GENEALOGY AND THE CHRONOLOGY OF THE SECOND INTERMEDIATE PERIOD

By Chris Bennett

INTRODUCTION

The study of the internal chronology of the Second Intermediate Period (hereafter SIP) has long been dominated by analysis of the Turin kinglist. However, there are some fundamental limits to the accuracy that can be achieved by reconstructions based on this approach, particularly in the latter part of the period, where the list is extremely fragmentary. As a result, models of SIP chronology are in practice constructed within constraints set by different models for the Middle and New Kingdom. The proposed durations of the dynastic groupings of the SIP are lengthened or shortened according to whether one accepts high or low chronologies for the Middle and New Kingdoms (e.g. Franke 1988, Kitchen 1987).

The internal chronology of the SIP is of great interest in its own right, since it is key to understanding important historical problems such as the reasons for the collapse of the 13th dynasty and the rise of the Theban state that created the New Kingdom. However, it is also important to resolving wider issues of Egyptian chronology. To the extent it can be determined independently of the chronologies of the Middle and New Kingdoms, SIP chronology acts as a cross-check on proposed absolute chronologies for those periods. A minimum chronology for the SIP sets a minimum possible distance between the Middle and New Kingdoms. It is therefore desirable to find ways to construct such a chronology from items of contemporary evidence that can be placed in a defined sequence of measurable length.

An approach is suggested by work on the chronology of the Third Intermediate Period (TIP). For the last several decades, TIP chronological studies have been dominated by prosopographical and genealogical analyses. These analyses have greatly clarified the identities and sequences of kings, and the temporal relationships of the various groups of kings in the TIP. Even where they have not resolved these chronological issues, they have helped to delineate clearly the available alternatives.

Although the prosopographical and genealogical data available for the SIP does not yet compare

in quantity or quality to that available for the TIP, there is still a considerable database. In particular, the genealogy of the governors of El-Kab, while not by any means fully determined, is now known in enough detail to provide a minimum number of generations between several SIP kings – Sebekhotep IV, Merhetepre (Iny or Sebekhotep VI) and Nebiriau I – and the early 18th dynasty ruler Amenhotep I. This allows us to estimate the minimum distances between these kings as a count of human generations in a succession controlled by primogeniture, which in turn can be converted to an approximate estimate of elapsed time.

In this paper, I survey the limits of the chronological data available from the Turin kinglist for the late SIP, examining the difficulties of recovering dynastic structure and the temporal relationships of the dynasties from it. I next review the results of the study of the El-Kab line published in Bennett 2002, discussing the chronological implications of the study for establishing the minimum length of the SIP.

THE LIMITS OF THE TURIN KINGLIST

As is well known, the Turin kinglist is a Ramesside papyrus which in its original state gave a reign by reign listing of the names and lengths of reign of the kings of Egypt from the beginning of time to an uncertain point in or after the SIP. It is the only connected account we have of the individual kings of the SIP.

Although the papyrus was discovered nearly 200 years ago and has been the object of numerous studies, to this day it has not been adequately published. Fortunately, RYHOLT 2004:135 n. 1 has announced that a new publication is expected shortly. To date, however, most scholars have been obliged to work from reconstructions made by the few who have been able to examine the papyrus personally. The most widely available and most influential publication of the original is still GARDINER 1959, which gives the tracings of the fragment boundaries completed by hieroglyphic transcriptions of the original hieratic text. The published reconstructions diverge widely, particularly on those sections of the papyrus which cover

the later part of the SIP. Many important divergences result from differing judgements about the fibre alignments of various fragments, judgements which are impossible to assess independently since no photographs of sufficient quality exist in the published literature.

The first chronological question is to decide how the kings in the list are organised into dynastic groupings. This has been approached by comparing it to the only other ancient account we have of the history of the period, the dynasties listed in the epitomes of Manetho made by Africanus and Eusebius as transmitted by Syncellus (WAD-DELL 1940), which still form the basic chronological divisions of pharaonic time. The underlying assumption behind this approach is that Manetho and the Turin list reflect a common historiographical tradition, and specifically, a common definition of the Egyptian dynasties for the period following the Old Kingdom (REDFORD 1986:13). However, determining the relationship between the Manethonian dynasties and those of the Turin kinglist in the SIP is not a trivial problem.

This is not only because of the fragmentary condition of the kinglist, but because the surviving epitomes of Manetho are corrupt and differ significantly in their accounts of this particular period. Africanus and Eusebius agree that the 13th dynasty consisted of 60 kings, the 14th dynasty consisted of 76 kings, and there were three other dynasties in the period. However, they treat these three dynasties quite differently. According to Africanus, the 15th dynasty consisted of 6 Hyksos kings, while Eusebius knows of an unspecified number of Theban kings for 250 years. According to Africanus, the 16th dynasty consisted of 32 Hyksos kings, while Eusebius knows a 16th dynasty of 5 Theban kings. Africanus' statement of the 17th dynasty has been conflated by Syncellus with a summary of dynasties 15-17, but if his 15th and 16th dynasties are extracted from the total we are left with a Theban dynasty of 5 kings, evidently corresponding to Eusebius' 16th dynasty. Eusebius' 17th dynasty, however, consists of 4 Hyksos kings who reigned for 103 years – at best a partial match for Africanus' 15th dynasty.

Manetho's 13th dynasty is clearly the group of about 50 kings, covering two columns in the Turin list, who "followed the kings of Itj-tawi". The following columns reasonably cover Manetho's 14th dynasty. Following this group of kings, all reconstructions place a group which survives only in its dynastic summary, naming 6 kings

who reigned for 108 years, or, according to Ryholt's recent collation (RYHOLT 2005), 140 years. This surely corresponds to Africanus' 15th dynasty and Eusebius' 17th, the dynasty of the Great Hyksos, but its position in the dynastic sequence and the number of kings is aligned with Africanus' account. The traditional reading of 108 years is also close to Eusebius' report of 103.

The real difficulties come with the last surviving column of the papyrus, column 11. The major fragment names a group of 9 kings. This is followed at a short but uncertain distance by two closely linked fragments. These gave 5 kings whose names are lost, followed by a line that mentions "5 kings", and then by a couple of partly-preserved names who are not certainly identifiable in contemporary data. Finally, after a large gap, a fragment which is always placed at the bottom of the same column contains a few additional names that cannot yet be identified. RYHOLT 1997:9–10 has advanced structural arguments that the papyrus originally contained one more column, of which no fragments survive.

STOCK 1942:79 identified the first group of kings as Theban from the last surviving name on the list, Sekhemre-shedwast. He proposed to identify him with Sekhemre-shedtawi Sebekemsaf, known from the Abbott papyrus. Sebekemsaf's tomb is associated therein with those of several other kings, including two - Sequenere Ta'o and Kamose - who are known to have immediately preceded king Ahmose. Accordingly, he identified this group of kings as Africanus' 17th dynasty, and the kings of the Abbott papyrus as supplying the missing 5 names following Sekhemre-"shedwast". Beckerath 1964:168 adopted this solution. He proposed that "shedtawi" - saviour of the Two Lands - was changed to "shedwast" - saviour of Thebes - because the list had passed through a Memphite editor, and Sebekemsaf had only been a Theban king, possibly subordinate to the Hyksos. Beckerath 1964:29 also argued that the "5 kings" was a summary which should be amended to "<1>5 kings". In support of this, fragment 134, introducing a new dynastic grouping, which was then regarded as the last fragment of the previous column, could be placed 15 lines before the line of "5 kings". However, this arrangement appeared to require placing Nubkheperre Inyotef, who otherwise seemed to be a later king on art-historical grounds, at the head of the dynasty.

This arrangement was generally, if not universally, accepted for several decades, but in the early

1990s it became clear that there were problems with it. Dodson 1991 stressed that the Invotefs had to be grouped together on stylistic grounds, which in turn implied that the last 17th dynasty kings had to be displaced below the "summary" line of <1>5 kings; he proposed to reinterpret this line as a heading for a group of 5 kings rather than a summary. Bennett 1995b noted that too many SIP Theban kings had been identified to be covered by a dynasty of <1>5 kings, and also proposed to resolve the problem by allowing the excess to be placed below the line. At the time I was nevertheless inclined to accept Beckerath's interpretation of the number, for want of a better solution, in view of the then-prevailing placement of fragments in the kinglist.

Ryholt 1997:151-152 took a more radical approach. He retained Beckerath's <1>5 kings, but as a Theban "16th dynasty", reviving an earlier proposal of Winlock. He suggested that this was in fact Manetho's original definition, reflected in Eusebius' "15th dynasty", and that Africanus' assignment of this dynasty to the Hyksos was a copying error by him or by Syncellus (which, if correct, would also eliminate the textual argument for concluding that Africanus' 17th dynasty was Theban). He denied Stock's identification of Sekhemre-shedwast with Sekhemre-shedtawi, and moved Sekhemre-shedtawi and the other kings named with him in the Abbott papyrus, together with a few other kings who could be associated with them, to a new column beyond the surviving sections of the papyrus, as the Theban "17th dynasty". He identified Sekhemre-shedwast as a different and otherwise unknown king who was now followed by at least 5 unknown kings, for whom he suggested several candidates, most of which were previously regarded as late 13th dynasty kings. He proposed that kings of the "16th" and "17th" Theban dynasties could be assigned according to whether their tombs were known to have survived till later times. He supposed that the tombs of the "16th" dynasty had been destroyed in a Hyksos sack of Thebes. He also suggested that the "16th" dynasty was coterminous with a local dynasty ruling at Abydos, so that Theban kings who are documented at Abydos must belong to the "17th" dynasty.

On the limited evidence available, such a reconstruction is not impossible, but it is far from certain. In the absence of stronger evidence than RYHOLT has adduced, it can only be regarded as the latest of a long line of conjectures. There are,

in my view, several difficulties with it which make it rather unlikely.

The first is king Sekhemre-shedwast. RYHOLT 1997:156 rejects Beckerath's argument for identifying him with Sekhemre-shedtawi Sebekemsaf by arguing that the king list appears intended to be an objective record and that there is no other detectable deliberate alteration of names. The objectivity of the list is perhaps debatable: RED-FORD 1986:14–16 argued that the list does contain deliberate omissions, reflected in wsf entries, and it seems difficult to explain all of them as simple lacunae in source texts. Moreover, Ryholt's argument implicitly assumes that the list's compiler was working from equally accurate and objective sources. Bennett 2002:131 noted that reignlengths were accounted by whole years in column 11 even though there was space for month and day entries if needed, except for one reign associated with a wsf entry, and another which appears to have lasted less than a year. One explanation for this is that this column is derived from a different source from that used to compile the 13th dynasty. Hence, we can only safely assume the limited evidence of the column itself to assess its objectivity and accuracy. In fact the entries have one provable error: the two kings Nebiriau are named "Nebiriau-re" as though they were prenomina. This is almost certainly a simple error, of a type that is seen elsewhere in the list, but it does suggest that the source is not necessarily completely accurate.

Ryholt suggested that the prenomen Sekhemre-shedwast reflects an acceptance that the Theban kings were only provincial rulers. However, to date there is not a single attestation of a "Sekhemre-shedwast" to support his existence. To the contrary, we have at least one clear indication, from other royal titulary, that the Theban kings of the period considered themselves to be fully legitimate kings of the Two Lands: the Horus Sewadjtawi (Nebiriau I). If BENNETT 1994 and RYHOLT 1997:152 have correctly identified any of the first three kings of column 11, we also have the eviof their prenomina: [sementawi] (Djehuti), Sekhemre-[seusertawi] (Sebekhotep VIII), and Sekhemre-se[ankhtawi] (Neferhotep III). The Nebti Seankhtawi (Senusert IV) has also been proposed as a Theban king of this time, though placed in the sequence in several different ways (DAUTZENBURG 1992, Bennett 1995b, Ryholt 1997:157, Beck-ERATH 2000). In light of these facts, Stock's proposal to identify "Sekhemre-shedwast" with Sekhemre-shedtawi Sebekemsaf, while certainly conjectural, remains reasonable and viable.

Ryholt's proposed criteria for distinguishing "16th" and "17th" dynasty kings are also doubtful. The evidence for the Abydene dynasty is extremely weak (BENNETT 2002:130), still more so in the light of seal impressions from Abydos of Nebiriau I, a king of Ryholt's "16th" dynasty (WEGNER 1998:40 fig. 20). The proposal that the dynastic division is marked by a sack of Thebes and the plunder of the royal tombs of the "16th dynasty" kings also seems flawed. Even accepting, for the sake of argument, that such a sack would have led to a dynastic division in the Egyptian historiographical tradition, the argument is circular, since the only evidence for it is precisely the absence of royal tombs. Moreover, the proposed "17th dynasty" includes Rahotep, the doubtful king Nebmaatre, and king Senakhtenre, even though at least two of them, and, if VANDERSLEYEN 1983 is correct, all three, do not have documented tombs. If the absence of some royal tombs is not due to the supposed sack, it is unclear why we should suppose that any of them were so destroyed.

Returning to the kinglist, the specific arguments advanced for reconstructing the "5 kings" as an error for "<1>5 kings" have now been eliminated. As noted above, the proposal was originally made to accommodate the 15 Theban kings then known as a single dynasty, but at least 17 Theban kings are now known from the period. At the time Beckerath made the proposal, the 5 kings preceding the number in the fragment were held to follow immediately after the large fragment giving 9 kings at the head of the column, but the distance between the fragments is in fact uncertain (BENNETT 2002:155 n. 124). Also, the fragment of a header line that was previously supposed to introduce these kings as a dynastic grouping is now placed at a point where it can be seen as introducing the 14th dynasty (BEN-TOR, ALLEN and ALLEN 1999:67 n. 3), so we can no longer point to a possible header for the reconstruction of <1>5 kings. Finally, whether or not we amend the line, it seems hard to dissociate it from the 5 Theban kings of Africanus and Eusebius. If it is indeed an error for <1>5 kings, we must suppose a remarkable coincidence or the prolonged and faithful transmission of an egregious error.

That being said, the significance of a mention of "5 kings" at this point is unclear. If we accept the number at face value as the size of a dynasty, it does not seem possible to reconcile the Turin list's account of Theban kings with either Africanus or with Ryholt's proposed reorganisation. It might be reconcilable with Eusebius if we could accept Dodson 1991's proposal that the "5 kings" comes from a header line, making the succeeding kings Eusebius' 16th dynasty. BENNETT 1995a:19 n. 5 noted that the remaining traces do not display the characteristics of other header lines. Nevertheless, it seems we must at least suppose that the Turin compiler knew of a dynastic group of 5 kings who were almost certainly Theban, and that the first 9 kings of column 11 were also Theban. But if, with Ryholt, we also suppose that there was a further group of Theban kings at a later time, then we are looking at not less than three Theban dynasties. Further, while the kings immediately following the "5 kings" may or may not be Theban, the kings currently placed at the bottom of the column remain completely unidentified, and have not been located in a Manethonian dynasty under any existing proposal.

Ryholt's reconstruction has won remarkably rapid acceptance and his Theban "16th dynasty" is now displacing Africanus' Hyksos 16th dynasty from the canon (e.g. Dodson and Hilton 2004:106). However, this reconstruction seems to me to be very insecure, and the evidence we have is still best explained by supposing that all the Theban kings were listed together in column 11. While I agree with Ryholt that the compiler of the Turin list very probably considered that there was more than one group of Theban kings, I do not think we can yet be sure what those dynastic groupings were, nor even that they were shared with Manetho, except, probably, for the "5 kings".

In the current state of our knowledge, it seems to me to be both premature and ill-advised to reassign Manetho's "16th dynasty" to a particular group of Theban kings. For better or worse, Egyptological dynastic convention is Manetho's, as transmitted by Africanus via Syncellus. We cannot be certain that Syncellus' statement of Africanus' definition of the "16th dynasty" is in fact wrong, since we still have many unexplained kings in column 11 of the Turin list. Even if, as seems likely, this convention is not the one used by the Turin compiler, it is not at all clear that the proposed replacement is any closer, nor that it is more helpful in understanding the internal chronology of the period.

Egyptologists have occasionally recognised a need to depart from the Manethonian tradition. They have usually done so by augmenting it, e.g.

the "Taosids" or "Thutmosids" of the 18th dynasty, or Aston's "Theban 23rd dynasty", rather than by arrogating a Manethonian dynasty to another purpose. HAYES 1973 took a similar approach with the Theban kings of the SIP. While accepting that the Turin list contained two Theban dynasties, he considered them to be the "First group" and "Second group" of the 17th dynasty. This hierarchical approach to dynastic terminology allowed him to retain Africanus' definition of the "17th dynasty", as a well-established and Manethonian convention, for use in discussing the Theban kings as a whole, while permitting conjectural restructurings of the internal organization of that "dynasty", reflected in the Turin list and other data, to be discussed and accepted, rejected or refined, on their merits. In my opinion it is still the more judicious approach.

Since the dynastic structure of the SIP sections of the Turin kinglist is so uncertain, the inferences we can make from it about the chronological relationships between its dynastic groups are necessarily limited. First, the list tells us that the 13th dynasty kings "followed the kings of Itj-tawi", that is, the 12th and 13th dynasties were consecutive. So far as we can tell from contemporary data, the list of 13th dynasty kings and their reigns is generally, though not perfectly, historically accurate. However, the list of reign lengths is incomplete, so we have some floating blocks of time even within the 13th dynasty. 82 years are assigned to 14 kings, at least 8 are known for Sebekhotep IV, and an additional 33 kings or more reigned for an uncertain amount of time.

The 14th dynasty is just a list of names, with almost no reign lengths preserved. We have the beginning, at least as it was recognised by the Turin tradition, but we are not told how it relates to the 13th, and we have still not found out very much about it. Only one or two kings are even documented. Fortunately, it also has no links to later dynasties, so we may safely ignore it for present purposes.

The 15th dynasty, the dynasty of the Great Hyksos, barely survives in the Turin list, but what does survive includes a summary of the length of the dynasty, 6 kings for 108, or 140, years (RYHOLT 2005). Whether or not this number (whichever it is) is precisely correct, both values are reasonable for a dynasty of 6 powerful kings. Since we know Avaris fell between years 11 and 22 of Ahmose (VANDERSLEYEN 1995:216), we have an approximate distance between the rise of the 15th dynasty and the end of the SIP.

This leaves one substantial block of kings in the Turin list – the 9 Theban kings of column 11, 6 of whom are given a total of 59 years. To these, we can add the three kings who were certainly Ahmose' immediate predecessors (Kamose, Seqenenre and Senakhtenre), and other kings such as the Inyotefs, Rahotep and Sejhemre-wadjkhau Sebekemsaf, who must almost certainly be placed between these two groups. We have to account for at least 17 Theban kings, and quite possibly several more. While, as we have seen, the internal structure of this sequence of kings is uncertain, the fact that they are all Theban ensures that they may be treated as consecutive groups of kings who were ultimately followed by the 18th dynasty.

Thus, the Turin list allows us to relate the kings of the 13th dynasty to the Middle Kingdom, and we can loosely relate both the 15th and the 17th dynasty to the start of the 18th dynasty from New Kingdom data. However, we have no direct indication of how the 15th and 17th dynasties relate to the 13th dynasty, and the length of the 17th dynasty in particular is very elastic. We have traces of around half a dozen unplaced Theban kings who cannot be certainly placed in the Turin list, some of whom, such as Nubkheperre Invotef and Sekhemre-wadjkhau Sebekemsaf, were certainly quite important. While further examination of the Turin list fragments will undoubtedly clarify some of the outstanding questions, it seems very unlikely that this approach will, by itself, reduce the elasticity very much.

For chronological purposes, these fault-lines have traditionally been resolved by supposing that the 15th and 17th dynasties both arose with the fall of the 13th under the onslaught of the Hyksos. On the usual reading of 108 years for the 15th dynasty, one consequence of this model is that the distance between king Sekhemre-"shedwast", the last Theban king whose name survives in the Turin list, and king Ahmose must be very short, around 30 years, yet it must cover at least 8 kings, one of whom (Sekhemre-wadjkhau) certainly reached his 7th year, and at least two of whom (Nubkheperre and Segenenre Ta'o) also appear to have had fairly long reigns. If Ryholt's new reading of 140 years for the 15th dynasty is correct, some 30 extra years could be added to this. While this reading relieves the chronological pressure on the 17th dynasty, it does not prove that the 15th and 17th dynasties arose simultaneously with the fall of the 13th.

To convert this picture into an absolute chronology, it is tied to relatively fixed points in the

New and Middle Kingdoms. For the New Kingdom, we have the accession of Ahmose, usually dated between 1570 and 1539 BC. This date can be derived from the Sothic data in the Ebers Papyrus for year 9 of Amenhotep I. The validity of this interpretation has been questioned, but the conclusion is supported by a network of synchronisms that tie it to the remainder of pharaonic history and the wider chronology of the Near East. For the Middle Kingdom, we have the astronomical data of the Lahun papyri, and in particular a Sothic date for Senusert III which has been dated between 1872 and 1830 BC (Krauss 1985; Luft 1992; Parker 1950). If we allow the dates to be associated freely, the distance between year 7 of Senusert III and year 1 of Ahmose is between 260 and 333 years.

A third astronomical fixed point may exist within the SIP which is more precise than either of these, but it is currently of very limited value. DAR-NELL and DARNELL 2002:49-52 interpret iGebel Tjauti 11 as giving another Sothic date, corresponding to year 11 of an unnamed king. Since its location is isolated and fixed, this date would be restricted to the years 1593-1590 BC. Although this interpretation was reached after detailed consideration of alternative readings, it is not universally accepted (e.g. RYHOLT 2005), though to date no other interpretation has been offered. However, even if Darnell and Darnell are correct, the date is still a weak constraint on SIP chronology since the king is not named. It only allows us to improve the precision of dates assigned to a king whose placement in the 1590s has been determined by other means. BEN-NETT 2002:144–151 identified several candidates, some perhaps more likely than others.

If we assume that the reign-length figures in the Turin list, while not perfectly accurate (RYHOLT 2004:151–153), are sufficiently accurate to be usable for estimating purposes, the minimum distance between year 7 of Senusert III and year 1 of Ahmose, can be calculated by dead reckoning as follows:

Distance	Minimum Length	Notes		
Remainder of 12th dynasty	72	If 19 years for Senusert III		
Known 13 th dynasty reigns	90	From Turin list		
Other 13th dynasty kings	33	Assuming 1 year per king		
Length of 15th dynasty	108	From Turin list		
(Ahmose before fall of Avaris)	(22)	Highest date for fall of Avaris		
Minimum Distance	281			

This minimal model is sufficient to rule out the low Middle Kingdom chronology if it is coupled with a high date for the accession of Ahmose. It is otherwise compatible with all the proposed dates for year 7 of Senusert III and year 1 of Ahmose. However, if 32 years are added, per Ryholt's proposed new reading for the length of the 15th dynasty, then the minimum distance becomes 313 years, which requires a high date for year 7 of Senusert III and a low date for year 1 of Ahmose. This model is very tight, since it gives a minimum distance which only 20 years shorter than the maximum distance allowed by the external constraints. If the average reign length of the 13th dynasty kings whose reigns are lost is over 2 years, or if it was as low as 18 months but Avaris fell in year 11 of Ahmose, or if Senusert III reigned over 30 years, then the minimum distance calculated by dead reckoning would be too long.

This highlights an important problem with basing the dead reckoning primarily on the evidence of the Turin list: the unproven assumption that 15th and 17th dynasties arose at the end of the 13th dynasty. If this assumption is removed, it becomes possible to compress SIP chronology below the numbers derived above. But the effect of doing this is that the dead reckoning ceases to be an effective cross-check on proposed dates for Senusert III and Ahmose.

Thus, both in order to resolve internal chronology of the SIP and in order to test the constraints that the SIP places on the dates of the Middle and New Kingdoms, it is necessary to find an alternative approach to deriving an SIP chronology. In short, we need a substantial injection of contemporary SIP data.

THE EL-KAB AND YAUYEBI GENEALOGIES

Figure 1 shows outline genealogies of the governors of El-Kab, as reconstructed in Bennett 2002, and the vizieral family of Yauyebi reconstructed in Habachi 1984, synchronised with certain kings of the 13th, 17th and 18th dynasties. The focus of this discussion is on the chronometric aspects of these genealogies, in particular what they tell us about the minimum chronological distance between the kings involved. The detailed arguments in support of this particular reconstruction are presented in Bennett 2002; some issues raised since that article was written which have chronometric implications are also discussed here (Fig. 1).

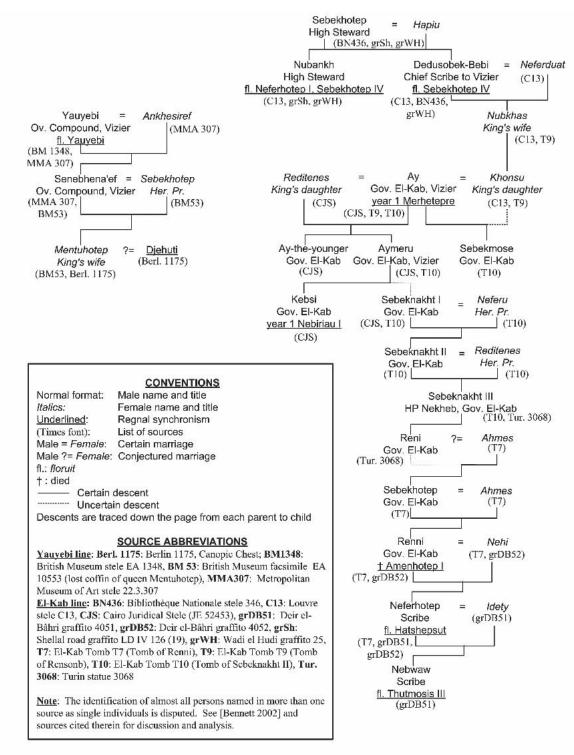


Fig. 1 Minimal-Length Reconstructions of El-Kab and Yauyebi Vizieral Genealogies

From Sebekhotep IV to Merhetepre

This section of the El-Kab genealogy is based on a genealogy of queen Nubkhas (SPALINGER 1980) derived from a dossier of documents centered on Louvre stele C13, together with the genealogy of Rensonb from El-Kab tomb T9 and the Cairo

Juridical Stele. From this dossier, we learn that Nubkhas, niece of a prominent official of Neferhotep I and Sebekhotep IV, was the mother of Khonsu, wife of Ay, vizier and governor of El-Kab. Ay's *floruit* is therefore two generations after Sebekhotep IV. From the Cairo Juridical Stele, Ay, governor of El-Kab and vizier in year 1 of king

Merhetepre, was the ancestor of at least two generations of governors of El-Kab by his wife, the king's daughter Reditenes. An Ay, governor of El-Kab and vizier, is also mentioned as an ancestor of the governor Sebeknakht II in the latter's tomb, El-Kab tomb T10.

The chronologically important points of uncertainty in this genealogy are the number of Ays and their relationship to each other. This reconstruction follows SPALINGER 1980 in identifying all of them, a solution that minimizes the amount of time between the two kings, at two generations. It requires Merhetepre to be identified as the immediate successor of king Merneferre Ay. While the reign-length of Sebekhotep IV is lost from the Turin kinglist, and he may have had a successor who is lost from the list, his three certain successors, kings Sebekhotep V, Yauyebi and Ay, reigned for 37 years.

RYHOLT 1997:240, arguing against the identity of the Ays, did not propose any alternate relationship, either chronological or genealogical. Two have been proposed that distinguish them. HARTMANN 1989:296 suggested that Ay, husband of Khonsu, was the son of Ay husband of Reditenes. This is certainly wrong (BENNETT 2002:138). Dodson and Hilton 2004:107 have proposed the opposite solution: to make the vizier Ay, husband of Khonsu, the father of the vizier Ay husband of Reditenes. Although in my view unlikely, it is not impossible. The chronometric effect would be to lengthen the distance from Sebekhotep IV to Merhetepre by a generation, most likely implying that the king Merhetepre of the Juridical Stele is not the Merhetepre of the kinglist, and should be placed instead near the end of the 13th dynasty.

From Yauyebi to Djehuti

HABACHI 1984 developed a genealogy of the family of the late 13th dynasty vizier Yauyebi. This genealogy gave a distance of two generations between king Yauyebi, the second or third successor of Sebekhotep IV, and king Djehuti, whose canopic chest was given to a queen Mentuhotep. Habachi held that Yauyebi, Overseer of the Compound, who gave himself equal status with king Yauyebi in stele BM EA 1374, was the same man as the vizier of that name at an earlier stage of his career. He supposed that one of the sons of the vizier, both called Senebhanef, followed a similar career, becoming, as vizier, the father of queen Mentuhotep, wife of king Djehuti.

Habachi's reconstruction has two chronometric implications. The first concerns the earliest date at which the vizier Ay of the Juridical Stele could have taken office (RYHOLT 1997:234). King Yauyebi reigned for 10 years. If Habachi is correct, Yauyebi's vizierate most likely occurred late in that reign or in the reign of Yauyebi's successor king Ay, who reigned for 23 years, and he was succeeded as vizier by his son Senebhanef. Senebhanef's vizierate must then be dated to the reign of king Ay. On the minimal-length reconstruction of queen Nubkhas' genealogy, the vizier Ay must then have become vizier late in king Ay's reign, possibly even as late as year 1 of his successor, king Merhetepre.

Grajetzki 2000:159 and 2004 has challenged Habachi's reconstruction on this point, noting that the names Yauyebi and Senebhanef are relatively common, and that there is no positive proof that either of the Overseers of the Compound was the same man as the homonymous vizier. These are valid concerns, but they do not amount to a disproof, and they overlook some important circumstantial points. First, the overseer Yauyebi, while holding a middle-ranking office, was nevertheless able to place himself at the same level of status as the king, which indicates a degree of influence far exceeding his rank. Thus it is very likely that he did reach higher office. Second, the overseer Senebhanef was certainly son of the vizier Yauyebi, which suggests that the lower office was in the vizier's gift, and that the vizier and his son both regarded it as a step on the path of advancing the son's career. The El-Kab genealogies show the governorship playing a similar role in that family in the late 13th dynasty. Finally, RYHOLT 1997:260 pointed to seals of a certain Sobka-Bebi, who also apparently held both offices.

The second chronometric datum implied by the genealogy is the maximum distance between kings Yauyebi and Djehuti. Habachi, along with most other commentators, considered that king Djehuti's canopic chest was given to queen Mentuhotep by the king himself, that he was therefore her husband, and that she predeceased him during his reign. If correct, it follows that Djehuti lived two generations after king Yauyebi, and three generations after Sebekhotep IV.

RYHOLT 2005, noting that the chest does not explicitly name the king who gave the gift, argued that its use as a storage chest for a toiletry set rather than as a canopic chest suggests that it was

a gift taken from storage, not a personal gift from Djehuti. He concluded that Djehuti had predeceased queen Mentuhotep (presumably in circumstances precluding a royal burial), and that he was not necessarily her husband. This argument establishes that Djehuti reigned at most two generations after king Yauyebi.

We have very little comparative evidence to estimate the maximum amount of time that royal funerary goods would be held in storage if they could not be used for their original purpose. However, examples such as the apparent use of Neferneferuaten's grave goods by Tutankhamun suggests that it was not long, so it still seems to me most likely that Djehuti was a contemporary of queen Mentuhotep.

Be that as it may, the chronological value of the result depends on whether Djehuti was a late 13th dynasty king or an early 17th dynasty king. In the former case the bound is not very useful. In the latter case, we have a maximum distance from king Yauyebi to the start of the 17th dynasty. Djehuti is usually regarded as a 17th dynasty king, because his prenomen, Sekhemre-sementawi, matches the surviving traces of the prenomina in the first three positions of column 11 of the Turin papyrus. STOCK 1942:79, followed by BECKERATH 1964:168, proposed the third position; BENNETT 1994 and Ryholt 1997:152 proposed the first, 20 years earlier.

This dynastic assignment has recently been questioned. VANDERSLEYEN 1993 advocated a late 13th dynasty placement based on Habachi's genealogy, but his argument is only an argument against placing Djehuti in the third line of column 11. It is not valid if he is in the first line. More recently, Geisen 2004 has argued on art historical grounds that the surviving material related to queen Mentuhotep (and therefore to Djehuti) must date to the late 13th dynasty. However, it is doubtful that the very limited material available is sufficient to allow such a precise determination; it is in any case moot if the 13th and 17th dynasties overlapped.

RYHOLT 2005 has stressed that the evidence for Djehuti's dynastic placement is not conclusive, and this is certainly so. However, the consequence of placing him in the late 13th dynasty is to open up a position at the beginning of column 11 of the Turin list. While not impossible, it is difficult to replace him with a known candidate. Occam's Razor suggests that additional evidence should be found before requiring such a move.

From Merhetepre to Nebiriau I

This section of the El-Kab genealogy is given by the Cairo Juridical Stele (LACAU 1949). The chronometric data provided by this document is well known. It states that the vizier Ay transferred the governorship to his son Ay "the younger" in year 1 of king Merhetepre, but after the latter's early death without heirs he transferred it to his younger son Aymeru, who later became vizier in turn. Aymeru's son Kebsi sold the governorship to a certain Sebeknakht in year 1 of king Sewadjenre Nebiriau, who was the fifth king listed in the surviving section for the 17th dynasty in the Turin king list. At that time, the vizier was no longer Aymeru but another Sebeknakht.

The Juridical Stele does not indicate where year 1 of Merhetepre falls in Ay's vizierate. However, if Habachi's analysis of the family of the vizier Yauyebi is correct, and if king Merhetepre is the successor of king Ay, then it must be early in the vizierate, if not at its beginning. Since neither Ay nor Aymeru were still vizier in year 1 of Nebiriau I, it then follows that the distance from year 1 of Merhetepre to year 1 of Nebiriau I is some time in the third generation. Since Nebiriau I reigned for 26 years (RYHOLT 1997:159), his reign can be regarded as the *floruit* for this generation.

From Nebiriau I to Amenhotep I

This section of the genealogy comes from El-Kab tomb T10 (the ancestry of the governor Sebeknakht II and his family), Turin 3068 (a statuette of the governor Reni son of Sebek(nakht)), tomb T7 at El-Kab (the family of the governor Renni), and graffiti 4051 and 4052 from a grotto above the temple of Deir el-Bâhri (the descendants of Renni); for sources see Bennett 2002:141 nn. 72–74. The principal bases for integrating these documents into a single line of descent are the rule of hereditary patrilineal succession to the governorship of El-Kab enunciated in the Juridical Stele, "from son to son, from heir to heir", and the clear onomastic relationships between the names.

The governor Sebeknakht I, father of Sebeknakht II, is almost certainly the Sebeknakht of the Cairo Juridical Stele, regardless of the number of Ays who were governor of El-Kab (BENNETT 2002:140-141). This anchors the genealogy of tomb T10 in the reign of Nebiriau I. At the other end, Renni is explicitly identified as a contemporary of Amenhotep I. Consideration of the available data for his son and grandson from the time

of Hatshepsut and Thutmosis III strongly suggests he was a senior contemporary of Amenhotep I (Bennett 2002:143–144).

The descent line shown gives the minimum number of generations between them, unless there was a collateral succession involved at some point. There is, however, some uncertainty as to whether Renni's grandfather was unnamed in his tomb or whether he is a second Sebekhotep. In the latter case, an extra generation must be added to the genealogy. Since we also cannot verify that Reni's father Sebeknakht was Sebeknakht III, nor that Reni was the father of Sebekhotep, there may be even more generations involved.

CHRONOLOGICAL IMPLICATIONS

The El-Kab genealogy therefore gives a minimum of 8 generations from the accession of king Merhetepre of the 13th dynasty, and 6 generations from the accession of Sebeknakht I in year 1 of Nebiriau I of the 17th dynasty, to the death of Renni, most probably some time in the reign of Amenhotep I.

Bennett 2002:151 concluded that this genealogy implied that the early 17th dynasty overlapped the later 13th dynasty for a few decades, and that there is a gap of two generations between the Theban kings of the Turin kinglist and the 17th dynasty kings we know from the New Kingdom record. To the extent that other evidence is available for these periods, these conclusions are consistent with that evidence. To the extent that other interpretations of that evidence are possible, their general effect is to lengthen the intervals of time involved.

The two proposals are largely independent of each other. If, for example, there were two generations of Ays, as DODSON and HILTON 2004 has proposed, this lengthens the time between Sebekhotep IV and Merhetepre by a generation, but does not affect the generational distance between Merhetepre and Amenhotep I. Similarly, if Renni's father and grandfather were both named Sebekhotep, the minimum distance between Merhetepre and Amenhotep I is increased by a generation, but the distance between Sebekhotep IV and Merhetepre is unchanged.

The result that the time from year 1 of Merhetepre to the death of Renni under Amenhotep I covers at least 8 generations is valuable in two other respects. First, it is a direct association between the 13th dynasty and the 18th, independ-

ent of the relationship between the 13th dynasty and the 15th and 17th dynasties. Second, the measurement is independent of the final and least-known kings of the 13th dynasty. That is, the minimalist interpretation of the measurement overcomes the major structural problem in using the Turin kinglist to establish a chronology of the SIP by dead reckoning, and substantially mitigates the uncertainties in using the Turin kinglist to establish 13th dynasty chronology.

On the other hand, a generational count is inherently an imprecise measure of time. In order to convert it into a useable estimate of elapsed years, we need to know the average length of an Egyptian generation in the upper classes. To my knowledge, there has been very little research into this question. The estimate usually used is 25±5 years, based on Bierbrier 1975:xvi, 112. However, based on a cross-cultural study, Henige 1986 suggested that the figure could well be higher. A study of data from the securely-dated Saite or Ptolemaic periods would be a useful calibration exercise, and might well support this: the average length of a generation in the family of the Ptolemaic High Priests of Memphis, well-documented over eight generations, is almost exactly 30 years (QUAEGEBEUR 1980). For present purposes, however, we may use Bierbrier's figure, giving us around 200 years from the accession of Ay-the-younger to the death of Renni. If we suppose that Renni died around the end of the reign of Amenhotep I, i.e. about 45 years after the accession of Ahmose, then the distance from year 1 of Merhetepre to year 1 of Ahmose is around 155 years.

We may therefore derive a new estimate of the minimum distance from year 7 of Senusert III to year 1 of Ahmose as follows:

Minimum Length	Notes	
72	If 19 years for Senusert III	
74	From Turin list	
14	Assuming 1 year per king	
155	Estimate from genealogies	
315		
	72 74 14 155	

This estimate is very close to the estimate derived above based on Ryholt's new reading of 140 years for the 15th dynasty, but it no longer depends on assumptions about the relationship between the 13th and 15th dynasties or the date of

the fall of Avaris. Moreover, through use of contemporary genealogical data, the contribution of the Turin kinglist is now restricted to a section that is relatively intact, and concerns about the unreliability of reign-lengths from the list are now limited to the late 12th and early 13th dynasties. As with the earlier model, the estimate supports a high chronology for the Middle Kingdom (year 7 of Senusert III = 1872 or 1866) and a low chronology for the New Kingdom (year 1 of Ahmose = 1539). It seems difficult, if not impossible, to reconcile this result with a low Middle Kingdom chronology (year 7 of Senusert III = 1830), except by lowering the start date of the New Kingdom.

The agreement with the estimate derived from Ryholt's model suggests that the 15th and 17th dynasties arose at about the same time. We can derive the length of the 17th dynasty independently. The genealogical estimate for the distance between year 1 of Nebiriau I and year 1 of Ahmose is 6 generations less 45 years, i.e. about 105 years, to which another 20 years must be added to account for Nebiriau I's four known predecessors, giving a total length of about 125 years for the 17th dynasty. This agrees very well with Ryholt's new reading of 140 years for the 15th dynasty, since that number includes at least a decade of Ahmose' reign, but does not depend on it.

This agreement does not imply, however, that the 13th dynasty ended at the same time that the 15th and 17th dynasties began. In order to achieve this result, we must follow Dodson and Hilton's proposal to distinguish two viziers Ay, making one a generation later than the other, thereby creating a second Merhetepre reigning a generation after the first, who becomes the Merhetepre of the Juridical Stele (and most probably forcing Djehuti to be a 13th dynasty king). But this extends the overall minimum length of the SIP by a generation, to a point where it exceeds the bounds permitted by the constraints on year 7 of Senusert III and year 1 of Ahmose. Rather, if Ryholt's reading is correct, it implies that the 15th and 17th dynasties both began as the result of a catastrophic event that seriously weakened the 13th dynasty but did not end it for another generation.

CONCLUDING REMARKS

RYHOLT 2005 has correctly emphasised that many of the interpretations made in BENNETT 2002 and in this paper are disputable, that the data from this period requires careful analysis, and that historical conclusions should be drawn with great caution. However, the value of synthesised genealogies, based on reasonable if uncertain interpretations of the data, does not only lie in the degree of certainty to which they are an accurate representation of the historical past. The process of constructing a chronological model using different techniques than have hitherto been used can highlight unexamined assumptions in earlier models, and suggest new questions to investigate. The chronological properties of the genealogical models, if selected carefully, can also test the feasibility of chronologies arrived at by other means.

The genealogies discussed here are certainly not complete and may well not be correct in significant respects. Nevertheless, because they make chronologically minimal interpretations of the data, they have led to a new minimum estimate for the length of the SIP that challenges the low chronology of the Middle Kingdom. Alternate interpretations that add generations can only extend that challenge. The genealogies also suggest the hypothesis that the 17th dynasty rose before the fall of the 13th, a possibility that had not previously been considered, and which allows us to find time for Theban kings who are otherwise difficult to place.

It is clear that existing prosopographical data from the SIP, while sparse compared to that from the TIP, is nevertheless sufficient to allow at least some genealogies to be constructed that have chronometrically useful characteristics. The challenge to researchers is to find additional data to improve the number, reliability and utility of these genealogies. We may hope that the data from El-Kab considered in this paper and in BEN-NETT 2002 will be refined and corrected through the continuing work in the tombs of the governors of El-Kab (DAVIES 2003). But the best opportunity for extending the genealogical networks is through the publication of additional genealogical databases, such as a database of about 130 unpublished stelae from Edfu (VERNUS 1988), the home of a queen Sebekemsaf, who has known family connections to other individuals from this city. If such databases are analysed with an eye to synthesising the results into a genealogical network that can be correlated with other chronological data, it may be that the internal chronology of the SIP can eventually be placed onto a foundation comparable to that of the TIP.

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