## THE RELEVANCE OF GENEALOGICAL INFORMATION FOR EGYPTIAN CHRONOLOGY

By Karl Jansen-Winkeln

1. The simple fact that sources such as genealogical tables and family trees are used for the reconstruction of Egyptian chronology is quite revealing: our supply of chronological data is so limited that we are forced to use methods which can only deliver vague results. This is true for historical methods like genealogy as well as for scientific methods like radio carbon dating. The use of genealogical data only makes sense if chronological knowledge is rather imprecise due to the lack of other sources. On the other hand, the use of genealogical data is only possible if there is a sufficient supply of it.

Many periods of Egyptian history have left few data which can be used for chronological calculations. The best known epochs are the 12<sup>th</sup> Dynasty and the New Kingdom, which provide comparatively good evidence from dated inscriptions and administrative documents. In the Late Period, chronology is firmly established with the accession of Taharka in 690. Other epochs are very little known in this respect, for example the Second Intermediate Period or in general the time before the Middle Kingdom.

Given these circumstances, genealogical information can indeed be helpful in many cases, if there is an adequate supply of it. In the third and second millenium, however, Egyptian monuments and documents as a rule confine themselves to mentioning the name of the father or the mother of a given person; thus there is a lack of basic source material for genealogical studies throughout this broad time span.

Genealogical source material becomes increasingly abundant in the period after the New Kingdom. Many texts mention not only the father and the mother, they often give us 3, 4 or 5 generations of ancestors, and even elaborate family trees occur, reaching back hundreds of years. For the 22. and 23. dynasties, the main sources are temple

statues, in dynasties 25 and 26 there is a lot of genealogical information on coffins as well.

By and large it may be said that long genealogies flourished from the 22<sup>nd</sup> to the 26<sup>th</sup> dynasty, reaching their climax in the Late Libyan Period. During that time, genealogical information was generally more detailed, and exceptionally long family trees are known mainly from that period as well. In the second half of the first millenium, genealogical indications become more scarce again, and in the Ptolemaic period only father and mother are mentioned in most cases.<sup>2</sup>

2. For the first half of the first millenium, genealogical information is indeed a most welcome aid for chronological purposes, because this period is or was an especially weak point in Egyptian chronology. It is revealing, but not surprising, that this epoch has been a favourite target of chronological extremists who have attempted to revolutionize the chronology of Egypt and the Near East by eliminating a few centuries. There are in fact many reasons for the chronological weakness of this period: We have - apart from Manetho - no king-lists, no Sothic dates and few, if any, other astronomical data,3 and there are only few and partly controversial synchronisms.<sup>4</sup> Dated royal inscriptions are rare, and there are only a few administrative documents: the allimportant source of Deir el-Medina has terminated. As a consequence, regnal years are sparse in the material handed down to us, and these dates are often anonymous, they do not mention the king to whom the dates refer.

There is not a single ruler with a complete chain of dates, for most kings only a few dates are attested, and there are several kings with none at all. Thus the method of dead-reckoning is problematic for this time. Moreover, there are at times two or more parallel dynasties; the stela of

 $<sup>^{1}</sup>$  Redford 1970, 5; Leahy 1985, 55; Ritner 1994, 219.

<sup>&</sup>lt;sup>2</sup> Jansen-Winkeln 2005.

The much disputed lunar eclipse in year 15 of Takeloth II will be treated again by Rolf Krauss.

<sup>&</sup>lt;sup>4</sup> VON BECKERATH 1997, 61-62; 68-70.

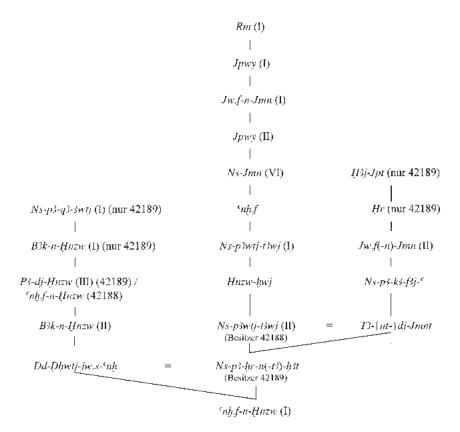


Fig. 1 Pedigree Cairo CG 42188/89 (SAK 31, 2003, 222)

Pianchi mentions no less than five kings at the same time. A good example for the difficulties is the well-known controversy surrounding the chronological position of Takeloth II.5 It is still a matter of dispute whether he was the successor of Osorkon II and predecessor of Sheshong III, or if he was a member of another dynasty, ruling in a different area. If the latter is true, we have to extend the reign of other rulers, and this itself is only possible because so few regnal dates of the rulers of this period are known to us. Between the pros and cons of the dispute, genealogical information plays a vital role as well.

- 3. In general, we have two different kinds of genealogical information that can be used for chronological calculations:
- On some monuments there are long pedigrees of mostly paternal ancestors, partly going back to the New Kingdom. When at least one of these ancestors is known from other sources, one can try to calculate the distance in time.

The second source consists of elaborate genealogical tables, which can be compiled from the surviving commemorative objects of several members of one family.

Long pedigrees may seem suspect, if there is no confirmation from other sources, and they may be especially suspect when they go back to a famous person living centuries before. For example, it is well-known from european genealogies how many aristocratic families attempted to include Charlemagne as an ancestor.

Now some examples of these long pedigrees:

The genealogy on the statues Cairo CG 42188 and 42189<sup>6</sup> from the reign of Osorkon I (Fig. 1) ends with Ipui, son of Roma, a 2. prophet of Amun. This Roma is also the father of the Highpriest Bakenkhons, who was in office under Ramses II. Obviously, the genealogy contains no internal inconsistencies and the last ancestor was an important man in his time, but surely not a legendary person.

Broekman 2005, with earlier references.

<sup>&</sup>lt;sup>6</sup> Jansen-Winkeln 2003.



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- The relief Berlin 23673<sup>7</sup> from the time of Sheshong V(?) (Fig. 2) shows the owner and 59 of his ancestors; in 27 cases, the name of the ruling pharaoh is added. This relief could well be the most important source for genealogical studies, and it surely contains a lot of valuable data. The ancestors of generation 8 to 13 (1,9-14), for example, are known from other sources. Unfortunately, there are some clear inconsistencies: we have only 2 generations between king Amenemnisut of the 21st dynasty and Ramses II; on the other hand, there are no less than 7 generations between Mentuhotep II. and Amenemhet I. Moreover, it is a priori very unlikely, that a family held an office for 60 generations or that it is even possible to trace a single family over such a long time.
- The inscription on the block Berlin 2096 (Fig. 3)<sup>8</sup> records the introduction of a Theban priest in year 3 of Tanutamun (662 B.C.); the new priest lists 16 generations of forefathers. 3 members of this pedigree are known from the Neseramun-family,9 who lived at the end of the New Kingdom.
- The pedigree of the architect Khnumibre in the Wadi Hammamat<sup>10</sup> (Fig. 4) from year 26 of Darius I mentions 22 ancestors. Beginning with a forefather 6 generations earlier, each of them was architect and vizier, in all 18 generations, ending with the well-known Rahotep, who was vizier under Ramses II. Apart from Rahotep, not a single one of these viziers is known from other sources, and there are some other inconsistencies as well.<sup>11</sup> Nevertheless, 7 generations later than Rahotep, probably during the 21st dynasty, we can locate an ancestor, a 2., 3. and 4. prophet of Amun by the name of *Jmn-ḥr-p3-mš*<sup>c</sup>. He is otherwise unknown, but the acculumation of offices and the type of name clearly point to the 21st dynasty.

On the whole, the reliability of these long pedigrees can often be called into question. However, as L. Borchardt pointed out, 12 this does not definitely exclude their use for chronological purposes. For example, it is indeed unlikely, that

Fig. 3 Pedigree Berlin 2096 (SAK 29, 2001, 363)

all the ancestors of Khnumibre were architects and viziers, but this is irrelevant for chronology. All that matters is, whether Khnumibre's information about egyptian history and chronology is sufficient enough to give a pedigree that does not contradict history and chronology. For example,

Mn-msw Wn-nfrS3-jht Hr Jmn-msw Ns-p3-hr-cn Dd-Mwt-jw.f-cnh 'nh.f-n-Mwt Hr'nh.f-n-Mwt HrDd-Mwt-jw.f-cnh HrP3-dj-Mwt Ns-p3-hr-<sup>c</sup>n

<sup>&</sup>lt;sup>7</sup> Borchardt 1935, 96–112; Bl. 2/2a.

<sup>&</sup>lt;sup>8</sup> VITTMANN 2001, 357–362; 369; Taf. 21.

<sup>&</sup>lt;sup>9</sup> Kitchen 1996, 202.

<sup>&</sup>lt;sup>10</sup> Posener 1936, 98–105.

 $<sup>^{11}\,</sup>$  Posener 1936, 104 (n); the sequence of no less than eight persons with the names Nesshutefnut and Tjaenhebu is likewise suspicious.

<sup>&</sup>lt;sup>12</sup> Borchardt 1935, 95–96; 105.

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Rc-htp
                        hm-ntr Jmn-Re njswt ntrw hrj-sšt3 n pr Re mr k3t n Šmew Mhw mr nwt 13tj
B3k-n-Hnzw
                        mr k3t t3tj
Wd3-Hnzw
                        mr k3t t3tj
Nfr-mnw
                        mr k3t mr nwt <u>t</u>3tj
Mij(?)
                        mr k3t t3tj
Sr(?) ...
                        mr k3t t3tj
Pjpj
                       mr k3t mr nwt <u>t</u>3tj
                      hm-ntr 2 hm-ntr 3 hm-ntr 4 hm-ntr n Jmn-Re njswt ntrw mr k3t mr nwt t3tj
Jmn-ḥr-p3-mš
Ḥr-m-s3.f
                      mr k3t <u>t</u>3tj
Mrmr(?)
                      mr k3t <u>t</u>3tj
Ḥr-m-s3.f
                   mr k3t 13tj (Sheshonq I, year 21)
T3-(n-)hbw
                       mr nwt t3tj
Ns-Šw-Tfnt
                       mr k3t <u>t</u>3tj
\underline{T}3-(n-)hbw
                        mr nwt t3tj
Ns-Šw-Tfnt
                       mr k3t <u>1</u>3tj
<u>T</u>3-(n-)hbw
                       mr nwt t3tj
Ns-Šw-Tfnt mr k3t t3tj
<u>T</u>3-n-hbw
                       mr k3t Šm<sup>c</sup>w Mḥw mr nwt t3tj
Ns-Šw-Tfnt
                       mr k3t
W3h-jb-R^-tnj
                       mr k3t
                   mr k3t n Šm<sup>c</sup>w Mhw
'nh-Psm<u>t</u>k
J<sup>c</sup>h-msw-z3-Njtt
                       mr k3t n Šm<sup>c</sup>w Mhw
Hnm-jb-R<sup>€</sup>
                        (numerous priestly titles +) mr k3wt wrw(t) hrj n m5° hrp k3t m t3 dr.f
                        mr k3t n Šm<sup>c</sup>w Mhw
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Fig. 4 Pedigree Wadi Hammamat 92/93 (cf. Posener 1936, 98 105)

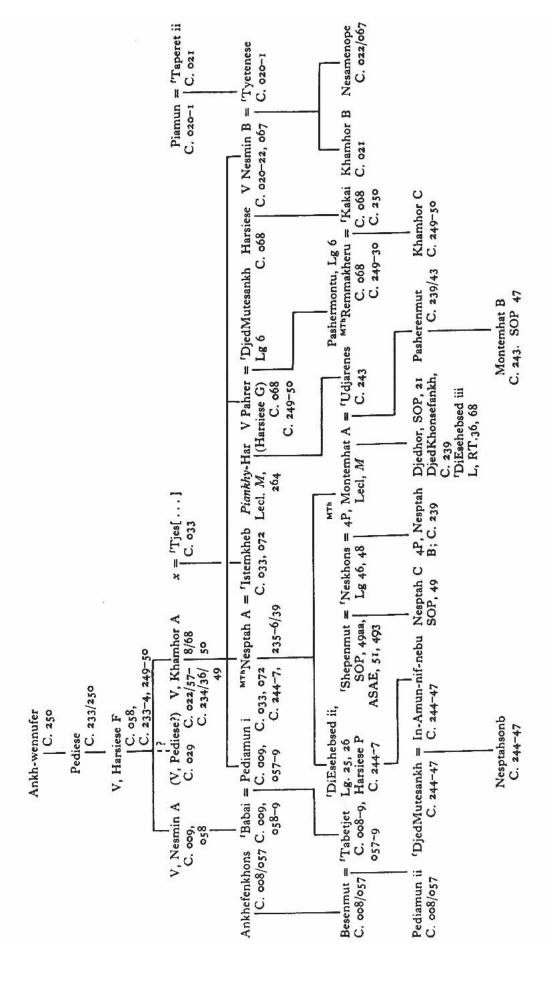


Fig. 5 Family of Montemhat (KITCHEN 1996, 231; reproduced by permission of Aris & Phillips, Oxbow Books)

was the autor's information about the temporal distance to Rahotep correct? The question of whether Rahotep was really his ancestor need not concern us. The same is true for all other sources of this kind. Even if they exaggerate the importance of their family in former times, the crucial point is whether they succeeded in drawing up a genealogy that is historically and chronologically consistent and at least possible. I think we can be sure that they tried to do so, because an obviously wrong pedigree was useless. We learn from pRylands 9, that there were fierce fights about positions and benefices among the priests.<sup>13</sup> A long pedigree of office-holders was a good argument, an inconsistent one surely not.

4. An example for a genealogical table compiled from various sources is the family of the Theban mayor Montemhat, who held his office under Taharka and Psametik I. (Fig. 5).<sup>14</sup> Most of this data stems from coffin inscriptions. No doubt, such a compilation is more reliable than a pedigree of 10 or 20 generations. In general, the relevant sources give only 2, 3 or 4 generations of ancestors, errors or an intention to deceive are rather unlikely. Moreover, a lot of data has been confirmed by several sources.

The Neseramun-family (Fig. 6)15 is known mainly from statues. Indeed, it is a compilation of the data of two long pedigrees on Cairo CG 42224 and 42221 with several other sources, and all these sources agree quite well with each other.

Both genealogical tables are excerpts. In fact, practically all the higher Theban priests and officials in the later periods are at least remotely related, all those genealogical tables are connected. For the families of the Third Intermediate, the Nubian and early Saite period, the material is extensive, and a lot of data is confirmed by different sources. But there are bottle necks for the 21st dynasty and for the passage from the late 22nd dynasty to the Nubian period. The genealogical bridge between the New Kingdom and the 22<sup>nd</sup> dynasty is the family of the Highpriests of Amun, the rulers of Upper Egypt.<sup>16</sup> Fortunately, the members of this family and their succession are well-known. The connection between the 22nd dynasty and the Nubian period is more doubtful and controversial. One of the key-figures is the vizier Nakhtefmut. His offspring is mentioned in various sources, but with different mothers.<sup>17</sup> Thus there may have been several viziers named Nakhtefmut, or only one with several wives.<sup>18</sup> The question of whether or not persons of similar names, titles and time periods are identical frequently causes difficulties in the compilation of genealogical tables.

Nevertheless, today most colleagues agree that there was only one vizier Nakhtefmut, and it seems, that the late dating of the Besenmut-family is likewise no longer a matter of dispute.

To sum up, some of the long pedigrees of a single person give us a genealogical bridge from the Third Intermediate or even the Late Period to the New Kingdom, but it is a bridge whose reliability is open to doubt. The genealogical tables of whole families, on the other hand, are better verifiable, but certain crucial points may nonetheless be controversial.

**5**. Genealogical information can be an important aid in the chronological arrangement of kings or officials, if their succession is otherwise unknown. Kitchen's book on the Third Intermediate Period19 shows how important the genealogies of Theban and Memphite officials can be in this respect. Another example is Yoyotte's identification of king Osochor with the help of two genealogies of the Late Third Intermediate Period.<sup>20</sup> Still, genealogies are more important for the dating of monuments. The ruling king is only rarely mentioned after the New Kingdom, and dating by style and iconographic details is still in its infancy in many areas, the dating of statues is especially difficult.

But now for chronology proper. If we try to ascertain the temporal distance between two persons by means of a genealogy, we have to count the number of generations. This procedure is not without problems. We almost never know the exact year of birth and of death, nor the age at death. The bulk of genealogical information stems from monuments erected or dedicated after the death of their owners. As a consequence,

<sup>&</sup>lt;sup>13</sup> VITTMANN 1998, passim.

<sup>&</sup>lt;sup>14</sup> Kitchen 1996, 231.

<sup>&</sup>lt;sup>15</sup> KITCHEN 1996, 202.

<sup>&</sup>lt;sup>16</sup> Bierbrier 1975, 45–50.

<sup>&</sup>lt;sup>17</sup> Bierbrier 1975, 86–91.

 $<sup>^{18}\;</sup>$  Bierbrier 1975, 88–90, charts XIX–XXI.

<sup>&</sup>lt;sup>19</sup> Kitchen 1996, especially part three.

 $<sup>^{20}</sup>$  Yoyotte 1976–77; Cf. Kitchen 1996, 534-5.

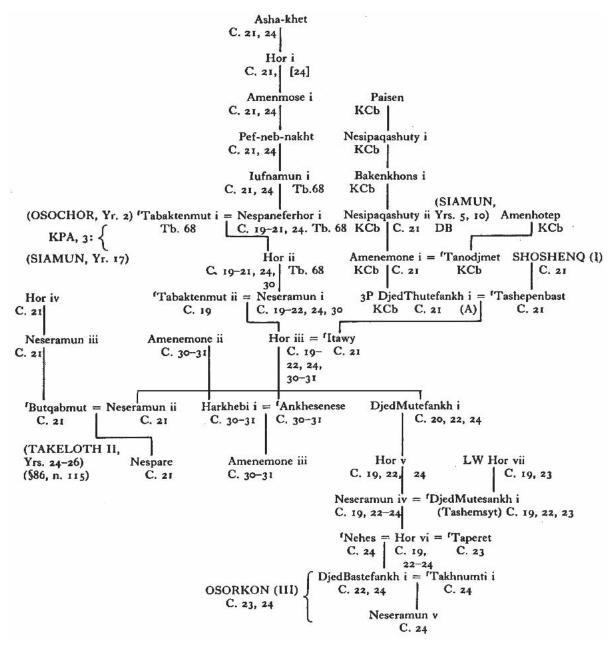


Fig. 6 Family of Neseramun (KITCHEN 1996, 202; reproduced by permission of Aris & Phillips, Oxbow Books)

the monuments of one (genealogical) generation may be widely apart in time, depending on when their owners died. Another element of uncertainty is the date of a posthumous dedication. It is generally assumed that monuments like temple statues were made a short time after the death of their owners, but this is not certain in every single case. A good example for some of theses problems is the Neseramun family (Fig. 7).

Neseramun V dedicated the statue CG 42224 to his father Djedbastetefankh, and Djedbastetefankh himself and his elder brother Neseramun VI dedicated CG 42222 and 42223 to their father Hor (VI). CG 42223 and 42224 bear the cartouches of Osorkon III. Because Osorkon reigned for at least 28 years, CG 42223 was probably erected in the beginning of his reign,<sup>21</sup> CG 42224 towards the end, both being about a generation

Another, yet unpublished, statue of Neseramun VI himself (Kairo TN 20/2/25/2) is dated by the cartouches of Osorkon (III) and Takeloth (III). It was probably erected shortly after his death.

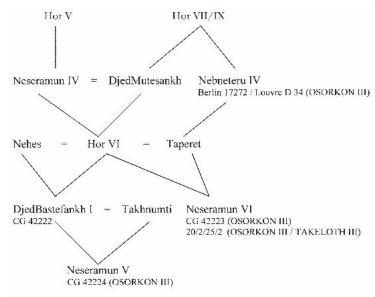


Fig. 7 Family of Neseramun, descendants of Hor V and Hor IX

apart from each other. But there is a complication: Nebneteru (IV), the father-in-law of Hor VI, dedicated a statue to his father Hor (IX),22 and Nebneteru himself is the owner of a vase now in the Louvre.<sup>23</sup> Both objects are dated by the cartouches of Osorkon III. In other words, monuments of no less than 4 generations were erected during the reign of Osorkon III, which was hardly longer than 30 years. This shows how misleading the simple counting of generations can be. The genealogical table of this family (Fig. 6) contains another irregularity: The 3rd prophet of Amun DjedThotefankh married a daughter of Sheshong I,<sup>24</sup> but the statue of his son, a vizier, is dated by the name of Sheshong III,<sup>25</sup> giving a gap of far more than two generations. As Kitchen and Bierbrier have shown,<sup>26</sup> this is nonetheless possible, there is no need to "emend" our evidence. But it demonstrates again the inherent problems of genealogical counting. The question of whether or not the objects of a genealogical generation are different in time can to a certain extent be solved by archaeological data: this is the subject of D. Aston's paper.27 Anyone who tries to make a rough chronological calculation by counting generations with the help of long pedigrees

and genealogical tables should be aware of these difficulties.

6. However, the actual crux of any calculation of this kind is the average length of a generation. A reliable statistic calculation for a short period is not possible unless we have an ample supply of data like that available for the demography in modern states. In historical and genealogical studies of the Middle Ages and modern times, which deal with longer periods, a generation is estimated at about 30 years<sup>28</sup> or a third of a century;<sup>29</sup> note the approximate figures. In these studies, the basis for such calculations is the use of a sufficient number of genealogical tables. Such tables have been collected in large numbers for the late Middle Ages down to modern times, with exact dates of birth and death for each person.<sup>30</sup> This is indeed a base for calculating an average.

For Ancient Egypt, we lack any such basis. As I tried to demonstrate, we have a small amount of long pedigrees and we can put together genealogical tables for a few families from Thebes, but this is a scanty base for a reliable calculation, all the more so since the most important detail is lacking throughout: the dates of birth.

<sup>&</sup>lt;sup>22</sup> Block statue Berlin 17272, ROEDER 1924, 73–75.

<sup>&</sup>lt;sup>23</sup> Louvre D 34, Legrain 1908, 171–172 (Doc.18).

<sup>&</sup>lt;sup>24</sup> Block statue Cairo CG 42221, e, 5–8, JANSEN-WINKELN 1985, 539.

Block statue Cairo CG 42232, ibid., 556

<sup>&</sup>lt;sup>26</sup> Kitchen 1996, 205-209; Bierbrier 1975, 64–66.

 $<sup>^{\</sup>rm 27}\,$  "Why Texts Alone are Not Enough: Chronology in the Third Intermediate Period", not published.

VON BRANDT 1983, 41 ("rund 30 Jahre").

<sup>&</sup>lt;sup>29</sup> DE BATTAGLIA 1948, 29 ("ein Dritteljahrhundert"); 117.

Ibid., passim.

In the 19th century, Egyptologists estimated a generation at 30-35 years, as is usual in historical studies elsewhere.31 In 1935, L. Borchardt had a critical look at the problem, and he rightly pointed out how insufficient our data is for any reliable calculation of an average.<sup>32</sup> In this connection he published the now famous genealogy of a family of Memphite priests Berlin 23673<sup>33</sup> (Fig. 2), whereby he calculated the median length of a generation on that very monument at 22,8 years. His final conclusions<sup>34</sup> were somewhat contradictory: On the one hand, he stated that the average length of a generation of the upper classes in Egypt could only be little shorter than that of Europe. On the other hand he thought that the average of 22,8 for the Berlin Genealogy was not so wide off the mark. For the sake of convenience, one could calculate 4 generations in a century, that is 25 years, but he conceded that even this was a very low estimation. So he considered 25 years as the lower limit for the length of a generation.

His statements were on the whole rather cautious and his so far unusual low figure of (at least) 25 years was supported only by the Berlin Genealogy. This single family would in fact have had an average of 22,8 years, but it goes without saying that this genealogical compilation of 60 generations is the least trustworthy of all we possess, and, as stated above, in some parts is definitely wrong. In spite of this, Borchardt's 22,8 years seem to have been very influential. The first major work to deal at length with the priestly families of the early first millenium was Hermann Kees' "Das Priestertum im ägyptischen Staat vom Neuen Reich bis zur Spätzeit", published in 1953. Kees estimates the length of a generation at 20-25 years, without further explanation.35 Five years later, H. de Meulenaere mentions that 25 years presents the highest possible figure for a generation, with reference to Kees<sup>36</sup>. K. Kitchen, in his study on the Third Intermediate Period, calculates with an average of 20 years, but allows for a margin of 5 years.37

In 1975, 40 years after Borchardt's study, M. Bierbrier published "a chronological and genealogical investigation" on "The Late New Kingdom in Egypt". At the very beginning he states "a generation will be assumed for the purpose of calculation to be twenty years although this study may in fact show it to be nearer to twenty-five years". 38 This figure, 25 years, is arrived at in the following way:<sup>39</sup>

The chief worker at Deir el-Medineh, Kaha I, was a younger contemporary of Ramses II. His descendants are well-known in continous succession down to Ramses XI. at the end of the New Kingdom: 40 a distance of 6 generations. Moreover, there is a connection between his family and the scribes of the necropolis:<sup>41</sup> Taweretemheb, the sister of Anherkhawi II, married the scribe Amennakht (X), and a great-grandson of Amennakht, the famous scribe Thutmose, was a close contemporary of the High Priest Piankh. Thus we have a link to the family of High Priests of the 21st Dynasty, which can be traced down to Osorkon I (6 generations distant from Piankh). The royal family of the 22<sup>nd</sup> dynasty is best known from the stela of Pasenhor<sup>42</sup> (Fig. 8), dedicated in year 37 of Sheshonq V, near the end of his reign. In my calculation we have a distance of 20 generations between Kaha and the end of the reign of Sheshonq V (6 + 6 + 8 generations from Osorkon I down to Pasenhor B). Bierbrier, on his part, counts 20 to 21. Then, he adds one generation that covers the reigns of Piankhy, Osorkon IV, and Tefnakht, and another three generations covering dynasty 25 until 664 B.C.43 However, these three generations cannot be determined with the help of genealogical tables because we have no pedigrees with a link to Sheshonq V. And if we consider the royal family of the 25th dynasty, 3 generations between Piankhy and the end of the dynasty may be too many: King Taharka, the son of Piankhy, reigned until 664.

Nevertheless, Bierbrier arrived at 24-25 generations. Now, if we calculate a generation at 20 years, we have to add 480-500 years to the starting

<sup>&</sup>lt;sup>31</sup> E.g. Haigh 1869, 43–44; Lieblein 1869, 121-122, Wiede-MANN (1890, 505), on the other hand, argued for a much shorter generation of just 26 years.

<sup>&</sup>lt;sup>32</sup> Borchardt 1935, 94–95.

 $<sup>^{33}</sup>$  *Ibid.*, 96–112; Bl.2/2a.

<sup>&</sup>lt;sup>34</sup> *Ibid.*, 111–112.

<sup>&</sup>lt;sup>35</sup> Kees 1953, 280.

<sup>&</sup>lt;sup>36</sup> CdE 33, 195.

<sup>&</sup>lt;sup>37</sup> KITCHEN 1996, 79.

Bierbrier 1975, XVI.

Ibid., 112-113.

Ibid., 36-39; chart IX.

<sup>41</sup> Ibid., 39-41; chart X.

<sup>&</sup>lt;sup>42</sup> Louvre SIM 2846, Malinine, Posener, and Vercoutter 1968, 30-31; pl.10 (31); KITCHEN 1996, 488.

<sup>&</sup>lt;sup>43</sup> Bierbrier 1975, 112.

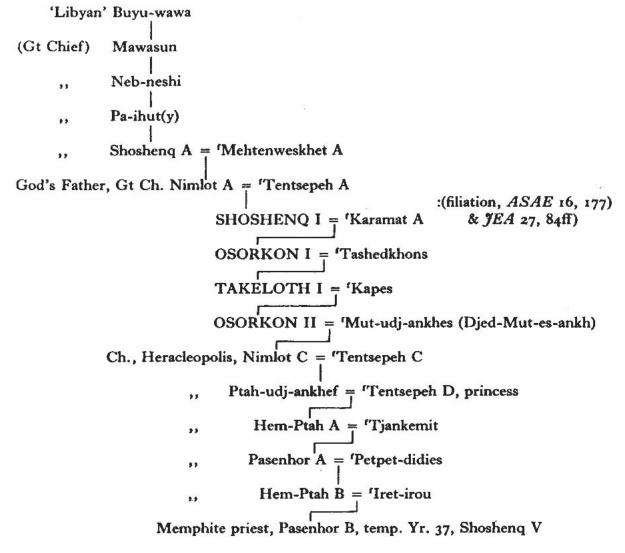


Fig. 8 Pedigree of Pasenhor (KITCHEN 1996, 488; reproduced by permission of Aris & Phillips, Oxbow Books)

point 664; this would add up to 1144-1164 for Ramses II, much to low for conventional chronology. Calculated at 25 years, we arrive at 1264–1289; this would fit well. But Bierbrier drew a further conclusion: His results are compatible with an astronomically calculated accession date of Ramses II in 1279 or 1290. To arrive at 1304, it would be necessary to increase the time span of the average generation or to increase the total number of generations. The latter solution, he thinks, is not possible (and I can only agree, it is already too high). Thus, he concludes: "Since the number of generations should not be increased and any increase of the time span of each generation over 25 years is suspect, the generation analysis of the period from the accession of Ramses II to 664 B.C. tends to weaken the argument in favour of 1304 B.C. as the accession date of Ramses II.

Weak points in his line of argument have been pointed out long ago by David Henige.44 Bierbrier's calculation is based on a combination of a few excerpts of genealogical tables. These excerpts may contain all sorts of deviations from the average. Just one accidental succession of necropolis scribes, Highpriests and kings cannot be the basis for calculating the average length of a generation. Moreover, he does not even attempt to explain why a generation length of more than 25 years should be "suspect". This alleged upper limit is a pure assertion without any justification.

<sup>&</sup>lt;sup>44</sup> Henige 1981.

Incidentally, in my calculation I count only 22 generations instead of 24–25 (20 down to Sheshonq V, as shown, and 2 for the 25<sup>th</sup> dynasty). This would amount to a median length of generation of 28 years for a generation in this case. But, as stated above, such an accidental addition of genealogical pieces is certainly not a sound base for general conclusions.

In spite of these shortcomings, Bierbrier's calculation has been almost universally accepted, his 25 years are now regarded as the median length or even the upper limit for a generation by most egyptologists. 45 Kitchen, in a study on the king list of Ugarit, went even further and postulated 22 years, not only for Egypt, but for the whole Near East: "A generation in the ancient Near East can be about 22 years, 20 years is too short, and 25 years is too long."46 As proof for this rather apodictic statement he refers to Bierbrier's study. Von Beckerath is even more exact and estimates the average length of a generation at 22.5 years. 47 It is remarkable that modern historical science, which commands a huge mass of detailed and reliable sources, still does not even attempt to give such exact dates. Nor does modern demography: both are usually content to give rough figures such as 30-33 or 35 years.

7. Now, is there any possibility to arrive at a reasonably realistic average? On the one hand, one can try to determine whether the length of a generation in Ancient Egypt was shorter or rather longer than in Western societies. For example, was the average male age at first marriage lower or higher than in Western societies? Borchardt thought that the Egyptians, male as well as female, were capable of reproduction earlier than Europeans, and therefore the first-born child arrived earlier than in Europe<sup>48</sup>. This may be so, but it is only an assumption, there is no data whatsoever to support his opinion.

A priori, a great statistical deviation from the average length of 30–33 years for a generation in the Middle ages and modern history is very suspi-

cious, and a 5–8 year difference or even more would be a huge deviation in statistics. Herodotus actually informs us (II,142) that 3 generations make up a century in Egypt, 49 and that is the same value observed elsewhere in history.

It would be important to know the average age of a male when he first married. In Ancient Greece it seems to have been at about 30 years.<sup>50</sup> For Ancient Rome, the inscriptions point to a much younger age of about 23–24 years.<sup>51</sup> There is no such data for Pharaonic Egypt, but for Roman Egypt, we have the so-called census declarations, with detailed information about more than a thousand people. In their study on the demography of Roman Egypt, Bagnall and Frier conclude that "the median male age at first marriage may in fact be slightly later than 25 years."52 In modern demography, the length of a generation has been defined "to be equal to the average male age at marriage, plus one year before child-bearing begins, plus half the average number of years during which fecundity lasts."53 According to this calculation, an age at first marriage of 25 years or more would lead to a length of generation distinctly higher than 30 years. But perhaps we should not apply this calculation to our data without reservation: Most genealogies we have are from sons who inherited their fathers' main office; as a rule, they should be the eldest surviving sons. On the other hand, all these people were members of the upper classes, wealthy and in good positions. Thus, even men in advanced age could be attractive candidates for marriage, and indeed we know that some key-figures of great families fathered children in advanced age.<sup>54</sup> One or two such cases can considerably increase the average length of generation in a pedigree. On balance, general considerations seem to favour an average length of generation of about 30 years rather than 25 years in Ancient Egypt. In my opinion, all figures lower than 25 years are out of the question. Further evidence might come from Herodotus, who reckons three generations to a century, and also

<sup>45</sup> BOTHMER 1981, 80, even assumes "a generation span of about twenty years".

<sup>&</sup>lt;sup>46</sup> Kitchen 1977, 136.

<sup>47</sup> VON BECKERATH 1997, 29 ("der Generationendurchschnitt ist in Ägypten … mit etwa 22,5 Jahren zu veranschlagen").

<sup>&</sup>lt;sup>48</sup> Borchardt 1935, 111.

<sup>&</sup>lt;sup>49</sup> Cf. the discussion by LLOYD 1975, 176ff.

<sup>&</sup>lt;sup>50</sup> Wiesehöfer 1998, 256–258.

<sup>&</sup>lt;sup>51</sup> Loc. cit.

 $<sup>^{52}</sup>$  Bagnall and Frier 1994, 116.

<sup>&</sup>lt;sup>53</sup> Jacobs 2005, 1.

<sup>&</sup>lt;sup>54</sup> Cf. Kitchen 1996, 208–209; Bierbrier 1975, 3.

from the Egyptian Sed-festival. Its 30 years may indeed reflect the conception of the length of a generation.55

- 8. Apart from these general considerations, we can try to compare Egyptian genealogies with traditional chronology; this procedure may give us some concrete figures. But one should always bear in mind that the average length of a generation within a single pedigree is not the average for the whole country or period. In fact, it may be very different from the general average. As an example, I could use my own family: I was born in 1955. If we calculate the average length of generation at 30 years, my father should have been born in 1925, my grandfather in 1895 and my great-grandfather in 1865. In fact, my father was born in 1908, my grandfather in 1873, and my great-grandfather in 1815. Thus, after 3 generations, we have a difference from the average of no less than 50 years. Now let us examine some egyptian examples.
- On the statues Cairo CG 42188/89 from the reign of Osorkon I (Fig. 1) we find a long genealogy.<sup>56</sup> The last but one ancestor, Ipui, was in office under Merenptah. His father, the second prophet of Amun Roma, was also the father of the High-Priest Bakenkhons, and the career of Bakenkhons is well-known:57 He served in the stables of Sethos I for eleven years and as a priest for seventy years. Thus he should have been born during the reign of Haremhab, and Ipui must be a younger son. If he was in office under Merenptah and his brother was born under Haremhab, he could have been born in the first decade of Ramses II. Because of the alleged average of 25 years for a generation it has been supposed (and I did so myself)<sup>58</sup> that this genealogy is wrong, too short. But if we assume that both statues were dedicated in the beginning of Osorkon's reign, about 920, the dedicator could have been born about 965. If Ipui was born around 1275, we have a difference of 310 years, and a

- duration of 9 generations. This would yield an average of 34,44 years for this family, in no way unrealistic, as I now see it.
- The pedigree of Khnumibre<sup>59</sup> (Fig. 4) is dated to 496 B.C. Khnumibre himself is attested with high titles already in 526 under Amasis, but still together with his father.<sup>60</sup> A year of birth around 550 should be realistic. The oldest member of this pedigree, 22 generations earlier, is the vizier and architect Rahotep, wellknown from the time of Ramses II.61 Another prominent ancestor could be the architect Horemsaf 12 generations earlier, who is known from year 21 of Sheshong I.<sup>62</sup> 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. If we reckon with 34 years, we will get 1298 and 1258 for Rahotep, and 958 and 918 for Horemsaf. This would fit very well. For Amunherpamesha, 63 not attested in his times, we would get 1060 and a floruit at about 1020, also a reasonable time.
- In the genealogy Berlin 2096<sup>64</sup> (Fig. 3), the author is introduced as jt-ntr-priest in the third year of Tanutamun, that is 662 B.C. Because jtntr is a rather low rank, he should have been still a young man; he may have been born between 680 and 690, let's say 685. The ancestors third to fifth from last are probably known from the Neseramun-family.65 Nespaneferhor, a great-grandson of Amenmose (Fig. 6), was introduced as priest in year 2 of Osochor (about 980), his father in year 17 of Siamun (about 960)<sup>66</sup>. If they were born about 1000 and 980, we can calculate 315 years for the 9 generations from Padichons to Nespaneferhor, an average of 35 years.
- On a block statue from Dendera,67 a priest Basa lists 25 generations of forefathers. The 19th ancestor is the well-known Nebwenenef, who was appointed Highpriest of Amun in the first year of Ramses II.68 Unfortunately, the

 $<sup>^{55}</sup>$  Martin 1984, 784; 788–789, n.33.

<sup>&</sup>lt;sup>56</sup> Jansen-Winkeln 2003, 222.

<sup>&</sup>lt;sup>57</sup> Jansen-Winkeln 1993, 221–225.

<sup>&</sup>lt;sup>58</sup> Jansen-Winkeln 2003, 222–223.

<sup>&</sup>lt;sup>59</sup> Posener 1936, 98–105.

<sup>60</sup> *Ibid.*, 88–91.

<sup>61</sup> KITCHEN 1980, 52–67; ALTENMÜLLER 1975.

<sup>&</sup>lt;sup>62</sup> Caminos 1952, 51; 56; pl.XIII.

<sup>&</sup>lt;sup>63</sup> Cf. above, § 3.

<sup>&</sup>lt;sup>64</sup> VITTMANN 2001, 357–362; 369.

<sup>65</sup> Ibid., 362 (v).

<sup>&</sup>lt;sup>66</sup> KITCHEN 1996, 202–204

<sup>&</sup>lt;sup>67</sup> Ritner 1994.

<sup>&</sup>lt;sup>68</sup> Sethe 1907; Kitchen 1980, 282–285.

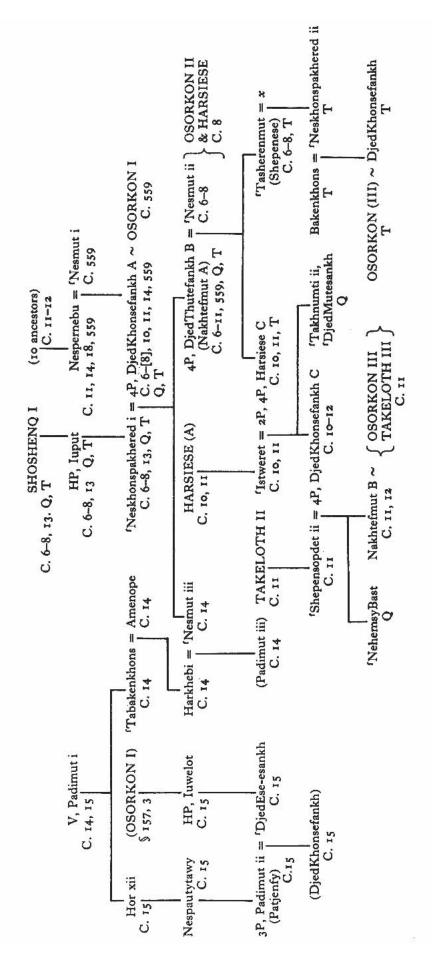


Fig. 9 Family of Nakhtefmut A (Kitchen 1996, 220; reproduced by permission of Aris & Phillips, Oxbow Books)

statue itself is difficult to date. The editor assigned it to the late 22nd dynasty, when extensive pedigrees were especially popular. The owner Basa held many titles, so he should have been advanced in years. A year of birth around 800 would not be improbable. Nebwenenef was introduced in year 1 of Ramses II and died about year 12, a year of birth around 1330 might be realistic. Thus we have 19 generations in 530 years, an average of circa 28 years. But on this statue, the name of Osiris is repeatedly written in a form characteristic for the period following the 22<sup>nd</sup> dynasty.<sup>69</sup> Thus a year of birth around 750 might be more appropriate. This would result in an average of about 30.5 years.<sup>70</sup>

- The author of the Pasenhor genealogy<sup>71</sup> (Fig. 8) is attested with modest titles in year 37 of Sheshonq V, about 740; he may have been born in 770. Sheshonq I is 9 generations apart, he became king in 945 or a little later, and reigned for at least 21 years. He may have been born around 990. We thus find 9 generations in 220 years or an average of 24.4 years. It should be noted that this is a pedigree with a continous succession of father and eldest son.
- The statue Cairo CG 4221172 was dedicated during the coregency of Osorkon III and Takeloth III, probably around 770. Being a 4<sup>th</sup> prophet of Amun, the dedicator Nakhtefmut B cannot be a very young man, perhaps he was 40 and born in 810. Thus we get 180 years to 6 generations up to Sheshonq I (the grandfather of the wife of his great-great-grandfather, Fig. 9), an average of 30 years, if Sheshonq was born in 990.

Of course, we should not put to much emphasis on these examples, the calculations contain much guesswork. The different results are in no way contradictory or even astonishing, but they can teach us that it is not reasonable to take one single genealogy as a base for general conclusions. Nevertheless, these examples as well as general considerations suggest that the average length of a generation in Ancient Egypt might be nearer to 30 years than to 25 years.

9. Genealogical information should be used for chronological purposes only if there are no better sources. It may be a useful aid to determine whether a person lived earlier or later than another, it can give hints as to whether a chronological reconstruction is more probable than another one. Long pedigrees and genealogical tables with at least two members fixed in time can be used for a rough chronological estimation by counting the generations - but, of course, the whole operation reveals something of a circular argument, if we determine the average length of a generation with the help of the established chronology. Nevertheless, I think it is quite probable that this average is not drastically different from other pre-modern societies. But the material at our disposal and the necessary vagueness of calculation (without exact dates) only allows a rough estimation. A person many generations apart can only be fixed by a margin of some decades. This is enough to refute the conclusions of chronological extremists and to confirm conventional chronology in a very general way. But it cannot help to solve specific chronological problems such as the choice between the astronomically calculated accession dates possible for Ramses II.

Thus genealogical information can help us in chronological questions, but only to a very limited extent.

<sup>&</sup>lt;sup>69</sup> Cf. Leahy 1979.

<sup>&</sup>lt;sup>70</sup> Recently I. Guermeur has proposed dating this statue to the end of the 25th dynasty or the beginning of the Saite periode (GEURMEUR 2005, 353). This would yield a date of birth of around 700 and an average generation length of 33,2 years.

MALININE, POSENER, and VERCOUTTER 1968, 30-31; pl. 10 (31); Kitchen 1996, 488.

 $<sup>^{72}</sup>$  Legrain 1914, 28–32; pl. XX; Jansen-Winkeln 1985, 83-99; 470-481; Taf. 18-21.

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