

Article

# Third Report on the Publication and Conservation of the Tomb of Ramesses III in the Valley of the Kings (KV II)

The Journal of Egyptian Archaeology 2021, Vol. 107(1-2) 79–104 © The Author(s) 2021



Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/03075133211060539 journals.sagepub.com/home/ega



Anke Weber

Humboldt University of Berlin, Germany

### Willem Hovestreydt

Netherlands Institute for the Near East (ret.), The Netherlands

#### Lea Rees

Free University of Berlin, Germany

#### **Abstract**

Since antiquity, the tomb of Ramesses III (KV II) has been among the most frequently visited royal tombs in the Valley of the Kings. It was also one of the first to be described and documented in detail by European travellers in the eighteenth to nineteenth centuries. As large parts of the wall decoration of the tomb, especially in its rear, are now destroyed, the drawings, notes and squeezes of those early researchers who saw the site in its former splendour offer an invaluable resource for the reconstruction of the tomb's unique decoration programme. The collection, revision, and publication of all relevant archive material concerning KV II is an important goal of The Ramesses III (KV II) Publication and Conservation Project. The following article reports on first and preliminary results from the authors' research in the archives of the British Library and the Victoria and Albert Museum in London, as well as the Bodleian Libraries and the Griffith Institute in Oxford, carried out in September 2019 and made possible through the Centenary Award 2019 of the Egypt Exploration Society.

تعد مقبرة رمسيس الثالث (11 KV) من بين المقابر الملكية الأكثر زيارة في وادي الملوك منذ العصور القديمة، وهي أيضًا واحدة منأوائل المقابر التي تم وصفها وتوثيقها بالنفصيل من قبل الرحالة الأوروبيين في القرنين الثامن عشر والتاسع عشر. ولقد تهشمت الآن أجزاء كبيرة من الزخارف الموجودة على جدار المقبرة، خاصة في الجزء الخلفي، لذا فإن الرسومات والقوالب الورقية والملاحظات التي قام بها هؤ لاء الباحثين الأوائل الذين رأوا الموقع في روعته السابقة، تعتبر موردًا لا يقدر بثمن لإعادة بناء برنامج الزخرفة الفريدة لهذه المقبرة. جمع ومراجعة ونشر جميع مواد الأرشيف ذات الصلة المتعلقة بالمقبرة (KV 11) يعد هدفًا مهمًا لمشروع نشر وحفظ مقبرة رمسيس الثالث (KV 11). تشير المقالة التالية إلى النتائج الأولى والأولية لأبحاث المؤلين في أرشيفات المكتبة البريطانية ومتحف فيكتوريا وألبرت في لندن، بالإضافة إلى مكتبات بودليان ومعهد جريفيث في أكسفورد، والتي تم إجراؤها في سبتمبر 2019 من خلال المنحة المئوية 2019 لجمعية استكشاف مصر.

### Keywords

Ramesses III, KV II, archive research, research history, early travellers

### Introduction

The Ramesses III (KV 11) Publication and Conservation Project, based at Humboldt University of Berlin, aims to fully document, conserve and publish the tomb of Ramesses III. Along with ongoing archaeological fieldwork and conservation measures, the scientific study of the tomb's architecture (fig. 1) as well as its textual and pictorial decoration programme form the basis of the project's research. Since devastating floods destroyed most of the wall decoration in the tomb's rear compartments and the

lower areas of its front part,<sup>2</sup> the accounts of early travellers hold much important information that would otherwise have been lost. Apart from the publications of the Napoleonic,

Anke Weber, Humboldt-Universitat zu Berlin, Unter den Linden 6, Berlin 10099, Germany.

Email: anke.weber@hu-berlin.de.

<sup>&</sup>lt;sup>2</sup> Concerning the causes of destruction, see A. Weber, 'First report on the publication and conservation of the tomb of Ramesses III in the Valley of the Kings (KV 11)', *JEA* 104:1 (2019), 62–5 with further references. To this can recently be added A. Dorn, 'Flash floods, huts, and stratigraphy in the Valley of the Kings', *GM* 259 (2019), 91–112. The chronology of the floods will be discussed later in this article.

Corresponding author:

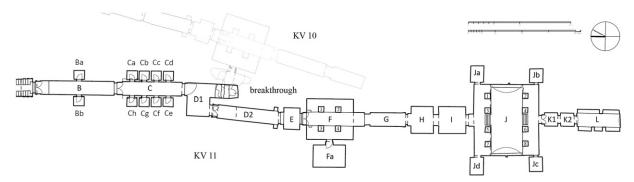


Fig. 1. Ground plan of KV 11 after The Theban Mapping Project.

Franco-Tuscan, and Prussian expeditions,<sup>3</sup> most of the documentation work carried out in KV 11 before the tomb was flooded has never been published.<sup>4</sup> Bertha Porter and Rosalind Moss already identified many manuscripts held in archives depicting scenes from KV 11 for the Topographical Bibliography,<sup>5</sup> and many additional references were found during our work in the archives of the British Library and Bodleian Libraries, as well as the Griffith Institute and the Victoria and Albert Museum.

This article aims to present the work carried out in KV 11 by early travellers such as Sir John Gardner Wilkinson (1797–1875), James Burton (1786–1862), and Robert Hay (1799–1863) and his collaborators Joseph Bonomi (1796–1878), Francis Arundale (1807–53), George Alexander Hoskins (1802–63), and Edward William Lane (1801–76), and seeks to demonstrate its importance as a source of information for the reconstruction of the tomb's decoration programme. The remarkable accuracy of drawings was frequently ensured by the use of a camera lucida, an optical device composed of prisms and mirrors which projects an image of a wall or object on the artist's drawing paper, resulting in extremely precise sketches that are free of distortion. This is why Robert Hay, for example, praised it as a 'most correct instrument', even if he claims to have preferred to sketch freely.<sup>6</sup>

Both Bonomi and Lane knew its inventor William Hyde Wollaston, who had patented it in 1806, and Lane had been personally trained in its use by Wollaston. Many of the above-mentioned travellers regularly made use of this visual aid which made it easy to control perspective and proportions. Due to their accuracy, the drawings can be perfectly matched with photographs and photogrammetry-based orthophotos showing the current state of the tomb (fig. 2). Thus, in combination with tracings of the actual remains, it is possible to visualise the walls with their former colourful decoration and to reconstruct scenes which are now-adays partially or completely lost.

Lea Rees has been working on the historical background of the archive material and the history of the exploration of KV 11. She prepared a list of references including all manuscripts we investigated thus far in order to complement the information from Porter and Moss (see table 1).

Willem Hovestreydt is working on the reconstruction of the tomb's rear, especially rooms H, I, K1–K2 and L. His first promising results show the value of using archive material in combination with modern state-of-the-art techniques.

Anke Weber provides insight into the chronology of flooding events in KV 11 (see table 2), based on published data as well as fieldwork carried out in the tomb. Furthermore, she contributes to the reconstruction of the tomb's decoration in the area of a now missing wall in front of room D1a.<sup>8</sup>

All results in the following are preliminary, reflecting the state of our team's work up to 2020. Further research will be carried out in the years to come.

### Historical background

From 1811, when Muhammad Ali (1769–1849) had become sole ruler of Egypt, several cultural institutions dedicated to

<sup>&</sup>lt;sup>3</sup> See Description de l'Égypte: ou, recueil des observations et des recherches qui ont été faites en Égypte pendant l'expédition de l'armée française, publié par les ordres de Sa Majesté l'Empereur Napoléon le Grand, II: Antiquités: planches (Paris, 1812), pl. 78; J.-F. Champollion, Monuments de l'Égypte et de la Nubie, d'après les dessins executes sur les lieux (Paris, 1845), III, pls CCLIII-CCLXIV; I. Rosellini, I monumenti dell'Egitto e della Nubia disegnati dalla spedizione scientifico-letteraria Toscana in Egitto, II: Monumenti Civili (Pisa, 1834), pls LIX-LXII, LXXV, LXXX, LXXXV-LXXXVI, LXXXIX, XCL-XCIL, XCVIL, CV, CVII-CVIII, CXXI; K. R. Lepsius, Denkmäler aus Aegypten und Aethiopien. Nach den Zeichnungen der von Seiner Majestät dem Könige von Preussen Friedrich Wilhelm IV nach diesen Ländern gesendeten und in den Jahren 1842–1845 ausgeführten wissenschaftlichen Expedition, III (Leipzig, 1897–1913), 206–9.

<sup>&</sup>lt;sup>4</sup> An exception is F. Mauric-Barberio's study of the Hay papers in the British Library: F. Mauric-Barberio, 'Reconstitution du décor de la tombe de Ramsès III (partie inférieure) d'après les manuscrits de Robert Hay', *BIFAO* 104 (2004), 389–456.

<sup>&</sup>lt;sup>5</sup> Cf. B. Porter and R. L. B. Moss, *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings*, I. *The Theban Necropolis*, 2: *Royal Tombs and Smaller Cemeteries* (Oxford, 1960), 518–27.

<sup>&</sup>lt;sup>6</sup> Hay is cited as having described the camera lucida as 'a most correct instrument, but not so great a favorite with me as my eye', in J. Thompson, *Wonderful Things: A History of Egyptology*, I: *From Antiquity to 1881* (Cairo, 2015), 156.

<sup>&</sup>lt;sup>7</sup> Thompson, Wonderful Things, I, 156–7; S. Tillett, Egypt Itself: The Career of Robert Hay of Linplum and Nunraw, 1799–1863 (London, 1984), 13–14.

<sup>&</sup>lt;sup>8</sup> For evidence of a former covering wall in front of D1a see A. Weber, 'Der Eingang zum Reich des Sokar: Überlegungen zur antiken Interpretation der Bereich D bis E in KV 11', in S.-W. Hsu, V. P-M. Laisney, and J. Moje (eds), Ein Kundiger, der in die Gottesworte eingedrungen ist: Festschrift für den Ägyptologen Karl Jansen-Winkeln zum 65. Geburtstag (Münster, 2020), 372–3. <sup>9</sup> For a short overview of our work in the British archives, see also W. Hovestreydt, L. Rees, and A. Weber, 'Collecting archive material in Oxford and London concerning the tomb of Ramesses III', EA 58 (2021), 36–41.



**Fig. 2.** Composite image of a modern photograph (© The Ministry of Antiquities, The Ramesses III (KV 11) Publication and Conservation Project) and overlapping drawing with camera lucida from the archive of Robert Hay (© British Library Board, Add. MSS. 29820, fol. 139).

the study of ancient as well as contemporary Egypt were founded as the country had become more accessible and safer for Western travellers. This enabled them to remain in Egypt for long periods and thus provided ample opportunities to study and record the antiquities they encountered. Among those travellers were John Gardner Wilkinson, James Burton, Robert Hay, Joseph Bonomi, Francis Arundale, George Alexander Hoskins, and Edward William Lane, all of whom were in contact with each other, working and travelling together in different constellations at different times.

Wilkinson and Burton met in Italy when the former was studying with Sir William Gell in preparation for a prolonged stay in Egypt, and they met again in Egypt after Burton had been part of Muhammed Ali's Geographical Survey of Egypt in 1822. <sup>11</sup> Wilkinson had already settled in Egypt in 1821 and stayed there until 1833. <sup>12</sup> He moved into TT 83, the tomb of '3-mtw (Ahmes) in Qurnah, and transformed the ancient tomb into 'Oasr Wilkinson', which

functioned as a sort of dig house that would welcome generations of Egyptologists, including Edward William Lane, George Hoskins, and Robert Hay. 13 The latter started on a Grand Tour in 1824 and employed the financially troubled Joseph Bonomi the Younger to record the sites he visited, first in Italy and Malta, before they set out for Egypt together and travelled further down the Nile towards Nubia. 14 Bonomi and Hay split up in July 1826 after constant quarrelling about Bonomi's salary and whether their contract allowed Bonomi to produce drawings for himself. Bonomi then offered his services to Burton instead, whom he supported with the publication of his Excerpta Hieroglyphica.<sup>15</sup> In the meantime, Bonomi's position as Hay's assistant had been temporarily taken on by Edward William Lane, whom Hay had met before in Cairo and with whom Burton had travelled up the Nile in 1825. Lane is less known in Egyptology, since his account of Ancient Egypt entitled Description of Egypt remained unpublished until 20 years ago. 16 With his study Manners and Customs of the Modern Egyptians, as well as his translation of One Thousand and One Nights and the publication of the first Arabic-English Lexicon, however, he still remains one of the most influential

<sup>&</sup>lt;sup>10</sup> Cf. P. Sadgrove, 'Travellers' rendezvous and cultural institutions in Muhammad Ali's Egypt', in P. Starkey and J. Starkey (eds), *Travellers in Egypt* (London, 1998), 257–66. For an in-depth study of the life of Muhammad Ali, see A. L. Sayyid-Marsot, *Egypt in the Reign of Muhammad Ali* (Cambridge, 1984).

<sup>&</sup>lt;sup>11</sup> Apparently, Burton's achievements in searching for minerals were not to the Pasha's satisfaction. Cf. J. Thompson, *Wonderful Things*, I, 153–4, 159–60; J. Thompson, *Sir Gardner Wilkinson and His Circle* (Cairo, 1992), 110–11. For a biography of Burton, see N. Cooke, 'The forgotten Egyptologist: James Burton', in P. Starkey and J. Starkey (eds), *Travellers in Egypt* (London, 1998), 85–94. <sup>12</sup> Concerning Wilkinson's time in Egypt and visits of his British colleagues, see Thompson, *Sir Gardner Wilkinson and His Circle*, 82–114 and S. J. A. Flynn, *Sir John Gardner Wilkinson, Traveller & Egyptologist* (1797–1875) (Oxford, 1997).

<sup>&</sup>lt;sup>13</sup> See J. Thompson, 'An account of the journeys and writings of the indefatigable Mr. Lane', *Saudi Aramco World* 59:2 (2008), 30–9; Thompson, *Sir Gardner Wilkinson and His Circle*, 100–4.

<sup>&</sup>lt;sup>14</sup> Cf. J. Waldron Grutz, 'The lost portfolios of Robert Hay', *Saudi Aramco World* 54:2 (2003), 2–11; Thompson, *Wonderful Things*, I, 154–9. For a biography of Hay, see Tillett, *Egypt Itself*.

<sup>&</sup>lt;sup>15</sup> Cf. J. Burton, Excerpta Hieroglyphica (Cairo, 1825–28).

<sup>&</sup>lt;sup>16</sup> Cf. E. W. Lane, *Description of Egypt: Notes and Views in Egypt and Nubia, Made During the Years 1825, –26, –27, and –28* (Cairo, 2000), 369–89 for his description of the Valley of the Kings, 378–80 for KV 11.

 Table I. Identified archive material concerning KV II with references to Porter and Moss.

1822–23 WILKINSON PAPERS, BODLEIAN LIBRARIES, OXFORD

Bodleian shelfmark no.	Pages	Short description	Location Location in KV II (TMP) II (PM)	Location in KV 11 (PM)	PM reference
MS. Wilkinson dep. a. 15	8	ground plan and section of the tomb	whole tomb	whole tomb	PM p. 518: MSS xlv. A. 8
MS. Wilkinson dep. a. 21	147 [top, left] 147 [below] 153 [top, left side and	scene I: west wall, north side, upper register/scene 2: north wall, upper register east wall, upper register south wall, upper register	chamber Ba	side-room C	PM p. 519; MSS ii, 16 [top and middle], 17 [upper and lower right]
	middle] 153 [below, right]	west wall, south side, lower register (bakers, cooks, butchers, brewers, leather workers)			7.00
	155 [top, right] 230–1	west wall, south side, upper register four ships (230 left: south wall, upper register, right/230 right: west wall; upper register, left; chamber Bb 23 left: north wall unper register left/231 right: north wall lower register left)	chamber Bb	side-room D	PM p. 519: MSS ii, 23 [middle]
	180	(mirror-image)	chamber Cd	side-room I	PM p. 521: MSS ii, 20 [left and middle]
	183 121–2	183: south wall, narper BD 110 spell vignette, reaping, sowing, ploughing; two men and heaps of corn; plants and	chamber Cf	side-room K	PM p. 521: MSS ii, 12
	72–7, 91–105	squarung gous bed with steps and headrest, chairs and stools, vases (some Mycenaean), boxes, baskets, ewers   chamber  Cg and basins. leopard skin etc.	chamber Cg	side-room L	PM p. 521–2: MSS ii, 8, A verso. 9. 10 [1–8]
	202–9; 211–19	weapons and armour	chamber Ch	side-room M	PM p. 522: MSS ii, 22 [fron]
MS. Wilkinson	123	ground plan of KV 11	whole tomb	whole tomb	E ×
MS. Wilkinson dep. c. 5	100 r°	first part of a brief description of the whole of KVII, including the names of deities in corridor hall J to hall F H and sketches of an Asian from the fifth hour of the Book of Gates; the text continues on fol 100 v² (176) and fol 101 r²	hall J to hall F	hall Q	×
	100 v° [top, left] 100 v° [right]	X X	hall F, north wall, east side hall Q corridor D2, east and west corridor D2.	hall Q corridor O	××
	100 v° [middle] 100 v° [below]	sketches and accompanying texts of Osiris figures sketches of BD 110 spell vignette	vall room Ce room Cf	side-room J side-room K	××
	101 r°	sketch of bull and cow sketches and texts from room DI, Ca, Cb, Ba	room Ch room DI, rooms Ca, Cb, Ba	side-room M hall N, side- rooms F G C	
MS. Wilkinson dep. d. 118	31 [top] 31 [middle]	sketches of the bakery and butchery scenes texts accompanying boats	room Ba room Bb	side-room C	X PM p. 519: MSS viii. 31
	31 [middle] 31 [bottom]	sketches of single vessels and furniture names of Nile gods (in changed order)	room Cg room Cb	side-room L side-room G	X X PM p. 520: MSS viii. 31 [bottom]

(continued)

$\overline{}$
×
Ψ
_
=
_
Ξ
_
$\sim$
ដ
. •
_
_
·
<u>.</u>
<u>-</u>
<u>:</u>
e .
<u> e  </u>
ble I.
ble I. (
able I.
Fable I. (
Table I. (

WILKINSON P.	APERS, BODL	WILKINSON PAPERS, BODLEIAN LIBRARIES, OXFORD			
Bodleian shelfmark no.	Pages	Short description	Location in KV II (TMP) II (PM)	Location in KV II (PM)	PM reference
MS. Wilkinson dep. e. 59	105 144 [top] 144 [middle]	pilasters with cow heads, sketch demotic graffito texts accompanying harpers	corridor A, tomb entrance room Cf room Cd	approach A side-room K side-room I	X X PM p. 521: MSS v, 144
	147 [3,4] 147 [7]	texts of king offering incense to Atum, censing and receiving heb-sed from Ptah (incomplete) Ptah-Sokar-Osiris and Isis (north wall)	room DI	hall N hall N	[top] PM p. 523: MSS v, 147 [3,4] PM p. 523: MSS v, 147
	247 241 [1] 271 [1]	Merit with libation vase (south wall) Onuris-Shu Onuris-Shu	room DI room Cd room Cd	hall N side-room l side-room l	, ''] X PM p. 521: MSS v, 271 [1]
	245	two demons with heads of tortoise and gazelle Thoth and Shu as guardian deities Ra-Horakhty Prah-Tatenen	room I room H, west wall hall J, pillar 8 north side hall I. pillar 4, north side	hall U hall T sarcophagus chamber V	×××
	246	spd-šps-bsw-Twnw Ptah-Sokar-Osiris Osiris Khepri Shepsi Khepri	hall J, pillar 7, south side hall J, pillar 6, north side hall J, pillar 3, south side hall F, pillar 3, east side hall F, pillar 2, north side hall J, pillar 2, north side	hall Q sarcophagus	×××××
MS. Wilkinson dep. e. 64	74	fifteen guardian deities sketch 10 chambers Hathor	I walls and C, between D2 and	chamber V hall T corridor E	×××
MS. Wilkinson dep. e. 65	39–40 43 [top]	pilasters with cow heads texts accompanying Nile gods parts of BD 148 spell vignette	room E corridor A, tomb entrance chamber Cb chamber Cc	approach A side-room G side-room H	X/PM p. 519: MSS. ix. 40 X X
1824–25 <i>(?</i> ) BURTON PAPE	RS, THE BRIT	1824–25 (?) BURTON PAPERS, THE BRITISH LIBRARY, LONDON			
Manuscript no.	Pages	Short description	Location in KV II (TMP) Location in KV II (PM)	Location in KV 11 (PM)	PM reference
Add. MSS. 25642	8 v° 9 9 v° – 11 12	pilasters with cow heads plan with annotated description of the tomb beds, head-rests, ewers, vases, leopard-skin, boxes, baskets, chairs with stools weapons etc.	corridor A, tomb entrance whole tomb room Cg room Ch	approach A side-Room L side-room M	PM p. 519 PM p. 518 X

Table I. (continued)

1822–23	WILKINSON PAPERS, BODLEIAN LIBRARIES, OXFORD

Bodleian				Location in KV	
shelfmark no.	Pages	Short description	Location in KV 11 (TMP)	11 (PM)	PM reference
Add. MSS. 25643	2	harper	room Cd. south wall	side-room I	PM p. 521
	ວ້	BD spell 110, kneeling figure with sceptre, plants	room Cf	side-room K	ا ا
	° ^ °	BD spell 110, trees, falcon-headed god on barque	room Cf	side-room K	PM p. 521
	4 r° [top left]	BD spell 110, benu bird; man with adzes	room Cf	side-room K	PM p. 521
	4 r° [right and	stirrup jar, vessels, vases and ewers with basins	room Cg	side-room L	×
	bottom]				
	4 v° [left]	shields and situlae	room Cg	side-room L	PM p. 522
	5 r <sub>o</sub>	BD spell 110, reaping, sowing, ploughing	room Cf	side-room K	PM p. 521
	5 v°		room Cg	side-room L	PM p. 522
	6 r°, 6 v° [upper]		room Cg	side-room L	PM p. 521-2
	6 v° [right]	leopard skin	room Cg	side-room L	X (in PM p. 521 wrongly
					referring to Burton
					MSS. 25643, 7
					[nbber])
	7 r° [upper]	three metal basins	room Cg	side-room L	PM p. 522
	7 r° [lower]	chests/boxes	room Cg	side-room L	PM p. 522
	7 ^o	wooden chest, weapons	room Ch	side-room M	PM p. 522
	<sub>0</sub> ک	armour	room Ch	side-room M	PM p. 522
	°> 8	llud	room Ch	side-room M	PM p. 522
	9 [r° and v°]	weapons, wooden chest, headdresses, armour, quivers	room Ch	side-room M	PM p. 522
	10 r° – 13 r°	Nile gods, inscriptions, flowers, offerings	room Cb	side-room G	نه
	14 r° - 16 r°, 17		room Ba	side-room C	PM p. 519
	v° – 18 r°				
	18 v° – 21 r°	boats	room Bb	side-room D	PM p. 519
Add. MSS. 25644	98	Merit with libation vase and accompanying text	room DI, south wall	hall N	PM p. 523
	87	cow headed pilaster	corridor A	approach A	×
Add. MSS. 25656	79–83	two harpers	room Cd	side-room I	PM p. 521
	85-91, 93-4, 96	chairs with stools	room Cg	side-room L	×
	92	bed with headrest, tube	room Cg	side-room L	×
	98–9, 103 [r°	weapons, headdresses, quivers, armour	room Ch	side-room M	PM p. 522
	and v°]				
	102	tubes	room Cg	side-room L	×
	104	wood, copper ingot, sledges, string of beads	room Cg	side-room L	×
	105	chests	room Cg	side-room L	×
	901	ebony and staves	room Cg	side-room L	×
	107	chests	room Cg	side-room L	×
1825–26, 1832–33	Š				

1825–26, 1832–33 HAY PAPERS, THE BRITISH LIBRARY, LONDON

Manuscript no.	Pages	Short description	Location in KV 11 (TMP)	Location in KV 11 (PM)	PM reference
Add. MSS. 29818	28–30 31–2	view of sarcophagus chamber view into corridor C and room DI/Dla	hall J corridor C, room D1/D1a	sarcophagus chamber V corridor E, hall N	PM p. 525 X

(continued)	1832–33
able I.	825–26,

Manuscript no.	Pages	Short description	Location in KV 11 (TMP)	Location in KV 11 (PM)	PM reference
Add. MSS. 29820	86–7	king before Ra-Horakhty	corridor B, east wall	corridor B	PM p. 519
	88	title of Litany of Ra: disk with scarab and	corridor B, east wall	corridor B	PM p. 519
	93.4	two hoats	room Bh	C moon-abia	PM p 519
	92-6	Merit with libation vase	room DI. south wall		PM p. 523
	66	king offering incense and libation		hall N	PM p. 523
		to Ptah-Sokar-Osiris with winged Isis			
	I-00I	Onuris-Shu, Shu-son-of-Ra	room Cd	side-room I	PM p. 520
	901	two seated figures holding lizards		oted as referring to hall $U(PM) = room$	PM p. 525
	107	tortoise headed god	room I	hall Ù	PM <sub>D</sub> . 525
	109-20	notes with descriptions and sketches	8 rooms in corridor C, room DI, hall F,	8 rooms in corridor C, room DI, hall F, chambers in corridor E, hall N, hall Q, hall U,	PM p. 518
			room I, hall J		
	121 v° – 124	plan and section of the tomb	whole tomb		PM p. 518
	125–7	view of entrance situation, sketches	corridor A-B, tomb entrance	approach A, corridor B	PM p. 518
	128, 143 [right]	pilasters with cow heads	corridor A, tomb entrance		PM p. 519
	129–32	harpers	room Cd	side-room I	PM p. 520 (131 not
					quoted)
	133–4 [top]	weapons and armour	room Ch	side-room M	PM p. 522
	133–4 [bottom,	bull and cow	room Ch	side-room M	PM p. 522
	left]		(	:	>
	l 33–4 [bottom, right]	snake and corn god	room Ca	side-room F	×
	135-41	bed with steps; chairs with stools, throwing room Cg	room Cg	side-room L	PM p. 521–2
		sticks,			
		bows, shields, ewers, basins, vases, tubs,			
		chests,			
		leopard skin, sledges, ivory	Ţ	· ·	2
	142-3 [left]	nome goddess and INIIe god	room Cb	side-room G	PM p. 520
Add. MSS. 29853, Mikrofiche	129 [left]	chair with lion and four captives	room Cg	side-room L	PM p. 522
Add. MSS. 29854, Mikrofiche	263–83	chairs and one stool	room Cg	side-room L	PM p. 522

PM reference

Location in KV 11 (PM)

Location in KV II (TMP) corridor A, tomb entrance

pilasters with cow heads

Pages 5, 6, 8

Manuscript no. Bonomi MSS. 20

Short description

BONOMI PAPERS, GRIFFITH INSTITUTE, OXFORD

approach A

Table I. (continued)

1826 LANE PAPERS, TH	1826 LANE PAPERS, THE BRITISH LIBRARY, LONDON	r, London			
Manuscript no. Manuscript no. Add. MSS. 34088	Pages Pages 32 33	Short description Short description view of entrance situation weapons and armour harper	Location in KV 11 (TMP) Location in KV 11 (TMP) corridor A-B, tomb entrance room Ch room Cd	Location in KV 11 (PM) Location in KV 11 (PM) approach A side-room M side-room I	PM reference PM reference PM p. 519 PM p. 522 PM p. 521
1832–33 HOSKINS PAPERS	1832–33 HOSKINS PAPERS, GRIFFITH INSTITUTE, OXFORD	JTE, OXFORD			
Manuscript no.	Pages	Short description	Location in KV 11 (TMP)	Location in KV 11 (PM)	PM reference
Hoskins MSS. III.	37 38 39	chairs and one stool two harpers weapons and armour	room Cg room Cd room Ch	side-room L side-room I side-room M	PM p. 522 PM p. 521 PM p. 522
1832–33 ARUNDALE DRAV	WING, VICTORIA &	1832–33 ARUNDALE DRAWING, VICTORIA & ALBERT MUSEUM, LONDON			
Inventory no.	Pages Short o	Short description	Location in KV 11 (TMP)	) Location in KV 11 (PM)	PM reference
8258	section	section of KV 11 with a plan of the tomb in the lower left register	er left register whole tomb	whole tomb	×
1838 HOREAU PAPERS,	1838 HOREAU PAPERS, GRIFFITH INSTITUTE, OXFORD	ITE, OXFORD			
Manuscript no.	Pages	Short description	Location in KV 11 (TMP)	Location in KV II (PM)	PM reference
Horeau MSS. 18 Horeau MSS. 40	2  -3	view of entrance situation harper boats	corridor A, tomb entrance room Cd room Bb	approach A side-room I side-room D	×××

Table 2. Recorded storms and rainfall at Thebes-West in the Valley of the Kings as documented in graffiti, publications, notes, photographs, and drawings from antiquity until today.

End of Eighteenth Dynasty BC	Jynasty BC					
Rain = ▲ Publication = □  Drawing = ✓ Photo = Û®	Date	<b>V</b> 1	Source	Literature	Remarks	Remarks and quotations
•	reign of Seti I (1289–tomb construction	,sa	archaeological evidence (layer of flash- flood deposition)	Dorn, in Wilkinson and Weeks (eds), Oxford Handbook of the Valley of the Kings, 32.		
•	year 4 of the reign	year 4 of the reign of Merenptah (March) g	graffito no. 3012	Dorn, in Wilkinson and Weeks (eds), Oxford Handbook of the Valley of the Kings, 31. Weeks, Hetherington, Site Management Handbook, 45. <sup>2</sup> Leblanc, Memnonia 6 (1995), 200.	m.	rnp.t-sp 4 njswt-bjtj (B3-n-R <sup>c</sup> ) sbd 1 šmw sw 27 hrw pn h3yt jrj.n p3 mw n p.t
•	year 62 of the reigr	year 62 of the reign of Ramesses II (May/June) graffito no. 3013	graffito no. 3013	Dorn, in Wilkinson, Weeks (eds), Oxford Handbook of the Valley of the Kings, rnp.t-sp 62 sbd 4 šmw sw 23 hrw 30.  (Leblanc, Memnonia 6 (1995), 200–1 dates the graffito to the time of year 2 of the reign of Ramesses IV) <sup>3</sup>	lley of the Kings, rnp.t-sp ( pn h3) me of year 2 of	p.t-sp 62 sbd 4 šmw sw 23 hrw pn hsyt jrj.n ps mw n p.t
•	year 2 of one of the (May/June)	year 2 of one of the successors of Ramesses III graffito no. 2868 (May/June)	graffito no. 2868	Dorn, in Wilkinson and Weeks (eds). Oxford Handbook of the Valley of the Kings, 31.		rnp.t-sp 2 sbd 4 šmw sw 2 h3yt jrj.n p3 mw {m} m p3 mw fuj m t3 p.t
•	year 2 of the reign (May/June)	year 2 of the reign of Ramesses IV, V, or VI g (May/June)	graffito no. 1736	Dorn, in Wilkinson and Weeks (eds), Oxford Handbook of the Valley of the Kings, 31. Weeks and Hetherington, Site Management Handbook, 45. <sup>4</sup>		rnp.t-sp 2 sbd 4 šmw sw 24 r ps mw n p.t
Eighteenth/Nineteenth Century AD	nth Century AD					
Rain = ♠ Publication = □  Drawing = ✓						
Photo = V	Date	Source	Literature	Remarks and quotations		
•	II-I2 December I8I8	Belzoni, Narrative of the Operation 125; 370–2; 473–4. D'Athanasi, Brief Account of the Researches and Discoveries, 12–15.	Belzoni, Narrative of the Operations, Jones, in Wilkinson and Weeks (eds), Oxford 125, 370–2; 473-4. D'Athanasi, Brief Account of the Wüst and McLane, Engineering Geology 58, 167. Researches and Discoveries, 12–15.	(eds), Oxford damage in the tomb of Seti I through heavy rainfall; damage to the road constructed for the Kings, 546–7.  Geology 58, 167.	rainfall; damage to the ro: 	ad constructed for the
Q	1832/33	George A. Hoskins (Griffith Institute Hoskins MSS 3.38)	Institute —	drawing of harper with minor destructions (cf. fig. 11); no evidence for flooding	cf. fig. 11); no evidence fc	or flooding
Q.	1838	Hector Horeau (Griffith Institute Horeau MSS. 18.2)	itute —	drawing of harper and Onuris-Shu with minor destructions (cf. fig. 11); no evidence for flooding	destructions (cf. fig. 11); r	no evidence for flooding
	1881–82	Villiers Stuart, The Funeral Tent of an Egyptian Queen, 146–55.	ent of an	an appendix presents detailed meteorological tables for the Luxor area over the period November 1881 – March 1882. For 23 February 1882, 'a few drops' are mentioned	I tables for the Luxor are bruary 1882, 'a few drops	a over the period is, are mentioned
<u></u>	1880s	black and white photos by Jan Herman Insinger	an	no evidence of destruction by flooding in rooms Cf and Ch; major destructions caused by natural decay in room Cd	ns Cf and Ch; major destru	ıctions caused by natural

_
g
П
Ē
О
ပ
<u>ت</u>
٠,
ie 2. (c
e 2. (c

Rain = 🍆				
Publication =				
Drawing = 🖊				
Photo = V	Date	Source	Literature	Remarks and quotations
•	1883 (?)	not mentioned	Cross, JEA 94, 305, n. 7. <sup>5</sup>	
	1889 (field work in 1883)	1	Lefébure, Les hypogées royaux de Thèbes, 2, 87— 120, pls 58–65.	complete description of the rear part of KV 11; no flood destruction mentioned
	1885–90	Baedeker, Ober-Ägypten und Nubien (1891), 239.		complete description of rooms J, Ja-Jd, K1-K2, and L; no destructions (by flooding) mentioned; checked 1885–90 by Eisenlohr
	1895	Baedeker, Ägypten <sup>4</sup> , (1897), 271.	I	'Die übrigen Räume sind sehr zerstört, man möge sie schnell durchwandern, da die schlecht erhaltenen Wandbilder wenig bemerkenswertes enthalten; described 1895 by Steindorff
•	(¿) 868 (	not mentioned	Cross, JEA 94, 305, n. 7. <sup>6</sup>	
Twentieth Century AD	, AD			
Rain = 🌢 Publication = 🛄				
Drawing =				
Photo = 🔎	Date	Source	Literature	Remarks and quotations
•	(¿) 5061	not mentioned	Cross, JEA 94, 305, n. 7.7	I
•	(¿) 0161	not mentioned	Cross, JEA 94, 305, n. 7.8	I
•	March 1914	Harry Burton	Jones, in Wilkinson, Weeks (eds), Oxford Handbook of the Valley of the Kings, 548. Romer, Valley of the Kings, 236. Leblanc, Memnonia 6, 205–6.	'there was a terrible flood that ran down through the Valley and entered several tombs. Once again the tomb of Ramesses III was flooded []'
•	October 1915	Howard Carter	Romer, 'History of Floods', 150. <sup>9</sup>	not certain; reference unclear
•	July 1916	Winlock, The Treasure of Three Egyptian Princesses, 8.		In 1916 a violent rainstorm came in the Luxor district about the end of July $[\ldots]$
	October 1916	Howard Carter	James, Howard Carter, 214–15.	'In a few moments the whole mountain-side foamed with innumerable cascades.'
•	October 1917	Howard Carter	Romer, 'History of Floods', 150.	not certain; reference unclear

$\overline{}$
TO.
ň
~
=
Έ.
$\Box$
$\overline{a}$
~
۳
٣
<u>.</u>
0
0
e 2. (c
•
•
ple
•

Twentieth Century AD	AD			
Rain = A Publication =  Drawing = A				
Photo = 🐚	Date	Source	Literature	Remarks and quotations
•	25 October 1918	Letters of Howard Carter to his mother and to Lord Carnarvon	Weeks, in Willánson (ed.) Valley of the Sun Kings, 122–8. Jones, in Wilkinson, Weeks (eds), Oxford Handbook of the Valley of the Kings, 548. Weeks, Hetherington, Site Management Handbook, 45. Cross, JEA 94, 305, n. 7. Leblanc, Memnonia 6, 212, n. 51	'seething waters, reaching from side to side of the Valley'
•	1949	weather station at Luxor airport	Weeks, Hetherington, Site Management Handbook, 43–4. Weeks, in Wilkinson (ed.), Valley of the Sun Kings, 122–8.	based on data from the weather station at Luxor airport, a chart shows the storm with the heaviest rainfall for each year of the 1940s to the 1990s
9	1960s	colour photos of Martin Davies	ı	photos of harpers show evidence of flooding
•	1975	weather station at Luxor airport	Weeks, Hetherington, Site Management Handbook, 43–4. Weeks, in Wilkinson (ed.), Valley of the Sun Kings, 122–8.	
•	9261	weather station at Luxor airport	Weeks, Hetherington, Site Management Handbook, 44.	
•	3 May 1979	Romer, 'History of Floods.'	I	'severe electrical storm accompanying gusts of rain' (personal observation by Romer)
•	0861	weather station at Luxor airport	Weeks, Hetherington, Site Management Handbook, 43-4. Weeks, in Wilkinson (ed.), Valley of the Sun Kings, 122-8.	
•	6861	weather station at Luxor airport	Weeks, Hetherington, Site Management Handbook, 44.	
•	1661	weather station at Luxor airport	Weeks, Hetherington, Site Management Handbook, 44.	
•	1993	weather station at Luxor airport	Weeks, Hetherington, Site Management Handbook, 44.	
•	October- November 1994	Weeks, in R. H. Wilkinson (ed.), Valley of the Sun Kings, 122–8.	Weeks, Hetherington, Site Management Handbook, 41, 44. Weeks, The Lost Tomb, 116–18. Jones, in Wilkinson, Weeks (eds), Oxford Handbook of the Valley of the Kings, 544–5;	the storms that struck Upper Egypt in October and November 1994 did terrible damage.'heavy rains and subsequent runoff flooding caused extensive damage in the Valley of the Kings.'
			Leblanc, Memnonia 6, 206 and Pl. XXXVIII A. Wüst and McLane, Engineering Geology 58, 167.	water and debris entered twenty or more tombs.'

_
g
tinu
8
٠.
4
Pe
<u>_</u>

Twentieth Century AD

Rain = ♠ Publication = □ Drawing = ♠ Photo = Û®	Date	Source		Literature	Remarks and quotations	quotations
•	May 1995	Jones, in Wilkin: Handbook of t	Jones, in Wilkinson, Weeks (eds), Oxford Handbook of the Valley of the Kings, 545.	Leblanc, Memnonia 6, 212, n. 52.	'Further heavy rainfall occ previous autumn.' storm with wind and hail	Further heavy rainfall occurred [] but with a lesser impact than the storms of the previous autumn.'
Twenty-First Century AD	ıry AD					
Rain = ♠ Publication = □ Drawing = ♠ Photo = ♥	Date		Source		Literature	Remarks and quotations
					1 10	
•	Octob	October 2001 (!)	not mentioned		Cross, JEA 94, 305, n. 7.	I
•	March	March 2005	Weeks, Hetherington, Site Management Handbook, 43, 45.	nnagement Handbook, 43, 45.	1	a heavy rain in 2005 that caused minor flooding'
•	21.01.	21.01.2008 (?)	Cross, JEA 94, 305, n. 7. <sup>11</sup>		1	I
•	01.05.2018	2018	records KV 11-project		1	rainfall on westbank (Qurnah Gedida)
•	06.05.2018	2018	records KV 11-project		I	rainfall on westbank (Qurnah Gedida)
•	14.05.2020	2020	records KV 11-project		I	thunderstorm on westbank, heavy rainfall (Qurnah Gedida)
•	17.05.2020	2020	records KV 11-project		I	thunderstorm on westbank, heavy rainfall (Qurnah Gedida)
•	26.12.2020	2020	records KV 11-project		1	rainfall on westbank (Sawalim)

A. Dodson, Poisoned Legacy. The Decline and Fall of the Nineteenth Egyptian Dynasty (Cairo, 2010), 134.

<sup>2</sup>The authors mention 18 March 1210 BC as an absolute date, which is doubtful regarding the difficulties of a proper narrowing of Merenptah's life and reign

The authors provide the absolute date of 6 July 1150 BC, which is highly doubtful regarding the difficulties of dating the graffito itself.

<sup>3</sup>Dating after A. A. Sadek, 'Varia graffitica', Varia Aegyptiaca 6.3 (1990), 117-19.

<sup>5</sup>The date (here and in the following) is not certain as Cross does not give references for his footnote. It seems to be partly based on J. Romer, 'History of floods', for which see note 9 in this table. In a critical review, Dorn, GM 259, 91– 112, refers to this footnote in his note 19. Furthermore, the Getty Institute refers to Cross in this case in their conservation report (<w.getty.edu/conservation/publications/pdf\_publications/pdf/qv\_voll\_part5.pdf>accessed 21.12.2020) on page 259, where the flash flood of 1994 is extensively discussed on pages 262–3.

<sup>6</sup>See note 5 in this table. See note 5 in this table.

See note 5 in this table.

<sup>9</sup>This article is part of an unpublished report by the Brooklyn Museum: J. Romer, 'A history of floods in the Valley of the Kings', in G. H. Curtis, et al. (eds), Theban Royal Tomb Project: A Report of the First Two Seasons (San Francisco, 1979). It was reprinted in J. and E. Romer, The Rape of Tutankhamun (London, 1993), 144-52. The reprint has been used for references in the present article. <sup>o</sup>Although the source is not mentioned here, it is presumably based on recent personal observation.

orientalist scholars today.<sup>17</sup> Bonomi rejoined Hay's team in 1832, after being promised a higher salary. At that time, the architect Francis Arundale and George Hoskins had become part of Hay's team as well, and together they produced an impressive archive of drawings, panoramas, squeezes, and notes.<sup>18</sup> The team continued to work, even when Hay travelled to Nubia again in 1833, sometimes accompanied by Arundale, while Hoskins went to Ethiopia.<sup>19</sup> In 1834 however, they went separate ways, with Bonomi and Arundale making their way to Palestine,<sup>20</sup> whereas Hay returned to Britain.

# Manuscripts concerning KV 11

Sir Gardner Wilkinson used many scenes from KV 11 in his *Manners and Customs of the Ancient Egyptians*, but did not attribute them to the tomb precisely.<sup>21</sup> Today, his voluminous papers are held by the Bodleian Libraries of the University of Oxford and comprise a large amount of sketchand notebooks, papers relating to his travels, his residency in Egypt and various publication projects, as well as personal notes and letters.<sup>22</sup> The references in the *Topographical Bibliography* refer to an old numbering system when the papers were still held by the Griffith Institute;<sup>23</sup> in the new numbering system of the Bodleian Libraries, references to KV 11 can be found in the manuscripts with the shelfmarks MS. Wilkinson dep. a. 15, a. 21, a. 22, c. 5, d. 118, e. 59, e. 64, and e. 65 (see table 1 for a chronological overview of the

manuscripts, including a short description of the content and the precise location of depicted scenes). Additional scenes to the references provided by Porter and Moss (marked with an X in the table) include, among others, a ground plan of KV 11 (MS. Wilkinson dep. a. 22, fol. 123), scenes from the small chambers in the front part of the tomb (dep. d. 118, fol. 31; e. 59, fol. 241; e. 65, fol. 43), as well as scenes from the Amduat (dep. c. 5, fol. 176), the Book of Gates (dep. c. 5, fol. 100, 176), and the Book of the Dead (dep. c. 5, fol. 176; dep. e. 65, fol. 43).

The British Library in London holds the manuscripts of the travellers James Burton, Robert Hay, and Edward William Lane. James Burton's sketchbooks and drawings refer to KV 11 in Add. MSS. 25642, 25643, 25644, and 25656. Additional to the references published in Porter and Moss, scenes copied from KV 11 are the pieces of furniture from chamber Cg (Add. MSS. 25642, fol. 9v-11; Add. MSS. 25643, fol. 4r, 6v; Add. MSS. 25656, fol. 85-94, 96, 102, 104–7) and weapons from chamber Ch (Add. MSS. 25642, fol. 12). The papers of Robert Hay include drawings of his collaborators Joseph Bonomi and Francis Arundale. A first study of these manuscripts with reference to KV 11 was carried out by F. Mauric-Barberio. <sup>25</sup> Scenes from KV 11 can be found in Add. MSS. 29818, 29820, 29853, and 29854. Additional references to the Topographical Bibliography are a view into corridor C and room D1 (Add. MSS. 29818, 31– 2) and the scene of a snake and a corn god in room Ca (Add. MSS. 29820, fol. 133-4). Of the manuscripts of Edward William Lane, another member of Hay's team, three pencil drawings refer to KV 11, showing a view of the entrance situation, <sup>26</sup> weapons, and armour depicted in room Ch and one of the famous harpers in room Cd (Add. MSS. 34088, fol. 32-4).

The Griffith Institute keeps manuscripts from Joseph Bonomi, George Alexander Hoskins, and Hector Horeau. From Bonomi's drawings, three illustrations could be newly identified as depicting scenes from KV 11, showing the cow-headed pilasters at the entrance of the tomb (MSS. 20, fol. 5, 6, 8).<sup>27</sup> Hoskins' drawings (MSS. 3.37–39) show

<sup>&</sup>lt;sup>17</sup> For biographies of Lane, see L. Ahmed, Edward W. Lane: A Study of his Life and Works and of British Ideas of the Middle East in the Nineteenth Century (London, 1978) and J. Thompson, Edward William Lane: The Life of the Pioneering Egyptologist and Orientalist, 1801–1876 (Cairo, 2010). Also see J. Thompson, 'Edward William Lane's Description of Egypt', International Journal of Middle East Studies 28:4 (1996), 565–83; J. Thompson, 'Edward William Lane in Egypt', JARCE 34 (1997), 243–61; Thompson, Saudi Aramco World 59:2, 30–9.

<sup>&</sup>lt;sup>18</sup> Many references to working with Hay can be found in G. A. Hoskins, *Visit to the Great Oasis of the Libyan Desert: With an Account, Ancient and Modern, of the Oasis of Amun, and the Other Oases Now Under the Dominion of the Pasha of Egypt (London, 1837).* Further important team members were Charles Laver, Owen Browne Carter, A. Dupuy, and F. Catherwood. For more information, see Thompson, *Wonderful Things*, I, 157–61.

<sup>&</sup>lt;sup>19</sup> See G. A. Hoskins, *Travels in Ethiopia: Above the Second Cataract of the Nile* (London, 1835).

<sup>&</sup>lt;sup>20</sup> See F. Arundale, *Illustrations of Jerusalem and Mt. Sinai: Including the Most Interesting Sites between Grand Cairo and Beirut* (London, 1837).

<sup>(</sup>London, 1837).

<sup>21</sup> See J. G. Wilkinson, Manners and Customs of the Ancient Egyptians, Including Their Private Life, Government, Laws, Arts, Manufactures, Religion, Agriculture, and Early History, Derived from a Comparison of the Paintings, Sculptures, and Monuments Still Existing, with the Accounts of Ancient Authors, I–III (London, 1837–41).

<sup>&</sup>lt;sup>22</sup> A helpful guide to Wilkinson's material is S. J. A. Flynn, *Papers of Sir John Gardner Wilkinson (1797–1875), Egyptologist, 14<sup>th</sup> cent. –1921 (Oxford, 1997). Also see <a href="https://archives.bodleian.ox.ac.uk/repositories/2/resources/3289">https://archives.bodleian.ox.ac.uk/repositories/2/resources/3289</a> accessed 06.07.2020.* 

<sup>&</sup>lt;sup>23</sup> A very useful concordance of the old and new numbering system is available with S. J. A. Flynn, *Catalogue of the Papers of Sir John Gardner Wilkinson (1797–1875)* (Oxford, 2000).

<sup>&</sup>lt;sup>24</sup> The dates cited in table 1 refer to the approximate time when the travellers visited the tomb. In many cases, it remains difficult, however, to assign an exact date for the production of the manuscripts. This is the case for the studies of James Burton, about whose stay in Egypt little is known between 1825 and 1834, when he returned to Britain, or for Hay's collaborators, of whom we do not necessarily know exactly when they accompanied Hay in the tomb and when they were working somewhere else. Even for Robert Hay, of whose journals the Griffith Institute holds typescript copies, we have exact information about the days spent in KV 11 in 1825 and 1826, but the relevant diary entries of 1832–33 are unfortunately missing.

<sup>&</sup>lt;sup>25</sup> Cf. Mauric-Barberio, *BIFAO* 104, 389–456. We are grateful to her for attending our third KV 11-workshop in 2018 and sharing her work with us.

<sup>&</sup>lt;sup>26</sup> The entrance scene is very similar to that depicted by Hay (British Library, Add. MSS. 29820, 125–7) and of Horeau (Griffith Institute, Horeau MSS. 18.1: <a href="http://www.griffith.ox.ac.uk/gri/4horeau">http://www.griffith.ox.ac.uk/gri/4horeau</a> 18 1.html> accessed 06.07.2020).

<sup>&</sup>lt;sup>27</sup> The Griffith Institute is working on making all of Bonomi's sketches and watercolours available online: <a href="http://archive.griffith.ox.ac.uk/index.php/bonomi-collection">http://archive.griffith.ox.ac.uk/index.php/bonomi-collection</a> accessed 23.12.2020.

the harpers (room Cd), weapons (Ch), and chairs (Cg). <sup>28</sup> Unrelated to the above-mentioned travellers, the water-colours of Hector Horeau, which detail the entrance situation (MSS. 18.1), the harpers in room Cd (MSS. 18.2), and the boats in room Bb (MSS. 40.2), provide an interesting, colourful insight into KV 11, produced during his visit to Egypt in 1838. <sup>29</sup>

Lastly, a more than two metres long section and plan of the tomb of Ramesses III, produced by Francis Arundale, is held by the Victoria and Albert Museum in London and will be discussed in further detail below.<sup>30</sup>

# Reconstruction of scene parts using archive materials

# Demons and deities in the tomb's rear compartments

While the effects of the floods described above can be observed everywhere in the tomb, the damage is truly severe in the rear parts, specifically from Corridor G down to Room L. Most of the tomb's decoration was executed in painted plaster relief, and in these parts in particular very little has remained. Nevertheless, traces are still visible where the artisans cut through the plaster into the stone surface, and here and there patches of painted plaster are still in place.

It would be difficult, if not impossible, to reconstruct the decoration of these parts on the basis of the remaining fragments alone, and it is here in particular that the documentation from the nineteenth century is indispensable, the more so because the decoration programme can only be described as highly unusual. In fact, as will be explained below, it is unique for a royal tomb from the New Kingdom.<sup>31</sup>

The essential elements of the decoration were already described in 1987 by Wolfgang Waitkus, who based his

study on published sources, mainly the notes of Champollion and Lefébure. In 2004, Florence Mauric-Barberio expanded this investigation considerably by utilising the notes and drawings produced by Robert Hay and his assistants, which had remained unpublished until then. Neither of these publications, however, attempted a visual reconstruction of the original aspect of the decoration, although Mauric-Barberio published a view of the still largely intact burial chamber (hall J) by Joseph Bonomi, who was part of Hay's team of artists. In 2004, Florence Mauric-Barberio expenses the notes of the decoration, although Mauric-Barberio published a view of the still largely intact burial chamber (hall J) by Joseph Bonomi, who was part of Hay's team of artists.

Apparently unknown, even to researchers familiar with the Hay papers, was the existence of a plan and section of the tomb by Francis Arundale, now in the Victoria and Albert Museum, London, which was recently published by Olivia Horsfall-Turner.<sup>35</sup> It is a very large drawing, done in pencil and watercolour on paper, and measuring 214.8 cm × 24.1 cm. The museum acquired it in 1877 from the dealer Robert Jackson, who may have bought it in turn from Hay's eldest son.<sup>36</sup>

Francis Arundale had joined the Hay expedition in 1832, and the drawing was probably made in that year or else in 1833, the year in which he left Egypt. Thus far, the drawing is the only one offering a complete view of the east walls of the tomb in their former state. It does not provide entirely new or unexpected information, but it adds strong support for our sometimes tentative findings, and in many places it confirms what we had already surmised. To illustrate this, two examples are given below.

Room K1. Room K1 is located immediately behind the burial chamber. The reconstruction of the west wall (fig. 3) is based on a drawing by Robert Hay that was obviously made with the aid of a camera lucida. Depicted at the right is a nude standing figure with childlike proportions, depicted frontally. Its feet are shown in a curious foreshortened way which makes them resemble hooves. A small offering table is depicted to its right and to its left are two male figures rendered in a sitting posture, though without seats, a posture described by Champollion as assis en l'air. They are holding lizards in both hands.

Very little is preserved of the wall decoration, but enough is left to establish that Hay's drawing provides a perfect fit. Above the figures, there are clear traces of a chapel crowned with a *kheker* decoration.

Arundale's rendering of the opposite east wall (fig. 4) shows three figures in a similar sitting posture. The first two

<sup>&</sup>lt;sup>28</sup> The drawings can be found online under <a href="http://www.griffith.ox">http://www.griffith.ox</a>. ac.uk/gri/4hoskins gallery.html> accessed 22.10.2020.

<sup>&</sup>lt;sup>29</sup> For more information on Horeau and his watercolours see <a href="http://www.griffith.ox.ac.uk/gri/4horeau">http://www.griffith.ox.ac.uk/gri/4horeau</a> intro.html> accessed 21.12.2020.

<sup>&</sup>lt;sup>30</sup> See the Victoria and Albert Museum Online Collections <a href="http://collections.vam.ac.uk/item/O810019/section-and-plan-of-the-drawing-arundale-francis-vyvyan/">http://collections.vam.ac.uk/item/O810019/section-and-plan-of-the-drawing-arundale-francis-vyvyan/</a> accessed 07.07.2020. The plan has already been published in O. Horsfall Turner, 'From sepulchre to saloon', in M. Lending, E. A. Gulseth Bøhn, and T. Anstey (eds), *Images of Egypt* (Oslo, 2018), 160–2, and in Hovestreydt, et al., *EA* 58 (2021), 38–9.

<sup>&</sup>lt;sup>31</sup> An exception is Corridor G, which was decorated with scenes from the Opening of the Mouth Ritual. For this, see A. Weber, J. Bunbury, K. Dietze, W. Hovestreydt, D. Petrova, L. Popko, G. Rees, L. Rees, and K. Schinken, 'Second Report on the Publication and Conservation of the Tomb of Ramesses III in the Valley of the Kings (KV 11)', *JARCE* 56 (2020), 237–8. Parts of the corridor have been reconstructed by D. Petrova, 'From invisible traces to invincible ritual: Reconstructing the Opening of the Mouth Ritual in the Tomb of Ramesses III', in A. Weber, M. Grünhagen, L. Rees, and J. Moje (eds), *Akhet Neheh: Studies in Honour of Willem Hovestreydt on Occasion of his* 75<sup>th</sup> Birthday (GHP Egyptology 33; London, 2020), 115–21.

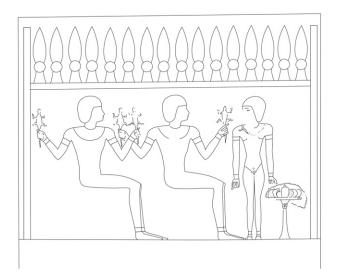
<sup>&</sup>lt;sup>32</sup> W. Waitkus, 'Zur Deutung einiger apotropäischer Götter in den Gräbern im Tal der Königinnen und im Grabe Ramses III.', *GM* 99 (1987), 51–82.

<sup>&</sup>lt;sup>33</sup> Mauric-Barberio, *BIFAO* 104, 389–453.

<sup>&</sup>lt;sup>34</sup> As he often did, Bonomi put his initials at the bottom of the drawing.

<sup>&</sup>lt;sup>35</sup> Horsfall Turner, in Lending, et al. (eds), *Images of Egypt*, 160–2, accompanied by a large foldout reproduction of the drawing. We thank our colleague Joost Hagen for alerting us to this publication. <sup>36</sup> It is difficult to imagine that Arundale made the drawing for his own purposes as Hay set very strict rules for what his draughtsmen were allowed to do. See Tillett, *Egypt Itself*, 50–2. On Hay's son Robert James Alexander and his role in the disposal of Hay's collection, Tillett, *Egypt Itself*, 106–9.

<sup>&</sup>lt;sup>37</sup> See e.g., Champollion, *Notices descriptives*, 421.



**Fig. 3.** Provisional reconstruction of the west wall of Room K1 by W. Hovestreydt, based on remaining traces and a drawing by Robert Hay (The British Library, Add. MSS. 29820, fol. 106).

are human-headed and they are holding lizards in both hands. The third one has a ram's head and is holding snakes. They are seated in a similar chapel with *kheker* decoration. In Room K2, comparable groups of figures were depicted, including a standing female 'Beset' figure. Figures like these are known from other contexts and are best described as guardian-figures or 'demons'.<sup>38</sup>

Room I. The second example comes from Room I, immediately in front of the burial chamber. Here, the situation is somewhat different. As can be seen in Arundale's drawing, the east wall was decorated with a depiction of the Hall of the Double Maat. On the opposing west wall there were four scenes of gods leading the king by the hand. A close parallel to this arrangement can be found in the tomb of Merenptah, and there are parallels in other royal tombs from the Nineteenth Dynasty, as well. The decoration of these walls can therefore be said to conform to a tradition.

Conversely, the north and south walls were decorated with four groups of demons flanking the doorways in this room, and comparable to those depicted in Rooms K1 and K2. Several of them were holding snakes or lizards, but in this case, they were not seated 'en l'air', but on cube-shaped thrones. On the east half of the south wall, the decoration showed a group of three squatting demons having, respectively, an antelope's head, a tortoise in place of a head,

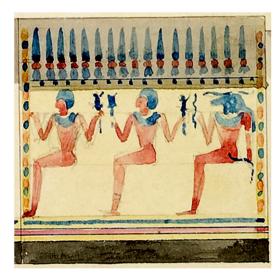


Fig. 4. Drawing by Francis Arundale of the east wall of Room KI (© Victoria and Albert Museum, London, Museum no. 8258).

and a crocodile head. Drawings of the group were made by Alessandro Ricci, 41 Champollion, and Hay (fig. 5a-c). 42 Unlike the first two renderings, Hay gives a sketch of the group as a whole and, in addition, a meticulous camera lucida drawing of the tortoise-shaped head. If we compare the different renderings of the group with the actual traces on the wall (fig. 6), Hays' sketch, which was done quickly and without much detail, turns out to be the most reliable. There, the tortoise-headed figure in the middle is represented in a slightly different posture, with the legs bent less tightly than in the other two drawings.

The Hay sketch also provides a striking parallel to a wooden statuette in the British Museum (fig. 7).<sup>43</sup> It is one of a fairly large group of rather similar figures, most of which were found in the nineteenth century in royal tombs of the Eighteenth and Nineteenth Dynasties. Several of them can be recognized among the figures depicted in Rooms I and K1/K2. Other statuettes have

<sup>&</sup>lt;sup>38</sup> See e.g., R. Lucarelli, 'The guardian-demons of the Book of the Dead', *BMSAES* 15 (2010), 85–102. A remarkable early example can be found in Seti I's temple at Abydos. On the south wall of the chapel of Ptah-Sokar, three very similar demons holding snakes and lizards are depicted above a well-known scene showing Osiris lying on a bier. See K. J. Eaton, 'The festivals of Osiris and Sokar in the month of Khoiak: The evidence from Nineteenth Dynasty royal monuments at Abydos', *SAK* 35 (2006), 75–101, with pl. 6

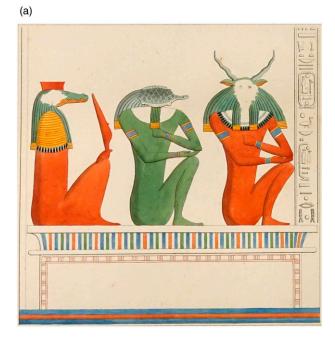
<sup>&</sup>lt;sup>39</sup> A provisional reconstruction of this scene is given by Hovestreydt, in Weber, et al., *JARCE* 56, 233.

<sup>&</sup>lt;sup>40</sup> See F. Abitz, König und Gott: Die Götterszenen in den ägyptische Konigsgräbern von Thutmosis IV. bis Ramses III. (Wiesbaden, 1984), 65–70, 80–3.

<sup>&</sup>lt;sup>41</sup> A slightly more detailed rendering of this group was published in D. Salvoldi, *From Siena to Nubia: Alessandro Ricci in Egypt and Sudan* (Cairo, 2018), pl. 4. It forms part of a collection of drawings made by Ricci for a written account of his travels and is now kept at the Egyptian Museum in Florence. Still another version, more accurate and doubtless the original one, was made for William John Bankes and is kept at the Dorset History Centre (D-KL/H/J/6/2/B/1); we thank Daniele Salvoldi for providing us with a copy. For Ricci's voyage with Baron von Minutoli, see Salvoldi, *From Siena to Nubia*, 36–8.

<sup>&</sup>lt;sup>42</sup> Additional sketches of the demons can be found in British Library, Add. MSS. 29820, fol. 107 of the Hay papers (depicting the tortoise-headed demon) and MS. Wilkinson dep. e. 59, fol. 245, upper left (showing the tortoise- and antelope-headed demons) in the Bodleian Libraries.

<sup>&</sup>lt;sup>43</sup> British Museum, EA50704, possibly from the tomb of Horemheb. See J. H. Taylor, *Journey Through the Afterlife: Ancient Egyptian Book of the Dead* (London, 2010), no. 96.





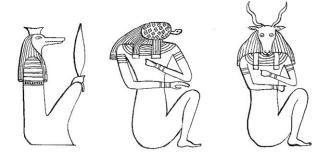






Fig. 5. a) Drawing by Alessandro Ricci, published in H. M. von Minutoli, Reise zum Tempel des Jupiter Ammon und nach Ober-Aegypten in den Jahren 1820 und 1821 (Berlin, 1824), pl. XXI; b) drawing by Jean-Francois Champollion, Notices descriptives, 418; c) sketch by Robert Hay (© British Library Board, Add. MSS. 29820, fol. 112 ro).

parallels elsewhere in the tomb. Specifically, four groups of such figures are depicted in the four corners of the sarcophagus chamber, above the doorways of Rooms Ja, Jb, Jc and Jd. 44 Related groups appear in the doorways leading in and of the

**Fig. 6.** Orthophoto of the east half of the south wall of room I. Provisional tracing of the remains of the decoration (orthophoto and drawing: W. Hovestreydt).



**Fig. 7.** British Museum EA50704 (© The Trustees of the British Museum).

 $<sup>^{44}</sup>$  A list of the statuettes is provided by Waitkus, GM 99 (1987), 81-2.

burial chamber.<sup>45</sup> No other royal tomb from the New Kingdom has similar representations of these figures on its walls, let alone in the almost life-sized dimensions we encounter in KV 11. The existence of the wooden statuettes suggests strongly, however, that from the Eighteenth Dynasty onwards they were present as sculptures in the round.

It should also be noted that certain groups of the demons found in KV 11 occur in the tombs of members of Ramesses III's family. Close parallels to the four groups in the burial chamber can be found in the tomb of queen Tyti, who was great royal wife to Ramesses III (QV 52). <sup>46</sup> Additionally, there are parallels in the tombs of several of his sons: Paraherwenemef (QV 42), Sethherkhopshef (QV 43), and Khaemwaset (QV 44). There are even a few instances in two queen's tombs from the Nineteenth Dynasty: that of an anonymous queen (QV 40) and that of Sat-ra (QV 38).

Rooms H and L. Arundale's drawing shows a very different set of figures in rooms H and L. Being divided over these two rooms, north and south of the burial chamber, they fall into two groups. Twenty are depicted in room H, and sixteen in room L. All are clearly characterised as deities, the male gods holding a was sceptre and the goddesses either a was sceptre or a papyrus sceptre. They are standing in chapels shaped as nw shrines, with a small offering table placed in front of them. As was the case with the demons discussed above, both groups are looking in the direction of the sarcophagus chamber, which is thus clearly the focus of their attention. In this case, not only the appearance but also the name of each deity has been preserved, mainly thanks to the notes of Champollion and Lefèbure, to which Wilkinson's unpublished notes form a valuable complement.<sup>47</sup>

There are a couple of parallels in royal tombs from the New Kingdom, though not executed on the large scale we encounter in KV 11. An apparently incomplete version of the 20 deities depicted in Room I can be found in the small burial chamber of Seti II. <sup>48</sup> A full version of the same group of 20, but on a much smaller scale, occurs in the tomb of Ramesses IV, behind the burial chamber. <sup>49</sup>

Remarkably, though, all 36 deities from rooms I and L occur in a composition depicted in the tombs of Ramesses VI (KV 9) and Ramesses IX (KV 6), representing the

'awakening of Osiris', where they are grouped around the bier of Osiris. <sup>50</sup> The earliest known instance of this composition is found in the Osireion at Abydos, in a relief dating to the reign of Merenptah. <sup>51</sup>

It cannot be doubted that the demons and deities described above functioned in a protective role related to the awakening of Osiris, and thus the king. As stated above, the monumental scale in which these figures were executed in KV 11 is unique for a royal tomb from the New Kingdom. In fact, after the New Kingdom, this congregation of gods and demons saw a remarkable renaissance. This is not the place for an extensive discussion, so we can only mention briefly that they occur again in some of the royal tombs at Tanis (Psusennes I, Sheshong II) as well as on some private coffins from the Twenty-Second Dynasty. In the Kushite and Saite Dynasties, they are found in some of the monumental tombs of El-Assassif (Luxor), such as those of Montuemhat and Padiamenopet, as well as smaller ones such as that of Mutirdis.<sup>52</sup> Variants occur even as late as the first century AD in the temple of Dendera. In recent years, this has attracted much attention and it seems certain that the tomb of Ramesses III will have to play a role in further discussions.

# The scene of Merit offering a libation in Room D1

Another unique and unusual scene to be found in KV 11 is that of the goddess Merit offering a libation in room D1. The depiction seems to be without parallels in other New Kingdom royal burial sites. Therefore, it provides new information about the complex system of meanings employed in pharaonic tomb conceptions, especially of the Ramesside Period. The inscription in front of the goddess attests to the strong connection of the tomb with the sanctuary of Heliopolis. Nowadays, the inscription is heavily damaged, especially in its lower part. A proper reconstruction is only possible with the notes of previous visitors to the tomb who

<sup>&</sup>lt;sup>45</sup> With two exceptions, the figures in the last-mentioned groups cannot be properly described as demons. Among others, they include a sitting image of the king as a naked child, known as *hry-m3*<sup>c</sup>t. And, as can be seen in the Arundale drawing, the east wall of the southern doorway is decorated with a large torch. Another important difference is that the figures are looking outward, away from the burial chamber.

<sup>&</sup>lt;sup>46</sup> M. Collier, A. Dodson, and G. Hamernik, 'P. BM EA 10052, Anthony Harris, and Queen Tyti', *JEA* 96 (2010), 242–7.

<sup>&</sup>lt;sup>47</sup> Notes and sketches of these figures are given among others in Wilkinson's papers and notebooks: Bodleian Libraries, MS. Wilkinson dep. c. 5, 100 and dep. e. 59, 246.

<sup>&</sup>lt;sup>48</sup> F. Abitz, Statuetten in Schreinen als Grabbeigaben in den ägyptischen Königsgräbern der 18. und 19. Dynastie (Wiesbaden, 1979), 81, figs 16, 17.

<sup>&</sup>lt;sup>49</sup> E. Hornung, Zwei ramessidische Königsgräber: Ramses IV. und Ramses VII. (Mainz am Rhein, 1990), 49–50, 77, pls 5b, 78–82.

<sup>&</sup>lt;sup>50</sup> Full references are given in J. A. Roberson, *The Awakening of Osiris and the Transit of the Solar Barques: Royal Apotheosis in a Most Concise Book of the Underworld and Sky* (Fribourg, 2013). <sup>51</sup> H. Frankfort, *The Cenotaph of Seti I at Abydos*, II (London, 1933), pls LXXIV–LXXV. The relief is dated to the reign of Merneptah. A fragment of a divergent version featuring the same deities occurs in the temple of Ramesses II in Abydos; see S. Iskander and O. Goelet, *The Temple of Ramesses II in Abydos* (Atlanta, 2015), pls 4.9.3–.4. A still earlier version seems to have been found at Abydos as well: U. Effland and A. Effland, '»Und dann kam Osiris aus der Unterwelt ... «: Kultbild und Naos des Osiris vom »Gottesgrab« in Abydos', *Sokar* 34 (2017), 6–23.

<sup>&</sup>lt;sup>52</sup> In this connection, two older publications must be singled out: J. Leclant, *Montouemhat: quatrième prophète d'Amon, Prince de la ville* (Cairo, 1961), 113–32 (supplemented by J. Leclant, 'Les génies-gardiens de Montouemhat', in N. Pigulevskaja (ed.), *Drevnij mir. svornik statej akademiku Vasiliju Vasil'eviču Struve* (Moskva, 1962), 104–29). A fundamental reference for all later studies is J. Assmann, *Das Grab der Mutirdis* (Mainz am Rhein, 1977)

<sup>&</sup>lt;sup>53</sup> Weber, in Hsu, et al. (eds), *Ein Kundiger, der in die Gottesworte eingedrungen ist*, 365, 369, 378–9, 393; A. Weber, "Wasser aus Heliopolis" Nochmals zur Merit mit nmst-Gefäß in KV 11 als Darstellung eines Reinigungsrituals: Neues zur Rekonstruktion des Wandverschlusses vor D1a', *GM*, forthcoming.



Fig. 8. 1) Champollion's sketch (*Notices descriptives*, 412); 2) Burton's pencil drawing (© British Library Board, Add. MSS. 25644, fol. 86); 3) watercolour drawing of Hay (© British Library Board, Add. MSS. 29820, fol. 95); 4) sketch from Wilkinson's notebook (Bodleian Libraries, University of Oxford, MS. Wilkinson dep. e. 59, 247, © National Trust).

saw this passage before its destruction. In another publication, Anke Weber queried whether a quail (G43), an owl (G17), or a wr bird (G36) were depicted.<sup>54</sup> A comparison of several drawings by researchers and travellers (fig. 8), which we were able to collect during our archive research, brings us closer to an interpretation of this scene and its religious meaning. Without doubt, the passage was not clearly legible from the eighteenth century onwards. Drawings by Champollion (fig. 8.1) and Burton (fig. 8.2) show gaps in the text, as do the renderings by Hay (fig. 8.3) and Wilkinson (fig. 8.4). While Champollion marks a destroyed part in the text below the signs for 'water' mw (N35A) and in front of r (D21), the quail slides down on the level of plural strokes (Z2) in Burton's drawing, who also leaves a gap between prj and the 'Iwn pillar. Champollion fills this gap with walking legs (D54), as do Wilkinson and Hay. Presently, traces of this sign are still visible while the other part of the inscription is completely destroyed. From personal observation, it seems quite certain that this hieroglyph was present here (fig. 9).<sup>55</sup>

However, Wilkinson drew an Egyptian vulture (G1) to the right of those legs, which leads to even more confusion. Of this bird, nothing is left on the remaining wall. What we can say for now is that the area between *mw* and *'Iwn* must have been destroyed since the time of Champollion and maybe even longer. Comparing the drawings collected during our archive research and considering all possibilities of a proper translation, lead to the conclusion that the two

birds which were depicted behind mw and behind prj may have been a wr bird and an owl (G17).

Using the technique of *Kopienkritik*, a critical analysis of copies, and by factoring in the remaining parts of the inscription, it is at least possible to reconstruct the order of the hieroglyphs closest to the original (fig. 10). Both Burton and Wilkinson only saw the head of the bird which precedes a further gap and the word *prj*. Therefore, it seems most likely that they only reconstructed the tail to complete the sign as a quail without really having seen it. Another bird with similar features but a different feathertail, however, makes more sense in this place: the swallow, which is to be read as *wr*. The following owl is clearly visible on a photograph taken by the Epigraphic Survey of the Oriental Institute, Chicago (6506). Because of the lack of any parallels to this scene, it is only possible to provide a tentative suggestion for a new transcription and translation:

Formerly:  $\underline{d}d$ -mdw jn Mr.t  $\underline{s}m\underline{s}y.t$  jnl.n(=j) n=k mw ///rw.t w/m (?) /// prj(.w) m 'Iwn

Words spoken by the Upper-Egyptian Merit: '(I) have brought to thee water /// that came out of Heliopolis.'57

New suggestion:  $\underline{dd}$ -mdw jn Mr.t  $\underline{s}m3y.t$  jnl.n(=j) n=k mw [j]r.t wr[.t] prj(w) m 'Iwn

Words spoken by the Upper-Egyptian Merit: 'I have brought to you water of the great water (author's comm.: high/flood water) which came out of Heliopolis.'

<sup>&</sup>lt;sup>54</sup> Weber, in Hsu, et al. (eds), *Ein Kundiger, der in die Gottesworte eingedrungen ist*, 369 and n. 79.

<sup>&</sup>lt;sup>55</sup> For the traces and pattern of colour, kindly check the online version of this article.

<sup>&</sup>lt;sup>56</sup> <a href="https://oi-idb.uchicago.edu/id/4cd43d80-f7b7-4b38-83f7-0212">https://oi-idb.uchicago.edu/id/4cd43d80-f7b7-4b38-83f7-0212</a> 67b7d421> accessed 20.12.2020.

<sup>&</sup>lt;sup>57</sup> See Weber, in Hsu, et al. (eds), Ein Kundiger, der in die Gottesworte eingedrungen ist, 369.

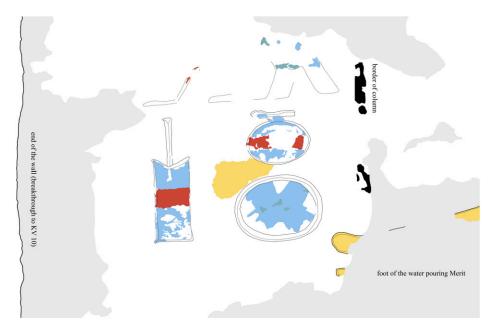


Fig. 9. Drawing of the lower remains of the inscription in front of Merit (drawing: A. Weber).

Since the scene must have illustrated a purification ritual, <sup>58</sup> which corresponds to a libation scene on the opposite north wall, the water from Heliopolis may be interpreted as sacred libation water from the River Nile during the flood season which was previously interpreted as the primeval ocean Nun. The word *jr.t* eminently supports this thesis. It is also preserved on the Piyestela (102) which refers to a certain pilgrimage of the king to Heliopolis. There it is written that he washes his face 'with the water of Nun (*jr.t n.t Nnw*) in which Re washes his face.' <sup>59</sup> Thus, the flood waters may have been connected to the primeval ocean and therefore served as a liquid for purification.

## Chronology of flooding events in KV II

In addition to reconstructing the wall decoration of the tomb, the archive material also helps to establish a chronology of the flooding events that caused much of the destruction in the tomb, thus leading to a better understanding of the tomb's geology. A number of drawings by Lane, Hay, and Horeau and a



**Fig. 10.** Reconstruction of the inscription accompanying Merit (A. Weber).

photoengraving<sup>62</sup> depict the entrance situation of KV 11 in the nineteenth century, filled with rubble that

<sup>58</sup> Weber, *GM*, forthcoming.

<sup>&</sup>lt;sup>59</sup> N. Grimal, La stèle triomphale de Pi('ankh)y au Musée du Caire: JE 48862 et 47086–47089 (MIFAO 105; Cairo, 1981), 130, 136 n. 402.

<sup>&</sup>lt;sup>60</sup> For a first assessment of the tomb's geology, see Weber, et al., *JARCE* 56, 215–23. See also J. Bunbury and K. Schinken, 'Preliminary report on the geology, stonemasonry and plaster remains in the Tomb of Ramesses III (KV 11)', in A. Weber, M. Grünhagen, L. Rees, and J. Moje (eds), *Akhet Neheh: Studies in Honour of Willem Hovestreydt on Occasion of his* 75<sup>th</sup> Birthday (GHP Egyptology 33; London, 2020), 37–42.

<sup>&</sup>lt;sup>61</sup> Cf. Lane Add. MSS. 34088, 32; Hay Add. MSS. 29820, 125–7 in the British Library. For Horeau's drawing, see Horeau MSS. 18.1 held by the Griffith Institute: <a href="http://www.griffith.ox.ac.uk/gri/4horeau\_18\_1.html">http://www.griffith.ox.ac.uk/gri/4horeau\_18\_1.html</a> accessed 20.10.2020.

<sup>&</sup>lt;sup>62</sup> S. Manning, *The Land of the Pharaohs* (London, 1887), 167. The photoengraving shows rubble and debris washed inside Corridor C and Room D1a. The caption erroneously mentions the tomb of Seti I although the identification of the amount of chambers (on the left) makes clear that it must be KV 11. The same illustration is reproduced in J. Romer, *Valley of the Kings* (London, 1981), 36.

washed down the corridor into the rear parts of the tomb. Since antiquity, several flash floods and rainfall in the *wadi* and on the westbank were recorded (table 2)<sup>63</sup> by

<sup>63</sup> The table contains only dates of which we are fairly certain. The aim was to collect the most reliable sources, but in certain cases the references are still unclear. Those references are mentioned under 'Remarks and quotations', while others have been omitted completely although they are provided in the literature. An example is S. Cross, 'The hydrology of the Valley of the Kings', JEA 94 (2008), 305, n. 7, mentioning a flood in 1799. This seems to be based on J. Romer, 'A history of floods in the Valley of the Kings', in J. Romer and E. Romer (eds), The Rape of Tutankhamun (London, 1994), 148, which in turn refers to a nonexistent source mentioning water in the tomb of Amenhotep III in 1799. Contemporary sources from the Napoleonic expedition mention huge quantities of bat droppings, but no water. The rainfall in 1819 that is given in G. D'Athanasi, A Brief Account of the Researches and Discoveries in Upper Egypt Made Under the Direction of Henry Salt, Esq. (London, 1836), 14 is erroneous and actually refers to one year earlier, which is caused by the author's confusing timeline. D'Athanasi mentions the rain in the context of the removal of the sarcophagus of Seti I, which took place in 1818. K. R. Weeks and N. Hetherington, The Valley of the Kings: A Site Management Handbook (Oxford, 2014), 45 provide the date of 23 February 1882 while referring to V. Stuart, The Funeral Tent of an Egyptian Queen (London, 1882); no page number is provided (probably 153?). However, only 'a few drops' are mentioned and therefore the date does not occur in table 2. The same authors provide a date in February 1896, but the source is not mentioned and therefore it is impossible to follow their argument. Since they only write about a 'light rain' (Weeks and Hetherington, Site Management Handbook, 45), the date is not included in the table. The date 1895 is noted in the table, because K. Baedeker (ed.), Ägypten: Handbuch für Reisende (Leipzig, 1897), 271, hints at an earlier flooding in the description of the tomb's destroyed rear parts. It is important because it provides a terminus ante quem for us, but it does not mean that a flooding event occurred in this year exactly. The later editions of Baedeker (until 1928) are not given in the table because they simply reprint the description given in the 1897 edition. 1900/01 is a year of flooding or heavy rainfall that is mentioned by R. A. J. Wüst and J. McLane, 'Rock deterioration in the royal tomb of Seti I, Valley of the Kings, Luxor, Egypt', Engineering Geology 58 (2000), 164. They refer to H. Carter, in J. Rutherford, M. Chekene, J. Romer, and A. Gribaldo, Damage in the Royal Tombs in the Valley of the Kings at Thebes (Unpublished Report for The Egyptian Organization of Antiquities, January 1977), 58. Since the report is unpublished, the date remains irreproducible for us. The same holds for the date 1917/18 on the same page with similar source. Romer, in Romer and Romer, The Rape of Tutankhamun, 150 writes about 'three successive' floods from 1915 until 1918. For the time of those four years, it remains unclear whether flooding occurred in 1916 or 1917. Therefore, only the dates for 1915 and 1918 are guaranteed. Since the floods in October and November 1994 are very well known and recorded, Cross, JEA 94, 305 n. 7 is not added to the references in the table since he does not provide a source. Instead, other reliable articles and books giving evidence of this disaster are cited.

eyewitnesses and researchers.<sup>64</sup> The table clearly shows that storms and rainfall occur periodically. In ancient times, the *šmw*-season (February–April) is recorded, while spring (March-May) and autumn (October-November) are likewise recorded in more recent times. The tombs were already protected from water intrusion by water drainage patterns and debris accumulations in ancient times, at least until the end of the New Kingdom.<sup>65</sup> The data from the Luxor airport weather station, recording since the 1930s, offer a long-term record of weather conditions, but can only be considered tentatively for the Valley of the Kings, as Weeks and Hetherington already admit.<sup>66</sup> From personal experience it can be stated that the weather differs strongly not only between the Theban east- and westbank but also between some smaller areas and villages on the same side of the River Nile. From the table, it is evident that none of the floods before 1837, when Alexander Hoskins drew the harpers in room Cd (fig. 11, left), caused the current state of the front part of KV 11.67 It is a similar situation for the rear

<sup>&</sup>lt;sup>64</sup> General literature used for compilation: G. Belzoni, Narrative of the Operations and Recent Discoveries within the Pyramids, Temples, Tombs, and Excavations, in Egypt and Nubia (London, 1820); Cross, JEA 94, 303-10; S. Cross, 'The workmen's huts and stratigraphy in the Valley of the Kings', JEA 100 (2014), 133-50; D'Athanasi, Brief Account of the Researches and Discoveries in Upper Egypt; S. M. A. El-Didy, 'Appendix III: Hydraulic response of the Valley of the Kings in Luxor', in K. Weeks (ed.), KV 5: A Preliminary Report on the Excavation of the Tomb of the Sons of Rameses II in the Valley of the Kings (rev. edn; Cairo, 2006); A. Dorn, 'The hydrology of the Valley of the Kings: Weather, rainfall, drainage patterns, and flood protection in antiquity', in R. H. Wilkinson and K. R. Weeks (eds), The Oxford Handbook of the Valley of the Kings (Oxford, 2016), 30-8; A. Dorn, GM 259, 91-112, 161-6; T. G. H. James, Howard Carter: The Path to Tutankhamun (2nd rev. edn; London, 2006); Chr. Leblanc, 'Thèbes et les pluies torrentielles. A propos de mw n pt', Memnonia 6 (1995), 197–214; Romer, Valley of the Kings; Romer, in Romer and Romer, The Rape of Tutankhamun, 144-52; J. Rutherford, et al., Damage in the Royal Tombs, 58; J. Rutherford and R. Wilkinson, Effects of the Recent Floods in the Valley of the Kings (Unpublished Report, presented at ARCE Annual Meeting, Atlanta, Georgia, 1995), 22; Weeks and Hetherington, Site Management Handbook; K. R. Weeks, 'The work of the Theban Mapping Project and the protection of the Valley of the Kings', in R. H. Wilkinson (ed.), Valley of the Sun Kings: New Explorations in the Tombs of the Pharaohs. Papers from the University of Arizona International Conference on the Valley of the Kings (Tucson, AZ, 1995), 122-8; K. R. Weeks, The Lost Tomb: The Greatest Discovery in the Valley of the Kings since Tutankhamun (Cairo, 1998); H. E. Winlock, The Treasure of Three Egyptian Princesses (New York, 1948); Wüst and McLane, Engineering Geology 58, 163-90.

<sup>&</sup>lt;sup>65</sup> Dorn, in Wilkinson and Weeks (eds), Oxford Handbook of the Valley of the Kings, 32–3.

<sup>&</sup>lt;sup>66</sup> Weeks and Hetherington, Site Management Handbook, 45-6.

<sup>&</sup>lt;sup>67</sup> James Bruce is not named in this table, because his drawings of the harpers cannot be counted as a true copy of the scene.





George A. Hoskins 1832/33

Hector Horeau 1838

Burton, who wrote in March 1914:

Fig. 11. Early drawings of the harper on the south wall of room Cd (© Griffith Institute, University of Oxford, Hoskins MSS. 3.38 and Horeau MSS. 18.2) illustrating first signs of destruction in the lower part of the scene.

part of the tomb, which must have been almost fully intact in 1883 when Lefébure was working on his notes on the royal tombs.<sup>68</sup> Fourteen years later (in 1897), the fourth edition of Baedeker traveller's guide already mentions a severe destruction of the tomb's rear part and recommends to pass these rooms quickly since there is 'nothing remarkable to see'. 69 That the rooms were destroyed by flooding events is not mentioned in particular, but implied since the first edition of Baedeker's Upper Egypt and Nubia from 1891 gives a full description of the rear part. 70 Between 1891 and 1897, Weeks and Hetherington mention only one 'light' rainfall without destructive power. It seems rather unlikely that another severe flooding event was not officially recorded, since most heavy rainfalls are mentioned somewhere in traveller reports or other records of this time. During our project's geological survey of KV 11, Judith Bunbury already concluded that the water masses must have come from the tomb entrance rather than the

cracks in the ceiling in the site's rear sections. 71 A flooding

event of this scale, which destroyed nearly all the decoration

from corridor G to room L in KV 11, would most certainly

have been noted by somebody. Therefore, it seems likely that

it was not only one flood that caused the current state of the

tomb's rear part, but the accumulative power of repeated

flooding events. One of the most devastating floods must have

been the one in 1914, which is explicitly mentioned by Harry

According to Burton, KV 11 was too dangerous to excavate immediately after the flood. Masses of rubble and debris were washed inside the tomb where they partly remain to this day. Between 1883 and 1914, at least one more violent flooding event must have occurred, which contributed to the damage we see in the back of the tomb today. Earlier degradation of the tomb's front part can be explored by comparing drawings and photographs of artists, travellers, and researchers. With the drawings of George A. Hoskins (1837) and Hector Horeau (1838), it is possible to trace the first stages of the slow deterioration of the lower part of the walls in chamber Cd where the famous harpers are depicted (fig. 11). The front part (corridors B and C) was

<sup>[...]</sup> there was a terrible flood that ran down through the valley and entered several tombs. The tombs of Ramesses II and III were both again flooded, the latter blocked again by debris after having been long since partly excavated and made accessible by Salt and Lepsius.<sup>72</sup>

<sup>&</sup>lt;sup>68</sup> E. Lefébure, *Les hypogées royaux de Thèbes, seconde division: Notices des hypogées* (MMAF 3:1; Paris, 1889), 87–120, pls 58–65.

<sup>&</sup>lt;sup>69</sup> K. Baedeker (ed.), Ägypten: Handbuch für Reisende (Leipzig, 1897), 269–71. The preface states that this edition was revised by Georg Steindorff, 'der das Material auf einer hauptsächlich zu diesem Zweck 1895 unternommene Reise gesammelt hat'.

<sup>&</sup>lt;sup>70</sup> K. Baedeker (ed.), Ägypten: Handbuch für Reisende, 2, Ober-Aegypten und Nubien bis zum zweiten Katarakt (Leipzig, 1891), 236–9. The preface states that the text was based on manuscripts by Ebers and Dümichen, which were completed and checked on the spot by Eisenlohr between 1885 and 1890. Eisenlohr's last voyage to Egypt for this project took place in 1890.

<sup>&</sup>lt;sup>71</sup> See her contribution in Weber, et al., *JARCE* 56, 220-1.

<sup>&</sup>lt;sup>72</sup> Cited in M. Jones, 'Conservation and flood protection', in R. H. Wilkinson and K. R. Weeks (eds), *Oxford Handbook of the Valley of the Kings* (Oxford, 2016), 548.

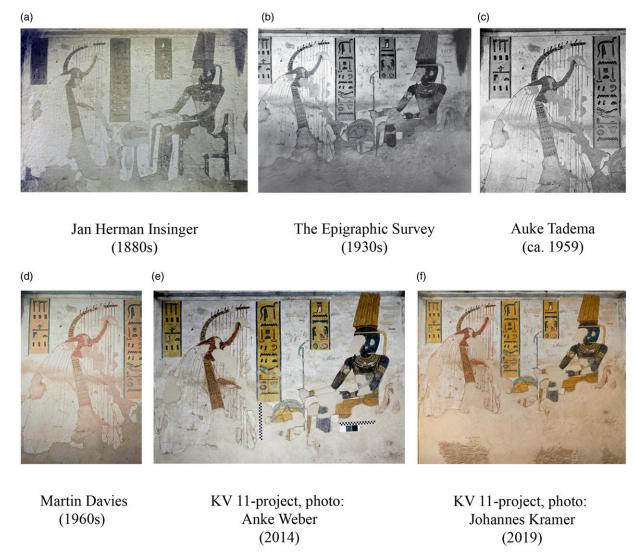


Fig. 12. Compilation of photographs taken by former researchers and our project, showing the increasing degree of destruction in the lower part of the south wall in chamber Cd. a) © Rijksmuseum van Oudheden, Leiden, archive no. 42.a; b) courtesy of the Oriental Institute of the University of Chicago, negative 3395; c) courtesy of Rob Demarée; d) courtesy of Aidan Dodson; e) © The Ministry of Tourism and Antiquities, The Ramesses III (KV 11) Publication and Conservation Project; f) © The Ministry of Tourism and Antiquities, The Ramesses III (KV 11) Publication and Conservation Project.

probably still unharmed by floods at this time and only small parts of the scene were damaged.

Probably in the early 1880s,<sup>73</sup> Jan Herman Insinger produced the first photographs of KV 11 (fig. 12). These already show severe damage in the area of the god's throne and in the lower part of the harp in room Cd (south wall).

The protagonists' feet and the reed mat have suffered damage as well but are still clearly recognizable. The damage is thus considerably less than in the later photographs of the Oriental Institute Chicago (fig. 12), taken in the 1930s.<sup>74</sup> The Dutch artist and illustrator Auke Tadema and his wife visited Egypt regularly between the middle of

<sup>&</sup>lt;sup>73</sup> More precisely, between 1880 (Insinger's first journey up the Nile) and 1888 (last letter by Insinger to the Leiden Museum in which he mentions his photographs). Information kindly provided by Maarten Raven (pers. comm. 29.12.2020). However, it is unclear when exactly he took these photos and even the relevant literature does not provide any hint. We were in contact with the Rijksmuseum van Oudheden, Leiden, where the historic photographs are stored; Rob Demarée kindly provided additional information but no dates. For further reading about Insinger and his photographic actions, see M. J. Raven, 'The Most Prominent Dutchman in Egypt': Jan Herman Insinger and the Egyptian Collection in Leiden (PALMA 19; Leiden, 2018) and M. J. Raven, 'Insinger and early photography in Egypt', OMRO 71 (1991), 13–27.

<sup>&</sup>lt;sup>74</sup> Information kindly provided by Sue Lezon, Associate Professor of Art at State University of New York, Plattsburgh (pers. comm. 17.11.2020) and W. Raymond Johnson, Director of the Epigraphic Survey of the OIC at Chicago House (pers. comm. 07.12.2017 and 05.12.2020). The pictures were taken as part of the original plan of Chicago House to publish the temple of Ramesses III at Medinet Habu and the tomb in the Valley of the Kings together. More information about this will be published in one of our next reports. Negative 3395, Oriental Institute, Chicago <a href="https://oi-idb.uchicago.edu/id/7741f2c1-700f-4f36-b1ff-3034ed78c0da">https://oi-idb.uchicago.edu/id/7741f2c1-700f-4f36-b1ff-3034ed78c0da</a> accessed 22.20.2020. Image courtesy of the Oriental Institute of the University of Chicago.

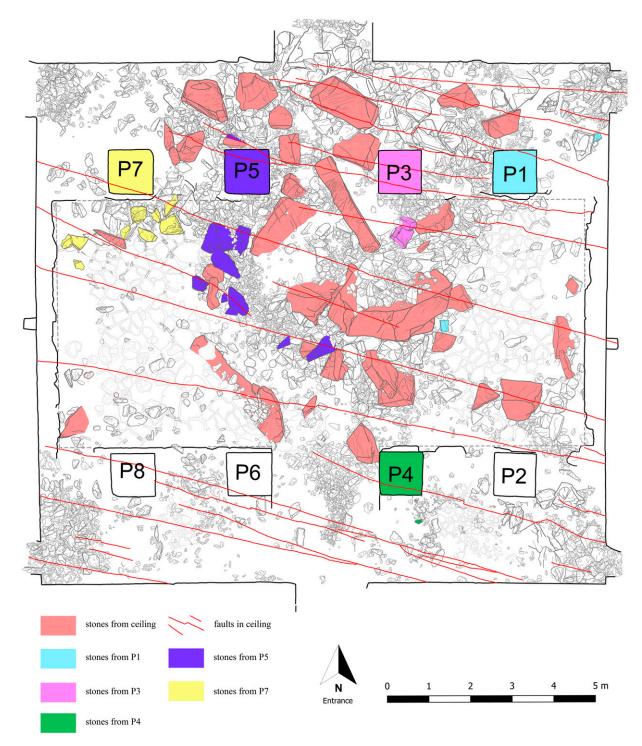


Fig. 13. Preliminary drawing (state: spring 2020) of the floor in hall J of KV II showing the sequence of collapse of stones due to their overlapping flood streams (visible through accumulation of stones and debris), and faults in the ceiling (crossing lines) (drawing: A. Weber).

the 1950s and the early 1980s.<sup>75</sup> Their photographs of KV 11 were probably made between 1958 and 1960 (fig. 12) and are a fruitful source for our dating attempts. Together

with the images from the Oriental Institute, Chicago, <sup>76</sup> they reveal that a flooding event between 1890 and the 1950s caused a high water level even in the eight side-rooms of corridor C. It is impossible, however, that the flood water actually remained stagnant in the front part of the tomb, since the tomb plan steeply slopes downwards and the water would have flooded down towards the rear of the

<sup>75</sup> Some of the photographs of KV 11 were published in A. A. Tadema and J. Tadema Sporry, *Vallei der koningen: de graven van de farao's* (Haarlem, 1979). Information and image reproduction rights kindly provided by Rob Demarée, who met the Tademas personally during his time as an assistant curator at the Rijksmuseum van Oudheden Leiden.

<sup>&</sup>lt;sup>76</sup> Unfortunately, it is not documented who the photographer was and when exactly the photographs were taken. See note 74.



Fig. 14. Drawing of the eastern part of the burial chamber by Joseph Bonomi (© British Library Board, Add. MSS. 29818, fol. 28).

tomb and the breakthrough to KV 10. However, the appended room D1 and corridor D2 do not show evidence of a remaining flood water level which one would expect since the floor level of corridor D2 is increasing. Moreover, the side-rooms of corridors B and C no longer had doors installed by the end of the nineteenth and beginning of the twentieth century that could have held up the water for a certain amount of time. It is much more likely instead, that the relatively permeable Wall Limestone A in the lower part of these rooms absorbed the water and was highly saturated with humidity over a long period of time. The relatively dark line which is presently visible thus indicates the water level, up to which the stone absorbed the incoming water. Furthermore, it is noticeable that there are only minor differences between the photographs of Auke Tadema, Martin Davies, and the ones taken by our project in the last few years, although roughly four decades have passed between the points of time that they were taken. This means that the flash floods which were recorded after 1979 did not cause any further destruction - at least in this area of the tomb. In conclusion, it becomes clear that solely modern flooding events caused the current, poor state of the tomb. This is due to the accumulation of excavation material and flood sediments in front of the tomb which led to a higher ground level compared to the original entrance position at the bottom of the *wadi* in ancient times, thus increasing the impact of the flood.  $^{78}$ 

Our team is currently undertaking further research into several flooding events of KV 11 through accurate visual observation of the collapsed stones and the upper sediment layer in the burial chamber. The current floor level of this room lies around 60 cm above the original bottom of the hall. 79 The uppermost layer is formed of a desiccated sediment crust that cracked while drying. By recording all big limestone fragments that fell on top of this layer and observing subjacent impressions in the mud, a chronology of flood streams as well as the collapse of parts of the ceiling, walls, and pillars can be established (fig. 13). The ceiling must have collapsed before parts of pillars 5 and 3 fell down and after the upper sediment layer had completely dried, because no impressions below the architectural fragments were visible in the mud.<sup>80</sup> Parts of pillar 7 must have collapsed while the mud layer on the floor was still moist since

<sup>&</sup>lt;sup>77</sup> This process is also discussed in Weber, et al., *JARCE* 56, 218–20, fig. 6. Figure 6 indicates that the ten small chambers at the tomb's entrance are built into Wall Limestone A.

<sup>&</sup>lt;sup>78</sup> For the accumulation of excavation material and flood sediments in front of the tomb see Dorn, in Wilkinson and Weeks (eds), *Oxford Handbook of the Valley of the Kings*, 36.

<sup>&</sup>lt;sup>79</sup> For a detailed description see Weber, et al., *JARCE* 56, 223, fig. 15.

<sup>&</sup>lt;sup>80</sup> This does not include the largest stone in the middle of the hall which still has to be lifted. However, a first endoscopic observation by Anke Weber and conservator Karin Schinken did not show any evidence of impressions in the mud below the fragment. Of course, this is a very preliminary remark which has to be proven during our next field campaign.

mud impressions are found below one of the largest stones. A clearly visible flood stream between pillars 7 and 5 indicates that another flooding event must have occurred after the most devastating floods and brought small pieces of wood and pottery fragments into the chamber. Afterwards, pillar 7 partly collapsed.

The chronology of the collapsed stones also provides evidence for the static forces at work in the burial chamber. The pillars certainly collapsed after the ceiling. The latter broke along the natural faults (fig. 13)<sup>81</sup> and was already in danger of collapse in the early nineteenth century, long before the devastating flooding events. This means that the collapse of the ceiling was not influenced by the water ingress and was rather predictable.

A drawing with the camera lucida from the Hay archives at the British Library can be dated to the years 1832/33 (fig. 14). 82 On the ceiling above pillars 3 and 4 one may recognise a half-circle-shaped crack that caused the later collapse of a very large stone which is currently situated on top of the sediment layer. The object must have already been in danger of collapse at this point in time.

In conclusion, it can be established that several violent floods have occurred since antiquity, but they did not reach the same level of destructiveness as the flash floods of the late nineteenth and early twentieth centuries. The chronology of flooding events for KV 11 will not only be useful for the conservation of this site and other tombs in the Valley, but it may also help to prevent future flooding by developing a Site Management Plan. Even in this regard, John Gardner Wilkinson, James Burton, and Robert Hay carried out pioneering work in taking flood prevention measures with the digging of dikes in front of the tomb of Seti I (KV 17). <sup>83</sup> Currently, the modern flood protection wall installed by the Ministry of Tourism and Antiquities (formerly SCA) is a very useful construction in order to prevent future flooding.

### **Conclusions**

Our research in the archives of the British Library, the Victoria and Albert Museum, the Bodleian Libraries, and the Griffith Institute has brought to light important material about the decoration programme in the tomb of Ramesses III. In combination with modern technologies like 3D modelling, digital drawing, and virtual overlapping of drawings and photographs, these manuscripts prove to be a fruitful source for the reconstruction of the original scene material of KV 11. We are convinced that we will be able to reconstruct almost the entire decoration programme of the tomb's rear part that is

now lost and we are currently developing new techniques to visualise our reconstructions and making them accessible to a broader public. With our ongoing archive research as well as fieldwork in the tomb, we will be able to collate the reconstructions on the basis of small details that still remain intact. Moreover, we will proceed with the geological survey in and around the tomb as well as with the clearance of the tomb's burial chamber, recording the collapsed parts of the pillars and the ceiling, which promise to reveal further information about the chronology of flooding events.

### **Acknowledgements**

We would like to express our sincerest thanks to the Egyptian Ministry of Tourism and Antiquities (MoTA), the Minister of Antiquities His Excellency Dr Khaled el-Enany, SCA secretary general Dr Mostafa Waziri, Director of Foreign Missions Affairs Dr Nashwa Gaber and the Permanent Committee for supporting our work in the tomb of Pharaoh Ramesses III. We would like to express our gratitude to the Egypt Exploration Society for granting us their Centenary Award and for their kind support. We would especially like to thank former director Cédric Gobeil and new director Carl Graves. Our fieldwork in the tomb was carried out with the generous support of the ARCE Antiquities Endowment Fund. Furthermore, we are grateful to the reviewers of this article for their useful comments. We owe a debt of gratitude to the British Library (London), the Bodleian Libraries (Oxford), the Victoria and Albert Museum (London), the Griffith Institute (Oxford) - here especially to Francisco Bosch-Puche -, the Oriental Institute of the University of Chicago, and the Rijksmuseum van Oudheden (Leiden) for receiving access to their archives and publication permission. We also thank Rob Demarée and Aidan Dodson for entrusting us with the photographs of Auke Tadema and Martin Davies and for granting publication permission. Finally, we would like to thank W. Raymond Johnson, Sue Lezon, and J. Brett McClain for information about the Epigraphic Survey photographs of KV 11 and the correspondence in the Chicago House archives. To J. Brett McClain, we would like to express our thanks for reviewing this article and for providing his valuable comments.

### **Funding**

EES Centenary Award ARCE Antiquities Endowment Fund

### **ORCID iD**

Anke Weber https://orcid.org/0000-0002-4758-2461

### **Author biographies**

Anke Weber is an Egyptologist who studied Egyptology, Classical Archaeology, and Ancient History at Freie Universität Berlin. She received additional education as a museum curator from the Egyptian Museum and Papyrus Collection Berlin, where she has worked intermittently since 2011 on several exhibitions. She is the Field Director of The Ramesses III (KV 11) Publication and Conservation Project in which she leads an international and interdisciplinary team of researchers and conservators.

Willem Hovestreydt is a Dutch Egyptologist. He studied Egyptology at Leiden University and was editor of the

 $<sup>^{81}</sup>$  For the distribution of colours, kindly check the online version of this article.

<sup>&</sup>lt;sup>82</sup> The dating is based on another drawing from the same archive (Add. MSS. 29818, 29, published in Mauric-Barberio, *BIFAO* 104: 2, 455, fig. 10.). Both drawings are made from the same view and perhaps from the same draftsman. Since sheet 29 is signed with the initial letters of Joseph Bonomi, who rejoined Hay's mission in 1832/33, it seems quite likely that he is also the producer of sheet 28, although this cannot be established with absolute certainty.

<sup>83</sup> Cf. Weeks and Hetherington, Site Management Handbook, 33.

Annual Egyptological Bibliography (now continued at the University of Oxford as Online Egyptological Bibliography). He retired in 2011 and is currently a team member of The Ramesses III (KV 11) Publication and Conservation Project.

Lea Rees is a PhD candidate at Freie Universität Berlin, where she also received her BA and MA degree in

Egyptology. Her PhD deals with the transformations of the cultural landscape at Dahshur, and in the framework of The Ramesses III (KV 11) Publication and Conservation Project, her focus lies on the pharaoh's burial equipment. Along with working in Luxor, she has participated in fieldwork projects at Dahshur (Egypt), Meroe (Sudan), Tayma (Saudi Arabia), and Xanten (Germany).