expedition. She is President of the Arizona chapter of ARCE and a professor of anthropology at Pima Community College in Tucson, AZ.

Intersection of Text and Object: Offering Tables and Cultic Performance

Harold Hays

With countless examples surviving from all periods of Egyptian history, the offering table was an object of enduring importance to the ancient Egyptians. Its importance and use might be presumed from the physical contexts in which it has sometimes been found, such as in front of false doors in Old Kingdom tombs. Just as the false door served as a cultic focus during the performance of mortuary services, the table, positioned between the false door and the priestly officiants, evidently had an important place in cultic performances.

One of the most frequent motifs on an offering table is the carved shape of the heiroglyphic word *hetep,* which often dominates the table's decoration, as in the Old Kingdom table shown in Figure 1. In fact, the actual shape of many offering tables is the heiroglyphic word *hetep*.[1] From the contexts in which this word appears in the Old Kingdom, it seems to have originally meant "to have needs or desires satisfied"[2], through receiving food and drink, material recompense for services rendered, a suitable legal arbitration, or other means. But the hieroglyphic sign for this word represents a loaf of bread upon a mat – that is, a presented offering – and hence *hetep* often refers simply to an offering to a god or a dead person.[3] This last dimension of meaning provides an immediate indication of the use of offering tables: they were objects over and upon which items were ritually presented, especially foodstuffs. Indeed, so closely connected was the offering table with this meaning that the word *hetep* itself could stand as a term for "offering table".[4]

The term *hetep* also appears in the very common phrase *hetep-di-nisut,* "an offering given of the king," a phrase bearing witness to the king's role as archetypal officiant in mortuary cult, just as he was the archetypal officiant in temple cult. *Hetep-di-nisut* appears on inscribed offering tables from the Old Kingdom through to the end of pharaonic history. It is perhaps the most frequently encountered statement on offering tables, either standing alone or combined with other statements to create an entire offering formula.[5] In the latter instance, *hetep-di-nisut* acts as a kind of heading to one or more granted items, such as in one place on the table in Figure 1, which reads, "An offering given of the king: that he [the deceased] be given a thousand bread, beer, beef, fowl, alabaster, oil and linen".[6] The part following the heading of "An offering given of the king" constitutes something granted to the deceased, corporeal items symbolically representing the means for the continued life of his incorporeal person. Items such as bread and beer were indeed presented during mortuary services, ideally performed every day for the deceased person in order to secure for him a beatified state.[7] Figure 2 depicts such a presentation.

Besides the common *hetep*-shape of offering tables, also noteworthy with respect to physical structure is their frequent incorporation of libation channels and basins, both of which were designed to receive liquids poured over and onto the table's platter. The function of the basins is made clear by texts which can be wrapped around them, as on the New Kingdom offering table of Sarenenutit, called Tjawy

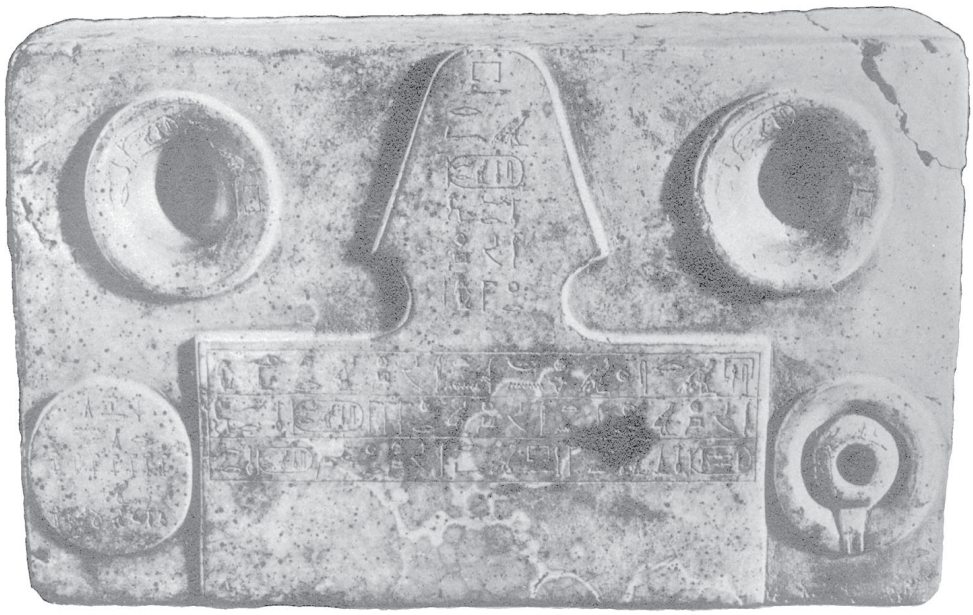


Figure 1: An offering table from the Old Kingdom, bearing *hetep*-design (after Borchardt 1937 pl. 4).

(see Figure 3): "This your libation, O' Osiris Tjawy, true of voice, gone forth because of [your] son, [gone forth because of Horus — I have come,] even having brought you the eye of Horus, that your [heart] be cool [by it]".[8] Though damaged, the text can be restored since enough of it remains to make it identifiable as the Pyramid Texts utterance 32, first attested in the sarcophagus chamber of the pyramid of Unas, the last king of Dynasty 5. Significantly, this utterance is from the offering ritual, a sequence of rites within mortuary service.

Even more significantly, though first attested in the pyramids, this utterance is attested in all periods of pharaonic history, down to the Ptolemaic. The text owes its longevity to its membership in the offering ritual, as the offering ritual was known throughout all these periods. Thus, in addition to its literal content, the text's ritual context emphasizes the table's position in the culture which produced it: it was a cultic implement, something over which rites were performed and texts like this recited. At the same time, the table as a physical object imparts a real-world context for this and other utterances: they, too, had a reality beyond mere words; they were cultic recitations.

Equally important is the fact that texts like the one from Sarenenutit's table took on a life of their own beyond ritual's bonds of tradition, inasmuch as they became subject to the creative genius of variation.[9] For example, the Ptolemaic offering table of Neferibre (Figure 4) bears the text: "O' Osiris Khentimentiu, let me give you this libation gone forth because of your son, gone forth because of Horus; let me bring you the efflux gone forth from you!"[10] Numerous offering tables bear further variations of the ancient libation text.

Because of their often explicit association with the act of libation, it is natural that another Egyptian word for offering table, *wedehu* or *wedjehu,* is derived from *wedeh,* meaning "to pour out".[11] Figure 5 shows how this word is sometimes written. But even with the etymological connection of *wedehu* to the act of pouring out, and even with many of these tables being designed to physically receive liquids, their function was not limited to libation, for some texts speak of "bread and beer being given to you upon the offering table *(wedjehu),* of Khentimentiu".[12] It is evident, therefore, that offering tables in general were employed in several different rites, including rites of presenting bread, beer, and libation.

Moreover, although the texts mentioned so far were all inscribed for dead persons, offering tables were employed not only in mortuary service but also in temple cult. This can be inferred from the last text, which intriguingly speaks of offerings presented "to you," a dead man, "upon the *wedjehu* of Khentimentiu," a god. But the same term *wedjehu,*

Figure 2: From an Old Kingdom depiction of a rite in mortuary service, the presentation of bread and beer (after Junker 1944, p. 167).

as used in the tale of the Westcar Papyrus, is more directly associated with temple cult, when a group of gods is informed that kings will "endow your *khaut* and make your *wedjehu* flourish".[13] A further indication of an offering table's suitability to both mortuary service and temple cult is found in this last passage's use of the term *khaut,* yet another word for "offering table." For it, too, may be found in the context of service for the dead, as when the deceased is to be equipped with a *khaut* during a rite in the offering ritual. The affinities between mortuary service and temple cult are underscored by their common use of the same implement — the very platform upon which the means for future and further life is offered.[14] In this regard, the Coffin Texts provide a spell intriguing for its uniting service for the gods with service for the dead: "May you [the deceased] eat bread from the *khaut* of Re, of the great ones within the gates".[15] As with the *wedjehu* of Khentimentiu discussed above, one has here a dead man receiving items from the offering table of a god.

The offering table was integral to cultic performances for

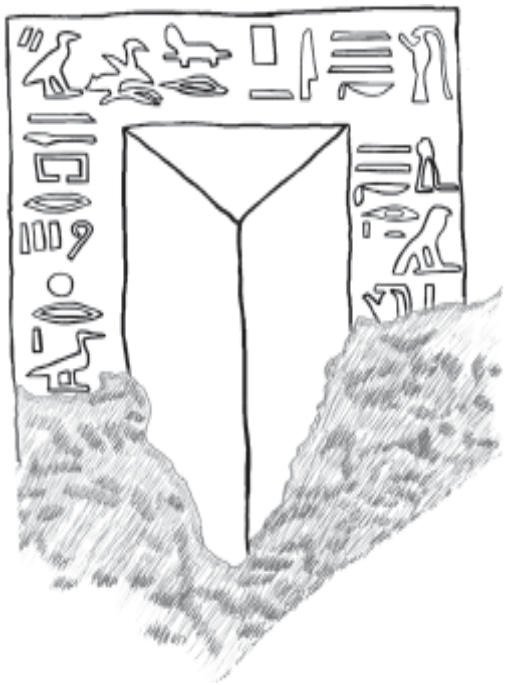


Figure 3: From the platter of the offering table of Sarenenutit, showing libation basin with remnants of Pyramid Texts utterance 32 wrapped around it (drawing Hays, from photo of Cléré 1981, pl. XXV).

Figure 4: An offering table from the Ptolemaic period bearing a libation text, ultimately derived from Pyramid Texts utterance 32 (after Kamal 1909, pl. XXXIX).

both the dead and for the gods, from its very shape and design, to the words inscribed upon it, to the contexts in which words for "offering table" appear. For us today, each one of these different kinds of evidence complements our understanding of the others. The physical table is not only a sculpted block of stone able to be appreciated for aesthetic reasons but it is also an object over which sacred rites

Figure 5: Some Egyptian terms for offering table; from left to right, *hetep*, *wedehu*, and *khaut.*

were once actually performed. Texts upon it were not only decorative but were of the sort anciently recited over it. And the ancient authors of words concerning it were making reference to objects that have survived to us today.

Notes

1. For example, the 25th Dynasty offering table of the God's Wife, Shepenwepet, found at Medinet Habu, on which see Uvo Hölscher 1954 *The Excavation of Medinet Habu, Volume V: Post-Ramessid Remains*. Chicago: University of Chicago Press, p. 28 with fig. 31.

2. Compare the similar interpretation of Alan Gardiner in Nina de Garis Davis and Alan H. Gardiner 1915 *The Tomb of Amenemhet (No. 82).* London: Egypt Exploration Fund, p. 80, where the word is held to literally mean "'satisfaction', 'contentment', and refers to the feelings aroused by the presentation of offerings".

3. As noted by Regina Hölzl 2002 *Ägyptische Opfertafeln und Kultbecken.* Hildesheim: Gerstenberg Verlag, pp. 133-134, it symbolizes the deceased being provisioned with offerings.

4. See Kurt Sethe 1908-1910 *Die altäegyptischen Pyramidentexte,* 2 vols. Leipzig: J.C. Hinrichs, section 102a.

5. For further detail on the components of the offering formula, see Winfried Barta 1968 *Aufbau und Bedeutung de altäegyptishchen Opferformel.* Gluckstadt: J.J. Augustin, pp. xiv-xv.

6. Author's translation of text in Ludwig Borchardt 1937 *Denkmäler des Alten Reiches (ausser den Statuen),* Part 1 (Catalogue Générale vol. 97). Berlin: Reichsdruckerei, p. 13 and pl. 4.

7. For a summarized description of mortuary ritual, see Ann Macy Roth 2002 "Funerary Ritual" in Donald B. Redford, ed., *The Ancient Gods Speak: A Guide to Egyptian Religion.* New York: Oxford University Press, pp. 147-154.

8. Author's translation of text in J.J. Clére 1981 "Le table d'offrandes de l'échanson royal Sa-Rénénoutet surnommé Tchaouy" in *Bulletin de l'Institut Français d'Archéologie Orientale,* 81, Suppliment, p. 219 and pl. XXV.

9. This phenomenon was first observed by Friedrich von Bissing 1901 "Zur Geschichte der Libationsformeln" in *Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes,* 23, pp. 38-47.

10. Author's translation of text in Ahmed Bey Kamal 1909 *Tables d'offrandes* (Catalogue Générale vols. 46-47). Cairo: Institut Français d'Archéologie Orientale, p. 115 and pl. XXXIX.

11. As it is used, for example, in the Pyramid Texts; see Sethe 1908-1910, section 2067b: "with a libation being poured out at the gate".

12. Author's translation of text in *Journal of Egyptology* 20 (1934), p. 158, pl.12. The statement is evidently derived from an utterance found also in the Pyramid Texts (see Sethe 1908-1910, section 474c: "its thousand of bread and beer upon the *wedjehu* of Khentimentiu".

13. Author's translation of text from A.M/ Blackman 1988 *The Story of King Kheops and the Magicians.* Kent: J.V. Books. On this passage, see Harold M. Hays 2002 "the Historicity of Papyrus Westcar" in *Zeitschrift für ägyptische Sprache* 129, pp. 28-29 with note 71.

14. On other affinities between mortuary service and temple cult, see Harold M. Hays 2002 "The Worshipper and the Worshipped in the Pyramid Texts" in *Studien zur altägyptischen Kultur* 30, pp. 153-167.

15. Author's translation of text in Adriaan de Buck 1935 *The Egyptian Coffin Texts I (Texts of Spells 1-75).* Chicago: University of Chicago Press, pp. 192I-193a.

Harold M. Hays is a Ph.D. candidate in Egyptology at the University of Chicago and an epigrapher with the Epigraphic Survey of the Oriental Institute of the University of Chicago.

The Prehistory of Egypt, or How It All Began

A lecture presented to the ESS by Ellen LeBlanc
15 July 2002
Summarized by Anita McHugh

It has often been said that Egyptian civilization was complete by the 4th Dynasty. If so, something substantial must have come before this in order to lay the firm foundation for the Egyptian civilization and culture. The vast majority of the elements of Pharaonic civilization have their roots in the very distant prehistoric past. The earliest evidence of humans in Egypt is mostly of Neolithic cultures, during the last part of the Stone Age, when people were making fine tools and beginning to domesticate plants and animals.

Dating remains of very ancient sites has always been a difficult problem. There are four methods used for dating such artifacts.

The first and most valuable is the Sequence Dating Chart developed by Sir Flinders Petrie. In 1901, he announced his system of relative dating of artifacts from the grave goods in thousands of graves at Naqada, which he had excavated. This system is based on stylistic changes in pottery, slate palettes, etc. In 1947, Carbon-14 dating was developed. This method uses a small piece of organic matter and is based on the rate of decay of a radioactive isotope of carbon, C-14. The results of C-14 dating are by no means as perfect as once thought. C-14 results are compared with the results of other methods of dating, such as dendrochronology, or tree ring dating. In tree ring dating, the relative size of each annual tree ring forms a pattern due to the climate. Charts for tree ring dating are based on the type of wood and the site or climate in which it was grown. The results of C-14 and dendrochronology are averaged to give a date for the artifact.

A much more recently developed dating method for fired clay like pottery is thermoluminescence. This method uses the fact that minerals absorb radioactivity at a certain rate. When an item is fired above 500°C, it releases the entire radioactivity, essentially restarting its clock. These three tests are generally used to substantiate the sequence dating. Dating rock art is more of a problem. The best method is to compare the rock art with art on pottery.

The earliest peoples of North Africa did not settle along the Nile River. During the Early and Middle Paleolithic periods, the climate varied between arid and wet. Thus, the inhabitants moved from sites near the oases and the Nile to other places far out in the deserts when savannas existed there. Due to the climate variations, the Nile flow varied widely. Older deposits from relative dry periods have been almost totally eradicated by the intervening periods when the river flow was much greater. Early sites are nothing more than places where people camped. These early sites yield stone choppers and hand tools. The earliest burial from Egypt is that of a child found near the temple of Dendera, dated to about 55000 BCE. There are several Late Acheulean sites in the Western Desert related to wetter periods when life as hunter-gatherers was possible. Many Late Paleolithic sites have been found in Upper Egypt.

Because of climatic changes brought about by the last Ice Age, the rains returned about 14000 BCE. There was a great wet period from about 12000 until 7500 BCE. During this time, the people returned to the savannas of the Sahara. This was a time of catastrophic floods of the Nile, with floods reaching eight or nine meters above normal and erasing any trace of human occupation along the Nile. During this period, at one site near Qena, fish were caught in sophisticated baskets and nets, and then smoked. Also from this time, excavators found a cemetery at Gebel Sahara with stone flakes imbedded in the bones and skulls of 24 human skeletons, suggesting they were killed in some type of warfare. There has also been rock art found in the Nile Valley at Gerf Hussein from this same time period.

As the rains increased, people returned to the Sahara where life was more productive, during the early Neolithic from 11000 to 6800 BCE. Hunting and gathering continued and the domestication of cattle began. Between 6500-4000 BCE, human occupation of the Western Desert reached its peak, with numerous sites, wells, wattle-and-daub constructions and slab-lined houses. By 8000 BCE, there is evidence of domesticated cattle and the cultivation of emmer wheat and barley. By 7000 BCE, the people living in the savannas of the Western Desert had made decorated pottery, lived in huts and were sedentary for at least part of the year. From around 6000 BCE at Nabta Playa, excavators have found a large megalithic complex, with an underground chamber containing the remains of a long-horned bull. This was clearly a public structure and represents a change in social complexity. As the climate dried, people were forced to migrate back toward the oases and the Nile.

While there is evidence for civilization in the Western Desert, there is no evidence for human presence in the Nile Valley between 11,000 and 8,000 BCE. It is likely that some inhabitants stayed in that area and dealt with the climatic

change. However, the remains of the occupation are covered with alluvial silt deposits.

There are several Nile Valley sites, inhabited between 8000 and 3500 BCE, that have been discovered and excavated. These include el-Kab, Helwan (near Cairo), the Faiyum Oasis, Maadi (now a part of modern Cairo), Merimda, el-Omari, Buto, Sais, and the sites of the separate Badarian and Tarifian cultures.

The most impressive of these sites today is el-Kab. The site is located along a silting-up branch of the Nile, about 75km south of modern-day Luxor, where people made summer camps, hunted the game and fished in the entrapped water. They apparently did not make pottery or practice agriculture. At the same time, the Faiyum was occupied with people whose main occupation was fishing. Helwan was also occupied and here there is some evidence of trade between the people of Helwan and the people inhabiting the Mediterranean coast of Egypt. These Nilotic peoples do not seem to have been as culturally advanced as the inhabitants of the Eastern and Western Deserts.

About 5500 to 3000 BCE, the Sahara began to grow even more arid, forcing the herders and farmers to migrate toward the oases and the Nile River Valley. They mingled with the existing hunter-gatherers and brought their domesticated animals and crops with them. It was this mingling of the more advanced Saharans and the Nilotic peoples that really began the predynastic period of Egyptian history.

There were early cultures using ceramics and domesticating cattle in the eastern Sahara. Thus the Faiyum appears to be one of the first areas occupied as people moved back toward the river during the extreme dry period of the sixth millennium BCE.

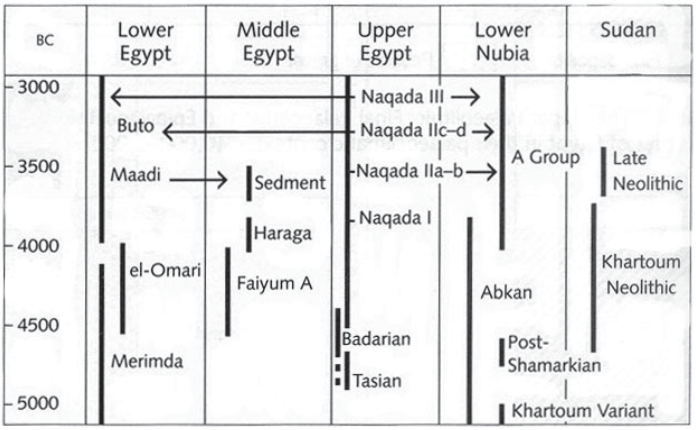
There were two Faiyum cultures, A and B. Faiyum B is the earlier culture and its people were true hunter-gatherers. The Faiyum A culture used many complex flaked stone tools and the origins of some of their techniques can be traced back to the Middle East. They had a coarse pottery, used sandstone mortars and pestles, and carved palettes from limestone or diorite. These palettes are important artifacts for sequence dating as they change throughout the predynastic period. The most important animal remains in the Faiyum are those of domesticated goats, sheep, cattle and pigs. The goats and sheep appear to have originated in the Middle East, as there is no trace in Africa of wild ancestors for these. No cemeteries from this period have been found.

Because of the mixture of both Saharan and Middle Eastern traits, the Faiyum seems to have been a culture at the intersection of four routes, one from the eastern Sahara, one from the Mediterranean coast, one from the Near East, and one from the Red Sea and across the Nile Valley itself.

The Merimda culture is found about 45 km northwest of Cairo and has 5 levels dating between 6000 and 3500 BCE. Merimda is one of the earliest settled cultures in the Nile Delta. Located on the western edge of the delta, it was the first known farming village in Lower Egypt. Merimda excavations uncovered an anthropomorphic figure and figures of cattle at Level 1, the earliest known examples of Egyptian sculpture in the round. In the village were found traces of a reed enclosure fence. It was laid out across the ground and very well preserved. It was made of lines of stalks bound together by two horizontal ties, as is still done today to provide cattle enclosures. Burials at Merimda were in abandoned parts of the village, although children were also buried under the houses. The site of Merimda shows a long occupation of a single site during which period a sedentary lifestyle became dominant. There is some speculation that Level 1 shows many Middle Eastern influences. These include pear-shaped mace heads (as seen later in the mace heads of Scorpion and Narmer, footed pots, emmer wheat, flax, sheep and goats). Spinning and weaving are also thought to be innovations brought in from the Middle East.

The site of el-Omari, 3 km north of Helwan, was occupied roughly from 4600 to 4400 BCE. It consists of three separate, small sites that are very close to each other. The pattern of settlement suggests an egalitarian society. The pottery found here has little in common with that found in the Faiyum and Merimda. It is more similar to that of Palestine, both in technology and shape. Here there is some evidence of the beginning of social differentiation. The skeleton of a man who was apparently a chief was found holding a wooden staff. The people of el-Omari raised and ate goats, sheep, pigs and cattle, supplemented with fish. There is evidence that animals grazed in the fields and that fodder was stored to feed them, as is done today. The site C of el-Omari is significant in that the remains of donkeys are first found here.

The Badarian culture found at Hemmameih has been dated from 5500 to 3800 BCE. This site revealed a vertical stratification showing the sequence of cultures from Badarian to the late Predynastic. Their cemeteries were located outside the community in the low desert edge. The pottery from the graves is some of the finest thin-walled ware ever produced without a wheel. Grave goods also included ivory combs, siltstone palettes, copper pins and beads, leather bags and turquoise. The turquoise and copper are believed to have come from the Sinai. The Badarian culture produced Egypt's first tomb robbers. Evidence was found that many of the tombs had been robbed soon after interment. The tombs at Badari demonstrate a marked social differentiation with an increase in the quality and number of exotic grave goods.



Radiocarbon-dated prehistoric phases in Egypt, Lower Nubia and Sudan (after Kaiser: 1985 Abb: 10).

Maadi is located 10 km north of el-Omari and trade dominated its culture. It had active and strong contacts with Palestine and Syria. The houses of Maadi are of a type found only in the Levant. There is also distinctive, imported Palestinian pottery as well as Naqada-style pottery. One of the earliest uses of stone in building is found in a cellar here. Copper may have been important in the economy of Maadi, and raw ore, probably from the Sinai, was smelted by the Maadians. Other sites with the Maadi culture are in Heliopolis, Wadi Digla and Buto.

About 95 km east of Alexandria is the site of Buto at the town of the same name. It is believed to be the main delta center shown on the Narmer Palette. The early phases of the settlement are from the Maadi culture. Artifacts have been found at Buto that closely resemble those found in Uruk and used to decorate temple facades, as well as potsherds with decoration characteristic of Syrian ware. There is evidence that trade was conducted by sea.

In her lecture, Ms. LeBlanc traced the development of human civilization in Egypt from the distant past in the Pleistocene era, to the time when Egypt as we know it was about to explode upon the scene. The basis for this explosion was the domestication of animals, the development of agriculture with the knowledge of the Nile flood behavior needed for success, and the beginnings of technology and foreign trade. Ms. LeBlanc traced the peoples from small, wandering bands of hunter-gatherers to sedentary peoples who had culture, religion and some knowledge of the world outside their own village. Without the knowledge and skills that they developed, the Egypt that we know could not have emerged.

Note: Ms. Leblanc will continue the Prehistoric development of Egypt with a discussion of the Naqada I, II and III cultures, as well as the Dynasties 00 and 0, in another lecture to the ESS in the spring of 2003.

House of Scrolls

The Cult of Ra
by Stephen Quirke 2001
Thames & Hudson, London 184 pp.
$29.95 hardcover; ISBN 0500051070

Reviewed by Susan Cottman

Trapped within the sprawling Cairo metropolis lies the heart of the ancient Egyptians' sun cult, Iunu (also known as Heliopolis, On and Tell Hisn). While little remains and excavation has been limited, the influence of Iunu and its cult is preserved throughout Egypt in temples and tombs.

Stephen Quirke, a curator at the Petrie Museum of Egyptian Archaeology at University College, London, reconstructs the worship of Ra through religious texts, art, architecture and pharaonic cult practices spanning nearly the entire length of ancient Egyptian history.

Quirke divides his examination into several chapters: The Mythology of Ra; The Sun Cult and the Measurement of Time; Iunu – Lost City of Ra-Atum; Solar Spires – Pyramids and Obelisks; and The Exclusive Son – Akhenaten. Quirke first examines myths and art for the names, objects and animals, such as Atum, the benben, the scarab beetle and the benu bird (heron) that are at the center of the sun cult.

In the second chapter, The Sun Cult and the Measurement of Time, the author examines the relationship between the king and Ra, as it is expressed in the so-called Books of the Dead inscribed on kings' tombs during the New Kingdom. The sun and the king are always on the move during their dangerous solar journey in two boats, the *Mesketet* during the night and the *Mandjet* during the day. The sun and the king die at each sunset and are reborn at dawn in a perpetual cycle of life and death. Quirke also examines solar hymns found in the tombs of the Theban elite, perhaps sung daily to the sun and evidence of non-royal cult practices.

The reader is introduced to Iunu, the once-magnificent city of Ra, in chapter three. This chapter is particularly important because few popular books give Iunu more than a brief mention. Its Greek name, not surprisingly, means "City of the Sun". The Egyptians called its temple *Iunu Hut aat,* or the Great Shrine. Although the only surviving royal monument is an obelisk erected by Senusret I in the Middle Kingdom, structures may have been built as early as the Old Kingdom. Whenever the first religious structures appeared, the temple precinct at Iunu dwarfed even Karnak's, as illustrated in a scale comparison on page 91. Quirke cites Egyptologist David Jeffreys' research that suggests the sun temple faced east, toward the desert, "fronted by a monumental gateway flanked by obelisks ... A temple not quite like any other, but leaving clues to itself as echoes around the country.

Pyramids and obelisks are the subject of chapter four. Both architectural types date to the Old Kingdom. The tip of the pyramid was named *benenet,* the stone of the benben, which refers to the primeval mound at Iunu. Yet Quirke cautions the reader to not assume that pyramids are strictly solar monuments. He cites Kate Spence's recent research on a possible stellar orientation of the pyramids as evidence for the complicated significance of the pyramid and its complex.

Quirke suggests that the 6th Dynasty pharaohs developed the obelisk as an expression of the royal solar cult. Could the obelisk be the equivalent of the 4th Dynasty royal cult complex and the 5th Dynasty royal sun temples? Quirke describes the obelisk's purpose as a monument "to capture the spark of life at first dawn, for the eternal regeneration of the king and creation". Whatever the reason, subsequent pharaohs continued the practice of erecting obelisks at Iunu, Thebes, Pi-Ri'amsese and Tanis. The largest obelisk, built by Hatshepsut, was nearly 100 feet (30 meters) high.

Akhenaten is the subject of the final chapter. His father, Amenhotep III, was not content to join with the sun disk after death. He deified himself during his reign and became the Shining Sun Disk of All Lands. His iconoclastic son took this to "logical extremes" by banning worship of all other gods except Aten, the sun disk. The changes first appeared at Thebes early in Akhenaten's reign and became fully realized at his new capital and city of the sun, Akhetaten. Quirke describes it this way: "... the new king focused all cult on his father the sun disk, a practice reinforced perhaps by the assonance of the Egyptian words *it* 'father' and *itn* 'sun disk'". He suggests that this sweeping change was a plausible reason for the much-debated Amarna art style. Quirke's discussion of Akhenaten's heretical brand of solar worship is one of the best in recent books that deal with the subject. Thankfully, he does not ask the reader to endure yet another fruitless speculation about Marfan's syndrome or other medical conditions that attract sensationalism.

The Cult of Ra is essential for anyone interested in ancient Egyptian religion, architecture and funerary beliefs. The three are inexorably bound together, as Quirke's book so ably demonstrates.