Section Ten

Egypt:
The Centre of the Problem

The trail of 'Dark Age' questions eventually leads to Egypt, whose history provides the yardstick of Old World chronology [388]. Apparently fixed by a number of astronomical observations, Egyptian chronology has the reputation of being scientifically sound and has therefore been used as the base point for dating the prehistoric and early historic cultures of North Africa, the Eastern Mediterranean, the Near East and large areas of Europe. Yet this broad application of Egyptian dates has frequently produced conflicts in the interpretation of local stratigraphy and locally developed chronologies (where available). The most common effect has been the insertion of elusive 'Dark Ages' into the history of these cultures.

As we have seen, Egypt seems to be encircled by countries in which Egyptian chronology has raised immense difficulties. On Egypt's very doorstep, the archaeology of Nubia presents a disturbingly familiar pattern, with its own 'Dark Age' lasting from the collapse of Egyptian government in Nubia at the end of the New Kingdom (c. 1070 BC) down to the re-emergence of Nubia (Kush) under the kings of Napata in approximately 780 BC [389]. Material dated to this interim period is virtually non-existent. The usual supposition is that Nubia was temporarily depopulated, in the words of Dixon:

"There is no real evidence ... for the presence of Egyptians in any capacity, in the Napata district, or indeed anywhere in Upper Nubia, in the period between the close of the Twentieth Dynasty and the foundation of the kingdom of Kush, for ... after the Egyptian abandonment of Nubia during the Twentieth Dynasty, the area between the First and Third Cataracts was almost devoid of a settled population of any sort for over four hundred years. [390]"

The puzzle of a lengthy Nubian 'Dark Age' contemporary with those of the Mediterranean prompts the restatement of a question raised by Torr at the end of the last century: is the chronology of Egypt really as firm as it is claimed to be [391]? Indeed, as Torr asked, was the substantial shortening of Egyptian chronology resolve many of the furious dating arguments that have bedevilled Old World archaeology over the last hundred years?

Alternatively, would it be feasible to raise the dates for periods which fall after the 'Dark Age' gap? As a solution this would seem increasingly unlikely since current research is recommending, and in some cases effecting, a general lowering of chronology throughout the Eastern Mediterranean world. We have already seen how the chronology of the 'Balkan complex' of Macedonia, Thrace and Illyria has been lowered by some two hundred years. A similar reduction has been envisaged for the beginning of the Iron Age in Anatolia by Mellaart. In Palestine, Holladay's conclusions regarding 'Assyrian Palace Ware' have put the present Egyptian-based chronology in extremely difficult straits, while Balensi has already lowered the dating of the key site of Tell Abu Hawam by a hundred years at least. In Greece the work of Francis and Vickers could result in a chronology for the Archaic period (and hence the Late Geometric) lower by at least 50 years, with inevitable ramifications for the whole of Greek 'Dark Age' chronology.

Egyptian chronology in perspective

Raising the dates of 9th to 7th-century BC material and strata cannot be seen as a feasible strategy for resolving the problems of 'Dark Age' chronology. Equally, reducing the date for the end of the Late Bronze Age would seem impossible without a major shift in Egyptian chronology. The period of the Late Bronze-Early Iron Age transition in the Levant, when LHllIC pottery styles were coming into fashion [392], is firmly linked by scarabs and other evidence to the late 19th and early 20th Dynasties [393]. Consequently, a lowering of Late Bronze Age chronology in the Near East and Eastern Mediterranean would also have to involve a reduction in the dates for the Egyptian New Kingdom (18th to 20th Dynasties). This could only be achieved by a compression of Egyptian history for the period after the New Kingdom. By the time of the 26th Saite Dynasty (mid-7th century BC) we are well within the era of solidly dated history, where large-scale chronological adjustments can be ruled out by a wealth of interlocking evidence from Greek, Biblical, Assyrian and Babylonian sources as well as Egyptian. Between these two bench marks, the end of the 20th Dynasty and the beginning of the 26th, lies the 'Third Intermediate Period'. A period of some obscurity, its dates (c. 1110-650 BC) curiously parallel those of the 'Dark Ages' reviewed above.

Material culture during the 'Third Intermediate Period' (TIP) was generally much impoverished, compared to that of the 19th and early 20th Dynasties [394]. Nevertheless, it was not a 'Dark Age' in the sense that this term has been applied to Greece, Anatolia, Nubia and other areas. Material remains are abundant, indeed extremely rich, in comparison with Egypt's two earlier 'Intermediate Periods' [395]. The problem with the history of the TIP is not one of a lack of evidence (as is often the case elsewhere), but rather one of the huge quantity of data which needs to be ordered into a coherent historical picture. Detailed studies of TIP history and chronology have been undertaken in recent years by Kitchen, Bierbrier, Baer, Wente and others [396]. Yet despite the thoroughness, indeed brilliance, of much of this work, it must be remembered that it has all been undertaken within the framework of a high chronology - with the underlying, tacit assumption that the overall Egyptian dating is basically sound. The present length of the TIP has not been determined by careful reconstruction.
working back from the known dates of Assyrian and Saite Egypt (early to mid-7th century BC). Instead, the process is actually the reverse. The beginning of the TIP is determined first, by using the accepted date for the end of the New Kingdom (presently set at c. 1070 BC).

The basic framework of ancient Egyptian history still relies on the dynastic system described by an Egyptian priest, Manetho, who wrote under one of the Ptolemaic kings of the 3rd century BC. Manetho’s history of Egypt (the Agiwydisen) is now lost but summaries and ostensible extracts survive in a number of much later works, notably those of Josephus (1st century AD), Julius Africanus (3rd century AD), Eusebius (4th century AD) and Syncellus (c. AD 800) [397]. These preserve in different and often contradictory versions an Epitome of Manetho’s Egyptian history. The Epitome gives the names and reign lengths of the Egyptian pharaohs from the unification of Egypt under Menes to the Persian Emperors who ruled Egypt at its conquest by Alexander in 332 BC, arranged into a system of 31 dynasties or ruling houses. As Gardiner noted:

In spite of all defects this division into dynasties has taken so firm a root in the literature of Egyptology that there is but little chance of it ever being abandoned. [398]

Accepting Manetho’s dynamic system, Egyptologists have divided it into four major epochs separated by ‘intermediate periods’:

<table>
<thead>
<tr>
<th>Dynasty</th>
<th>Period</th>
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<tbody>
<tr>
<td>Old Kingdom</td>
<td>1st to 6th Dynasties</td>
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<tr>
<td>First Intermediate Period</td>
<td>7th to 10th</td>
</tr>
<tr>
<td>Middle Kingdom</td>
<td>11th to 12th</td>
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<tr>
<td>Second Intermediate Period</td>
<td>13th to 17th</td>
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<tr>
<td>New Kingdom</td>
<td>18th to 20th</td>
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<tr>
<td>Third Intermediate Period</td>
<td>21st to 25th</td>
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<tr>
<td>Late Dynasties</td>
<td>26th to 31st</td>
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A chronology for this historical framework has been provided by dates derived from astronomical observations. The theory of ‘Sothic’ dating (see below) gives a date of 1872 BC for Senwosret III (Year 7) of the 12th Dynasty, and dates of 1540 BC and 1464 BC respectively for Amenhotep I (Year 9) and Thutmose III (Year unknown) of the 18th Dynasty [399]. Falling roughly in the middle of the accepted dynastic sequence, these dates are used as the starting point for the calculation, both backwards and forwards in time, of Old, Middle and New Kingdom dates. The resulting skeleton chronology is fleshed out with the data for the reign years of given monarchs from surviving monuments; when contemporary evidence is lacking, the figures given by Manetho are still adhered to, although it is generally admitted that these should not be given too much weight.

A brief review follows of those criteria used to establish Egyptian chronology which have a bearing on the length of the Third Intermediate Period.

**Sothic and lunar dating**

Recent studies have cast doubt on many of the assumptions behind Egypt’s astronomical chronology and the time would seem to be ripe for a reassessment. The primary astronomical tool is the theory of Sothic dating which draws on the ancient observations of the heliacal rising of the star Sirius (Sothis). While the related calendrical problems are extremely complex (involving, for example, the assumption that the Egyptians had two lunar calendars for religious purposes as well as a civil one), the theory of Sothic dating is relatively straightforward. As explained succinctly by Edwards:

The 12 months were divided into 3 seasons bearing names which are generally rendered Inundation, Winter and Summer, each season consisting of four months. The year began in the season of Inundation, and in the ideal year the first day of the first month of the season of Inundation coincided with the first day on which the dog-star Sirius could be seen on the eastern horizon just before the rising of the sun (i.e. roughly about 19 July or 20 in the Julian calendar). Since the dynamic Egyptians never introduced a leap year into their civil calendar, New Year’s Day advanced by one whole day in relation to the natural year in every period of four years. As a result of this displacement New Year’s Day and the day on which Sirius rose heliacally actually coincided for no more than four years in every period of approximately 1460 years (i.e. 365 x 4), the so-called Sothic cycle. [400]

Thus, according to the theory of Sothic dating, the heliacal rising of Sirius gradually revolved around the civil calendar. After 730 years its rising, together with the calendrical seasons, would have completely reversed with respect to the solar year, only returning to its original position after a period of some 1460 years. References to the rising of the star Sirius can therefore be used to calculate absolute dates, using the sliding-scale of the wandering civil calendar:

Dates in Egyptian records were generally set out according to a fixed formula: ... if in addition to this formula, a document tells us that Sirius rose heliacally on that day it is only necessary to count the number of days which had elapsed since the first day of the year given in the formula and multiply the total by four to obtain the number of years since the beginning of the particular Sothic cycle. [401]

An anchor point for the retrocalculation of Sothic cycles is provided by the Roman writer Censorinus, who stated that in the year 139 AD New Year’s Day and the heliacal rising of Sirius coincided. The previous Sothic cycle would therefore have begun around 1460 years earlier [402], i.e. in c. 1321 BC, a date which also seems to be referred to in a marginal gloss to the writings of Theon as the beginning of the ‘era of Menophres’. It is from this point in time, 1321 BC, that the Sothic dates for the Middle and New Kingdoms are calculated [403].

**Prima facie** the theory of Sothic dating may look straightforward. Closer examination, however, reveals a web of interlocking assumptions each of which requires intensive reexamination. The value of the raw data employed in the Sothic chronology, the literary references to the rising of Sirius, has been critically examined and questioned in many fundamental respects by Long [404]. The key Sothic date of 1872 BC is provided by two papyrus fragments found at Illahun, but the documents do not include the name of the reigning Pharaoh; Senwosret III of the 12th Dynasty has always been assumed on palaeographic grounds. Likewise, the reading of the royal prenom of Amenhotep I on the Ebers Papyrus, which gives the Sothic date of 1540 BC, has been questioned. An inscription from Elephantine which provides the next Sothic date of 1464 BC has only been tentatively ascribed to Thutmose III. The Sothic fullersm of 1321 BC is also of little historical value. The name ‘Menophres’, attached to this date by the reference in Theon, has been compared to the prenomes of Ramesses I and Seti I of the early 19th Dynasty. However, as Rowton noted, Menophres is unlikely to be the name of a king and is more probably the Egyptian name for the city of Memphis (menenefet) [405]. The Sothic date calculated from the...
The Illahun pyramid of Senusret II, where the two papyrus fragments were found which established the key Sothic date of 1872 BC for the reign of Senusret III.

Medinet Habu calendar is uncertain, being either 1316 or 1196 BC, and could belong either to Ramesses II or Ramesses III. While Parker has forcefully defended the validity of two key Sothic dates (from the Illahun and Ebers papyri) [406], many uncertainties remain; it is also noteworthy that the whole structure of Sothic dating for the Middle and New Kingdoms rests almost entirely on the evidence of these two Sothic references.

For the other major building-block of the theory, the astronomical evidence, work is still needed to confirm the original calculations (made at the turn of this century) with the aid of contemporary techniques. For example, no recent study seems to have been carried out to verify the coincidence between the helical rising of Sirius and New Year's Day reported by Censorinus for 139 AD. In 1969 Ingham, at the request of ancient historians, did perform a check on the length of Sothic cycles. Unfortunately, rather than working from the known end of the scale (i.e. modern retrocalculations linked with the report of Censorinus) to the unknown, he took as the starting point of his calculations an assumed date of 4226 (= 4227 BC) for the beginning of the first relevant Sothic cycle [407]. In the meantime, another astronomer, Roy, has described the 'meagre grounds' on which 'astronomy was brought in to fix the absolute dating of the pharaoh list of Egypt', concluding that 'the classical astronomical chronology rests on very weak ground and that there is a need for a very much more careful examination of texts referring to calendars, festivals ...', etc. [408]

Further astronomical evidence held to support the key Sothic dates comes from the comparison of Egyptian records of the moon's phases with modern retrocalculations of past lunar cycles [409]. While many lunar records can be made to fit with the dates calculated from the Sothic theory, they are based on only one observation and are of little chronological value since new moons will occur on the same civil date at 25 year intervals [410]. Thus single lunar dates can only really be used to fine-tune an already established absolute chronology. The long-standing debate over the lunar date for Thutmose III, determining the beginning of his reign at 1504 BC (argued by Hayes and Redford) or 1490 BC (argued by Parker, Kitchen and others), has continued interminably. This is partly because of the repetition of the lunar cycle within a short time span, but also because of new refinements in the calculation of ancient lunar patterns, as well as differing interpretations of the text in question (which according to Parker requires amendment) and of the nature of Egyptian lunar observations [411].

Of far greater significance than isolated lunar references is another papyrus from Illahun (Berlin Museum, Pap. 10056, verso) which contains sufficient data to determine the length of lunar months for an entire year. Read calculated that the observations recorded in the papyrus must reflect the lunar conditions of the year 1549 BC: 'over a time span of 1000 years, there is only one chance in 197 that a duplicate sequence would exist.' Therefore, in Read's opinion, this 'placement of the Illahun calendar with an apparent 12 for 12 fit has to constitute one of the greatest chronological anchor points in recorded history.' [412] Despite Read's confidence in this absolute date, an immediate problem arose from the fact that it falls, in the conventional chronology, early in the 18th Dynasty. Yet the Illahun papyrus has always been assigned a date in the Middle Kingdom, some two and half centuries earlier. Consequently Read had to argue for a redating of the text (in the relative sense) to the 18th Dynasty. Parker demonstrated that this was impossible on historical grounds: the papyrus certainly dates to the late 12th Dynasty. He rejected Read's interpretation in favour of his own, which, after emending one of the entries on the papyrus, still only allows for a match of ten of the twelve recorded dates with modern retrocalculations for the year 1813-1812 BC [413]. Parker's method had already been resolutely dismissed by Read:

This type of chronology, where one claims the historical record is wrong rather than his own analysis, is no chronology at all. [414]

A compromise solution might have been to combine Read's absolute date of 1549 BC for the lunar sequence with Parker's relative date in the 12th Dynasty for the papyrus. However, the possibility of such a late dating for the Middle Kingdom was never raised in the debate, as both parties involved accepted the present framework of Sothic chronology as fundamentally sound.

Beyond the astronomical calculations the validity of Sothic dating really becomes, as Roy indicated, a calendrical question. Here there remains one factor of overriding importance which has received surprisingly little attention [415]. The possibility exists that any Egyptian Pharaoh who felt that his reign was the inauguration of a new era (for example, Akhenaten, Horemheb, Set I or Ramesses XI) or whose reign coincided with an era of particular calendrical confusion, could have reset the civil calendar, perhaps by the introduction of intercalary days or months, in order to restore the desired harmony with the risings of Sirius.

Indeed, a glance at the much better documented (calendrically speaking) Hellenistic and Roman periods shows that several major reforms were put into effect within the space of only three centuries.
the Macedonian luni-solar system which allowed for the occasional intercalation of a month for regulation. The old Egyptian calendar continued to operate alongside it, however, and under Ptolemy III (247-222 BC) the Macedonian calendar’s links with the lunar month were broken and the two systems were synchronised. Under the same king, an assembly of priests issued the famous ‘Canopus Decree’ (238 BC) which prescribed the addition of one day every fourth year into the Egyptian calendar. The decree was unpopular and never really took effect. Then in 163 BC Ptolemy VII re-established the Macedonian calendar, an action repealed after his death in 145 BC. The continuing difficulties of the Egyptian calendar inspired Julius Caesar to devise his own solution, the Julian calendar, which he attempted to impose on the Roman world in 45 BC [416].

With respect to earlier periods we simply do not know what kind of reforms may have been put into effect, or when - but the strong suspicion that adjustments were made should be enough to throw into the gravest doubt any calculations involving the assumption that the calendar was not tampered with throughout the Middle Kingdom, New Kingdom, Third Intermediate and Late Periods. If a single calendrical adjustment was made in the period before the Ptolemies, it would completely invalidate the Sothic calculations for any prior period, including the Sothic-derived date for the end of the New Kingdom and the beginning of the TIP.

Shishak and Shoshenq I

The accepted framework for TIP chronology is thought to be supported by a key synchronism with Biblical history, the only generally accepted synchronism with Western Asia from the beginning of the TIP until the late 8th century BC. In the fifth year of Rehoboam the kingdom of Judah was invaded by ‘Shishak king of Egypt’ (1 Kings 14:25-26). According to Thiele’s chronology of the Hebrew monarchy, this event can be dated to 925 BC [417]. Since Champollion’s time Shishak has been identified with Pharaoh Hedjikheperre Shoshenq I, founder of the Libyan 22nd Dynasty. The identification is based on the similarity of names and that Shoshenq left a record of a campaign to Palestine on the gateway which he constructed at Karnak in his 21st year. This link forms the basis for dating the beginning of the 22nd Dynasty (and the Libyan domination) to 945 BC, described by van der Meer as ‘the first Egyptian date fixed on real facts’ [418]. It also agrees well with the estimates based on Sothic dating. The identification, however, remains extremely problematic. Jerusalem, the focal point of Shishak’s campaign according to the Old Testament, is not named at all in the list of Palestinian towns recorded by Shoshenq I at Karnak [419]. Indeed, very few Judaean towns are included in the list, which concentrates principally on the northern kingdom of Israel, by then separated from Judah. Strangely, Jeroboam king of Israel was an ally rather than an enemy of Egypt according to the Old Testament, which only records an Egyptian attack on Judah. While Edwards considers that the ‘obvious explanation’ of the biblical narrative would have been that Shishak ‘was acting as an ally of Jeroboam in order to overthrow Rehoboam’, he has to reject it on the evidence of Shoshenq’s town-list [420]. Given the almost complete disagreement of geographical factors between the campaigns of Shishak and Shoshenq I, there only remains the similarity of the two names to support the identification. The case for this synchronism, equivocal at best, should hardly prevent a reworking of TIP chronology if other, more convincing, evidence demands it.

The length of the Third Intermediate Period

Suspending judgement, for the moment, regarding the Sothic dates for the New Kingdom and the synchronism between Shoshenq I and Rehoboam of Judah - how much can we rely on the presently accepted estimates for the length of the TIP? It is true to say that the monumental and inscriptive evidence for various kings, priests and officials of the TIP has been arranged within an already predetermined time-span. If we look closely at the data available for such reign-lengths, pontificates, etc, there is actually little to inspire confidence in the idea that we are dealing with a soundly constructed period of history. Many TIP kings, on close examination, are mere ciphers, names on lists with little or no evidence for the lengthy reigns attributed to them in modern reconstructions. For example Takelot I is known only from one genealogy and has no attested monuments [421]; yet he is assigned a reign of 15 years (889-874 BC) in the generally accepted chronology [422]. Similarly Osorkon I is attributed 35
years (924-889 BC) on the most equivocal evidence. Kitchen suggests an amendment of the Manethonian figure for Osorkon’s reign from 15 to 35 years, and supports this with the occurrence of the Years 3 and 33 together on the linen wrappings of a mummy with bracelets bearing Osorkon I’s name. Working within the constraints of his own chronological scheme, Kitchen elects to give the Year 33 to Osorkon I [423], even though the highest attested date of this ruler is Year 12 [424]. Yet the very fact that the linen bears two dates indicates that Osorkon was not the sole ruler at the time; the high regnal year could just have easily belonged to the other king [425]. Equally flimsy is the evidence for the many years of sole rule attributed to Smendes, whose reign is thought to have bridged the transition between the 20th and 21st Dynasties. There are no monuments attributable to this Pharaoh, only a few statues and small finds and the record of some repair work carried out on the temple of Luxor. Neither are there any year-dates definitely attributable to Smendes [427]. Despite this he is generally accorded 26 years of sole reign, the figure given in Manetho’s Egyptian history.

What has not been fully appreciated is that for every year of Egyptian history added to the ‘Third Intermediate Period’, another year is added to the ‘Dark Age’ histories of the Eastern and Central Mediterranean, the Near East and Africa (with respect to Nubia). It is therefore a question of the utmost importance that the dating of TIP Egypt is clearly demonstrable. Even the three examples given above (Smendes, Osorkon I, Takeloth I) show that TIP chronology may be inflated by several decades.

Greater flexibility in the chronology is possible if due consideration is given to the fragmented condition of Egypt during the TIP. The period was characterised by a breakdown of centralised authority. Under the 18th and 19th Dynasties the Pharaoh (plus perhaps a co-regent, who was usually his son and heir) was the unquestioned, sole ruler of the land. By the end of the 20th Dynasty the system was collapsing. The High Priests of Amun at Thebes had acquired vastly greater, almost autonomous, power. HPAs Amenhotep (under Ramesses IX) and Herihor (under Ramesses XI) had pharaonic pretensions, the latter even enclosing his name and title in royal cartouches [428]. This process continued throughout the TIP, during which many of the High Priests of Amun assumed full pharaonic status. Other areas, as well as Thebes, eventually spawned local royal dynasties. By the time of the Assyrian invasion of Assurbanipal in 666 BC Egypt was ruled, according to the Assyrians, by no less than 20 ‘kings’ [427]. The writings of Greek historians reflect this situation in the tradition of a ‘dodarchy’, a coalition of 12 kings who ruled before Psamtek I (664-610 BC) of the 26th Dynasty reunited the country [429].

It is generally accepted that several of the later TIP dynasties ruled concurrently, for example that the earliest kings of the 26th Dynasty were contemporary with the later rulers of the Ethiopian 25th (early 7th century BC). Likewise, it is also agreed that the early 25th overlapped with the later 22nd and 23rd dynasties (last decades of the 8th century). Thus Manetho’s scheme of dynasties for this period is not treated as strictly successive. Indeed, there is no reason to believe that the original version of Manetho (now totally lost and surviving only in king lists and occasional excerpts) ever suggested that a given dynasty was considered to have begun only after its predecessor had finished. Precisely the contrary is stated in one of the major recensions of Manetho’s work (the Armenian Version of Eusebius):

It seems, moreover, that different kings held sway in different regions, and that each dynasty was confined to its own nome; thus it was not a succession of kings occupying the throne one after the other, but several kings reigning at the same time in different regions. [430]

The moot point, therefore, concerns exactly how much the different dynasties of the TIP overlapped. The generally accepted arrangement of the dynasties involves three axiomatic assumptions:

A. That the 20th, 21st and 22nd Dynasties were successive, with no overlaps, and that the kings of these dynasties were the sole monarchs of Egypt (with the exception of the priestly line which adopted pharaonic titles at Thebes during the 21st Dynasty).

B. That the fragmentation of Egypt into several kingdoms began with the establishment of the independent 23rd Dynasty under Pedubast I, quite late in the 22nd Dynasty (i.e. in 818 BC during the reign of Shoshenq III).

C. That central authority was restored by Psamtek I of the 26th Dynasty, who during his first ten years of reign (664-654 BC) rapidly eliminated all the other dynasts with pretensions to kingship [431].

Numerous ‘anomalies’ in the accepted version of TIP history tend to throw these assumptions into doubt. Taken together such ‘anomalies’ might suggest that there were far greater overlaps between the 20th to 26th dynasties than the conventional chronology allows. A brief selection of the kinds of evidence available follows, presented in roughly chronological order and focussing mainly on the 21st to 22nd Dynasties.

The High Priests at Memphis

The length of time spanned by the Memphite Genealogy of the High Priests of Ptah is exceptional. It extends back from Ankhkafenschknet appointed during the reign of a late 22nd-Dynasty Pharaoh Shoshenq (assumed to be the ‘V’), to High Priest Ptahemheb under Mentuhotep I of the 11th Dynasty [432] - a total period of approximately 1300 years according to accepted dating. The list appears to give a complete line of Memphite priests, often linking their names with those of contemporary monarchs. For most periods, e.g. the 18th and 19th Dynasties, the generations of priests given match well with the lengths of reigns and dynasties established by other evidence; for example Kitchen notes ‘its realistic attribution of four successive priests to the long reign of Ramesses II, among other sequences’ [433].

However, an exception to this pattern occurs in the list for the period between the 19th and 21st Dynasties. Next to the name of the eponym 21st-Dynasty Pharaoh Amenemnisu [434] the Genealogy places the appointment of a Prophet Ashkhet. Before him comes one Ptahemakhet, whose immediate predecessor, Neferenetep, was appointed during the last years of Ramesses II’s reign. Orthodox chronology makes the interval of time between these two kings (from late Ramesses II to Amenemnisu) approximately 180 years. On this dating the three pontificates (Ashkhet, Ptahemakhet and Neferenetep) which cover the period would have had an improbable average duration of 60 years. Kitchen has suggested that six or seven entries between similar names were simply omitted from the list by a抄ist, but this seems unlikely given the accuracy of the list in other periods [435]. Alternatively, if the information given in the Genealogy is accurate, then the 180-year period assumed by current chronology cannot reflect the true historical duration.
The shorter time-span suggested by a straightforward reading of the Memphite list would seem to be supported by another genealogy which extends from the 19th to early 22nd Dynasties.

The genealogy of Ankhefenchons, who was a contemporary of Osorkon I (22nd Dynasty), reaches back through nine generations to one Ipu, who must have been born early in the 19th Dynasty and was possibly still alive under Merenptah (19th Dynasty) [436]. The conventional interval between Merenptah and Osorkon I is about 300 years. Bierbrier normally allows an average of 25 years per generation [437], which, for nine generations would give a result of 225 years, very short of the figure one should expect from the accepted dates. Because of this, Bierbrier assumes that there must be some generations missing from the genealogy. An alternative explanation would be that the present chronology for the period between Merenptah and Osorkon I is over-extended.

**Apis burials at Saqqara**

One of the potentially most important sources of chronological information from Egypt is provided by the Serapeum at Saqqara. This vast subterranean complex held the burials of the sacred Apis bulls, which were believed to be a living manifestation of the god Ptah.

The importance of the Apis cult is reflected in the careful ritual involved in replacing one Apis, after its death, with another incumbent. Were the records of the installation and burial of the Apis bulls complete, they could in themselves have provided a continuous and independent chronology for Egyptian history.

The Serapeum consists of ‘Lesser’ and ‘Greater’ vaults, underground corridors with a series of side-chambers in which the Apis bulls were buried. The ‘Lesser’ vaults (see Fig. 5) were constructed during the reign of Ramesses II of the 19th Dynasty and the sequence of burials there begins with a bull interred in Year 30 of Ramesses II. This was followed by further burials from Ramesses II's reign, and a number from the 20th Dynasty. These two dynasties are therefore well represented. However, after the final burial under Ramesses XI (last ruler of the 20th Dynasty) the next for which we have any evidence is dated to Year 23 of Osorkon II of the 22nd Dynasty. The sequence of burials then continues through the rest of the 22nd Dynasty, the 24th (the 23rd being parallel to the late 22nd), on through the 25th and up to the 21st Year of Psamtek I of the 26th Dynasty. Construction of the ‘Greater Vaults’ was begun by Psamtek I, who inaugurated the new complex with an Apis burial in his Year 52. The ‘Greater Vaults’ continued to house the Apis burials until the Roman period [438].

Concerning this sequence of burials, Gardiner wrote:

Strangely enough not a single inscription of Dyn. XXI was found in the Serapeum, but the material bearing upon Dyn. XXII and others later is all the richer. [439]

The absence of any burials from the 21st and early 22nd Dynasties is certainly puzzling. The lacuna in the burial record, in the conventional dating of the TIP, amounts to some 210 years, during which time there should have been some 12 Apis burials, judging from an estimated average age for pre-Ptolemaic bulls of 17 years [440]. Mariette's unscientific clearing of the Serapeum (in 1851) was extremely hurried, and much information has now doubtless been lost. It is hard, however, to understand why the loss of material should have been so selective, removing all trace of the 21st and early 22nd-Dynasty Apis bulls from the Serapeum and environs.

**Genealogical records**

Describing the source material available for his work on TIP genealogies, Bierbrier noted:

With the advent of Dynasty XXI the copious sources of information which were available in the previous two dynasties vanish. Administrative papyri and ostraca prove practically non-existent. Votive statuary would seem to disappear almost totally. Graffiti and inscriptions decline to a few badly preserved examples ... Because of this dearth of material, it is not possible as in Dynasty XIX and Dynasty XX to present a coherent outline of the descent of various families and their interrelations. [441]

From the next dynasty we have again have plentiful source material in the form of votive statues, administrative documents and private and royal inscriptions. The contrast with the situation under the 21st Dynasty is striking:

Following the dearth of information during Dynasty...
Isolated Tombs

A - Amenhotep III
B - Rameses IX
C - Tutankhamun
D - Horemheb
E - Horemheb
F - Seti I
G - Rameses II
H - Rameses II
I - Unknown

Lesser Vaults

1 - Rameses II
2 - Rameses II
3 - Rameses II
4 - Rameses III
5 - Rameses IX
& Rameses X
6 - Rameses XI
7 - Shoshenq III
& Pimay
8 - Shoshenq V
9 - Shoshenq V
10 - Bakhenane
& Shabako
11 - Taharqa
& Psamtek I

Greater Vaults

12 - Psamtek I
13 - Necho II
14 - Apries
15 - Darius I

Fig. 5: Schematic Plan of the 'Lesser Vaults' of the
Serapeum:

The section of the Serapeum known as the 'Lesser Vaults'
lies between the bold letters 'N' and 'S' on the plan.
In general, the chronological sequence of internments is
from south to north.

The Ramesseide section appears to terminate with the
chamber attributed by Mariette to Rameses III (Chamber
4 on plan) just north of the ceiling collapse at 'CC'.
As far as is known from the excavation publications, no
19th or 20th Dynasty inscriptions have been found
beyond this point. Chambers 7 and 8 are late-22nd
Dynasty (Shoshenq III and Pimay in 7 and Shoshenq V
in 8) which leaves chamber XC as the likeliest repository
for the mid-22nd Dynasty burials - dated by donation
stelae to the reigns of Osorkon I and Takeloth I.

As a result of the recent re-opening of the Lesser
Vaults by Mohamed Ibrahim, it appears that Chamber
XA was also used for a Ramesseide burial (perhaps that
of Ramesses Siptah, whose cartouche is attested on
portable objects found in the Lesser Vaults).

'Chamber' XB shows every sign of being an abortive
attempt to extend the vaults in an easterly direction. The
resulting space was unlikely to have been used as a
sealed chamber due to the excessive width of the opening.
The only other possible candidate, therefore, for the
burials of the 21st and early 22nd Dynasties is Chamber
'T' (beneath Chamber 6), the entrance to which is located
in the vestibule of the early vault complex. So far, this
chamber has not been excavated due to the extreme
danger inherent in the operation (as indicated by
Mariette's report [A. Mariette: Le Serapeum de Memphiis,
(Vieweg: Paris, 1882) p.152-3]). However, should
Chamber I eventually prove to be 21st Dynasty in date,
it would still not fully explain the anomaly of the twelve
missing Apis. From his cursory look at the chamber, via
a hole cut into the floor of Chamber 6, Mariette
suggested that the room could only contain three
internments. The possibility exists that the chamber may
contain an opening to a further series of rooms but this
is unlikely given the arrangement of this vault. On the
face of it therefore, allowing for 3 burials, this would still
leave 9 early TIP Apis burials unaccounted for. - Ed.
XXI, the advent of Dynasty XXII brings a wealth of data on the priests and officials of Thebes. [442]

The paucity of such data during the 21st Dynasty and the subsequent re-emergence of source material in the 22nd Dynasty provides a curious parallel to the lacuna in the Apis burial record discussed above.

The Inhapi cache

During the 21st Dynasty the problem of pillaging in the Theban royal necropolis became so acute that the High Priests of Amun made 'a last frantic effort to put an end to such sacrilege', by preparing a secret cache of royal mummies in a rock-cut tomb near Deir el-Bahari originally built for Queen Inhapi [443]. The bodies of many of the most powerful Pharaohs of the 18th to 20th Dynasties (including Thutmose III and Seti I) were hastily reinterred here: Coffins, mummies and other funerary furniture were found piled up in this inconspicuous burial-place ... the cache was sealed up in the tenth year of the Tanite king Siamun' [444] of the 21st Dynasty.

The discovery in this cache of a mummy from the 22nd Dynasty, of one Djedptahafankh who held the offices of 2nd and 3rd Prophets of Amun, thus poses a conspicuous problem. Djedptahafankh was buried in the Year 11, or soon after, of Shoshenq I [445], conventionally some 34 years after the final deposits in the tomb by Siamun. It therefore has to be assumed that the secret cache was 'reopened once more in the reign of King Shoshenq I' to inter Djedptahafankh [446], the only evidence for its reopening between the year 10 of Siamun and the discovery of the cache in the 20th century [447]. Is it plausible that this secret hiding place should have been reopened after 34 years for the burial of a single prophet?

Further, it was reported by Maspero, who cleared the tomb in 1881, that the coffin of Djedptahafankh was found deep within the mountainside (possibly in the chamber of the 21st Dynasty HPA Pinudjem and his family), and not at the entrance of the crowded tomb as one would expect for a later intrusive burial (see Fig. 6). Thomas notes that the evidence for the placement of the burial depends on the extremely unsatisfactory reports made of the tomb clearance and suggests that Djedptahafankh's coffin may instead have been found in the entrance corridor. Yet Thomas' supposition seems to have been made largely on the (chronological) assumption that Djedptahafankh was a 'late arrival' [448].

Whatever the case regarding the coffin's precise position, a straightforward reading of the evidence may indicate that Djedptahafankh was buried in the cache before its closure in Year 10 of Siamun. This would admittedly conflict with the present chronology which places Shoshenq I after Siamun and which allows no overlap between the 21st and 22nd Dynasties.
Fig. 6 Plan and elevation of the Royal Cache (tomb 320)

It seems likely that the original tomb of Queen Inhapi (18th Dynasty) extended only as far as chamber D, i.e. the original burial chamber. During the early TIP the tomb was extended, presumably by HPA Pinudjem (II), in order to accommodate his wife’s burial in chamber F.

When the tomb was discovered by Brugsch in 1881, he found chamber F contained mummies from the TIP (including Pinudjem himself) whilst chamber D had been used as a cache for the royal mummies of the New Kingdom. Other coffins (and funerary equipment) of the 18th-20th Dynasties were found in both corridor B and in the low entrance passage between the shaft (A) and corridor B.

It is not clear from the original reports where the coffin of Djedpterachefankh was located, but it was grouped with the coffins from chamber F in subsequent publications. Whether it was found in chamber F or not, Djedpterachefankh’s coffin was certainly found beyond the coffin of Nebesny (or Nebkhepsen), “un coffre massif” (unidentified), the double coffin of Henenawtawy and that of Seti I, all of which almost completely blocked the entrance passage. This passage was variously published as being only .8 meters (Maspero) or 1.15 meters (Brugsch) high by an agreed 1.4 meters wide. If Djedpterachefankh was interred here after the original sealing in Year 10 of Stamen, then it appears that his double coffin and funerary furniture was manhandled through the crowded entrance passage and carried a further 150 feet down the cluttered main passage into the 21st Dynasty burial chamber at F.

- Ed.

Fig. 7 Schematic plan of the Tanite tomb complex.
The Tomb Complex at Tanis:
The photograph was taken looking south from the top of the remains of the mudbrick wall which forms the SW corner of the Osorkon II court. The tomb of Psusennes is in the centre with its entrance shaft indicated by arrow A. To the left is the tomb complex of Osorkon II and beyond that the mounds of debris from the great enclosure wall of Psusennes. To the right of the three small figures the remains of the original tomb of Amenemope can be seen with its abandoned sarcophagus (arrow B).

In the right foreground the remains of the mudbrick wall of the Osorkon court can be seen and, to its left, the ‘gap’ between the tomb of Psusennes and the court. This gap appears greater than in reality due to the foreground distortion of the wide angle lens used for the photograph. To add to this, the mudbrick envelope wall on the north side of the Psusennes structure (see Fig. 7) is beneath the sand and therefore not visible. The limestone block (arrow C) may be the remains of the original stone outer casing of the court wall (as evidenced elsewhere in similar structures) in which case, the gap between the block and the hidden mudbrick envelope would be reduced to a metre. - Ed.

Royal tombs at Tanis

Further evidence that something may be amiss with the conventional placement of the 21st and 22nd Dynasties comes from the royal tomb complex at Tanis, discovered in 1929 by Montet (see Fig. 7). In the southwestern corner of the main temple enclosure at Tanis he uncovered the underground tombs of Akheperre Psusennes I and Amenemope of the 21st Dynasty (tomb III), Osorkon II (tomb I) and Shoshenq III (not shown in Fig. 7) of the 22nd Dynasty, as well as two unattributed tombs (tomb II and one other not shown).

Montet and his architect Lézine were clearly puzzled by the relationship between the adjacent tombs of Psusennes I and Osorkon II. After careful examination they reluctantly concluded that Osorkon’s tomb had been constructed before that of Psusennes - this in spite of the usual understanding that Osorkon died more than a century later than the reign of Psusennes. Osorkon’s tomb abuts that of Psusennes on its northeastern side. The existence of a structure here at the time when the tomb of Psusennes was built is indicated by the awkward angle of the entrance and side chambers of Psusennes’ tomb (specifically the burial chamber of Amenemope - burial B in Fig. 7 - Ed.), something which can only be explained by a shortage of ground space available for the Psusennes structure. Further, it was clear that the northern outer wall-face of the antechambers of Osorkon’s tomb had actually been cut into in order to accommodate the antechambers of the Psusennes structure [449].

Lézine and Montet offered three possible hypotheses to explain this anomaly:

(1) either that a predecessor of Psusennes had built and left a tomb devoid of all decoration, which Osorkon simply usurped;

(2) or that Osorkon had reconstructed the walls of the tomb from the ground upwards, thereby removing its original decorations;

(3) or that Osorkon had re-occupied an abandoned tomb, partially in ruins, which he largely reconstructed in its eastern part [450].
The arguments for all these hypotheses are unconvincing. Solution (3), that favoured by Montet and Lézine, would only solve the problem for the eastern end of the structure. Nowhere was there a trace of earlier decoration or any evidence that Osorkon had erased the cartouches of a predecessor in order to substitute his own [451]. Thus hypothesis (3) would also have to assume, like (1), that the original tomb was left undecorated and presumably unoccupied. This would make it hard to understand why Psusennes, if he reigned before Osorkon, did not occupy the tomb himself instead of building an entirely new structure. While hypothesis (2) remains the most likely, there is a further factor which Montet and Lézine seem not to have considered. Psusennes would only have been required to construct his tomb so close to that of Osorkon, and chip away part of its facade, if there was another structure already existing immediately to the north. Within a few feet of the northern outer face of the Psusennes structure lies the south-west corner of one of the temple’s great courtyards, the foundation-deposit of which shows that it was built by Osorkon II [452]. Thus structures built by Osorkon are to be found on both sides of the Psusennes tomb, and they seem to have been the constraining factor in its placement. Montet’s arguments concerning the hypothetical re-use of Osorkon’s tomb should not be considered in isolation. The overall picture of evidence certainly points to Akheperre Psusennes having built his tomb after the building-work of Osorkon II.

Finally, note should also be made of the grave-goods found with the burial of Osorkon’s young son Harnakht (burial H). The child was buried in his father’s burial chamber and his limited grave goods contained objects with the cartouche of the 21st-Dynasty king Amenemope, assumed to be the successor of Akheperre Psusennes [453]. Why should the son of Osorkon II have been buried with material bearing the name of an obscure predecessor? The interval of time, according to the conventional chronology, between Amenemope and Osorkon II is 95 years. While the rifting and re-use of material from the neighbouring burial of Amenemope is of course possible, the complex of evidence from Tanis as a whole may suggest a far more intimate relationship between Akheperre Psusennes and Amenemope of the 21st Dynasty and the kings of the mid-22nd Dynasty than has hitherto been realised.

God’s Wives and High Priests of Amun

Similar gaps to that in the list of the High Priests of Ptaḥ (see above) appear in the records of other major offices during the TIP. During the 21st Dynasty the position of God’s Wife of Amun was ‘of ever increasing political importance’ [454], the office being held by ladies of the royal and priestly lines of Tanis and Yebes. Yet after the end of the 21st Dynasty a curious silence falls regarding the God’s Wives, the documentation for which only picks up again in the mid-22nd Dynasty. Kitchen assumes that:

...the institution of God’s Wife of Amun continued throughout the Libyan epoch, although few incumbents are known before its end. [455]

That there was continuity in such an important office is a reasonable assumption - the first incumbent known from the 22nd Dynasty is one Karamat (Maatkare) Meryt-Mut ‘I’, with the prenomen Maatkare Mutemhat, two of her names (Maatkare and Mutemhat) being familiar from the titulary of the 21st Dynasty God’s Wives. However, there still remains a complete gap in documentation for this office between the princesses of the 21st Dynasty (ending c. 945 BC) and this Karamat Merytmut, who built a chapel in the

Montu precinct at Karnak during the reign of Takeloth II. Kitchen estimates her dates as 870-840 BC; after her he lists only two candidates of uncertain placement to span the following century, when Amenirdis ‘I’ (Kitchen’s estimate 740-700 BC) of the 25th (Ethiopian) Dynasty took office [456].

The even more important office of ‘High Priest of Amun’ is alternately richly, then patchily, documented. The HPA’s of the 21st and early 22nd Dynasties are well documented. Then, between 775 and 704 BC (late 22nd to early 25th Dynasties) Kitchen is able to list only one HPA, the future Pharaoh Takeloth III of the 23rd Dynasty, the length of whose pontificate is unknown [457]. Kitchen assumes the existence of three unattested pontiffs, or even a half-century interval (754-704 BC) during which the office was left vacant. The identity and dating of the HPAs around these dates is also highly equivocal [458].

22nd-Dynasty finds outside Egypt

Material remains of the 22nd Dynasty occur in a curious number of ‘late’ find-spots outside Egypt. At Assur a vase with the cartouche of a 22nd or 23rd Dynasty prince Takeloth, broadly dated to 945-745 BC by von Bissing [459], was found reinscribed with the name of the Assyrian king Esarhaddon (681-669 BC) [460]. Similar alabasters were discovered at Nimrud, also in a 7th-century context linked with Esarhaddon [461]. Considered in isolation, these finds, may not be surprising - they could well have been looted during the Assyrian attack on Egypt in 671 BC or, as Culican suggests, from the royal treasury of Sidon in 677 BC [462]. However, similar alabasters bearing the cartouches of other 22nd-Dynasty figures, Osorkon II (874-850 BC), Takeloth II (850-825 BC) and Shoshenq III (825-773 BC), also occur in 7th-century deposits in Spain [463]. They were found in graves at Lauria (Cerro de San Cristóbal near Almuñécar) associated with Greek and Phoenician pottery of the 7th century BC. The graves included two Protocorinthian ‘kotylai’, for which a date in the ‘first quarter of the seventh century’ is considered suitable [464]. We can also compare the find of a scarab of Osorkon I or II found in Tomb 2 at Salamis, Cyprus (dated to c. 700 BC), and assumed to be an heirloom [465].

While finds of 22nd-Dynasty objects in Palestine are often used to determine the chronology of strata or associated material [466], controls on such datings can occasionally be provided by Assyrian and biblical evidence. For example, the discovery of an alabaster of Osorkon II at Samaria was once held to date its ivory collection to the mid-9th century BC:

...an alabaster vase of the Pharaoh Osorkon II was found in association with the ivories, and thus confirms the correctness of their attribution to Ahab, who ruled at the same time. [467]

This synchronism has now been abandoned. Winter’s analysis of the Samaria ivories, based on stylistic comparison with material from Phoenicia, Syria and Assyria, clearly indicates an 8th-century date [468]. Interestingly, Winter was cautious of the chronological value of the Osorkon alabaster from Samaria because of the late associations of such vessels elsewhere, as at Almuñécar and Nimrud [469]. Indeed, later study has shown that the Osorkon vase could not have been deposited earlier than the 8th century BC. It was noted by the excavators that the ‘Osorkon House’ with the Egyptian alabaster was built after the destruction of the building containing the famous Samaria ostraca [470]. While the ostraca were once dated to the 9th century BC, they are now thought to belong, on
palaeographic and historical grounds, to the mid-8th century BC [471], providing a terminus post quem for the 'Osorkon House'. Thus the Osorkon vase from Samaria can be added to the list of 'late' contexts for 22nd-Dynasty finds.

A related problem concerns the fragment of a relief chalice found at Busirah in Edom. The distinctive style of the piece enables it to be dated to the early 22nd Dynasty (conventionally the 10th to early-9th centuries). However, the date of its context is some two hundred years later. The major period of occupation at Busirah fell in the Assyrian period of the late 8th-7th centuries [472], which agrees with the earliest biblical references to the town of Bozrah by the mid-8th century prophets Amos (1:12) and Micah (2:12). Indeed, as the excavator, Bennett, stressed: 'there is still no evidence to support the determination of Buseirah before the beginning of the eighth century B.C.' [473] Consequently Milward had to assume that the find was part of an heirloom. Since Busirah was of no importance until the 8th century BC, she noted that:

...it is rather remarkable that an Egyptian chalice, which would have been a rare and costly article even then, should have found its way to Busirah at such an early date, possibly the tenth or ninth century ... [474]

Individually, these finds of 22nd material in 'late' contexts, at Assur, Nimrud, Almqvist, Samaris, Samaria and Busirah, can of course be accounted for by assuming that they were 'heirlooms'. However, taken together, there seem to be a disturbing number of such finds. It also seems to be the case that whenever a local, non-Egyptian, chronology can be used to date the context of 22nd-Dynasty material, the dates range from 100 to 200 years later than those assigned to the object by the standard Egyptian chronology. Thus the dates of late TIP history suggested by other evidence would bring the dates for these objects in line with independent, local chronologies.

The anomalies listed above are but a few of the more conspicuous examples apparent in the conventional history of the Egyptian TIP [475]. While only a summary of preliminary work, the above observations seem to offer the possibility that TIP chronology could be telescoped by allowing much greater overlaps among the 20th to 26th Dynasties (particularly between the 21st and 22nd dynasties), on the principle that many of these dynasties ruled concurrently in different parts of the country. Further research, it may be hoped, might be able to achieve such a reduction which would relieve the Eastern Mediterranean area of a vast array of chronological difficulties.

Notes and References

388. The JACF has been asked by the ISIS Board of Trustees, in the interest of good scholarship, to include an acknowledgment to the ISIS in respect of material which has already been published specifically relating to the subject matter of Section Ten. This material includes: an earlier Catalogue of Egyptian Anomalies drafted for the Six Tenth Anniversary Tour of Egypt (1984) for distribution to members attending lectures; the various contributions of writers who have published articles on Egyptian chronology in the JACF Review - a publication which, over the years, has supported the need for a revision of the chronology of the Ancient World; an introductory pamphlet entitled Old World Chronology: Is it Time for a Reassessment? which was published by ISIS in 1986 and formed the basis of this paper - Ed.

389. The dates used here are those used in the latest edition of the JACF: I:12 (1975), III:1 (1982).


391. C. C. Myer: op. cit. [98].


395. See table below, p. 51. The length and nature of these periods have never been clearly determined.


397. See the standard edition and translation by W. G. Waddell (Loeb Class. Library, 1940).


399. The dates here are those most commonly cited in the literature; different methods of calculation have produced slightly variant results but the differences are too small to affect the overall Sothic chronology in any significant way.

400. Edwards: op. cit. [5], p. 11.

401. op. cit. p. 12.


404. Ibid.


407. Ingham: op. cit. [402], pp. 36-40.


409. For example Parker: op. cit. [406], p. 180 (in answer to Long: op. cit. [403]) used the lunar data from the Ilahien temple account (see below) to establish a date (1813-1812 BC) within the reign of Amenemhet III and thereby eliminate him as a candidate for the Ilahien papyrus with its Sothic date of 1872 BC.

410. R. A. Parker: 'The Lunar Dates of Thutmosis III and Ramesses II', JNES 16 (1957), pp. 48-50: the small range in years in which a lunar date falls the greater the possibility that it may be fixed to one year. The range may be set by some other calendrical or astronomical datum such as a date for the helical rising of Sirius (Nitokris) or for an equinox or solstice of the sun or moon but it is more likely that purely historical considerations will set the limits. When two or more solutions for the same date are possible, historical considerations must determine which is the more possible. More heed by Parker of his own cautious statements might have protected him from the dangerously circular reasoning he exhibited in his answer to Long (see [409]).

411. See L. W. Carcopino: 'The Lunar Dates of Thutmosis III', JNES 45 (1986), pp. 135-142, for a bibliography of the debate. Carcopino identifies a number of inaccuracies in the calculations and tables prepared by Neugebauer and subsequently used by Parker. See also J. G. Read: 'Early Eighteenth Dynasty Chronology', JNES 29 (1970), pp. 6-7, & n. 22 regarding the nature and timing of Egyptian 'new moon' observations.

412. Read: op. cit. [411], pp. 2, 10.


414. Read: op. cit. [411], pp. 21, 23.

415. I am grateful to Professor John Harris of the Dept. of Egyptology, Durham Univ., for drawing my attention to this possibility.


418. Van der Meer: ACWIE, p. 60. The date of 945 BC for the first year of Nebuchadnezzar (consequently of the 22nd Dynasty) is based on the assumption that he campaigned in Palestine in his 20-21st year, only shortly before the construction of the portal at Karnak, dated to


421. The Takeloth assumed to be the 'T' is listed in the genealogy of Pasharnu, which traces back to a king Shoshenq V through 9 generations to a king Shoshenq, grandfather of a king Takeloth - M. Malinine, G. Posener, J. Vercoorter: Catalogue des steles du Sérapéum de Memphis I (Louvre: Paris, 1968), No. 31, pp. 30-31; see also Kitchen: TIPE, p. 488.


423. Kitchen: TIPE, pp. 110-111, in searching for a long reign which might be linked with the Year 33 on the linx, has to eliminate the 49-year reign of the 21st-Dynasty Pharaohs 'T' because it was 'too remote in time.' A model allowing a considerable overlap between the 21st and 22nd Dynasties would not be subject to this constraint.


425. Wente: op. cit. [418], p. 277 suggests that the year 33 belongs to Shoshenq I and not Osorkon I. It associates a longer reign to Shoshenq I than the 21 years normally given, allowing a 3-year co-regency with the reign of Osorkon I to explain the bandage epigraphs.


429. Hieroglyphs II:147; Dioscorus Sicelius I.146.

430. Waddell: op. cit. [397], p. 9.


432. L. Horvath: Die koptisch zur zeitlichen Festlegung von Punkten der ägyptischen Geschichte und ihrer Anwendung (Sollstalverlag: Cairo, 1925), pp. 96-112, plates 2, 2a.


434. J. J. S. Taylor, ed., The name as Amennothef (Amenemope), but it has been conclusively shown by B. Gersdelsof: 'En marge des recents recherches sur Tanis,' Annales du Service des Antiquités de l'Egypte 47 (1947), p. 210, that it should be read as Amenemose.

435. See Kitchen: TIPE, pp. 188-192. The possibility exists that there was a continuation of the slab containing the list, but certainly no more than one generation can be accommodated in any hypothetical lacuna. To suggest more would unnecessarily inflate the number of entries from 11 to 12. Kitchen: TIPE, p. 192) finds 'supposed incompleteness of the slab... a less likely hypothesis'.


438. A. Mariette: Le Sérapéum de Memphis (Vieweg: Paris, 1882);


441. J. Vercoorter: 'Une Epiaphe Royale Indéite du Sérapéum,' Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo 16 (1950), p. 340, calculated this figure from the recorded lifespan of 7 bulls known between the reigns of Ramesses II and Danu.

442. Bierbrier: op. cit. [396], p. 45.

443. Ibid., p. 54.


446. As assessed by Kitchen: TIPE, p. 289.


448. E. Thomas: The k3y of Queen Inhapi,' JARCE 16 (1960), p. 92. n. 24 refers to a further early 22nd-Dynasty burial, of one Nomu-hatshefau. Kitchen: TIPE, p. 64, considers that the bandage epigraph on this burial could pertain to Siamun, Pharaohs II (22nd Dynasty or Shoshenq I (22nd Dynasty), so its actual attribution to the 22nd Dynasty should be treated with caution.


451. Ibid.


459. W. von Bissing: 'Ägyptische und ägyptisierende Alabasterfüfsen...', ZA 46 (1940), pp. 157-158. The tells named by this prince ('King's Son of Ramesses' and 'High Priest of Anakhte') suggest that

he was either Takeloth son of Shoshenq III (825-773 BC) or Takeloth son of Osorkon III (773-749 BC), the future Takeloth III - see Kitchen: TIPE, pp. 344, 352 nnnnnn.


462. Ibid., pp. 30-31.

463. For publication details see ibid., 28-36.

464. Ibid., pp. 32-33.


466. See the Section Nine, 'Syro-Palestine: Confliction Chronologies,' above.


469. Ibid.; see also Winter's review of Mallowan & Herrmann: op. cit. [465], in AJA 83 (1979), p. 203.


471. See conveniently M. Avgad in EAEHL IV, pp. 1043-1044, 1050. Strangely, Avgad (p. 1044) notes that the Assur vase 'is of importance for dating the ivories.'


475. I would like to thank Dr John Hinson and David Rohl for valuable suggestions and references used in the above discussion of 'amalthe' in TIIP history.

It is generally assumed that this badly worn scene from the so-called 'Broken Obelisk' shows a group of four prisoners kneeling in supplication before the Assyrian king Assur-bel-kala (1075-1056 BC). It was however originally thought by some scholars that the obelisk dated to the reign of Assur-bel-kala's grandfather Tiglath-pileser I (1115-1077 BC) on the grounds that the text describes a hunting expedition which took the king (whose name is lost) to the shore of the Mediterranean Sea. This scenario corresponds closely to Tiglath-pileser's own hunting narratives contained in other inscriptions.

The obelisk was discovered in the Temple of Ishar at Nineveh, and is the earliest known example of this type of commemorative inscription (BM - WA 118898).