Dead-reckoning the Start of the 22nd Dynasty: from Shoshenq V back to Shoshenq I

Robert Morkot and Peter James

Kenneth Kitchen and other Egyptologists have claimed that a 10th-century BC date for Shosheng I (founder of the 22nd Dynasty) can be arrived at not only from a philological identification with the biblical Shishak, but from chronological 'deadreckoning' backwards through the Third Intermediate Period. One problem here is: where is the fixed point from which one begins retrocalculation? Kitchen himself counts backwards from his 'Osorkon IV', whom he identifies with the like-named king from the Piye Stela and the Shilkanni mentioned in Assyrian records in 716 BC. Yet there is no firm evidence that such an Osorkon 'IV' ever existed, while there is a mounting case for a return to the position of earlier Egyptologists that the king in question was the well-attested Osorkon III, presently dated to the first quarter of the 8th century BC. Equating him with the Osorkon of Piye would require lowering the dates of Osorkon III (and the last incumbents of the 22nd Dynasty) by some 40-50 years – a position strongly supported by archaeological, art-historical and genealogical evidence. Using these later dates, dead-reckoning backwards through the Dynasty (using the Pasenhor genealogy, Apis bull records and attested rather than imaginary reign lengths) brings us to a date for Shosheng I in the second half of the 9th century. It would place him a century later than the biblical Shishak, making the equation of the two untenable. Another candidate needs to be sought for the biblical 'king Shishak'.

Introduction: the wider picture

Since we published our initial critiques of the standard chronology for ancient Egypt (James et al. 1987; 1991a; 1991b; 1992) there has been an explosion of studies offering small adjustments to the Third Intermediate Period (hereafter TIP), as canonised in Kenneth Kitchen's book of the same name (1973; 1982; 1996). These have done little to strengthen the chronology of that period. Rather, the fact that Egyptologists have been able to offer endless variants (see below) for this period only seems to reinforce the impression that there must be something fundamentally wrong with its basic framework. At the same time increasing efforts have been made by some Egyptologists to reassure those working in related fields that all is well with the TIP – in particular that the start of the 22nd Dynasty can be dead-reckoned back to c. 945 BC, making the identification of Shosheng I with the biblical king Shishak a certainty.

An example is the paper written by A. J. Shortland for the conference on *The Bible and Radiocarbon Dating: Archaeology, Text and Science*. It is largely based on the work of Kenneth Kitchen, from which the 'salient facts are therefore drawn... and presented in a more general way' (Shortland 2005, 44). In doing so, Shortland merely repeats many of Kitchen's unsubstantiated claims, glossing

over problem areas. For example, the all-important table showing how the start of Shoshenq I's reign can allegedly be back-calculated from the 25th Dynasty lists Osorkon IV as the son of Shoshenq V, with no caveat or question mark (Shortland 2005, 51, Table 4.3). Apart from the fact that the very existence of Osorkon 'IV' has always been extremely doubtful (see below), the idea that he was the son of Shoshenq V is a *complete fiction*, a piece of guesswork on Kitchen's part.^[1]

This particular piece of guesswork is not an anodyne or harmless piece of speculation. A king Osorkon (ruler of Bubastis) is mentioned by the Kushite conqueror Piye, whose campaign to Egypt can be set within broad parameters to 730-715, assuming that it took place in his years 19-20, and that the king's reign was around 25-30 years. [2] Moreover, Piye's Osorkon is certainly the same

^[1] Note that even those who do not stress the genealogical link still accept the succession Shoshenq V–Osorkon IV (see e.g. Jansen-Winkeln 2006, 246). Frankly this is merely blind acceptance of the *status quo*.

^[2] Morkot 2000 (171-174) considered the possibility that the campaign took place somewhat earlier in the reign, perhaps around years 3-4, or year 12. There are also issues over the

as the Shilkanni of Assyrian records, who sent a gift of horses to Sargon II in 716 BC, giving us a precise date within his reign, while he was also most likely the Pharaoh 'So' to whom Hoshea of Israel sent envoys c. 725 BC (for references see Morkot & James 2009). So it is clear that a king Osorkon reigned in the Delta during the last quarter of the 8th century BC. The Osorkon in question is assumed to have been a fourth ruler of that name (for whom there is not a single certainly verified monument or inscription), rather than Osorkon III, as understood by an earlier generation of Egyptologists – see below. This, together with the imaginary idea that he was the son of Shoshenq V, sets the baseline for Kitchen's retrocalculation of the date of Shoshenq I back through the 22nd Dynasty.

Kitchen himself has felt the need to publish a series of papers in interdisciplinary contexts in recent years. 'Ancient Egyptian Chronology for Aegeanists' (2002) was largely aimed at some rather jejune speculations by Sturt Manning. In his attempts to backdate the eruption of Thera to the mid-17th century Manning realised this creates tension with the standard chronology of Egypt, and played with the idea of *raising* New Kingdom (and hence TIP) dates to alleviate some of the problems with accepted archaeological synchronisms between Egypt and the Aegean world (Manning 1999, 367-413). He was (quite rightly) given short shrift by Kitchen. Nevertheless in this and other similar papers Kitchen (2007a; 2007b) merely reiterates the assumptions set out in *The Third Intermediate Period in Egypt*.

It is also instructive to read the remarks of a relative outsider to Egyptian history, Malcolm Wiener. He is best known for his papers on Late Helladic chronology and his forensic criticisms of the Manning and Kuniholm super-high dates for Thera (for references and discussion see conveniently James 2012a; 2012b). Naturally he has sought to examine the present state of the art with respect to Egyptian chronology, relying on the opinions of the 'recognised' experts on this period, and in various conference papers has tried to summarise matters from a bird's eye view. For example, with respect to the papers delivered at a workshop in Vienna (2005) on 'Egypt & Time: Precision and Accuracy of the Egyptian Historical Chronology', Wiener (2007, 325) wrote:

The fine papers on the genealogy and history of the Third Intermediate Period and Twenty-fifth Dynasty speak for themselves. The T.I.P–Twenty-fifth Dynasty framework established through the heroic efforts of Ken Kitchen in particular, Morris Bierbrier and others was subject to vigorous challenge on many points of detail. Dan'el Kahn's proposal that Manethonian absolute dates in the period around 700 B.C. are in error by a few years supports the long-held understanding that Manetho's sources were better for some periods than others.

length of the reign, some arguments favouring 40 years, which obviously have major repercussions for the discussion.

Regarding Manetho, as we have been arguing now for some 25 years, one should go much further than Kahn's understanding here and simply reject use of Manetho *entirely* in any serious academic argument (James & Morkot 1991; see now 2013, Part I). *Only* the evidence from contemporary monuments is admissable. Wiener is, of course, correct in noting that Kitchen's heroic efforts have been subject to 'vigorous challenge on many points of detail'. Yet, unfortunately, most Egyptologists have shied away from challenging, or even re-evaluating, the basic assumptions underlying the standard framework.

For example, in 1989 Aston quite rightly argued that the Chronicle of the High Priest and Crown Prince Osorkon indicates a significant overlap between Takeloth II and Shosheng III. [3] This is now generally accepted by most Egyptologists (with the notable exception of Kitchen); see for example Karl Jansen-Winkeln (2006, 243), who considers the parallel rule of Takeloth II and Shosheng III 'to be certain'. However, as Aston (1989, 144) himself noted, this would create a 'lacuna' of some 25 years in TIP chronology. But rather than shortening the chronology as a whole, Aston (sticking to a date of c. 945 BC for the beginning of the Dynasty based on the identification of Shosheng I with the biblical Shishak) resorted to the device of assigning Osorkon II 'a further 15/20 years of rule, despite the absence of high regnal dates' (Aston 1989, 148). Osorkon II was thus attributed a reign of 40/45 years despite the fact that his highest certainly attested year-date is 23 (Jansen-Winkeln 2006, 238). Aston (1989, 148) also removed Takeloth II from his traditional place as a ruler of the 22nd Dynasty, and assigned him to Upper Egypt, making him a 'purely Theban king' as part of a Theban 23rd Dynasty, in company with Pedubast I, Iuput I and Osorkon III. (Note that the very existence, and partly the composition, of such a dynasty is based on Manetho.) Subsequently, however, Aston has separated these kings, creating new groupings (with other pharaohs) - into no less than three 23rd dynasties: one incorporating Takeloth II at Herakleopolis/Thebes; a dynasty of 'rebel kings' at Thebes (including Pedubast I and Iuput I); and a Tanite 23rd dynasty which included Osorkon IV. In his published paper for the conference on The Libyan Period in Egypt held at Leiden in 2007, Aston (2009) presents a stream of tables for variant chronologies, for Kitchen's, Krauss's and his own models, all with absolute dates – populated by pharaohs leap-frogging each other from one reconstructed 'dynasty' to another.

Absolute dates aside, the very fact that at one point Aston can associate Takeloth II (on no serious grounds whatsoever) into one dynasty with Pedubast I and Iuput I, then later separate them into two warring dynasties shows how much speculation is involved in such 'models'. Even a cursory comparison of such competing chronologies with the raw evidence (and particularly the *documented* reign-

^[3] An idea which Aston (2009, 1) acknowledges was suggested a century ago by Daressy (1913, 137); Daressy argued that year 11 of Takeloth II = year 22 of Shoshenq III.

lengths) shows the pointlessness of attempting too much false 'precision': there are, simply, too many unknowns. Drawing up endless tables and assigning extra years to arbitrary pharaohs to avoid 'lacunae' is merely tinkering with the figures within a preconceived framework (which starts the 22nd Dynasty in c. 945 BC because of the assumed identification of Shoshenq I with the biblical Shishak) and gets us nowhere. Precision should never be confused with accuracy. In the case of the TIP, with all its unknowns, it is sometimes better to be roughly right than precisely wrong.

'Dead-reckoning' or 'dead' reckoning?

Kitchen has repeatedly made the claim that a date of *c*. 945 BC for the accession of Shoshenq I can be arrived at by 'dead reckoning', i.e. by adding up the reigns of the pharaohs involved back from the 7th century BC. For example, 'the series of known regnal years of his successors, which fill up the interval 924-716/712 BC almost completely, leaving just 14/18 years for the one king (Osorkon IV) whose reign is poorly documented in terms of monumental year-dates.' (Kitchen 1987, 38). Our response was, and still remains (James *et al.* 1991b, 231):

Here the supposed use of 'dead reckoning' backwards is nothing more than the filling up of an already preconceived time-frame. Osorkon IV, who has no year dates at all, is by no means the only poorly attested king from the Third Intermediate Period.

Authorities on biblical chronology have effectively said the same. So Jeremy Hughes (1990, 190):

Egyptian chronologists, without always admitting it, have commonly based their chronology of this period on the *Biblical* synchronism for Shoshenq's invasion.

The problem was described with equal force by William Barnes (1991, 66-7):

Although the present scholarly consensus seems to favor a date *c*. 945 B.C.E. for the accession of Shishak ..., apart from the biblical synchronism with Rehoboam (which as I have noted above remains problematic at best) there is no other external synchronism by which one might date his reign, and the Egyptian chronological data themselves remain too fragmentary to permit chronological precision.

With respect to the date of Shoshenq I's campaign, Jansen-Winkeln (2006, 264, n. 203) agrees that 'the Egyptian chronology is absolutely dependent upon Near Eastern chronology'. Nevertheless he, like Kitchen, claims (Jansen-Winkeln 2006, 264) that between 690 BC (the accession of Taharqo) and the accession of Shoshenq I c. 945 BC 'the sequence of kings and the highest known

dates for these kings does not leave significant gaps. The general framework of the chronology of this age is certain.'

Kitchen (2007b, 166-167) gives a digest of his dead-reckoning, working back from a date of *c*. 728 BC for Piye's invasion:

Thus, we have 727 (better, 728), 725, 716 as datelines for Osorkon IV. Before him, we have the entire 22nd Dynasty back to Shoshenq I in impeccable good order, which I list in almost unrealistically minimal terms at this stage: Shosheng V, 37 years (up to Yr 38), Pimay [Pamiu], 6 years (up to Year 6; Apis-sequence), (the new) Shosheng IV plus Shoshenq III, together 52 years (40+12; on Apis sequence), Takeloth II, 25 years (not less ...); Osorkon II, up to Year 23, but 24 needed; Takeloth I, 14 years' minimum (15?); Osorkon I, 32 absolute minimum (Year 33 bandages); and Shosheng I, 21 years. Adding up 37+6+52+25+24+14+32+21 =211 years unrealistically absolute minimum; from 727 = an irreducible and unrealistic bottom date of 727+211 = 938 BC for the accession of Shosheng I. If we allow 728 as proper date for Piye's invasion, and Osorkon IV reigning from 730 BC (and not just 5 minutes before Pive arrived on his doorstep!), Takeloth a 15th year in full, and Osorkon I, 35 years (correcting Manethonic *15), then 1+2+1+3 = 7 years more, bringing Shoshenq I's accession to c. 945, close to maximum. A 50-year range of error, that some have suggested, is absolutely excluded.

Here is a comparison of the figures used by Kitchen with the highest attested years from contemporary documents:

- Shoshenq V, '37 years (up to Yr 38)'; 37 agreed.
- Pimay (hereafter Pamiu), '6 years (up to Year 6; Apis-sequence), (the new) Shoshenq IV plus Shoshenq III, together 52 years (40+12; on Apis sequence)'. 52 agreed. A Year 7 of Pamiu is now known from the Heliopolitan Annals (Bickel *et al.* 1998, 36, 38) but this makes no difference to the period which is clear from the Apis sequence. (The reign-length of the rather nebulous Shoshenq IV is a matter of supposition.)
- Takeloth II, '25 years (not less ...)'. A year 24 is mentioned on the Chronicle of Crown Prince Osorkon (Ritner 2009, 371). However, this ignores the now generally accepted idea that Takeloth and Shoshenq III ruled in parallel (see above). If Shoshenq III came to the throne (as a co-ruler in northern Egypt) in Year 4 of Takeloth II (see Jansen-Winkeln 2006, 248), this would reduce the latter's reign to 3 years for deadreckoning purposes. Further, it would seem that Shoshenq III took the throne before the death of Osorkon II, possibly in his penultimate year (see

James & Morkot in prep.b.).^[4] This would mean that the reign of Takeloth should be completely discounted for dead-reckoning purposes.

- Osorkon II, 'up to Year 23, but 24 needed'; 23 agreed. A year 28 from a Nile Level Record is also possible see below; but if Shoshenq III acceded in Osorkon Year 27, only 26 are needed for dead-reckoning purposes.
- Takeloth I, '14 years' minimum (15?)'. Kitchen assigned him this reign-length on the basis of some anonymous year-dates (Karnak Nile-level texts, Nos. 18 and 19) which refer to a High Priest Smendes, son of king Osorkon (presumed Osorkon I).^[5] While he admitted (Kitchen 1973/1986, 121) that the attribution 'is not yet susceptible of outright proof', he granted Takeloth I 14 years of reign.^[6] At the time he wrote, there was not a scrap of evidence for the existence of this pharaoh, except for his appearance as the son of Osorkon I in the Pasenhor genealogy: even his prenomen was unknown. Dissatisfied with the lack of activity displayed by Takeloth in a reign of up to 15 years, Kitchen characterised him as 'a witless nonentity

[4] This would be the most economical explanation of why the (undisturbed) burial of Crown Prince and HPM Shoshenq ('D'), who predeceased his father Osorkon II, contained an amulet bearing the cartouche of Shoshenq III. Jansen-Winkeln (2006, 239-240) takes this as evidence that Crown Prince Shoshenq outlived his father, a rather awkward conclusion which leaves the fact that he did not become pharaoh unexplained. Shoshenq III was very likely the son of this Crown Prince (see further below).

[5] There is no reason why these Nile-level texts, as well as that naming Iuwelot as HPA in a Year 5 (no. 16) could not belong to the reign of Osorkon II. In fact the evidence favours such an attribution. Nimlot C, son of Osorkon II, became HPA but only after Year 16 when he was still High Priest of Herishef in Herakleopolis and Great Chief of (Pi) Sekhemkheperre. If we do not assign Iuwelot and Smendes to the early years of Osorkon II, there would be a gap in the pontificate for some 16+ years. The old idea that Harsiese A, son of Shosheng II(c) and future Theban king was HPA at the beginning of Osorkon II's reign has been corrected (Jansen-Winkeln 1995, 129-135; Ritner 2009, 267-268; Dodson 2012, 106). A son of King Harsiese, [... du/'awti? ...], listed by Kitchen (1986, 196) as an HPA is argued by Dodson (2012, 107) to belong to the very end of the reign, and he speculates that he could be the future King Pedubast – hence a rival pontiff from another dynasty. The fragmentary nature of this inscription makes speculation about the status and identity of this individual pointless. Hence, only two pontiffs are certainly known for the reign of Osorkon II (Nimlot C and Takeloth F). Attributing the shortlived pontificates of Iuwelot and Smendes near the beginning of the reign would not strengthen Aston's case for lengthening the reign of Osorkon II.

[6] More recently, however, caution has been thrown to the wind. Kitchen (2009, 167) states that we 'have certainly... (13)15 years for Takeloth I...'

who allowed all real power to slip through his fumbling fingers' and, more recently, as a 'sloth'! (Kitchen 1982, 220; 2009, 185; see comments in James 1991). Matters have now changed as inscriptions in Chamber III of the Tanis tomb of Osorkon II referring to a king Takeloth have been convincingly assigned to him (see conveniently Ritner 2009, 282-283 for references and translation). Thus Takeloth's prenomen is now known to be Hedikheperre-setepenre, minus the Si-ese which distinguishes him from Takeloth II (see Aston 1989, 144, n. 40; Jansen-Winkeln 1987). This further led to the suggestion (on orthographic grounds) that the foundation-stela of a Takeloth Hedikheperresetepenre belongs to the first, rather than second ruler of this name (see Kitchen 1996, xxiii). The date on the Stela, Year 9, would now become the only (certainly attested) regnal year of Takeloth I.^[7]

Osorkon I, '32 absolute minimum (Year 33 bandages); Osorkon I, 35 years (correcting Manethonic *15)'. The use of an amendment of Manetho's 15 years to round up the reign to 35 years is totally inadmissible, though Kitchen frequently invokes it in his discussions of deadreckoning. [8] Jansen-Winkeln (2006, 238 & n. 39) lists for Osorkon I the year-dates [1]-4, 6, 10, 11, 12, 23 and 33, noting with caution that: '... only the year 10 in lines 2-3 of the "stèle de l'apanage" (...) and the year 12 of the Nile level record no. 2 (...) are *explicitly* related to Osorkon.'

The year 33 (anonymous) is from linen on the mummy of the priest Nakhtefmut (E), found at the Ramesseum at Thebes; the burial also contained a *menat*-tab bearing the nomen and prenomen of Osorkon I. A second bandage on the mummy has a dateline of Year 3 (Quibell 1898, 10-11). It might be reasonable to assume, because of the *menat*-tab, that either the Year 3 or 33 belongs to Osorkon I. One might also argue that *both* belong to the reign of Osorkon I, which would mean that the Year 3 bandage would have been a thirty-year old one – with such reuse of linen not being uncommon. [9] Either way there is a curious gap of 30

^[7] NB Jansen-Winkeln (2006, 238) regards the other suggested years 5, 8, 13/14 and 14 as 'dubious'.

^[8] See e.g. 'Osorkon I, 35 years (correcting Manethonic *15)' in Kitchen 2007b, 167.

^[9] At an early point in our research we thought that the two year dates from the same mummy might provide a possible synchronism between Osorkon I and another ruler (as per Thijs 2010, 186 and Thijs in this volume). We now feel, for the considerations set out above that this is unrealistic and that one of the wrappings might simply be an old and reused one. The year date 33 dateline is reminiscent of those from the high year count from the 21st Dynasty (ranging from years 25-49), usually associated with either Psusennes I or Amenemope (see James & Morkot 2013, Part II). On our overall model there would have been a considerable overlap between the late 21st and early 22nd Dynasties.

years between the two dates: but an old bandage is an old bandage, hence of unknown age, and it may well be that it is the Year 33 bandage that was reused from an earlier reign. The Year 23 comes from another (anonymous) dateline on a wrapping from the mummy of Khonsmaakheru in Berlin, with other wrappings giving datelines of 11 and 12; the mummy also has braces of Osorkon I (Altenmüller 2000a; 2000b). As these wrappings overall are less distant in time from each other (only 11 years) compared to the two datelines in the Nakhtefmut case (30 years), perhaps they *might* all reasonably belong to the same reign and be associated with Osorkon I. This would give him a highest year of 23. Nevertheless, the Year 12 from the Nile-level records remains the only one attributable to him with absolute certainty. [10]

Shoshenq I, 21 years. Agreed.

This more critical assessment gives us the following minimum figures: Shoshenq V (37); Pamiu to Shoshenq III (58); Takeloth II (0); Osorkon II (23 or 26); Takeloth I (9); Osorkon I (12); Shoshenq I (21). This amounts to a total of 160-165 years, falling well short of what Kitchen described as 'an unrealistically absolute minimum' of 211 years, to which he nudges in (by various means) an extra 7 years (see above). The difference between the highest certain year-dates and Kitchen's estimates could amount to half a century. What price then, Kitchen's emphatic statement (2007b, 167) that: 'A 50-year range of error, that some have suggested, is absolutely excluded.' In plain terms it is not.

[10] As an argument in favour of a long reign for Osorkon I, Kitchen (1986, 110-111) cites the sequence of HPAs. Yet there is only one HPA clearly attested from the reign of Osorkon I - his son Shoshenq 'II' (Kitchen 1986, 306-307). The next known HPA is Iuwelot, son of Osorkon (presumed 'I'). As Iuwelot was still a youth in the year 10 of Osorkon, Kitchen assigns the anonymous Year 5 (Nile-level record) in which he is named as HPA to the next reign, that of Takeloth I. He next argues that for the high offices of HPA and army commander Iuwelot 'is more likely to have been so appointed 25 years later, aged about 40, than 5 years later at hardly 20, when he was still a callow youth'. Little of this adds up. The Apanage Stela of Iuwelot (tr. Ritner 2009, 274-275) states that he was already managing a large estate at Siut in the year 10 of Osorkon. Second, there is no reason at all why Iuwelot would have had to wait until he was 40 to take high office! Third, the attribution of the anonymous Year 5 to Takeloth I is mere guesswork: it could belong to Osorkon II (see note 5 above), which would indeed mean that Iuwelot was older than 20. In any case, with a (reasonable) 23-year reign for Osorkon I, Iuwelot would have already been approaching 30 by the time of the latter's death. Kitchen's next argument, concerning the lifespan of Osorkon I's son Shoshenq 'II' is equally unsafe as it is based on an estimate (about 50 years at death) from the mummy of Shoshenq Heqakheperre at Tanis. The identity of this monarch (now referred to as Shoshenq IIa) with the HPA Shoshenq 'IIc' known from Thebes is highly uncertain (see the thorough discussion in Broekman 2000; 2006; 2007).

Of course, given the extremely patchy record at our disposal, the highest attested date of a pharaoh does not necessarily represent the total length of his reign.[11] What we obtain through retrocalculation using the highest surviving regnal years is a *minimum chronology* for the period. But whether this is an absolute minimum or not poses another question. Undetected 'coregencies' would naturally require the shortening of even an apparently minimum retrocalculation. As Murnane (1977, 87) noted, the TIP 'is replete with episodes of joint rule. Most of these were not coregencies in the proper sense, but rather condominiums, involving peaceful coexistence of rival kinglets in different parts of the country.' Evidence for Libyan-period coregencies is as follows: Osorkon I and his son HPA and king 'Shoshenq II (c)', who appears not to have had an independent reign (Murnane 1977 187-188)^[12]; Nile-level Record No. 13 (Ritner 2009, 39-40) with an Osorkon Year 28 equal to a Year 5 of his son Takeloth, argued by von Beckerath (1966, 45; cf. James & Morkot in prep.b) to be Osorkon II and Takeloth II, although the third kings of these names are generally preferred (see e.g. Murnane 1977, 91; Kitchen 1986, 92); Osorkon III and Takeloth III appear together in scenes in the Osiris Heqa-Djet chapel at Karnak (see e.g. Murnane 1977, 93-94); Nile-level Record No. 26 (Ritner 2009, 38) which matches the Year 16 of Pedubast with Year 2 of Iuput (though whether the latter was the son of the former is unknown). In these instances we are fortunate that concrete information has survived. But there may well have been others. For example, Osorkon I may have been co-opted for a period of time as co-regent by Shoshenq I, who from all indications would have been fairly elderly by his year 21. Takeloth I may be another instance here. Despite the year-dates now assigned to him on grounds of orthography (up to Year 9 and still not as high as the 14/15 usually preferred), it is not an unreasonable suggestion that he might have ruled as co-regent with his son Osorkon II (whose first dated document comes from a Year 12). We just don't know, and have to accept that our tables should always carry caveats with a fairly wide +/- margin.

But the question of retrocalculation *per se* amounts to only *half the question* with regard to dead-reckoning. Where is the sound baseline or baselines from which one starts retrocalculation? We will return to this all-important question shortly, after two excurses into controlling evidence over Libyan-period chronology (genealogical and stylistic information), which we feel have been much ignored or misinterpreted.

^[11] For example, we know only two year-dates (2 and 21) for Iuput 'I': had only the first record been found this would have given the false impression that his reign was extremely short. Still, on presently available evidence, the reign length of Iuput has no direct bearing on the overall length of the 22nd Dynasty.

^[12] Shoshenq 'IIc' was most likely installed by his father as a Theban king, since he was the predecessor and father of the Theban king Harsiese known from the early reign of Osorkon II.

Genealogies

From the late Libyan period onwards genealogies of various officials become common and are potentially a useful chronological tool. The much-discussed Pasenhor genealogy (S. Louvre IM 2846, Cat. No. 31) is one of the most important. The genealogy occurs on the Apis Stela

of year 37 of Shoshenq V (for references and translation see Ritner 2009, 17-21) on which the prophet of Neith Pasenhor traces his ancestry through nine generations back to Shoshenq I (and then further back to various Libyan chieftains). It confirms the generally accepted succession (as deduced from the monuments) for the earlier 22nd Dynasty: i.e. Shoshenq I – Osorkon I – Takeloth I –

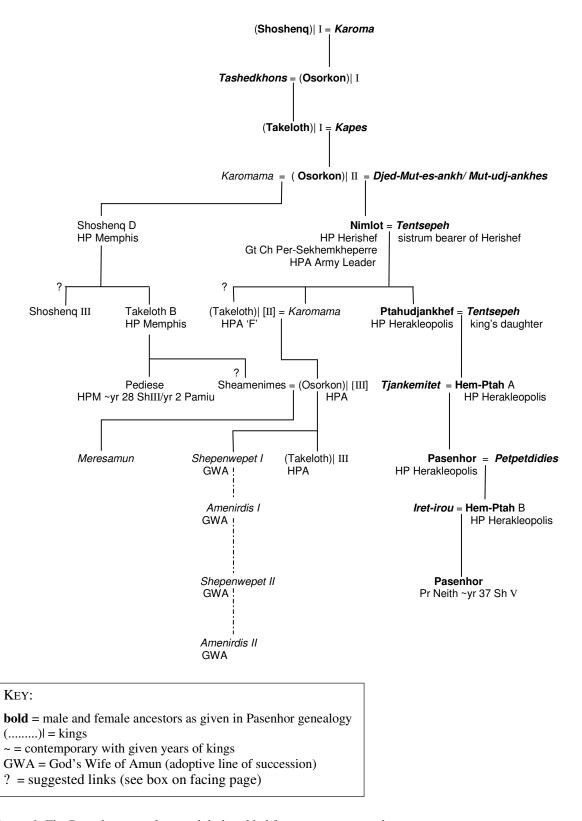


Figure 1. The Pasenhor genealogy with links added from contemporary documents.

Osorkon II. It also allows us to make rough approximations of the length of the 22nd Dynasty; but absolute dates all depend on the length we assign to a generation and where the baseline (Shoshenq V) for retrocalculation is placed.

Some crucial facts that emerge are that Pasenhor was descended from the royal house in a junior male line: Ptahudjankhef, a son of the HPA Nimlot, hence brother of Queen Karomama wife of Takeloth II (and probably full or half-brother of that king also) married a 'king's daughter' (of which king is unknown) Tentsepeh (the same name as that of his own mother) and served as High Priest of Herishef, as had Nimlot; this office was then held by his son (Hem-Ptah A), grandson (Pasenhor) and great-grandson (Hem-Ptah B); a son of the last, Pasenhor, was a prophet of Neith (at Memphis) and dedicated the

Apis stela in year 37 of Shosheng V. The relationship to Takeloth II and Osorkon II makes the link to the Crown Prince and HPA Osorkon very clear. The genealogy places the HPA/Crown Prince Osorkon on the same generation as the HPM Pediese attested by the Apis Stelae of years 28 Shoshenq III and 2 Pamiu – which is to be expected from the references to Shoshenq III in the 'Chronicle' of Prince Osorkon (trans. Ritner 2009, 348-376). The crucial factor then becomes whether the Crown Prince is identical with king Osorkon III. Clearly, if he was – now virtually proven and generally accepted (see below) – a much later date for Shosheng V is inevitable. A descendant of Osorkon III's son Djed-Ptah-ef-ankh, Namenkhamun, was buried in a 'late 25th Dynasty' style coffin (Bierbrier 1984, 82-84), while Ankhpakhered, father of Namenkhamun, belonged to the same genealogical generation as Pasenhor. (The

The Pasenhor Genealogy: links and implications

The Pasenhor genealogy continues earlier, with a Great Chief Nimlot and his wife Tentsepeh (parents of Shoshenq I) and then gives a line of Great Chiefs to one Buyu-wawa. There is certainly a confusing transition in the earlier part of the genealogy (in which it is not introduced by the conventional 'son of'), but that does not invalidate the source, and is not relevant to the later part. Various interpretations have been offered, although the most generally accepted regards it as a simple continuation. (For one discussion see Kitchen 1973, 105-111.) There is no good reason to dispute the genealogy back through the royal line to Shoshenq I, and there is other evidence that corroborates elements of it.

Further links to the royal genealogy given by Pasenhor for the later Libyan period may be confidently added. The senior line of the royal family, represented by the High Priests of Memphis, is well documented by burials, inscriptions, and dated Apis Stelae. For example, Pediese is depicted on the stela of year 28 of Shoshenq III when his son Peftjauawybast was officiating as High Priest, and 26 years later in year 2 of Pamiu when another son, Harsiese H officiated (see Morkot and James 2009).

Shoshenq III was postulated as a son of the High Priest of Memphis Shoshenq D by Morkot in the presentation at the BICANE 2011 conference and elsewhere (see main text below and note 17) and this possibility has since been adopted by Dodson (2012, 115, 228-229). Shoshenq III's grandson Ankh-Shoshenq married (a possible second-cousin) Taperet, daughter of the HPM Pediese.

Nimlot, son of Osorkon II, is attested as High Priest of Amun late in his father's reign, but pre-deceased him. His daughter, Karomama, married Takeloth II, who (as first suggested by Morkot in James *et al.* 1991a, 240), is now quite widely accepted as the same as the Takeloth 'F' son of Nimlot and HPA near the end of Osorkon II's reign. There is also increasing acceptance that the HPA and Crown Prince Osorkon, son of Takeloth II, became king as Osorkon III, thereby providing a direct link to the adoptive line of God's Wives of Amun spanning the late-Libyan, Kushite to Saite periods.

The *hs n hnw n Imn Mr.s-Imn.t*, Chantress of the Inner Abode of Amun, Meresamun, was suggested to be daughter of the HPA Osorkon by Ritner (1999), although he does not accept the equation of the HPA and Osorkon III. Sheamenimes was proposed to be a daughter of the High Priest of Memphis Takeloth B by Ritner following Gardiner and Yoyotte. This connection, if allied with the proposal that Shoshenq III was also heir of the Memphite line, would perhaps give some explanation of why Osorkon deferred to Shoshenq III in the Chronicle. The Berlin Bronze statue ÄS 32321 (www.griffith.ox.ac.uk/gri/3pm8sta4 801-715-525) may also be attributable to this Meresamun. This bronze has a hairstyle strongly reminiscent of the images of Shepenwepet I in the chapel of Osiris Heqa-Djet at Karnak. It should be noted that Dodson (2009) makes Sheamenimes daughter of an otherwise completely unattested 'Takeloth Q', and that Aston (2007) has Meresamun as a grand-daughter of Takeloth III.

names of the kings Osorkon and Takeloth are written without any additional epithets.)^[13] Equally, the adoptive descent of the God's Wives from Shepenwepet I places Pasenhor on the same generation as Shepenwepet II who served in the reigns of Taharqo and Tanwetamani, and continued in office under Psamtik I. Even allowing for some degree of flexibility in ages, there is a limit to how far this can be stretched. Such problems have led some Egyptologists to dispute the obvious identification of Crown Prince Osorkon and Osorkon III; and to ignore the indications for a later relative placement of Shoshenq V, a crucial matter which we will return to later.

Another significant genealogy is that of the 'Overseer of building works of the Southland and Northland' Khnumibre from the Wadi Hammamat (LDIII 275b), [14] dated to the year 26 of Darius I (496 BC) goes back through 22 generations to a vizier Rahotep. All of the named ancestors carry the title 'Overseer of building works in the southland and northland':

Rahotep, Vizier and Mayor ~ Ramesses II Bakenkhons, Vizier Wedjakhons, Vizier and Mayor Nefermenu, Vizier and Mayor May (?), Vizier Sr (?), Vizier Pipi, Vizier

Amunherpamesha, 2PA, 3PA, 4PA, Mayor and Vizier

Horemsaf, Vizier ? \sim *Shoshenq I*

Mermer (?), Vizier

Horemsaf, Vizier? \sim Shoshenq I

Tja(en)hebyu, Vizier

Nesshutefnut, Vizier

Tja(en)hebyu, Vizier

Nesshutefnut, Vizier

Tja(en)hebyu, Vizier

Nesshutefnut, Vizier

Tja(en)hebyu, Vizier and Mayor

Nesshutefnut

Wahibre-teni ~ b. under Psamtek I? (664-610 BC)

Ankh-Psamtek

Ahmose-saneit ~ b. under Amasis (570-526 BC); active Amasis Yr. 44 (526 BC)

Khnumibre ~ active Amasis Yr. 44 (526 BC), still alive 492 BC (Darius I Yr. 30: Posener 1936, 113-115, §§21-22)

Figure 2. The genealogy of the architect Khnumibre. With the exception of the last two generations all the royal links are deduced. Only the relationship between the last two names in this pedigree can be verified from other surviving documents, which also name Khnumibre's mother as Sat-Nefertum (Posener 1936, 88-97, §§11-13). Nevertheless, and despite the highly repetitive papponymous section in the middle, there is no good reason to doubt its veracity. With the exception of Khnumibre, none of the officials is dated in the sense of being linked with a royal name, but much can be reasonably deduced. The reigns in which the last four incumbents were born are reflected by the (26th-dynasty) basilophoric elements in their names, and they form a chronologically consistent unit. The Rahotep who heads the list must be one of the two viziers of this name known from the mid to late reign of Ramesses II: Posener (1936, 104) identifies him with the ambassador to the Hittites. Neither of the two Horemsafs named is given a royal link, but one of them must be the like-named chief architect employed by Shoshenq I for his building work at Thebes (Caminos 1952, 51, 56).

Calculations based on the genealogy produce figures far lower than the conventional dates for both Shoshenq I and Ramesses II. So Jansen-Winkeln (2007, 269):

The pedigree of Khnumibre (...) is dated to 496 B.C. Khnumibre himself is attested with high titles already in 526 under Amasis, but still together with his father. A year of birth around 550 should be realistic. The oldest member of this pedigree, 22 generations earlier, is the vizier and architect Rahotep, well known from the time of Ramses II. Another prominent ancestor could be the architect Horemsaf 12 generations earlier, who is known from year 21 of Sheshonq I. If we calculate a generation at 30 years, Rahotep was born in 1210, and his floruit was about 1170, for Horemsaf we get 910 and 870. These figures are clearly too late.

They are indeed 'too late', even with the generous 30-year estimate for a generation employed here by Jansen-Winkeln. Were we to use the more reasonable 25-year generation – that recommended by Bierbrier and Kitchen – the birth of Rahotep (under Ramesses II) would fall *c*. 1100 BC.

Jansen-Winkeln's initial reaction to such awkward results was to challenge the veracity of the genealogy, as being based 'on oral tradition and almost certainly on the author's memory' (Jansen-Winkeln 1999, 18).^[15]

^[13] A second Ankhpakhered, son of a Djed-Ptah-ef-ankh was probably the grandson of the first, and the nephew of Namenkhamun. He dedicated a statue to his father which is in late 25th-dynasty style (Bierbrier 1984, 84 with references).

^[14] For all relevant monuments see Posener 1936, 88-116, genealogical text 98-105, §14; and conveniently Jansen-Winkeln 2007, 261.

^[15] There is no need to assume an oral tradition for this class in Egyptian society: the numerous inscriptions at Karnak recording installations of priests include usually three generations, and there are many lengthy genealogical texts on statues throughout the TIP. Surviving marriage contracts also show the obsession with ancestry. There can be no doubt that the elite kept genealogical records, just as in the reign of Ramesses II the family of one Mose was able to trace its ancestry for 300 years back to the reign of Ahmose, for shares in family land. Of course, a written tradition does not preclude a fictitious, or fraudulent claim.

However, Jansen-Winkeln now accepts the information as being genuine, arguing instead that if a 34-year generation is employed then the genealogy can be made to conform to the accepted dates for Shosheng I and Ramesses II (Posener assumed a 35-year generation). Jansen-Winkeln's calculation cannot be used to approximate the date of Shosheng I, as effectively all he has done is to take the standard chronological dates to arrive at a new estimate for a generation. A 34-year generation for pharaonic Egypt is highly unrealistic; such information as there is suggests that men were normally married by their late teens, and women even younger, meaning that an estimate nearer 20 years than Kitchen and Bierbrier's 25 is also possible (see James and Morkot in prep.a; cf. Kitchen (1977) who analysed the royal genealogy from Ugarit and postulated 22 years for an average generation.) This genealogy implies a senior line through some, if not all, sections, so an average generation between 20 and 25 years may not be far out.

Regarding the two Horemsafs in the genealogy, Jansen-Winkeln assumes that it was the second individual of this name who was the architect known under Shosheng I, but without further argument. Here the controlling information of two other genealogies (Memphis priests and Ankhefenkhons – see in brief James et. al. 1991a, 238-242; James & Morkot in prep.a for full discussion) should be brought to bear. They show nine generations from the time of Ramesses II to Shosheng I (inclusive). Counting down nine generations from Rahotep brings us to the first Horemsaf, not the second, making this individual the likelier candidate for Shosheng I's architect. If we assume that the earlier Horemsaf (i) was the architect under Shoshenq I, then 14 generations at 20-25 years each bring us to a date in the range 900-830 BC for his birth. If the less likely candidate of Horemsaf ii preferred by Jansen-Winkeln and Posener the results would be 850-790 BC. Both are 'too late' for the conventional dates of Shosheng I.

Our survey of the evidence suggests that every available genealogy for the Third Intermediate Period recommends a compression of its chronology and a lowering of New Kingdom dates. While ad hoc 'solutions' have often been made, such as 'missing generations', when taken together the genealogies actually form a remarkably consistent picture. Due to constraints of space only one other genealogy can be discussed here in detail – one that is of crucial importance for the concept of 'dead reckoning'. This is the royal genealogy for the second half of the

[16] James and Morkot, in prep.; see already James *et al.*, 1991, 238-242 for brief treatments of the High Priests of Memphis and Ankhefenkhons genealogies; James *et al.* 1998, 32-33 for the royal 21st genealogy and James & Morkot 2010, 253 on the Theban high-priestly genealogy of the early 21st Dynasty. One should, however, note the case of the shortened genealogy discussed by Payraudeau 2013. This demonstrates that such shortenings did happen, whether due to the records being used, 'memory' or the amount of space available, combined with the intentions of the patrons.

Libyan period. *Figure 3* shows the basics of the genealogy as reconstructed by Kitchen.

All the question marks in *Figure 3* are Kitchen's, with the addition of two which he chose to omit (which we have restored): there is no evidence that Pedubast I was the father of Iuput 'I' (though the two are associated on Nile Level Record 26 (see conveniently Ritner 2009, 38), or – *more importantly* – that Osorkon III was the son of a Shoshenq 'IV'.

Rather, the case for identifying Osorkon III with the Crown Prince/HPA Osorkon, son of Takeloth II, has long been made. This attractive identification, accepted by many earlier Egyptologists (e.g. Baer 1973, 15-16) was rejected by Kitchen – his high chronology would place almost a century between the beginning of Osorkon's pontificate (c. 840 BC) and the end of Osorkon III's reign (749 BC), giving an impossibly long career for one individual. The problem disappears if we allow that the chronology of this period has been over-extended and some years ago the present writers defended the equation (James et al. 1991a: 256, 385, n. 129; see also Morkot & James 2009, 24-25). It is now strongly supported by the evidence of the Akoris Stela that names Osorkon III as both king and as High Priest of Amun (Shobo 1995, 301-305, Pl. 116) and is widely accepted again (Leahy 1990, 192-93; Jansen-Winkeln 2006, 243; Aston 2009, 20-21; Aston 2014). Most surprisingly, after many years of struggling against the identification, Kitchen himself (2009, 183-185) now seems to favour it, but with no concession on the chronological ramifications.

The resulting genealogy – widely accepted by most Egyptologists with the odd variation – can be instructively compared with Kitchen's standard model (*Figure 3*). It will be immediately noticed that three generations disappear from the royal genealogy, those separating Crown Prince HPA Osorkon from Osorkon III. The model presented in *Figure 3* effectively collapses.

There are numerous fallouts from such an evidence-based genealogy, shorn of all the imaginary links suggested by Kitchen. For example, the otherwise unclear origins of Peftjauawybast, king of Nen-nesut (Herakleopolis), a vassal of Piye, can be explained. In the fact-based genealogy only one generation, rather than four, separates the 'two' Peftjauawybasts (as highlighted in Figure 3). Thus, King Peftjauawybast could have been the same individual as the High Priest of Memphis Peftjauawybast known from an Apis inscription of the Year 28 of Shosheng III. The HPM Peftjauawybast was of royal blood, through his descent from the HPM and Crown Prince Shosheng D, heir apparent of Osorkon II. On his elevation to kingship Peftjauawybast would have been succeeded as HPM by his younger brother Harsiese H. (For the detailed arguments see Morkot & James 2009). It is also possible to propose that Shoshenq III (whose ancestry is otherwise unknown) was the son of the same HPM and Crown

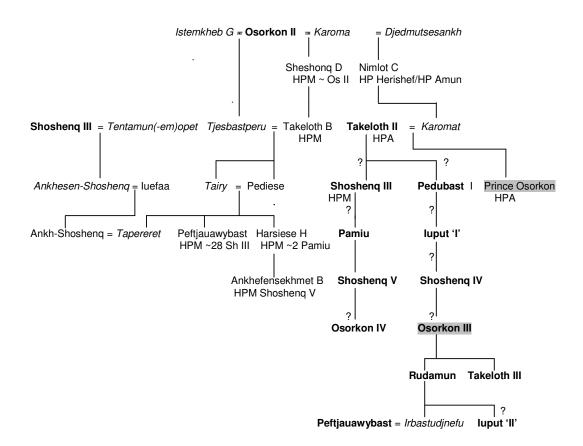


Figure 3. 'Conventional' genealogy for the late Libyan period built on numerous imaginary links – after Kitchen (1986, 193-194, 343-344, 476-477, Table 10, 594, Table *12, Table 18, 487).

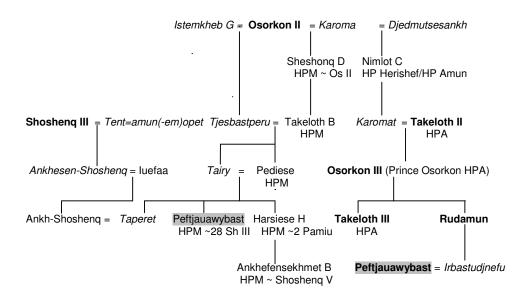


Figure 4. Genealogy based on hard facts plus the now generally agreed identification of Crown Prince & HPA Osorkon with the future Osorkon III. The generational positions of Peftjauawybast the High Priest of Memphis and King Peftjauawybast are highlighted.

Prince Shoshenq D, son of Osorkon II. The successors of Osorkon II would thus both have been his grandsons, with Shoshenq III representing the senior line. [17] This might explain why the HPA Osorkon followed his own father's regnal years with those of Shoshenq III, rather than assuming royal style himself.

The evidence for the succession of the God's Wife of Amun also supports a lowering of the 22nd Dynasty relative to the 25th. Osorkon III installed his daughter Shepenwepet I in the office: she is depicted with him and Takeloth III in the Chapel of Osiris-Heqa-Djet at Karnak. Shepenwepet I lived to the reign of Shebitqo (Morkot & James 2009, 41-42; Ayad 2009, 41), hence through the reigns of Kashta, Piye and Shabaqo. How long that was is difficult to calculate, as the reign of Piye could have been as much as 40 years. Shepenwepet I adopted Amenirdis I daughter of Kashta, presumably as a political acknowledgement of Kushite control of Thebes.^[18] There is no evidence that Piye was responsible for this, and all other God's Wives were installed by their fathers.^[19] Shepenwepet's reign as GWA would then have comprised x-years under Osorkon III + x-years under Kashta + 25/40 years under Piye + 16 (a full 15) under Shabago: an absolute minimum of 40+ years.^[20] While of course a lengthy reign such as this is far from impossible, there are further considerations. Osorkon III's daughter Shepenwepet adopted as her heir GWA Amenirdis, the daughter of Piye's predecessor Kashta (see above). It should therefore be manifestly clear that Osorkon III, at least in generational terms, was a contemporary of Piye (on this see further later).

We have discussed elsewhere in some detail how the case of Shepenwepet I ties in with other anomalies, such as gaps in high-priestly offices and the much discussed 'generation jump' of Takeloth III's offspring (Aston & Taylor 1990). There is no space to rehearse all the arguments here (see

Morkot & James 2009; James & Morkot in prep.b), but this quote from Broekman (2009, 93) encapsulates some of the problems:

It appears that seven of the eight known children of Takeloth III survived into the last years of the eighth century BC and that, consequently, they seem to have outlived their father by two generations. A generation jump also occurred between Takeloth's father Osorkon III and the latter's daughter Shepenupet I, who was probably still alive during the reign of the Nubian King Shebitku, as appears from the inscriptions and reliefs in the Nubian part of the Chapel of Osiris Heqa-Djet at Karnak.

Another important fallout from the *fact*-based genealogy is that it confirms that rather than being a predecessor of Osorkon III, Shoshenq V would have belonged to a later generation. The correct placement of Shoshenq V is crucially important: through use of the Apis burial inscriptions he remains the second feasible (and frequently used) starting point for dead-reckoning backwards through the 22nd Dynasty (see below).

Style and Chronology

Much of the discussion by writers on the period concentrates on the genealogical and other inscriptional material. Discussions of style are usually in relation to burial equipment, particularly coffins, and although there are very distinctive coffin types, frequent comments are made expressing some surprise at an apparent mismatch between coffin types and what might be presumed from the genealogical links – as in the case of the offspring of Takeloth III mentioned by Broekman above. Although receiving more attention recently, style in the Libyan period has not been adequately addressed. In earlier periods styles change, not necessarily with a change in pharaoh, but more fuzzily and related to generations of artisans: so the style of Thutmose IV continues into that of Amenhotep III, and the 'Amarna' style(s) continues into the reigns of Tutankhamun and Horemheb. However, the chronological implications of some stylistic features, particularly those associated with 'archaising', cannot be dismissed, as has happened. As noted earlier (Morkot & James 2009, 21, 42):

... it is important to recognise that variation and change in style was regional as well as chronological and that it was not a simple linear-chronological process... Nevertheless, we should be wary of any apparent 'lack' of change, or seemingly slow change, which might be the result of imposed chronological reconstructions. In the New Kingdom, for example, styles changed and evolved constantly, and there is no reason to think that did not happen in the Third Intermediate Period.

^[17] This idea, first suggested by Morkot at the BICANE 2011 colloquium and also at the British Egyptology Conference 2011, is echoed in Dodson 2012, 115.

^[18] The 'problem' – and still a matter of dispute – has always been the lack of clear evidence for Kashta's presence in Thebes. The small stela fragment from Elephantine demonstrates some Kushite activity on the border in Kashta's reign; the reference in the Karnak Priestly Annals is far less certain, but the 'Sandstone Stela' of Piye does indicate an existing Kushite presence in Upper Egypt (see Morkot 2000, 158; 2013, 5, 6).

^[19] Morkot 1999, 194-196.

^[20] The reliefs depicting Shepenwepet I on the gateway and East Wall of the Shebitqo addition to the Heqa-Djet chapel are discussed by Ayad 2009, 38-41; Dodson (2012, 199-201) has Shepenwepet I as GWA from 792-712 BC, but as she was to live to the reign of Shebitqo this would require her to live on until 706 or beyond; Dodson (2012, 159) notes the presence of Shepenwepet I in the Heqa-Djet reliefs of Shebitqo and comments that she was 'by now in her late 90s' and that Amenirdis had 'long taken over day-to-day cultic activities.'

Aspects of Archaism

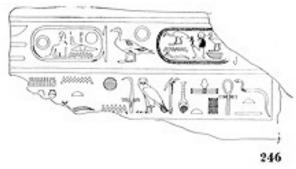
The issue of 'archaism' in the art of the late-Libyan, Kushite and Saite periods has been extensively discussed (see Morkot 2014, esp. p. 379, n.1 for recent literature). It appears to have begun in northern Egypt in the period between about year 30 of Shoshenq III and the reign of Pamiu (Morkot & James 2009, 38-41). The issues are complex and clearly require much more research; interpretation depends not only on survival of evidence, but how the relative chronology is understood. What can be said is that the current conventional chronology requires features to be virtually unchanged over a span of about a century, and numerous anomalies to appear. The figures here are simply examples to highlight some of the issues.

1: The Cartouche Base

The elaborate rope-work cartouche and tapered base are characteristic of Old and Middle Kingdom work and are found in the New Kingdom to the reign of Hatshepsut (discussed at length in Morkot 2014, 380-388). The tapered base is replaced with a flat or 'cushion' base until the time of Pamiu. The elaborate 'archaising' cartouche with tapered base is found on the recently recovered blocks of Usermaetre Osorkon from Tanis, and blocks of Gemenefkhonsubak from Montet's excavations at Tanis. The form appears commonly on work of Shabaqo. A more stylised form is found on sculpture attributable to Shoshenq V and Nekau I (Morkot 2014, 387, nos 40 and 41, also below)



Line drawing of cartouches of Usermaetre Osorkon from the recent excavations at the Sacred Lake at Tanis (Morkot 2014, 383-384, no 28).



Part of inscription of Gemenefkhonsubak from the Sacred Lake at Tanis (Montet excavations) displaying the same sort of 'archaising' cartouches with elaborately executed hieroglyphs. (Morkot 2014, 385 no.33.)



Erased cartouche of Shabaqo in the gateway of the Pylon of Luxor temple (Morkot 2014, 385, no 32).



Cartouche of Shabaqo on a block from Memphis (Berlin ÄS 39/66: Morkot 2014, 384, no 30).



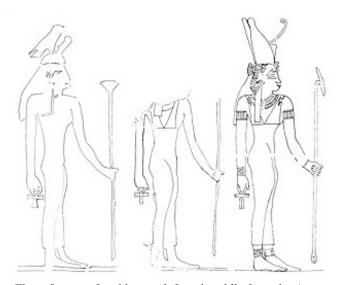
Cartouche of Nekau, perhaps Nekau I, possibly from Kom el-Hisn (Morkot 2014, 387, nos. 40-41).

2: The Female Figure

The proportion and style of the female figure during the Libyan and Kushite periods is discussed in more detail in Morkot 2007 and Morkot & James 2009. There are striking similarities between female figures on the Apis stelae of Pamiu (Pimay) dated by Kitchen (1973) to 772 BC, and Dodson (2012) to 778 BC and the Kawa shrine of Taharqo c. 680 BC. Similarly there are close similarities of style between figures on a stela of year 22 Shoshenq V, 752 BC (Dodson 2012) and yr 2 Shabaqo c. 710. There are many other examples not illustrated. The conclusion is that *either* the 'archaising' style was in use for over a century, with hardly any change or development, or a tightening of chronology is required.



Shoshenq I on the 'Bubastite Gate' at Karnak. The proportions of the goddess conform to those of the later New Kingdom with long legs and comparatively short torso. There is no pronounced thigh. The line of the dress follows the profile of the figure.



Three figures of goddesses: left and middle from the Apis stelae of year 2 Pamiu (Pimay), the figure on the right from the Kawa Shrine of Taharqo c. 680 BC. All show very similar proportions and 'archaising' features derived from Old Kingdom models (specifically the pyramid complex of Sahura at Abusir) with broad shoulders, long hip bone, projecting thigh, length and projection of dress.





Figures of goddesses from stelae: far left year 2 of Shabaqo (MMA), near left yr 22 Shoshenq V (UC) Both have broad straight shoulders, narrow waists, projecting thigh. Are these characteristics due to genre, in this case donation stelae?

There is an increasing debate about 'archaism': what it means, when it began, and its development. Once regarded as a 'Late Period' phenomenon, beginning in the 26th Dynasty, it has for some time been recognized as a feature of the late Libyan and Kushite periods (for references see Morkot 2003; 2007; 2014). The 'archaising' style was based on Memphite models such as the 5thdynasty pyramid temple of Sahura at Abusir and the subterranean chambers of the Step Pyramid complex of Djoser (3rd Dynasty). It appears on monuments, notably at Tanis, associated with a group of kings who are difficult to place chronologically (such as Gemenefkhonsubak) and on the Apis stelae of the reign of Pamiu (Morkot & James 2009, 38-41). The reliefs in the chapel of Osiris Hega-Djet at Karnak are the first in Upper Egypt to demonstrate some of the same features. These reliefs are dated to the joint reign of Osorkon III and Takeloth III, and hence on a conventional chronology would *predate* the Tanis examples. The features include short kilts, an Old Kingdom physique, and simple titularies without epithets. The last is especially significant as earlier in his reign Osorkon III followed New Kingdom and earlier Libyan tradition with epithets. Shosheng V also dropped epithets, and adopted an archaising style in both titulary and relief. There is not space here to discuss all aspects of this problem. Some details have recently been discussed by Morkot (see box on Aspects of Archaism), and whilst they could be spread out over the conventional chronological framework, acknowledging regional changes, that framework makes little art historical sense, and to explain development more sensibly not simply a lowering, but an overlapping of the late Libyan and Kushite periods is required.

Where should dead-reckoning backwards start?

There are two possible starting points for dead-reckoning backwards through the 22nd Dynasty: the Osorkon of Piye's time and Shoshenq V. Both are frequently used in the literature. The links backwards from Shoshenq V using the datelines from the Apis-bull burials provide a sound chronological framework in terms of a relative internal chronology – but require anchoring to the Kushite period to establish absolute dates. This has usually been done through a nexus of assumptions, including the paternity of Piye's Osorkon (imagined to be the son of Shoshenq V – see above) and the dating of Piye's main adversary in the north, Tefnakht of Sais (Great Chief of the Libu), relative to the 22nd Dynasty. The link through Piye's Osorkon is not more precise. But in any case, who was he?

A. Did a King Osorkon 'IV' actually exist?

When Kitchen published the first edition of his masterwork on the TIP (1973, 88), he listed the evidence for the existence of four separate Libyan-period rulers called Osorkon:

- I. Prenomen Sekhemkheperre (Setepenre); nomen Osorkon Meryamun.
- II. Prenomen Usimare Setepenamun; nomen Osorkon Meryamun Si-Bast.
- III. Prenomen Usimare Setepenamun; nomen Osorkon Meryamun Si-Ese.
- IV. Prenomen Akheperre Setepenamun; nomen Osorkon Meryamun.

By reckoning downwards from Shosheng I at 945 BC (this was in the days before dead-reckoning backwards was claimed), Kitchen had already dated Shoshenq V, last attested incumbent of the 22nd Dynasty to 767-730, and Osorkon III (of the alleged 23rd Dynasty) to 777-749 BC (see Table 3, Kitchen 1973, 467). Both would have been dead by the time of the invasion of the Kushite Piye (set by Kitchen c. 728 BC). Pive's stela states that he met three kings who wore the uraeus in the north, one of them an Osorkon ruling at Bubastis and the district of Ra-nofer (usually understood as meaning Tanis). Earlier scholars had understood that this was the well-attested Osorkon III (see below). Yet Kitchen's dates (as well as his understanding that Osorkon III was part of a Leontopolitan 23rd Dynasty and not the 22nd Dynasty) ruled him out as a candidate for the Osorkon of the Piye stela.

This left only the poorly documented Osorkon 'IV' as a candidate. The evidence for this ruler is as follows:

- 1. A glazed ring in Leiden of unknown provenance (Schneider 1985, 264-265, Fig. 1; Pl. I; Kitchen 1973, 117; Ritner 2009, 412). with the inscription:
 - 'King of Upper and Lower Egypt, Akheperre Setepenamun, King of Upper and Lower Egypt Osorkon [actually Śwrkni] Meryamun.'
- 2. A relief block in Leiden of uncertain provenance (Schneider 1985, 265-267, Fig. 2; Pl. I) carries a label for the deity Geb and another for the king:
 - '[Lord of the Two] Lands Akheperre Setepenamun, [Son of Re,] Osorkon, Meryamun.'
- 3. A silver-gilt aegis in the Louvre (Ritner 2009, 412) of uncertain provenance, is engraved as follows:
 - 'Son of Re, Osorko(n) (living) forever. The God's Mother and royal wife Tadibast.'

Kitchen placed his Osorkon 'IV' at the end of the 22nd Dynasty, suggesting that he was the son of Shoshenq V. However the whole case for Osorkon 'IV' began to erode as that for an entirely different Osorkon grew. This ruler is generally referred to as 'Osorkon the Elder' to avoid the necessity of renumbering the kings of that name. Manetho includes in the 21st Dynasty a king called 'Osochor', and Young (1963) suggested that this ruler was an Osorkon, and that his prenomen could be deduced from an entry



Figure 5. Seal-ring of a king Osorkon IV or Osorkon the Elder? (Photography A. de Kemp/P. J. Bomhof and courtesy of Dr C. Greco of the National Museum of Antiquities in Leiden, registration no. EG-ZM2658.)

in the Karnak priestly annals as Akheperre Setepenre. Further evidence was brought to bear by Yoyotte (1976-1977) from a fragmentary genealogy on the roof of the temple of Khonsu in Thebes; his analysis showed that this new Pharaoh Osorkon was the son of Mehtenweskhet and the uncle of the future Shoshenq I. Agreement on a 21st-dynasty ruler called Akheperre Setepenre Osorkon is now universal. Yet it was perhaps only a matter of time before someone wondered whether the objects ascribed to the similarly named Akheperre Setepenamun Osorkon 'IV' actually belong to Osorkon the Elder. The question has now been posed by Payraudeau (2000), who adduces a number of arguments for ascribing both the Leiden objects (the ring and the block) to Osorkon the Elder, here slightly augmented:

- A. Akheperre Setepenamun is acceptable as a variant of Akheperre Setepenre.
- B. The prenomen Akheperre Setepenamun is not in keeping with the trend of simplified 'archaising' prenomens during the period of the early Kushite dominion e.g. Neferkare for both Shabaqo and Peftjauawybast, Sekhemkare, Wahkare (Bakenranef), and Shepseskare (Gemenef-khonsu-bak). Cf. Shoshenq V whose prenomen was 'Akheperre, often without further complement, balancing the simple nomen Shoshenq. To these "nuclear" forms, Setepenre was sometimes added to Akheperre... but the simpler style is by far the commoner.' (Kitchen 1973, 349-350)
- C. Akheperre Setepenamun is identical to the prenomen of Psusennes I of the 21st Dynasty.
- D. Within the top of the cartouches on the Leiden ring there are small winged solar disks, which Payraudeau (2000, 79) compares to those in the cartouches of the 21st-dynasty Tanite ruler Amenemope: 'Hormis ces deux attestations dans les cartouches royaux, cet usage rare ne m'est connu que pour des noms divins *au début* de la Troisième Période Intermédiaire.'^[21]
- E. The orthography of the nomen on the Leiden ring.

While not all these arguments are of equal weight (B and D are far less clear-cut), the overall case provided by Payraudeau is fairly compelling. In a brief reply, Kitchen (2009, 161) wrote:

As Akheperre Setepen*amun*, with a block wrought in a *typical late 22nd-Dynasty style* (like those of Shoshenq V from Tanis), Osorkon IV is wholly distinct from Osorkon the Elder, of the 21st Dynasty, with the prenomen Akheperre Setepen*re*.

Yet elsewhere Kitchen (1973, 86) was most insistent that there is no nomenclature problem in the case of Shoshenq III, who is sometimes Setepen*amun* and sometimes Setepen*re* on the Apis stelae:

This in itself is sufficient to demonstrate the interchangeability of deities, certainly of Amun and Re, in the complement Setepen-*x* used within the prenomen of one single king. Independent proof of this usage is afforded by the same alternation in the cartouche of Pimay, wherein Usimare is usually followed by Setepen*amun* as on the Serapeum stelae, but sometimes by Setepen*re* as once on a votive stela in the Louvre.

^[21] Gerard Broekman (pers. comm.) notes that similar winged solar disks are known from an inscription from early in the reign of Osorkon II. However, on the *Centuries of Darkness* model, with an overlap between the 21st and 22nd dynasties there may have been as little as two decades separating Amenemope from the early years of Osorkon II.

As to the alleged resemblance of the Leiden block to those of Shoshenq V from Tanis, Kitchen merely notes elsewhere (2007a, 294) that 'its technique is comparable (but slightly inferior to) that of blocks of Shoshenq V at Tanis'. There are no grounds for such a judgement as the block is rather roughly incised and has no particularly distinguishing stylistic features.

If one accepts Payraudeau's case, the sole object which one might attribute to Osorkon 'IV' is the silver aegis (#3 above), with no prenomen. The case for this was argued by Kitchen (1986, 117) on the grounds that the aegis refers to a 'God's Mother (cartouche:) King's Wife, Tadibast'; if this means that she was the mother of an Osorkon, then the other candidates would be ruled out as their mothers had different names (Osorkon the Elder: Mehtenweskhet; Osorkon I: Karamat; Osorkon II: Kapes; Osorkon III: Kamama). The problem is that the argument relies on selecting only one of the two titles given to Tadibast on the aegis. Indeed Kitchen (2007a, 294) now allows that Tadibast was either the 'mother or queen' of the Osorkon in question. There is thus no proof that we need to invoke an extra Osorkon. (Tadibast may have been a minor queen of one of the attested kings of that name. [22])

To summarise: the 'monumental' evidence for an Osorkon IV is at best highly dubious; at worst, there is no archaeological evidence to support his existence at all. As put by Jansen-Winkeln: 'Osorkon IV is only documented with certainty on the stela of Piye; the other references could be to Osochor of Dyn. 21.' (Cf. Dodson 2012, 73-74; 2014, 6.) Strictly speaking an Osorkon (not 'IV') is documented on the Piye Stela. Our understanding is that Osorkon 'IV' is a fiction produced by a procrustean approach to TIP chronology. If Osorkon 'IV' were to be removed from the lists, he would not be the first (or last) imaginary king to suffer such a fate. Other erstwhile pharaohs have gone, or may go the same way. For example the 'new' pharaoh Shosheng Tutkheperre only enjoyed a brief appearance on revised kinglists before the question was raised whether this was actually Shoshenq I using an early 'experimental' prenomen (Kitchen 2009, 172; Dodson 2012, 84, 257, n. 9).

A further consideration comes from the evidence concerning the standing and importance of Piye's Osorkon:

(a) In the references to him on the stela, king Osorkon certainly seems to be accorded a special place. He is depicted first in the group of the three 'uraeus-wearing kings' paying homage to Piye in the scene on the lunette of the Stela. Nimlot bringing his horse and with his wife interceding for him is shown separately above the group. In the text, Osorkon is given a separate place after the enumeration of the allies of Tefnakht (Piye's main opponent), clearly somehow distinguishing him. Later, following the capture of Memphis, Piye went to Heliopolis and we are told whilst he was there: 'Then came king Osorkon to behold the beauty of His Majesty'. At Piye's audience with the kings at Athribis, Osorkon heads the list of the rulers of Lower Egypt, indicating his precedence. Osorkon is not indicated as having had such a close relationship to the Kushites as Nimlot and Peftjauawybast, but despite his obvious importance he does not seem to have been a prime mover in the coalition of Tefnakht.

- (b) Piye's Osorkon is agreed to be the Shilkanni king of Egypt who sent a present of 12 large horses to Sargon II in 716 BC (see above).
- (c) He was most likely the 'king So' of Egypt to whom Hoshea of Israel paid tribute in order for help against Assyria *c*. 725 BC (see above).

The Osorkon in question was clearly a king of some international standing; so it seems unlikely that little or no archaeological trace of him would have survived. Earlier Egyptologists, including Petrie (1905, 270) and Breasted (1906, 412-417), had no difficulty in recognising him as the well-attested Osorkon III, an idea we have since resurrected (James *et al.* 1991a, 254-255; Morkot 2000, 193, 315-316, n. 27; Morkot and James 2009, esp. 41-42, 44; James and Morkot 2010, 243). The surviving major building of this ruler comes from Thebes, but this is no reason to assume he was a Theban monarch, any more than was Shoshenq I or other 22nd-dynasty monarchs who built there extensively. (We are in agreement with Kitchen in placing Osorkons III's seat in the north – though not at Leontopolis.)

Until recently Osorkon III was represented in Middle and Lower Egypt by only a smattering of finds, but in 2011 the excavators of Tanis released photographs of two beautifully carved relief fragments of an Usermaa(t)re Osorkon, familiar titles of Osorkon III, reused by later builders. The quality and style of the reliefs is extraordinary, with elements of the archaising style identified above as dating to the period of the Kushite domination.

The blocks bear a striking resemblance to some of those excavated earlier by Montet, and clearly belong to one of the same group of dismantled buildings (or gateways). In particular, they are very similar to the blocks carrying the name and image of Gemenefkhonsubak which are probably based on the reliefs of Djoser at Saqqara. These details all appear in work of the reign of Shabaqo in Thebes although they might be slightly earlier in Lower Egypt (Morkot 2014, 380-88). The cartouches display a simple writing of both nomen and prenomen, without epithets. This development already appears for Osorkon

^[22] A wife of Shoshenq III was Tadibast (ii) daughter of Tadibast (i) (Ritner 2009, 386) – dare one speculate that 'God's Mother' could mean – as has been argued for 'God's Father' – mother of the King's wife connected with Osorkon III? A marriage concluded between Osorkon as Crown Prince and a daughter of Shoshenq III would be another element of the *rapprochement* indicated by the Chronicle.

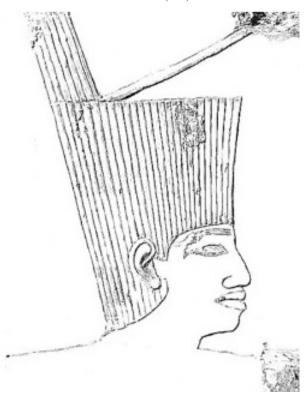


Figure 6: Recently recovered block depicting king Usermaetre Osorkon from the Sacred Lake of the Goddess Mut at Tanis. The block has strong similarities with blocks excavated by Montet showing Gemenefkhonsubak, and probably owe as much to the Djoser reliefs in the subterranean rooms of the Step Pyramid complex as they do 'Kushite' influence. The 'reeded' crown (see Morkot 2014, 392) with ear tab is also found on an image of Shabaqo from Memphis.



Figure 7: Head of Shabaqo from a building by the Sacred Lake at Karnak. The crown has a curving tab below the ear which is characteristic of 'archaising' monuments of the Kushite period (see Morkot 2014, 389-392).

III and Takeloth III in the chapel of Osiris Heqa-Djet at Karnak. As already noted by Porter (2011), these 'new' reliefs are most naturally attributed to Osorkon III, despite weak objections to the contrary (Aston 2014, 21; Dodson 2014, 7-10).

The number and range of Osorkon III's monuments are evidence of a powerful ruler, making him an ideal candidate to be the Shilkanni and So recognised by Assyria and Israel – and the Osorkon of Piye's stela; as noted above these two kings must have been contemporary.^[23]

If we use a floruit of *c*. 720 BC for Osorkon III as a baseline, counting six royal generations (back to the beginning of the Dynasty – see *Figure 1* above) at 20-25 years each would give us a notional date as low as *c*. 870-840 BC for Shoshenq I. Note that this is consistent with the estimate of 900-830 BC calculated from the Architects' genealogy of Khnumibre (see above).

B. The rise of Tefnakht – under which Pharaoh Shosheng?

As discussed above, Kitchen uses Piye's Osorkon, the putative Osorkon 'IV', as a means of more 'precise' calculation backwards (see above). Most importantly (Kitchen 2007a, 294-295) he uses notional figures for the reign of this Osorkon to set the baseline for the date of Shosheng V and his predecessors in the 22nd Dynasty:

... it is unlikely that Osorkon IV became king only 5 minutes before he had to rush off and submit to Pi(ankh)y in c. 728 (min.), so we may set his rule from c. 730 BC, minimally, or slightly earlier... As a result, we can *nach wie vor*, minimally put 37 years of Shoshenq V at c. 767-730 BC, 6 years of Pimay at c. 773-767, then max. 13 years for the new Shoshenq IV at c. 786-773, and the basic 39 years of Shoshenq III at c. 825-786 BC, minimally. There is no absolute need to change this basis for the later 22nd Dynasty – 'don't mend what ain't broken!' is homely but sound advice in such a case.

In his concluding table he adds a few more years to Osorkon IV for good measure, bringing his accession to 735 BC and the Year 37 (highest attested) of Shoshenq V to 736 BC (Kitchen 2007a, 307). At the risk of labouring the point, it is extremely important to break down the assumptions in Kitchen's rather jocular defence of his model. Far from there being nothing 'broken' in his reconstruction, there is nothing in it that is 'fixed' in the first place:

(i) There is not a shred of monumental evidence for a 20-year reign for Osorkon 'IV' and, as we have seen,

^[23] Note that even in Kitchen's genealogical reconstruction of the 22nd Dynasty Osorkon III would have been a generational equivalent of the putative Osorkon IV, although he separates them by 50 odd years.

there is no sound evidence for the existence of such an individual.

- (ii) The placement of Shoshenq V as the direct predecessor of Osorkon 'IV' is based on the assumption that he was his father – as stressed near the beginning of this paper such a link is entirely imaginary.
- (iii) Genealogical and other evidence (e.g. stylistic dating) shows that Osorkon III was a contemporary of Piye (see above).
- (iv) Working from a *fact*-based genealogy rather than being a predecessor of Osorkon III, Shoshenq V would have belonged to a later generation.

The placement of Shoshenq V relative to the invasion of Piye has been confused by a further unfounded assumption (by Kitchen and others) regarding a key issue – the expansion of Saite power under Tefnakht, which was used by the Kushite ruler Piye as a *casus belli* for his northern campaign (Kitchen 1973, 362-368; Morkot 2000, 181-2; Morkot and James 2009, 41-2). The increase of Tefnakht's power is indicated by two stelae dated to regnal years 36 and 38 of a pharaoh whose cartouches have been left

blank. The only pharaohs from this period attested with such a long reign are Shoshengs III and V. In his original work, Kitchen attributed 53 years to Shosheng III and, on his interpretation of the Apis and other evidence, assumed no overlap of the reign of Shosheng V with the Kushites. The expansion of Tefnakht's power was thus placed in the last years of Shoshenq V, and the conflict with Piye in the years following Shosheng's death. This has generally been followed other writers, meaning by that the reigns from year 28 of Shoshenq III to year 37 of Shoshenq V (linked by the Apis sequence), totalling a minimum of 66 years, [24] are placed before Piye's campaign. The argument also assumes a direct link (both in succession and, presumed,

genealogical) between Shoshenq III and V. Although the evidence now shows that the highest *attested* year for Shoshenq III was not 53, but 39, this has no effect on the total time to be allotted to the linked reigns. It does, however, open the possibility that Tefnakht's expansion of his territory took place at the end of the reign of the *third*,

rather than the fifth Shoshenq (as argued in Morkot 2000, 181-182). This is in step with the genealogical and arthistorical evidence reviewed above. For example the style of the Apis stelae of year 2 Pamiu already demonstrates an Old Kingdom 'archaism' which is more in keeping with a later date in the 8th century than is normally accepted (Morkot & James 2009, 38-41). Of course, the fallout – that the reign of Shoshenq V overlapped with Kushite rule – is not a possibility that has been entertained by adherents of the conventional scheme, even though the reign is erratically documented, and the monuments confined in distribution.

The question of which Shoshenq was the contemporary of Tefnakht is of major consequence – in that the conventional placement of Piye's invasion *after* the reign of Shoshenq V effectively extends the internal chronology by some sixty years.

C. Shosheng V and Apis-Bull Chronology

We have already (Morkot & James 2009) suggested the following realignment of the late 22nd-dynasty rulers and the Kushite 25th Dynasty, on the grounds of genealogical, historical and stylistic evidence:

High Priest of Memphis	Bubastite line	Tanite kings	Kushite/Saite kings
Shoshenq D	Osorkon II		
Takeloth B	Takeloth II		
(Pediese) Peftjauawybast		Shoshenq III	
Harsiese H	Osorkon III	interregnum/ Shoshenq IV Pamiu	Piye/ Tefnakht
Ankhefensakhmet Takeloth H	Takeloth III	Shoshenq V	Shabaqo Shebitqo Taharqo
Pedipep		Pedubast 'II'	Tanwetamani/ Psamtik I

Figure 8. Suggested realignment of dynasties and HPMs, 8th to early 7th centuries BC (modified from Morkot & James 2009, 44, Table 6).

The Apis burial records give us a firm (though floating) time-frame for the later 22nd Dynasty – in particular the distance between Shoshenq III and Shoshenq V. In our proposed reconstruction Osorkon III (formerly HPA and Crown Prince), a contemporary of Piye, took the Bubastite throne shortly after the year 39 (highest attested) of Shoshenq III. The latter must have died by the time Piye invaded the Delta, as he is not mentioned. Shoshenq III is now thought to have been followed by the rather shadowy Shoshenq IV, with a highest attested year of 10, leaving a four-year gap in the sequence of local kings at

^[24] yr 28 Sh III + 26 years to 2 Pamiu + x years to 11 Sh V + 26 years to 37 Sh V (see conveniently Morkot & James 2009, 38-41). The x includes the remaining years of Pamiu + 10 of Shoshenq V.

Tanis. This would be accounted for by the expansion of Tefnakht's power. It is reasonable to assume then that there was a short interregnum at Tanis, during which time it was dominated by Osorkon III. This might explain his reliefs at Tanis (see above), the absence of a specifically Tanite king on the Piye stela and his description of Osorkon as ruler of the district of 'Ranofer', thought to include Tanis, as well as Bubastis. It may, then, have been on the death of Osorkon III that the Tanite monarchy was restored (under Nubian auspices) with the accession of Pamiu, (assumed) son of Shosheng III. [25]

The last Apis burial of the 22nd Dynasty took place in the year 37 of Shoshenq V. The genealogical and other evidence discussed earlier suggests that his long reign must have overlapped with that of the Nubian ruler Taharqo. The Apis evidence certainly allows variant models. This is partly due to remaining uncertainties in the chronology of the Kushite 25th Dynasty before the reign of Taharqo, but also due to the inconsistent and vague reporting of the (Apis) finds from the Serapeum, hurriedly excavated in the 19th century, plus difficulties in the readings of certain texts. An Apis bull was buried in Taharqo's Year 24 (667/6) and it should be considered whether this was the same as that from the year 37 of Shosheng V. Alternatively Brunet (2005; followed by Thijs 2010; and in this volume) has made an interesting case for an identification of the latter with a reported Apis burial in Year 14 of Taharqo (677/6 BC).

These two possibilities (i.e. year 37 Shoshenq V = Taharqo year 14 or 24) would result (through dead-reckoning) in an accession date for Shoshenq III of 761 or 771 BC. If Shoshenq III's accession took place in the 27th year of Osorkon II (see above), the latter's reign would have started in 787 or 797 BC. Adding 9 and 12, for the highest attested years of Takeloth I and Osorkon I respectively, would brings us to 808 or 818 BC for the last year of Shoshenq I. We stress again that these are notional figures as the lengths of reign used are merely the highest attested; while in the other direction there is the possibility of 'hidden' co-regencies.

Conclusions

With Shoshenq V in place as a contemporary of the 25th Dynasty, dead-reckoning backwards using minimal reignlengths and Apis bull data brings one back to the 830s or 840s for the start of the reign of Shoshenq I and the beginning of the 22nd Dynasty. This is in step not only with other Egyptian evidence (e.g. reasonable estimates based on the Architects' Genealogy), but also with that from the Levant. For example a 9th-century context for the erection of the stela of Shoshenq I at Megiddo has been tentatively (though persuasively) argued on stratigraphic

grounds by Rupert Chapman (2009; further Chapman in this volume). More clearly, the epigraphic evidence from Byblos (Wallenfels 1983, esp. 88-89; James *et al.* 1991a, 248-251; van der Veen in this volume) strongly suggests a mid to late 9th-century BC date for both Shoshenq and Osorkon I.

The congruence of so many lines of evidence can no longer be ignored by those Egyptologists who seem to think that the problems of Third Intermediate Period history can be resolved by minor adjustments to various reign lengths, based on preconceived or unproven assumptions. The most significant of those assumptions, and the one which Egyptologists seem most reluctant to abandon, is that Shoshenq I was the biblical Shishak; yet there is no inscriptional or archaeological evidence to support the identification, which comes down to a similarity (even equivalence) of names as preserved in the Hebrew record which was written down no earlier than the 7th century BC (see James et al. 1992, 127; also van der Veen, 'The Name "Shishaq"...' in this volume). Should Egyptian chronology, history and archaeology hang on one external, and dubious, coincidence? Other points of intransigence include the unproven assumption that Tefnakht's rise to power came at the end of the reign of Shoshenq V, rather than that of Shosheng III, and the belief that there was an Osorkon 'IV' who was the son (and/or successor) of Shosheng V. As shown above, these assumptions lie behind the retrocalculations of those Egyptologists who continue to defend the standard TIP model, together with dubious methodological practices - such as adding in extra (unattested) years for various pharaohs to fill up obvious gaps, stretching estimates of generation lengths in genealogies to fit a preconceived chronology and the completely outdated use of Manetho as a source.

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^[25] An alternative here may be that Tanis is another place – like Thebes and Memphis – where any pharaoh may have built in the right political circumstances.

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