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Publication of The Ostracon is supported by a grant from THE PETTY FOUNDATION

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THE EGYPTIAN MUSEUM IN TURIN, ITALY

By Charles Toth

About the Author
Chuck Toth retired from Lockheed Martin Aerospace in 1991 after 32 years in materials engineering and quality control. He has been an ESS member since 1997, and is currently the ESS Financial Secretary. His interest in ancient Egypt began in high school, where ancient history was taught using J. H. Breasted’s “A History of Egypt.” Chuck has been to Egypt twice, and plans to return in 2002.

Turin (Torino in Italian) is located about an hour and a half train ride west of Milan (84 miles) in Italy’s northern region called the Piedmont. The Alps are in sight to the north on clear days. The city center dates to the 17th and 18th centuries and boasts most of the west of Milan (4 miles) in Italy’s northern region called the Turin (Torino in Italian) is located about an hour and a half train ride west of Milan (84 miles) in Italy’s northern region called the Piedmont. The Alps are in sight to the north on clear days. The city center dates to the 17th and 18th centuries and boasts most of the 34 museums to be found in Turin. Among these is the Egyptian Museum (Museo Egizio) which houses one of the world’s largest collections of ancient Egyptian artifacts dating from the paleolithic to the Coptic era. The museum’s literature claims to have “30,000 objects and the most important collection outside of Cairo”. The three levels of the museum, from the basement to the second floor, allow over 20,000 square feet of display area. Some of the documents in the rooms can help the visitor somewhat in English as not all display placards and labels are in English.

The ground floor exhibit begins with two long halls (Halls I and II) dedicated almost entirely to large stone sculptures from the pharaonic dynasties. Amazingly, few are missing noses or have other facial disfigurements! Among the scores of life-size and colossal sculptures only the most impressive are described here.

From 18th dynasty Thebes the 6 foot high standing diorite statue of the astronomer-priest, Amen, brother of Queen Tiye (wife of Amenhotep III) stands close to a fine 5 foot diorite statue of Tiye herself as Isis in diorite from Copitos. Further along is the exquisite 6 foot high black diorite standing statue of Ptah from the 18th dynasty. It is surprising to notice that the two halls have 21 statues of the lion-headed goddess, Sekhmet, spaced here and there among the other statues! Possibly some or all of these came from the hundreds that were found at Karnak in the temple of Mut. All are between 7 and 9 feet tall, sculpted in diorite, and date back to the Other objects in Room I include false doors from Old Kingdom tombs, wall fragments from various tombs, a series of objects from Amarna and Dier el-Medina, and small statues in limestone and wood from 18th dynasty tombs.

Room II exhibits artifacts from burial chambers such as canopic vases, a huge collection of small and large scarabs, some ushabtis and ancient molds used to make them; and an assortment of painted chests. There, too are many animal mummies, including crocodiles, baboons, cats, and birds.

Room III has good selection of coffins and sarcophagi from Middle Kingdom tombs at Gabelein and Asyut. Also in this room are the stuccoed and painted sarcophagi of Puia of the 18th dynasty and the finely decorated one of the singer of Amon, Tabakenkhonsu, of the 20th dynasty. Of interest is the mummy from the predynastic peri-
od resting on its left side in a fetal position complete with all grave goods. Other predynastic artifacts include an entire range of flint tools, from arrow and spear points to exquisitely shaped long blade knives. Also displayed are 6 wrapped and 2 unwrapped adult mummies from the Late Period, one having a beautiful blue faience bead net draped over the wrapping. With this group are 2 wrapped mummies of children. Room III also has a remarkably detailed 1/1 scale model of Neferetari's tomb in the Valley Of The Queens. Each level can be seen through the plexiglas sides, showing very detailed painted walls and pillars. Close by is a beautifully inscribed 20th dynasty pyramidion from the tomb pyramid of the scribe Ramese that is undamaged except for minor chips along the bottom edge. Room III also contains a large display of ceramic and stoneware objects of daily use. Some of these, such as the black-topped vases, date to the pre-3100 BCE Naqada I and II periods.

Above a low doorway in the wall of Room III is a placard that reads "THE TOMB OF KHA". Inside the darkened room are sealed glass cases displaying the contents of the tomb of the architect Kha and his wife Merit that was found undisturbed in 1906 by Schiaparelli at Deir el-Medina. The Tomb was found below the ruins of the mud-brick chapel of Kha down a short stairway and at the end of a corridor blocked by a stone wall. The funerary chamber was sealed by a door of perfectly preserved coniferous wood. Near the door was the baskets and poles that the workmen had used to transport the mummies and grave goods to the tomb. Kha and Merit lived and died during the middle of the 18th dynasty and now both of their mummies lie intact in this remarkable room. X-ray photos show numerous items of jewelry within their wrappings. Displayed are funerary masks, internal coffins, a pristine papyrus Book Of The Dead 42 feet long, Kha's stele, chairs, beds, chests, senet game box, wooden statues of the dead, their clothes, Merit's toilet casket and wig, many loaves of flat bread, and metal and pottery containers full of assorted foodstuffs. Of great interest is Kha's architectural tools including a gold covered cubit given to him by Amenhotep II, a folding cubit and its leather case, writing equipment, and more.

Room IV contains many examples of weaving from various periods of dynastic Egypt including clothes and folded linen. Of special interest here from the end of the Old Kingdom is a complete linen tunic with sleeves and lacing at the neck, much like the galebeah worn in Egypt today.

Room V has on display many papyri including the very famous King list which surprisingly has come down to the present in torn fragments with many missing parts. Evidently it had been transcribed before it had come to such a sad state. Of additional interest is a large quantity of writing on stone and potsherd ostracae.

Room VI contains numerous exhibits that show the ancient way of daily life, many of which came from Deir el-Medina. There are models of houses and boats, foodstuffs, models of masons' and carpenters' tools, painters colors and brushes, fishing equipment, foot wear, toiletry items, kitchen implements, and musical instruments such as oboes, a fragment of a harp, castanets, flutes, and sistra.

Room VII has a multitude of divine figures such as the small bronze statuettes of the ancient gods and goddesses, including the sacred animals. Also included are specific aspects of religious beliefs and the belief in magic such as magic wands and healing statues.

Room VIII has many paintings that have been obtained from tomb walls and depict royal art as well as scenes from every day life. Also here are displays of model boats, granaries, a kitchen and other examples of ancient life from the museum's excavations at Asyut.

Last in the Egyptian tour is the underground hall in the Schiaparelli wing of the museum. This hall was built to house the finds made by Schiaparelli and Farini in the first half of the 20th century at Gebelein (which had been the cult center of the goddess Hathor), Asyut (Lyconopolis of the First Intermediate Period), and Qau el-Kebr (Antaeopolis of the Predynastic Period).

From Gebelein and the scant remains of the temple to Hathor there

From an altar-table of Roman date, in the Museum's collection is a fragment of a monumental stele dedicated by a pharaoh of the 2nd or 3rd dynasty (possibly Zoser), pieces of relief decoration from the era of Mentuhotep III, and a deposit of Thutmose III with models of work tools and brick molds. From the necropolis at Gebelein itself are sheets from the Predynastic Period (c.3500 BCE) depicting boats and funerary dances, black-topped vases, a boomerang and the remains of a wooden bed, and the tomb of a certain Iti, reconstructed as it was found with all of its contents.

From Asyut are full sized and life-like wooden statues of the deceased, sarcophagi, wooden models of boats and granaries.

Lastly is the Qau el-Kebr princely tombs, badly destroyed in ancient times, but still showing a royal grandeur in the beautiful sarcophagus of Ibu, built in the form of a palace. At the back of the room is the funerary chamber of Henib reconstructed with its paintings, which were removed from the site using the Strappo technique.

On the 3rd and 4th floors of the building is the Galleria Sabauda art museum which houses one of Italy's largest collections of northern European paintings such as Van Eycks, Van Dycks, Rembrandts, and Van der Weydens, among others. Well worth visiting while at the Egyptian Museum. The museums are located at Via Accademia delle Scienze 6 in Turin. Telephone: 011-36-17-776, admission is $7.90 to the Egyptian Museum and $5.25 to the Sabauda, both free to seniors over 60. Both are closed on Mondays. Helpful information can be obtained from the Turin tourist bureau at FAX 0039 011 5617095.

EDITOR'S NOTE
The Museum also has a Web site at:
http://www.multix.it/museogizio.to/

At the time of writing, the site is entirely in Italian, though an English version is in progress.
ELECTRICITY IN THE AIR: GIZEH, 1881

Transcribed by Randall T. Nishiyama

About the transcriber: Randall received his degrees in the engineering sciences and is employed at the University of Colorado at Boulder. He is a member of the ESS and the Boulder Society of the Archaeological Institute of America. He excavates with the Mamertine Foundation in Oppido Mamertina (Contrada Mella), Calabria, Italy.

In the spring of 1881, a dramatic thunderstorm darkened the skies over Gizeh. A young archaeologist named Flinders Petrie, who was conducting his Pyramid Survey (1880-1882) at the time, observed the phenomenon called 'ball lightning'. Ball lightning is a luminous sphere appearing near the ground after a lightning stroke and remains visible for up to a few seconds. To this day it is still little understood.

The 27-year-old Petrie wrote a letter to the editor of the journal Nature in response to an article by the Scottish physicist P.G. Tait regarding the same subject. The letter is impressive in the sense that it illustrates Petrie’s Victorian influence.

The tomb which Petrie used as his quarters was originally a set of three tombs whose walls had been taken down. The heat at this time was so uncomfortable that four days later, Petrie left Giza for Cairo. The tomb had previously been inhabited by Waynman Dixon, the engineer who had removed Cleopatra’s Needle to England. If you do ever find yourself one evening overlooking the Delta while in front of the ‘tomb’ at Gizeh and begin to feel some electricity in the air, it may be due to a storm but it may just also be due to the ghostly presence of someone who had been there many years before.

Ball lightning - a phenomenon rarely witnessed and more rarely photographed

Having just seen the statement of Prof. Tait (Nature, vol. xxii, p.341) quoted, as a final authority, against the possibility of distinguishing the source from the termination of a lightning-flash, I wish to record a storm that I saw. On [Thursday] May 19 [1881] there had been a brisk, hot south-west wind blowing at Gizeh, off the Libyan Desert, at about or over 100F; at near sunset a north wind began to come up against it, and there was heavy thunder and lightning all along the line of the mingling of the winds, extending as far as I could see to east and west, and passing a few miles to the north of the Pyramids: the lightning was solely between the clouds, at a height of about one and a half miles; the air around me was 94, though almost dark, I sat on a rock in front of the door of my tomb (from which I could see eighteen miles over the Delta) and quietly watched the lightning. To my sight there were distinctly different differences in the duration of the flashes; some appearing instantaneous and others in which I could see a spot of light occupying an appreciable interval to travel from one cloud to another; and I should be puzzled to draw a hard and fast line between the classes. Does this moving spot-lightning merge insensibly into the variation, of which I saw a fine case years ago near Guildford [Surrey], where a spark would slowly sail down in the air and then move over the ground before it disappeared?

In any case can these slow flashes (lasting perhaps half a second), seem as well as instantaneous flashes, to be disposed of by that blessed word ‘subjectivity’, which is so comforting to theorists on many objects? Or may not the confession of our ignorance of the cause of ball-lightning be extended to slow flashes in general, instead of treating them just as meteors were put out of court a century ago?

W.M. Flinders Petrie, Bromley, Kent

NOTES

There are certain things that mankind seems to discover/invent at the same point in each society. These are agriculture, animal domestication, weaving, and pottery. Once a given group has made some commitment to a settled lifestyle they begin to think in somewhat different ways than their nomadic cousins. Their needs change. Agriculture begins to develop as individuals/groups notice plants that are able to produce an edible product. This encourages settlement to grow food, to vary the diet, to create a perceived advantage in having a more reliable source of food. Animal domestication would follow or perhaps precede food growing again in order to acquire a more reliable food source. Weaving would come into play at some point but that is not my subject so I leave it to some other worthy person to research. This brings us to pottery. When people have more food or more abundant food and are not required to be on the move they tend to produce cookware and storage vessels that are of a more durable material.

Pottery is one of the oldest art forms of mankind. Particularly the shape found all over the world known as the amphorae. Unfortunately, because pottery is also breakable and has a somewhat limited lifespan, even in the desert areas of the Middle East, archaeologists are not able to say exactly when pottery was first made. We do know that there are remains of settlements in the Middle East as far back as 5500 BC, perhaps even to 6000 BC. We are forever increasing our knowledge with new discoveries and new finds undoubtedly there will be more evidence to move these dates further back. So much of what we know comes to us in little pieces. What a wonderful jigsaw is prehistory.

Flinders Petrie was the first to make some sense of the masses of pot sherds he found both in Egypt and in the Holy Lands. His work was so meticulous that we are still using his dating and pottery style system today. In my research I found several differing versions of the break down of prehistoric dates. So I picked one and if you prefer another so be it. For this paper I will use the following dates:

<table>
<thead>
<tr>
<th>DATE BC</th>
<th>UPPER EGYPT</th>
<th>LOWER EGYPT</th>
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<tbody>
<tr>
<td>5500 - ?</td>
<td>Predynastic</td>
<td>Late Neolithic</td>
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<tr>
<td>5500 - 4000</td>
<td>Badarian</td>
<td>Fayum A / Mirinda</td>
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<tr>
<td>4000 - 3500</td>
<td>Amratian / Naqada I</td>
<td>Omari A ?</td>
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<tr>
<td>3500 - 3300</td>
<td>Early Gerzean / Naqada II</td>
<td>Omari B ?</td>
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<td>3300 - 3100</td>
<td>Late Gerzean / Naqada III</td>
<td>Maadian/Late Gerzean</td>
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One of the reasons there are two date systems for Upper and Lower Egypt is due to the types of site available in each area. The sites in Upper Egypt are primarily cemeteries while those Lower Egypt are mainly of the remains of settlements. Basically the predynastic period is from 5500 BC to 3100 BC. However, it is during this time that many of the later elements of Pharaonic Egypt are established, to include wine and beer brewing as well a most of the pottery styles. As a point of interest it is in the predynastic times that many of the religious and afterlife ideas were merging.

The making of pots is natural for humans. The forming of round balls the inadvertent poking a thumb or fist into the ball and presto a pot. All these little ideas were in the back of mankind's mind until one day pottery developed. Of course, it takes a suitable material to make said pot, and fortunately the world has an abundance of clay a unique material for pottery. The connection that clay is moldable, that it will dry in the sun, would in time be made. Someone someone found probably by accident that the clay could be put in fire and made even harder and less water soluble. With practice, patience, several thousand years most likely; pottery became a part of every day life.

In Egypt according to our dating schedule it was made with the pre-dynastic people. Before I get too far ahead of myself let me go through some of the way's pottery develops. To give you a better idea of this I would like to refer to 'figure 1' Which will give an idea of how different shapes of pottery develop. To begin with pots are used primarily for cooking, storing, and pouring. Surprisingly the evolution of pots is really quite logical.

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The hand is the primary built-in tool of mankind. It is used for scooping, eating, holding, drinking, and carrying. From this basic form came all other forms of pottery. It is interesting to see that pottery in many diverse cultures is incredibly similar. Once people(it was women who were the first potters) mastered the pinching, poking, and forming of the clay they were on their way. So far I have just brushed the very basic outline of the beginning of pottery forms, there is not enough room to go into the subject in depth. But, at least this should give the reader a small understanding.

Most of the differences in pottery from culture to culture is based on the extremities and appendages, but the main difference it in the slips/glazes used, decoration and use of color. However, this is not the primary focus of this article. One of the elements that pronounced style is the various use of feet, spouts/pouring lips, lids covers or knobs, and handles, and lugs. These all run the gambit of very simple to grossly exaggerated. Often it is a mark of a particular society, reflecting it's religion, geography, and culture. The regions which have the longest pottery-making tradition are also the ones which will have the greatest variety and variations of themes. This holds true also for the differences in cooking utensils with the added

FIGURE 1

Pot development from primal though ovoid form, mainly used for pouring and storage vessels.

Pot development from primal through cylinder form, mainly used for pouring and drinking vessels.

Pot development from primal through bowl form, mainly used for cooking, eating, and serving.
causation of styles of cooking. Mankind's history of pottery-making has always quickly adapted forms from other cultures into his own. This adaptation is most evident in areas which had directly been influenced by trade routes from China to Persia to Egypt and back again. War also had great influences on this exchange of ideas. When ideas do become accepted as part of a culture it is often seen that the original form becomes somewhat blurred as it is incorporated into the new society.

Prior to 4500 to 4000 BC pottery was made by a variety of hand methods. The simplest was called "Hand Building" where a lump of clay is held in the palm and the other hand shapes the form, most likely by pinching the clay into the desired shape. A more complicated form used the "Coil Construction". In this method the potter forms the bottom of a pot by making a flat round piece. Then the potter rolls out long, thin rolls of clay that resemble a worm and coil this around the top of the base. Repeating this many times over to build the pot walls. The pot can be narrowed or widened as needed. Slip is a thin mixture of water and clay used to smooth the sides of pots. Yet another method of pot making is to use a mold. This requires a model over which the mold can be made, sure as a gourd, a basket, or even one made of clay for that specific purpose. Yet a fourth method is the "Paddle and Anvil" in this way the pot is formed from a lump using and inner support and a paddle or pounding tool on the outside. Most pots were round in form but occasionally there would be rectangular form as in Crete which made rectangular troughs divided into partitions. The Paddle & Anvil method was used in the Indus valley often to complete a form thrown on the wheel. But I get ahead of myself.

It is not known how the leap from clay hardened in the sun to clay hardened by fire was made. It came about over a long period and at different times in different places. There are two current theories to account for this discovery. The first is the Heath theory, whereby fire being a central part of man's early existence was carefully attended to. It is quite possible that as pits for fire were used it is likely they were lined with clay. This would have enabled the clay to become fired and thus turn into a crude bowl left in the fire pit. The other theory is that baskets at the fires edge were lined with clay to waterproof them and as the clay dried out and contracted it formed a pot which was better able to hold water or fire. The first theory is the most credible from what I can gather.

The present level of knowledge suggest that the earliest pottery came from Anatolia in association with a community of cave-dwellers during the Mesolithic period and dates no later than 6500 BC. These early wares were made of reddish-brown clay. Later around 5000 BC a group in this area made pots painted with red pigment designs and slip of cream in geometrical designs. All of these pots were burned to add a pleasing effect. White clay, yellow and red ochre's can tolerate the heat of firing and its effects more readily than others. It is thought that the decoration (painting) of pot showed an interest in an art form. Mesopotamia was at this time considered the earliest known civilization and much evidence of pottery remains throughout this region. I wish to concentrate on Egypt so let us acknowledge the others areas and move on.

There are two discoveries that revolutionized the pottery industry, the kiln and the wheel. In the predynastic and earlier times there was the kiln not as we know it, rather a sort of bonfire was used whereby the pot was put-on the fire upside-down until the potter believed it to be hard enough. The obvious problems was knowing when that hardness was achieved as well as controlling the fire as not to get it too hot as there would be hard pots but of a dull gray color. They also had a wheel of sorts towards the end of late Gerzean or possibly the early Protodynastic. It was a flat round tray of wood with a round handle. The left hand held the handle while the right hand shaped the pot. Before the beginning of the Old Kingdom this was refined several times until it became a two person task; the potter worked on the shape and his assistant turned the wheel with his hands or feet depending on the size of the turn-table. The true potter's wheel came into existence in Egypt by the late Old Kingdom. Both the wheel and glazing were developed in several areas at about the same time but independently of each other. We know that China, Mesopotamia, Persia, Egypt, and several other civilizations had pottery at least by 5500 BC and many scholars believe it probably began much earlier perhaps around 10,000 BC. Most of the elements of pottery that I have outlined so far concern general pottery except where noted, and as it relates to predynastic Egypt. I should now like to become more specific and address only pottery in Egypt. I shall start when everyone else starts, with yet another display of Flinders Petrie's wonderful chart of early Egyptian pottery (see figure 2). I have added the general break down of the three major periods, Amratian, Gerzean, and Protodynastic. You should take note that all pottery designs are present by the middle of Gerzean or Naqada II. Next to Petrie's chart is figure 3 a drawing to show the many variations of styles in dynastic Egypt. Almost all of the styles were done in extremely small to as well as very large vessels. Two examples of this are the bottle used for perfume (very small) to the larger pouring bottle or wine jug; then there are the wine and beer jars which can be large or notably large. The other thing I have noticed that I think is interesting is what modern anthropologist title these pots. They can be jars usually with a large round bottom or amphora bottom, or flat bottom pots. There can be vases which range in size from small to large used for wet and dry goods. There can be flasks, pitchers and double flasks and pitchers, that are joined. The pitcher usually has only one handle on the side whereas vases and flasks usually have no handles. Then there is the amphora shape. This is probably THE most popular shape in the entire ancient world; it is found literally everywhere from China in 4500 BC (see figure 5) to Jerusalem and the entire rest of the Near and Middle East, it also appears in all of the Mediterranean. It is a most versatile pot. One of the reasons for this is the extensive trade throughout these areas. For example the so called Canaanite Jar (figure 4) with the slit exception of having a less pointed bottom then the Egyptian wine amphora, it is identical. Yet it is said to be from the Holy Land around the time of the late Bronze age. The same holds true for the Chinese amphora which was use to draw water from wells. The rope was tied to the handles and lowered. The only difference on the China jar is that the handles are lower down on the pot. To this author like most of the authorities on the subject, the exchange of style in pottery was due to trade more than anything else.
Figure 7 shows two stands used for pots. Another stand for round bottomed pots were a coil of basketry either flat with a hole in the middle to hold the pot; or a coiled basket resembling the above pottery stand B. Lids were also used such as the seals used on wine jars with the persons name on the seal. These wine stoppers may have been just a round shape, of nile mud (believe it or not) formed into rounded lids with a flat part that topped the beer pot. I am sure there were other lids I have, however, been unable to find a picture of any or any references to them.

The next figure is of Theban Tomb #93. It shows in the wall painting the potter busy forming a pot while his assistant turns the manual wheel. In the middle is another worker kneading the clay to prepare it for working. At the far right is the mud-brick kiln being attended to by yet other worker. This tomb is from the New Kingdom. Does this mean they still used manual wheels or does it mean they reverted back to an older technology for the forming?
non-porous. The mud stoppers are then placed in the jars and vented to avoid the fermenting process from blowing its top. At this point the owners name and the date are stamped into the still damp mud. The wine amphorae are then taken to the storage cellar or onto a ship for transport. If the jar is too heavy for one worker to carry, it is put in a net pot-sling which is carried suspended on a strong pole by two workers.

At this point the bread is crumbled up and mixed well with large amounts of water and placed in the large jars at the back where a worker treads the mash with his feet. After several days sitting and fermenting the liquid is strained through a sieve into a special brewing vat seen in the foreground. The pouring spout is so placed in order to allow the bran to stay on top and the dregs to remain in the bottom. The bottling process consist of again pouring the beer into large round vats/jars which are then stopped with semi-conical hemispheres of good-ol-nile mud. Once they were sealed they could safely travel. When the beer was drunk it was again poured into smaller jugs/flasks/vases which all held about four pints. These drinking vessels could be of pottery, stone, metal, or even faience.

The information which has enabled the author to write this paper has come from many sources. Some of these sources are relatively recent, some are new, but mostly they are old sources, that is from 1950 to 1970's. After all of this research I find that just recently the public has been made aware of large new finds in Egypt. One of the newer books stated that with all the new finds and technology of today pottery is a rapidly developing area of Egyptology again. So look to the pots! With so much going on it is very difficult to say anything with absolute authority, until more information is available. Also, as with too many soft sciences there is a great deal of room to disagree with many more theories or points of view than there are facts. But what a great way to learn.

Now that I have qualified things let me propose my own theories. For one thing I am convinced that some utilitarian human art forms, such as pottery develop a strong sense of the aesthetic in the makers of these items. This leads me to believe that the extreme popularity of the amphorae in all parts of the world was most probably due to its pleasing shape. There is also the fact that most people thought of the same type of pot because it was the most useful shape or some cultural need called for it. The best example of this is the amphorae. I do believe mankind very often thinks of the very same thing at the very same time but in very differing places by very different people. The one thing that did strike me as profound is the existence of the Amratian figure (see figure 6) that Egyptian's used for ritual purposes. Is this figure shaped like the amphorae for a reason or is it visa versa?
The Wessex Culture

The Wessex Culture is concentrated in the central part of southern England, in roughly the same area as the later Anglo-Saxon kingdom from which it takes its name. The second phase is generally dated to around 1,500 BC, which is roughly contemporary with the 18th and 19th dynasties in Egypt - the time of Hatshepsut, Akhenaten, Tutankhamun and on to Ramses II.

The wealth of the Wessex people is attested by their burials, which were covered by circular mounds of earth and rubble called round barrows. Gold objects are more common in phase I Wessex burials than in almost any other archaeological context in Britain. This wealth came in part from wool, and partly from trade. The chalk downs of Wessex are ideal sheep grazing even today, and the wool trade underpinned the area's wealth right up to the Industrial Revolution. Although the Wessex people didn't begin the building of Stonehenge, they built the final and largest phase, which constitutes most of the surviving remains.

The people of the Wessex culture buried their dead individually - one to a round barrow - and the dead took at least a portion of their wealth with them. This is in contrast to the communal burial monuments of the preceding late Neolithic period, and some theorists have taken this as evidence that an egalitarian late Neolithic society was replaced by an early Bronze Age where individuals - and individual wealth - was much more important.

What is Faience?

Faience is a name that can mean many things. The term originated in France, referring to Moorish-influenced pottery made in Faenza in Italy - where, confusingly, it is known as Maiolica after the island of Majorca. Their colorful, opaque lead-based glazes led to the word being broadened to cover a certain shade of blue, and this in turn was adopted to cover the blue glass paste known from Egypt and many other parts of the ancient world.

Technically speaking, faience is not quite glass, but an alkaline glaze over a core of another substance. The core can be quartz, or quartz composition - sometimes heated almost to the point of becoming glass - or it can be some other substance, such as steatite (soapstone) or a soda-lime composition.

In ancient Egypt, faience was used to make beads of many shapes, as well as scarabs and other amulets. It could be made in many colors, and red faience was one of the favored materials for the burial amulets of the Heart and the Buckle of Isis, among others. Most commonly, though, faience was made in various shades of blue, and this is the color most commonly imitated by makers of souvenirs - and fakes - today. Faience was also made in neighboring states, particularly the Minoan and Mycenean civilizations.

Chemical Analyses

The making of faience was anything but a precise science, and chemical composition varies widely. This makes it almost impossible to source a piece of faience by chemical analysis, and it even makes it difficult at times to define exactly what is faience and what is not.

The Beads

The beads themselves are nothing out of the ordinary. They are of blue faience; most of them are segmented barrel beads about an inch long, and a few are ring or star shaped. Beads like them have been found all over the Eastern Mediterranean, and the forms are so commonplace that they give no hint as to the beads' origin. The only remarkable thing about them is the place where they were found.

The beads have normally been found singly or in small groups, but one burial at Upton Lovell in Wiltshire contained ten segmented beads as part of a necklace with shale and amber beads. Beads have been found across the southern half of Britain, but they are most numerous in the burials of Phase II of the Wessex culture.

ABOUT THE AUTHOR

Graeme Davis first encountered ancient Egypt at the age of ten, on a school trip to the "Treasures of Tutankhamun" exhibition during its stay at the British Museum in 1969. After that, he became more interested in the contemporary cultures of western Europe, and he graduated from the University of Durham with an honours degree in Archaeology in 1982. Now he designs games for a living, to the despair of his surviving parent. A long-time member of the ESS publications committee and the outgoing editor of the Ostracon, Graeme gave a presentation on ancient Egyptian games earlier this year.

In many standard textbooks on the prehistory of the British Isles, there are mentions - very casual mentions, almost as if they don't want to draw attention to themselves - of faience beads, thought to be of Egyptian origin, among the grave-goods in certain Bronze Age burials in the British Isles. In fact, little is known or can be proven about the origin of these beads, partly because their shapes are too common to be narrowed down to a particular place, and partly because the manufacture of faience was so various that chemical analysis has so far failed to provide any answers.

In this article, I will try to put together what is known, speculated and admitted about these beads, and their implications for our picture of trade and communications in the ancient world. 

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It is hardly surprising, then, that studies based on chemical analyses of the Wessex faience beads have done little to clarify the situation. Studies in 1935 (Beck and Stone) and 1956 (Stone and Thomas) were inconclusive, but in 1970 a re-examination of the data from these studies (Newton and Renfrew) led to claims that the composition of the Wessex beads was sufficiently different from beads found in Egypt and Europe to suggest that they were of British manufacture. Further chemical analysis led in 1972 to a rebuttal of this theory (McKerrell).

**Bronze and Lead**

Blue faience objects owe their color to the presence of bronze in their thick glaze. Analyzing this bronze, McKerrell found a high lead content in addition to the usual copper and tin. Adding lead to a bronze mix improves its pouring and casting properties, at the expense of making the bronze a little softer. This was a common practice in the eastern Mediterranean at that time, but the technique would not reach Britain till much later in the Bronze Age. The bronze objects of the Wessex culture – and north-western Europe in general at this time – almost always have a low lead content.

So either the beads themselves were imported from the eastern Mediterranean, or Mediterranean bronze was imported specifically for the purpose of making their glaze, and not used for any other purpose. On the face of it, the former hypothesis seems much more probable.

Chemistry aside, the fact that the beads were mostly found singly in apparently wealthy burials also argues against a British origin. Locally-made beads would surely have been present in greater numbers, and in more graves. By contrast, these beads seem to have been rare and exotic imports.

**Tin and Futility**

Another study in 1973 (Aspinall and Warren) discovered that the Wessex beads also had a very high tin content, which sets them apart from the central European beads. These are lower in tin, but much higher in silver and antimony – very much like the central European bronzes of the time.

The high tin content of the Wessex beads created a problem. Not only was it much higher than the tin content of the central European beads, it was also much higher than the tin content of any bronze that would make an effective tool. This suggests that tin was added to the glaze along with bronze, which in turn casts doubt on the usefulness of any chemical comparison between the faience and bronze objects. It is just impossible to say whether the lead – or any other element – came from the bronze that was used in the glaze, or was added separately, either with tin or on its own. Chemical analysis was back at square one.

**Trade Routes**

Faience beads have been found across Europe: in the Minoan and Mycenaean cultures with which Egypt had a thriving trade, and westward through Malta, the south of France and southern Spain. There is a cluster of finds on the Danube and in its northern hinterland, and others in northern Holland and the Armorican peninsula in north-western France, facing southern Britain across the English Channel.

It has long been thought that the northern and southern traces of faience beads may correspond to two ancient long-distance trade-routes: the northern overland route bringing Baltic amber to Egypt, and the Mediterranean-Atlantic sea route bringing tin, possibly from Cornwall.

Amber was not unknown in the Mediterranean, but the Baltic region was a far more plentiful source, and tests on amber found in Mycenaean contexts has shown that it was of Baltic origin. Close trading links have been northern Germany and the Unetice culture of central Europe, who were well-placed to act as middlemen in the trade of exotic goods between the eastern Mediterranean and northern Europe. Amber beads have been found in graves of the Wessex culture – and indeed of Bronze Age cultures throughout the British Isles – in far greater numbers than faience beads, so that faience beads could possibly have been traded into the British Isles along with amber.

The seaborne tin trade between the British Isles and the Mediterranean has almost the feel of legend. For decades, British history teachers have leaped from the end of the Ice Age (c. 8,000 BC) to the British expeditions of Julius Caesar (55 and 54 BC), passing only to make passing mention of Phoenician traders from the Biblical cities of Tyre and Sidon coming in search of tin to the south-western peninsula of England which is now mostly occupied by the County of Cornwall. In Victorian-influenced schoolbooks which continued to be used as late as the 1970s, these civilized merchants are most often depicted dressed in general-purpose Biblical garb, offering trinkets to the roughly-dressed Britons. There are striking parallels with the way 19th-century British explorers are shown offering colorful but valueless trinkets to African chiefs, but these tell us more about Victorian attitudes than about the Bronze Age. Could this be how faience beads made their way to Wessex?

While the eastward trade in Baltic amber is known almost exclusively from archaeological finds, the British tin trade is documented in Classical sources, albeit not with total certainty. The first known documentary record of the British Isles is commonly held to be in the work of the Greek geographer Poseidonius, who wrote in the 4th century BC. His work is now lost, but he is quoted by several later Classical writers, including Strabo and Julius Caesar. By this indirect means, mention has survived of the Cassiteriades – the Tin islands – which lay beyond the Pillars of Hercules (i.e. the Gates of Gibraltar) in the great world-girdling Ocean.

Cornwall was a major tin producer from prehistoric times right up to
the Industrial Revolution, so it seems likely that the Cassiteriades were indeed the British isles. Mediterranean peoples were forced to look further and further afield for their tin as sources closer to home were gradually worked out. But were the Phoenicians trading directly with Britain at this time? It seems unlikely. It wasn’t until 814 BC that they founded the best-known of their trading colonies, Carthage in modern-day Tunisia, and later that they ventured out of the Mediterranean and planted colonies at Mogador in Morocco and Cadiz in Spain. In the Wessex I era, some 600 years earlier, the Phoenicians’ westward expansion from their Palestinian home base was held largely in check by the Myceneans. Most likely, this long distance trade went along the coast from neighbor to neighbor. But to Victorian historians, working from Biblical and Classical written sources in times before archaeology put the Mycenean and Minoan civilizations on the map and with a chronology that was imperfectly understood, the idea of direct contact probably didn’t seem so strange.

Conclusions

The exact origin of the faience beads in the graves of the Wessex culture, and how they got to Britain, will probably never be established for certain. Chemical analysis has increased uncertainty rather than dispelling it, but the high tin content of the northern distribution of beads seems to suggest that the Wessex beads did not reach Britain by that route. It does seem likely that they are of eastern Mediterranean origin, but whether or not they are from Egypt is probably impossible to tell.

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Two Books on Cleopatra

Reviewed by Anita McHugh

The first book is *The Memoirs of Cleopatra* by Margaret George. This book is the basis of the mini-series on Cleopatra broadcast on ABC. I listened to the audio version. The book takes the form of a long letter written to Isis the patron goddess of Cleopatra VII, the last queen of Egypt. It begins with her dedication to Isis after the death of her mother when she was very young. The book is the story of her life, including her work as daughter of Pharaoh, queen, concern with the inundation, opening granaries to feed her people when the inundation and the crops failed and planning for war, scheming for the survival of Egypt. Of course, it covers her political and personal alliances with Julius Caesar to regain her crown and Marc Anthony to protect her crown. Interestingly, when she went to Rome she expressed horror at the brutality of the Roman games where people were killed for the amusement of others...a significant culture difference. The memoir ends with her suicide to avoid being paraded through the streets of Rome.

The second book about Cleopatra is a more serious study of the life and legend of Cleopatra. The book, *Cleopatra, Histories, Dreams and Distortions* by Lucy Hughes-Hallett, published by Harper & Row, 1990, begins with the story of Cleopatra, neither the Roman version nor the Egyptian one, but some place in the middle. It dovetails very neatly with the previous book. Cleopatra was intelligent, educated, dedicated to her crown and country, and incredibly wealthy. She was not beautiful. The book jacket as well as one of the pictures inside has a photograph of a coin with the profile of Cleopatra. Queen Cleopatra VII ruled with her husband/brothers (Ptolemy XIII and XIV). After the death of Ptolemy XIII, Cleopatra married the younger Ptolemy XIV who was only 12. Since he had no mentor and protector, Cleopatra effectively ruled alone from then on. This was when Julius Caesar was in Egypt. The affair between Cleopatra and Julius Caesar produced one son, called Caesarion (Little Caesar). Her second love was Marc Anthony, with whom she had a set of twins and her fourth child Ptolemy Philadelphius. Cleopatra VII was one of the few of the Ptolemys to learn to speak the Egyptian language when the language of the court was Greek. In this story Cleopatra also committed suicide to avoid being paraded through the streets of Rome.

The second chapter reviews the exaggerations and views of Octavius the Roman ruler who conquered both Cleopatra and Egypt. The Roman culture was male dominated, ruled by warriors who had been successful in battle, with male warrior gods. Women were considered property and were not allowed to conduct business transactions on their own accounts. Octavius played on this cultural difference. An independent woman ruled Egypt. The third chapter looks at the Egyptian side of the cultural differences. Cleopatra was as good at managing public opinion as Octavius. She staged great spectacles. Her meeting with Anthony at Tarsus was a symbolic meeting of the Egyptian goddess Isis (as the goddess of love) and the god of the east. At that time Anthony was the ruling the eastern part of the Roman Empire. The peoples of the eastern part of the Roman Empire understood the meanings of her spectacles.

The rest of the book looks at different aspects of the legend of Cleopatra and the prevailing attitudes towards women through the writings of various authors through the medieval, Renaissance and later periods. For example the first of these chapters looks at the suicide as either further sin or redemption because Cleopatra died for love (conveniently forgetting that she backed a loser in a war). This chapter ends with the statement 'For the only good woman is a chaste woman, and the only chaste woman is a dead one.'

The book has pictures of art and actresses that have portrayed Cleopatra, including Elizabeth Taylor. I found the Cleopatra presented in these two books to be far more interesting than any of the movie versions.