Ancient Egyptian Chronology

Edited by
Erik Hornung,
Rolf Krauss, and
David A. Warburton

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THE RELATIVE CHRONOLOGY OF II. 5 **DYNASTIES 6 AND 8**

Michel Baud

Although data are quite abundant for Dyn. 6 and derive from a variety of sources (royal annals and decrees on stone, administrative documents on papyrus, expedition graffiti), the interpretation of the dating system used by the monarchy remains controversial. For this period, the dogma of the biennial census has been challenged in the most recent studies, especially in the compilations of Spalinger¹ and Helck² prior to the publication of the South Saggara Stone, with the royal annals of Dyn. 6.3 In theory, the discovery of such a monument might be expected to clarify chronological questions, since the text is organized in year-compartments ending with the citation of the year, either of the census type (mpt zp) or post-census type (mpt m-ht zp). But unfortunately, the inscriptions were quite systematically erased prior to the reuse of the slab as a sarcophagus lid, so that neither the demarcation of the compartments (which may in any case have been painted, rather than carved) nor most of the dates are preserved. Documents of significantly later date, such as the TC, do not provide any help for evaluating the dynasty's duration, or the lengths of individual reigns. Most, if not all, of the figures preserved are at odds with contemporaneous OK data, despite repeated efforts to reconcile the two.4 Therefore, the value of the papyrus lies more in the realm of historiography than in chronology.5

 $^{^1}$ Spalinger, "Texts", 275–319. 2 W. Helck, "Gedanken zum Mord an König Teti", in: Fs Goedicke, 108–109.

³ Baud & Dobrev, "Annales", 30–31; Baud & Dobrev, "Le verso des annales de la VIe dynastie, Pierre de Saqqara-Sud", *BIFAO* 97 (1997), 35–42.

See Beckerath, Chronologie, 147–152.
 Baud, "Ménès", 126–132.

Reign of Teti

No dates are preserved on the annals (recto, first register),6 and the absence of lines dividing year-compartments does not even allow an estimate of the reign's total length. The space allotted Teti seems much too small to accommodate the available data; most likely, the monument displayed a summary of the reign with compartments of very reduced size. Possibly what was initially considered the recto is rather the verso,⁷ but arguments in favour of this are weak.⁸

The Abusir archive from the funerary temple of Neferirkare' provides a number of dates for the early part of Teti's reign.9 All come from pBerlin 10.474A-B recto and verso (HPBM V, 1969, pl. 92-95), a narrow roll which belongs to a single reign, as is obvious from the coherent time span of the recorded dates. Teti's serekh (pl. 94) clearly identifies the sovereign, at least for the left document of the presumed verso preserving the earliest dates:

- [mpt (m)-ht zp 1], III prt sw 'rk(y); mpt (m)-ht zp 1 [III prt] sw 10; mpt [(m)-ht zp 1] III prt sw 9, in reverse order (pl. 94, left doc.), to which the recto adds two:
- mpt (m)-ht zp 1, III šmw sw 3 (pl. 94, right doc.),
- mpt (m)-ht zp [1], IV šmw sw [x] and mpt zp 2, II šmw sw 3, in normal order (pl. 92).

pBerlin 15.729 verso (pl. 103) provides another date: [mpt] (m)-ht zp [x], $I \ni ht$ sw 3, but the year is missing and the identity of the king remains uncertain. It should not be Teti,10 since the recto displays a basilophorous name citing a king Pepy¹¹ (not necessarily Pepy II). Whatever the numeral was, this document provides another example of a post-census year.

⁶ Baud & Dobrev, "Annales", 23-92.

⁷ V. Dobrev, "The South Saqqara Stone and the sarcophagus of Queen Mother Ankhesenpepy", in: M. Barta & J. Krejci, eds., *Abusir and Saqqara in the Year 2000* (Prague: Archiv Orientální Supplementa 9, 2001), 382–384.

⁸ Baud & Dobrev, "Annales", 54; Baud & Dobrev (n. 3; 1997), 38. ⁹ Posener-Kriéger, *Archives* II, 491.

¹⁰ Helck, Fs Goedicke.

¹¹ Posener-Kriéger, Archives II, 491.

Other dates for the reign of Teti are:

- mpt (m)-ht zp 6, III šmw sw /x: a graffito at the alabaster quarry of Hatnub (gr. no. 1);12
- mpt zp 11, I 3ht sw 20: an ink inscription in the tomb of Nykau-Izezi (Teti Cemetery, Saqqara), added to a scene of fowling in the marshes, just above the boat in which the owner stands.¹³ The inscription dates the official's burial "the 11th count, I 3ht sw 20: burial in the necropolis of the prince, the treasurer of Lower Egypt, Nykau-Izezi". Although a king's name is not mentioned, all arguments favour the reign of Teti. By doubling the number of "occasions" hitherto known, this new date raises several questions (see below).

Reign of Userkare

The South Saggara royal annals,14 demonstrate conclusively the existence of this king, but almost nothing remains of the section in the middle of the uppermost register devoted to his reign. The available space between the titularies of Teti and Pepy I, when compared to the size of an average year compartment of the latter, indicates that Userkare's reign must have been brief, from two to four years. This conclusion is consistent with the very few monuments of this king, mostly seal impressions, so far recovered. The silence of contemporaneous private biographies is disturbing. A funerary complex planned but never erected, is a better explanation for this absence than a speculative damnatio memoriae. 15 Regardless, the chronographic purpose of the royal annals did not allow the omission of this king, whatever form his titulary may have taken.

¹² Eichler, E., Untersuchungen zum Expeditionswesen des ägyptischen Alten Reiches (Wiesbaden, 1993), 41, no. 36.

^{13 (}a) N. Kanawati & M. Abder-Raziq, The Teti Cemetery at Saggara VI. The Tomb of Nikauisesi (Warminster: ACE Reports 14, 2000), pl. 50; (b) N. Kanawati, "A new htt/ mpt-zp for Teti and its implication for Old Kingdom chronology", GM 177 (2000) 25 - 32.

 ¹⁴ Baud & Dobrev, "Annales", 28, 53, 59-62.
 ¹⁵ R. Stadelmann, "König Teti und der Beginn der 6. Dynastie", in: Fs Leclant I, 335.

Reign of Pepy I

Again, the discussion must start with the data preserved in the annals stone from South Saggara. The reign extends from the last third of the first register (A) to the very beginning of the fifth (E). Although there is again no demarcation of year-compartments, traces of a number of memorial formulae (nswt bjt Ppy jm.f m mnw.f) provide clues for reconstructing the original layout. 16 The twelve surviving formulae (M3-M14) are spaced at rather regular intervals (× 2 or × 3 where one, or perhaps two formulae are lacking), which supports as estimate of the original number at up to 25. Since both "occasion" and "afteroccasion" years are known for the reign, obviously each mnw-formula was associated with a pair of years, a census year and a post-census year, presuming a regular biennial system.

Contrary to the editio princeps of the monument, 17 it is, however, by no means certain that a single heading systematically covered two years. Some compartments, especially at the beginning of a register, indeed appear much larger than others (see especially M5, second reg., and one formula before M10, fourth reg.). Therefore, it is tempting to conclude that they group two different years, by contrast to the others, which represent the vast majority of the (theoretical) compartments. But there are a number of objections to such a radical proposition. First, the size of a compartment might vary slightly according to the number of available and/or relevant data that needed to be recorded for posterity, as exemplified by the difference between the first and the second register where the average distance between successive mnw is respectively 30 and 40 cm. For years of crucial importance to the monarchy, such as the royal jubilee, the compartments could have been much larger than the average, although this is not an absolute necessity (cf. the minimal size of the first year, dedicated to the coronation rites). Secondly, there is at least one surviving example of two years grouped in a (theoretical) compartment of average size, reg. D, formula following M11 (hereafter M11 + 1). The date preserved here, a census year, occupies the middle of the available space and not the end, as anticipated for the case of a single year covered by its own mnw-formula. Nonetheless, if it is possible that most of the memorial

Baud & Dobrev, "Annales", 50–53.
 Baud & Dobrev, "Annales", 50–52, fig. 19.

formulae grouped census and post-census years together, the present condition of the stone leaves some doubt about the generalization of such a layout. Only parallel evidence from other sources might help to solve this problem. The dates preserved in the annals are indeed very few for the reign of Pepy I, and not unproblematic as regards their reading:

- mpt zp 18 (reg. D, M11 + 1, text zone D4);
- mpt (m)-ht zp 23 (reg. E, M14 + 1, text zone E7);
- mpt / m-ht? / zp 25 (reg. E, M14 + 3, text zone E8).

These high counts are also attested in several expedition graffiti¹⁸ and a royal decree:19

- mpt (m)-ht zp 18, III šmw sw 27: Wadi Hammamat graffito no. 107, mentioning the first jubilee;
- mpt m-ht zp 18, IV šmw sw 5: Sinai graffito no. 16, mentioning the first jubilee;
- mpt zp 21, I prt sw 23: decree for the Pyramid complex of Snofru, Dahshur:20
- mpt zp 25, I 3ht sw /x/: Hatnub quarry graffito no. III, once more associated with the first jubilee.

Major clearance work at the king's pyramid, South Saggara, 1987–88 and 1993-97, revealed a few dates among the great number of masons' marks.²¹ Most did not include the year but, according to common practice,²² only a season, month and dav.²³ A block from the eastern end of the south side is a notable exception.24 After the group mpt(?)-zp there is an hieratic sign, which at first sight reads 30, followed by two vertical strokes. Such a high date, count 32 (or even 22), from an early

¹⁸ Eichler (n. 12), nos. 133, 16, 30.

¹⁹ Spalinger, "Texts", 303-304.

²⁰ Goedicke, Dokumente, 55-77, fig. 5.

²¹ A. Labrousse, L'architecture des pyramides à textes. II, Saggara Sud, (Cairo: BdE 131,

²² For the mastaba of Ptahshepses see M. Verner, Abusir II. Baugraffiti der Ptahschepses-Mastaba (Prague, 1992), 176–198.

23 V. Dobrev, "Observations sur quelques marques de la pyramide Pépi Ier", in: Fs

Leclant I, 150-151.

²⁴ Dobrev, pers. comm. 1994; see also F. Raffaele in 2001, "Sixth Dynasty Annals. The South Saggara Stone", http://members.xoom.it/francescoraf/hesyra/ssannals.htm. The mark is visible in Labrousse (n. 21), fig. 10, but at a very reduced scale.

stage of the construction (corresponding to the 5th course of revetment blocks), leaves some doubt about this reading. Furthermore, since the highest count of the reign is 25, as confirmed by both the royal annals and the other contemporary data, the only satisfactory solution is to suppose that a double system of counting, one annual, the other biennial (whether regular or not) existed. The annual *mpt-zp* 32 should be therefore equated with a lesser number of biennial census counts, at least 16 if regular. (Note that an anomalous group of 19 strokes in two rows (10 + 9) just before the date is obviously a calculation of some sort, not necessarily connected to the dating system). At present, and until adequate publication, this intriguing problem defies solution. Conceivably, it may eventually provide a key to explaining the contradictory dates for the king's first jubilee.

The date of Pepy's first heb-sed is controversial, since it is associated with two different years, counts 18+ and 25.25 Taking the two figures at face value, they would have been separated by at least 6 years (systematically excluding post-census dates in this period, which is unlikely), and as many as 12 (with systematic post-census years). Therefore, the significance of both or either might reasonably be challenged, and could attest the prevalence of the Wunsch-Idee in the mention of the jubilee, for the benefit of the king's longevity.26 A strictly historical/chronological interpretation is, however, still possible. Spalinger ingeniously envisaged the existence of two parallel dating systems at this period, one annual, i.e., 25 counts, the other (irregularly) biennial, i.e., 18 census counts, plus presumably 7 post-census.²⁷ Although interpretation of building graffiti may support this hypothesis, there remains the very confusing consequences of such a theoretical double system, both citing all years simply mpt-zp. Furthermore, Spalinger has not considered one important factor: the context in which the dates are actually associated with the jubilee. As for the Sinai relief, there is no direct equation between the first jubilee and the date of the expedition. And though the scene depicts the royal ceremony in a format typical of an

²⁵ These do not refer to two different jubilees as P. O'Mara ("Dating the Sed-Festival: Was there a Single Model?", *GM* 136 [1993], 57–70) thought, nor can the second belong to Pepy II (as proposed by J.v. Beckerath, "Gedanken zu den Daten der Sed-Feste", *MDAIK* 47 [1991], 30; tentatively Eichler [n. 12], 39).

²⁶ E. Hornung, "Sedfest und Geschichte", MDAIK 47 (1991), 169–171; with earlier literature.

²⁷/Spalinger, "Texts", 305–306.

year compartment in the annals, it is an all too frequent royal tableau to be taken as a true date.²⁸

The same may possibly hold true for the other inscriptions, although the same historical connection between the Sinai and the Hammamat graffiti, both under count 18+, end of the shemu-season, may not be fortuitous.²⁹ However, a tendency to mention the jubilee repeatedly in the years following its celebration apparently existed, 30 for example, in connection with intense building activity at the royal funerary complex, down until the very end of the reign (i.e., count 25). Here again, the royal annals furnish a new argument favouring this hypothesis. Between the mention of count 18 and the next memorial formula which belongs to count 19, end of register D, the available space for count 18+ is the expected half of the average size of a theoretical compartment. It is hard to believe that such a narrow space corresponds to the jubilee celebration, which obviously had a considerable importance for this (and every) king, as is documented, for example, by the number of stone vessels celebrating the event.31 (Count 25, the very last compartment of the annals, is of course excepted). By contrast, the longest compartment of the reign-more than half again the average length-is M10-1 (i.e., one formula before the preserved M10) at the beginning of register D. Fortuitously or not, this compartment corresponds precisely to year 30/31, if a strictly biennial system of numbering is presumed.³² This could also explain why the handful of documents dated to the first jubilee did not cite any other date. For example, decree Coptos A simply epitomized the rule for the renewal of the king's powers after 30 years.33

Specialists, however, remain divided on whether this rule obtained during the OK.³⁴ There would therefore be no necessity to place the

²⁸ See, too, two inscriptions recording Merenre's visit to the First Cataract area to receive the hommage of Nubian chief(s). One displays a real date (count 5, see infra), reign of Merenre'; the other only a pictorial *zema-tawy* (*Urk. I*, 111), which may be indicative of the theoretical date—the coronation year—in which such an event would have taken place.

²⁹ J. Vercoutter, L'Égypte et la vallée du Nil, 1: Des origines à la fin de l'Ancien Empire (Paris, 1992), 326.

³⁰ See Hornung (n. 26), 170.

³¹ A. Minault-Gout, "Sur les vases jubilaires et leur diffusion", in C. Berger & B. Mathieu, eds., Fs Jean-Philippe Lauer (Montpellier, 1997), 305–14.

³² Raffaele (n. 24).

³³ Goedicke, Dokumente, 41-54, fig. 4.

³⁴ For the range of interpretations see Beckerath (n. 25), Hornung (n. 26), O'Mara (n. 25), A. A. Krol, "The representation of the 'Sed-Platform' in the Early Dynastic monuments", *GM* 184 (2001), 27–37.

jubilee as late as year 35/36,35 nor to equate mpt zp 18+, presuming Userkare' was a usurper, with a canonical year 30 of strictly personal rule,³⁶ an assumption invalidated by the royal annals.³⁷

Reign of Merenre'

The last register (F) of the recto of the Dyn. 6 annals is dedicated to the first years of this reign. The number of compartments is uncertain, but five or six is a reasonable estimate.³⁸ The dates preserved are:

- mpt zm3-bwy, associated with the first memorial formula (M15) of the register (text zone F1);
- mpt zp 1 (+ 1?), with the second formula (M16, zone F3);
- mpt (m)-ht zp 1 (+ 1?), probably with the next formula, not preserved (zone F5).

In our initial publication, we logically assumed that the two last dates were to be read as counts 2 and 2+, since in these annals, the Unification of the Two Lands was apparently considered a year of cattle census (the expression *tnwt jh* does follow the date). After this first census (count 1), a compartment was tentatively delineated to account for a post-census year after the Unification, 39 considering that for such years also the system remained biennial. Although this remains a possibility, there are weaknesses in such a reconstruction. In the first place, this so-called count 1+ would be confined to a very narrow space, when compared to the other very broad compartments of the last register. 40 Secondly, the figure of the next date consists of a very deeply carved single stroke, 41 and it is unlikely that another stroke ever existed; there is also no space available for an alleged second stroke under the zp sign. It may not be mere chance that the next date also retains only a stroke. These two dates should be read accordingly as counts 1 and 1+, even if the first year of the reign was labelled census year. Should the succeeding years be read 1/1+ or 2/2+, it is nonetheless clear that this

³⁵ Contra e.g., H. Goedicke, "Two Mining Records from the Wadi Hammamat", RdE 41 (1990), 65-93, at 67, and O'Mara (n. 25).

T1 (1990), 03–95, at 07, and O'Mara (r. 36 Contra Spalinger, "Texts", 305–306.

Baud & Dobrev, "Annales", 61–62.

Baud & Dobrev, "Annales", 48–49, 54.

Baud & Dobrev, "Annales", fig. 19.

Baud, "Ménès", 123–124.

⁴¹ Baud & Dobrev, "Annales", pl. VII c.

period experienced a biennial census. Since a year 5+ is also known (see below) and since it is likely that the document did not end abruptly in mid-reign, it must be concluded that the reign continued on the verso (see above, *contra* Dobrev),⁴² even if the titulary of this king probably featured in the introductory column of the recto, as recently proposed, citing new and convincing arguments.⁴³ Other sources are restricted to two rock inscriptions:⁴⁴

- mpt zp 5, II šmw sw 28, First Cataract area, Urk. I, 110, 12;
- mpt (m)-ht 5, Hatnub graffito no. VI.45

Once again, it is clear that the latest years of the reign experienced a biennial system.

Reign of Pepy II

Spalinger's list⁴⁶ remains relatively current and must be consulted for further references:

- mpt (m)-ht zp tpy, IV 3ht sw 10 (in two parts) and mpt zp 2, procession graffiti in Wadi Hîlal (El Kab), although the beginning of the reign of Pepy II is a good possibility, 47 the dates could belong to his predecessor Merenre';
- mpt zp 2, III 3ht sw 15, letter of the king to Harkhuf in his tomb, Aswan;
- mpt zp 2, Sinai graffito no. 17;48
- mpt zp 11, I šmw sw 23, the famous letter found in the workshop adjacent to Temple T in the Djoser complex, Saqqara; the reign is inferred from other chronological data of the archives;⁴⁹
- mpt (m)-ht zp 11, II šmw sw 26, decree Coptos B, temple of Min;

⁴² Dobrev (n. 7).

⁴³ Dobrev (n. 7), 384–385, pl. 58. ⁴⁴ Spalinger, "Texts", 306–307.

⁴⁵ Eichler (n. 12), 40, no. 33.

⁴⁶ Spalinger, "Texts", 307-308.

⁴⁷ H. Vandekerckhove & R. Müller-Wollermann, Elkab VI. Die Felsinschriften des Wadi Hilâl (Turnhout, 2001), 210–211, gr. O 144, and 183–186, gr. O 74; conclusions: 375–379.

⁴⁸ Eichler (n. 12) 35, no. 17.

⁴⁹ P. Posener-Kriéger, "Fragments de papyrus provenant de Saqqarah", *RdE* 32 (1980), 83-93.

- mpt zp 12, graffito of Tômas, either of the two Pepys, but more probably Pepy II;50
- mpt zp 14, 13ht sw 23(?), Hatnub graffito no. 3;51
- mpt (m)-ht 22, IV šmw sw 28 (date in two parts), decree Coptos C;
- mpt zp 31, III 3ht sw 3 /+ 3/, decree for the cult of Mycerinus, Gîza:
- mpt zp 31(?), IV prt sw /x/, graffito from the king's funerary temple,
- mpt (m)-ht zp 31, I šmw sw 20, Hatnub graffito no. 7:52
- mpt zp 33 (?) or 24 (?), IV sw /x/, decree for the cult of Queen Udjebten, Saggara.

There are also dates without a king's name which can be placed securely in the second half of Dyn. 6. The first two are from Giza:53

- mpt zp 2, III prt sw 27, two mason's marks on the walls of mastaba G 7803C, Giza Eastern Cemetery, and another citing the same year, but month, season and day lost;
- mpt (m)-ht zp 5, III prt sw 29, two execration texts from Giza. Another date comes from an expedition graffito at Tômas;⁵⁴
- mpt 6, III šmw, probably either Pepy I or II.

Biennial, Irregular or Annual Census? The Case of Dynasty 6

The regularity of the census, backbone of the Ancient Egyptian dating system, is still a matter of controversy for the OK. The most recent discussions of this crucial problem present the largest possible spectrum of interpretations, ranging from a regular biennial census⁵⁵ through an annual census with post-census years at irregular intervals⁵⁶ to a strictly annual one.⁵⁷ That an annual count was already established by Dyn.

⁵⁰ According to Eichler (n. 12), 105 (no. 227A).

⁵¹ Eichler (n. 12), 43, no. 39.

⁵² Eichler (n. 12), 44–45, no. 43.

 ⁵³ Spalinger, "Texts", 308–309.
 54 Eichler (n. 12), 109, no. 245.

⁵⁵ E.g., Baud, "Ménès".

⁵⁶ E.g., Verner, "Archaeological Remarks on the 4th and 5th Dynasty Chronology", Archiv Orientálni 69 (2001), 410-412.

⁵⁷ E.g., Kanawati (n. 13).

6 (and not in the FIP, according to the traditional view),⁵⁸ is disproved by the number of attestations of *m-ht zp* years at this period. Kanawati believes, however, that they resulted from provisional numbering, subsequently altered to "normal 2 years counts". For example, "the reference to the 'year after the sixth count' may simply refer to the seventh year, but before the seventh count was undertaken".⁵⁹ This hypothesis ignores the existence of the South Saqqara Stone, with at least two examples of post-census years (one in the reign of Pepy I, and the second under Merenre', see above). Since annals are an official recapitulation of events, there is no reason why the entries should reflect a provisional numbering system.

Kanawati's proposal is an attempt to reconcile apparently contradictory data in the case of Nykau-Izezi (see above), viz., (a) a basilophorous name suggesting that Nykau-Izezi was born under Izezi⁶⁰ (b) his representation in the reliefs of the causeway of Wenis, with the high ranking title 'sole friend'; (c) the dating of his burial to the 11th count, presumably of Teti; (d) an estimate of his age at death, based on examination of his remains, as 40–45 years or even slightly younger (35).

Kanawati was influenced by the difficulty of reconciling the relative brevity of Nykau-Izezi's life with the time-span between Djedkare's reign and the 11th census in Teti's reign, presuming a regular biennial census. The 11th census of Teti corresponds to year 22/23 of a regular biennial census system, but at least 13/14, if the census was irregular (since two intervening years are known, 1+ and 6+, see above). Nykau-Izezi was therefore between about 17/18 and 26/27 years old when Teti ascended the throne. Since, on the same premise, Wenis reigned between 16 (mpt zp 8 as highest census) and 9 years, 61 the official was either born at the very end of Djedkare's reign, or ten years earlier. This would account for Izezi in his name, but this explanation is superfluous, since kings were celebrated thus for various reasons, if indeed such names were not simply passed from father to son. 62 Thus the name does not prove that Nykau-Izezi's career began in Djedkare's reign. If he is the like-named official in the Wenis cause-

⁵⁸ E.g., Gardiner, "Years", 14-16.

⁵⁹ Kanawati (n. 13; 2000a), 21, 23, b; see also Helck (n. 2), 110.

⁶⁰ N. Kanawati & M. Abder-Raziq, *The Teti Cemetery at Saqqara V. The Tomb of Hesi* (Warminster: ACE Reports 13, 1999), 37–38, pl. 33, 59.

⁶¹ Verner (n. 56), 410-412, 416.

⁶² Another Nykau-Izezi is mentioned, for example, on three graffiti at the pyramid of Pepy I, see V. Dobrev, "Les marques sur pierres de construction de la nécropole de Pépi Ier. Étude prosopographique", *BIFAO* 96 (1996), 112, D.1.

way reliefs, he was promoted to 'sole friend' between the ages of 17 and 27—quite young in either case. The first alternative may indeed seem much too young, but high-ranking titles may not have been confined to mature officials. All in all, there are simply too many uncertainties in Kanawati's argument. The same situation obtains for other officials who started their careers under Teti and died under Merenre'. Some cases may still be debatable, as Kanawati rightly pointed out.63 Weni, for example, already held a relatively high position under Teti and must have been about 70 when Merenre' ascended the throne, since Pepy I's reign amounts to 50 years, presuming a strictly biennial system. This seems very old for the onerous duties reported in his biography, and for his journeys to obtain materials and monuments for the king's tomb. However, this may have been a conceit to celebrate the official's longevity and his capacity to remain active at an advanced age.

If the theory of an annual census be discarded for sound reasons, it must nevertheless be admitted that no basis exists for deciding in favour of either of the alternatives, the regular or irregular biennial system. On the one hand, the number of attested census years is very well balanced by post-census years during the reigns of Teti to Pepy I. When the sources shed some light on a segment of these reigns, i.e. the earliest counts of Teti (1 to 2), the latest counts of Pepy I (18 to 25) and the earliest and latest counts of Merenre' (1 and 5), the number of intervening years equals, or nearly equals, the number of census years. The alleged total imbalance between the two⁶⁴ results from the limited number of sources and prejudice associated with the category of sources. as exemplified by the masons' marks of Dyn. 4 at Giza. 65 On the other hand, the extreme imbalance for the reign of Pepy II could favour an irregular counting system in his particular case. The celebrated longevity of the king in tradition⁶⁶ as well as the fact that he was a child at his accession, 67 demand reconciliation with the contemporaneous record, to which a biennial count does justice. 68 The table below summarizes the dates for the period from Teti to Pepy II:

⁶³ Kanawati (n. 13, 2000a), 22-23.

⁶⁴ E.g., Helck (n. 2), 106-110; Spalinger, "Texts", 314-316.

⁶⁵ Baud, "Ménès", 119–121. 66 Baud, "Ménès", 129, with caution.

⁶⁷ K. Ryholt, "The Late Old Kingdom in the Turin King-list and the Identity of Nitocris", ZAS 127 (2000), 87-100, at 94.

⁶⁸ H. Goedicke, "The Death of Pepy II-Neferkare", SAK 15 (1988), 111-121; Beckerath, Chronologie, 151-152.

King	Highest Census	Minimal Number of Post-census	Minimal Reign Length A Years	Minimal Reign Length B
Teti	11	2	13 years	22/23 years
Userkare	. ?	5	[2/4]	[2/4]
Pepy I	25(+?)	2 or 3	27	50/51
Merenre	5+	2	7	11/12
Pepy II	31, ev. 33	3 or 4	34	62/63
Total	min. 83	9/10	83/85	147/153

X+ indicates a post-census year, for which X is the number of counts; "minimal reign length A" is the sum of the highest count (col. 2) and the attested intervening years (col. 3);⁶⁹ "minimal reign length B" presupposes a regular biennial census; the estimate for Userkare' is based on the royal annals (see above).

Dynasty 8

The identity, number and order of the Memphite rulers of Dyn. 8 remain uncertain and identifications rely heavily on the much later Ramesside lists. The TC counts 8 rulers after Pepy II (col. iv, no. 5 to 13, this name and some others in lacuna). It includes, in second position, Queen Nitocris, who turns out to be a male ruler, Neitiqerty Siptah, according to Ryholt's recent examination of the papyrus. The Abydos list (nos. 39 to 56) adds 10 more rulers, all probably between Neitiqerty (Abydos no. 40, if identified with Netjerkare') and Neferka Khered-seneb (Abydos no. 51, called Neferkare' Pepy-seneb), a group which may have been in lacuna in the TC Vorlage and therefore probably reported as wsf/lost.

⁶⁹ After Verner (n. 56), 415-416.

⁷⁰ E.g., Beckerath, Chronologie, 151-152.

⁷¹ This column should be renumbered 5, since according to Ryholt's recent study (see n. 67) there is evidence of an intermediate column between col. I and II of Gardiner's edition.

⁷² Ryholt (n. 67), 87–100.

⁷³ See Ryholt (n. 67), 87-94.

⁷⁴ Beckerath, *Chronologie*, 148-9; Ryholt (n. 67), 96-98.

According to the partially preserved figures in the TC, both for reign lengths and summations of grouped dynasties, Dyn. 8 covered a very short period of about one generation. However, not only is the reading of some of the figures problematic (e.g., the total for Merenre'), 75 but the very value of the figures remains largely questionable, as exemplified by contradictory OK data for a number of reigns. Recent analysis would double the duration of this dynasty, to at least 50 years,76 or even slightly more,⁷⁷ but this is not a significant change in the image of a relatively short and obscure period. In this particular case, the TC data is probably not far from the truth with its low figures for individual reigns: 1 year for the immediate successor of Pepy II (name lost, no. 6) and between 1 1/2 to 4 years for the last four rulers (nos. 10-13). The six wsf-years reported in the subtotals (col. iv, 14-17) for ten missing kings probably represent an artificial emendation of the scribe, as exemplified by other occurrences of this figure.⁷⁸ All in all, these brief reigns accord with the few royal monuments recovered so far, and the low figures of the preserved dates.⁷⁹ Arranged in increasing numeric order, they are:

- mpt zm³-Bwy, II prt sw 20, Coptos decree P of [Netjeri-bau] (Horus name of Neferkauhor; identification from parallel decrees),⁸⁰ temple of Min;⁸¹
- mpt zp zm³-Bwy, IV šmw 1 (wpty), decree of [Demedj-ib]-tawy (?), (Horus name),82 funerary complex of Queen Neith, Saqqara;

⁷⁵ For the old reading '44 years', see Ryholt (n. 67), 90, 98.

⁷⁶ Beckerath, Chronologie, 151–152.

 $^{^{77}}$ S. Seidlmayer, "Zwei Anmerkungen zur Dynastie der Herakleopoliten", $G\!M$ 157 (1997), 84–85.

⁷⁸ Ryholt (n. 67), 97–98.

⁷⁹ Spalinger, "Texts", 312–313.—Note also the inscription Cairo JE 43290 dated to mpt zp <1?>; IV 3ht 25. The numeral is omitted, but 1 is the most likely emendation, see H. Goedicke, "A Cult Inventory of the Eighth Dynasty from Coptos (Cairo JE 43290)", MDAIK 50 (1994), 72. This could refer to the first incomplete civil year—year 0—usually designated zm³-&wy. The inscription presumably originates from Coptos or nearby Khozam. Goedicke (ibidem) ascribed it tentatively to Nefer-kau-hor, but Fischer, in: Manuelian, ed., Studies Simpson, 267–270, argues for a date towards the end of Herakleopolitan rule in the Coptite nome. See also below Krauss, chapter III. 8 for the Khozam lunar date.

⁸⁰ See W. C. Hayes, "Royal Decrees from the Temple of Min at Coptos", *JEA* 32 (1946) 3–23

⁸¹ Goedicke, Dokumente, 195-196, with Hayes (n. 80), pl. V.

⁸² According to the restoration proposed by Schenkel, *Memphis*, 24–25.

- mpt zp tpy, IV 3 ht sw 2, Wadi Hammamat inscription of King Ity (mentioned in the name of his presumed pyramid),⁸³ possibly Dyn. 8 (O.Ham no. 169);
- mpt zp tpy (?), III šmw sw 2, Wadi Hammamat inscription of an unknown king, date uncertain but possibly Dyn. 8 (O.Ham no. 152);⁸⁴
- [mpt] zp 4 [+ x?], 85 season etc. lost, Coptos decree H of king Kha[bau?] (Horus name). 86

The absence of post-census years probably testifies to a change in the dating system from a regular (?) biennial to an annual one.⁸⁷

⁸³ Tentatively equated with Neferirkare' II of the Abydos list and the contemporary Horus Demedjibtawy by Spalinger, "Texts", 313, and n. 104. Goedicke's reading (n. 35), 66-67, (mpt zp tpy <jb-sd> taken to refer to Pepy I is not supported by the parallel evidence.

⁸⁴ See Schenkel, Memphis, 32-33; Goedicke (n. 79), 83.

⁸⁵ The stela is lost below the four aligned strokes. While 3 or even 4 more strokes could possibly have figured in a lower line, it is rather unlikely in such a period of ephemeral kings.

⁸⁶ Goedicke, *Dokumente*, 163–164, fig. 16 and 23; for the date: Hayes (n. 80), 13, n. 7, and pl. iiia, top, before col. 1.

⁸⁷ Gardiner, "Years", 14–16; Hayes (n. 80), 13; Spalinger, "Texts", 312.