

CONTRIBUTIONS TO THE CHRONOLOGY OF THE NEW KINGDOM AND THE THIRD INTERMEDIATE PERIOD

By Thomas Schneider

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This study was undertaken in the context of the SCIEM2000 project with the objective to establish a timeline for the New Kingdom and the Third Intermediate Period. It addresses specific issues Manfred Bietak wished to be clarified, in particular (1) recent research on the internal chronology of the Third Intermediate Period; (2) the state of research regarding the life ages at death of the kings of the New Kingdom as inferable from the royal mummies, (3) chronological problems of the New Kingdom and new synchronisms with the Ancient Near East.¹

1. TIMELINE OF THE CHRONOLOGY OF THE THIRD INTERMEDIATE PERIOD

A comprehensive overview of the current state of knowledge on the chronology of the Third Intermediate Period was given in 2006 by K. JANSEN-WINKELN in E. HORNUNG/R. KRAUSS/D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden, Boston 2006, 218–264. The purpose of this paragraph is to incorporate those results from the proceedings of the SCIEM2000 workshop Egypt & Time (published in *E&L* 16, 2006) and of a major conference held at Leiden in 2007² that directly affect the chronological timeline which is at the centre of SCIEM2000's attention.

1. 1 Revisions relating to the 21st–23rd Dynasties

21st Dynastie (Table 1)

A dynasty length of 124 years is well-established,³ relying on Manetho for Amenemope, Osochor, and Psusennes II in whose cases the epigraphic information is deficient. Manetho's total of 130 years has, according to Kitchen, "clearly suffered longstanding corruption" but is more likely to be seen as the total of the individual reign lengths plus the length of the probable coregencies, Amenemnesu/Psusennes and Psusennes/Amenemope (ca. 3 years). They may have been counted twice; in the table below the 3 years have been deducted from the length of Psusennes' reign.

¹ I would like to thank David Aston, Peter Brand, Eckart Frahm, James E. Harris, Salima Ikram, Peter Sheldrick, Anthony Spalinger, David A. Warburton, Malcolm Wiener, and Gernot Wilhelm for comments and providing me with manuscripts or offprints.

² G.P.F. BROEKMAN, R.J. DEMARÉE, O.E. KAPER (eds.), *The Libyan Period in Egypt. Historical and Cultural Studies into the 21st–24th dynasties: Proceedings of a Conference at Leiden University, 25–27 October 2007*, Egyptologische Uitgaven XXIII, Leiden 2009 [hereafter abbreviated as *LPiE*].

³ K. JANSEN-WINKELN, Dynasty 21, in: E. HORNUNG, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology* (HdO 1, 83), Leiden, Boston 2006, 218–233.; K.A. KITCHEN, The Strengths and Weaknesses of Egyptian Chronology – A Reconsideration, *E&L* 16 (2006), 293–308, and *id.*, The Third Intermediate Period in Egypt: An Overview of Fact & Fiction, *LPiE*, 161–202.

Smendes	highest year : 25, Manetho: 26 J.	26
Amenemnesu	Manetho: 4	4
Psusennes I	highest year: 49, Manetho: 46 (Eus.: 41) Probable coregency Amenemnesu/Psusennes (3 years ?)	46
Amenemope	highest year: 5; "10" uncertain, Manetho: 9 Probable coregency Psusennes/Amenemope	9
Osochor	highest year: 2; Manetho: 6	6
Siamun	highest year: 17 (Manetho 9 < *19)	19
Psusennes II	highest year: 5 ("13" uncertain); M.: 14	14
total		124

Table 1

22nd and 23rd Dynasties (Table 2)

The controversies about the internal arrangement and mutual relationship of the dynasties labelled "22" and "23" have continued during the past years, producing a number of conflicting chronologies.⁴ For the sake of establishing a chronological timeline, it is essential to see that a chronological nexus can be established between the end of dynasty 22 (despite variations in the

scholarly reconstructions) and dynasty 25, but not between dynasties 23 (in whatever form) and 25. The nexus between dynasties 22 and 23 is important insofar that R. Krauss has adduced lunar dates that date Takeloth II 1 into 834 BCE (if the newest interpretation by D.A. Aston is followed).⁵ The following table gives the arrangement of dynasty 22 according to J. JANSEN-WINKELN (2006) and D. ASTON (2009).

22. DYNASTY			
<u>First Half:</u>			
Shoshenq I	highest year: 21; Manetho: 21	21	
Osorkon I	highest year: 33; Manetho: 15 < *35?	35	KITCHEN:
MANETHO	"three further kings, 25 years"	0–25?	—
	? to be identified with:	(see below)	
	Shoshenq IIc = <i>Maa-cheper-re</i> no reign of his own		
	Shoshenq IIa = <i>Heqa-cheper-re</i> no dates attested		
	Shoshenq IIb = <i>Tut-cheper-re</i> no dates attested		
Takelot I	highest year: 9 (ev. 14?); M.: 13	13	KITCHEN:
Osorkon II	highest year: 29, ev. 30 (Sed festival) higher reign length plausible on account of genealogical data (ASTON, JANSEN-WINKELN)	35	30/32
Harsiese	no independent reign (within Osorkon II's)		KITCHEN: <i>inserts here</i> Takelot II:
Total, first half		104–129	17/20

Table 2

⁴ J. VON BECKERATH, Über das Verhältnis der 23. zur 22. Dynastie, in: N. KLOTH, K. MARTIN, E. PARDEY (eds.), *Es werde niedergelegt als Schriftstück. Festschrift für Hartwig Altenmüller zum 65. Geburtstag*, SAK Beiheft 9, Hamburg 2003, 31–36; G.P.F. BROEKMAN, Once Again the Reign of Takeloth II. Another View on the Chronology of the mid-22th Dynasty, *E&L* 16 (2006), 245–255; D.A. ASTON,

Takeloth II, a King of the Herakleopolitan/Theban Twenty-Third Dynasty Revisited: The Chronology of Dynasties 22 and 23, *LPIE*, 1–28.

⁵ D.A. ASTON, Takeloth II, a King of the Herakleopolitan/Theban Twenty-Third Dynasty Revisited: The Chronology of Dynasties 22 and 23, *LPIE*, 8.

<u>Second Half:</u>		
Shoshenq III.	highest year: 39	39
Shoshenq <i>Hedj-cheper-re</i>	highest year: 10	13
His reign length of 13 years can be calculated from data regarding an Apis bull according to which 26 years elapsed between year 28 of Shoshenq III and year 2 of Pami: $26 - ([39-28] + 2) = 13$		
Pami	highest year: 6, Heliopolis annals: 7	7
Shoshenq V.	highest year: 38	38
Dies some time before the conquest of Egypt by Piankhi; ca. 3 years		
Total, second half		97
<u>Separate kings</u>		
Padibastet <i>Sehetepibre</i>	no dates attested, ephemeral	3 y.
Osorkon IV.	no dates attested	
Accession some time before the conquest of Egypt by Piankhi; ca. 3 years		
Probably identical with "Shilkanni" who paid tribute to Sargon II		

Table 2 continued

The first half is considered an all-Egyptian dynasty whereas the second half is regarded a Lower Egyptian line only. In his most recent contribution in *LPIE*, Kitchen⁶ agrees with the overall sequence of kings (considering, however, the entire dynasty a whole-Egyptian line) and dates, with two exceptions:

1) Between Osorkon II and Shoshenq III, he inserts Takelot II, who in the alternative reconstruction has been reassigned to the 23rd dynasty. He gives Osorkon II a maximum of 31/32 years (accession at 845/4 BCE) and has Shoshenq III ascend the throne after Takelot II in 827/5 BCE.

2) He disregards the existence of the three Shoshenq kings (now labelled Shoshenq IIa-c according to the Leiden agreement) and sees the throne names of Shoshenq IIb and Shoshenq IIc as early, later abandoned names of Shoshenq I.⁷ Regarding Shoshenq IIa he holds: "That he is the same as the high priest of Amun Shoshenq, son of Osorkon I, using a cartouche (as Shoshenq Meriamun) on BM No. EA 8, still remains the

likeliest affiliation; he can still best be accounted for as a coregent of Osorkon I who failed to outlive his father, so that the throne passed to a younger son Takeloth (I), not to the deceased Shoshenq (II) or any heirs of his. Thus, this Shoshenq II (IIa) cannot contribute any further to the regnal years dating of the 22nd dynasty, at least not at present."⁸

In the Aston/Jansen-Winkel approach, Osorkon II is given a longer reign, based on genealogical data (Jansen-Winkel thought of 30–40, Aston originally of 40–45 years, but the latter has now deemed this to be too long⁹). Broekman concedes 34 years.¹⁰ 35 years seems to be in line with all existing estimates (and is only slightly higher than Kitchen's).

The major difficulty are the three Manethonian kings with an alleged cumulative reign of 25 years. As we have seen, Kitchen does not consider them to have been independent individuals or reigned independently. This is now an isolated view. Shoshenq IIb = *Tut-cheper-re* is known from Abydos (sherd Louvre E.31886) and a frag-

⁶ K.A. KITCHEN, The Third Intermediate Period in Egypt: An Overview of Fact & Fiction, *LPIE*, 161–202.

⁷ K.A. KITCHEN, *op.cit.*, 172.

⁸ K.A. KITCHEN, *op.cit.* 165.

⁹ D.A. ASTON, Takeloth II, a King of the Herakleopolitan/Theban Twenty-Third Dynasty Revisited: The Chronology of Dynasties 22 and 23, *LPIE*, 1–28: p.1.

¹⁰ G.P.F. BROEKMAN, The reign of Takeloth II, a Controversial Matter, *GM* 205 (2005), 24; G.P.F. BROEKMAN, Once Again the Reign of Takeloth II. Another View on the Chronology of the Mid-22nd Dynasty, *E&L* 16(2006), 246.

mentary relief from Bubastis, “evidently a king of the entire country and not a minor U[pper] E[gyptian] king or a local ruler”.¹¹ Jansen-Winkel sees it as plausible that he and Shoshenq IIa = *Heqa-cheper-re* reigned for a brief time in the early 22nd dynasty, maybe between Osorkon I and Takelot I. In turn, Shoshenq IIc = *Maa-cheper-re* is not given an independent reign and identified with the high priest Shoshenq (“II”).¹² Aston has commented as follows: “However, as Jansen-Winkel, and others, have pointed out not all the ‘missing years’ need to be given to Osorkon II. Somewhere near the beginning of the dynasty have to be placed the three ephemeral kings Heqa-Kheper-Re, Tut-Kheper-Re and Maa-Kheper-Re Shoshenq. Indeed it is perhaps significant that if Heqa-Kheper-Re [Shoshenq IIa], Tut-Kheper-Re [Shoshenq IIb] and Maa-Kheper-Re Shoshenq [Shoshenq IIc], were all placed between Osorkon I and Takeloth I, Manetho’s three kings between his Osorthon and Takelothis, who would then be Osorkon I and Takeloth I, would be vindicated. The order of these three kings is uncertain. (...) If we use Kitchen’s 31 years, these three ephemeral kings would have reigned for about six years between them; 34 years with Broekman gives these three kings three years.”¹³ In a different article, Broekman gives the total reign of Takeloth I, Shoshenq IIa and Shoshenq IIb as 15 years, t.i. reserves 2 years to the two Shoshenqs. Aston adopts an estimate of six years when calculating the length of the 22nd dynasty on the basis of Krauss’ preferred lunar date option of 845 BCE for the accession of Takelot I but allows for as

much as 14–17 years when he recalculates the dynasty based on Krauss’ alternative 834 BCE option which Aston prefers.¹⁴ The consequence of raising their regnal years would be to considerably reduce the reigns of Rudamun and Osorkon IV of the 23rd dynasty, at Herakleopolis/Thebes and Tanis, respectively (ASTON, *loc.cit.*).

Pending new evidence, it is impossible to reach a conclusive decision. Any decision affects, however, the chronology of the New Kingdom. Four scenarios will be presented sub 1.2.

Osorkon IV is identified with the king Osorkon featured by the Pianki stele.¹⁵ This allows for a link with the 25nd dynasty. K. Jansen-Winkel allows for as much as 5 years between the accession of Osorkon IV and the Kushite conquest,¹⁶ while K.A. Kitchen admits a minimum of 2 years (or slightly more) before he surrendered to Piankhi.¹⁷ An estimate of 3 years seems reasonable.

The total time span from the accession of the 22nd dynasty under Shoshenq I to the conquest of Piankhi can therefore be estimated to have been *between 204 and 229 years*.

1.2 The Impact of the 22nd Dynasty scenarios on the New Kingdom

The different assumptions about the three ephemeral kings directly affect the chronology of the earlier New Kingdom. Four scenarios will be presented here (for the internal chronology of the New Kingdom, see below 3):

¹¹ K. JANSEN-WINKELN, The Chronology of the Third Intermediate Period: Dyns. 22–24, in: E. HORNUNG, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden, Boston 2006, 237; E. LANGE, Ein neuer König Schoschenk in Bubastis, *GM* 203(2004), 65–72.

¹² K. JANSEN-WINKELN, The Chronology of the Third Intermediate Period: Dyns. 22–24, in: E. HORNUNG, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden/ Boston 2006, 238.

¹³ D.A. ASTON, Takeloth II, a King of the Herakleopolitan/Theban Twenty-Third Dynasty Revisited: The Chronology of Dynasties 22 and 23, *LPIE*, 22.

¹⁴ D.A. ASTON, Takeloth II, a King of the Herakleopolitan/Theban Twenty-Third Dynasty Revisited: The Chronology of Dynasties 22 and 23, *LPIE*, 26f.

¹⁵ C. JURMAN, From the Libyan Dynasties to the Kushites in Memphis. Historical Problems and Cultural Issues, *LPIE*, 121.

¹⁶ K. JANSEN-WINKELN, The Chronology of the Third Intermediate Period: Dyns. 22–24, in: E. HORNUNG, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden/ Boston 2006, 263f..

¹⁷ K.A. KITCHEN, The Strengths and Weaknesses of Egyptian Chronology – A Reconsideration, *E&L* 16 (2006), 294; similarly IDEM, The Third Intermediate Period in Egypt: An Overview of Fact & Fiction, *LPIE*, 161.

1) reign length of 0 years (hypothesis Kitchen)

Begin New Kingdom	1520
Thutmose III	1451–
Horemheb	1290–1276
Begin 19 th dynasty	1276
Ramesses I.	1276–1275
Seti I.	1275–1265
Ramesses II.	1265–1199
Merenptah	1199–1189
Begin 20 th dynasty	1173
Begin 21 st dynasty	1061

2) reign length of 6 years (Aston, 1st option)¹⁸

Begin New Kingdom	1526
Thutmose III	1457–
Horemheb	1296–1282
Begin 19 th dynasty	1282
Ramesses I.	1282–1281
Seti I.	1281–1271
Ramesses II.	1271–1205
Merenptah	1205–1195
Begin 20 th dynasty	1179
Begin 21 st dynasty	1067

3) reign length of 14 years (Aston, 2nd option)

Begin New Kingdom	1534
Thutmose III	1465–
Horemheb	1304–1290
Begin 19 th dynasty	1290
Ramesses I.	1290–1289
Seti I.	1289–1279
Ramesses II.	1279–1213
Merenptah	1213–1203
Begin 20 th dynasty	1187
Begin 21 st dynasty	1075

4) reign length of 25 years (Manetho)

Begin New Kingdom	1545
Thutmose III	1476–
Horemheb	1315–1301
Begin 19 th dynasty	1301
Ramesses I.	1301–1300
Seti I.	1300–1290
Ramesses II.	1290–1224
Merenptah	1224–1214
Begin 20 th dynasty	1198
Begin 21 st dynasty	1086

Scenario 1 (ultra-low) fits the requirements of the New Kingdom lunar dates of Thutmose III and Ramesses II: 1451 is in conformity with a 14-year half-cycle, 1265 with a full cycle. Its dates may be too low to reconcile with the Ancient Near Eastern requirements. Scenario 2 produces no viable timeline for the NK lunar dates. Scenario 3 provides matches for Ramesses II and Thutmose III. Scenario 4 fulfills both lunar requirements (14-year half-cycle for Thutmose III, full cycle for Ramesses II) and would, with a 1-year adjustment for Horemheb, allow for an absolute dating of Horemheb 1 into 1314 (on the basis of the solar omen of the 10th year of Mursili II, see below 2.3.1). It is therefore the scenario that is tentatively accepted here.

1.3 Revisions relating to the 25th Dynasty and Summary*25th Dynasty*

The chronology of the early 25th dynasty had to be revised in light of the *Tang-i Var* inscription of Sargon II,¹⁹ indicating that Shebitku was already king of Egypt in 706 BCE. This has now been gen-

¹⁸ Only this scenario can be aligned with the Shoshenq I/Rehabeam synchronism. However, doubts about the historicity of the Biblical narrative prevail (see V. MÜLLER, *Wie gut fixiert ist die Chronologie des Neuen Reiches wirklich?*, *E&L* 16(2006), 203–230). If, as is now widely assumed, the presentation of Israel's early history reflects a later and idealized perception, the dates given for its internal chronology cannot be taken to be historically authentic. See, e.g., I. FINKELSTEIN/A. MAZAR, 163f., in: B.B. SCHMIDT (ed.), *The Quest for the Historical Israel: Debating Archaeology and the History of Early Israel*. Atlanta 2007.

¹⁹ G. FRAME, *The Inscription of Sargon II at Tang-i Var*, *Orientalia* 68 (1999), 31–57; D. KAHN, *The Inscription of Sargon II at Tang-i Var and the Chronology of Dynasty 25*, *Orientalia* 70 (2001), 1–3.

²⁰ K.A. KITCHEN, *The Third Intermediate Period in Egypt: An Overview of Fact & Fiction*, *LPIE*, 162–164.

²¹ K. JANSEN-WINKELN, *The Chronology of the Third Intermediate Period: Dyns. 22–24*, in: E. HORNUNG, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden, Boston 2006, 262f. Cf. also KITCHEN (n. 63), 162, and regarding the ensuing kingship of Tefnakht, D. KAHN, *The Transition from Libyan to Nubian Rule in Egypt: Revisiting the Reign of Tefnakht*, *LPIE*, 139–148.

erally accepted with the exception of K.A. Kitchen.²⁰ The latest year for Piankhi's conquest of Egypt is 726 in all scenarios, with a preceding reign of at least 20 years. Within the timeframe of 734–726, Jansen-Winkeln prefers to date the campaign more precisely into 734/733.²¹ Kitchen gives an average date for the conquest of 728 BCE within a timeframe 730/727;²² if the shift of 4 years (contested by Kitchen) resulting from the *Tang-i Var* inscription is included, the resulting year for the conquest is between 734 and 731. The mean of Broekman's 737/729 timeframe²³ for the conquest is also 733 BCE. 733 can therefore be adopted as a likely date for the Piankhi campaign; D.A. Aston has equally 733/2.²⁴ Piankhi's reign ended in ca. 722/1 BCE. Shoshenq V of the 22nd dynasty must have died

some time before the campaign. An Apis bull installed in his 37th year died in year 1/2 of Shabaka. David Aston sets the two years of birth and death as 736/3 and 722/0, respectively; "thus the bull lived for between 13 and 17 years, which is well within the normal lifespan of such animals".²⁵ The adjusted dates are 721–706 for Shabaka (his highest attested year is "15", t.i. certainly 14 full years can be accounted for), whose 2nd year corresponds to year 6 of Bokchoris of the 24th dynasty. The revised reign years for Shebitku are 706–690 BCE. While the beginning of Taharqa's reign in 690 BCE has always been regarded as the earliest secure anchor date of Egyptian chronology, Dan'el Kahn has now opted for considering Shabaka's accession year of 721 BCE as the earliest chronological anchor.²⁶

Piankhi		–722/721
Shabaka	<i>2nd year corresponds to year 6 of Bokchoris of the 24th dynasty</i>	722/1–706
Shebitku		706–690
Taharqa		690 (–664)

Summary of dead-reckoning (scenario 4):

Conquest of Piankhi	ca. 733 BCE
End of 22 nd dynasty, Shoshenq V	736 BCE
Beginning of 22 dynasty, Lower Egyptian line	833 BCE
Beginning of 22 dynasty, all-Egyptian line	962 BCE
Beginning of 21 st dynasty	ca. 1086 BCE

²² K.A. KITCHEN, The Strengths and Weaknesses of Egyptian Chronology – A Reconsideration, *E&L* 16(2006) 294.

²³ G.P.F. BROEKMAN, Takeloth III and the End of the 23rd Dynasty, *LPIE*, 93.

²⁴ D.A. ASTON, Takeloth II, a King of the Herakleopolitan/Theban Twenty-Third Dynasty Revisited: The Chronology of Dynasties 22 and 23, *LPIE*, 20.

²⁵ D.A. ASTON, *op.cit.*, 27.

²⁶ D. KAHN, Divided Kingdom, Co-Regency, or Sole Rule in the Kingdom(s) of Egypt-and-Kush? *E&L* 16(2006), 291.

2. THE CHRONOLOGY OF THE NEW KINGDOM

2.1 The Royal Mummies: Life Ages and Chronology

The purpose of this section is to reevaluate the controversial debate on the life age at death of the kings of the New Kingdom as inferable from the royal mummies, and to test the agreement between historical and medical data.²⁷ This has been a thorny and controversial issue, in particular regarding several obviously too low estimates, as emphasized by K.A. Kitchen and E. Hornung.²⁸

2.1.1 Methodological problems

The main problems of establishing the ages at death on the basis of the preserved mummies and incorporating them in chronological calculations are as follows:²⁹

(1) *Missing royal mummies.* Kings not believed to be represented in the existing number of bodies are (see within the following chronological lists for details): Thutmose I, Amenhotep IV, Aya, Horemheb, Ramesses VII/VIII/X and XI. In recent years, tentative identifications of Hatshepsut and Ramesses I have been proposed. The general assumption that mummy CG61065/JdE26217 cannot be Thutmose I (no pertinent mummy label, non-royal position of arms, young age, probable death on battlefield) is adopted here; it is the most consequential absence since historical data for Thutmose I are controversial.

(2) *Questioned identities.* Based on their analysis of cranial features, Harris and Wente put into doubt the biological identities of many of the royal mummies as they were given on the labels from the TIP reburials, suspecting confusion and erroneous

relabeling. With the only exception of Seti II, all cases of dubious identity belong to the 18th dynasty. From the 1973 *X-Raying the Pharaohs* through the 1980 *X-Ray Atlas of the Royal Mummies* to articles published by Harris and Wente between the 1990s and 1995, several versions and proposals have been published. In an article from 1991, Harris/Hussien propose the following identification of presumed bodies with actual historical personalities:³⁰

Historical identification ^a	Biological identification ^b
Amenhotep I	Amenhotep
Thutmose I	Prince
Thutmose II	Thutmose II
Thutmose III	Thutmose III
Amenhotep II	Thutmose IV
Thutmose IV	Amenhotep II
Amenhotep III	Amenhotep IV <i>Akhenaten</i>
Skeleton KV55	Smenkhare [sic]
Tutankhamon	Tutankhamon

^a Identification by the priests of the XXI Dynasty (1085–945 BC), except for Tutankhamon.

^b Identification based upon similarities/dissimilarities of the components of the craniofacial skeleton.

The bodies of Ahmose and Thutmose I are here discounted as being those of 18th dynasty kings; the assignment of the bodies traditionally identified as “Amenophis II” and “Thutmose IV” is exchanged, and the body labelled “Amenophis III” is tentatively identified with Amenophis IV. Apart from Thutmose III, also the identity of the body of the mummy “Thutmose II” with Thutmose II is adhered to. By 1995, Harris and Wente developed three new scenarios which identify “Seti II” as Thutmose II and reassign the body of “Thutmose II” to the vacant position of Thutmose I (Table 3).³¹

²⁷ *Non vidi*: D. BICKERSTAFFE, Refugees for Eternity, part 4: Identifying the Royal Mummies, 2009. The author is not a professional Egyptologist.

²⁸ Cf. the salient remarks by E. HORNUNG, The New Kingdom, in: E. HORNUNG, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden, Boston 2006: 197f.

²⁹ Abbreviation used in section 2.1: REEVES VoK = C.N. REEVES, *Valley of the Kings. The Decline of a Royal Necropolis*, London 1996

IKRAM/DODSON, RM = S. IKRAM, A. DODSON, *Royal Mummies in the Egyptian Museum*, Cairo 1997

HAWASS, RM = Z. HAWASS, F. JANOT, *Royal Mummies. Immortality in Ancient Egypt*, Vercelli 2008

SMITH, RM = E. SMITH, *Royal Mummies* (Catalogue Général), Le Caire 1912

XARM = J.E. HARRIS, E.F. WENTE, *An X-Ray Atlas of the Royal Mummies*, Chicago 1980

HARRIS/WEEKS, *X-Raying* = J.E. HARRIS, K. WEEKS, *X-Raying the Pharaohs*, New York 1973.

³⁰ Table from J.E. HARRIS, F.E. HUSSIEN, The Identification of the Eighteenth Dynasty Royal Mummies: A Biological Perspective, *International Journal of Osteoarchaeology* 1 (1991), 238 (table 3). Cf. also E.F. WENTE, J.E. HARRIS, Royal Mummies of the Eighteenth Dynasty: A Biologic and Egyptological Approach, in: N.C. REEVES (ed.), *After Tutankhamun. research and excavation in the royal necropolis at Thebes*, London 1992, 2–20.

³¹ E.F. WENTE, Who Was Who Among the Royal Mummies, *The Oriental Institute News and Notes* 144, Winter 1995. Cf. also L. GABOLDE, Des momies royales en quête d'identité, *Egypte, Afrique et Orient* 38 (2005), 67–80.

Sequence of Kings		Royal Mummies		
DYNASTY 18		SCHEME 1	SCHEME 2	SCHEME 3
Thutmose I	=	Thutmose II	Thutmose II	Thutmose II
Thutmose II	=	Seti II	Seti II	Seti II
Thutmose III	=	Thutmose III	Thutmose III	? Thutmose III
Amenhotep II	=	—	—	? Thutmose III
Thutmose IV	=	Amenhotep II	Amenhotep II	Thutmose IV
Amenhotep III	=	Thutmose IV	Thutmose IV	Amenhotep II
Akhenaten	=	KV 55	—	Amenhotep III
Smenkhkare	=	—	KV 55	KV 55
Tutankhamun	=	Tutankhamun	Tutankhamun	Tutankhamun
Aye	=	Amenhotep III	Amenhotep III	—

Table 3

The new identities are in their majority based on cranofacial comparisons; in some cases new readings of linen and coffin labels are proposed rather than disregarding the post-NK labels as outright erroneous and owed to the ignorance and confusion assumed for the context of the reburials. While the individual arguments for reassigning mummies will be discussed below, it seems mandatory to respect the written labels as prime sources with the balanced arguments put forth by Nicholas C. Reeves in this respect (“the veracity of the docket-ets”): “The consensus of modern scholarly opinion would seem to accept that the restoration parties involved in the rewrapping and reburial of the royal mummies were prone to confusing one body with another, and that, as a consequence, the identifications which they attached to the individual corpses are less than reliable. A re-examination of the history of the controversy suggests, however, that the unreliability of the docketets has been overstated. (...) As Winlock once wrote, ‘the docket written by the ancient officials must be accepted unless there is very strong evidence against it’. ‘Very strong evidence’ of the sort required has apparently yet to be produced, since there exists not one case where the identification of a docketed corpse can be shown to be false. Indeed, the fact that we possess several unidentified mummies from the DB 320 cache in particular, which indi-

cates that the restorers preferred to leave un-inscribed any corpse concerning whose identity they had the slightest doubt, would seem indirectly to vouch for the reliability of those identifications they did feel confident enough to make.”³² The existence of several competing scenarios developed by Harris/Wente on the basis of biological indicators and historical probabilities seems to indicate a certain subjectivity.

(3) *Diverging estimates of age.* Estimates of age have differed considerably, due to the fact that early researchers (Maspero, Smith) based their estimates exclusively on the visual observation of the external appearances of mummies. X-raying and CT-scanning has allowed for a more precise and non-invasive determination of the age, although major discrepancies continue to exist and only select remains (Ramses II, Tutankhamun, KV55) have been subjected to exhausting investigations. It should also be noted that, from the first estimates of age done by Maspero, conjectures about what age the historical data required from the pathological evidence influenced the estimates. I have tried to reach most likely data by reviewing existing proposals. In addition, an attempt was made to clarify controversial dates with the very limited number of palaeopathologists who have had the possibility to examine the actual remains.³³

³² C.N. REEVES, *VoK*, 1996, 225, 227.

³³ I am grateful for feedback received in this respect from James E. Harris, Salima Ikram, and Peter

Sheldrick. I also thank Lisa Sabbahy for information on the pathological database and bibliography on the royal mummies.

(4) *Lack of publication of evidence.* Individual royal mummies (e.g., Ramesses IX) have never been properly investigated. The whereabouts of other mummies (e.g., the so-called “mummy in the boat”, see below 21.) is currently unknown. The current investigation (including testing of DNA samples) by a project team initiated by Zahi Hawass has been widely publicized (e.g., regarding the proposed identification of Hatshepsut, and the family of Tutankhamun), however, academic publication is still outstanding in most instances. In other cases, palaeopathological results regarding royal family mummies have been published but do not contain Cairo museum numbers or details about their provenance which would allow to identify them.³⁴

2.1.2 Catalogue of Mummies with comments on age estimates and identity

1. *Ahmose:* Ahmose’s mummy (Cairo Museum JdE 26210; CG 61057) was found in DB320. It carried a Type A docket on the breast and a Type B docket three layers beneath (REEVES *VoK* 206). The A docket identified the corpse as “The Osiris King Nebpehtyre Ahmose LPH” (REEVES *VoK* 232, table 9, 8). The B docket, dated to year 8, III prt 29, states that “The majesty of the king of Upper and Lower Egypt, the lord of the two lands Kheperkare-setepenamun LPH [Psusennes I] Pinudjem-meryamun LPH commanded to osirify the Osiris king Nebpehtyre LPH” (REEVES *VoK* 236, table 10, 29). Contrary to the other royal mummies, Ahmose’s arms were fully stretched alongside his body and not crossed over his breast. As visible on the X-rays of Amenophis I’s body, the crossed arms were the adopted position under his successor which made scholars argue that this mode might have been newly adopted by the 18th dynasty. The evidence from the burial of the 13th dynasty King Hor at Dahshur where the body’s arms were crossed over the breast³⁵ (and this position was also reproduced on the anthropoid coffin) indicates, however, that the royal arm posi-

tion was clearly in place well before the time of Ahmose. In consequence, Ahmose’s case is either an exception or the body is not that of Ahmose. Smith wrote about the age of the body: “There is nothing definite to enable one to estimate the age Ahmosis had attained. But the state of his teeth, hair and the base of the skull suggest that he was a young man. From the examination of his mummy I should have estimated Ahmosis age at not more than 40 years, but there is definite historical evidence that he reigned at least 22 years, and apparently had come of age at the time of his succession. Nevertheless the fact that his mother survived him for ten years is further corroboration of his youth.”³⁶ The X-Ray Atlas gives an estimate of 25–30 years (table 6.4). Harris/Wente excluded an identity with Ahmose I on account of the non-royal position of his arms, the craniofacial morphology which was unlike that of King Seqenenre, that of his sister Ahmose-Nofretari and that of his son Amenhotep I; in addition, the body was not circumcised.

2. *Amenophis I:* Amenophis I’s mummy (CG61058; JdE 26211) from DB320 has never been unwrapped. X-raying confirmed the crossed position of the arms over the chest. After the king’s original burial was found unrobbed in year 16 of Ramesses IX (pAbbott 2,2ff.), a renewal of the burial took place in year 6 of Smendes, IV prt 7, according to the text of the docket on the replacement coffin (CG 61005 [adopted for the reburial of the king from that of an 18th dynasty priest Djehutymose], REEVES *VoK* 212, table 7/6): “Year 6, IV prt 7: On this day the high priest of Amun-Re king of the gods Pinudjem son of the high priest of Amun Pinudjem (sic) son of Piankh commanded the renewal of the burial of king Djeserkare son of Re Amenophis LPH by the overseer of the double treasury Pa...” (REEVES *VoK* 235, table 10, 14). Ten years later, the burial was again renewed: “Year 16, 4 prt 11. The high priest of Amun-Re king of the gods Masaharta son of king Pinudjem commanded the renewal

³⁴ E.M. BRAUNSTEIN, S.J. WHITE, W. RUSSELL, J.E. HARRIS, Paleoradiologic Evaluation of the Egyptian Royal Mummies, *Skeletal Radiology* 17/5 (1988), 348–352 claim to have examined 12 hitherto unexamined royal mummies in the Cairo Museum, but fail to give CG (or other museum) numbers and photographs, thereby preventing any identification of the bodies.

³⁵ E.F. WENTE, Who Was Who Among the Royal Mummies, in: *The Oriental Institute News and Notes* 144, Winter 1995; cf. A.C. AUFDERHEIDE, *The scientific study of mummies*, Cambridge, 2003, 231.

³⁶ SMITH, *RM*, 17.

of the burial of this god by the scribe of the treasury and scribe of the temple Penamun son of Sutymose (?)” (REEVES *VoK* 236, table 10, 23). A month before the first reburial, the body of Thutmose II was rewrapped and placed in a new coffin which is similar to the substitute coffin of Amenophis I. By year 10 of Siamun, 4 prt 17, the mummy of Amenhotep I had been transferred to the tomb of Inhapi (WN A), from where it was transferred to DB320 after year 11 of Shoshenq I. The close placement of his mummy and that of Thutmose II in the corridor of DB320 outside the entrance to room D could mean that their transfer happened jointly.³⁷ The age estimate based on the x-rays conducted in the 1970s was 20–30 years (XARM table 6.4) whereas Ikram/Dodson maintain that the king died in his late forties (IKRAM/DODSON, *RM* 26).

3. *Thutmose I*: The mummy (CG61065; JdE26217) tentatively identified with Thutmose I since Maspero on account of the fact that it had been found in a coffin of Thutmose I and the external similarity with Thutmose II and Thutmose III, is now believed to be that of a prince of the early 18th dynasty, maybe Ahmose-Sipair (IKRAM/DODSON, *RM*, 28). While SMITH cited (*RM*, 28) Maspero’s age estimate of more than 50 years, noticing (p. 27) the presence of white hair, the Harris/Wente team (table 6.4) established as his age 18–22 years. Recent scans by the team of Z. Hawass indicate the person died at about age 30 from a fatal arrow wound; the latter fact and the non-royal position of the arms disprove the traditional identification.³⁸

4. *Thutmose II*: The mummy of Thutmose II from DB320 (CG61066; JdE26212) can be identified by a type B docket referring to the king’s reburial in the 21st dynasty: “Year 6, III prt 7, Smendes/Pinudjem I: On this day the high priest of Amon-Re king of the gods Pinudjem son of the high priest of Amun Piankh commanded the overseer of the great double treasury Payneferher to repeat the burial of king Aenre (*sic*) LPH” (REEVES *VoK* 234, table 10/2, 13). This happened

one month before the first reburial of Amenophis I. Thutmose’s substitute coffin was similar to that of Amenophis I, taken from a private individual of the early 18th dynasty. The close placement of the mummies of the two kings in the corridor of DB320 outside the entrance to room D could mean that they were transferred here jointly (see above).³⁹ Wente reevaluated the dockets supposedly identifying the mummy as the body of Thutmose II: “On the mummy the orthography of the king’s name was not without ambiguity, while on the coffin the scribe had originally written the prenomen of Thutmose I and then altered it to Thutmose II’s. Since the mummy identified as Thutmose II was older at death than the Seti II one [which according to Wente does not belong into the 19th dynasty and should be reassigned to the Thutmosid family, TS], and from historical considerations we believe that Thutmose I died at an older age than Thutmose II, the end result of this part of our inquiry was to suggest that the Thutmose II mummy really belonged to Thutmose I and the Seti II mummy to Thutmose II.”⁴⁰ Maspero’s age estimate at death was around 30, based on the condition of the teeth. Smith doubted the estimate and noted that Thutmose II was practically bald (*RM*, 29.30): “Although loss of hair occurs at a much earlier age than 30 years, especially as a result of certain diseases, the baldness of Thutmose II, considered in conjunction with the wrinkled skin of his face, leads me seriously to question the suggestion that he was no more than 30 years of age.” The age estimate of XARM is 25–30 years (table 6.4), also adopted by Z. Hawass.⁴¹ The state of teeth equally favours ca. 30 years (HARRIS/WEEKS, *X-Raying*, 133; adopted by IKRAM/DODSON, *RM*, 29). A new CT investigation conducted in 2007 produced an even higher age estimate of ca. 40 years.⁴² The evidence about the length of reign of Thutmose II will be presented below (2.1).

5. *Hatshepsut*: Hatshepsut was one of the missing pharaohs of the New Kingdom until her body was tentatively identified with one of the two bod-

³⁷ REEVES, *VoK*, 253.

³⁸ <http://www.archaeology.org/online/features/hatshepsut/>; <http://www.chnpress.com/news/?section=2&id=7226>.

³⁹ REEVES, *VoK* 253.

⁴⁰ E.F. WENTE, Who Was Who Among the Royal Mummies, *The Oriental Institute News and Notes* 144, Winter 1995.

⁴¹ Z. HAWASS, F. JANOT, *The Royal Mummies. Immortality in Ancient Egypt*, Vercelli 2008, 105.

ies found by Howard Carter in KV60 and rediscovered by Donald P. Ryan in 1989 (presently in the Cairo Museum; number unknown). The body was that of an obese elderly woman approximately 1.55 meters tall whose head was described as bald by Ryan. The position of the arms (left arm over the chest with the left hand clenched,; the right arm extended along the right side of the body) is that of a queen. In 2007, Z. Hawass proposed to identify the mummy with Hatshepsut on the basis of a molar tooth found in a box inscribed for Hatshepsut which fitted into the place of a missing molar in the body's lower jaw. The fit has been contested by specialists (information by P. Sheldrick). The presence of a royal burial in KV20 could possibly be corroborated by rests of the equipment, among which was the reverse side of a fragmentary coffin face-piece with a notch that could have held a false beard. On the basis of an inscribed fragment, the second mummy could tentatively be identified, with Hatshepsut's nurse In/Sitre. Definitive publication is still outstanding.

6. *Thutmose III*: The body of Thutmose III (CG61068; JdE 26213) is identified by a linen label. Wente has commented on this that "Thutmose III has possibly been correctly identified. I say "possibly" because the shroud of Thutmose III, which has been used to identify the mummy, was discovered not wrapped around the body but simply folded on top of the mummy, which itself bore no clear identification".⁴³ When found in DB320, the mummy rested in Thutmose III's original (according to Reeves, probably the second innermost or outer⁴⁴) coffin (CG 61014). Smith quoted Virchow's statement about the mummy's "fast jugendliches Aussehen" but also noticed that the king was "certainly almost completely bald" (Royal Mummies, p. 35). The age estimate of XARM is 35–40 years (table 6.4). This contradicts (HARRIS/WEEKS, *X-Raying*, 138) the historical evidence whereby Thutmose III reigned into his 54th year (including the reign of Hatshepsut). The

king's age at the time of his father's death is generally estimated to have been low, ca. 1–3 years.⁴⁵ Even on the assumption that he had just been borne to Thutmose II when the latter died, this would result in a minimum age of 54 years.

7. *Amenophis II*: the mummy of Amenophis II (CG 61069) was found in 1898 by Victor Loret in the king's tomb KV35,⁴⁶ within a replacement cartonnage coffin inscribed for him that was placed in the stone sarcophagus. Apart from the coffin inscription, the body is identified by a type A docket giving his prenomen (REEVES, *VoK*, table 9, 6). Smith referred to the interspersed white hair and patches of baldness and concluded: "These facts, together with the evidence of the well-worn teeth, indicate that Amenophis II was a much older man than Thutmose IV. There are however, no data to enable us to estimate with any precision the age Amenophis II had reached; but from his general appearance he was probably somewhere between forty and fifty years old at the time of his death" (SMITH, *RM*, 36). XRAM estimates the age as between 35 and 45 years (table 6), with IKRAM/DODSON (*RM*, 32) and HARRIS/WEEKS (*X-Raying*, 138) leaning towards the higher end of the range, 45 years.

8. *Thutmose IV*: The body of the king (JdE 34559; CG61073) was found in room Jb of KV 35 and identified by a type A linen docket mentioning his throne name and the inscription on his replacement coffin (CG61035) (REEVES, *VoK* 227).⁴⁷ SMITH (*RM*, 44f.) commented extensively on the ossification of the skeleton in order to gain an accurate age estimate which he set at 25 years (maybe more). However, the king has been described as balding (IKRAM, DODSON, 33). HARRIS/WEEKS (*X-Raying*, 139) estimated his age at 30 years, XARM at 30–40 years (table 6).

9. *Amenophis III*: The king (JdE34560; CG61074), found in side-chamber Jb of KV35,⁴⁸ is identified by docket on the linen wrappings and the lid of his replacement coffin (REEVES, *VoK* 226f., 232). Early doubts by Douglas Derry about

⁴² Z. HAWASS, The scientific search for Hatshepsut's mummy, *KMT* 18 (3) (2007), 20–25.

⁴³ E.F. WENTE, Who Was Who Among the Royal Mummies, *The Oriental Institute News and Notes* 144, Winter 1995.

⁴⁴ REEVES, *VoK*, table 7/3, p. 214 vs. p. 24.

⁴⁵ P.F. DORMAN, The Early Reign of Thutmose III: An Unorthodox Mantle of Coregency, in: E.H. CLINE, D.

O'CONNOR (eds.), *Thutmose III. A New Biography*, Ann Arbor 2006, 57, 60 n. 14.

⁴⁶ P. PIACENTINI, C. ORSENIGO, *La Valle dei Re Riscoperta. I giornali di scavo di Victor Loret (1898–1899) e altri inediti*, Milano 2004.

⁴⁷ P. PIACENTINI, C. ORSENIGO, *op.cit.*

⁴⁸ P. PIACENTINI, C. ORSENIGO, *op.cit.*

the identity of the mummy, based on the allegedly 21st dynasty embalming techniques, have been dismissed by Elliot Smith, Edward Wente and Nicholas Reeves. Due to the bad damage inflicted to the mummy, age determination was difficult for SMITH (*RM*, 50) who stated: “Whether he was nearer forty or fifty years must remain an open question.” The estimate given by XARM, based solely on the head film, was 30–35 years whereas HARRIS/WEEKS (*X-Raying*, 142) backed the upper end of Smith’s estimate on account of his 38-year reign. While James Harris in *X-Raying the Pharaohs* (p. 143) had stated that “it is worth noting that the mummy of Amenhotep III shows absolutely no sign of the unusual physical attributes commonly associated with his son, Amenhotep IV”, he has reached a different conclusion in a recent contribution: “The mummy of Amenhotep III (61074) upon recent examination reveals an individual who was morphologically dissimilar to the mummies of his predecessor Thutmose IV (61073) or heirs Tutankhamon or Smenkhare [sic] (note TS: Harris considers Smenkhkare and Tutankhamun to be the sons of Amenhotep IV and Kiya, a hypothesis which very probably is not possible). His facial features and stature reflect the stylized body and face often associated with the Amarna [sic] period. (...) Hence there is substantial evidence both from the historical and biological viewpoint that if the mummy of Amenhotep III (CG 61074) was correctly identified 3000 years ago by the priests of the 21st dynasty, then his son Amenhotep IV was not uniquely biologically aberrant but simply a biological sum or normal variant of his father and mother. Alternatively, if the mummy of Amenhotep III (CG 61074) was incor-

rectly identified by the priests of the 21st dynasty, than [sic] his mummy is an excellent candidate to be Amenhotep IV, the heretic pharaoh Akhenaten.”⁴⁹ This latter suggestion does not factor in the improbability of a reburial of Akhenaten from Amarna to the Valley of the Kings. In the context of the political and religious situation after the failure of Amarna, no obvious arguments can be produced why such a transfer to Thebes might have been feasible or desirable. The recent ingenious reconstruction by James P. Allen, suggesting that Semenkhhkare was not the brother or half-brother of Tutankhamun but rather his father, is in agreement with the available historical and chronological data and provides a reason why the body of KV55 would have been laid to rest in the Valley of the Kings.⁵⁰

10. *Semenkhhkare*: The skeleton from KV55 (CG61075), most probably that of Semenkhhkare,⁵¹ yields an age estimate of 18–23 years. This has again be demonstrated by studies of the remains made by E. Strouhal⁵² and J.M. Filer.⁵³ A higher age has more recently been postulated by J. Harris/F. Hussein,⁵⁴ N. Reeves⁵⁵ and M. Gabolde.⁵⁶ So far isolated is the most recent estimate put forth by Z. Hawass and his team: “Our CT scan put Akhenaten squarely back in the running for the identity of the mummy from KV55. Our team was able to determine that the mummy may have been older at death than anyone had previously thought. Dr. Selim noted that the spine showed, in addition to slight scoliosis, significant degenerative changes associated with age. He said that although it is difficult to determine the age of an individual from bones alone, he might put the mummy’s age as high as 60.”⁵⁷ Cf. also the

⁴⁹ J. HARRIS, The Mummy of Amenhotep III? *SSEA Newsletter* Fall 2008, 3. Cf. ID., The Mummy of Amenhotep III, in: E. TEETER, E.F. WENTE, (eds.), *Gold of Praise; Studies on Ancient Egypt in Honor of E.F. Wente*, SAOC 58, Chicago 1999, 163–174.

⁵⁰ J.P. ALLEN, The Amarna Succession, in: P.J. BRAND, L. COOPER (eds.), *Causing His Name to Live. Studies in Egyptian Epigraphy and History in Memory of W. J. Murnane*, Leiden, Boston 2009, 19.

⁵¹ Recent claims to the contrary (Akhenaten), essentially by M. Gabolde and Z. Hawass are based on the coffin (manufactured for Akhenaten, Gabolde) and the claim that the Amarna royals, including Nefertiti, were transferred to the Valley of the Kings (Hawass).

⁵² E. STROUHAL, *Paleopathology Newsletter* 102, June 1998, 4.

⁵³ J.M. FILER, The KV 55 Body: the Facts, *EA* 17(2000), 13–14; EAD., Anatomy of a Mummy, *Archaeology* 55/2(2002), 26–29; R. GERMER, in: A. GRIMM, S. SCHOSKE, *Das Geheimnis des goldenen Sarges. Echnaton und das Ende der Amarnazeit*, München 2001, 58–61; cf. the distinct statement by W.J. MURNANE, *OLZ* 96 (2001), 22. Also J.P. ALLEN (see n. 48) and A. DODSON (see n. 102).

⁵⁴ Cf. J. HARRIS, The Mummy of Amenhotep III? *Newsletter of the SSEA*, Fall 2008, 1; in his thirties.

⁵⁵ N.C. REEVES, *Akhenaten. Egypt’s False Prophet*, London 2001.

⁵⁶ M. GABOLDE, *D’Akhenaton à Toutânkhamon*, Lyon 1998, 264.

⁵⁷ <http://www.guardians.net/hawass/articles/Mystery%20of%20the%20Mummy%20from%20KV55.htm>

concluding remarks above sub 9. The recent claim by Z. Hawass and his team to the effect that the person from KV55 (proposed by Hawass to be Akhenaten) was the father of Tutankhamun actually corroborates J.P. Allen's historical identification of Semenkhkare as Tutankhamun's father (see above under 9.).

11. *Tutankhamun*: The age of Tutankhamun (the body is resting in the king's tomb KV62) has been determined at several instances to be ca. 18 years.⁵⁸

12. *Aya*: Not identified or found. The remains of some four bodies recovered from KV 57 ("a skull and a few bones of more than one person in the sarcophagus, from side chamber Jb, two skulls and some broken bones lying in the corner; female according to Weigall; in room Jdd, skull and a few bones of more than one person")⁵⁹ may belong to royal individuals of the late 18th dynasty, among them, Aya and Haremhab. These remains have been studied by R. Walker on behalf of G.T. Martin (information S. Ikram, report unpublished).

13. *Horemheb*: Not identified or found (see 12.). Apart from historical data, a minimum estimate of his age at death can be inferred from the remains of his second wife Mutnodjmet, found at Saqqara. E. Strouhal established for the latter an age of 35–40 years.⁶⁰ It is plausible to assume that Horemheb was at least the age and probably significantly older than his second wife whose main responsibility was to give birth to an heir to the throne. A minimum age of Horemheb at the time Mutnodjmet died of ca. 50 years seems reasonable to assume. This is in general agreement with estimates of his age at the time he ascended

the throne, ranging from 45–55 years. His actual age at death, after a reign just reaching into his 15th regnal year (see below, 2.2.2 and the next paragraph, 14.), will then have been between 60 and 70 years.

14. *Ramesses I (?)*: This royal mummy, purchased in 1860 for the Niagara Falls Museum, and first explored scientifically in 1985, underwent full CT scanning when purchased in 1999 by the Michael C. Carlos Museum of Emory University (#1999.1.4; NFM M7). The body was returned to Egypt in 2003 and is now exhibited in the Mummification Museum at Luxor. The accumulated evidence favours an identification of the body with Ramesses I, although Horemheb and Ramesses VII cannot be excluded.⁶¹ However, the age estimate of 35–45 years seems to low for both Horemheb and Ramesses I. A type B coffin docket from DB320 (REEVES, *VoK* 233, table 9/11) provides conclusive proof that the body of Ramesses I had been in the cache of DB320 where it was not found by the modern excavators.

15. *Seti I* (CG6107; JE26213) was found in one of his original coffins (CG61019) in DB320. The identification of the body is clear from two dockets on the mummy wrappings and another three dockets on the coffin relating to the restoration and reburial of the body (REEVES, *VoK*, 94; SMITH, *RM*, 57). The age of the king was estimated at 35–40 years by XARM (table 6.4). The estimate by IKRAM/DODSON (*RM*, 39) is about 40 years.

16. *Ramesses II* (CG61078; JE26214) was found in DB320 and identified by two dockets on the coffin and a type B docket beneath the outer wrappings (REEVES, *VoK*, table 5/3, p. 208; 94f.).

⁵⁸ R.G. HARRISON, A.B. ABDALLA, The remains of Tutankhamun, *Antiquity* 46/181 (1972), 8–14; most recently Z. HAWASS *et al.*, Computed tomographic evaluation of Pharaoh Tutankhamun, *ASAE*, 81 (2009), 159–174. Cf. also specific medical reports on the mummy: R.S. BOYER, E.A. RODIN, T.C. GREY, R.C. CONNOLLY, The Skull and Cervical Spine Radiographs of Tutankhamen: A Critical Appraisal, *American Journal of Neuroradiology*, 24 (2003), 1142–1147; W. BENSON HARER, Chariots, Horses, or Hippos: What Killed Tutankhamun? *Minerva* 18/5 (2007), 8–10; D.C. FORBES, Tutankhamen's Mummy, *KMT*, 3/1, 58–6; Z. HAWASS *et al.*, Ancestry and Pathology in King Tutankhamun's Family, *Journal of the American Medical Association* 303 (7) (2010), 638–647.

⁵⁹ N.C. REEVES, *VoK*, 78.

⁶⁰ E. STROUHAL, *The Memphite Tomb of Horemheb, Commander-in-chief of Tutankhamun, 4: Human Skeletal Remains*, EES Excavation Memoir 87, London 2008, 1f.

⁶¹ G. GIBSON, Names Matter: The Unfinished History of the Niagara Falls Mummies, *KMT* 11/4 (2001), 18–29; B.T. TROPE, P. LACOVARA, A Pharaoh in Atlanta? The Michael C. Carlos Museum's Royal Mummy is Probably Rameses, *KMT* 14/2 (2003), 45–51; M. ROSE, Mystery Mummy. A royal body may be that of Rameses I, but can we ever be sure? *Archaeology* 56:2, March/April 2003, 18; P. LACOVARA, Returning Ramesses: An Egyptian Patriarch Goes Home, http://www.emory.edu/ACAD_EXCHANGE/2003/decjan/ramesses.html.

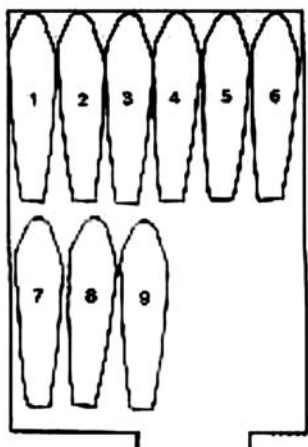


Fig. 1 KV 35, Jb cache
(after REEVES, *VoK*, fig. 91)

The mummy underwent extensive investigation in France between September 1976 and May 1977 when the age at death was determined at 80 ± 5 years.⁶²

17. *Merenptah* (CG61079; JE34562): His body was found in side-chamber *Jb* of KV 35 [number 4 on Fig. 1], laid to rest in the coffin box of a cartonnage coffin (CG61039) that had originally belonged to Sethnakht.⁶³ His identification is based on a type A linen docket (REEVES, *VoK*, table 9/9). SMITH (*RM*, 66) stated that this was the body of an old man. XARM estimated the king's age at death at 45–50 years (whereas the vault suture closure is “younger”, 35–40: table 6.4). Ikram/Dodson assume that he ascended the throne in his late 60s or early 70s which in consequence would set his age at death at ca. 80 years (IKRAM/DODSON, *RM*, 41). The degenerative pathological conditions that his remains reveal would support an old age (HARRIS/WEEKS, *X-Raying*, 157: at beginning of reign, over 50 years old).

18. *Seti II*'s body (JE34561; CG61081) was found next to Merenptah's in side-room *Jb* of

KV35 (Fig. 1, number 3).⁶⁴ A type A linen docket on his breast identified the king, while one of his garments carried the cartouche of Merenptah; other hieratic ink inscriptions on the embedded shirts are unpublished (REEVES, *VoK*, 211: table 6/2–13; 232: table 9/14). Despite Ikram/Dodson's assertion that “the king only suffered slightly from arthritis in his hip when he died at a fairly advanced age” (IKRAM/DODSON, *RM*, 42), the prevailing view is that he died young. The estimate of XARM is 25 years (table 6.4), Smith speaks of a “young or middle-aged” man (SMITH, *RM*, 73).

19. *Siptah* (JE34563; CG61080) was reburied in side-chamber *Jb* of KV 35 (at position 5) in a replacement coffin.⁶⁵ He was identified by a type A linen docket (REEVES, *VoK*, 248; 232: table 9/16). He seems to have died “as a young man” (SMITH, *RM*, 72), in his late teens or early twenties (HARRIS/WEEKS, *X-Raying* 160; the earlier estimate also in IKRAM/DODSON, *RM*, 43), between 20–25 years (XARM table 6.4).

20. *Tewosret* (?): Equating the female mummy of “Unknown Woman D” found in side-chamber *Jb* of KV 35 (Fig. 1, position 7), placed within the coffin lid of Setnakhte, with Tewosret or Tiye Mereniet, wife of Setnakhte (IKRAM/DODSON, *RM*, 44), or another royal woman of the Rameside period, cannot be ascertained. The fact that the cheeks are stuffed (not attested until Siptah) and conversely, that she had no artificial inlaid eyes (as customary from Ramesses IV/V onward), points to a royal woman of the time between Siptah and Ramesses IV.

21. *Sethnakht*: The mummy of Sethnakht, founder of the 20th dynasty, has so far not been identified or found with any certainty. A possible candidate adduced by some scholars in the context of the other dynasty 19 and 20 royal mummies found in KV35 is the “mummy in the boat”, found by Victor Loret in the antechamber of

⁶² L. BALOUT, C. ROUBET C. DESROCHES-NOBLECOURT, *La momie de Ramsès II. Recherche sur les Civilisations*, Paris 1985; A. MONIER, T. MONIER, *La momie de Ramsès II: étude paléopathologique d'un pharaon de la XIX^e dynastie* (<http://www.bium.univ-paris5.fr/sfhad/vol7/article02.htm>); E. FELDTKELLER, E.-M. LEMMEL, A.S. RUSSELL, Ankylosing spondylitis in the pharaohs of ancient Egypt, *Rheumatology International* 23 (2003), 1–5.

⁶³ P. PIACENTINI, C. ORSENIGO, *La Valle dei Re Riscoperta. I giornali di scavo di Victor Loret (1898–1899) e altri inediti*,

Milano 2004, 180f. (the label misread by Loret as the personal name of Akhenaten).

⁶⁴ P. PIACENTINI, C. ORSENIGO, *op.cit.*, 178f. The diagram reproduced here is from REEVES, *VoK*, fig. 91 and was, since Reeves had no knowledge of a sketch by Loret, reconstructed on the basis of Loret's comments. The edition of Loret's excavation notes shows the sketches Loret produced (*op.cit.*, 126; 177) and proves Reeves right.

⁶⁵ P. PIACENTINI, C. ORSENIGO, *op.cit.*, 180f.



Fig. 2 The mummy in the boat from KV35 (after PIACENTINI, ORSENIGO, *La Valle dei Re Riscoperta. I giornali di scavo di Victor Loret (1898–1899) e altri inediti*, 68)

KV35 in a model boat.⁶⁶ Very unfortunately, and unlike the other mummies in the tomb, the body in the boat was not transferred to Cairo and, when the tomb was looted in November 1901, was smashed into pieces.⁶⁷ The boat itself was later retrieved and is now in Cairo.⁶⁸ However, as has been argued by A. Dodson, this body and the three bodies found in chamber *Jc* are very likely to be identified with members of the family of Amenophis II (Fig. 2).⁶⁹

22. *Ramesses III* (CG61083; JE26208b?), recovered from DB320 where the body was placed in a replacement coffin and then placed in the large coffin of Ahmes-Nefertari together with that queen's probable mummy, is identified by a type B linen docket under the outer shroud and two linen notations; on some of the lower layers, notations refer to *Ramesses III's* mortuary temple as the provenance of the linen (REEVES *VoK* 208, table 5/3, 31; 235, table 10/3, 15.16.20; 248f.). The age estimate given by XARM is 30–35 years which, again, is too short to conform to his reign of 31 years. By contrast, HARRIS/WEEKS (*X-Raying*,

164) noted that “his mummy is that of an old man”, in accordance with which statement Ikram/Dodson conclude that the king died “when he was in his sixties” (IKRAM/DODSON, *RM*, 45).

23. *Ramesses IV's* body (CG61084; JE34597), found in KV35 (within the last coffin introduced into the *Jb* cache) was identified by the inscription on the substitute coffin⁷⁰ while a type A linen docket (according to Loret, “au pied”, whereas Reeves speaks about a type A docket on his breast) was unreadable (REEVES *VoK* 117; 210, table 6/10; 249). Smith estimated that *Ramesses IV* was at least 50 years old when he died and probably older (SMITH, *RM*, 87), an estimate adopted by IKRAM/DODSON (*RM*, 46). By contrast, XARM gives him 35–45 years (table 6.4). While SMITH (*RM*, 88) had noted that the teeth were “healthy, but well worn”, HARRIS/WEEKS (*X-Raying*, 166) stated that “his teeth are in unusually good condition”, a comment probably favouring the lower age estimate.

24. *Ramesses V* (CG61085; JE34566): The body found in position 6 of the *Jb* cache in KV35 is nor-

⁶⁶ P. PIACENTINI, C. ORSENIGO, *op.cit.*, 68f., 124, 166. The picture reproduced here is on p. 68. For the page of Loret's excavation journal, see *op.cit.* 125. REEVES, *VoK*, 111, 204, 210.

⁶⁷ P. PIACENTINI, C. ORSENIGO, *op.cit.*, LV (and English translation, p. 37).

⁶⁸ The whereabouts of the remains of the body are at present unknown (kind information by Salima Ikram).

⁶⁹ A. DODSON, *The Burial of Members of the Royal Family in the 18th Dynasty*, in: Z. HAWASS, L. PINCH-BROCK (eds.),

Egyptology at the Dawn of the 21st Century. Proceedings of the Eighth International Congress of Egyptology Cairo 2000, vol. 2: History – Religion, Cairo 2003, 189f. The famous “Elder Lady” could, in this context, be queen Tia, wife of Amenophis II and mother of Thutmose IV (<http://aegyptologie.unibas.ch/forschung/projekte/misr-mission-siptah-ramses-x/koenigin-tiaa/>).

⁷⁰ P. PIACENTINI, C. ORSENIGO, *La Valle dei Re Riscoperta. I giornali di scavo di Victor Loret (1898–1899) e altri inediti*, Milano 2004, 169 (picture), 184f.

mally identified as that of Ramesses V due to a type A docket (REEVES *VoK* 232, table 9,13). The docket was, however, “presque entièrement effacé” and the ink rests given by Loret⁷¹ might just be sufficient to read the king’s epithet Sekheperenre, an identification tentatively proposed by Loret. There is unanimity on the age at death of the king (“much younger than his predecessor”, SMITH, *RM*, 91) as being between 30–35 years (XARM, table 6.4: 25–35 years; HARRIS/WEEKS, *X-Raying*, 167: “Dentally, there is little doubt that the king died in his early thirties”; IKRAM/DODSON, *RM*, 47: early thirties).

25. *Ramesses VI* (CG61086; JE34564): The mummy of Ramesses VI was found in side chamber *Jb* of KV 35 and was identified by an ink docket on the substitute coffin.⁷² Smith estimated his age at death as “apparently middle-aged”, between the estimates for Ramesses IV and Ramesses V (SMITH, *RM*, 94), a view endorsed by HARRIS/WEEKS (*X-Raying*, 168: early middle age), XARM (table 6.4: 30–35 years).

26. *Ramesses IX*: The mummy of Ramesses IX, placed in a coffin of Neskhons in DB320 (neither picture nor CG number in IKRAM/DODSON, *RM*, 49) has never been subjected to a full examination and was not examined by Elliot Smith although the body must have been preserved at the Cairo Museum (REEVES *VoK*, 208, table 5/3, 32 [no CG number]). It is also absent from HARRIS/WEEKS, *X-Raying*,⁷³ whereas XARM (table 6.4) gives 35–40 years for the body which they identify with either Ramesses IX or XI. The type B linen docket on the breast (REEVES *VoK*, 237, table 10/5, 37) speaks (as quoted from Maspero) about the ‘expedition faite au temple [*hwt*] en l’an VII, pour emailletter le roi RA-KHAMOIS...’. While both Ramesses IX and Ramesses XI used the epithet *Khaemwese*, the fact that Ramesses XI did not use his tomb in the Valley of the Kings for his burial but was probably buried in the delta residence,⁷⁴ makes the identification with Ramesses IX certain.

2.1.3 Conclusions and probability of assumed identities

Based on the discussion of the evidence presented in the catalogue, a chart indicating four major

indicators in favour of or against an identification of the royal mummies is presented below. Indicator (1) is the existence of an identifying label (linen or coffin), (2) the position of the arms, (3) the agreement between the estimated age at death and the historical reign length, and (4) the biological agreement as established by J.E. Harris on the basis of the craniofacial features. In this perspective,

- **positive identifications** with a ratio of 4/0 exist in the cases of

Tutankhamun
Seti I
Ramesses II
Merenptah
Ramses IV
Ramses V
Ramses IX

- **positive identifications** with a ratio of 3/1 exist in the cases of

Thutmose II (only if lower age estimate is paired with long reign)
Amenophis I
Thutmose III
Amenophis II
Thutmose IV
Smenkhkare
Seti II
Ramses III

- **neuter identifications** with a ration of 2/2 exist in the case of

Hatshepsut (no craniofacial judgment available)
Amenophis III
Ramesses I

- **negative identifications** with a ration of 1/3 exist in the cases of

Ahmose, Tewosre

- **negative identifications** with a ration of 0/4 exist in the cases of

Thutmose I

⁷¹ P. PIACENTINI, C. ORSENIGO, *op.cit.*, 184f.

⁷² P. PIACENTINI, C. ORSENIGO, *op.cit.*, 184f.

⁷³ And equally, from R.B. PARTRIDGE, *Faces of pharaohs: royal mummies and coffins from Ancient Thebes*, London 1994.

⁷⁴ T. SCHNEIDER, Ramses X.: Person und Geschichte, in: H. JENNI (ed.), *Das Grab Ramses’ X*, Aegyptiaca Helvetica 16, Basel 2000, 104–108.

While the variability of estimated ages and in some questions, questioned identities, is inferior in accuracy to the lengths of reign as established purely on the basis of historical and epigraphical sources, the mummy assigned to Thutmose II (and equally the alternative scenario proposed by Harris/ Wente) can effectively contribute to the debate on the length of reign of Thutmose II (see below sub 2.) (Table 4).

2.2 Specific problems of the chronology of the New Kingdom

2.2.1 *The reign length of Thutmose II*

In his latest contribution to New Kingdom chronology, Erik Hornung has adduced the presumed facts of a missing funerary temple and the small number of preserved scarabs as the main evidence in support of a short, 3-year reign, priv-

Assumed identity	mummy label	coffin label	arms crossed	Estimated age based on mummy	agreem. with hist. age	biol. id.
Ahmoose	yes	–	no	25–30 XARM	no	no
Amenophis I	yes	–	yes	20–30 XARM	no	yes
Thutmose I	–	–	–	18–22 XARM	no	no
Thutmose II	yes	yes	yes	25–30 XARM	lower estimate if long reign	no
Hatshepsut	no	no	queen position	yes 50+ years	yes	–
Thutmose III	yes	–	yes	35–40 XARM	no	yes
Amenophis II	yes, found in his tomb	yes	yes	35–45 XARM	yes	no
Thutmose IV	yes	yes	yes	30–40 XARM SMITH: 25	yes	no
Amenophis III	yes	yes	yes	30–35 XARM SMITH: 40/50	no	no
Semenkhkare	no	no	yes?	18–23	yes	yes
Tutankhamun	found in his tomb	yes, found in his tomb	yes	18–20	yes	yes
Ramesses I	no	yes, uncertain assignment of mummy	yes	35–45 XARM	no	–
Seti I	yes	yes	yes	35–40 XARM	yes	yes
Ramesses II	yes	yes	yes	55+ (80+?) XARM	yes	yes
Merenptah	yes	found in coffin of Setnakhte	yes	45–50 XARM	yes	yes
Seti II	yes	–	yes	25 XARM	yes	no
Siptah	yes	yes	yes?	20–25 XARM	yes	yes
Tewosre/ Woman D	no	no	not queen position	senile atrophy of breasts?	yes	–
Setnakhte? (Mummy in boat)	?	?	?	?	yes	–
Ramesses III	yes	–	yes	30–35 XARM 60+	no	yes
Ramesses IV	yes?	–	yes	35–45 XARM 50+ SRR	yes	yes
Ramesses V	yes	–	yes	25–35 XARM	yes	yes
Ramesses VI	–	yes	yes	30–35 XARM	yes	yes
Ramesses IX	yes	–	yes?	35–40 XARM	yes	yes

Table 4 Probability of assumed identities of the royal mummies

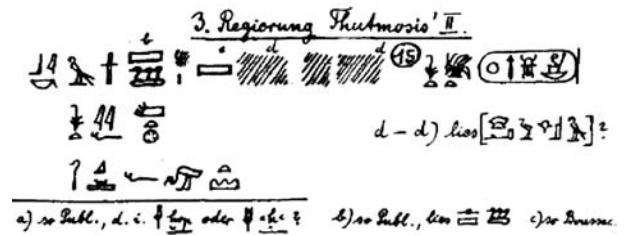
iledging them over possible indicators of a long reign from the non-material evidence (the age at death as evidenced by the mummy; Manetho; the Ebers date; the early celebration of the Sed festival in Hatshepsut's 16th/17th year, possibly through addition of the 13 years of her husband).⁷⁵ As Jürgen von Beckerath and more recently Vera Müller have remarked, we have no conclusive criteria allowing us to statistically associate the numbers of preserved artefacts with reign lengths.⁷⁶ While the imponderabilia of artistic productivity and source preservation loom over all respective conclusions, scholars were not opposed to reaching methodologically divergent conclusions with respect to other reigns. In the case of Horemheb, to cite one example, the modest dimensions of his tomb in the Valley of the Kings and the absence of artefacts datable to years beyond his 13th have not prevented scholars from defending a long reign (see below). Most recently, R. Krauss/D.A. Warburton have even advocated a mere 1-year reign for Thutmose II.⁷⁷ Whereas PETER F. DORMAN held that “the arguments rest largely on the projected ages of the kings involved, the age at which they were able to conceive children, and the biographies of their private officials, criteria that may be assessed in different ways”,⁷⁸ explicit evidence can be adduced against a short and in favour of a long reign.⁷⁹ Moreover, both the reassessment of evidence and new finds have revealed a potentially more extensive building activity of the king.

Arguments in favour of a long reign:

(1) Manetho who lists Thutmose II under his throne name ʿ3-ḥpr-n-Rʿ = *Chebron* assigns him 13 regnal years (Josephus, Theophilus, Africanus after Synkellos, Eusebius after Synkellos and the

Armenian version). It is rather unlikely to posit that an ι (Iota) = 10 was erroneously added to the original ‘3’ in the course of transmission of Manetho.

(2) In the inscription of the royal overseer of construction Ineni, Thutmose II on his assumption of power is explicitly called a “falcon in the nest”, i.e. a minor (*Urk. IV, 58*):



(3) In agreement with this, Thutmose II did not participate in the Nubian campaign of the first regnal year which would usually have been a ritual necessity; he therefore seems to have been a child (or alternatively, of bad health). This is suggested by the text of the stela which says that “his majesty dispatched a large army to Nubia” and that it was his authority (*b3w*) which led the expedition:



From (2) and (3) it has to be inferred that Thutmose II was younger than 15 years when he ascended the throne; L. Gabolde proposes 12–13

⁷⁵ E. HORNUNG, The New Kingdom, in: E. HORNUNG, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology* HdO 1, 83, Leiden, Boston 2006, 200.

⁷⁶ V. MÜLLER, Wie gut fixiert ist die Chronologie des Neuen Reiches wirklich?, *E&L* 16 (2006), 215; J. VON BECKERATH, Nochmals zur Regierung Thutmosis' II., *SAK* 17 (1990), 65–74.

⁷⁷ R. KRAUSS, D.A. WARBURTON, The Basis for the Egyptian Dates, in: D.A. WARBURTON (ed.), *Time's Up! Dating the Minoan Eruption of Santorini*, Monographs of the Danish Institute at Athens 10, Athens 2009, 129.

⁷⁸ P.F. DORMAN, The Early Reign of Thutmose III: An Unorthodox Mantle of Coregency, in: E.H. CLINE, D.

O'CONNOR (eds.), *Thutmose III. A New Biography*, Ann Arbor 2006, 60 n. 12.

⁷⁹ For the past debate, see the references given in n. 78 and L. GABOLDE, La chronologie du règne de Thoutmosis II, ses conséquences sur la datation des momies royales et leurs répercussions sur l'histoire du développement de la Vallée des Rois, in: S. SCHOSKE (ed.), *Akten des vierten internationalen Ägyptologen Kongresses, München 1985. Band 4: Geschichte – Verwaltungsgeschichte – Wirtschaftsgeschichte – Rechtsgeschichte – Nachbarkulturen*, SAK Beihefte 4, Hamburg 1991, 55–61.

years. If the mummy conventionally identified with Thutmose II from DB320 (CG61066; JdE26212) is his, a long reign must inevitably be posited. The lower end of the age estimate (25–30 years) paired with a long reign of 13 years would result in the required age of 12 years at the time of the king's ascension. The upper age estimate would conflict with the Ineni statement as we would be dealing with a person of 17 years who no longer could be called a falcon in the nest and would also have been able to participate in the Nubian expedition. Higher age estimates (such as the 2007 one of the new CT investigation commissioned by Z. Hawass) would require us to raise the length of Thutmose II's reign to impossible 28 years, or to reject the identification of the mummy with Thutmose II. Wente reevaluated the dockets supposedly identifying the mummy as the body of Thutmose II: "On the mummy the orthography of the king's name was not without ambiguity, while on the coffin the scribe had originally written the prenomen of Thutmose I and then altered it to Thutmose II's. Since the mummy identified as Thutmose II was older at death than the Seti II one [which according to Wente does not belong into the 19th dynasty and should be reassigned to the Thutmoseid family, TS], and from historical considerations we believe that Thutmose I died at an older age than Thutmose II, the end result of this part of our inquiry was to suggest that the Thutmose II mummy really belonged to Thutmose I and the Seti II mummy to Thutmose II."⁸⁰ Under this hypothetical scenario, again only a long chronology is applicable as the age estimate of the "Seti II" mummy corresponds to the lower end of the Thutmose II estimate (25 years).

(4) This assumption is in conformity with the fact that from the two children engendered with Hatshepsut, Thutmose III was too young to assume power at the time Thutmose II died. On the assumption that Thutmose III was born when his father was at least 15 years of age, he would have been 10 years old when Thutmose II died. With a short reign of three years, Thutmose III could just have been born or have been ca. 1 year

old but as indicated before, this is only admissible when the mummy of Thutmose II is dismissed.

(5) The unexpectedly early celebration of the Sed festival in Hatshepsut's 16th year has stirred different explanations. Most recently, E. Hornung/E. Staehelin have commented on the debate:

"Für Hatshepsut hat man die Erklärung versucht, dass sie für die Feier ihres Hebsed nicht von ihrer eigenen Thronbesteigung oder Usurpation ausgeht, sondern vom Regierungsantritt ihres Vaters Thutmosis' I., als dessen legitime Mitregentin und Nachfolgerin sie sich fühlt. Als Alternative hat zuletzt Jürgen von Beckerath eine Zählung von der Thronbesteigung ihres Gemahls Thutmosis II. vertreten. Damit käme man wiederum auf eine Dreissigjahr-Periode, doch ist ein Zusammenhang zwischen den auf ihrem nördlichen Obelisken genannten Daten und dem Vermerk "Erstes Mal des Hebsed" auf dem gleichen Obelisken keineswegs sicher, obwohl für J. von Beckerath durch diesen Vermerk "die tatsächliche Durchführung dieser Feier wohl bewiesen" sei; es handelt sich um eine "Pillar Benediction", die auch in anderen Fällen (Amenophis II., Thutmosis IV.) keineswegs beweiskräftig ist. Immerhin scheint das "Erste Mal" auf dem Obelisken als Anlass für die Errichtung dieses Denkmals genannt zu sein (*Urk.* IV 358, 17f.). Zur Vorsicht mahnt auch die "Wiederholung" von Sedfesten, von der Thot in einer Götterrede der "Roten Kapelle" in Karnak spricht; hier ist ein Wunsch an die Götterneunheit ausgedrückt, und von Hatshepsut ist auch nirgends ein "Zweites Mal" des Erneuerungsfestes belegt."⁸¹

However, the similarity of the statements about erecting the obelisks as a "first time" and the "first time" of celebrating the Hebsed seem rather to be indicative of the fact that the two events coincided.

(6) Recently, Peter F. Dorman has added an important argument in favour of a long reign of Thutmose II when commenting on the age of Hatshepsut:

"One may well wonder how old Hatshepsut was at this juncture. If Hatshepsut were only twelve or thirteen at her father's death (perhaps barely able

⁸⁰ E.F. WENTE, Who Was Who Among the Royal Mummies, *The Oriental Institute News and Notes* 144, Winter 1995.

⁸¹ E. HORNUNG, E. STAEHELIN, *Neue Studien zum Sedfest*, *Aegyptiaca Helvetica* 20, Basel 2006, 36f. (and p. 23 for

the actual records). J. von Beckerath's contribution is: Zum Jubiläum der Hatshepsut, in: J. AKSAMIT *et al.* (eds.), *Essays in Honour of Prof. Dr. Jadwiga Lipińska*, Warsaw Egyptological Studies 1, Warsaw 1997, 15–20.

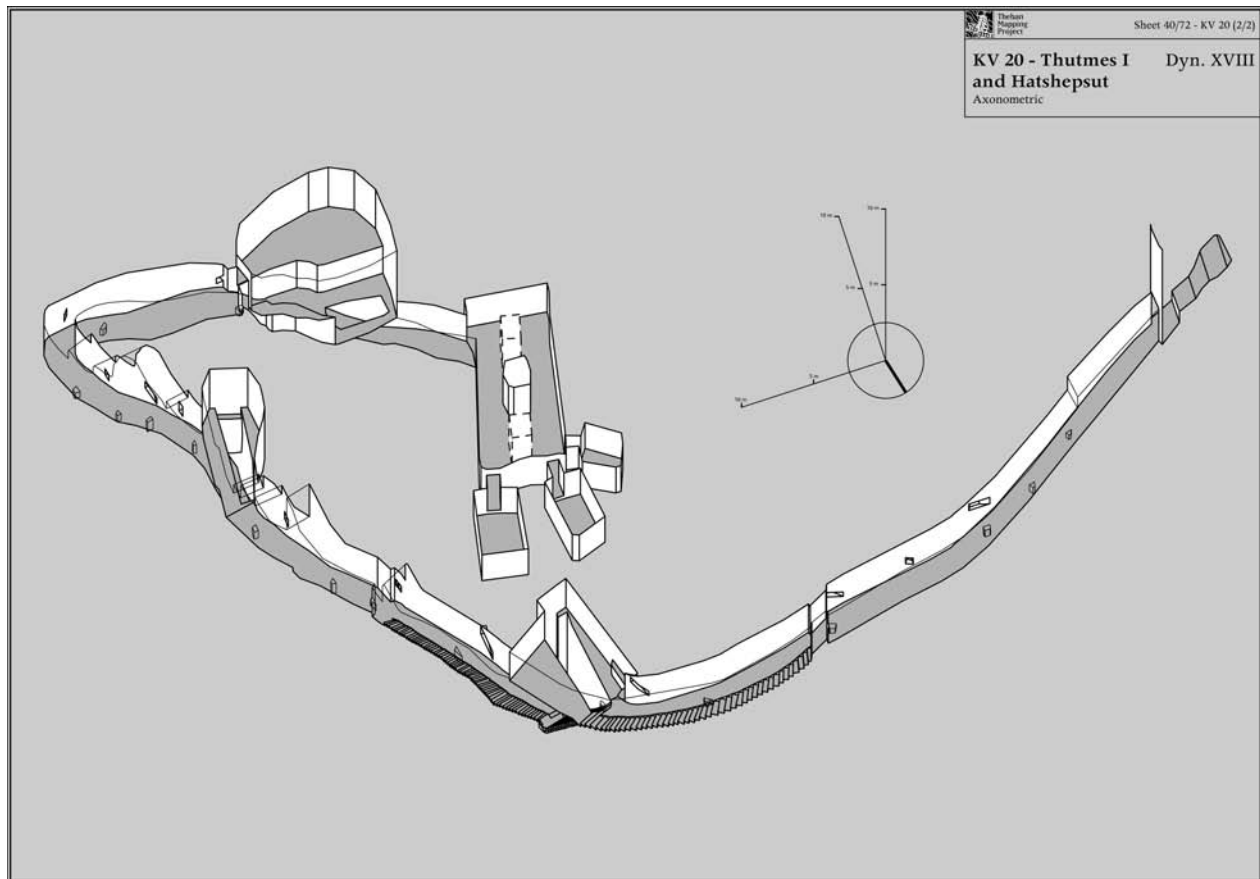


Fig. 3 KV20 (Theban Mapping Project)

to bear children), she would have been only fifteen or sixteen at her husband's demise (assuming a short reign of three years) – hardly capable of the decisive acts of governance implied by Ineni. But a long reign of thirteen years for Thutmose II would add another decade to her age, alleviating this difficulty to a certain degree.⁸²

(7) *Evidence of construction activity of Thutmose II:* The reluctance to assign 13 years to Thutmose II was, as mentioned before, mainly due to the deficient evidence of construction activity. However, recent research has pointed to the possibility of

more extensive building on the part of the king, in particular by suggestions that major building projects of Hatshepsut were originally Thutmose II's and should correctly be reassigned to him.

(a) Catherine Roerig has proposed to identify tomb KV20, conventionally believed to have been commissioned by Hatshepsut,⁸³ with the original tomb of Thutmose II.⁸⁴ If correct, this would be a major project requiring a construction period of several years (Fig. 3).

(b) Zygmunt Wysocki has suggested that the funerary temple of Hatshepsut at Deir el-Bahari was

⁸² P.F. DORMAN, The Early Reign of Thutmose III: An Unorthodox Mantle of Coregency, in: E.H. CLINE, D. O'CONNOR (eds.), *Thutmose III. A New Biography*, Ann Arbor 2006, 60 n. 17 (and cf. n. 7.12–14 for the issue of the reign length of Thutmose II).

⁸³ For the debate on KV20, see e.g., J. ROMER, Royal Tombs of the Early Eighteenth Dynasty, *MDAIK* 32 (1976), 191–206; A.M. DODSON, The Tombs of the Kings of the Early Eighteenth Dynasty at Thebes, *ZÄS* 115 (1988), 110–123, II, P. DER MANUELIAN and C.E. LOEBEN, New Light on the Recarved Sarcophagus of

Hatshepsut and Thutmose I in the Museum of Fine Arts, Boston, *JEA* 79 (1993), 121–155; L. GABOLDE, Les tombes d'Hatchepsout, Égypte, *Afrique et Orient* 17 (2000), 51–56.

⁸⁴ C. ROERIG, The Building Activities of Thutmose III in the Valley of the Kings, in: E.C. CLINE, D. O'CONNOR (eds.), *Thutmose III: A New Biography*, Ann Arbor 2006, 238–259; EAD., Chamber Ja in Royal Tombs in the Valley of the Kings, in: P.F. DORMAN, B.M. BRIAN (eds.), *Sacred Space and Sacred Function in Ancient Thebes*, SAOC 61, Chicago 2007, 117–138.

originally begun as Thutmose II's own mortuary temple. Thutmose III here replaced Hatshepsut's depiction by Thutmose II's in those parts of the temple that are proposed to have been executed by the latter before Hatshepsut took over the temple.⁸⁵

This reevaluation of the evidence would remove two arguments traditionally advanced in favour of a short reign: the absence of a tomb that can be clearly assigned to Thutmose II, and the absence of a funerary temple. It alligns with other policies of Hatshepsut's aimed at including her former husband's reign in hers, in particular the year count of her Sed festival (see above, 2.2.1, [5]).

(c) New work at Karnak has produced evidence of a pylon and an opulent festival court of Thutmose II in front of the 4th pylon.⁸⁶ The two obelisks commissioned by Thutmose II were erected by Hatshepsut.⁸⁷ Additionally, the French work at Karnak has uncovered blocks from a chapel and a barque sanctuary by Thutmose II.⁸⁸

(d) In Nubia, Thutmose II has contributed to the decoration of the temple of Khnum at Semna.⁸⁹

(e) Thutmose II may also have been one of the founders of the South Temple of Buhen.⁹⁰

(f) Construction on behalf of Thutmose II is attested through blocks found at Elephantine. A statue of the king found here was probably commissioned by Hatshepsut.⁹¹

(g) In more general terms, interest of the king in the region south of Aswan is shown by the Aswan-Philae inscription.⁹²

(h) Other buildings in his name seem to have been built by his successors, e.g. the small temple by the name of Shesepetankh, north of the (later) temple of Medinet Habu, built postumously for Thutmose II by Thutmose III.⁹³ In the case of the Kha-Akhet temple in the Assasif, a construction originally built by Hatshepsut was later reinscribed in the names of Thutmose II and Thutmose III.⁹⁴

In sum, the balance seems tilted towards a long reign for Thutmose II.

2.2.2 *The reign length of Horemheb*

While two votes from 2006 and 2007 still pleaded for a long reign of Horemheb of 27 or 28 years (E. Hornung,⁹⁵ K.A. Kitchen⁹⁶) a long reign of up to 31 years was also been advocated by J. von Beckerath⁹⁷), new evidence in the form of more than 200

⁸⁵ Z. WYSOCKI, The Temple of Queen Hatshepsut at Deir el-Bahari: Its Original Form, *MDAIK* 42 (1986), 213–228.

⁸⁶ L. GABOLDE, La "cour de fetes" de Thoutmosis II à Karnak, *Cahiers de Karnak* 9 (1993), 1–100; L. GABOLDE, *Monuments décorés en bas relief aux noms de Thoutmosis II et Hatshepsout à Karnak*, MIFAO 123, le Caire 2005. F. LARCHÉ, Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon, *Cahiers de Karnak* 12 (2007), 407–592.

⁸⁷ L. GABOLDE, A propos de deux obélisques de Thoutmosis II, dédiés à son père Thoutmosis I et érigés sous le règne d'Hatshepsout-pharaon à l'ouest du IV^e pylône, *Cahiers de Karnak* 8 (1982–1985), 143–158.

⁸⁸ L. GABOLDE, *Monuments décorés en bas relief aux noms de Thoutmosis II et Hatchepsout à Karnak*, MIFAO 123, le Caire 2005.

⁸⁹ R. CAMINOS, *Semna-Kumma II*, 20–25, pls. 20–23; W.V. DAVIES, Tombos and the Viceroy Inebny/Amenemnekhu, *British Museum Studies in Ancient Egypt and the Sudan* 10 (2008), 45f.

⁹⁰ R. CAMINOS, *Buhen II*, 4f.; H.S. SMITH, *The Fortress of Buhen. The Inscriptions*, EES Excavation Memoirs 48, London 1976, 210; PEDEN, *The Graffiti of Pharaonic Egypt. Scope and Role of Informal Writings (c. 3100–332 BC)*, Leiden, Boston, Köln 2001, 89.

⁹¹ G. DREYER, Eine Statue Thutmosis' II. aus Elephantine, *SAK* 11 (1984), 489–499.

⁹² D. LORTON, The Aswan/Philae Inscription of Thutmose II, in: S. ISRAELIT-GROLL (ed.), *Studies in Egyptology Present-*

ed to Miriam Lichtheim, vol. 2, Jerusalem 1990, 668–679; L. GABOLDE, La stèle de Thoutmosis II à Assouan, témoin historique et archétype littéraire, in: A. GASSE, V. RONDOT, *Sehel entre Egypte et Nubie. Inscriptions rupestres et graffiti de l'époque pharaonique. Actes du colloque international 31 mai–1^{er} juin 2002, Université Paul Valéry, Montpellier, Orientalia Monspeliensia 14*, Montpellier 2004, 129–148.

⁹³ A. CABROL, *Les voies processionnelles de Thèbes*, Leuven 2001, 559f.; L. GABOLDE, Les Temples "Mémoriaux" de Thoutmosis II et Toutânkhamon : (Un rituel destiné à des statues sur barques), avec la collaboration de M. GABOLDE, *BIFAO* 89 (1989), 127–178.

⁹⁴ Abu el-Ayun Barakat, The Temple of Kha^c-Akhet in Western Thebes, *MDAIK* 37 (1981), 29–33.

⁹⁵ E. HORNUNG, The New Kingdom, in: E. HORNUNG, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology HdO 1*, 83, Leiden, Boston 2006, 209 (27 Jahre).

⁹⁶ K.A. KITCHEN, Egyptian and Related Chronologies – Look, no Sciences, no Pots! in: M. BIETAK (ed.), *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C. III. Proceedings of the SCIEM 2000 – 2nd Euro Conference, Vienna, 28th of May – 1st of June 2003*, CChEM 9, Wien 2007, 168 (28 Jahre).

⁹⁷ J. VON BECKERATH, Das Problem der Regierungsdauer Haremhab, *SAK* 22 (1996), 37–41; ID., *Chronologie des ägyptischen Neuen Reiches*, Hildesheim 1994, ID., *Chronologie des pharaonischen Ägypten. Die Zeitbestimmung der ägyptischen Geschichte von der Vorzeit bis 332 v. Chr.*, MÄS 46, Mainz 1997.

hieratic jar dockets from the well room (E) of the tomb of Horemheb in the Valley of the Kings (and one additional “year 14” date from a dump between the tombs of Seti I and Ramesses X) consistently mentions either his year 13 (for ordinary wine) or year 14 (for best wine).⁹⁸ Jacobus van Dijk has recently reevaluated the question of Horemheb’s reign length (including the controversial dates from the tomb of Mes at Saqqara,⁹⁹ from a royal statue,¹⁰⁰ and from O. IFAO 1254¹⁰¹) and concluded that Horemheb reigned full 14 years and died at the beginning of his 15th year. Manetho’s original date for Horemheb may well have been in compliance with these epigraphic finds. His tradents list at the end of dynasty 18 for *Harmais* (the correct Greek rendering of *Horemheb*) „4 years, 1 month“ (*Josephus, Theophilus; Eusebius* [after Synkellos and the Armenian version: 5 years, equally Africanus, if to be recognised in the name form *Armesis*]¹⁰²). This can very easily have been misread from „14 years, 1 month“ since the Greek numerical letter for „10“ was a mere ι (Iota). A simple copying mistake would have reduced ιδ’ „14“ to

δ’. A possibly attested “15th year” of Horemheb¹⁰³ would then fall into the last month of Horemheb’s reign. The Mes date is very likely a mistake¹⁰⁴ since *inclusive dates* (embracing the rules of different kings) are not known from Egypt and the reign of Akhenaten is outright mentioned in the inscription as “the time of the criminal of Amarna” (pBerlin 3040A rto. 6f. dates a death retrospectively even to “year 9 of the criminal!”¹⁰⁵).

2.2.3 The late 19th Dynasty¹⁰⁶

The chronological position of Amenmesse has been a controversial issue for many years. Placing Amenmesse within the reign of Seti II rather than – as was presumed earlier – between Merenptah and Seti II has been recently advocated by A. Dodson on the basis of the building stages of his tomb in the Valley of the Kings.¹⁰⁷ R. Krauss tried to offer definite astronomical proof in 1997.¹⁰⁸ This proof, however, cannot be validated in the view of the present writer. Krauss’s starting point is the graffito DB3 from the temple of Thutmosis III at Deir el-Bahari which reports that in a year 7 (which has to be

⁹⁸ J. VAN DIJK, New evidence on the length of the reign of Horemheb (abstract), *JARCE* 44 (2008), 193–200.

⁹⁹ Like n. 97, 199f. with fig. 3.

¹⁰⁰ For this graffito s. A. PEDEN, *The Graffiti of Pharaonic Egypt. Scope and Role of Informal Writings (c. 3100–332 BC)*, Leiden, Boston, Köln 2001, 74f.; as a reference to Horemheb’s burial seen by E. HORNING, The New Kingdom, in: E. HORNING, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden/Boston 2006, 209. Explained as a secondary graffito by PEDEN (*op.cit.*) and also J. RAY, *Reflections of Osiris. Lives from Ancient Egypt*, New York 2002, 75. J.R. Harris saw it as pertaining to a visit by Ramesses II to Horemheb’s funerary temple: J.R. HARRIS, How Long Was the Reign of Horemheb? *JEA* 54 (1968), 96.

¹⁰¹ R. KRAUSS, Nur ein kurioser Irrtum oder ein Beleg für die Jahre 26 und 27 des Horemheb? *DE* 30 (1994), 73–85.

¹⁰² MANETHO, with an English Translation by W.G. WADDELL, London, Cambridge Mass. 1940, 21948 (und spätere Reprints) 103, 109, 113, 117, 119.

¹⁰³ J. VAN DIJK, Maya’s Chief Sculptor Userhat-Hatiay: with a Note on the Length of the Reign of Horemheb, *GM* 148 (1995), 29–34. Von Dijk does not include this date in his recent study (n. 97).

¹⁰⁴ J.R. HARRIS, How Long Was the Reign of Horemheb? *JEA* 54 (1968), 97 (includes also a calculation of age of a police commander after O. Toronto A.11 which supports a short reign); G.T. MARTIN, The Memphite Tomb of Horemheb, Commander-in-chief of Tutankh-

amun, 162 (mistake for 28 oder 29); W. HELCK, Zur Chronologiediskussion über das Neue Reich, *E&L* 3 (1992) [= High, Middle or Low? Acts of the Second International Colloquium on Absolute Chronology (The Bronze Age in the Eastern Mediterranean), Schloß Haindorf/Langenlois 12.–15. August 1990], 63–67; Id., Discussing the chronology of the New Kingdom, *JACF* 7 (1995), 79–84; J. VAN DIJK, New evidence on the length of the reign of Horemheb (abstract), *JARCE* 44 (2008), 193–200: 199f. Or could the ligature of *t* (*feminine ending*) + *sp* have been misinterpreted as the ligature of the numeral „50“ so that original *mp.t-sp* 8 would have given *mp.t (sp)* 58 in the Mes inscription?

¹⁰⁵ A.H. GARDINER, A Later Allusion to Akhenaten, *JEA* 24 (1938), 124.

¹⁰⁶ The following passage replicates a section of T. SCHNEIDER, Conjectures about Amenmesse: Historical, Biographical, Chronological, in: *Ramesside Studies, Festschrift K.A. Kitchen*, Bolton, which has been forthcoming since 2006.

¹⁰⁷ A. DODSON, The Decorative Phases of the Tomb of Sethos II and their Historical Implications, *JEA* 85 (1999), 131–42.

¹⁰⁸ R. KRAUSS, Untersuchungen zu König Amenmesse: Nachträge, *SAK* 24 (1997), 75 f. Repeated in R. KRAUSS, Lunar Dates, in: E. HORNING, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden, Boston 2006, 415.

Tawosret's), in the 2nd month of Shemu, on day 8, Amun was resting in the mortuary temple of Tawosret. This stay took place during the feast of the valley. The Medinet Habu calendar from the reign of Ramesses III informs us that Amun rested in Ramesses's mortuary temple on the first and the second day after the new moon in the second month of Shemu. Krauss concludes that, as an identical feast procedure is likely for Tawosret's reign, the date from the Deir el-Bahari graffito has to coincide equally with the first or the second day of a lunar month. He then calculates in which of the years between 1195 and 1180 BC the Tawosret date fell on one of the first two days of a lunar month – only in 1191 and 1180 – which complies solely with a minimal chronology that does not allow for a separate reign of Amenmesse. Krauss corroborates this by calculating the distance between the lunar date from II Peret 7 in Ramesses II's 52th year and the Tawosret date. This hypothesis holds true *unless* Amun stayed in the mortuary temple *more than two days*. Fortunately, there exists another date that allows the hypothesis to be tested – a date not mentioned by Krauss although it occurred a mere seven years before the Tawosret date and Schott lists it in his *Festdaten* immediately after the Tawosret one. O. Cairo CG 25538 from the 6th year of Seti II¹⁰⁹ states that II Shemu 25 was the 'day of Amun's sailing to the town', possibly his return to the east of Thebes.¹¹⁰ If we apply Krauss's argument of a two day visit to this message, the god's return would have taken place on the 3rd day of the lunar month, after Amun's stay in the funerary temple on its 1st and 2nd day. Counting backwards, we would have to postulate that II Shemu 22 in Seti's 6th year should have been a new moon, and II Shemu 23 the 1st day of the lunar month. Placing the Tawosret date on the base of a minimal chronology in

1191 BC is indeed in accordance with the lunar date (II Shemu 8, in Tawosret's 7th year falls on April 10, one day after the new moon of April 9).¹¹¹ But II Shemu 23 in the 6th year of Seti II fell on April 6, 1197, with the next new moon being not on April 4 or 5, but only on April 15. Even if we go back another year, to 1198, the situation is not better (new moon on March 8). This means that either the stay of Amun in the funerary temple lasted considerably longer (in the case of the Seti II date, at least 19 days) or the feast took place at another date altogether. In consequence, an absolute proof of an overlap of Amenmesse's and Seti II's reigns on the base of the Tawosret date is not possible.

Another piece of evidence in favour of a parallel reign has recently been put forward by J. J. Janssen. He inferred from the workmen data that during or after the reign of Amenmesse 'a large proportion of the gang was removed, either by "the enemy" [mentioned in ostraca and P. Salt 124 – TS] and his regime, or on Sethos' return to power at Thebes.'¹¹² An important piece of evidence adduced by Janssen is O. MMA 4.6.217 which records Seti's accession to the throne and was later reused to register absence from work. As this posterior register lists the workman Neferhotep who according to P. Salt 124 was killed in the reign of Amenmesse (who in the papyrus is possibly mentioned as 'Msy' in 2, 8), it would seem that Amenmesse could not have reigned before Seti II, but only during the latter's reign.¹¹³ On account of this argument, it seems reasonable to think that the reigns of Amenmesse and Seti II at least partly intersected."

A new interpretation of the term "Arsu" in the historical retrospective of the Great Papyrus Harris as "the one who reigned six (years)", combined with a new reconstruction of the political history of the late 19th dynasty,¹¹⁴ further corroborates a

¹⁰⁹ J. CERNY, *Ostraca hiératiques (CGC Nos 25501–832)*, Cairo 1935, I, 16, 34*; II, pl. 23; KRI IV, 315; S. WIMMER, *Hieratische Paläographie der nicht-literarischen Ostraka der 19. und 20. Dynastie*, ÄAT 8, Wiesbaden 1995, I, 58.

¹¹⁰ S. SCHOTT, *Altägyptische Festdaten*, AAWLM, Wiesbaden 1950, 107.

¹¹¹ I would like to thank Dr. Johannes Thomann, University of Zurich, who has kindly carried out the following astronomical calculations on my behalf.

¹¹² J. J. JANSSEN, Amenmesse and After: The Chronology of the Late Nineteenth Dynasty Ostraca = chapter 6 in id., *Village Varia: Ten Studies on the History and Administration of Deir el-Medina*, Leiden 1997, 104.

¹¹³ J. J. JANSSEN, VILLAGE VARIA, 100.

¹¹⁴ T. SCHNEIDER, Siptah und Beja. Neubeurteilung einer historischen Konstellation, ZÄS 130 (2003), 133–146; id., Siptah: Person und Geschichte, in: H. JENNI (ed.), *Das Grab Siptahs (KV 47) und das Grab der Königin Tiaa (KV 32)*. Mit Beiträgen von Andreas Dorn, Hanna Jenni, Barbara Lüscher, Elina Paulin-Grothe, Catharine Roehrig, Thomas Schneider, *Aegyptiaca Helvetica*, forthcoming. For recent literature on the end of the 19th dynasty, cf. P. GRANDET, L'exécution du chancelier Bay – O, IFAO 1864, *BIFAO* 100, 339–345; H. ALTENMÜLLER, Tausrets Weg zum Königtum: Metamorphosen einer Königin, in: R. GUNDLACH, U. RÖSSLER-KÖHLER (eds.), *Das Königtum*

reign length of six years for Siptah and a maximum of another two years until the assumption of power by Sethnakht. For the latter king who was traditionally believed to have died at the beginning of his third year, a fourth regnal year is now attested in a stele found at Karnak in 2006.¹¹⁵

The fact that no month or day are indicated may signify that the first day of the fourth year of reign is meant and that no more than three full years need to be accounted for.

2.2.4 Chronology of the last Ramessides (IX, X, XI)

Whereas the correct sequence of the late Rameside rulers had been unknown in earlier Egyptology, the succession of Ramesses IX./19 years, Ramesses X./3 years and Ramesses XI./ca. 30 years was established in the later part of the 20th century, mainly on the basis of dates attested in

the administrative papyri of the late 20th dynasty. New contributions of 1998–2007 by AD THIJS (1998–2007)¹¹⁶ and by GEORGES DEMIDOFF (2000–8)¹¹⁷ have recently challenged the accepted order and attempted to propose a shorter chronology of the late 20th dynasty. Thijs shortens the chronology by ca. 12 years to a total of 38/39 years, Demidoff by several years.¹¹⁸ In Thijs' reconstruction, the three final Ramessides would have had partially parallel reigns. While Ramesses X would have succeeded to Ramesses IX, Ramesses XI would have reigned for a total of 12 years simultaneously with Ramesses IX and Ramesses X. He would have begun his kingship in year 5 of Ramesses IX and inaugurated the Renaissance era early in his independent reign. This bold attempt at a short chronology has not received any comprehensive response and is widely ignored,¹¹⁹

der Ramessidenzeit. Voraussetzungen – Verwirklichung – Vermächtnis. Akten des 3. Symposiums zur Ägyptischen Königsideologie in Bonn 7.–9.6.2001, ÄAT 36,3 (= Beiträge zur alt-ägyptischen Königsideologie 3), Wiesbaden 2003, 109–128; V.G. CALLENDER, Queen Tausret and the End of Dynasty 19, SAK 32(2004), 81–104. Unfortunately, the recent debate is not accounted for in S. TIMM, Der Tod des Staatsfeindes: Neues zu B3j, VT 58 (2008), 87–100, or D. KAHN, Who is Meddling in Egypt's Affairs? The Identity of the Asiatics in the Elephantine Stele of Sethnakhte and the Historicity of the Medinet Habu Asiatic War Reliefs, JAEI 2:1 (2010), 14–23.

¹¹⁵ M. BORAİK, Stela of Bakenkhonsu, High Priest of Amun-Re, *Memnonia* 18 (2007), 119–126. For an online photography, see <http://en.wikipedia.org/wiki/File:Her01.jpg>.

¹¹⁶ AD THIJS, Two Books for One Lady: The Mother of Herihor Rediscovered, *GM* 163 (1998), 101–110; ID., Piankh's Second Nubian Campaign, *GM* 165 (1998), 99–103; ID., Reconsidering the End of the Twentieth Dynasty/1: The Fisherman Pnekhtemope and the Date of BM 10054, *GM* 167 (1998), 95–108; Reconsidering the End of the Twentieth Dynasty/2, *GM* 170 (1999), 83–99; Reconsidering the End of the Twentieth Dynasty/3: Some Hitherto Unrecognised Documents from the whm-mswt, *GM* 173 (1999), 175–191; Reconsidering the End of the Twentieth Dynasty/4: The Harshire-family as a Test for the Shorter Chronology, *GM* 175 (2000), 99–103; "Please tell Amon to bring me back from Yar": Dhutmose's visits to Nubia, *GM* 177 (2000), 63–70; ID., Reconsidering the End of the Twentieth Dynasty/5: P. Ambras as an Advocate of a Shorter Chronology, *GM* 179 (2000), 69–83; ID., Reconsidering the End of the Twentieth Dynasty/6: Some Minor Adjustments and Observations Concerning the Chronology of the Last Ramessides and the wehem-

mesut, *GM* 181 (2001), 95–103; ID., Reconsidering the End of the Twentieth Dynasty/7: The History of the Viziers and the Politics of Menmare, *GM* 184 (2001), 65–73; ID., The troubled careers of Amenhotep and Panehsy: the high priest of Amun and the viceroy of Kush under the last Ramessides, *SAK* 31 (2003), 289–306; ID., Pap. Turin 2018, the journeys of the scribe Dhutmose and the career of the Chief Workman Bekenmut, *GM* 199 (2004), 79–88; ID., "My father was buried during your reign" – the burial of the high priest Ramessesnakht under Ramses XI, *DE* 60 (2004), 87–95; ID., In search of king Herihor and the penultimate ruler of the 20th dynasty, *ZÄS* 132 (2005), 73–91; ID., King or high priest? The problematic career of Pinuzem, *GM* 211 (2006), 81–88; ID., "I was thrown out from my city": Fechts's views on Pap. Pushkin 127 in a new light, *SAK* 35 (2006), 307–326; ID., The scenes of the high priest Pinuzem in the temple of Khonsu, *ZÄS* 134 (2007), 50–63; ID., The Second Prophet Nesamun and his Claim to the High-Priesthood, *SAK* 38 (2009), 343–353.

¹¹⁷ G. DEMIDOFF, Pour une révision de la chronologie de la fin de l'époque ramesside, *GM* 177 (2000), 91–101; ID., Hérihor-Piankhy, Piankhy-Herihor. Retour sur une controverse, in: C. GALLOIS, P. GRANDDET, L. PANTALACCI, *Mélanges offerts à François Neveu par ses amis, élèves et collègues à l'occasion de son soixante-quinzième anniversaire*, BdE 145, le Caire 2008, 99–111.

¹¹⁸ V. MÜLLER, Wie gut fixiert ist die Chronologie des Neuen Reiches wirklich?, *E&L* 16 (2006), 224.

¹¹⁹ Cf. the extreme brevity of the dismissal by E. HORNING, The New Kingdom, in: E. HORNING, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden, Boston 2006, 197–217: „Thijs' proposal that Ramesses IX–XI were contemporary (...) has been countered by VON BECKERATH (ZÄS 127 [2000],

despite its consequences for the political and chronological reconstruction of the late New Kingdom. The Necropolis Journal from Deir el-Medine seems to contradict the hypothesis most obviously as it *assigns an entire scroll to the reign of Ramesses X and records after the last entries for Ramesses X a new "year 1"* (traditionally seen as the first year of the successor, Ramesses XI).¹²⁰ In Thijs' scenario, Ramesses XI would have been in power already for 17 years at this point in time. His interpretation of the "year 1" date is to see it not as a reference to the first regnal year of Ramesses XI but the first year of the era of Renaissance declared during his reign. However, dates of the Renaissance era under Ramesses XI are always marked as such in the documents. Therefore, Thijs has to postulate inconsistent dating practices by the Theban scribes. It seems therefore preferable to assume the conventional sequence of reigns. In the same vein, it should be expected that the presumed parallel reigns of Ramesses XI with Ramesses IX and X would produce overwhelming factual links and overlaps in the documents; however, the discrepancies prevail, and no document alludes to the fact that there existed parallel kingships. If Ramses IX and Ramses XI reigned concomitantly for 15 years, it would require explanation why it was not Ramesses XI but Ramesses X who succeeded to Ramesses IX. It is conspicuous that the different sequences of regnal years during the simultaneous rules would not be kept distinct in documents of the same provenance.

Georges Demidoff (who advocates against the hypothesis as proposed by Thijs) takes his point of departure from the date on which the hypothesis of a Renaissance era is based. A date of pAbbott vso. (Abbott Dockets) equates a regnal year 19 with the year 1 of the era of Renaissance under Ramesses XI. Conventionally, the "year 19" was believed to also refer to Ramesses XI and to indicate a change in dating in his very reign. In

DEMIDOFF's view, the "year 19" is to be assigned not to Ramesses XI, but Ramesses IX. This means in consequence that Ramesses XI was the direct successor of Ramesses IX, and that Ramesses XI's first regnal was at the same time the first year of the Renaissance era. The explicit equation could also imply that a coregency existed between Ramesses IX and XI. Demidoff sees his proposal supported by the evidence of Seti I who established an era of renaissance with his very first year. Conspicuous is the fact that practically all "renaissance" dates are from the years 1–7, all regular dates from the years 7–27. Demidoff sees the reason for this in a change to a conventional dating practice from year 7 onward. Two exceptions of a regular "1st year" (instead of a "first year of the renaissance") would come from the very first days of the new system when the new dating standard as "years of the renaissance" would not yet have been binding. Adding to these obstacles is again the evidence of the Necropolis Journal of Deir el-Medine where *an entire scroll deals with the reign of Ramesses X and records after the last entries for Ramesses X a new "year 1"*. If, in Demidoff's scenario, Ramesses XI was the direct successor to Ramesses IX, he and Ramesses X must have been rival kings after the death of Ramesses IX with their own year datings. It seems implausible to assume that two documents (Necropolis Journal; list of tomb robberies from pAbbott) issued by one and the same administration of the Theban Necropolis would have dated in one case after Ramesses X, in the other after Ramesses XI. I propose therefore to retain the traditional sequence and length of the late 20th dynasty.

2.3 New Synchronisms of the New Kingdom with the Ancient Near East

2.3.1 The new synchronism Haremhab 1 = Mursili II 8

The Amarna Age and the time of Ramesses II provide a number of synchronisms which have been

114–116, and GM 181, 2001, 17)“. It is altogether ignored by K.A. KITCHEN, *Egyptian and Related Chronologies – Look, no Sciences, no Pots!*, in: M. BIETAK (ed.), *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C. III. Proceedings of the SCIEEM 2000–2nd Euro Conference, Vienna, 28th of May–1st of June 2003*, CChEM 9, Vienna 2007, 163–171. J. LULL, *Los sumos sacerdotes de Amón tebanos de la wḥm mswt y dinastía XXI (ca. 1083–945*

a.C.), Oxford 2006, 48 n. 271: “Haciendo uso de los documentos que disponemos, Thijs ha llegado a indicar incluso que los reinados de Ramsés IX, Ramsés X y Ramsés XI fueron contemporáneos. Sin embargo, esta hipótesis no ha encontrado adeptos entre los principales expertos en cronología del período.”

¹²⁰ T. SCHNEIDER *Ramses X.: Person und Geschichte*, in: H. JENNI (ed.), *Das Grab Ramses' X*, *Aegyptiaca Helvetica* 16, Basel 2000, 82, 103 mit n.333.

explored in great detail.¹²¹ Recently, Jared Miller has been able to reconstitute a text (KUB 19.15 + KBo 50.24)¹²² which provides a crucial new and potentially precise synchronism between Haremhab and Mursili II. This text has already stirred an extensive debate with contributions by Miller,¹²³ Stempel,¹²⁴ Groddeck,¹²⁵ and Wilhelm.¹²⁶ Its text runs as follows (translation as given by Miller, essential changes by Wilhelm will be mentioned below):

(5') Then [...] became hostile (pl.) towards me, and Titti, [my servant] wrote [to] the ['ma]n(?) of Egypt (saying): (7') '[Send] troops and chariots, [and] ... shall ... me forth, (8') and [I] will arise [and] come to the land of Egypt.' (9') Then the troops and chariots of the land of Eg[yp]t came, (10') and Titti arose (11') and went to the land of [Eg]ypt. When, however, I wrote to 'Arma'a (saying): (12') '[Si]nce Tetti was m[y] servant, (13') why then did you send your troops and chariots and [bring] him a[way]? (15') Give my [serv]ant back to me!' ['Arma'a] (16') did not give [him ba]ck [to me], nor did he [even wr]ite back to me. (17') Then it came about that Zirtaya, [his] servant, wrote to me (saying): (18') 'Sen[d] troops and chariots, (19') and I will arise, and [come] to Hattusa.' (20') So I sent troops and chariots, and they brought Zirt[aya, his servant], to Hattusa. (21') Then 'Arma'a w[rote] to me (saying): (22') 'b Since [Z]irtaya is my servant, [giv]e hi[m back to me]!' (23') But I wrote back to him (saying): (24') 'An[d you]? Wh[y] did you [not g]ive Tetti back to me?' (25') Then 'Arma'a remained totally quiet, (26') [and] said [nothing] at all! [So] we were [not] on good terms with one another. (28') We were [not] at all on [goo]d(?) terms.

The upper half of obv. ii is missing, and the text resumes thus:

(1') [... But when] (2') [PN] sat [upon the throne of] ki[ngship], (4') 'Arma'a began t[here-up]on to take [ve]ngeance upon A[murru], (6') and he sent troops and chariots to the land of [Amurru] to attack. (8') But when I heard (about it), (9') I came to the rescue, (10') and the troops and chariots of the land of Egypt fled before me, (12') and I [pu]rsued him. Thereafter I wrote right back to him (saying): 'You are taking [ve]ngeance upon the land of Amurru. (16') But was it I who took the [land] of Amurru away from you, (18') or was it rather my father who took it away from you? (20') It was the king of the land of Hanigalbat who took the land of Amurru away from the king of the land of Egypt, (22') and then my father defeated the king of the land of Amurru, (23') and [he took the land] of A[murru away] from the king of the Hurri land. 6 [...] (27') grasped(?) [...] land(?) [...]'

Some few phrases are also preserved toward the top of rev. iii:7

'[...] (3') Where/When(ever) the [sto]rm-god thund[ers] (4') [...] the message of the stormgod (5') [...] is [...], it shall be the [border] of the Land of A[murru(?)]. (6') Whe[re/Wh[en(ever)], then, the stormgod [thun]ders, (8') [it] shall be the border [of the Land of Amu]rru. [...] [...] someone/something(acc.) [...] the/a word/affair(acc.) [...]

Miller's *main conclusions* inferred from this text, inasmuch as they directly relate to the synchronism, are as follows:

1) the events of cols. i and ii of KUB 19.15+KBo 50.24 are to be dated to the 7th and 9th years, respectively, of the reign of Mursili II.

2) "'Arma'a" is equated with Haremhab of Egypt.¹²⁷ As he is referred to here with his personal name, his function must have been that of

¹²¹ For a classic treatment, see E. HORNUNG, *Untersuchungen zur Chronologie und Geschichte des Neuen Reiches*, ÄA 11, Wiesbaden 1964, 63–70; most recently, J. Klinger, Chronological Links Between the Cuneiform World of the Ancient Near East and Ancient Egypt, in: E. HORNUNG, R. KRAUSS, D. WARBURTON (eds.), *Ancient Egyptian Chronology*, HdO 1, 83, Leiden, Boston 2006, 304–324.

¹²² J.L. MILLER, *Texte historischen Inhalts*, KBo 50, Berlin 2006.

¹²³ J.L. MILLER, Amarna Age Chronology and the Identity of Nibhururiya in the Light of a Newly Reconstructed Hittite Text, *AoF* 34 (2007), 252–293; id., The rebellion of Hatti's Syrian vassals and Egypt's Meddling in Amurru, *SMEA* 50 (2008), 533–554.

¹²⁴ R. STEMPEL, Identification of Nibhururiya and the synchronism in the Egyptian and Hittite chronology in the light of <a> newly reconstructed Hittite text, *GM* 213 (2007), 97–100.

¹²⁵ D. GRODDEK, Zu den neuen ägyptisch-hethitischen Synchronismen der Nach-Amarna-Zeit, *GM* 215, 2007, 95–107.

¹²⁶ G. WILHELM, Muršilis II. Konflikt mit Ägypten und Haremhab's Thronbesteigung, *WdO* 39 (2009), 108–116.

¹²⁷ Z. SIMON, Kann Armā mit Haremhab gleichgesetzt werden? *AoF* 36 (2009), 340–348, has refuted the equation of Arma'a with Horemheb. In my view, the equation is well possible and highly likely.

viceroys and commanders in Asia, i.e. before taking the throne.

3) If these points are granted, then Horemheb would have become pharaoh some nine years after the beginning of Mursili's reign at the earliest, a synchronism which would exclude the equation of Nibḫururiya in the Deeds of Shuppiluliuma with Tutankhamun.

4) Miller advocates the (phonetically less likely) identification of Nibḫururiya in the Deeds of Shuppiluliuma with Akhenaten, and identifies the *tahamunzu*, who solicited a son from Suppiluliuma upon the death of her husband, with Nefertiti, or perhaps Meritaten.

Wilhelm (see n. 126) has recently corrected the interpretation of one essential passage of the text and, in consequence, redefined the synchronism:

1) At the beginning of the second text column, an accession to the throne is mentioned. Miller reconstructs this passage according to the formula of Hittite throne accessions but insinuates a reference to an Egyptian succession. Despite the fact that the traces do not agree with either the personal or (what would have been mandatory) the throne name of Horemheb's predecessor, Aya, he nevertheless postulates that Aya came to power in Mursili's 7th year. In turn, Groddeck sees here a retrospective reference to the accession of Arnuwanda II. Wilhelm discounts these hypotheses and demonstrates that the passage in question can indeed refer to Haremhab whom the text would continue to call by his personal name as this was the name of reference for him throughout the text before he rose to kingship.

2) The "King of the land of Egypt" mentioned in col. 1 would then still have been Aya during his 4th and final regnal year, while Haremhab as a general was operating on the Syrian theatre of war. If this is correct, we have a synchronism Horemheb 1 = Mursili (II) 8 (or possibly, 9).

3) Wilhelm attempts to reassert the reliability of a solar omen from Mursili's 10th year, and to connect it with the total solar eclipse visible in parts of Northern Anatolia on June 24, 1312 BCE. This would in consequence date Horemheb's accession and first year to 1314 BCE. In consequence, he postulates a longer reign of 18 years for Seti I (implicitly, as it appears, to guarantee the simultaneity of Egyptian-Hittite events in the 19th dynasty) which appears, however, impossible on the basis of present evidence. In another contribution, Wilhelm has bolstered this understanding by reevaluating the internal chronology of the Amarna letters and Shuppiluliuma's reign.¹²⁸ The evidence of the newly reconstructed Hittite text in Wilhelm's interpretation seems persuasive despite the uncomfortable necessity to assign the name form *Nibḫururiya* to Akhenaten. This could only be avoided by postulating two Syrian campaigns of Shuppiluliuma, whereby the one mentioned in the Amarna letters would have occurred during the reign of Akhenaten and the second one in the reign of Tutankhamun. This now seems very unlikely in view of the reconstruction of Shuppiluliuma's reign. If the Hittitological reconstruction is right, only Akhenaten is viable and must be the deceased pharaoh of the *Daḫamunzu* affair. The most recent proposals in this latter respect are:

R. Krauss (2007): *Daḫamunzu* = Meritaten, after the death of her husband Semenkhkare¹²⁹ (implicitly; equally G. Wilhelm¹³⁰).

R. Krauss (2009): *Daḫamunzu* = Nefertiti, after the death of Akhenaten¹³¹ (with knowledge of Miller's text restitution).

A. Dodson (2009): *Daḫamunzu* = Nefertiti, after the death of Akhenaten.¹³²

J.P. Allen (2009): *Daḫamunzu* = Neferneferuaten Tasherit, after the death of Akhenaten (implicitly).¹³³

¹²⁸ G. WILHELM, Die Regierung Šuppiluliumas I. und die Chronologie der Amarna-Zeit, in: R. HACHMANN, *Kamid el-Loz I* (forthcoming). I would like to thank Gernot Wilhelm for having made this article available to me.

¹²⁹ R. KRAUSS, Eine Regentin, ein König und eine Königin zwischen dem Tod von Achenaten und der Thronbesteigung von Tutanchaten, *AoF* 34, 2007, 294–318.

¹³⁰ G. WILHELM, Generation Count in Hittite Chronology, in: H. HUNGER, R. PRUZSINSZKY (eds.), *Mesopotamian Dark Age Revisited. Proceedings of an International Confer-*

ence of SCIEEM2000, Vienna 8th–9th November 2002, CChEM 6, Vienna 2004, 74, n. 13.

¹³¹ R. KRAUSS, Nofretete – Königsgemahlin und regierende Königswitwe?, *Antike Welt* 3 (2008), 25.

¹³² A. DODSON, Were Nefertiti & Tutankhaten Coregents? *KMT* 20 (2009), 41–49 which summarizes the main hypotheses of A. DODSON, *Amarna Sunset: Nefertiti, Tutankhamun, Ay, Horemheb and the Egyptian Counter-Reformation*, Cairo 2009 (*non vidi*).

¹³³ J.P. ALLEN, The Amarna Succession, in: P.J. BRAND, L. COOPER (eds.), *Causing His Name to Live. Studies in Egypt-*

Some leeway would still exist for the length of the transition period between Akhenaten and Tutankhamun, and the sequence and character of political events.

2.3.2 *The first mention of Egypt in an Assyrian text*

Eckart Frahm has recently published a restituted text by Tiglatpileser I (conventionally dated 1114–1076).¹³⁴ This text gives the first mention of Egypt in any Assyrian text, stating that the king of Egypt sent Tiglatpileser a crocodile and a female ape (third gift lost) when he was on his campaign on the Mediterranean coast.¹³⁵ Frahm comments:

“VAT 9484+ ist ein durch Joins bedeutend erweitertes Manuskript des auf zahlreichen Tontafeln, drei Steintafeln und einem sechseitigen Prisma überlieferten Tiglatpileser I-Textes RIMA 2, 87.4. Die Textvertreter sind durchweg fragmentarisch und erst durch die mühselige Kleinarbeit von E. WEIDNER und F. KÖCHER, die ihre Ergebnisse in *AfO* 18, 347–59 veröffentlicht haben, zu einem kohärenten Ganzen zusammengefügt worden. Graysons Ausgabe basiert im wesentlichen auf Weidners und Köchers Rekonstruktion. Sie ist im allgemeinen verlässlich, doch in dem Abschnitt Z. 24–30 findet sich ein Fehler, der sich nunmehr mit Hilfe des hier neu publizierten Stückes korrigieren läßt. Die Korrektur ist bedeutsam, weil sie einen expliziten Beleg für bislang nur indirekt erschließbare Kontakte zwischen Tiglatpileser I. und einem ägyptischen Pharao bietet. Auch wenn man schon vorher vermuten konnte, daß das

Krokodil und die Äffin, die Tiglatpileser I. auf seinem Zug an die Mittelmeerküste empfang, aus Ägypten stammten, wird erst jetzt klar, daß sie tatsächlich das Geschenk eines – leider namenlos bleibenden – ägyptischen „Königs“ waren. Das vorliegende Stück bietet überhaupt die erste Erwähnung Ägyptens in einer assyrischen Königsinschrift und ist auch deswegen bedeutend.”

In the slightly later so-called “Broken Obelisk” of Aššur-bel-kala (1073–1056) a similar reference to gifts received from Egypt is mentioned (RIMA 2, 89.7, iv 29f.). I give the transliteration and translation offered by Frahm:

pa-gu-ta GAL-ta nam-su-ḫa LÚ ÍD ú-ma-a-mi šá
A.AB.BA / GAL-te MAN KUR *Mu-uš-re-e ú-še-bi-*
la UN.MEŠ KUR-šu ú-še-eb-ri

“Der König von Ägypten ließ eine große Äffin, ein Krokodil und einen „Flußmann“, Geschöpfe des großen Meeres, bringen, und er (Aššur-bel-kala) führte sie den Menschen seines Landes vor.”

Frahm identifies the king of Tiglatpileser’s inscription with Ramesses XI and the provider of the gift for Ashur-bel-kala with Smendes. This is based on conventional dates for the end of the New Kingdom which may need to be adapted to the actual length of the Third Intermediate Period (see above I.2). Unfortunately, the exact date of Tiglatpileser’s campaign is unknown as his annals break off with year 6 but it seems to have occurred soon after the Mušru-Qumānu expedition of the last recorded year (ca. 1108).¹³⁶ Should an Assyrian text eventually provide a

ian Epigraphy and History in Memory of William J. Murnane, Leiden, Boston 2009, 9–20 (online available since 2006 at <http://history.memphis.edu/murnane/Allen.pdf>). While the identification of the regent “Neferneferuaton Ancheprure” with Achenaton’s 4th daughter Neferneferuaton Tascherit seems likely to stir some controversy, Allen’s ingenious proposal to see Semenkhkare as Tutankhamun’s father (and a younger brother of Akhenaten) solves many of the problems that have vexed Amarna research. Unfortunately, M. GABOLDE’s “Under a Deep Blue Starry Sky” in the same volume (*loc.cit.*, 109–120) does not take notice of Allen’s proposal, nor does Allen’s contribution account for the reinterpretation of the mourning scenes in rooms Alpha and Gamma by J. VAN DIJK (same volume, The Death of Meketaten, 83–89) who is able to show, on the basis of

an old photograph by G. Jéquier, that the child carried away by a nurse is identical with the deceased princess Meketaten and the scene thus shows her rebirth.

¹³⁴ E. FRAHM, *Historische und historisch-literarische Texte, Ausgrabungen der Deutschen Orient-Gesellschaft in Assur. E, Inschriften. 9; Keilschrifttexte aus Assur literarischen Inhalts* 3, WVDOG 121, Wiesbaden 2009.

¹³⁵ Cf. on the presented animals Y. IKEDA, *Assyrian Kings and the Mediterranean Sea. The Twelfth to Ninth Centuries B. C., Abr-Nahrain* 23 (1984), 22–31.

¹³⁶ A.T. OLMSTEAD, *Tiglath-Pileser I and His Wars*, *JAOS* 37 (1917), 180. On the Mušru-Qumanu campaign, see V. HUROWITZ, J. GOODNICK WESTENHOLZ, *LKA* 63: A Heroic Poem in Celebration of Tiglath-pileser I’s Musru-Qumanu Campaign, *JCS* 42 (1990), 1–49; on the political situation during the Palestinian expedition, R.R.

name for the Egyptian king and a precise campaign year, this would be an important anchor for the chronology around 1100 BCE.

2.3.3 The possibility of a synchronism between the 15th dynasty and the Old-Babylonian period

The possibility of a future synchronism between the 15th dynasty at Avaris and one of the Old Babylonian kings, thereby providing an anchor for the beginning of the New Kingdom, has become viable thanks to the recovery of three cuneiform artefacts at Tell el-Daba.¹³⁷

(1) The fragment of an Old Babylonian letter from one of the two last kings of the First Dynasty of Babylon, Ammi-Saduqa and Shamshi-Dutana,¹³⁸ was found in the filling of a well which most likely belongs to the palace of the Hyksos Khayran (Khayan, Khian). This well was filled in the late 15th dynasty. If we assume that Ancient Near Eastern *Kanzleischriftgut* was usually disposed of after 20–40 years (based on the evidence from Amarna and Mari), and the filling to have occurred ca. 1550 BCE, this would mean that the letter dates into ca. 1590–1570. In a recent article, Johannes Boese has established the latest possible date for the destruction of Babylon, based on new evidence from the texts from Tell Muhammad (layers II and III), as 1530 BCE and the likely date as ca. 1545 BCE;¹³⁹ while he sees the ultra-low chronology with a destruction date of Babylon in 1499 as no longer tenable. This result seems to be corroborated by the scenario of the Tell el-Daba tablet.

(2) The fragment of an Akkadian seal impression from area A/II, in “monumental script”, is equally Old Babylonian; it shows the name and titles (so far unpublished) of a high administrative official from between the time of Hammurabi and the end of the first dynasty of Babylon. It was found in a disturbed area (*sebakh pit*).

(3) An Old Babylonian seal impression from 27th dynasty mud brick pavement in area A/II, featuring a scene with the king and deities. Both this impression and (2) could relate to the Syro-Palestinian temple area of A/II.

(4) Another cylinder seal has recently been uncovered during a salvation excavation at Ezbet Rushdi.

3. CUMULATIVE CHRONOLOGY OF THE NEW KINGDOM AND TIP¹⁴⁰

This section gives a concluding list of the dates of the kings of the 18th through 25th dynasties. The internal chronology of the New Kingdom appears to be definitively established with a minor margin of ± 15 years. A majority agreement seems to be reached about the basic chronology between 880 and 690 BCE, despite ongoing debate on several issues. The main uncertainties pertain to the time around 900 BCE, as discussed above in 1.2. Here, a chronological leeway of ± 25 years cannot be eliminated at present. However, the possibility of anchors in the preceding New Kingdom (lunar dates and synchronisms) may be effective indicators of the correct time span.

STIEGLITZ, The Geopolitics of the Phoenician Littoral in the Early Iron Age, *BASOR* 279 (1990), 9–12.

¹³⁷ I would like to thank Irene Forstner-Müller for pertinent information.

¹³⁸ K. RADNER and F. VAN KOPPEN in M. BIETAK und I. FORSTNER-MÜLLER mit einem Beitrag von Frans van Koppen und Karen Radner, Der Hyksospalast bei Tell el-Dab‘a. Zweite und Dritte Grabungskampagne (Frühling 2008 und Frühling 2009), *E&L* 19 (2009), 115–118.

¹³⁹ J. BOESE, „Harbašipak“, „Tiptakzi“ und die Chronologie der älteren Kassitenzeit, *ZA* 98 (2008), 201–210.

¹⁴⁰ For the New Kingdom, s. V. MÜLLER, Wie gut fixiert ist die Chronologie des Neuen Reiches wirklich?, *E&L* 16 (2006), 203–230; E. HORNUNG, The New Kingdom, in: E. HORNUNG, R. KRAUSS, D.A. WARBURTON, *Ancient Egyptian Chronology*, HdO vol. 83, Leiden, Boston 2006, 197–217.

18th DYNASTY

Ahmose	25 y. 4 m.	1548 ¹⁴¹ –1523
Amenophis I	20 J. 7 m.	1523–1502
Thutmose I	12 y. 9 m. ¹⁴²	1502–1489
Thutmose II	13 y.	1489–1476
Hatshepsut/Thutmose III	54 y.	1476–1422 ¹⁴³
Amenophis II	25 y. 10 m.	1422–1396
Thutmose IV	9 y. 8 m.	1396–1386
Amenophis III	38 y. 7 m.	1386–1348
Amenophis IV	17 y.	1348–1331
transition period to Tutankhamun	4 y. ¹⁴⁴	1331–1327
Tutankhamun	9 y.	1327–1318
Aya	3 y.	1318–1315
Horemheb	14 y. 1 m.	1315–1301
total 18th dynasty	247 y.	

19th DYNASTY

Ramesses I	1 y. 4 m.	1301–1300
Seti I	10 y. ¹⁴⁵	1300–1290
Ramesses II	66 y. 2 m.	1290–1224
Merneptah	9 y. 6 m.	1224–1214
Seti II	6 y.	1214–1208
Amenmesse	2 y.	1208–1206
Siptah and Tewosre	8 y.	1206–1198
total 19th dynasty	104 y.	

20th DYNASTY

Sethnakhte	3 y. ¹⁴⁶	1198–1195
Ramesses III	31 y. 2 m.	1195–1164
Ramesses IV	7 y. 9(?) m.	1164–1156

¹⁴¹ This starting date is in agreement with the timeframe established by CH. BRONK RAMSEY *et. al.*, Radiocarbon-Based Chronology for Dynastic Egypt, *Science* 328 (2010), 1554–1557 (New Kingdom began between 1570 and 1544 with a probability of 95%).

¹⁴² Both the construction and the imperial policies of the king advocate a reign of at least 10 years while the highest year attested epigraphically is the 3rd. If Manetho's entry "Mephres" can be assigned to Thutmose I, the correct reign length would have been 12 years, 9 months.

¹⁴³ In order to maintain the conventional chronology with Thutmose III year 1 = 1479 and Ramesses II year 1 = 1290, another three years would need to be added between the two kings. A possible candidate is Seti I who may have reigned 11 full or more years (but see n. 144).

¹⁴⁴ J.P. ALLEN has again argued for 3–4 years between the death of Akhenaten and the accession of Tutankhamun; in: P.J. BRAND, L. COOPER (eds.), *Causing His Name to Live. Studies in Egyptian Epigraphy and History in Memory of William J. Murnane*, Leiden, Boston 2009, 19. This time-

frame does not change even if Meritaten is made regent after Akhenaten (against Allen), s. R. KRAUSS, Eine Regentin, ein König und eine Königin zwischen dem Tod von Achenaten und der Thronbesteigung von Tutanchaten, *AoF* 34 (2007) 2, 294–318.

¹⁴⁵ D. ASTON has persuasively argued for a reign of 9 years only: D.A. ASTON, In Vino Veritas. A Docketed History of the New Kingdom Between Year 1 of Thutmosis III and Year 1 of Ramesses II, in: *Festschrift Geoffrey T. Martin* (forthcoming). By contrast, P. Brand advocates a reign of either 10 or 11 full years (P. BRAND, *The Monuments of Seti I*, Probleme der Ägyptologie 16, Leiden/Boston/Köln 2000, 306–309). The average of both proposals of 10 years is adopted here. A reign of 10 years may also be preserved in Manetho fr. 51 where "Sethos, also called Ramesses" (misplaced and to be equated with Seti I?) is assigned 10 years.

¹⁴⁶ The plain "year 4" on the new Karnak stele may indicate the beginning of his 4th year, thereby 3 full years of reign.

Ramesses V	3 y. 10 m.	1156–1152
Ramesses VI	7 y. 9 m.	1152–1144
Ramesses VII	7 (or 8?)y.	1144–1137
Ramesses VIII	1 y. (+ sev. m.s?)	1137
Ramesses IX	18 y. 3 m.	1137–1118
Ramesses X	3 y.	1118–1115
Ramesses XI	28 (or 29?) y.	1115–1086

total 20th dynasty **112 y.**

21st DYNASTY

Smendes	26 y.	1086–1060
Amenemnesu	4 y.	1060–1056
Psusennes I (coregency deducted)	46 y.	1056–1010
Amenemope	9 y.	1010–1001
Osochor	6 y.	1001–995
Siamun	19 y.	995–976
Psusennes II	14 y.	976–962

total 21st dynasty **124 y.**

22nd DYNASTY

Shoshenq I	21 y.	962–941
Osorkon I	35 y.	941–906
“three further kings, 25 years” (Manetho)	25 y.	906–881
Shoshenq IIc = <i>Maa-cheper-re</i>		
Shoshenq IIa = <i>Hega-cheper-re</i>		
Shoshenq IIb = <i>Tut-cheper-re</i>		
Takehot I	13 y.	881–868
Osorkon II	35 y.	868–833

total first half **129 y.**

Shoshenq III.	39 y.	833–794
Shoshenq <i>Hedj-cheper-re</i>	13 y.	794–781
Pami	7 y.	781–774
Shoshenq V.	38 y.	774–736

Transition period until Piankhi campaign 3 y. 736–733

total second half **97**

total 22nd dynasty **226 (without transition)**

25th DYNASTY

Piankhi		–722/721
Shabaka	<i>2nd year corresponds to year 6 of Bokchoris of the 24th dynasty</i>	722/1–706
Shebitku		706–690
Taharqa		690–664

