

ABUSIR XIII

ABUSIR SOUTH 2

**TOMB COMPLEX OF THE VIZIER QAR,
HIS SONS QAR JUNIOR AND SENEDJEMIB, AND IYKAI**

Excavations of the Czech Institute of Egyptology

ABUSIR XIII

ABUSIR SOUTH 2

**TOMB COMPLEX OF THE VIZIER QAR,
HIS SONS QAR JUNIOR AND SENEDJEMIB, AND IYKAI**

Miroslav Bárta

With contributions by Aleš Bezděk, Viktor Černý, Salima Ikram,
Petr Kočár, Roman Křivánek, Martina Kujanová, Petr Pokorný,
Colin Reader, Zdenka Šůvová, Petra Vlčková

Czech Institute of Egyptology,
Faculty of Arts, Charles University in Prague

DRYADA
Prague 2009

Photographs: Archive of the Czech Institute of Egyptology, Miroslav Bárta,
Martin Frouz, Kamil Voděra, Milan Zemina 2009

Illustrations: Miroslav Bárta, Vladimír Brůna, Filip Coppens, Dušan Magdolen, Jolana
Malátková, Lucie Vařeková, Petra Vlčková, Luděk Wellner, 2009

Reviewers: Peter Jánosi, Břetislav Vachala

This book was published from the financial means allocated for the research project of
Ministry of Education, Grant MSM-0021620826

© Charles University in Prague 2009

ISBN 978-80-87025-21-5

Contents

Bibliography and abbreviations	viii
Foreword	xvii
1 Introduction	3
2 The geology of Abusir	11
2.1 Introduction	11
2.2 Pre-Quaternary geology	11
2.2.1 General	11
2.2.2 The development of northern Egypt during the Tertiary	11
2.3 Late Tertiary and Quaternary geology	13
2.3.1 The Nile system	13
2.4 The geology and landscape of South Abusir	14
2.5 The 'Lake of Abusir'	15
2.6 Summary	16
3 Geophysical survey at South Abusir in 2002	19
3.1 History of application of archaeo-geophysical methods in Egypt	19
3.2 Aims of geophysical survey in 2002	22
3.3 Geophysical methods in 2002	22
3.4 Results from area in Abusir South	23
3.5 Conclusion	25
4 Palaeoecology of Abusir South according to plant and animal remains	29
4.1 Survey of the former Lake of Abusir	29
4.2 Archaeobotanical analyses	31
4.2.1 Plant macroremains	31
4.2.2 Pollen analysis from mudbricks	36
4.3 Entomological analysis	36
4.3.1 Insect fragments from the sarcophagus of the vizier Qar	37
4.3.2 Insect fragments from the 'bugs tray'	38
4.4 Osteological analysis	39
4.5 Conclusions	40
Acknowledgement	41
5 Tomb complex of the vizier Qar	49
5.1 Family of Qar and his sons	51
5.1.1 Name, titles and epithets of Qar	51
5.1.2 Sons of Qar	53
5.1.3 Dependants of Qar	54
5.2 Architecture of the tomb complex of Qar	55
5.2.1 Superstructure of the tomb of Qar	55
5.2.1.1 Open Court	57
5.2.1.2 Serdab 1	61
5.2.1.3 Chapel 1	61
5.2.1.4 Chapel 2	67
5.2.1.5 Serdab 2	68
5.2.1.6 Corridor chapel	70
5.2.2 Substructure of the tomb	72
5.2.2.1 Burial chamber of the vizier Qar	72
5.2.2.2 Western burial apartments	74
5.3 Tomb of Qar, decoration and inscriptions <i>in situ</i>	87
5.3.1 Superstructure	87
5.3.1.1 Chapel 1	87
5.3.1.2 Chapel 2	90

5.3.1.2.1 The entrance	90
5.3.1.2.2 Chapel 2	92
5.3.2 Substructure	113
5.3.2.1 Burial chamber of Qar	113
5.4 Tomb of Qar: the finds	119
5.4.1 Surface finds	119
5.4.2 Finds from Open Court 1	120
5.4.3 Finds associated with Chapel 1	133
5.4.4 Serdab 1	137
5.4.5 Serdab 2	138
5.4.6 Corridor chapel	138
5.4.7 Descending Corridor	141
5.4.8 Shaft 5	142
5.4.9 Shaft 6	143
6 Lesser tombs of Qar's sons: Qar Junior and Senedjemib	145
6.1 Sons of the vizier Qar	147
6.1.1 Names, titles and epithets of Qar Junior	147
6.1.1.1 Name and epithets of Qar Junior's wife	148
6.1.2 Name, titles and epithets of Senedjemib	148
6.1.2.1 Members of the family	149
6.1.3 Dependants of Qar Junior and Senedjemib	150
6.1.4 Name, titles and epithets of Iykai	152
6.2 Lesser tombs of Qar Junior, Senedjemib and Iykai: the architecture	153
6.2.1 Superstructure	154
6.2.1.1 Qar Junior (Burial shaft and chamber 'B')	154
6.2.1.2 Senedjemib and Iykai	157
6.2.2 Substructures	160
6.2.2.1 Burial chamber of Qar Junior ('HH', Shaft B)	160
6.2.2.3 Shaft 'C'	167
6.3 The tombs of Qar Junior and Senedjemib: finds and remains of decoration <i>in situ</i>	175
6.3.1 Decoration and finds from the chapel of Qar Junior	176
6.3.2 Decoration and finds from the chapel of Senedjemib	187
6.3.2.1 The entrance	187
6.3.2.2 The false door fragments	192
6.3.2.3 Reliefs from the chapel	196
6.3.4 Decorated blocks not attributable to individual chapels	199
6.3.5 Finds from the burial chamber of Qar Junior (Burial chamber 'B')	223
6.3.6 Finds from the burial chamber of Senedjemib (Burial chamber 'A')	259
6.3.7 Finds from Shaft 'C'	271
6.3.8 Decoration and finds from the chapel of Iykai	273
7 The physical remains of the Old Kingdom mastaba and lesser tombs owners – the sexual dimorphism of the Old Kingdom population	279
7.1 Introduction	279
7.2 Methods	279
7.3 Osteological description of the skeletons	280
7.3.1 Human remains from the tomb complexes of the vizier Qar and his sons and Tomb 'KK'	280
7.3.2 Mastabas at the Lake of Abusir	285
7.4 Results	289
7.5 Discussion	290

8 Funerary food offerings	295
8.1 Mastaba of vizier Qar (Tomb 'GG')	295
8.2 Senedjemib (Tomb 'HH', Shaft 1)	296
8.3 Tomb of Qar Junior (Tomb 'HH', Shaft 2)	296
8.4 General discussion	298
9 Conclusions	301
9.1 The cemetery of Qar and its place in Sixth Dynasty history	301
9.2 Architecture and finds of the vizier Qar's tomb	303
9.3 Architecture and finds of the tombs of Qar Junior and Senedjemib	304
9.4 Titles of the tomb owners	307
9.5 Architectural comparison	311
9.6 Anthropology	313
9.7 Summary	313
Indexes	361

Bibliography and abbreviations

Journals and series

- ÄAT – *Ägypten und Altes Testament*, Wiesbaden: Harrassowitz.
- ACER – *The Australian Centre for Egyptology: Reports*, Oxford: Aris and Phillips Ltd.
- AegMonst – *Aegyptiaca Monasteriensia*, Aachen: Shaker Verlag.
- ArOr – *Archiv Orientalní*, Prague: Oriental Institute of the Czech Academy of Sciences.
- ÄgAbh – *Ägyptologische Abhandlungen*, Wiesbaden: Harrassowitz.
- ÄgFo – *Ägyptologische Forschungen*, Glückstadt, New York: J. J. Augustin.
- Ä&L – *Ägypten und Levante*, Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- AR – *Archeologické Rozhledy*, Prague: Archaeological Institute of the Czech Academy of Sciences.
- AV – *Archäologische Veröffentlichungen des Deutschen Archäologischen Instituts*, Mainz am Rhein: Philipp von Zabern.
- Bd'E – *Bibliothèque d'Etude*, Cairo: Institut Français d'Archéologie Orientale.
- BES – *Bulletin of the Egyptological Seminar*, New York: Egyptological Seminar.
- BIFAO – *Bulletin de l'Institut Français d'Archéologie Orientale*, Cairo: Institut Français d'Archéologie Orientale.
- DÖAW – *Drucke der Österreichischen Akademie der Wissenschaften*, Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- EA – *Egyptian Archaeology*, London: Egypt Exploration Society.
- ÉT – *Études et Travaux*, Warsaw: Neriton.
- GM – *Göttinger Miszellen*, Göttingen: Ägyptologisches Seminar.
- HÄB – *Hildesheim ägyptologische Beiträge*, Hildesheim: Gerstenberg Verlag.
- JEA – *Journal of Egyptian Archaeology*, London: Egypt Exploration Society.
- JNES – *Journal of Near Eastern Studies*, Chicago: Oriental Institute.
- KMT – *A Modern Journal of Ancient Egypt*, San Francisco: KMT Communications, Inc.
- MÄS – *Münchener ägyptologische Studien*, Berlin: B. Hessling.
- MMJ – *Metropolitan Museum Journal*, New York: Metropolitan Museum of Art.
- MonAeg – *Monumenta Aegyptiaca*, Brussels: Fondation égyptologique de la reine Elisabeth.
- OBO – *Orbis Biblicus et Orientalis*, Freiburg, Göttingen: Universitätsverlag; Vandenhoeck & Ruprecht.
- OLA – *Orientalia Lovaniensia Analecta*, Leuven: Peeters.
- OMRO – *Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden*, Leiden: Brill.
- OrMonsp – *Orientalia Monspeliensia*, Montpellier: Centre d'égyptologie de l'université Paul Valéry.
- PA – *Památky Archeologické*, Prague: Archaeological Institute of the Czech Academy of Sciences.
- PAM – *Polish Archaeology in the Mediterranean*, Warsaw: Warsaw University Press.
- PrArch – *Przegląd Archeologiczny*, Wrocław: Institute of Archaeology and Ethnology, Polish Academy of Sciences.
- SAGA – *Studien zur Archäologie und Geschichte Altägyptens*, Heidelberg: Heidelberger Orientverlag.
- SAK – *Studien zur altägyptischen Kultur*, Hamburg: Busske Verlag.
- SAOC – *Studies in Ancient Oriental Civilisations*, Chicago: The Oriental Institute.
- SDAIK – *Deutsches archäologisches Institut, Sonderschrift*, Mainz am Rhein: Philipp von Zabern.
- ZÄS – *Zeitschrift für ägyptische Sprache und Altertumskunde*, Berlin, Leipzig: Akademie der Wissenschaften.

Monographs

Alexanian, *Dahshur II*

Alexanian, N., 1999. *Das Grab des Prinzen Netjer-aperef: die Mastaba II/1 in Dahschur, Mainz am Rhein: Philipp von Zabern.*

Allam, *Grund und Boden*

Allam, S., 1994. *Grund und Boden in Altägypten (rechtliche und sozio-ökonomische Verhältnisse) : Akten des internationalen Symposions Tübingen 18.–20. Juni 1990, Tübingen: im Selbstverlag des Herausgebers.*

Altenmüller, *Mehu*

Altenmüller, H., 1998. *Die Wanddarstellungen im Grab des Mehu in Saqqara, AV 42.*

Andrews, *Ancient Egyptian Jewellery*

Andrews, C., 1996. *Ancient Egyptian Jewellery*, London: British Museum Publications.

Arnold, ed., *Egyptian Art*

Arnold, D., ed., 1999. *Egyptian Art in the Age of the Pyramids (Metropolitan Museum of Art, Sept. 16, 1999 – Jan. 9, 2000)*, New York: Metropolitan Museum.

Aston, *Stone Vessels*

Aston, B. G., 1994. *Ancient Egyptian Stone Vessels. Materials and Forms, SAGA 5.*

Barta, *Opferliste*

Barta, W., 1963. *Die altägyptische Opferliste, von der Frühzeit bis zur griechisch-römischen Epoche, MÄS 3.*

Barta, *Opferformel*

Barta, W., 1968. *Aufbau und Bedeutung der altägyptischen Opferformel, ÄgFo 24.*

Bárta, *Abusir V*

Bárta, M., 1999. *Abusir V. The Cemeteries at Abusir South I.* Prague: Set Out.

Bárta, ed., *OKAA 2004*

Bárta, M., ed., 2006. *The Old Kingdom Art and Archaeology. Proceedings of the conference, Prague May 31 – June 4, 2004*, Prague: Academia.

Bárta, *Life and death*

Bárta, M., 2008. *Life and death in the shadow of the pyramids. Tomb and society of the Old Kingdom period* (in Czech), Prague: Paseka.

Bárta, Brůna, *Satellite Atlas*

Bárta, M., V. Brůna, 2007. *Satellite Atlas of the pyramid fields of Abusir, Saqqara and Dahshur*, Prague: Dryada.

Bárta, Krejčí, eds., *Abusir and Saqqara in the Year 2000*

Bárta, M., J. Krejčí, eds., 2000. *Abusir and Saqqara in the year 2000*, Prague: Academy of Sciences of the Czech Republic, Oriental Institute.

Bárta, Krejčí, Coppens, eds., *Abusir and Saqqara in the Year 2005*

Bárta, M., J. Krejčí, F. Coppens, eds., 2007. *Abusir and Saqqara in the Year 2005*, Prague: Czech Institute of Egyptology.

Bárta, Voděra, *Memories*

Bárta, M., K. Voděra, 2002. *Memories of 4500 Years Ago*, Brandýs nad Labem: FOTO-GRAFIKA.

Begelsbacher-Fischer, *Götterwelt*

Begelsbacher-Fischer, B. L., 1981. *Untersuchungen zur Götterwelt des Alten Reiches im Spiegel der Privatgräber der IV. und V. Dynastie*, OBO 37.

Berger, Clerc, Grimal, eds., *Hommage á Jean Leclant*

Berger, C., G. Clerc, N.-C. Grimal, eds., 1994. *Hommage á Jean Leclant*, Bd'E 104/1–4.

Berger, Matthieu, eds., *Études Lauer*

Berger, C., B. Mathieu, eds., 1997. *Études sur l'Ancien Empire et la nécropole de Saqqâra dédiées à Jean-Philippe Lauer*, OrMonsp IX.

von Bissing, *Gem-ni-kai*

von Bissing, F. W., 1905. *Die Mastaba des Gem-ni-kai*. Band I, Berlin: A. Duncker.

Bolshakov, *Man and his Double*

Bolshakov, A. O., 1997. *Man and his Double in Egyptian Ideology of the Old Kingdom*, ÄAT 37.

Bolshakov, *Old Kingdom Reliefs and Sculpture*

Bolshakov, A. O., 2005. *Studies on Old Kingdom Reliefs and Sculpture in the Hermitage*, ÄgAbh. 67.

Brovarski, *Canopic Jars, Boston*

Brovarski, E., 1978. *Corpus Antiquitatum Aegyptiacarum. Loose-leaf catalogue of Egyptian Antiquities. Museum of Fine Arts Boston. Fascicle 1: Canopic jars*, Mainz am Rhein: Philipp von Zabern.

Brovarski, *Senedjemib I*

Brovarski, E., 2002. *The Senedjemib Complex, Part I. The Mastabas of Senedjemib Inti (G 2370), Khnumenti (G 2374), and Senedjemib Mehi (G 2378), Giza Mastabas 7*, Boston: Dept. of Art of the Ancient World, Museum of Fine Arts.

Cherpion *Mastabas et hypogées*

Cherpion, N., 1989. *Mastabas et hypogées d'Ancien Empire: le problème de la datation*, Bruxelles: Connaissance de l'Égypte ancienne.

Daressy, CG 38001–39384

Daressy, G., 1905–1906. *Catalogue Général des Antiquités Égyptiennes du Musée du Caire, Statues de divinités*, vols. 28 and 29, nos. 38001–39384, Cairo: Imprimerie de l'Institut français d'archéologie orientale.

D'Auria, Lacovara, Roehrig, eds., *Mummies and Magic*

D'Auria, S., P. Lacovara, C. H. Roehrig, eds., 1992. *Mummies and Magic. The Funerary Art of Ancient Egypt*, Boston: Museum of Fine Arts.

Daoud, *Corpus of Inscriptions*

Daoud, K. A., 2005. *Corpus of Inscriptions of the Herakleopolitan Period from the Memphite Necropolis. Translation, commentary and analyses*, British Archaeological Reports, International Series 1459, Oxford: Hadrian Books.

Davies, *Akhethotep*

Davies, N. d. G., F. L. Griffith, 1900. *The mastaba of Ptahhetep and Akhethetep at Saqqareh*, London: Egypt Exploration Fund.

Dittmar, *Blumen und Blumensträuße*

Dittmar, J., 1986. *Blumen und Blumensträuße als Opfergabe im alten Ägypten*, MÄS 43.

Dominicus, *Gesten und Gebärden*

Dominicus, B., 1994. *Gesten und Gebärden in Darstellungen des Alten und Mittleren Reiches*, SAGA 10.

Donadoni Roveri, *I sarcofagi egizi*

Donadoni Roveri A. M., 1969. *I sarcofagi egizi dalle origini alla fine dell' Antico Regno*, Roma: Istituto di studi del vicino Oriente, Università.

Duell, *Mereruka*

Duell, P., 1938. *The mastaba of Mereruka*, Chicago, Ill: The University of Chicago Press.

DuQuesne, *Jackal Divinities*

DuQuesne T., 2005. *The Jackal Divinities of Egypt. I. From the Archaic Period to Dynasty X. Oxfordshire Communications in Egyptology VI*, London: Da'th Scholarly Services [in association with] Darengo Publications.

Farlane, *Mastabas at Saqqara*

McFarlane, A., 2003. *Mastabas at Saqqara. Kaiemheset, Kaipunesut, Kaiemsenu, Sehetepu and Others*, ACER 20.

Firth, Gunn, *TPC*

Firth, C. M., B. G. Gunn, 1926. *Teti Pyramid Cemeteries*, Cairo: Imprimerie de l'Institut français d'archéologie orientale.

Hannig, *Wb I*

Hannig, R., 2006. *Grosses Handwörterbuch ägyptisch-deutsch (2800–950 v. Chr.): die Sprache der Pharaonen*, Mainz am Rhein: Philipp von Zabern.

Harpur, *DETOK*

Harpur, Y., 1987. *Decoration in Egyptian tombs of the Old Kingdom: studies in orientation and scene content*, London: Kegan Paul International.

Harpur, Scremin, *Kagemni*

Harpur, Y., P. J. Scremin, 2006. *The Chapel of Kagemni. Scene Details*. Edited by Geoffrey Thorndike Martin, *Oxford Expedition to Egypt*. Oxford: Linacre College.

Hassan, *Giza VI.2*

Hassan, S., 1948. *Excavations at Giza. The Offering List in the Old Kingdom, Vol. VI, Part 2, 1934–1935*, Cairo: Government Press.

Hawass, *Hidden Treasures*

Hawass, Z., 2002. *Hidden Treasures of the Egyptian Museum. One Hundred Masterpieces from the Centennial Exhibition*, Cairo: American University in Cairo Press.

Helck, *Beamtentitel*

Helck, W., 1954. *Untersuchungen zu den Beamtentiteln des ägyptischen alten Reiches*, ÄgAbh 18.

Houlihan, *Birds*

Houlihan, P. F., 1988. *The Birds of Ancient Egypt*, Cairo: American University in Cairo Press.

Hölzl, *Pyramiden Ägyptens*

Hölzl, Ch., 2004. *Die Pyramiden Ägyptens. Monumente der Ewigkeit*, Vienna: Kunsthistorisches Museum.

Hölzl, *Opfertafeln und Kultbecken*

Hölzl, R., 2002. *Ägyptische Opfertafeln und Kultbecken: eine Form- und Funktionsanalyse für das Alte, Mittlere und Neue Reich*, HÄB 45.

James, *Khentika*

James, T. G. H., 1953. *The mastaba of Khentika called Ikhekhi*, London: Egyptian Exploration Society.

Jánosi, ed., *Structure and Significance*

Jánosi, P., ed., 2005. *Architecture and significance. Thoughts on ancient Egyptian architecture*, DÖAW 33.

Jéquier, *Frises d'objects*

Jéquier, G., 1921. *Les frises d'objects des sarcophages du moyen empire*, Cairo: Impr. de l'Institut français d'archéologie orientale.

Jones, *Index*

Jones, D., 2000. *An Index of Ancient Egyptian Titles, Epithets and Phrases of the Old Kingdom*, Vols. I–II, *British Archaeological Reports, International Series 866 (I–II)*, Oxford: Hadrian Books.

Junker, *Gîza*

Junker, H., 1929–1955. *Gîza: Bericht über die von der Akademie der Wissenschaften in Wien auf gemeinsame Kosten mit Dr. Wilhelm Pelizaeus unternommenen Grabungen auf dem Friedhof des Alten Reiches bei den Pyramiden von Gîza*, Leipzig, Wien: Hölder-Pichler-Tempsky A.G.

Kanawati, *Conspiracies*

Kanawati, N., 2003. *Conspiracies in the Egyptian palace : Unis to Pepy I*, London, New York: Routledge.

Kanawati, *Teti Cemetery VIII*

Kanawati, N., 2006. *The Teti Cemetery at Saqqara. Vol. VIII. The Tomb of Inumin*, ACER 24.

Kanawati, Abder-Raziq, *Mereruka and his family I*

Kanawati, N., M. Abder-Raziq, 2004. *Mereruka and his family. Part I. The tomb of Meryteti*, ACER 21.

Kanawati, Abder-Raziq, *Teti Cemetery VI*

Kanawati, N., M. Abder-Raziq, 2000. *The Cemetery at Saqqara VI. The Tomb of Nikauisesi*, ACER 16.

Kanawati, Abder-Raziq, *Teti Cemetery VII*

Kanawati, N., M. Abder-Raziq, 2001. *The Teti Cemetery at Saqqara VII. The Tombs of Shepsiptah, Mereri (Merinebti), Hefi and Others*, ACER 17.

Kanawati, Abder-Raziq, *Unis Cemetery II*

Kanawati, N., M. Abder-Raziq, 2003. *The Unis Cemetery at Saqqara. Volume II. The Tombs of Iynefert and Ihy (reused by Idut)*, ACER 19.

Kanawati, Hassan, *Teti Cemetery I*

Kanawati, N., A. Hassan, 1996. *Teti Cemetery at Saqqara. Volume II. The Tombs of Nedjet-em-pet, Ka-aper and Others*, ACER 8.

Kanawati, Hassan, *Teti Cemetery II*

Kanawati, N., A. Hassan, 1997. *The Teti Cemetery at Saqqara. Volume II. The Tomb of Ankhmahor*, ACER 9.

Kaplony, *Rollsiegel I*

Kaplony, P., 1977. *Die Rollsiegel des Alten Reichs I. Allgemeiner Teil mit Studien zum Königtum des Alten Reiches*, MonAeg 2.

Kloth, Martin, Pardey, eds., *Fs. Altenmüller*

Kloth, N., K. Martin, E. Pardey, eds., 2003. *Es werde niederlegt als Schriftstück. Festschrift für Hartwig Altenmüller zum 65. Geburtstag*, Hamburg: Busske Verlag.

Koura, *Die „7-Heiligen Öle“*

Koura, B., 1999. *Die „7-heiligen Öle“ und andere Öl- und Fettamen : eine lexikographische Untersuchung zu den Bezeichnungen von Ölen, Fetten und Salben bei den alten Ägyptern von der frühzeit bis zum Anfang der Ptolemäerzeit (von 3000 v. Chr.– ca. 305 v. Chr.)*, AegMonast 2.

Kusber, KA

Kusber, E., 2005. *Der altägyptische KA – ‘Seele’ oder ‘Persönlichkeit’?*, dissertation Tübingen.

Landström, *Ships of the pharaohs*

Landström, B., 1970. *Ships of the pharaohs: 4000 years of Egyptian shipbuilding*, London: Allen & Unwin.

Lapp, *Opferformel*

Lapp, G., 1986. *Die Opferformel des Alten Reiches unter Berücksichtigung einiger späterer Formen*, SDAIK 21.

Lapp, *Särge und Sargkammern*

Lapp, G., 1993. *Katalog der Särge und Sargkammern von der 6. bis 13. Dynastie*, SAGA 7.

Lehmann, *Serdab in den Privatgräbern*

Lehmann, K., 2000. *Serdab in den Privatgräbern des Alten Reiches*, dissertation Heidelberg.

Leitz, ed., *Lexikon*

Leitz, C., D. Budde, F. Förster, D. v. Recklinghausen & B. Ventker, 2002. *Lexikon der ägyptischen Götter und Götterbezeichnungen*, OLA 110–114.

Macramallah, *Idout*

Macramallah, R., 1935. *Le Mastaba d’Idout, Fouilles à Saqqarah*, Cairo: Imprimerie Nationale.

Manniche, *Ancient Egyptian Herbal*

Manniche, L., 2006. *An Ancient Egyptian Herbal*, London: British Museum Publications (revised edition).

Martin-Pardey, *Eingeweidegefäße Hildesheim*

Martin-Pardey, E., 1980. *Eingeweidegefäße. Corpus Antiquitatum Aegyptiacarum. Pelizeus-Museum Hildesheim, Lieferung 5*, Mainz am Rhein: Philipp von Zabern.

Martin-Pardey, *Grabbeigaben Hildesheim*

Martin-Pardey, E., 1991. *Grabbeigaben, Nachträge und Ergänzungen. Corpus Antiquitatum Aegyptiacarum. Pelizeus-Museum Hildesheim, Lieferung 6*, Mainz am Rhein: Philipp von Zabern.

Montet, *Scènes de la vie privée*

Montet, P., 1925. *Les scènes de la vie privée dans les tombeaux égyptiens de l'Ancien Empire*, Strasbourg, London, New York: H. Milford, Oxford University Press.

Munro, *Unas-Friedhof*

Munro, P., 1993. *Das Unas-Friedhof Nord-West: topographisch-historische Einleitung*, Mainz am Rhein: Philipp von Zabern.

Murray, *Saqqara Mastabas*

Murray, M. A., K. Sethe, W. H. Petrie, 1905. *Saqqara Mastabas*, London: Bernard Quaritch.

Myśliwiec *et al.*, *Merefnebef*

Myśliwiec, K. *et al.*, 2004. *Saqqara I. The Tomb of Merefnebef*, Warsaw: Editions Neriton.

Nicholson, Shaw, eds., *Ancient Egyptian Materials*

Nicholson, P. T., I. Shaw, eds., 2000. *Ancient Egyptian Materials and Technology*, Cambridge: Cambridge University Press.

Osborn, Osbornová, *Mammals*

Osborn, D. J., J. Osbornová, 1998. *The mammals of ancient Egypt*, Warminster: Aris & Phillips.

Pantalacci, Berger-El-Naggar, eds., *Des Néferkarê aux Montouhotep*

Pantalacci, L., C. Berger-El-Naggar, eds., 2005. *Des Néferkarê aux Montouhotep. Travaux archéologiques en cours sur la fin de la VIe dynastie et la Première Période Intermédiaire, Travaux de la Maison de l'Orient et de la Méditerranée 40*, Lyon: Maison de l'Orient et de la Méditerranée.

Papazian, *Domain of Pharaoh*

Papazian, H., 2005. *Domain of Pharaoh. The Structure and Components of the Economy of Old Kingdom Egypt*. University of Chicago dissertation: Dept. of Near Eastern Languages and Civilisations, Chicago.

PM

Porter, B., R. L. B. Moss, eds., *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings*, 8 volumes, Oxford 1927–52, since 1960 revised and augmented by J. Malek.

Ranke, *PN I*

Ranke, H., 1935–1952. *Die ägyptischen Personennamen*, Glückstadt: J. J. Augustin.

Reiser-Haslauer, *Kanopen Wien II*

Reiser-Haslauer, E., 1989. *Die Kanopen II. Corpus Antiquitatum Aegyptiacarum. Kunsthistorisches Museum, Wien, Ägyptisch-Orientalische Sammlung, Lieferung 3*, Mainz am Rhein: Philipp von Zabern.

Reisner, *Giza Necropolis I*

Reisner, G. A., 1942. *A History of the Giza Necropolis*, Cambridge, Mass.: Harvard University Press, Oxford University Press, London: Humphrey Milford.

Reisner, *Mycerinus*

Reisner, G. A., 1931. *Mycerinus, the temples of the third pyramid at Giza*, Cambridge, Mass.: Harvard University Press.

Reisner, Smith, *Giza Necropolis II*

Reisner, G. A., 1955. *A History of the Giza Necropolis. Volume II. The Tomb of Hetep-heres the Mother of Cheops*, completed and revised by W. S. Smith, Cambridge, Mass.: Harvard University Press.

Roth, *Giza Mastabas 6*

Roth, A. M., 1995. *A cemetery of palace attendants : including G 2084–2099, G 2230+2231, and G 2240*, Boston: Dept. of Ancient Egyptian, Nubian, and Near Eastern Art, Museum of Fine Arts.

Simpson, *Western Cemetery I*

Simpson, W. K., 1980. *Mastabas of the Western Cemetery*, Boston: Dept. of Egyptian and Ancient Near Eastern Art, Museum of Fine Arts.

Scheele-Schweitzer, *Personennamen des AR*

Scheele-Schweitzer, K., 2006. *Die Personennamen des Alten Reiches. Altägyptische Onomastik unter lexikographischen und sozio-kulturellen Aspekten*, dissertation Marburg.

Smith, *HESPOK*

Smith, W. S., 1946. *A History of Egyptian Sculpture and Painting in the Old Kingdom*, London: Oxford University Press, G. Cumberlege.

Spencer, *Brick Architecture*

Spencer, A. J., 1979. *Brick architecture in Ancient Egypt*, Warminster: Aris and Phillips.

Staehelin, *Tracht*

Staehelin, E., 1966. *Untersuchungen zur ägyptischen Tracht im Alten Reich*, MÄS 8.

Stocks, *Experiments in Egyptian Archaeology*

Stocks, D. A., 2003. *Experiments in Egyptian archaeology: stoneworking technology in ancient Egypt*, London, New York: Routledge.

Strudwick, *Administration*

Strudwick, N., 1985. *The Administration of Egypt in the Old Kingdom: the Highest Titles and Their Holders*, London: Kegan Paul International.

Verner, *Khentkaus*

Verner, M., 1995. *Abusir III. The Pyramid Complex of Khentkaus*, Prague: Academia.

Verner et al., *Raneferref I*

Verner, M. et al., 2006. *Abusir IX. The Pyramid Complex of Raneferref. The Archaeology*, Prague: Academia.

Verner, Callender, *Abusir VI*

Verner, M., V. G. Callender, 2002. *Abusir VI: Djedkare's family cemetery*, Prague: Czech Institute of Egyptology, Charles University.

Weeks, *Giza Mastabas 5*

Weeks, K. R., 1994. *Mastabas of Cemetery G 6000 including G 6010 (Neferbaupth); G 6020 (Iymery); G 6030 (Iti); G 6040 (Shepseskafankh)*. *Giza Mastabas 5*, Boston: Dept. of Ancient Egyptian, Nubian, and Near Eastern Art, Museum of Fine Arts.

Wiebach, *Scheintür*

Wiebach, S., 1981. *Die ägyptische Scheintür: morphologische Studien zur Entwicklung und Bedeutung der Hauptkultstelle in den Privat-Gräbern des Alten Reiches*. Hamburg: Borg.

Willems, *Social aspects of funerary culture*

Willems, H., 2001. *Social aspects of funerary culture in the Egyptian Old and Middle Kingdoms. Proceedings of the international symposium held at Leiden University 6–7 June, 1996*, OLA 103.

Windus-Staginsky, *Der ägyptische König*

Windus-Staginsky, E., 2006. *Der ägyptische König im Alten Reich: Terminologie und Phraseologie*, Wiesbaden: Harrassowitz.

Zibelius, *Ägyptische Siedlungen*

Zibelius-Chen, K., 1978. *Ägyptische Siedlungen nach Texten des Alten Reiches*, Wiesbaden: Reichert.

Ziegler *et al.*, *Akhtihotep*

Ziegler, C. *et al.*, 2007. *Le mastaba d'Akhetetep*, Musée du Louvre éditions, Paris, Louvain: Peeters.

Zoffili, *Kleidung und Schmuck*

Zoffili, E., 1992. *Kleidung und Schmuck im alten Ägypten*, Frankfurt am Main, Berlin: Propyläen Verlag.

Zivie, *Les tombeaux retrouvés*

Zivie, A., 2003. *Les tombeaux retrouvés de Saqqara*, Paris: Éditions du Rocher.

Foreword

Miroslav Bárta

The excavation of the tomb complex of the vizier Qar and his sons started in the fall of 1995. Since then several campaigns have been carried out in order to investigate the complex in its entirety, analyze individual groups of finds and carry out necessary and extensive restoration and documentation activities.

During these campaigns the tombs of the vizier Qar and his sons were discovered.¹ The badly damaged tombs of Qar Junior, Senedjemib and of Iykai were documented during the 1995 season. During the 2000 season, the tomb of Inti was brought to light, as well as the burial apartment of Qar Junior. In 2002 the burial chamber of Senedjemib was examined and in 2004 some minor excavation activities were necessary for a better understanding of the complex' history and its architectural development.

The current volume is the first of the three planned publications dedicated to the complex. It comprises a full record of the tombs of the vizier Qar, Qar Junior, Senedjemib and Tjenti accompanied by chapters on geology and geophysical survey of Abusir South, faunal and floral remains from the tombs and anthropological evaluation of the human remains. This last study also includes burials discovered during the 2002 season from the lesser tombs of the late Old Kingdom at the Lake of Abusir.²

The second volume will contain the full publication of the tomb complex of Inti with chapters on faunal remains, pottery and restoration methods applied in individual tombs belonging to the family.

The final volume will be dedicated to numerous unique finds discovered during the works in the tombs. Their provenance cannot be assessed with certainty and they thus form a distinct group of evidence with much information about the cemetery's later development down to the First Intermediate Period.

It is my pleasure to thank above all our Egyptian colleagues without whose help and assistance we would not be able to realise successfully our field projects: Zahi Hawass, Director General of the Supreme Council of Antiquities and his predecessors Gaballa Ali Gaballa and Halim Nour ed-Din; Magdi Ghandour – Director of the Foreign Missions Departments; Ussama El-Shimy, director of the Saqqara Inspectorate of Antiquities; Adel Husseyn and Kamal Waheed – former directors of the Saqqara Inspectorate of Antiquities; Tarek El Awady, Chief inspector of Abusir, and many other colleagues and friends collaborating with us in the field – Yaser Hassan Abd el-Fattah, Esmat Abd el-Ghani Muhammad, Nasrallah Fathy Killany, Attalah el-Khouli, Adel Okasha, Nasser Ramadan, Ragab Ismail Shehata and Mohammad Youssef –

¹ For the previous partial publications see Bárta, Voděra, *Memories*; M. Bárta, 'The Czech Institute's ten years of excavation at Abusir South', *KMT* 13/1 (2002), 1–11; *idem*, 'Funerary rites and cults at Abusir South', in N. Kloth, K. Martin, E. Pardey, eds., *Es werde niergelegt als Schriftstück, Festschrift für Hartwig Altenmüller zum 65. Geburtstag* (Hamburg, 2003), 17–30; *idem*, 'A New Gate to the Netherworld', in K. Daoud, S. Bedier, S. Abd El-Fatah, eds., *Studies in Honor of Ali Radwan, Supplement to the Annales du Service des Antiquités de l'Égypte* 34/1 (Cairo, 2005), 183–191; *idem*, 'The Sixth Dynasty tombs in Abusir. Tomb complex of the vizier Qar and his family', in Bárta, ed., *OKAA 2004*, 45–62; M. Bárta, A. Bezděk, 'Beetles and the decline of the Old Kingdom: Climate change in ancient Egypt', in H. Vymazalová, M. Bárta, eds., *Chronology and Archaeology in Ancient Egypt (The Third Millennium B.C.). Proceedings of the Conference Held in Prague (June 11–14, 2007)*, (Prague, 2008), 214–222; M. Bárta, V. G. Callender, 'A Family of Judges at Abusir South', *KMT* 7.2, (1996), 32–39; M. Dvořák, B. Vachala, 'Restaurátorské práce v hrobce vezíra Kara v jižním Abúsiru (Egypt)/Conservation works in the tomb of vizier Qar in Abusir South (Egypt)', in V. Hašek, R. Nekuda, M. Ruttkay, eds., *Ve službách archeologie/In Service to Archaeology* 2/2007 (Brno, 2007), 192–200; B. Vachala, 'Zwei Hundenamen aus Abusir', *GM* 190 (2002), 83–87; *idem*, 'Výzdobný program Intiho hrobní kaple v Abúsiru (EAR)/The Decoration Programme of Inti's Tomb Chapel at Abusir, Egypt', in V. Hašek, R. Nekuda, J. Unger, eds., *Ve službách archeologie/In the Service of Archaeology* IV (Brno, 2003), 317–322; *idem*, 'Das älteste Liebeslied?', in Kloth, Martin, Pardey, eds., *Es werde niergelegt als Schriftstück*, 429–431; *idem*, 'Rekonstruované průčelí Intiho hrobky v jižním Abúsiru, EAR/Reconstructed Facade of Inti's Tomb in Southern Abusir, Egypt', in V. Hašek, R. Nekuda, M. Ruttkay, eds., *Ve službách archeologie/In the Service of Archaeology* V (Brno, 2004), 344–348; *idem*, 'Salbölpaletten aus Abusir Süd', *GM* 199 (2004), 89–94; *idem*, 'Tabulky posvátných olejů z Jižního Abúsiru (Egypt)/Sacred Oils Tablets from Abusir South (Egypt)', in V. Hašek, R. Nekuda, M. Ruttkay, eds., *Ve službách archeologie/In the Service of Archaeology* VII (Brno, 2006), in press; M. Verner, 'Excavations at Abusir. Seasons of 1994/95 and 1995/96', *ZÄS* 124 (1997), 80–85; P. Vlčková, 'Abusir South at the End of the Old Kingdom', in K. Piquette, S., Love, eds., *Current Research in Egyptology 2003. Proceedings of the Fourth Annual Symposium University College London 2003* (Oxford, 2005), 163–178; *idem*, '"Great Beard has shaved this Pepy's head and Sothis has washed this Pepy's arm..." The Earliest Attestation of "Grooming Implements" from the Old Kingdom', in Bárta, Coppens, Krejčí, eds., *Abusir and Saqqara in the Year 2005*, 385–396.

² M. Bárta, Vl. Bareš, K. Smoláriková, E. Strouhal, 'Abusir-Spring 2002', *ZÄS* 130, No. 2 (2003), 147–159.

Inspectors of the Supreme Council of Antiquities. Last but not least, our work would not be possible without the invaluable experience of our outstanding foremen Talal, Ahmad and Mittaal el-Qereti.

For their help during the preparation of the manuscript and/or for sharing our field work my special thanks go to Hartwig Altenmüller, Aleš Bezděk, Vladimír Brůna, Vivienne G. Callender, Filip Coppens, Petr Čech, Martin Dvořák, Martin Frouz, Salima Ikram, Petr Kočár, Jaromír Málek, Peter Pokorný, Colin Reader, Marta Štrachová, Martin Tomášek, Břetislav Vachala, Petra Vlčková and Hana Vymazalová. Luděk Wellner and Jolana Malátková drew the plans, and Martin Frouz, Miroslav Ottmar and Kamil Voděra were of invaluable help during the photographic documentation of this project. Kateřina Honskusová kindly checked most parts of the manuscript. My special thanks go to Miroslav Verner, Director of the mission, who kindly supervised the work in the field and helped us in many respects.

I also want to acknowledge the generous support of Alexander von Humboldt Stiftung which provided me with a fellowship for the last stage of my research in 2008 and Stephan Seidlmayer for accepting me in his Egyptological Seminar at the Free University in Berlin. Specialists of the Archaeological Institute of the Czech Academy of Sciences in Prague, the Geoinformatics Laboratory of the University of Jan Evangelista Purkyně in Ústí nad Labem and West Bohemia Institute for protection and documentation of archaeological heritage (ZIP o.p.s.) were members of the field team and their cooperation contributed significantly towards a better understanding of the examined evidence.

V. G. Callender read carefully the final text draft and contributed immensely towards its completion and saved me from many slips and errors.

Zara Meduna and Martin Meduna of the Dryada publishing house were indispensable in the preparation of the manuscript and production of the publication.

This publication was funded by the Czech Ministry of Education Research Grant MSM-0021620826.

PART I

Introduction

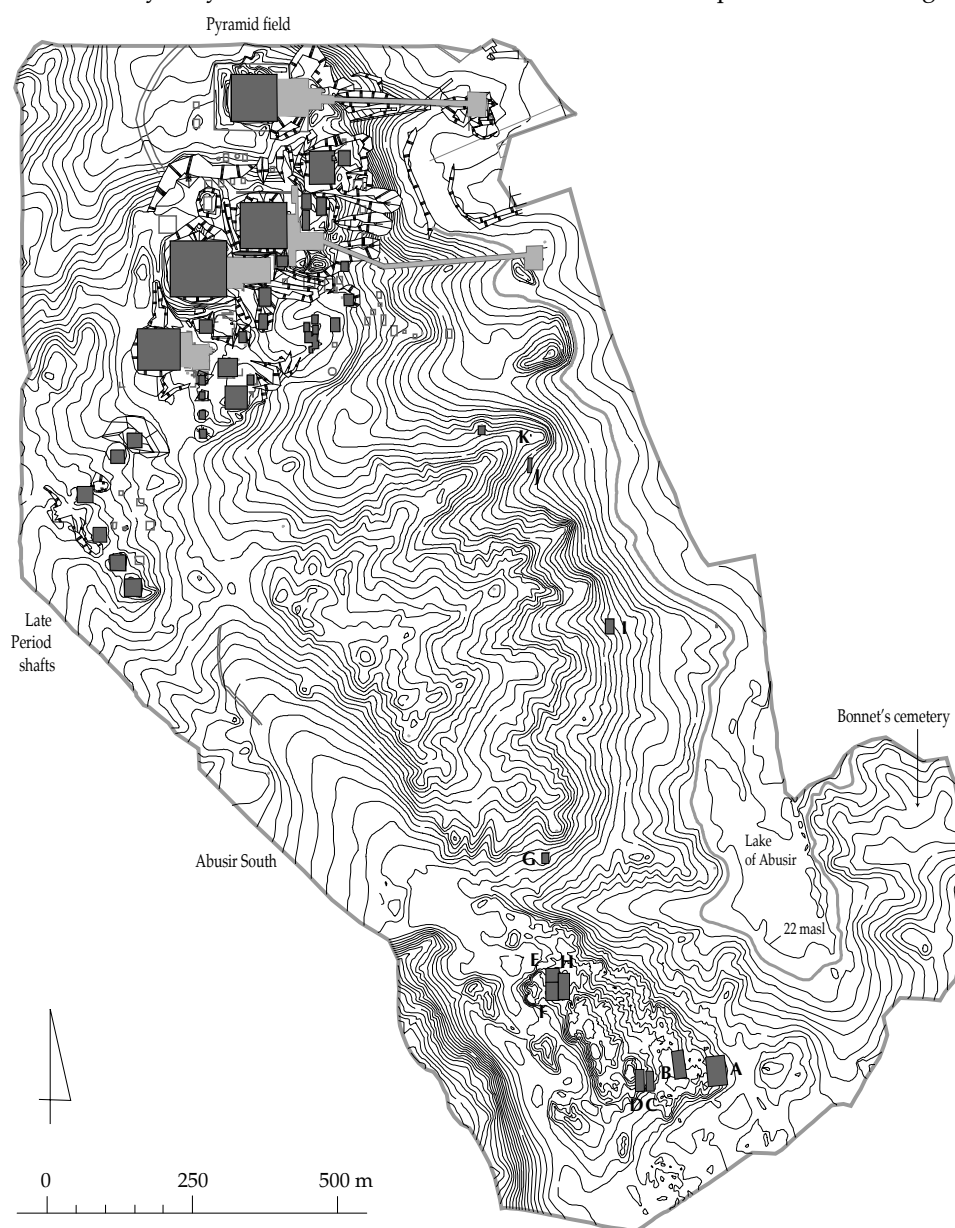
Miroslav Bárta

1 Introduction

In 1991, the Czech Institute of Egyptology started a systematic survey of the Abusir South site. The site consists of several cemeteries dating mainly to the Old Kingdom period. Prior to 1991, none of these structures had been exposed to scientific exploration; however, during the following fifteen years it was possible to explore and restore the tombs of several high officials of the Old Kingdom. The most important of these were the tombs belonging to the commander of the Army, Kaaper, the overseer of the granaries of the Residence, Ity, the property custodian of the king, Hetepi, and the vizier Qar and his sons, Qar Junior, Senedjemib, and Inti.¹ Another two tombs also belong to this category, but their owners are as yet unknown: tomb 'MM', dating to the Third Dynasty, and rock-cut tomb 'KK' with a mastaba superstructure dating to

Fig. 1.1 2D contour plan of

- Abusir.
A – 'MM',
B – Hetepi,
C – Ity,
D – Kaaper,
E – Qar,
F – Inti,
G – Fetekti,
H – 'KK'



¹ Cf. Bárta, Voděra, *Memories*; Bárta, *Abusir V*; *idem*, 'A Third Dynasty Tomb of Hetepi at Abusir South', in Kh. Daoud, S. Abd el-Fatah, eds., *The World of Ancient Egypt. Essays in honour of Ahmed Abd el-Qader el-Sawi*, SASAE 35 (2006), 35–45; *idem*, 'The Sixth Dynasty tombs in Abusir. Tomb complex of the vizier Qar and his family', in Bárta, ed., *OKAA*, 45–62.

the late Fifth Dynasty. To the north of the Central Mound of Abusir South, a cemetery containing the tombs of Fetekti, Rahotep, Hetepi and Gegi evolved during the late Fifth Dynasty. These tombs, however, belong to officials of a significantly lower social rank.² Additional tombs were discovered on the western shore of Lake of Abusir in 2002, including a New Kingdom rock-cut tomb which has as yet no parallel in Abusir (*fig. 1.1, pls. 1–2*).³

Currently available evidence suggests that South Abusir and specifically the cemetery located on the Central Mound played a significant role during the Archaic and Old Kingdom periods: its location in the transitional zone between the burial ground in Abusir and Saqqara predestined it for the gradual expanding necropolis of tombs throughout the greater part of the period during the third millennium B.C.

Within the framework of the multidisciplinary South Abusir project, several important themes have been selected for the application of diverse scientific disciplines in the field, such as geoinformatics, geophysics and geology, remote sensing techniques (especially satellite imaging), anthropology, palaeoecology, and the study of faunal and floral remains. These methods have not been chosen at random: in each case it was a matter of their potential to contribute to the analysis of the questions which were set as the long-term aims of the project. The issues we wished to address in this context include:

1. How did the burial ground develop through time?
2. What was the structure of the spatial division of the burial ground dependent on time and the social status of the dignitaries buried there?
3. How was the burial ground in South Abusir connected with the analogous burial grounds in Abusir and Saqqara (both with regard to their development through time, and spatially)?
4. Was there a relationship between the burial ground in South Abusir and the Old Kingdom settlement? If so, how did it manifest itself?
5. What are the typical anthropological traits of the Old Kingdom population as reflected through the Abusir excavations?
6. What were the social positions of the officials buried in the area?
7. What were the essential characteristics of the Old Kingdom natural environment?
8. What is the best way of preserving excavated monuments exposed to a modern, often devastating environment?

Most of these issues have been addressed in the following chapters. For the moment, it may be useful to detail the specific topographic setting of the South Abusir area based on our current knowledge. The cemeteries in South Abusir had continuously developed from the end of the Third – early Fourth Dynasty at the latest, when the first tombs of distinguished dignitaries (Hetepi, Ity) were built. Later on, at the beginning of the Fifth Dynasty, the tomb of Kaaper followed. Some time after the beginning of the Sixth Dynasty, the tomb complex of the vizier Qar and the adjacent tombs of his sons (Inti, Qar Junior, Senedjemib and Tjenti) were constructed. All these tombs made use of the dominant topographic locations proceeding from the southeast to northwest, which undoubtedly made these buildings very impressive structures at that time. Simply put, these mastabas constitute a certain southeast-northwest axis which respects both the natural topography of the Central Abusir South Mound and possibly even the proximity of the Lake of Abusir. It could have been the main route of access to the area during the Old Kingdom period (*pl. 3*).⁴

² Bárta, *Abusir V*; *idem*, 'Sociology of the Minor Cemeteries during the Old Kingdom. A View from Abusir South', *ArOr* 70, No. 3 (2002), 291–300.

³ L. Bareš, M. Bárta, K. Smoláriková, E. Strouhal, 'Abusir–Spring 2002', *ZÄS* 130, 2 (2003), 147–159 and J. Mynářová, 'Abusir in the New Kingdom: Current Research by the Czech Institute of Egyptology', in R. J. Dann, ed., *Current Research in Egyptology. Proceedings of the Fifth Annual Symposium* (London, 2006), 112–117.

⁴ As formulated by M. Bárta, 'The Title "Priest of Heket" during the Egyptian Old Kingdom', *JNES* 58, 2 (1999), 1–10. Cf. also M. Bárta, B. Vachala, 'The Tomb of Hetepi at Abu Sir South', *EA* 19 (2001), 33–35 and C. Reader, 'On Pyramid Causeways', *JEA* 90 (2004), 63–71.

Meanwhile, a hiatus clearly arises between the beginning of the Fifth Dynasty and the middle of the Sixth Dynasty among the tombs of the Central Mound which was reserved, based on the present evidence, only for highly distinguished dignitaries. The spatial disposition of the tombs indicates that it is possible to find the missing chronological horizon in the area northwest of Kaaper's tomb and southeast of the vizier Qar's tomb. This area undoubtedly contains an extensive tomb with a small chapel in the southeastern corner with a serdab west of it. The drift sand fill suggests that, unfortunately, the tomb had been robbed. With regard to its size and location, it may be presumed that it belonged to a higher ranking official. Based on the chapel's disposition (L-shaped ground plan), it is likely that chronologically, the first two thirds of the Fifth Dynasty must be taken into account. Tombs with this type of chapel have a sporadic occurrence in the Abusir and Saqqara regions, and at the same time they form a very specific group of tombs.⁵

Significantly, substantially smaller tombs were built on the fringes of these main tombs. Unlike the main monuments, they were not built from limestone, but from Nile-mud or *tafl* bricks. These tombs have so far been archaeologically documented close to the north eastern corner of Kaaper's tomb, east and south of Hetepi's tomb and, finally, also in the north and northeast area of Qar's complex. In addition to this direct evidence, some indirect evidence for lesser tombs is available. It comes from the fill of the burial shafts of Qar's family members. These numerous blocks were decorated with inscriptions and/or reliefs, which must, because of their location, have originated in the surrounding smaller tombs. On the basis of this indirect evidence, it appears that these tombs belonged to dignitaries of a lower social status and that the given blocks were used secondarily as the fill of the shafts at a time when these tombs had already been robbed or even dismantled – perhaps still during the fall of the Old Kingdom. Also, it cannot be excluded that, in some cases, we are dealing with decorative elements which originated in the rock-cut tombs.

A cemetery for the lesser officials was founded at the end of the Fifth Dynasty north of Qar's tomb, on the opposite side of the east-west running wadi. These officials, mainly priests, were taking part in the mortuary cult of the Fifth Dynasty kings in the Abusir pyramid temples (Fetekti and Hetepi) and in Menkauhor's complex (which indirectly indicates that this complex would have been located in the area of present-day Saqqara).

The tombs of the dignitaries Hetepi and Ity from the end of the Third or beginning of the Fourth Dynasty unambiguously prove that at that time the burial-ground of the high officials of non-royal origins from the northern part of Saqqara (Quibell and Firth Cemetery) was transferred to Abusir South, whose Central Mound is situated directly to the west from the Early Dynastic cemetery which was discovered by Hans Bonnet at the beginning of the Twentieth century and is nowadays almost swallowed up by the modern Muslim cemetery.⁶

The earliest tombs on the Central Mound fall into the category of the so-called 'transitional type' tombs which combine two different philosophies for the creation of the access routes to the underground burial chambers – staircase and shaft.⁷ The beginning of the Fifth Dynasty in Abusir corresponds with the development in Saqqara, which is evidenced by the restoration of building works in the cemetery, especially in the area north of Djoser's tomb complex. The construction and existence of Kaaper's tomb is completely consistent with this trend. At present we do not have any evidence that would cover the remaining time period of the Fifth Dynasty in Abusir South, and it is highly probable that most of the non-royal tombs of the time were constructed

⁵ M. Bárta, 'The L-shaped chapels discovered by A. Mariette at Saqqara, a case for Innovation?', in M. El-Damaty, M. Trad, ed., *Egyptian Museum Collections around the World. Studies for the Centennial of the Egyptian Museum* (Cairo, 2002), 87–98.

⁶ H. Bonnet, *Ein frühgeschichtliches Gräberfeld bei Abusir*, *Veröffentlichungen der Ernst v. Sieglin Expedition in Ägypten* 4 (Leipzig, 1928).

⁷ M. Bárta, 'The transitional type of tomb in Saqqara North and Abusir South', in W. Schenkel, S. Seidlmayer, eds., *Texte und Denkmäler des ägyptischen Alten Reiches* (Berlin, 2006), 1–22.

in the Central Pyramid Field in Abusir and in its close vicinity. For the period of the Sixth Dynasty, attempting a definition of the nature of the links to the main cemetery in Saqqara would at this stage be premature.

In 2006, it was possible to finish a detailed topographic plan of the cemetery. The detailed contour plan and 3D model of the cemetery contributed most significantly to the detection of several access routes which led to the cemetery from the Lake of Abusir, *e.g.* from the north-eastern part of the area. These routes can be defined as follows:

- they connect the lake with principal tombs in the cemetery;
- they are located so as to guarantee access into the main parts of the cemetery;
- the course of these routes differentiates them from natural *wadis*, which were created as a consequence of the natural formation of the geomorphology of this area: they have different slopes and courses and the adjacent man-made features/tombs respect these routes;
- the routes can be associated with cultic cemetery activities, as indicated by small deposits of pottery fragments or cultic objects (such as an offering basin).

In several cases, it is apparent that the main access routes branch out in places where there is convenient access to different parts of the cemetery. These places are always dominated by one of the principal tombs (Mastaba 'MM', Hetepi, Ity, Mastaba 'KK', Kaaper, Qar). These routes are always laid out so as to come from the southwestern side of the Lake of Abusir towards the cemetery, *i.e.* towards the southwest. There are also other archaeological indications that suggest that the Lake of Abusir was used as a principal entrance to the cemetery in Abusir South and Saqqara in the area to the north of Djoser's complex during the Old Kingdom period.⁸

Comparing the surface survey with the geophysical measurement and satellite imaging provides interesting indications which are relevant for a thorough evaluation of the attained results.⁹ The conclusions which were obtained through the surface survey show that its significance consists especially in the interpretation of the larger features (tombs), in the identification of specific structures – *e.g.* the shapes of the cult chapels, and in the plotting of the individual major burial shafts or concentrations of bone fragments, pottery, *etc.* This location of features has been possible mainly because of the fact that most of the tombs were constructed of Nile mudbricks or limestone blocks. In both cases their eroded crowns leave clear coloured traces on the surface of the desert. After the rain, signs of overgrowth and the differentiated absorbability of the terrain help to identify these features as well. A less advantageous situation occurs when the brickwork is built of *tafl* bricks. Such brickwork is not markedly apparent on the surface and is also difficult to identify through geophysical exploration. As for the tomb chapels and shafts, these were, as a rule, indiscriminately robbed and are filled (as a direct consequence) with yellow drift-sand, which is a very obvious phenomenon in the desert. If that is the case, the wall crowns of the tombs form slightly elevated mounds, whose internal surfaces have the shape of a shallow concentric depression.

A significant weakness of the surface survey became evident on the slopes, where the above mentioned features are less apparent, owing to geomorphological processes, especially washing and erosion. The survey is also subjectively affected by the optical properties of light, the season of the year, and the time of day. The major disadvantage of the surface survey reveals itself in the particularisation of the results: on the surface, many features were recorded by means of shorter lines; the other two methods are much more effective in creating polygons (totally closed structures, *e.g.* the ground plans of the tombs).

The significance of geophysical measurement consists not only in the fact that it facilitates the verification of the results of the surface survey, but primarily in its ability to detect an array of smaller features. It is also very effective in the identification of possible internal components within individual structures. The only weakness of

⁸ Reader, *JEA* 90 (2004), 63–71.

⁹ For a detailed report see M. Bárta, V. Brůna, R. Křivánek, 'Research at Abusir South in 2001–2002 – methods and results', *PA* XCIV (2003), 49–82.

magnetometric measurement consists in the mapping of *tafl* structures, which was not very successful because the component properties of the structures are almost identical with the properties of the *tafl* subsoil of South Abusir. Geophysics, on the other hand, was unexpectedly very successful even on the slopes, and so it has significantly contributed to the completion of the archaeological plan of the site.

In 2003, a set of satellite aerial views provided by the QUICK BIRD system of the Digital Globe Corp. was commissioned. It was provided exclusively for the Abusir South project and included the cemeteries of Abusir, Saqqara and Dahshur. Its resolution in a panchromatic zone of 0.64 m enables very detailed analyses of the cemeteries and their topography (*pls. 1–3*).¹⁰ The satellite imaging also has several comparative advantages: the entire explored site gets recorded at one moment in time, the imaging is not conditional on the subjective human factor, and it captures the entire area. Moreover, it makes it possible to identify and verify the existence of not just the dominant structures (tombs 'KK' and 'MM', Hetepi, Ity, Kaaper, and the complex of vizier Qar and his sons stand out in the picture), but also of significantly smaller structures. However, the picture has its greatest significance for the analysis of the overall properties of the explored site, *e.g.* its basic components and their spatial distribution, geomorphology of the terrain and its modifications through human activity, and last but not least even for the analysis of the communication system. The analysis clearly confirms the previous conclusion that the cemetery in Abusir South was accessible from the northeast through several routes which led to the major groups of tombs in the burial zone. But satellite imaging does not necessarily detect all site components and sometimes not even those that are detected through geophysical and/or surface survey. Therefore we can assert that its overall value is only fully realized when all three methods described above merge in a kind of site synthesis. The evolving model of the site examined in this way allows not only better site protection and management, but also a more complex site analysis, and last but not least it makes it much easier to formulate prospective research strategies and cut expenses incurred in the field.

¹⁰ Bárta, Brûna, *Satellite Atlas*.

PART II

The geology of Abusir

Colin Reader

2 The geology of Abusir¹

2.1 Introduction

An account of the geology of the Ancient Egyptian necropolis of Abusir needs to reflect the geological development of a much larger area of north east Africa. It is important to state, however, that the processes that have controlled this development are still not fully understood.²

The landforms of the Abusir area are largely the result of the erosion of Tertiary strata (Tertiary: ca. 65 to 2 million years ago, 65–2 Mya) originally laid down under shallow marine conditions. These Tertiary strata have subsequently undergone several phases of uplift and subsidence on a sub-continental scale. Furthermore, the solid strata have been modified to a significant extent by more recent erosion and the deposition of Quaternary deposits (Quaternary: ca. 2 Mya to present) including gravels, sands, silts and clays.

2.2 Pre-Quaternary geology

2.2.1 General

The Tertiary strata that are exposed across much of Egypt rest uncomfortably on largely upper Cretaceous strata (Cretaceous: ca. 150–65 Mya). In only a few areas, such as at Abu Rawash, are the underlying Cretaceous strata exposed.

When considering the Tertiary strata of Egypt, it is useful to consider the two major tectonic regions of the country that have been identified.³ Most of southern Egypt is referred to as the Stable Shelf, on the basis that this area does not appear to have been influenced to any great extent by tectonic activity during the upper Cretaceous. Across the Stable Shelf, the Cretaceous-Tertiary transition is generally marked by a thin conglomerate, derived from eroded Cretaceous strata and, generally speaking, the overlying Tertiary sequences are more complete than elsewhere.

The region of Egypt north of the approximate latitude of Asyut, which includes the Abusir area, is referred to as the Unstable Shelf, across which late Cretaceous tectonic compression produced a series of NE-SW trending folds.⁴ Across the Unstable Shelf, the transition between the upper Cretaceous and the Tertiary is less easily defined than across the Stable Shelf, with the Tertiary strata superimposed on the variable relief of the underlying Cretaceous rocks. It is the variable thickness and nature of the Tertiary strata in the north of Egypt, that makes spatial correlation difficult.

2.2.2 The development of northern Egypt during the Tertiary

The oldest Tertiary strata exposed in the region of Abusir date from the late Eocene (Eocene: ca. 57–36 Mya) and are derived from sediments laid down in the Tethys Sea which, in the period before the formation of the Alps, covered an area extending across southern Europe, northern Africa and central Asia.

The middle and late Eocene saw the Tethys Sea becoming increasingly shallow, as the North African plateau was lifted by regional tectonic processes. By the close of

¹ The author, geologist to the Saqqara Geophysical Survey Project, would like to thank Mr. Ian Mathieson, Field Director of the Saqqara Geophysical Survey Project, for permission to use the results of fieldwork undertaken under his direction, in the preparation of this chapter.

² K. W. Butzer, 'Nile Valley, geological evolution', in K. A. Bard, ed., *Encyclopaedia of the Archaeology of Ancient Egypt* (London – New York, 1999), 571.

³ W. M. Meshref, 'Tectonic Framework', in R. Said, ed., *The Geology of Egypt* (1990), 114, fig 8.1.

⁴ T. Aigner, 'A Pliocene Cliff-Line Around the Giza Pyramids Plateau, Egypt', *Palaeogeography, Palaeoclimatology, Palaeoecology* 42 (1983), 313–322.

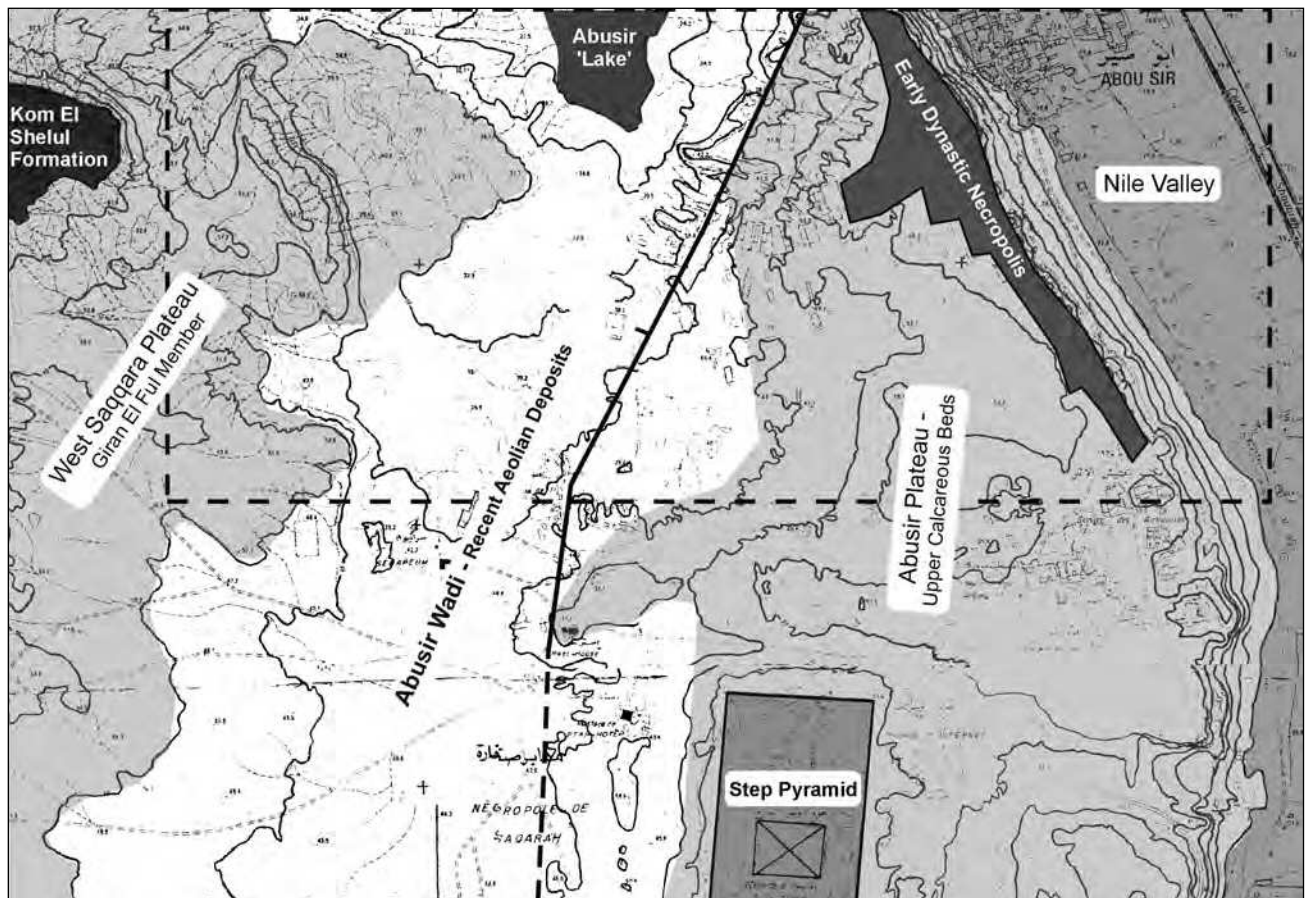


Fig. 2.1 North Saqqara and Abusir South

the late Eocene, much of the southern Stable Shelf area of Egypt had been elevated above sea level and the Unstable Shelf areas to the north had been reduced to shallow coastal waters.⁵ The sediments which were deposited into these relatively shallow marine waters tended to be coarser and more varied than had been the case previously, influenced as they were by material eroded from increasing areas of adjacent land, which mixed with the shallow marine deposits of the Tethys. Within these complex strata is evidence for the presence of a large river delta to the west of the Fayum basin. This is amongst the earliest evidence for a river in this region. Despite the complexity of the Tertiary deposits across the Unstable Shelf area, the prolonged period of sedimentation led to the formation of immense thicknesses of Eocene strata.

Continued fluvial and deltaic activity through into the Oligocene (Oligocene: 36–24 Mya) led to the development of extensive gravel deposits, which today cap many of the hills across the northern sections of the Western Desert in Egypt and across parts of Libya. The great age of these gravels has been determined on the basis of their composition, consisting as they do of eroded Lower Eocene limestones and Nubian sandstones. Also deposited in these Oligocene gravels were the trunks of trees, which must also have been washed down the ancient river and today, this petrified wood litters the high desert of the area.⁶

It is the subsequent development of north African geology that is perhaps the most difficult to reconstruct, being dominated by erosion rather than deposition, leading to a general absence of Oligocene and Miocene strata across much of Egypt. By the Oligocene, however, the progressive uplift of north Africa had led to the development of major fault systems, the opening of the Red Sea and a phase of large scale igneous intrusion.⁷

In the late Miocene, desiccation of the Tethys led to the withdrawal of the sea from across Egypt. With lowered sea levels, the evolving river systems of north east Africa

⁵ R. Said, 'Cenozoic', in Said, ed., *The Geology of Egypt*, 464.

⁶ K. S. Sandford, W. J. Arkell, *Palaeolithic Man and the Nile-Faiyum Divide* (Chicago, 1929), 7.

⁷ M. Y. Meneisy, 'Vulcanicity', in Said, ed., *The Geology of Egypt*, 167.

began to erode deeply into the plateau of elevated Tertiary rocks. The resulting river system (the Eonile) was a precursor of the modern Nile, however, the scale of this river was vast, with a north/south gorge that was longer and deeper than the Grand Canyon, USA.⁸

In the early Pliocene (Pliocene: ca. 5–2 Mya) flooding of the Mediterranean basin via the straits of Gibraltar led to the inundation of the deep Eonile canyon, perhaps as far south as Aswan. In the north of Egypt, sea waters extended beyond the limits of the Eonile gorge, with the limit of these flood waters being preserved in the geological record as deposits of highly fossiliferous sandstones (the Kom el Shellul formation).⁹ The Kom El Shellul formation can be identified at Abusir, capping the highest hills to the west of the necropolis, at a level of ca. 70 m above current mean sea level (amsl).¹⁰

2.3 Late Tertiary and Quaternary geology

2.3.1 The Nile system

Since the deep erosion of the Eonile canyon in the late Miocene and the flooding of the canyon by the Pliocene sea, the evolution of the modern Nile has progressed through a series of stages, with the present river system representing the most recent stage.¹¹

By the late Pliocene, the marine conditions in the Eonile canyon were under increasing influence from fluvial conditions associated with tributary streams which, given the scale of this river system, were probably major rivers in their own right. Consequently, early Pliocene marine conditions gave way to brackish and then freshwater environments and it has been estimated that, by the late Pliocene, marine sediments had accumulated to fill approximately half of the Eonile canyon.¹²

In addition to deposition within the Eonile canyon, gravel deposits were also laid down in the tributary channels. Deposits from the most significant of these tributaries survive today as prominent ridges that form some of the highest points to the south of Abusir. That these valley-bottom deposits survive today as elevated ridges is a result of the durable nature of the ancient river gravels, which contrasted with the elevated plateau of softer Eocene strata into which these valleys had been cut. These ancient highlands have eroded into today's valleys, leaving the more durable gravel infill standing as prominent features of the present landscape.¹³

The earliest truly fluvial phase of the Nile, the Paleonile, was established during the Pleistocene (Pleistocene: 2 Mya–10,000 years ago) and is characterised by sediments consisting of red-brown clays with sand and silt laminae. These deposits, which appear to have been influenced strongly by erosion in the Eastern Desert, can still be seen along the banks of the modern river and in many of the wadis that flowed into it.¹⁴

The end of the Paleonile phase, as with all other phases of the Nile's evolution, was brought about by a period of regional aridity during which flow along the Nile appears to have ceased. By the end of the Paleonile, however, the deep Eonile canyon had become almost completely filled with marine, estuarine and fluvial sediments.

The arid event that brought an end to the Paleonile phase of Nile evolution was superseded by a wet phase, which introduced the subsequent Protonile phase and led to the deposition of extensive coarse quartz and quartzite gravels. These deposits, the Edfu Gravels, have been mapped in the more elevated areas to the east of Abusir, where they reach up to 10 m in thickness.¹⁵

⁸ R. Said, 'Cenozoic', in *ibid.*, 485.

⁹ M. Youssef, O. Cherif, M. Boukhary, A. Mohamed, A., 'Geological Studies on the Saqqara Area, Egypt', *Neues Jahrbuch für Geologie und Paläontologie Abhandlungen* 186/1 (Stuttgart, 1984), 125–144.

¹⁰ I. Mathieson, E. Bettles, J. Dittmer, C. Reader, 'The National Museums of Scotland Saqqara Survey Project, Earth Sciences, 1990–1998', *JEA* 85 (1999), 24.

¹¹ R. Said, 'Quaternary' in Said, ed., *The Geology of Egypt*, 487.

¹² B. M. Sampsell, *A traveller's guide to the geology of Egypt* (New York, 2003), 30.

¹³ Sandford, Arkell, *Palaeolithic Man*, 16.

¹⁴ Said, 'Quaternary', in Said, ed., *The Geology of Egypt*, 490.

¹⁵ Youssef, Cherif, Boukhary, Mohamed, *Neues Jahrbuch für Geologie und Paläontologie Abhandlungen* 186/1 (Stuttgart, 1984), 136, fig 4.

Deposits laid down during the next phase of Nile development, the Prenile, included for the first time material eroded from the Ethiopian highlands. Whilst this may be regarded as marking the onset of the modern Nile system, the Prenile stage ended in yet another period of relative aridity, in which flow from Ethiopia was interrupted, to be replaced by deposits carried from the Red Sea hills via the system of wadis that flow through the Eastern Desert. It was only in the final (and current) stage of Nile evolution (the Neonile) that the connections with drainage from Ethiopia were re-established, though on a much smaller scale than for any of the earlier river stages.

2.4 The geology and landscape of South Abusir

As shown on Figure 2.1, the area of the current study straddles the rather indistinct 'boundary' between northern Saqqara and Abusir South. In the east, the steep Abusir plateau rises from the Nile valley to a level approaching 60 m amsl. This prominent area is the site of Saqqara's Early Dynastic necropolis, which was extensively excavated by Emery between 1935 and 1939.¹⁶

The western limit of the Abusir Plateau is defined by a roughly north-south trending fault to the west of which is the low lying area of the Abusir Wadi. At the northern end of the wadi, is the 'Lake of Abusir' which is the lowest part of the current study area, at approximately 25 m amsl. Further west, ground levels rise progressively out of the wadi, to a series of isolated hills, which have formed from the dissection of prominent ridges by surface drainage features and reach levels of 90 m amsl or thereabouts.

The solid geology of Abusir and north Saqqara has been discussed by Youssef *et al.* and is summarised in Table 2.1, below¹⁷:

Age	Rock Unit			Approx. Age (Mya)
Early Pleistocene	Edfu Gravels			Pleistocene: 2–0.01
Early Pliocene	Kom El Shellul Formation			Pliocene: 5–2
Late Eocene	Maadi Formation	Giran El Ful Member		Eocene: 57–36
		Saqqara Member	Upper Calcareous Beds	
			Basal Shale Beds	

Table 2.1 Solid geology of North Saqqara

The elevated Abusir plateau consists almost entirely of strata of the Upper Calcareous Beds of the Saqqara Member. The Upper Calcareous Beds are an alternating sequence of yellow/grey sandy limestones with interbedded yellow/orange marls, which dip to the west. The interbedded nature of these rocks is consistent with deposition in shallow lagoon or coastal marine conditions in a climate characterised by alternating wet and dry periods.

The underlying Basal Shale Beds are exposed only at the base of the eastern escarpment of the Abusir Plateau, adjacent to the modern village of Abusir, and on the low-lying flanks of the Lake of Abusir. These rocks consist of grey green marls (calcareous shales) with evaporite veins and were probably laid down under relatively uniform low energy conditions such as within a shallow bay or estuary.

Along the upper northern and eastern margins of the Abusir Plateau, shallow but extensive depressions in the Upper Calcareous Beds are filled with deposits of Edfu Gravels. These early Pleistocene deposits, which consist of approximately 10% white quartz, are associated with the Protonile phase of Nile evolution and, at Abusir, reach up to 10 m thick.¹⁸

The strata which form the bed of the Abusir Wadi, can not be directly observed because of the covering of recent aeolian sand and other superficial deposits, such as the sediments in the 'Lake of Abusir', which will be discussed below. As yet unpublished geological mapping undertaken as part of the Saqqara Geophysical Survey Project,

¹⁶ W. B. Emery, *Archaic Egypt*, (London, 1961).

¹⁷ Youssef, Cherif, Boukhary, Mohamed, *Neues Jahrbuch für Geologie und Paläontologie Abhandlungen* 186/1 (Stuttgart, 1984), 125–144.

¹⁸ *Ibid.*, 131.

Fig. 2.2 Sparse scrub vegetation with coarse grasses and palms



however, suggests that rocks of the Saqqara Member sub-crop beneath much of the northern end of the Abusir Wadi, with the Giran el Ful Member forming the more elevated western flanks of the wadi.

Where exposed in the area, the Giran El Ful Member is typically a moderately strong to strong grey sandy limestone with interbedded grey shales and occasional weak orange brown sandy beds. The rocks contain frequent fossils, with the upper beds in the formation readily identified in the field by a layer of abundant bivalves (*Carolia placunoides*). In addition to the *Carolia*, however, other faunal types, principally bivalves, are encountered.

An angular unconformity separates the Giran El Ful Member from the underlying Saqqara Member, with the younger beds having a dominant southerly component of dip. The Giran El Ful beds are considered to have been deposited under higher-energy (less sheltered) coastal- or shallow sea conditions than the earlier rocks, which suggests that sea levels may have risen slightly at the time that these rocks were laid down.

In the extreme west of the study area, the most elevated hills are capped by rocks of the Pliocene Kom El Shellul Formation, which mark the former margins of the Pliocene inundation of the Eonile canyon (see above). Where exposed at Abusir, the Kom El Shellul Formation consists of a grey and grey brown moderately strong coarse sandy detrital limestone with abundant whole and fragmentary *Pecten benedictus*.

Although the Kom El Shellul generally appear to dip to the north, the as yet unpublished geological field work of the Saqqara Geophysical Survey Project has identified an apparently anomalous dip in the east of the Kom El Shellul outcrop, closest to Abusir, where the apparent dip of the beds is steeper and to the east, or slightly north of east.

2.5 The 'Lake of Abusir'

Topographically the area referred to as the Lake of Abusir is the lowest-lying area of the concession, generally lying below 22 metres asl at the northern end of the Abusir wadi. The area is characterised by sparse scrub vegetation which, from south to north, trends from a thin, low-lying cover, through more abundant coarse grasses to stands of palms (fig. 2.2). Extending to the north and east from the study area, are the well-vegetated areas of the cultivated Nile Valley.

A preliminary hand auger investigation of the extent and nature of the soil deposits in this area, established that, beneath a cover of recent wind-blown sand, the soils of the Lake of Abusir are predominantly granular. However, this granular matrix contains varying proportions of dark humic material, together with evidence for mudbrick structures and occasional fragments of red/black pot.

These deposits suggest that this area was subject to a complex history of flooding and that, rather than a true lake (*i.e.* a body of permanent standing water) the area may represent an inundation basin, affected by seasonal flooding of the Nile. Within the dark deposits, the areas of permanent standing water appear to be limited in extent and, for the area investigated, are not sufficiently extensive to indicate the presence of a true 'lake'. It is possible, however, that areas to the north, closer to the pyramids of Abusir, were occupied by more extensive areas of standing water and the presence of a 'lake' further to the north can not be ruled out.

2.6 Summary

The area of interest for this publication, occupies a relatively small area of the Saqqara/Abusir necropolis, across which, late Eocene strata dominate. Faulting has defined the prominent limestone escarpment to the east, and fluvial activity has further influenced the topography of the site by eroding both the principal former waterway in the area – the Abusir Wadi – and a number of tributaries which have dissected prominent ridges to the west of the concession, leaving a series of isolated hills capped with Pliocene strata.

The area of the former Lake of Abusir appears to have been an inundation basin with only limited areas in which standing water was maintained for any significant period of time. The evidence of built-development using mudbrick, within the former lake area, suggests that as conditions varied, the extent and height of the inundation also changed.

PART III

Geophysical survey at South Abusir in 2002

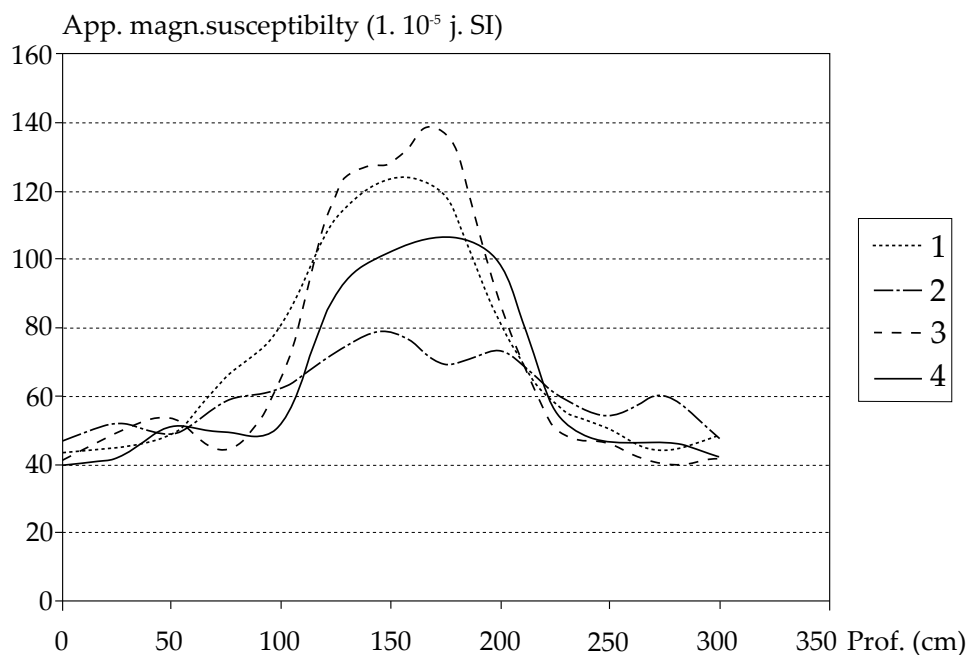
Roman Křivánek

3 Geophysical survey at South Abusir in 2002

3.1 History of application of archaeo-geophysical methods in Egypt

The application of geophysical methods to Egyptian archaeological sites has now had a long tradition of more than four decades. One of the earliest applications of geophysical methods for use in Egyptian archaeology was realised in Mirgissa by French geophysicist A. Hesse in 1974 and 1977.¹ Also the practical use of these non-destructive methods by archaeologists from the Czech (Czechoslovak) Institute of Egyptology in Prague started in the area of the Czech concession quite early in the late 1980's. The first application of geophysical methods in the region of the Abusir pyramid field and shaft tombs of the Late Period was carried out by V. Hašek in 1979–1980 and then again in 1981–1982.² At the same time more international archaeological teams and expeditions also started to use non-destructive geophysical methods. The Polish Center of Mediterranean Archaeology from Warsaw University surveyed Ancient Athribis (Tell Attrib) in the Nile Delta in 1985, the ancient Coptic monastery at Deir el-Malak Gabriel in Naqlun was also surveyed in 1986, with the first surveys in the Saqqara region starting in 1987.³

Fig. 3.1 Profile kappameter measurements of apparent magnetic susceptibility of various types of mudbrick walls (1 – outer walls of an earlier investigated tomb, 2 – masonry from features that were distinguished during the surface survey, 3 – perimeter masonry tomb complex of the vizier Qar, 4 – internal masonry from the tomb complex of the vizier Qar)



¹ A. Hesse, 'Introduction géophysiques et notes techniques', in J. Vercoutter, ed., *Mirgissa I* (Paris, 1970), 51–121; I. J. Mathieson *et al.*, 'Saqqara Project, Preliminary Report 2001', *National Museum of Scotland, Edinburgh* (Edinburgh, 2001).

² V. Hašek, M. Verner, 'Uplatnění geofyziky při archeologickém výzkumu aridního území u Abusíru', *Archeologické rozhledy* 33 (1981), 306–316, 358–360; V. Hašek, M. Verner, F. Obr, 'II. etapa archeologických výzkumů u Abusíru', *Sborník IV. celostátní symposium Geofyzika a archeologie* (Libice, 1983), 187–199; V. Hašek, F. Obr, A. Přichystal, M. Verner, 'Application of Geological and Geophysical Methods in Archaeological Research at Abusir', *Sborník geologických věd, rada hydrogeologie – inženýrská geologie* 18, NČSAV (Prague, 1986), 149–187; V. Hašek, F. Obr, M. Verner, 'Application of geological and geophysical methods in archaeological investigations of ancient Egyptian remnants at Abusir', *PrArch* 35 (1988), 5–47; M. Verner, V. Hašek, 'Die Anwendung geophysikalischer Methoden bei der archäologischen Forschung in Abusir', *ZAS* 108 (1981), 68–84.

³ K. Myśliwiec, T. Herbich, 'Polish archaeological activity at Tell Attrib in 1985', in E. van den Brink, ed., *Archaeology of the Nile Delta* (Amsterdam, 1988), 177–189; W. Godlewski, T. Herbich, E. Wipzysynska, 'Deir el Naqlun (Nekluni), 1986–1987: first preliminary report', *Nubica* 1–2 (1990), 171–207; K. Myśliwiec, T. Herbich, A. Niwiński, 'Polish research at Saqqara in 1987', *ÉT* 17 (1995), 178–203.

Much wider, more intensive and also extensive applications of geophysical methods by more international archaeological expeditions in Egypt we observe from the second half of the 1990's when the real possibilities of using suitable geophysical instruments and the processing of collected data also changed. We could also see more of absolutely new large area geophysical results from the use of new types of magnetometric instruments – caesium magnetometers or fluxgate gradiometers.⁴ Also at that time, south of the Czech South Abusir concession area, successful magnetometric surveys of a part of the larger shaft tomb area were carried out by I. Mathieson and other geophysical surveys in the Abusir and Northern Saqqara regions.⁵ More geophysical teams also applied wider combinations of geophysical methods and techniques – namely combined magnetometric, geoelectric resistivity or

⁴ T. F. Abdallatif, H. Odah, A. M. Saleh, 'Magnetic archaeoprospection at Fayum governorate, Egypt', in T. Herbich, ed., *Archaeological Prospection – 5th International Conference on Archaeological Prospection, Cracow 10.–14. 9. 2003, Archaeologia Polona 41* (Warsaw, 2003), 113; H. Becker, J. Fassbinder *et al.*, 'Methods and Equipment used by the Department Archaeological Prospection and Aerial Archaeology at the Bavarian State Conservation Office, Munich', in J. Fassbinder, W. Irlinger, eds., *Archaeological Prospection – Third International Conference on Archaeological Prospection Munich 9.–11. September 1999, Arbeitshefte des Bayerischen Landesamt für Denkmalpflege* (München, 1999), 93–105; H. Becker, J. Fassbinder, 'In Search for Piramesses – the Lost Capital of Ramesse II. in the Nile delta (Egypt) by Caesium Magnetometry', in *ibid.*, 146–150; J. Fassbinder, H. Becker, T. Herbich, 'Magnetometry in the Desert Area West of the Zoser's Pyramid, Saqqara, Egypt', in *ibid.*, 144–145; D. Hale, P. Wilson, 'Geomagnetic surveys at Sais, Sa el-Hagar, western Delta, Egypt', in Herbich, ed., *Fifth Archaeological prospection*, 185–188; T. Herbich, 'Archaeological geophysics in Egypt: recent results', in M. Doneus, A. Eder-Hinterleitner, W. Neubauer, eds., *Archaeological Prospection – 4th International Conference on Archaeological Prospection, Vienna 19.–23. 9. 2001* (Wien, 2001), 112–113; T. Herbich, 'Archaeological geophysics in Egypt: the Polish contribution', in Herbich, ed., *Fifth Archaeological Prospection*, 13–55; T. Herbich, 'Geophysical surveying in Egypt: recent results', in S. Piro, ed., *Proceedings, Extended Abstracts – 6th International Conference on Archaeological Prospection, Rome, Italy September 14–17, 2005, Institute of Technologies Applied to Cultural Heritage* (Roma, 2005), 1–5; T. Herbich, D. O'Connor, M. Adams, 'Magnetic mapping of the Northern Cemetery at Abydos, Egypt', in Herbich, ed., *Fifth Archaeological Prospection*, 193–197; T. Herbich, T. Smekalova, 'Dakhleh Oasis. Magnetic survey 1999–2000', *PAM* 12 (2001), 259–262; T. Herbich, J. Wegner, 'Magnetic survey at South Abydos: revising archaeological plans', in *ibid.*, 200–204; M. Chlodnicki, T. Herbich, 'The Magnetic Survey at Tell el Farkha, Egypt', in Fassbinder, Irlinger, eds., *Third Archaeological Prospection*, 19; Ch. Peeters, T. Herbich, 'Results of magnetic survey in Deir al-Barscha, Middle Egypt', in Herbich, ed., *Fifth Archaeological Prospection*, 245–247; T. Smekalova, 'Magnetic testing using Overhauser gradiometer GSM-19 WG and caesium magnetometer MM-60', in C. A. Hope, G. E. Bowen, eds., *Dakhleh Oasis Project: preliminary report on the 1994–1995 to 1998–1999 field seasons* (Oxford, 2002), 31–41.

⁵ I. J. Mathieson, 'The National Museum of Scotland Saqqara Survey Project 1990–2000', in M. Bárta, J. Krejčí, eds., *Abusir and Saqqara in the year 2000* (Prague, 2001), 33–42; Mathieson *et al.*, 'S.P.P.R. 2001', A. Gh. Hassaneen, El. A. al-Sayed, M. M. Soliman, 'Geoelectrical study to delineate the effect of ground-water increment in Abusir, Egypt', in Herbich, ed., *Fifth Archaeological Prospection*, 190–191; M. Metwaly, A. Green, H. Horstmeier, A. Gh. Hassaneen, A. Abbas, 'Results of high-resolution magnetic and tomographic seismic surveying at the Saqqara archaeological site, Egypt', in *ibid.*, 232–233; H. Odah, T. F. Abdallatif, I. A. al-Hemaly, E. Abd All, 'Gradiometer survey for detecting the ancient remains distributed northeast of the Djoser pyramid, Saqqara, Egypt', in *ibid.*, 242–243.

electromagnetic conductivity surveys – in arid conditions.⁶ Since that time also much wider and intensive use of radar (GPR) on Egyptian archaeological sites was started and in special cases also used on particular archaeological finds.⁷

Another new experience there was that it was also possible to use the experience of more new geophysical field surveys from similar desert territories of the Near East, North or Northeast Africa.⁸ It seems that non-destructive and also geophysical surveys

⁶ M. M. al-Gamili, 'Why the fish ensign and cult of Khnum were prevalent in Mendes: a new Egyptological approach in the light of science', in *ibid.*, 175–176; H. Ghazala, A. El-Mahmoudi, T. F. Abbalatif, 'Geophysical study on the archaeological site of Tell Tukh el-Qaramous, Sharkia Governorate, East Nile Delta (Egypt)', in Doneus, Eder-Hinterleitner, Neubauer, eds., *Fourth Archaeological Prospection*, 104; M. Kats, 'Results of Magnetic Survey on the Mit-Rahina Site near Cairo (Egypt)', *European Association of Archaeologist. 9th annual meeting. Final program and Abstracts. St. Petersburg, Russia* (St. Petersburg, 2004), 66; M. Kats, I. Modin, A. Gidasov, S. Sokolov, A. Pelevin, G. Belova, A. Krol, 'Integrated geophysical survey at the Kom Tuman site, ancient Memphis (Egypt)', in Piro, ed., *Sixth Archaeological Prospection*, 66–69; S. E. Mousa, T. F. Abdallatif, A. G. Hussain, A. El Bassiony, 'Application of geophysical tools for mapping the archaeological features at Saqqara, Giza, Egypt', in Doneus, Eder-Hinterleitner, Neubauer, eds., *Fourth Archaeological Prospection*, 149; T. Herbich, A. Jagodzinski, 'The Vertical Electrical Sounding method in investigations of the dry moat around the Djoser complex in Saqqara', in Piro, ed., *Proceedings, Extended Abstracts*, 413–417; L. A. Pavlish, A. C. D'Andrea, K. Weeks, 'Results of a Magnetometer Survey over the Environs of the Mortuary Temple of Amenophis I, Luxor, Egypt', in *33rd International Symposium on Archaeometry, April 22–26, 2002, Amsterdam, Netherlands – Abstract book* (Amsterdam, 2002), 18–19; L. A. Pavlish, A. C. D'Andrea, K. Weeks, 'Results of a Magnetic Survey over the Remains of the Mortuary Temple of Amenophis I and Environs', in H. Kars, E. Burke, eds., *Proceedings of the 33rd International Symposium on Archaeometry, 22–26 April 2002, Amsterdam, Geoarchaeological and Bioarchaeological Studies*, vol. 3 (Amsterdam, 2005), 31–35; A. Sarris, A. Vafidis, N. Economou, G. Poulidouis, C. Lemneos-Papakosta, 'Prospecting the old Jewish cemetery in the centre of Alexandria (Egypt)', in Doneus, Eder-Hinterleitner, Neubauer, eds., *Fourth Archaeological Prospection*, 168; G. al-Qady, N. Soliman, A. Taha, J. Dorner, 'Archaeological prospection in the Hyksos capital of Avaris using geoelectric resistance imaging', in Herbich, ed., *Fifth Archaeological Prospection*, 257.

⁷ A. Gh. Hassaneen, S. Sh. Osman, M. A. Abd Allah, F. A. Shaaban, 'Electrical and GPR tomographies for archaeological investigations at Mit-Raheina, Egypt', in Herbich, ed., *Fifth Archaeological Prospection*, 190; H. Kamei, M. A. Atya, T. F. Abdallatif, M. Mori, P. Hemthavy, 'GPR and magnetic survey around Al-Zayaan temple, Al Wadi Al Gadeed, Egypt', in Doneus, Eder-Hinterleitner, Neubauer, eds., *Fourth Archaeological Prospection*, 119; F. A. Shaaban, F. F. Shaaban, A. M. Abbas, A. H. al-Essawy, 'Mapping buried archaeological remains using GPR surveys at the Isis temple, Bahbeit el-Hegara area, Nile Delta, Egypt', in Herbich, ed., *Fifth Archaeological Prospection*, 272–273; A. Godio, L. Sambuelli, L. V. Socco, 'Micro-geophysics to assess the integrity of some statues in the 'Museo Egizio' of Turin, Italy', in Piro, ed., *Sixth Archaeological Prospection*, 167–171.

⁸ H. Becker, J. Fassbinder, 'Combined Caesium Magnetometry and Resistivity Survey in Palmyra (Syria) 1997 and 1998', in Fassbinder, Irlinger, eds., *Third Archaeological Prospection*, 156–160; H. Becker, J. Fassbinder, 'Magnetometry at Uruk (Iraq): the city of King Gilgamesh', in Herbich, ed., *Fifth Archaeological Prospection*, 122–124; C. Benech, N. Florch, J. Gaborit, G. Thebaut, 'Integration of Geophysical Survey into Archeological Prospecting Strategy: the Case of Apamée upon Euphrat', in Fassbinder, Irlinger, eds., *Third Archaeological Prospection*, 10; C. Benech, 'The study of ancient city planning by geophysical methods: the case of Dura-Europos, Syria', in Herbich, ed., *Fifth Archaeological Prospection*, 124–127; N. Buthmann, M. Posselt, B. Zinkgraf, 'Large scale magnetometer survey at Tell Chuera (Northern Syria)', in Doneus, Eder-Hinterleitner, Neubauer, eds., *Fourth Archaeological Prospection*, 77–78; F. Chouker, 'Archaeological Site Investigation by Means of Geoelectric Measurements in Tel-Halawi (Northern Syria)', in Fassbinder, Irlinger, eds., *Third Archaeological Prospection*, 20–21; J. Fassbinder, H. Becker, I. Gerlach, 'Magnetometry in the Cemetery and the Awam-Temple in Marib, the Capital of the Queen Saba, Yemen', in *ibid.*, 161–163; S. Giese, A. Grubert, Ch. Hübner, 'Geomagnetic mapping on the Early and Middle Bronze Age settlement mound Tell Mozan (Urkesch), Northeast Syria', in Herbich, ed., *Fifth Archaeological Prospection*, 178–180; K. Hamilton, A. Schmidt, 'Integrated archaeological geophysical assessment of an urban brown field site in Benghazi, Libya', in *ibid.*, 188–189; K. Kohlmeyer, M. Marinow, T. Goldmann, B. Kutschan, 'Geomagnetic prospection of the Early Bronze Age town of Tuttul/Tell Bi'a, Syria', in *ibid.*, 211–212; R. Křivánek, 'Geophysical survey on archaeological sites on Sir Bani Yas island, Abu Dhabi (UAE) – Geofyzikální průzkum na archeologických lokalitách na ostrově Sir Bani Yas (Spojené Arabské Emiráty)', *PA* 88, 1 (Prague, 1997), 142–150; C. Meyer, B. Ullrich, 'Tell prospection: experiences collected in Northern Syria', in Herbich, ed., *Fifth Archaeological Prospection*, 233–236; M. A. Mohamed Ali, H. Burkhardt, B. Khalil, T. Herbich, K. Grzyski, A. El Haj, 'Integration of geophysical surveys for archaeological prospection in Meroitic Sites. Case study: Meroe City (Sudan)', in Piro, ed., *Sixth Archaeological Prospection*, 74–78; M. Posselt, 'The 2002 magnetometer survey at the Early Islamic city of Kharab Sayyar in Northeast Syria', in Herbich, ed., *Fifth Archaeological Prospection*, 252–254; A. Schmidt-Colinet, G. A. Plattner, 'Geophysical survey and excavation in the 'Hellenistic Town' of Palmyra', in Doneus, Eder-Hinterleitner, Neubauer, eds., *Fourth Archaeological Prospection*, 175–177; M. Schurr, I. Kuijt, W. Finlayson, 'Geomagnetic surveys at the PPNA site of Dhra', Jordan', in Herbich, ed., *Fifth Archaeological Prospection*, 266–269; I. Trinks, H. Stümpel, S. Lorra, 'Integrated Geophysical Surveys for Archaeological Prospecting – New Results', in Fassbinder, Irlinger, eds., *Third Archaeological Prospection*, 82–83.

in these regions is now and will be in the future more intensive than it was in the last decades.⁹

3.2 Aims of geophysical survey in 2002

The main aim of a new geophysical survey in the South Abusir area was to create a geophysical map of more expected funeral features – mainly tombs in cooperation with newly stabilised geodetic systems of the area (50 × 50 m grid system of geophysically surveyed areas approx. 11.5 ha). Geophysical results there were later possible to compare in GIS software with the results of more subjective surface surveys and documentation of visually identified remains of low subsurface features.

Particular requests or needs of the field Egyptologists defined a few important aims of our geophysical measurements in the area of South Abusir: giving precise spatial identification of the subsurface preserved features and other ascertained situations; proving of the continuation of the features and monitoring their dimensions, form, orientation or state of preservation in the landscape. The measurements also determined the extent of anthropogenic activity, notably in cemeteries, and in the surroundings of areas of archaeological excavation – as well as the determination of the archaeologically prospective zones. They were also able to ascertain the differentiation and determination of negative areas or areas without distinguishable anthropogenic activity. Due to the very variable and often sloping and hilly landscape of the South Abusir cemetery plateau, it was of course necessary to respect in different terrain different aspects of preservation and identify the real limitations of features in different parts of the not uniformly preserved original landscape.

Methodical questions on the application of geophysical instruments in arid conditions also defined some other archaeo-geophysical aims of the geophysical survey. Finding the optimal way to explore the features present (tombs, or as the case may be other mudbrick buildings composed of different materials) in the given desert condition. Assessment of the possibilities and limitations of geophysical research methods when monitoring other areas within the limits of the Czech concession in Abusir.

3.3 Geophysical methods in 2002

Before choosing suitable geophysical methods for a new survey of a section of the South Abusir cemetery area we were able to refer to the previous experience with the application of combined geoelectric resistivity and magnetometric methods in the region of the Abusir pyramid field and shaft tombs of the Late Period and the observed magnetic changes of some building materials.¹⁰ We could also utilise the more recent experience from surveys in similar areas (for more references see the chapter about the history of geophysical work in Egypt) and the very promising future of the wider

⁹ B. Aminpour, 'The magnetic survey at Persepolis (Takht-e Jamshid), Iran', in Piro, ed., *Sixth Archaeological Prospection*, 35–38; C. Benech, 'A new vision of the royal gardens of Pasargades (Iran)', in *ibid.*, 39–42; S. Hasegawa, 'Current trend of protecting heritages in Egypt: Application of advanced technology', in *35th International Symposium on Archaeometry (35th ISA), May 10–15, 2005, Beijing China, Abstracts*, 20 (Beijing, 2005); P. Jaworski, W. Malkowski, T. Mikocki, M. Muszynska, K. Misiewicz, 'Non-destructive surveys of an ancient city Ptolemais at Cyrenaica (Libya)', in Piro, ed., *Sixth Archaeological Prospection*, 195–196; H. Kamei, K. Sato, T. Tsukamoto, I. Kanaya, A. Okamoto, Y. Miyoshi, M. A. Atya, N. M. Ahmed, 'Three-dimensional modelling of archaeological site and real-time digitizing of excavation site: case of Al Zayyan Temple', in *ibid.*, 185–190; Mohamed Ali, Burkhardt, Khalil, Herbach, Grzymiski, El Haj, in *ibid.*, 74–78; S. Yoshimura, 'Application of the scientific analysis in the field of Egyptology: New Kingdom necropolis at Dahsur', in *35th International Symposium on Archaeometry (35th ISA)*, 23.

¹⁰ Hašek, Verner, *AR* 33 (1981), 306–316, 358–360; Hašek, Verner, Obr, in *Sborník IV. celostátního symposiumu Geofyzika a archeologie* (1983), 187–199; Hašek, Obr, Přichystal, Verner, in *Sborník geologických věd, rada hydrogeologie – inženýrská geologie* 18 (1986), 149–187; Hašek, Obr, Verner, *PrArch* 35 (1988), 5–47; Verner, Hašek, *ZÄS* 108 (1981), 68–84.

application of magnetometric methods.¹¹ Before the start of the survey we expected to find the presence of a large cemetery area with many tombs - not only due to previous destructive archaeological excavation of the tombs of Hetepi, Ity and Kaaper or the burial complex of Qar and Inti but also due to new non-destructive geophysical results only a few hundreds of meters south of the Czech concession area.¹² For a new geophysical survey in Abusir South there were selected three different geophysical instruments of the Institute of Archaeology in Prague.

Caesium magnetometers in vertical gradient variant, Smartmag SM-4g, Scintrex, allowed very fast, large-scale and a sufficiently detailed magnetometric survey. Due to local changes of the gradient of the magnetic field we could identify subsurface relics of mudbrick building constructions, burned materials, and even granitic or volcanic materials. The magnetometric survey of a large area of the cemetery plateau (approx. 11.5 ha) was undertaken in a grid ca 1×0.25 m. Some detailed situations there were undertaken also in a grid ca 0.5×0.2 m.

The dipole electromagnetic profiling instrument (DEMP) EM-38B, Geonics, has been applied for contactless electromagnetic measuring of the apparent specific conductivity of smaller areas chosen from magnetometric results. With the local differentiation of low subsurface conductivity (reverse resistivity) we could separate several different building materials, stones (limestones), clays, dried bricks and the sandy environment. A supplementary electromagnetic survey (with a limited maximum effective depth below surface of 1 m) was carried out in a grid of 1×1 m. Further partial test profile measurements were undertaken at random intervals or in a grid of 0.5×0.5 m.

The kappameter KT-5c, Geophysics Brno, for magnetic susceptibility measurements *in situ* allowed additional detailed contact measurements of changes in apparent magnetic susceptibility in uncovered archaeological situations. By observing magnetic susceptibility changes of various brick features we could identify differences within the mudbricks from several excavated or uncovered tombs (fig. 3.1). A supplementary detailed series of measurements with the kappameter was undertaken in a grid of 0.2×0.2 m. Other profile and test field measurements were undertaken at random intervals or in a grid of 0.5×0.5 m.

3.4 Results from area in Abusir South

For the new geophysical survey in South Abusir in 2002 we selected 5 different areas in the southern, southeastern and central parts of the Czech concession with a surveyed total area of ca 17.5 ha.¹³ A major part of these geophysical surveys concentrated on the Central Mound in South Abusir, the place of an expected large cemetery plateau. Here, under very variable and formidable terrain condition (several places bordered on the limits of the useful application of the instrument), an extensive area of ca 11.5 ha was surveyed.¹⁴ From an area suitable for large scale magnetometric prospecting

¹¹ Becker, Fassbinder *et al.*, in Fassbinder, Irlinger, eds., *Third Archaeological Prospection*, 93–105; Herbich, in Doneus, Eder-Hinterleitner, Neubauer, eds., *Fourth Archaeological Prospection*, 112–113; Herbich, in Herbich, ed., *Fifth Archaeological Prospection*, 13–55; Herbich, in Piro, ed., *Sixth Archaeological Prospection*, 1–5.

¹² Bárta, *Abusir V*; Mathieson, in Bárta, Krejčí, eds., *Abusir and Saqqara in the year 2000*, 33–42; Mathieson *et al.*, 'S.P.P.R. 2001', (Edinburgh, 2001).

¹³ R. Křivánek, 'Geofyzikální měření ARÚ Praha na archeologických lokalitách v roce 2002', *Zprávy ČAS Supplément 53 – Archeologické výzkumy v Čechách 2002, sborník referátů z informačního kolokvia* (Praha, 2003), 8–10, obr. 4–5; R. Křivánek, 'Geofyzikální průzkum v jižním Abusíru, 2002', in J. Mynářová, ed., *Pražské egyptologické studie (PES) II* (Praha, 2003), 79–95.

¹⁴ M. Bárta, V. Brůna, R. Křivánek, 'Research at South Abusir in 2001–2002 – methods and results – Průzkum jižního Abusíru v letech 2001–2002 – metody a výsledky', *PA XCIV/2003* (Praha, 2003), 49–82; R. Křivánek, 'Příklady různých měřítek a cílů magnetometrického měření na archeologických lokalitách v roce 2002', in V. Hašek, R. Nekuda, M. Ruttkay, eds., *Ve službách archeologie V* (Brno, 2004), 104–114; R. Křivánek, M. Bárta, 'Geophysical prospecting in South Abusir, Egypt, 2002', in Herbich, ed., *Fifth Archaeological Prospection*, 220–223; R. Křivánek, M. Bárta, 'Geophysical prospecting in South Abusir, Egypt, 2002', in *Abstract book, CIPA 2003 XIXth International Symposium, New Perspectives To Save Cultural Heritage, Antalya (Turkey) 30 September – 04 October, 2003* (Istanbul, 2003), 392–394, and [www-pages http://www.cipa2003-antalya.org](http://www.cipa2003-antalya.org).

we separated only those areas that had been clearly shaped in modern times (areas of archaeological excavations, additional excavation sandy waste heaps, mounds, dumps or ghaffir houses) and areas close to recent metals that strongly interfere with the normal magnetic field and background of the site (fencing of excavation sites and tombs, a lighting mast or various concentration of metal waste). In spite of the local ruggedness and variability of the slopes of the hilly terrain, most of the relief changes were, in the end surprisingly not differentiated in their results because of a relatively homogenous sandy and slightly magnetic environment. Most of the terrain changes did not affect the identification of the archaeological situations but, on the other hand, they affected the quality of the data collected by zig-zag profile measurement systems and, in some cases, the real level and position of magnetic anomalies and archaeological features. Some of these terrain errors it was possible to eliminate by later processing of field data without changing magnetic anomalies of the real archaeological features.

In the results of the magnetometric survey of the Central Mound area we can distinguish many narrow linear and, as regards shape, typical magnetic anomalies (*pl. 4*). These extensive concentrations are proof of intensive anthropogenic activity and exploitation of the elevated and rugged plain east of Qar's tomb complex as well as in the lower eastern part of South Abusir. It can be presumed that the majority of these positive linear magnetic anomalies have their source above all in the brickwork made of Nile silt. Linear and in some places also square magnetic anomalies vary in different dimensions, shapes, amplitudes and the orientation of features. From geophysical results it is clear that alone in this surveyed area of South Abusir we can presume several different types of tombs from various periods of the Old Kingdom and concentrated tombs of the necropolis continue over the next 7 or 8 hectares. From the same large-scale magnetometric data we can use a more detailed scale for better description of the most interesting individual features (and their diversity) localised in different parts of the Central Mound area. Some of these particularly interesting features were then verified also by electromagnetic measurement.

The highest part of the Central Mound area is located in the western and eastern surroundings of the archaeologically investigated tombs of Kaaper, Ity and Hetepi. The biggest north-south oriented and extended rectangular magnetic anomalies of similar tombs without obvious internal segmentation are typical for this part of the hilly terrain (*pl. 5a*). Hetepi's tomb which has been first excavated, then filled in (except for two shaft openings) was included in the comparative area within the magnetic survey and it has been identified by a thin magnetic line of circumferential mudbrick walling. Homogenous internal parts of known tombs showed by the magnetic method the presence of non-magnetic material and non-distinguishable materials inside the tomb (limestone chips or *tafl*).

Another two similar types of uninvestigated large tombs were identified by rectangular linear magnetic anomalies in the southwestern end of the surveyed area west of the elevated tomb of Kaaper. Additional electromagnetic measurement of one unexcavated object confirmed circumferential mudbrick walling and identified the situation that inside, were also two different conductivity anomalies (*pl. 5b*) which could localise two places of different materials (mudbrick and limestone), and a possible two places for tomb entrances.

In the lower southeastern part of the Central Mound area another type of large, slightly rectangular and internally structured tomb was identified east of Hetepi's tomb near the edge of a flat plateau. Unfortunately a full-area magnetometer survey was not possible due to a stationary iron lighting mast but in the undisturbed area there were identified more probable highly magnetic, narrow linear anomalies and also the possible superposition of a rectangular tomb, together with another different, north-south extended rectangular tomb (see *pl. 5a*). The subsequent uncovering of the ground plan of the feature confirmed that during the process of the construction of this mudbrick tomb, the same material was also used for the multiple segmentation of the internal area

of the tomb. Smaller part surroundings of this area have been experimentally surveyed also by using kappameter magnetic susceptibility measurements *in situ*.

For the lowest northeastern part of the Central Mound area there are more typically different types of smaller rectangular magnetic anomalies coming from differently shaped and orientated tombs. Narrow rectangular magnetic anomalies are concentrated along the elevated border east of vizier Qar's tomb complex (*pl. 6a*). These tombs have strong magnetic and almost disconnected circumferential anomalies from brickwork walling and the typical orientation of all of them features a northwest-southeast axis. Further to the west of this area inside of a hilly and sloped terrain, there were remains of another small rectangular and strongly magnetic anomaly of circumferential brickwork. These tombs with probable internal divisions have an orientation running northnorthwest-southsoutheast. Results also showed more indefinable linear objects – magnetic parts of other possible features in the elevated broken and terraced terrain.

In the lower terrain outside the eastern edge of the Central Mound area we can observe the continuation of the necropolis where we can identify another probable type of large north-south orientated rectangular or trapezoidal feature (*pl. 6b*). Inside these tombs with narrow circumferential magnetic anomalies from mudbrick materials were identified other highly magnetic anomalies from probably other mudbrick places (entrances) inside the tombs. The features are situated outside the terrace-like raised zone on more slightly inclined blown sand terrain which slopes down to the north towards the assumed edge of the extinct Lake of Abusir.

Another type of single rectangular feature was identified in the lower plateau outside the northwestern edge of the Central Mound area and the excavated Qar's tomb complex (*pl. 6c*). A different shape and orientation, with probable magnetic and also non-magnetic internal divisions, were also verified by additional electromagnetic measurement of the feature.

3.5 Conclusion

For the geophysical survey of the chosen part of the hilly and sloped area in Abusir South in November 2002 a different scale and type of fieldwork used three different geophysical techniques. Large-scale magnetometric survey of the whole area by caesium magnetometers brought new spatial information about the intensity of the anthropogenic activity and also about the character and probable type of subsurface features. Magnetometric methods showed its advantage in detailed and precise identification of all of the mudbrick materials beneath a few tens of centimeters of sand in a large scale of many hectares. These quick and sufficiently detailed magnetometric results helped to determine the very large extent of the Old Kingdom necropolis in Abusir South. Many relics of brickwork structures were also identified on the slopes and locally eroded terraces of the variably hilly terrain and beneath wind blown sand where surface survey methods could not be so successful. Magnetometric results also confirmed that the identification of non-magnetic brickwork from *tafl* bricks or limestone by this geophysical method was not efficient due to the subsoil and bedrock of the site being physically similar. A supplementary application of the electromagnetic method on chosen smaller areas of the Central Mound contributed towards verifying the successful possibility of detection and separation of different mudbrick, *tafl* brick or limestone materials from the sandy environment. In relation to the possibility of extensive application of magnetometric methods of electromagnetic measurement regarding apparent conductivity, this was limited by the lower speed of the survey and was without any real possibility of surveying of smaller areas and those limited to a maximum effective depth below floor of 1 m. Additional detailed measurement of magnetic susceptibility *in situ* by the kappameter then showed other ways of studying differences in the excavated or open mudbrick materials of tombs by quick and simple field methods.

Further possibilities for the use geophysical results is offered by their combination with other methods applied to the same area of Abusir South. To better interpret some newly identified features from the large-scale magnetometric survey a combination of data with satellite images, the results of surface survey, photogrammetry or with detailed 2D contour line maps or 3D models of site should be used. The last combination for example showed how some identified magnetic rectangular features respect the direction of what were probably the main routes to the cemetery from the Lake of Abusir. It is clear that the combination of more of these methods and techniques could improve the quantity and also quality and effectiveness of archaeological work in such an important desert archaeological terrain as the area of the Central Mound in Abusir South.

PART IV

Palaeoecology of Abusir South according to plant
and animal remains

Petr Pokorný, Petr Kočár, Zdenka Šůvová, Aleš Bezděk

4 Palaeoecology of Abusir South according to plant and animal remains

The archaeological site of Abusir South offers a rich collection of biological material for researching the former environment surrounding the Old Kingdom to Roman Age burial grounds. During the 2004 season, our interest focused primarily on two situation types: a) sediments of so-called Lake of Abusir – a damp depression on the border of the present Nile floodplain, and b) biological remains in currently accessible archaeological features. Along with field sampling, gathered material has been processed concurrently. The Lake of Abusir was sampled using hand-operated coring equipment. In archaeological situations, biological remains were separated by floatation. Environmental research included the following analyses: analysis of plant macroremains, pollen analysis, osteological analysis and analysis of insect remains. The data-set thus obtained allows us to study past environmental conditions and, in connection with changes in the spectra of agricultural species, also study economical conditions in the Nile floodplain during the Old Kingdom Period.

4.1 Survey of the former Lake of Abusir

Today, the so-called Lake of Abusir is a slightly moist depression situated on the edge of the present Nile floodplain, attached on its eastern side to the extensive cemeteries of Saquara and southern Abusir (*fig. 4.1*). This is a remnant of an extensive water reservoir, fed by underground and aboveground waters of the Nile River. From the Old Kingdom Period onwards it was used as a harbour, from which paved footways led to nearby funereal areas. Not far to the south, close to the pyramid field of Dahshur,

Fig. 4.1 Satellite image of the former Lake of Abusir. Our sampling site is indicated by an arrow

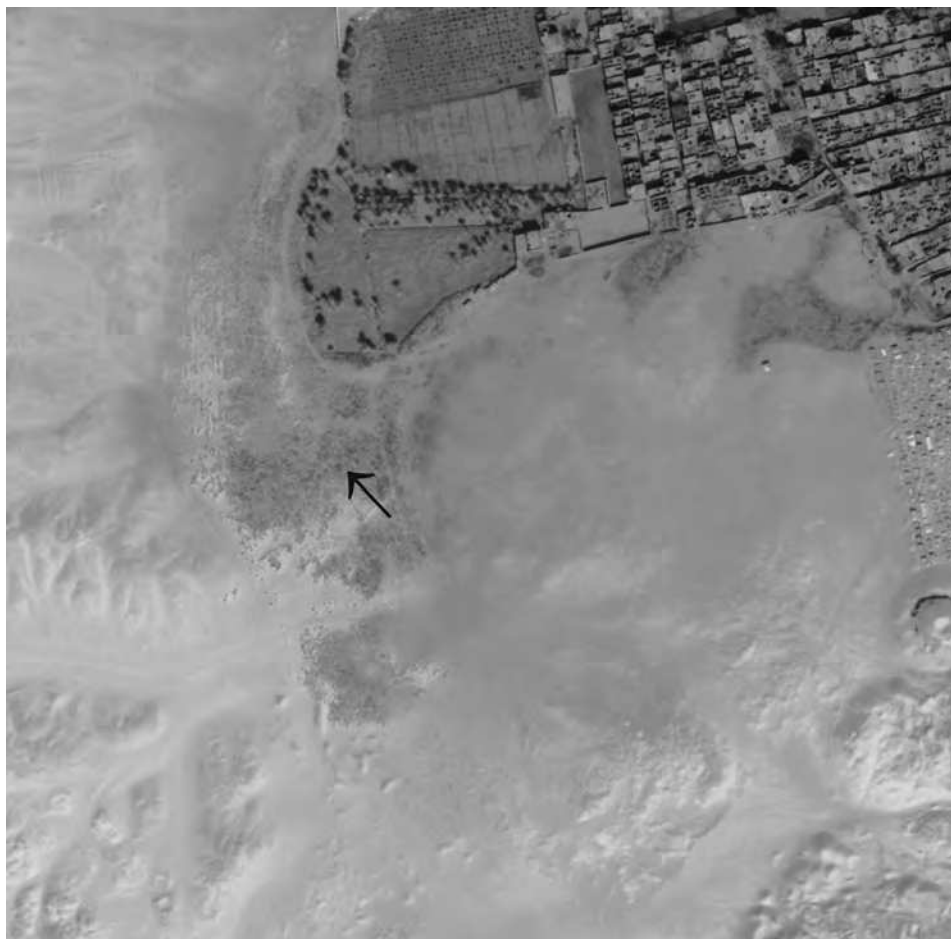




Fig. 4.2 Coring in the former Lake of Abusir

a similar feature is located, still being filled with water to the present day. We consider this site a close analogy to Lake of Abusir, which is now completely terrestrialised.

To take a direct look at the sediments of the Lake of Abusir, we have used hand-operated coring equipment (fig. 4.2). Our work was complicated by a thick surface layer of sand that had been deposited in the depression as runoff from nearby slopes. Under four metres of these sands, we discovered a stratigraphic series of fine-grained sediments with a complex visual stratigraphy (fig. 4.3). The transition from the layer of sand above to underlying lake sediments is very sharp. Without doubt, these sediments originated under conditions of stagnant, or maybe sometimes only slowly-flowing water. The sedimentary series is composed of thin layers of grey clay and rust-coloured sand. Both types of material quickly alternate and are sometimes intercalated by very thin blackish layers of organic material and white layers formed most likely of gypsum crystals. We interpret this stratigraphy as proof of cyclic changes in the sedimentary conditions within the basin. By reason of the strong climatic seasonality in this region, this is likely to be an annual periodicity. Sand layers may represent periods of more intensive aeolian activity during dry periods, while the fine clay layers reflect the periodic flooding of the Nile. The black layers are most likely evidence of increased biomass production in the stagnant water column, while gypsum layers may originate from periods when the lake dried-out completely.

Due to the many difficult technical problems connected with coring, we were only able to observe the topmost 40 cm of the lake sediments. But we presuppose there is a much longer sedimentary record present in the basin. The material observed did not contain any macroscopic organic remains and also the attempt to extract some determinable microscopic remains was unsuccessful. For pollen analysis, the conventional acetolysis method was used.¹ Despite efforts to prepare the samples using different modifications of this extraction method (using also preparation on celluloid micro-filters), no positive results were obtained. We suppose that the use of some other separation methods would be fruitless (*e.g.* Heavy Liquid Technique, for which we did not have the appropriate equipment at our disposal at the moment). Nevertheless, we consider the discovered sedimentary record as being highly important for future sedimentological and geochemical research. This may bear important palaeoenvironmental and palaeoclimatological data to be extracted in the future. The most serious problem in this instance will be the dating of the record, either in absolute or relative terms.

¹ G. Erdtman, *An Introduction to Pollen Analysis*. *Chronica Botanica* (Waltham, Mass., 1943).

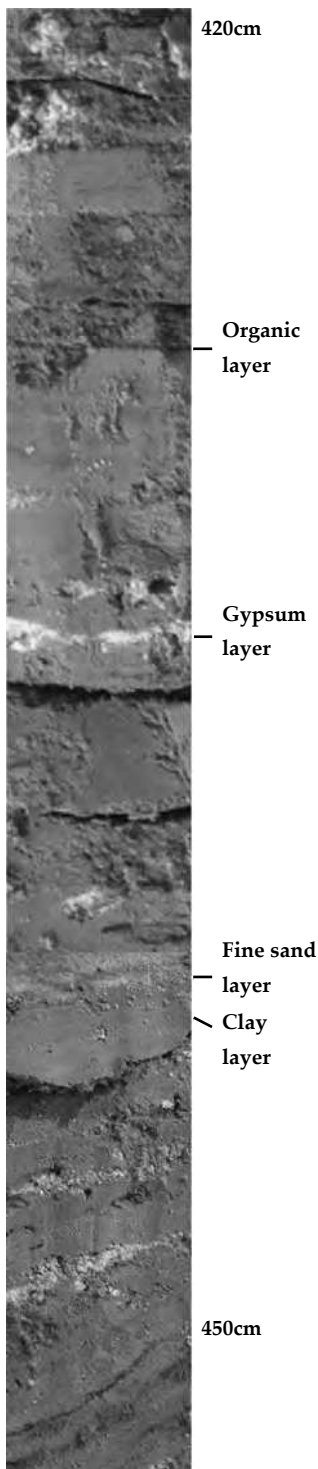


Fig. 4.3 Photograph of 35 cm-long sediment section from the Lake of Abusir

4.2 Archaeobotanical analyses

4.2.1 Plant macroremains

The aim of the archaeobotanical research in the 2004 season was to collect *on-site* data from the tomb complex of Qar and Inti. A total of 29 samples were analyzed for preserved plant material (tables 4.1, 4.3; figs. 4.5–4.35). Samples from the following archaeological features were taken: 10 samples of clay daub from walls (wall plaster); 7 samples of mudbricks; 2 samples of contents of sarcophagus; 2 samples of contents of conical jars; 8 samples of various layers.

For the separation and concentration of plant macroremains, the flotation method was used. The amount of sediments per sample ranged from 500 ml to 20,000 ml. The material was captured by 400 µm mesh. An 'Ankara type' flotation machine was chosen for this purpose. It is commonly used during archaeobotanical excavations in arid regions of the world.²

The results of plant macroremains analysis are given in table 4.3. The overall density of plant remains was high, with a total of about 5,500 macroremains, corresponding to ca 40 taxa (see table 4.1). The preservation of the remains was excellent. Most of the material was preserved in a desiccated fresh form (ca 4,900 macroremains), while charred material was present in less quantity (ca 600 macroremains).

Hulled barley (*Hordeum vulgare* subsp. *vulgare*) and emmer wheat (*Triticum dicoccon*) are the two principal crops recorded in the samples. Almost every sample contained grains and rachis internodes of barley, but spikelets of emmer wheat were commonly present as well (table 4.1). Emmer was a common wheat type at Egyptian sites in Predynastic and Dynastic times. It was mainly used for baking bread.

Several types of barley grains are present in the samples: symmetric, asymmetric, hulled and naked ones. The prevailing grain types are asymmetric and hulled ones. Therefore it seems likely that six-rowed hulled barley was the dominant type. Some samples contained charred grains of naked barley – *Hordeum vulgare* subsp. *coeleste*. Naked barley occurs sporadically in the so-far subfossil record in Egypt. Up till this time it was known from only two archaeological sites: Hierakonpolis – the find is dated to the period 3800–3500 B.C.,³ and the site of Umm el-Qaab, dated to the Predynastic period.⁴ From the ethnobotanical point of view, the naked and hulled forms of barley differ diametrically in their usage. Naked (free-threshing) barley used to be grown in the past mainly for making flour; the easily-removable glumes facilitated the grinding of the grain. The dominance of barley in this area could be attributed to the prevailing soil conditions of cultivated fields. Barley has a higher tolerance to saline soils than emmer wheat. In addition to its use for making bread and beer, barley was an important fodder plant.

The preservation of pulses was extremely poor: only a few charred seeds of lentils (*Lens culinaris*) and pea/vetch (*Pisum/Vicia*) could be identified. In Mediterranean agriculture lentil was a characteristic companion of wheat and barley. Nowadays, pea is widely cultivated in northern Egypt. However, all recovered seeds of pea/vetch identified from Abusir lack a *hilum*, thus preventing their exact identification.

Garden plants are represented by grape vine (*Vitis vinifera*), common fig (*Ficus carica*), sycamore fig (*Ficus cf. sicomorus*) and Christ's thorn (*Zizyphus spina-christi*). It seems that Christ's thorn had a sacred role in ancient Egypt: some ancient funeral

² M. A. Murray, 'Cereal production and processing', in P. Shaw, T. E. Nicholson, eds., *Ancient Egyptian Materials and Technology* (Cambridge, 2000), 509.

³ M. N. El-Hadidi, 'The predynastic flora of the Hierakonpolis region', in M. A. Hoffman, ed., *The Predynastic of Hierakonpolis: An Interim Report. Egyptian Studies Association Publication I* (Cairo, 1982), 102–109; A. G. Fahmy, *A Historical Flora of Egypt, Preliminary Survey* (Ph.D. thesis, Faculty of Science, Cairo University, Egypt, 1995); M. N. El-Hadidi, A. G. Fahmy, U. Willerding, 'The paleoethnobotany of locality 11C, Hierakopolis (3800–3500 ca. BC), Egypt 1. Cultivated crops and wild plants of potential value', *Taekholmia* 16 (1996), 31–44.

⁴ F. Feindt, M. Fischer, 'Anhang. Untersuchung botanischer Proben', in G. Dreyer, *Umm el-Qaab 1. Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*, AV 86 (1998), 189–195, pl. 45–47.

32 Part 4 Palaeoecology of Abusir South according to plant and animal remains

	Re- mains	N	FS	Preservation		Context				
				Charred	Desi- cated	Sar- coph- ghus	Mud- bricks	Daub	Layers	Conical jars
Utility species										
<i>Cerealia</i>	D	23	10	x	x	x	x	x	x	
<i>Cerealia</i>	C	37	12		x		x	x		
<i>Ficus carica</i>	D	100	3		x	x	x			
<i>Ficus cf. sicemorus</i>	D	422	1		x	x				
<i>Ficus sp.</i>	D	16	4		x		x	x	x	
<i>Hodeum vulgare</i>	D	148	15	x	x	x	x	x		
<i>Hodeum vulgare</i>	G	55	4		x		x	x		
<i>Hodeum vulgare</i>	R	2,179	16	x	x	x	x	x		
<i>Lens culinaris</i>	D	1	1	x			x			
<i>Linum usitatissimum</i>	D	1	1	x			x			
<i>Linum usitatissimum</i>	T	10	1	x	x					
<i>Linum sp.</i>	D	4	1		x			x		
<i>Pisum/Vicia</i>	D	4	3	x	x		x	x		
<i>Triticum dicoccon</i>	D	32	9	x	x	x	x	x		
<i>Triticum dicoccon</i>	S	186	10		x		x	x		
<i>Triticum dicoccon</i>	F	34	7	x	x	x	x	x		
<i>Triticum dicoccon</i>	G	74	7	x	x		x	x		
<i>Triticum dicoccon</i>	R	42	1		x		x			
<i>Vitis vinifera</i>	D	1	1		x		x			
<i>Zizyphus spina-christi</i>	D	1	1		x			x		
Wild plants										
<i>Alisma plantago-aquatica</i>	D	1	1		x		x			
<i>Anchusa aegyptiaca</i>	D	1	1		x			x		
<i>Anthemis cf. pseudocotula</i>	D	1	1		x		x			
<i>Arundo donax</i>	D	2	2		x			x		
<i>Bromus sp.</i>	D	54	10	x	x	x	x	x		
<i>Carex sp.</i>	D	22	12	x	x	x	x	x		
<i>Cyperus sp.</i>	D	12	6	x	x	x	x	x		
<i>Cynodon dactylon</i>	D	198	14	x	x	x	x	x		
<i>cf. Elatine sp.</i>	D	22	2		x	x		x		
<i>Eleocharis cf. palustris</i>	D	618	17	x	x	x	x	x		
<i>Geranium sp.</i>	D	1	1	x		x			x	
<i>Scorpiurus muricata</i>	D	7	5		x		x	x		
<i>Chenopodium murale</i>	D	16	7	x	x	x	x	x		
<i>Lathyrus hirsutus</i>	D	1	1		x			x		
<i>Lemna cf. gibba</i>	D	17	4	x	x	x		x		
<i>Lolium temulentum</i>	D	278	19	x	x	x	x	x	x	
<i>Lolium temulentum</i>	R	50	2	x	x	x	x		x	
<i>Malva cf. parviflora</i>	D	9	2		x		x			
<i>Medicago polymorpha s.l.</i>	D	41	12	x	x	x	x	x		
<i>Medicago sp.</i>	D	8	3	x	x	x	x	x		
<i>Phalaris paradoxa</i>	D	116	10		x		x	x		
<i>Plantago sp.</i>	D	1	1	x		x				
<i>Polygonum sp.</i>	D	3	3	x	x	x	x			
<i>Portulaca oleracea</i>	D	48	6		x	x	x	x		
<i>Potamogeton sp.</i>	D	1	1		x			x		

<i>Reseda</i> sp.	D	5	1	x	x	x				
<i>Rumex dentatus</i>	D	124	15	x	x	x	x	x		
<i>Trifolium dasyurum</i>	D	2	1		x		x		x	
<i>Trifolium</i> sp.	D	95	8	x	x	x	x	x		
<i>Verbenaceae</i>	D	1	1		x		x			
<i>Vicia</i> sp.	D	87	10	x	x	x	x	x		
Indeterminata										
<i>Asteraceae</i>	D	2	2	x		x	x			
<i>Boraginaceae</i>	D	1	1		x		x	x		
<i>Boraginaceae</i> TYP I	D	121	9	x	x	x		x		
<i>Brassicaceae</i>	D	25	3	x	x	x	x	x		
<i>Dauceae</i>	D	7	1	x		x				
<i>Fabaceae</i>	D	13	5	x	x		x	x	x	
<i>Poaceae</i>	D	32	6	x	x	x	x	x		
<i>Indeterminata</i>	D	176	16	x	x	x	x	x	x	

Table 4.1 Results of archaeobotanical analyses

N – total number of plant remains

FS – sample frequency

D – diaspores

R – rachis internodes

G – glume bases

F – heavy chaff fragment “fork”

T – textile fragments

loaves were made of the fruits of Christ's thorn. Fig has been used by Egyptians since early times. Pips of grape vine were most probably from imported fruit. It is commonly accepted that conditions were not suitable for its cultivation in the Nile delta, and vine was imported from Upper Egypt or from Western Desert oases.

To infer a minor importance for garden plants from their low occurrence would be misleading. They were probably used outside the study area (or outside the immediate area used for making mudbricks) and thus the low probability of their occurrence and preservation in sampled contexts.

The indications from crop remains are that Old Kingdom farmers grew flax (*Linum usitatissimum*) in addition to cereals. In several samples, seeds of flax and some fragments of textile material were found. Flax was extensively cultivated in Egypt, but it is also semi-naturalized as a weed in other cultivated plants.

The last recorded serviceable species, common purslane (*Portulaca oleracea*), can only be denoted a plant with potential utility; as a common field weed and a species of disturbed areas it did not necessarily have to be grown from seed. This species was present in large numbers in analyzed samples (table 4.1). In some regions of the world, the taxon is used as a lower quality salad vegetable and fodder crop.

The identified wild plant taxa are assigned to the following habitats: aquatic, wetland, saline soils, cultivated land, fallow or disturbed soils and sandy soils (table 4.2). Some of the taxa, such as the aquatic or wetland plants, are specifically bound to certain types of habitat, while others, such as weeds of cultivation or disturbed areas, are more generalized in their habitat preferences and can overlap several categories. Information regarding plant habitats is derived from sources describing the flora of Egypt and from research papers investigating the recent weed flora of northern Egypt.⁵

The presence of aquatic species *Lemna* cf. *gibba* and *Potamogeton* sp. indicates bodies of water. Also the egg shells of a water crustacean *Daphnia* sp. were found in three contexts.

Numerous remains of species growing in wet and marshy habitats were found: *Alisma plantago-aquatica*, *Arundo donax*, *Elatine* sp., mostly of Cyperaceae (*Carex* sp., *Cyperus* sp., *Eleocharis* cf. *palustris*, etc.). These finds indicate that fields were located within the Nile floodplain. Spike-rush (*Eleocharis* cf. *palustris*) in particular indicates at

⁵ L. Boulos, *Flora of Egypt*, vols. I–IV (Cairo, 1999–2005); L. Boulos, M. N. El-Hadidi, *The Weed Flora of Egypt* (Cairo, 1984); M. N. El-Hadidi, J. Kosinova, 'Studies on the weed flora of cultivated land of Egypt', Preliminary survey, *Mitteilung der Botanischen Staatssammlung* 10 (1971), 354–367; F. Sa'ad, 'Identification of weed seeds encountering the crops cultivated in Egypt', *Notes of the Agricultural Research Centre Herbarium* 5 (1980), 25–41; V. Täckholm, *Students' Flora of Egypt*, (Cairo, 1974); V. Täckholm, G. Täckholm, M. Drar, 'Flora of Egypt I', *Bulletin of the Faculty of Science* 17 (Cairo, 1941); V. Täckholm, M. Drar, 'Flora of Egypt II', *Bulletin of the Faculty of Science* 28 (Cairo, 1950); *idem*, 'Flora of Egypt III', *Bulletin of the Faculty of Science* 30 (Cairo, 1954); *idem*, 'Flora of Egypt IV', *Bulletin of the Faculty of Science* 36 (Cairo, 1969); M. Zahran, A. Willis, *The Vegetation of Egypt* (New York, 1992).

	Aquatic	Wet-lands	Saline	Cultuiv-ated and Fallow Fields	Dis-turbed	Sandy solils
<i>Alisma plantago-aquatica</i>		x				
<i>Anchusa aegyptiaca</i>				x	x	x
<i>Anthemis cf. pseudocotula</i>			x	x	x	
<i>Arundo donax</i>		x				
<i>Boraginaceae</i>				x	x	
<i>Bromus sp.</i>				x	x	
<i>Carex sp.</i>		x				
<i>cf. Elatine sp.</i>		x				
<i>Cynodon dactylon</i>				x	x	
<i>Cyperus sp.</i>		x				
<i>Eleocharis cf. palustris</i>		x				
<i>Geranium sp.</i>				x	x	x
<i>Chenopodium murale</i>		x	x	x	x	
<i>Lathyrus hirsutus</i>				x		
<i>Lemna cf. gibba</i>	x					
<i>Lolium temulentum</i>				x		
<i>Malva cf. parviflora</i>		x		x		
<i>Medicago polymorpha s.l.</i>				x	x	
<i>Phalaris paradoxa</i>				x	x	
<i>Plantago sp.</i>		x	x	x		
<i>Polygonum sp.</i>		x			x	
<i>Portulaca oleracea</i>				x		
<i>Potamogeton sp.</i>	x					
<i>Reseda sp.</i>				x	x	x
<i>Rumex dentatus</i>		x		x		
<i>Scorpiurus muricata</i>				x		
<i>Trifolium dasyurum</i>				x		
<i>Trifolium sp.</i>				x	x	x
<i>Verbena sp.</i>		x				
<i>Vicia sp.</i>		x		x		

Table 4.2 Habitats indicated by the plant remains

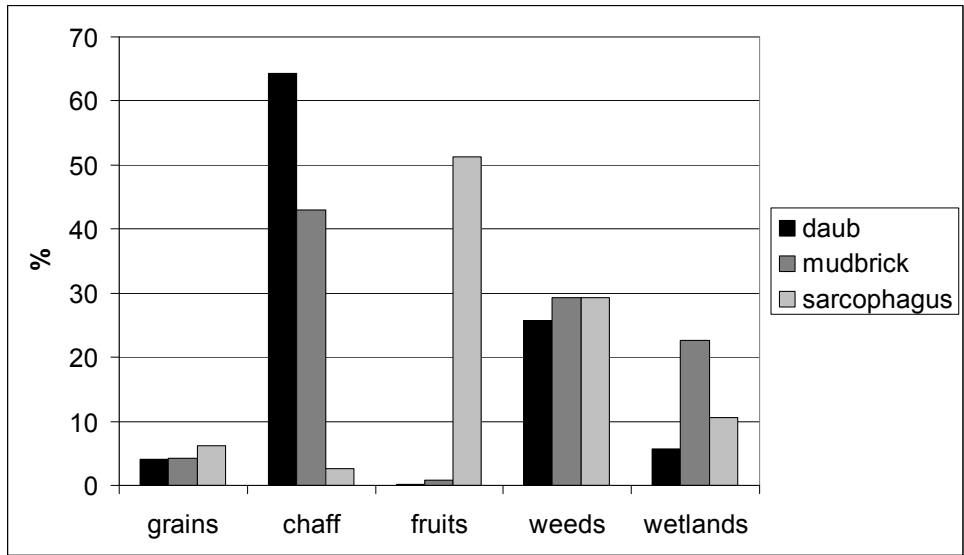


Fig. 4.4 Archaeobotanical percentage composition of various types of contexts

Sample No.	Type of context	Quantity [l]	N [pcs]	concentration [pcs/l]
0601	B	10	396	39.60
0602	B	12	440	36.67
0603	B	20	74	3.70
0801	B	10	287	28.70
1001	B	13	596	45.85
1801	BT	10,5	2	0.19
2401	BT	5	4	0.80
0701	D	5	273	54.60
0702	D	8	320	40.00
0703	D	7	709	101.29
0704	D	2	252	126.00
0705	D	2	99	49.50
0706	D	5	381	76.20
0707	D	2,5	200	80.00
0708	D	3	103	34.33
0901	D	5	242	48.40
1901	D	1,5	161	107.33
0101	S	10	1,021	102.10
0301	S	2	0	0.00
1301	L	13	0	0.00
1401	L	13	0	0.00
2001	L	10	0	0.00
2101	L	15	6	0.40
2301	L	5	0	0.00
0401	L	10	0	0.00
0501	L	10	17	1.70
0201	L	9,5	0	0.00
1101	CJ	1	0	0.00
1201	CJ	1,5	0	0.00

Table 4.3 List of archaeobotanical samples

D – clay daub of walls

B – mudbricks

BT – mudbricks from *tafl*

S – content of sarcophagus

CJ – content of the conical jars

L – various layers

N – total number of plant macroremains

least short-term-flooded areas. Nevertheless, we have no single piece of evidence of an artificial irrigation canal in Predynastic Egypt.⁶ Botanical indicators thus most probably give evidence for natural floods being used in agriculture. The presence of halophytic plant taxa is only insignificant.

At the site of Abusir South, cultivation weeds (*Rumex dentatus*, *Galium* sp., *Malva* cf. *parviflora*, *Plantago* sp., *Boraginaceae*) present in samples represent mostly the weed assemblages of winter crops. The species *Anthemis* cf. *pseudocotula*, *Phalaris paradoxa*, *Scorpiurus muricata*, *Lolium temulentum*, and *Trifolium densyurum* are specific to cereal cultivation and could have been harvested with the grain.⁷ Other, less crop-specific weeds of fallow or disturbed habitats and orchards are *Rumex* sp., *Chenopodium murale*, and *Plantago* sp. whereas *Anchusa aegyptiaca* and *Reseda* sp. are common plants in sandy habitats, but these are scarcely present in our material. *Polygonum* sp. and *Chenopodium murale* indicate waste places and marginal disturbed habitats, or land left fallow.

Not only do weeds provide information about a site's environmental conditions, but they can also indicate harvesting methods, crop husbandry and processing as well. It is also useful to note the ratio of the main archaeobotanical components – grains, chaff and weed seeds.

The presence of winter crop weeds (*Lolium* sp., *Bromus* sp., *Trifolium dasyurum*, *Malva* sp.) indicated winter crop sieving.

Some studied samples contained the lower parts of stalks with root systems attached which suggests harvesting low above the ground, part of the straw being torn out with the roots during this activity. Harvesting at the level of the bottom third of the straw is also supported by the finds of weeds with their fruits low above ground, for example *Portulaca oleracea* and *Medicago* sp. This is a very interesting finding in itself, since iconographic sources usually show the crop being harvested in the upper third of the straw.

One of the most striking aspects of the plant assemblages from Abusir is the presence of large quantities of chaff (rachis internodes of barley, and glumes of emmer), as well as culm fragments. The presence of chaff in archaeological assemblages is often interpreted as evidence for the early stages of crop processing. If we study in detail the ratio of barley rachis internodes to grain (whole ears contain one rachis internode for every three grains, *i.e.* a ratio of 0.3) from different contexts, we can identify that mudbricks and daub contain relatively small amounts of grain per rachis internode. In the same way, the ratio of emmer wheat glumes and grains (2 : 2 = 1) suggest a significant dominance of waste from crop processing (glumes).

Detailed analysis of the composition of samples from different contexts (mudbricks, daub, sarcophagus contents) suggests the following interpretation: the high proportion of waste from the cleaning of cereals (rachis internodes, glume bases, straw, diaspores of weeds) in the mudbrick samples suggests that corn was winnowed by throwing it into the air and letting the wind carry off the lighter chaff. Perhaps, sometimes, sieves were used. The burning of whole ears of emmer and barley in the sarcophagus (proportion of glumes, eventually proportion of rachis internodes and grains corresponds with the standards in whole ears) is also documented.

⁶ K. Butzer, *Early hydraulic civilisation in Egypt: A study in cultural ecology* (Chicago, 1976).

⁷ El-Hadidi, Kosinova, in *Mitteilung der Botanischen Staatssammlung* 10, 354–367; Sa'ad, in *Notes of the Agricultural Research Centre Herbarium* 5, 25–41; Zahran, Willis, *The Vegetation of Egypt*.

barley (<i>Hordeum vulgare</i>)				
type of contexts	rachis int.	grain	ratio	interpretation
daub	1626	87	18.69	Cleaning waste
mudbrick	536	17	31.53	Cleaning waste
sarcophagus	17	50	0.34	Whole ears
emmer (<i>Triticum dicoccon</i>)				
type of contexts	glumes	grain	ratio	interpretation
daub	111	17	6.53	Cleaning waste
mudbrick	386	8	48.25	Cleaning waste
sarcophagus	16	13	1.23	Whole ears

Table 4.4 Archaeobotanical composition of different contexts

The record of wild plant species documents the allochthonous origin of the plant material under study – nearly no desert and semi-desert plant species were recorded. In contrast, weeds of cereals and wetland species were present in great quantities. The representation of particular ecological groups of plants avers to the different taphonomy of plant collections gained from three types of contexts rich in plant remains (mudbricks, daub, and material acquired from the sarcophagus). The daub samples, and especially the mudbricks samples, document the high proportion of wetland species – these species were most probably transferred with the Nile clay used for the production of bricks (fig. 4.4).

A high proportion of diaspores from fruit species, especially fig diaspores (used as an offering), was recorded in the sarcophagus. The find of carbonised and germinated emmer grain in the filling of the sarcophagus is really interesting – this could be the residue of malt or beer offerings.

4.2.2 Pollen analysis from mudbricks

An attempt was also made to conduct pollen analyses of dry situations from the investigated funeral area of southern Abusir. Most of the material from which macrofossils were extracted was sampled for this purpose. However, we were only successful in the case of some mudbricks. Only in a single case (a mudbrick from the NW structure of Qar's funeral chapel; sample 0601/2004) we were able to get a well-preserved pollen spectrum (table 4.5). Its limited character allows us only a cautious interpretation. Moreover, the results are rather redundant to the more detailed results of the analyses of plant macroremains. Cereal pollen grains (*Triticum*-type) dominate the pollen spectrum, most likely as the result of the chaff and straw admixture in the material that forms the mudbrick. Apart from some finds of *Polygonum persicaria*-type and *Vicia*-type pollen grains, only broad taxonomical categories could be determined by pollen analysis. Such finds are difficult to attribute to any exact plant species and their ecological or technological interpretation is therefore extremely limited.

4.3 Entomological analysis

There were two different sources of insect fragments. The majority of fragments were collected in the vizier Qar's burial chamber from the burned layer inside the limestone sarcophagus. The second source was the remains of beetles that had become stuck in resin in the surface of some trays. These trays were used during the process of mummification.

There are two main problems with the identification of insect fragments from old depositories. Firstly the completeness of the fragments: the more complete the fragment, the more likely identification is possible. Members of many insect orders are too fragile to be well preserved for a long time. Thus the majority of the sufficiently-preserved fragments pertained to insect orders such as Coleoptera, Dermaptera or Heteroptera.

Brassicaceae	3
Compositae Tubuliflorae	21
Cyperaceae	14
Gramineae	56
Chenopodiaceae	8
Palmae	5
Polygonum persicaria-type	2
Trilete spores	1
Triticum-type	179
Vicia-type	1
varia	21
total sum	311

Table 4.5 Results of pollen analysis Sample: Abusir South, mudbrick from Qar's tomb

The second problem relates to the general state of entomological research in a particular area. From an entomological point of view, the Egyptian fauna is rather poorly known. Although there are some catalogues with checklists of Egyptian beetle fauna, comprehensive taxonomic revisions of many groups are still lacking.⁸

4.3.1 Insect fragments from the sarcophagus of the vizier Qar

a) Order Dermaptera (earwigs), family Labiduridae: *Labidura riparia* (Pallas, 1773).

The earwigs form a relatively small insect order with about 2,000 predominantly tropical species.⁹ The scientific name of earwigs derives from their modified mesothoracic wings, forming leathery elytra. Earwigs prefer damp and warm habitats, with only a few members distributed in steppe and dry biotopes. The majority of species inhabit geographically-restricted areas confined to one continent, only a small number of species having a cosmopolitan distribution. Earwigs are usually active at night and prefer shady places. Most of them are omnivorous with a low degree of diet specialization (plants, organic debris, and other insects).¹⁰

Labidura riparia is a cosmopolitan species known from the mild-climate regions to the tropics of all continents. It inhabits the banks of larger rivers, lakes and seashores, preferring a light sandy soil. Within the material from the tomb of the vizier Qar one nearly complete female was found (fig. 4.36).

b) Order Coleoptera (beetles), family Carabidae: *Scarites* (sbg. *Scallophorites*) sp.

Carabids represent a large coleopteran family of world-wide distribution, with more than 35,000 described species. Many species are active epigeal predators, a smaller proportion of species being phytophages (often seed feeders). The carabids of Egypt are rather poorly known, although there are some important catalogues dealing with the distribution and nomenclature of Egyptian Carabidae.¹¹

Genus *Scarites* includes cylindrical elongated species, with fore legs adapted for scrabbling. Members of this genus are common on seashores and the banks of salt lakes; they prefer sandy soils. Within the material from the tomb of the vizier Qar, only one incomplete specimen was found (figs. 4.37–4.38). Specific identification is impossible because only a fragment of head is at our disposal, while many important specific characters for identification are situated on the elytra.¹²

c) Order Coleoptera (beetles), family Dermestidae: *Attagenus* sp.

Dermestidae currently include about 1,200 described species. Members of the family are often cosmopolitan and associated with households, mainly as store product feeders. Adult beetles and larvae feed on various materials of plant and animal origin.

In the analyzed material, only a fragment of one male specimen was found (figs. 34–40). More precise identification is hardly possible. For identification of *Attagenus* species, examination of the male genitalia is essential, but the only specimen found has a somewhat damaged apex of parameres (Háva, pers. comm.). Several other species of Dermestidae have already been found to be associated with mummies in old tombs, e.g. *Dermestes frischi* and *Thilodrias contactus* were discovered in the mummy of Ramses II.¹³

⁸ A. Alfieri, 'The Coleoptera of Egypt', *Mémoires de la Société Entomologique d'Égypte* 5 (1976), 1–361; A. Schatzmayr, 'Risultati scientifici della spedizione entomologica di S.A.S. il Principe Alessandro della Torre e Tasso in Egitto e nella penisola del Sinai. XII', *Catalogo ragionato dei Carabidi finora noti d'Egitto e del Sinai. Pubblicazioni del Museo Entomologico "Pietro Rossi"* (1936), 1–114.

⁹ V. Albouy, C. Caussanel, 'Dermaptères ou Perce-oreilles', *Faune de France* 75. Fédération Française des Sociétés de Sciences Naturelles (Paris, 1990), 245.

¹⁰ P. Kočárek, J. Holuša, L. Vidlička, *Blattaria, Mantodea, Orthoptera & Dermaptera České a Slovenské republiky. Blattaria, Mantodea, Orthoptera & Dermaptera of the Czech and Slovak Republics* (Zlín, 2005), 348.

¹¹ Alfieri, in *Mémoires de la Société Entomologique d'Égypte* 5, 1–361; Schatzmayr, in *Catalogo ragionato dei Carabidi finora noti d'Egitto e del Sinai*, 1–114.

¹² Bulirsch, pers. comm.

¹³ J.-R. Stefan, 'L'entomofaune de la momie de Ramsès II', *Annales de la Société Entomologique de France* (N.S.) 18 (1982), 531–537.

species	English	0401 (OK)	1401 (OK)	2201 (GRP)	together
<i>Mollusca</i>	Molluscs			4	4
<i>Arthropoda</i>	Arthropods		1	15	16
<i>Anura</i> (cf. <i>Bufo</i>)	Frogs (toads?)			4	4
<i>Sauria</i>	Lizards	30	2	8	40
<i>Aves</i>	Birds			1	1
<i>Passeriformes</i>	Songbirds	8	1	4	13
<i>Mammalia</i>	Mammals				
<i>Suncus etruscus</i>	Pygmy White-toothed Shrew	73	1	30	104
<i>Suncus murinus</i>	Asian Musk Shrew	10		17	27
<i>Crocidura suaveolens</i>	Lesser White-toothed Shrew			9	9
<i>Crocidura</i> sp.	White-toothed Shrew			14	14
<i>Taphozous nudiventris</i>	Naked-bellied Tomb Bat	2		4	6
<i>Asellia tridens</i>	Trident Leaf-nosed Bat			1	1
<i>Pipistrellus kuhlii</i>	Kuhl's Pipistrelle	15		2	17
<i>Otonycteris hemprichii</i>	Desert Long-eared Bat	3			3
<i>Eptesicus bottae</i>	Botta's Serotine	2			2
<i>Acomys</i> sp.	Spiny Mouse	92	1	126	219
<i>Praomys fumatus</i>	Rock Rat			3	3
<i>Arvicanthis niloticus</i>	African Grass Rat	8		37	45
<i>Nesokia indica</i>	Short-tailed Bandicoot Rat			1	1
<i>Jaculus jaculus</i>	Lesser Egyptian Jerboa			1	1
	number of individuals	243	6	281	530
	number of species	10	5	20	24

d) Order Coleoptera (beetles), family Tenebrionidae: *Prionothea coronata* (Olivier, 1795).

Tenebrionidae is a large beetle family of worldwide distribution. It currently includes more than 18,000 species. Tenebrionidae are often associated with dry warm habitats. Beyond steppe and desert habitats, some species live on decaying wood, fungi, bird nests and similar biotopes with decaying plant litter.¹⁴ Adult beetles, as well as larvae, feed on dry or decaying plants.

Prionothea coronata is a huge-sized member of the subfamily Pimeliinae. It is common in semidesert areas of North Africa, as well as in the Near East. Only one small fragment of an elytron with very characteristic spines (fig. 4. 41) was found in the tomb of the vizier Qar.

e) Order Coleoptera (beetles), family Tenebrionidae: *Sclerum orientale* (Fabricius, 1775).

Sclerum orientale is rather common in same habitats as with the preceding tenebrionid species. It is the most abundant species in the analyzed material. Various preserved fragments of more than 10 specimens were found (figs. 4.42–4.43).

4.3.2 Insect fragments from the 'bugs tray'

- Order Coleoptera (beetles), family Carabidae: *Poecilus* (sbg. *Ancholeus*) *pharao* (Lutshnik, 1916).

Poecilus pharao (figs. 4.44–4.45) is an endemic species of Egypt. Like some other members of the subgenus *Ancholeus*, this species is strictly associated with saline habitats. Today it is a rather rare species. Its currently known geographical distribution gives the following localities: Abu Rawash, Saqqara, pyramids of Giza, Assyut, Birkasc, Khirdassa, Dahshur, Kafr Kakim, Maadi,¹⁵ vicinity of Cairo, El-Eksas, Luxor, Lake

Table 4.6 List of animal species determined from particular samples

OK	Old Kingdom
GRP	Greek-Roman Period

¹⁴ K. Hürka, Brouci České a Slovenské republiky. Käfer der Tschechischen und Slowakischen Republik (Zlín, 2005).

¹⁵ Schatzmayr, in *Catalogo ragionato dei Carabidi finora noti d'Egitto e del Sinai*, 1–114.

Fig. 4.51 Percentage of particular groups of vertebrates

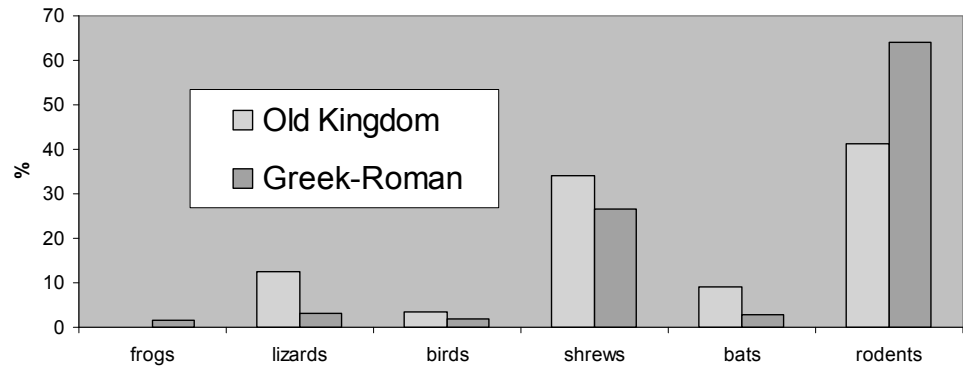
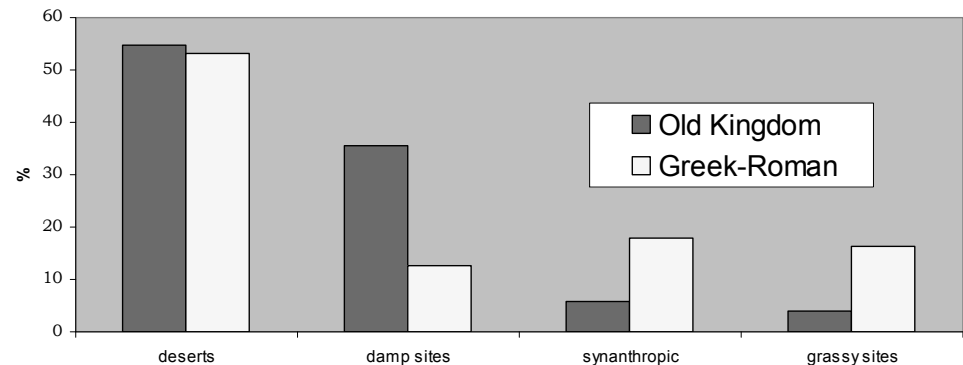


Fig. 4.52 Percentage of particular environmental groups of mammals



Qarun, and Wadi Halfa.¹⁶ Fragments of many specimens were found glued in the resin of a tray (fig. 4.44) that was found as an offering in the funeral complex of Inti. Provided this tray was used during mummification, the interpretation is the following: process of mummification was carried out near the salt lake or some similar salt-rich biotope.

4.4 Osteological analysis

Bones of small vertebrates were acquired from three studied contexts: 0401, 1401 and 2201. The first two samples (0401 and 1401) are dated to the Old Kingdom Period, while the third (2201) is dated to the Graeco-Roman Period (this younger sample was used as comparative material). The two Old Kingdom samples were collected from Abusir South, the Graeco-Roman Period one comes from the site Abusir North (pyramid field). Osteological material of the samples 0401 and 2201 was abundant, while the sample 1401 was rather poor in vertebrate remains.

The main problem in determination was an absence of catalogues of Egyptian vertebrates. The determination was taken thereby according to the general catalogues and the catalogues compiled for nearby countries.¹⁷

The bones probably come from the taphocoenoses of pellets of owls or birds of prey. There were thousands of osteological remains: after determination, the MNI of particular species were calculated (minimum number of individuals, MNI, was used for calculation on the basis of numbers of molars in the case of mammals, or other specific characteristics in the case of other vertebrate groups) – on the whole 530 individuals from 24 animal species were distinguished. There were bones of so-called microfauna: small mammals (rodents, white-toothed shrews, bats), reptiles (lizards – at least 3 species), birds (mostly songbirds) and frogs (probably toads) (the list of species can be seen in table 4.6). Predominant in numbers among mammals were rodents – especially spiny mice (*Acomys* sp.) and African Grass Rat (*Arvicanthis niloticus*), followed by insectivores, such as Pygmy White-toothed Shrew (*Suncus etruscus*), Asian House

¹⁶ Alfieri, in *Mémoires de la Société Entomologique d'Égypte* 5, 1–361.

¹⁷ W. W. Ferguson, *The Mammals of Israel* (New York, 2002); D. L. Harrison, P. J. J. Bates, *The Mammals of Arabia*, *Harrison Zoological Museum* (Sevenoaks, 1991); B. Kryštufek, V. Vohralík, *Mammals of Turkey and Cyprus*, *Kniznica Annales Majora* (Koper, 2001); H. Medelsohn, Y. Yom-Tov, *Fauna of Palestine: Mammalia of Israel* (Tel Aviv, 1999); R. M. Nowak, *Walker's Mammals of the World*, 2 vols. (Baltimore, 1991).

Shrew (*Suncus murinus*)¹⁸ and Lesser White-toothed Shrew (*Crocidura suaveolens*); also 5 species of bats were discovered – desert species and those resident in tombs. The percentage of particular groups of vertebrates is shown in fig. 4.51. In both periods, rodents were the most abundant group – on the other hand, they formed the dominant part of the microfauna only in the Graeco-Roman period. In the Old Kingdom samples, shrews closely followed rodents (esp. Pygmy White-toothed Shrew). Also lizards and bats were more numerous in the older contexts. Frogs (probably a species of desert toad) were recognized only in the Graeco-Roman period.

The Pygmy White-toothed Shrew (*Suncus etruscus*) is a typical inhabitant of river banks, while the presence of the other white-toothed shrews (Asian House Shrew, *Suncus murinus* – fig. 4.48, Lesser White-toothed Shrew, *Crocidura suaveolens*, and another species, *Crocidura sp.*) reflects mostly areas associated with human activity (i.e. they can be found in houses, agricultural areas, etc.). All species of bats found at the site occupy a dry and desert environment. Naked-bellied Tomb Bat (*Taphozous nudivestris*) is a colonist of deserted buildings, eg. tombs. Spiny mice (*Acomys sp.*, fig. 4.49 – in this case probably Egyptian Spiny Mouse, *Acomys cahirinus*) inhabit desert and semi-desert areas with rocky surfaces; a similar environment is also typical for Lesser Egyptian Jerboa (*Jaculus jaculus* – fig. 4.50) – it occupies deserts and semi-deserts covered with sand or stones. Short-tailed Bandicoot Rat (*Nesokia indica* – fig. 4.46) is an inhabitant of moist areas or areas along streams and channels, whereas the African Grass Rat (*Arvicanthis niloticus* – fig. 4.47) demands an environment with rather dense plant cover – it occupies savannas and other grasslands, sub-desert or cultivated areas; Rock Rat (*Praomys fumatus*) also inhabits a grassy environment.

Mammals were divided into groups according to their biotope preference – the following groups can be distinguished in this way: mammals of deserts and dry environments (bats, spiny mice, jerboa), mammals of grassy areas (including fields) (esp. African Grass Rat), synanthropic mammals (associated with humans; esp. white-toothed shrews) and mammals of damp areas with water (esp. Pygmy White-toothed Shrew). An interesting comparison can be made between the Old Kingdom samples and the younger sample 2201 taken on the locality Abusir North, preliminarily dated to the Graeco-Roman Period (see fig. 4.52). Comparison of these two periods shows some environmental changes at a regional level. The representation of desert species is comparable in both periods and slightly exceeds 50%, but in the younger sample there is an increased ratio of synanthropic species and the species of grassy areas¹⁹ to the detriment of species of damp environments. These differences probably reflect increase in the influence of human activities towards the Graeco-Roman Period: The Old Kingdom samples point to the fauna of desert environments with a significant representation of species from moist habitats. Sample 2201 from the Graeco-Roman Period also denotes a desert environment, but with the presence of grassy areas and areas strongly influenced by people.

4.5 Conclusions

The palaeoenvironmental data currently available from Abusir South have to be considered as preliminary. Nevertheless, the material obtained in the 2004 field season clearly demonstrates the strong potential for future palaeoenvironmental research in this area. Systematic sampling for biological remains is considered to be an indispensable part of uncovering new evidence in future archaeological research. For example, completely new perspective may arise from the future sedimentological investigation of the Lake of Abusir.

¹⁸ The find of this species is rather interesting. It is an example of prehistoric biological invasion. The Asian House Shrew is considered today as not native to Egypt (and Africa at all), while in our material from the Old Kingdom Period it was rather abundant. That means it had to have spread to North Africa some time before this period, probably due to the existence of long-distance trading that connected Asia with North Africa.

¹⁹ Grass vegetation could have replaced a former lake documented in the Old Kingdom Period.

The results of archaeobotanical analyses carried out from the tomb complex of Qar and Inti provide the basis for reconstruction of agricultural technology. The botanical evidence reflects environmental conditions prevailing in the Nile floodplain, where mudbricks and wall plaster were made. As for utility species, evidence was found for the following ones: emmer, barley, fig tree, Christ's thorn, pea/vetch, lentils, flax, and probably also common purslane. These results augment the up-till-now sporadic knowledge of utility plants in the Old Kingdom.

The zoological records (both entomological and osteological) from the Old Kingdom contexts reflect a desert environment in combination with grassy and moist habitats. The bones of small mammals show the gradual drying-out of water sources and the growing local human influence in the later (Graeco-Roman) period.

Acknowledgement

We would like to thank all those specialists of particular animal groups that shared in the identification of animal remains, mainly I. Horáček (Charles University, Prague), P. Bulirsch (Opava), J. Háva (Prague), P. Kočárek (University of Ostrava, Ostrava), O. Merkl (Hungarian Natural History Museum, Budapest) and D.W. Wrase (Berlin). Colour photographs of insects were kindly provided by R. Sehnal (Velenice), S. Pokorný and J. Zídek (Prague). This research was partially supported by the grant of AS CR No. 1Q500070505.



Fig. 4.5



Fig. 4.8

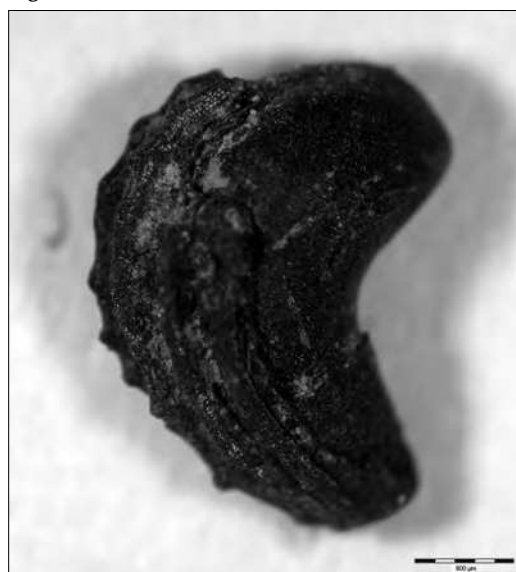


Fig. 4.6

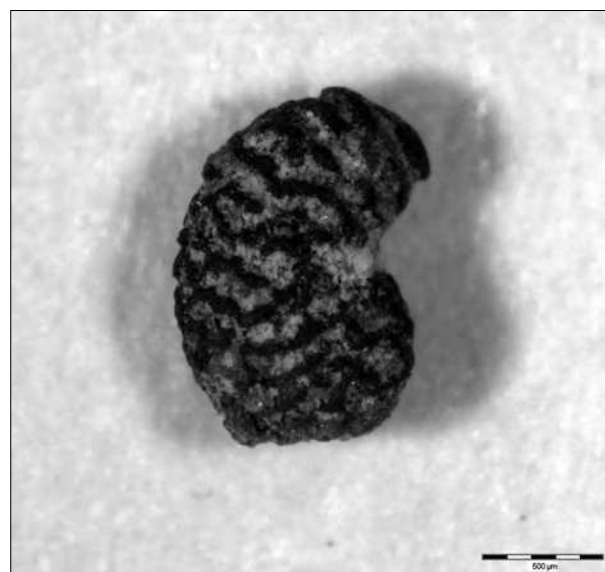


Fig. 4.9

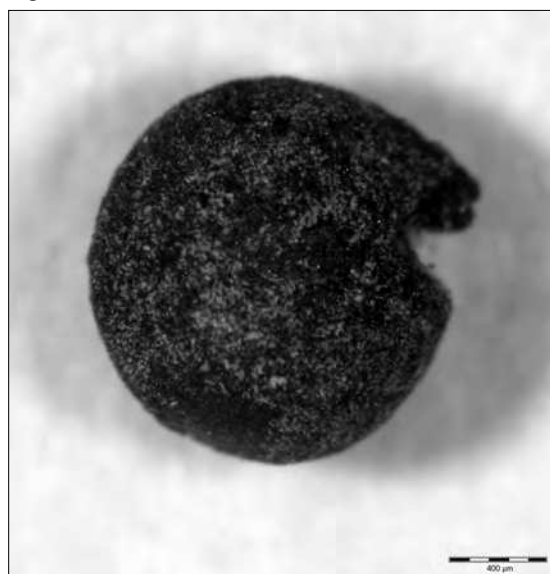


Fig. 4.7

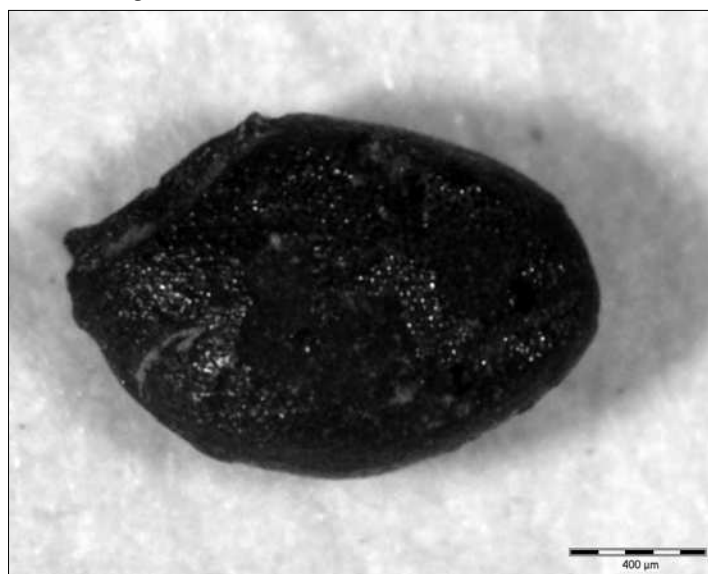


Fig. 4.10

Fig. 4.5 *Carex* sp. TYPE I. Fig. 4.6 *Carex* sp. TYPE II. Fig. 4.7 *Scorpiurus muricata*. Fig. 4.8 cf. *Elatine* sp. Fig. 4.9 *Chenopodium murale*. Fig. 4.10 *Cynodon dactylon*.



Fig. 4.11



Fig. 4.12



Fig. 4.13

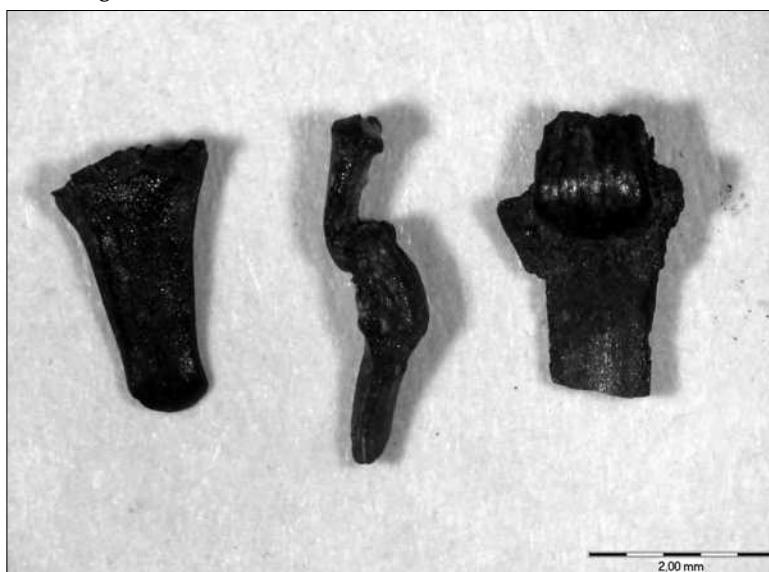


Fig. 4.14

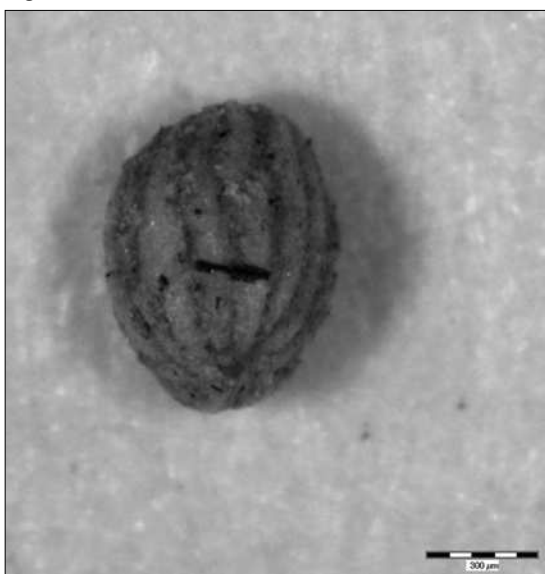


Fig. 4.15



Fig. 4.16

Fig. 4.11 *Eleocharis* cf. *palustris*. Fig. 4.12 *Ficus* cf. *sicemorus*. Fig. 4.13 *Hordeum vulgare*. Fig. 4.14 *Hordeum vulgare*. Fig. 4.15 *Lemna* cf. *gibba*. Fig. 4.16 *Linum usitatissimum*.



Fig. 4.17



Fig. 4.18



Fig. 4.19

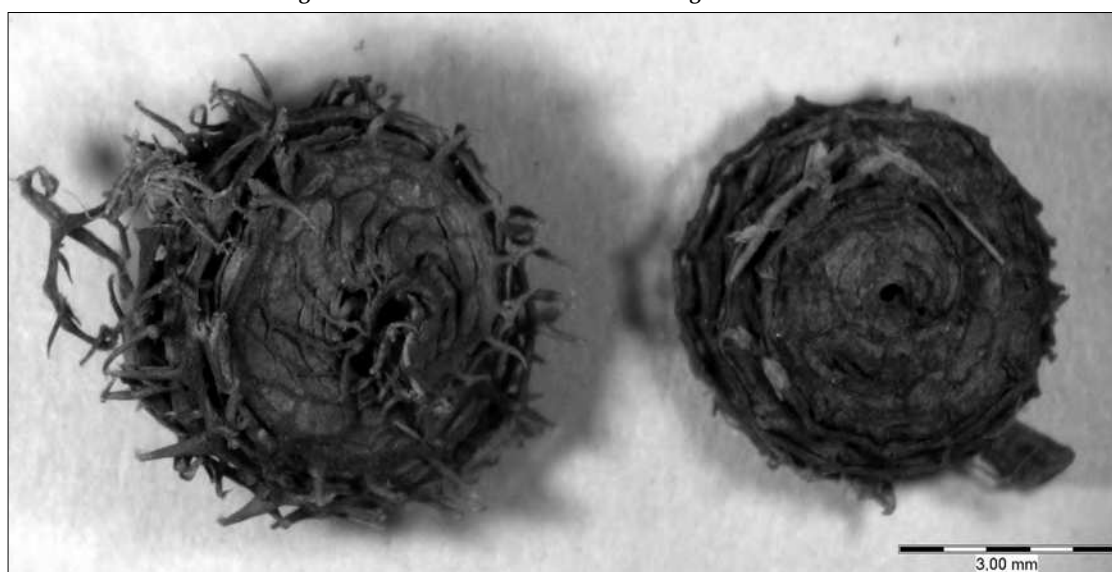


Fig. 4.20

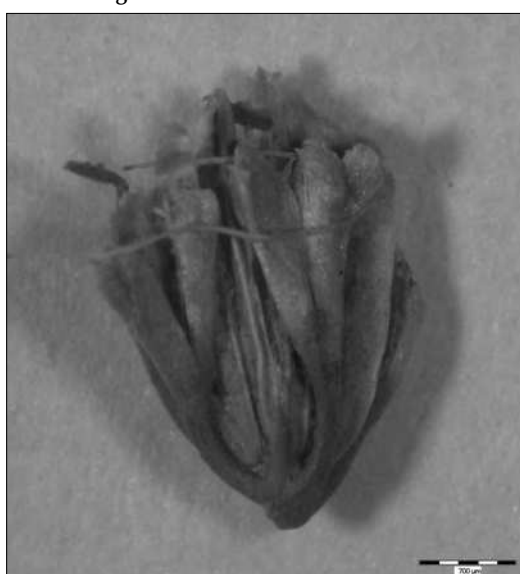


Fig. 4.21



Fig. 4.22

Fig. 4.17 *Lolium temulentum*. Fig. 4.18 *Lolium temulentum*. Fig. 4.19 *Medicago* sp. Fig. 4.20 *Medicago polymorpha* s.l.
Fig. 4.21 *Phalaris paradoxa*. Fig. 4.22 *Pisum/Vicia*



Fig. 4.23



Fig. 4.24



Fig. 4.25

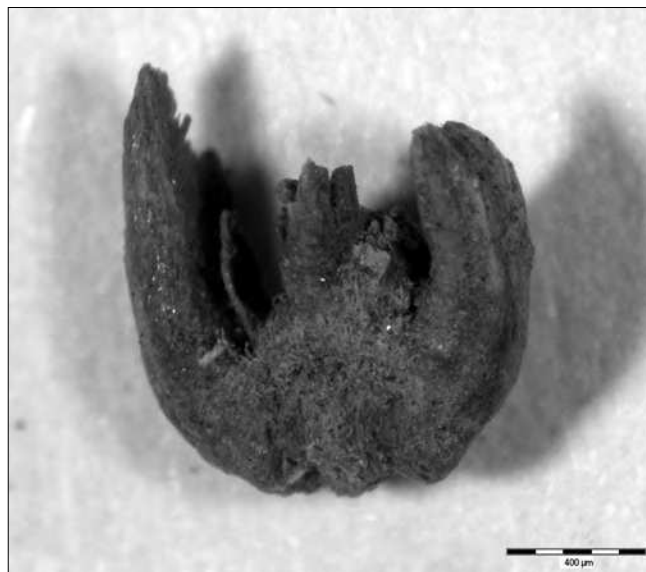


Fig. 4.26



Fig. 4.27



Fig. 4.28



Fig. 4.29

Fig. 4.23 *Plantago* sp. Fig. 4.24 *Rumex dentatus*. Fig. 4.25 *Triticum dicoccon*. Fig. 4.26 *Triticum dicoccon*. Fig. 4.27 *Triticum dicoccon*.
Fig. 4.28 *Triticum dicoccon*. Fig. 4.29 *Triticum dicoccon*.

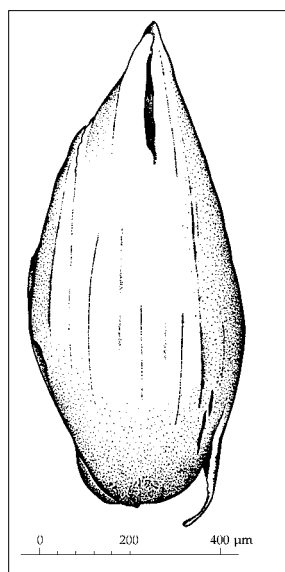


Fig. 4.30a

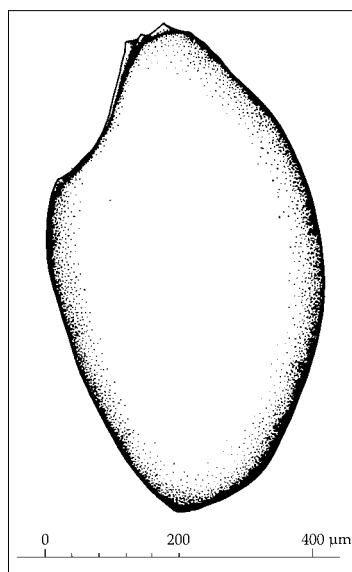


Fig. 4.30b

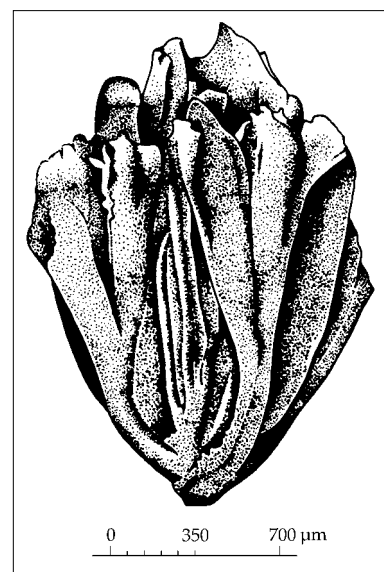


Fig. 4.31

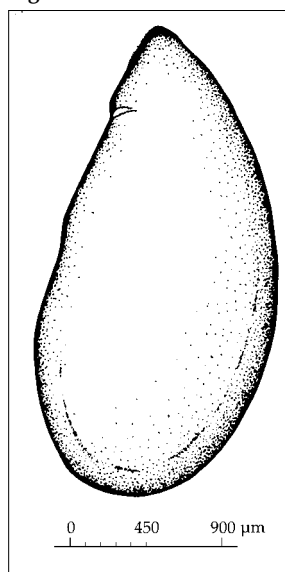


Fig. 4.32

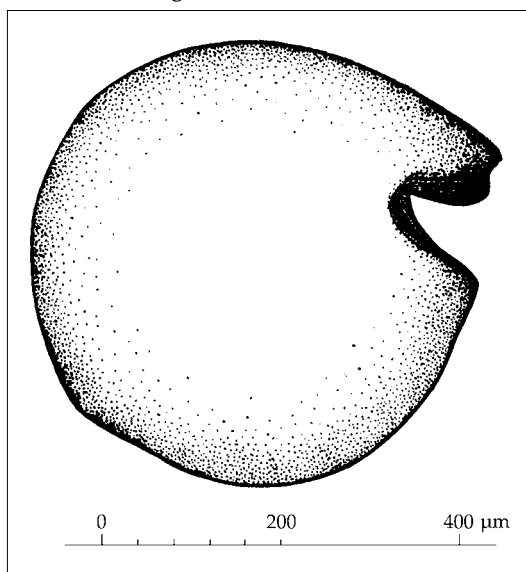


Fig. 4.33

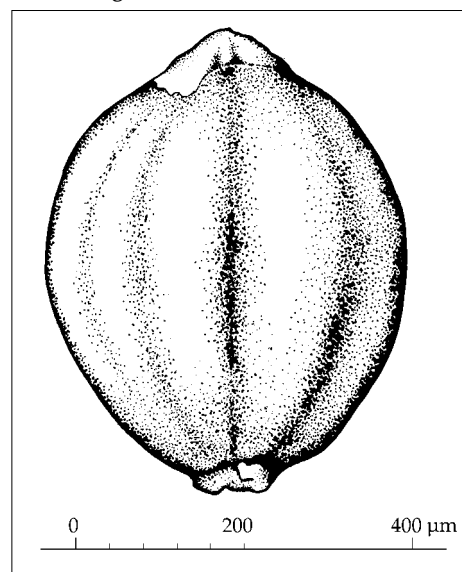


Fig. 4.34

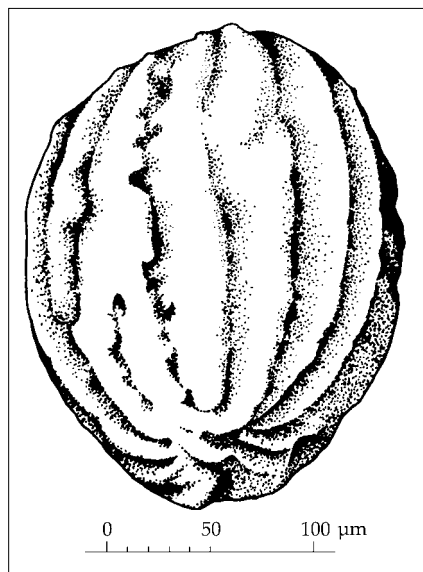


Fig. 4.35



Fig. 4.36



Fig. 4.37

Fig. 4.30 *Cynodon dactylon* – diaspore. Fig. 4.31 *Phalaris paradoxa* – spikelet. Fig. 4.32 *Linum usitatissimum* – diaspore.
Fig. 4.33 *Malva* cf. *parviflora* – diaspore. Fig. 4.34 *Eleocharis* sp. – diaspore. Fig. 4.35 *Lemna* sp. – diaspore. Fig. 4.36 Earwig, *Labidura riparia* – dorsal view. Fig. 4.37 Beetle, *Scarites* (sbg. *Scallophorites*) sp. – head, dorsal view



Fig. 4.38



Fig. 4.39



Fig. 4.40



Fig. 4.41



Fig. 4.42



Fig. 4.43



Fig. 4.44



Fig. 4.45

Fig. 4.38 Beetle, *Scarites* (sbg. *Scallophorites*) sp. – head, ventral view. Fig. 4.39 Beetle, *Attagenus* sp. – dorsal view. Fig. 4.40 Beetle, *Attagenus* sp. – ventral view. Fig. 4.41 Beetle, *Prionothea coronata* – fragment of elytron. Fig. 4.42 Beetle, *Sclerum orientale* – dorsal view. Fig. 4.43 Beetle, *Sclerum orientale* – ventral view. Fig. 4.44 Tray with beetles glued in resin. Fig. 4.45 Beetle, *Poecilus* (*Ancholeus*) *pharao* – dorsal view

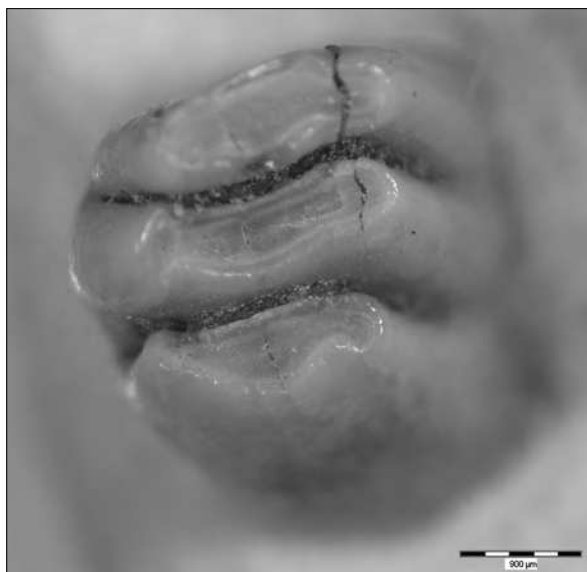


Fig. 4.46



Fig. 4.47



Fig. 4.48

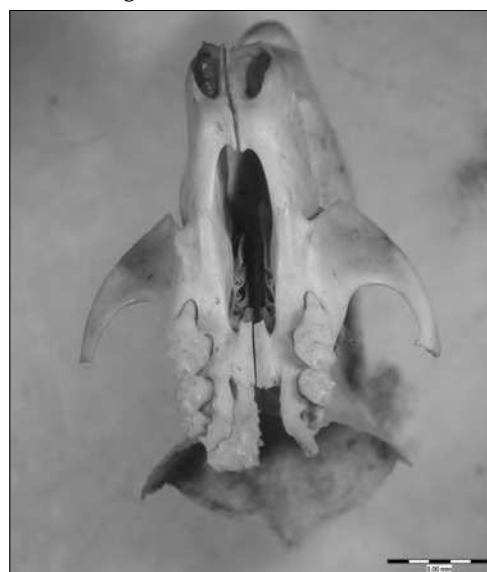


Fig. 4.49



Fig. 4.50

Fig. 4.46 Molar of Short-tailed Bandicoot Rat (*Nesokia indica*). Fig. 4.47 Upper and lower jaw of African Nile Rat (*Arvicanthis niloticus*). Fig. 4.48 Upper and lower jaw of Asian House Shrew (*Suncus murinus*). Fig. 4.49 Upper jaw of Spiny Mouse (*Acomys* sp.). Fig. 4.50 Lower jaw of Lesser Egyptian Jerboa (*Jaculus jaculus*)

PART 5

Tomb complex of the vizier Qar

Miroslav Bárta

5.1 Family of Qar and his sons

5.1.1 Name, titles and epithets of Qar

Names

K3r, rn.f^{c3} – ‘Qar, his great name’.¹

Occurrence: Chapel 1 – false door, Chapel 2 – false door and north and south wall, Excav. No. 11b/GG/1995, burial chamber – east exterior and east and west interior walls of the sarcophagus chest, east face of the lid.

Titles

1. *jwn Knmwt* – ‘support of Kenemut’.²

Occurrence: Chapel 2 – false door.

2. *(j)m(j)-r hwt-wrt* – ‘overseer of the Great (law) Court’.³

Occurrence: Chapel 2 – north wall, burial chamber – east exterior wall of the sarcophagus chest.

3. *(j)m(j)-r hwt-wrt 6* – ‘overseer of the Six Great (law) Courts’.⁴

Occurrence: Chapel 2 – false door and north wall.

4. *(j)m(j)-ht hm(w)-ntr [Dd-swt Tjt]* – ‘assistant of the *hmw-ntr* priests in (the pyramid complex) [“Teti’s (cult) places are enduring”]’.⁵

Occurrence: Chapel 2 – north and south wall.

5. *(j)r(j) Nhn (n) z3b* – ‘keeper of Nekhen of the king’.⁶

Occurrence: Chapel 1 – false door, Chapel 2 – false door, north and south wall, Excav. No. 11b/GG/1995, burial chamber – east exterior and interior walls of the sarcophagus chest and east wall of the lid.

6. *(j)r(j) Nhn (n) z3b m3c* – ‘true keeper of Nekhen of the king’.⁷

Occurrence: Chapel 1 – false door, Chapel 2 – false door and north wall, Excav. No. 120/66/1995, burial chamber – west interior wall of the sarcophagus chest.

7. *‘d-mr (n) z3b* – ‘administrator of the King’.⁸

Occurrence: Chapel 1 – false door, Chapel 2 – false door, north and south wall, Excav. No. 11b/GG/1995, burial chamber – east exterior wall of the sarcophagus chest.

8. *mdw rhjt* – ‘staff of the *rekhyt*-people’.⁹

Occurrence: Chapel 2 – false door, burial chamber – east exterior wall of the sarcophagus chest.

¹ Ranke, *PN I*, 333.9; Scheele-Schweitzer, *Personennamen des AR*, 702–704, No. 3393. For the great names see *ibid.*, 12.

² Jones, *Index I*, 6, No. 22.

³ *Ibid.*, 164–165, No. 628.

⁴ *Ibid.*, 165, No. 630.

⁵ *Ibid.*, 292, No. 1066.

⁶ Callender, in Bárta, Krejčí, eds., *Abusir and Saqqara in the Year 2000*, 361ff. Compare the reading by Jones, *Index II*, 808, No. 2953. For the discussion see also Bárta, *Abusir V*, 70–71 and fn. 57.

⁷ Jones, *Index II*, 809, No. 2954.

⁸ *Ibid.*, 806, No. 2947; Bárta, *Abusir V*, 180–181.

⁹ Jones, *Index I*, 453, No. 1698.

9. *n(j) nst hntt* – ‘He who belongs to the foremost seat’.¹⁰

Occurrence: Chapel 2 – false door, burial chamber – east exterior wall of the sarcophagus chest.

10. *hm-ntr (m) [Nfr-swt Wnjs]* – ‘*hm-ntr* priest (in the pyramid complex) “[Beautiful are the [cult] places of Unas”]’.¹¹

Occurrence: Chapel 2 – south and north wall.

11. *hr(j)-sst3* – ‘privy to the secret(s)’.¹²

Occurrence: Chapel 2 – false door.

12. *hr(j)-sst3 n wd^c-mdw n hwt-wrt* – ‘privy to the secret judgement(s) of the Great Court’.¹³

Occurrence: Chapel 1 – false door, burial chamber – east wall of the sarcophagus chest.

13. *hr(j)-sst3 n hwt-wrt* – ‘privy to the secret(s) of the Great Court’.¹⁴

Occurrence: Chapel 2 – false door.

14. *hr(j)-sst3 n hwt-wrt 6* – ‘privy to the secret of the Six Great Courts’.

Occurrence: Chapel 2 – false door.

15. *t3tj t3tj (n) z3b* – ‘vizier’.

Occurrence: Chapel 2 – false door.

16. *tp(j)-hr(t) nswt* – ‘property administrator of the king’.¹⁵

Occurrence: Chapel 2 – false door and the north wall, Excav. No. 11b/GG/1995, burial chamber – east exterior wall of the sarcophagus chest.

Epithets

I. *jm3hw* – ‘well-provided one’.¹⁶

Occurrence: Chapel 1 – false door.

II. *jm3hw hr Jnpw* – ‘well-provided before Anubis’.¹⁷

Occurrence: Chapel 1 – false door.

III. *jm3hw hr Jnpw, tp(j)-dw.f nb t3-dsr* – ‘[well-provided] before Anubis, Who is upon his mountain, Lord of the sacred land’.¹⁸

Occurrence: Excav. No. 11b/GG/1995, Chapel 1 and 2 – false door.

IV. *[jm3hw h]r Wsjr, nb Ddw* – ‘[well-provided] before Osiris, Lord of Busiris’.¹⁹

Occurrence: Chapel 2 – false door.

¹⁰ Jones, *Index I*, 471, No. 1755.

¹¹ *Idem*, *Index II*, 587, No. 2150.

¹² *Ibid.*, 609, No. 2233; on the title in general see K. T. Rydström, ‘HRY SST3 “In Charge of Secrets.” The 3000-Year Evolution of a Title’, *DE* 28 (1994), 53–94.

¹³ *Ibid.*, 614, No. 2254.

¹⁴ *Ibid.*, 635, No. 2326.

¹⁵ Cf. *ibid.*, 788, No. 2874. For the title and its discussion see H. Goedicke, ‘Titles for Titles’, in Allam, ed., *Grund und Boden*, 227–234.

¹⁶ Jones, *Index I*, 11, No. 42.

¹⁷ *Ibid.*, 13, No. 56; DuQuesne, *Jackal Divinities*, 141, §137.

¹⁸ Jones, *Index I*, 17, No. 75. For *tp(j) dw.f cf.* DuQuesne, *Jackal Divinities*, 160–162 (g), for *nb t3-dsr cf. ibid.*, 154–157 (e).

¹⁹ Jones, *Index I*, 21, No. 100; Zibelius, *Ägyptische Siedlungen*, 270–272.

V. *jm3hw hr Wsjr; hnt(j) Ddwt* – ‘well-provided before Osiris, Foremost of the necropolis in Heliopolis’.²⁰

Occurrence: Chapel 2 – false door.

VI. *jm3hw hr ntr ʕ3* – ‘well-provided before the Great God’.²¹

Occurrence: Chapel 2 – false door.

VII. [*jm3hw*] *hr ntr ʕ3, Nb-jmnt* – ‘[well-provided] before the Great God, Lord of the West’.²²

Occurrence: Chapel 1 – false door.

5.1.2 Sons of Qar

K3r ‘Qar (Junior)’.

z3.f smsw mrj.f – ‘his eldest beloved son’.²³

Occurrence: Chapel 2 – north wall, seventh register.

Sndm-jb – ‘Senedjemib’.²⁴

z3.f, smsw h(3j)t – ‘his son, elder of the (judicial court) of the king’.²⁵

Occurrence: Chapel 2 – north wall, seventh register.

Jntj – ‘Inti’²⁶

hnt(j)-š (m) [Dd-swt Ttj] – ‘attendant (in the pyramid complex) [“Teti’s (cult) places are enduring”]’.²⁷

Occurrence: Chapel 2 – north wall, sixth register.

(j)m(j)-ht hm(w)-ntr (m) [Dd-swt Ttj] – ‘assistant of the *hmw-ntr* priests (in the pyramid complex) [“Teti’s (cult) places are enduring”]’.²⁸

Occurrence: Chapel 2 – north wall, sixth register; south wall, sixth register.

smsw h(3j)t (n) z3b – ‘elder of the (judicial court) of the king’.²⁹

Occurrence: Chapel 2 – north wall, sixth register; south wall, sixth register (as *smsw h(3j)t* only).

[z3].f mrj.f – ‘his beloved son’.³⁰

Occurrence: Chapel 2 – north wall, sixth register; south wall, sixth register.

Tntj ‘Tjenti’.³¹

z3.f, zš (n) z3b – ‘his son, scribe of the king’.³²

Occurrence: Chapel 2 – north wall.

²⁰ Zibelius, *Ägyptische Siedlungen*, 268–269; the title is not mentioned by Jones, *Index*.

²¹ Jones, *Index I*, 30, No. 142; Windus-Staginsky, *Der ägyptische König im Alten Reich*, 106–107, when the king is to be understood as the ‘Great God’.

²² Jones, *Index I*, 31, No. 145.

²³ *Idem*, *Index II*, 800, No. 2920. See also Scheele-Schweitzer, ‘Zur Darstellung von mehr als einem ältesten Sohn in Gräbern des Alten Reiches’, *GM* 213 (2007), 69–75.

²⁴ Ranke, *PN I*, 316. 21; Scheele-Schweitzer, *Personennamen des AR*, 670–671, No. 3180.

²⁵ Jones, *Index II*, 902–903, No. 3313.

²⁶ Ranke, *PN I*, 38. 23; Scheele-Schweitzer, *Personennamen des AR*, 240, No. 352.

²⁷ Jones, *Index II*, 694, No. 2537.

²⁸ *Idem*, *Index I*, 292, No. 1066.

²⁹ *Ibid.*, 813, No. 2974.

³⁰ Jones, *Index II*, 800, No. 2920.

³¹ Ranke, *PN I*, 392.10; Scheele-Schweitzer, *Personennamen des AR*, 752–753, No. 3714.

³² Jones, *Index II*, 811, No. 2964.

5.1.3 Dependants of Qar

Jr-n-Pth – ‘Irenptah’ (1).³³

(*j*)*r(j)* *md3t* (*n*) *z3b* – ‘keeper of documents of the king’.³⁴

Occurrence: Chapel 2 – south wall, seventh register.

Jr-n-Pth – ‘Irenptah’ (2).

(*j*)*m(j)* *ht hm(w)-k3* – ‘assistant of the *hm(w)-k3* priests’.³⁵

Jd ‘Id’.³⁶

(*j*)*r(j)* *sšr pr-ε3* – ‘keeper of the linen of the Great House’.³⁷

Occurrence: Chapel 2 – north wall, seventh register.

Pr..w ... – ‘Pr...w’.

hm-k3 – ‘*hm-k3* priest’.³⁸

Occurrence: Chapel 2 – north wall, fourth register.

Hw(j).n-Hnm[w] – ‘Khu(i)khnum’.³⁹

zš hm(w)-k3 (n) z3b – ‘scribe of the *hm(w)-k3* priests of the king’.

Occurrence: Chapel 2 – north wall, fifth register.

Zt[w] – Setju.⁴⁰

hm-k3 – ‘*hm-k3* priest’.⁴¹

Occurrence: Chapel 2 – south wall, sixth register.

T... – ‘Tj’...’.

shd hm(w)-k3 – ‘inspector of the *hm(w)-k3* priests’.⁴²

Occurrence: Chapel 2 – north wall, seventh register.

...*tn-εnh* – ‘...tenankh’.

hr(j)-hb – ‘lector priest’.⁴³

Occurrence: Chapel 2 – north wall, fourth register.

Anonymous (1–2).

(*j*)*m(j)-ht hm(w)-ntr* – ‘assistant of the *hm(w)-ntr* priests’.⁴⁴

Occurrence: Chapel 2 – north wall, seventh register, two persons.

Anonymous (3–5).

shd hm(w)-ntr – ‘inspector of the *hm(w)-ntr* priests’.

Occurrence: Chapel 2 – north wall, seventh register, three persons.

³³ Ranke, *PN I*, 39.25; Scheele-Schweitzer, *Personennamen des AR*, 245–246, No. 396.

³⁴ Jones, *Index I*, 317, No. 1167.

³⁵ *Ibid.*, 292, No. 1067.

³⁶ Ranke, *PN I*, 53.17; Scheele-Schweitzer, *Personennamen des AR*, 275, No. 597.

³⁷ Jones, *Index I*, 336, No. 1239.

³⁸ *Idem*, *Index II*, 591, No. 2167.

³⁹ Ranke, *PN I*, 276.8; Scheele-Schweitzer, *Personennamen des AR*, 604–605, No. 2729.

⁴⁰ Ranke, *PN I*, 298.17; Scheele-Schweitzer, *Personennamen des AR*, 634, No. 2929.

⁴¹ Jones, *Index II*, 591, No. 2167.

⁴² *Ibid.*, 943, No. 3475.

⁴³ *Ibid.*, 781, No. 2848.

⁴⁴ *Ibid.*, 292, No. 1067.

5.2 Architecture of the tomb complex of Qar

The cemetery of Qar and his family illustrates a specific stage in the history of ancient Egyptian architecture that developed within the cemeteries of Memphis during the latter half of the Fifth Dynasty and continued to blossom into the Sixth Dynasty (*fig. 5.2.1*).¹ It is represented by two large tomb compounds belonging to the vizier Qar and his favourite son Inti. These two complexes are aligned in a north-south direction and adjoin each other. Qar's mastaba is located in the north, whereas Inti's mastaba lies to the south. Around the northern part of Qar's compound, cult chapels and burial apartments were subsequently built for his two sons, Qar Junior and Senedjemib. Later on, these structures were largely obscured by the building activity of an official named Iykai.

5.2.1 Superstructure of the tomb of Qar

The precise ground plan of the north-south oriented tomb complex of the vizier Qar is difficult to establish. The northern part of the complex assumes the shape of an Open Court which merges with the subsidiary cult chapels of the above mentioned members of Qar's family and Iykai. It is this part of the tomb complex that has also suffered most from erosion and destruction. The walls that originally delineated the complex on the north were largely removed and/or collapsed as is indicated by a massive mudbrick destruction to the north of the complex, in front of the actual entrance into Open Court 1. Embedded in the north wall of the tomb, to the west of the entrance, was a niche 1.00 m deep and 1.00 m wide which resembles a guard's shelter (*fig. 5.2.2*).

The basic dimensions of the tomb, including the court, are 25.40 × 14.10 m. The outer perimeter wall is well preserved only on the western side. A sounding made here in 1995 has shown that the outer wall of limestone blocks is preserved to a height of about 2.00 m, lying directly on the *tafl* bedrock. The wall has nine courses of masonry preserved, each course set back by about 4 cm, thus creating a slope of 79° (*fig. 5.2.3*).

Fig. 5.2.1 View of the tomb of Qar, looking southeast

¹ M. Bárta, 'Architectural Innovations in the development of the non-royal tomb during the reign of Nyuserra', Jánosi, ed., *Structure and Significance*, 105–130.



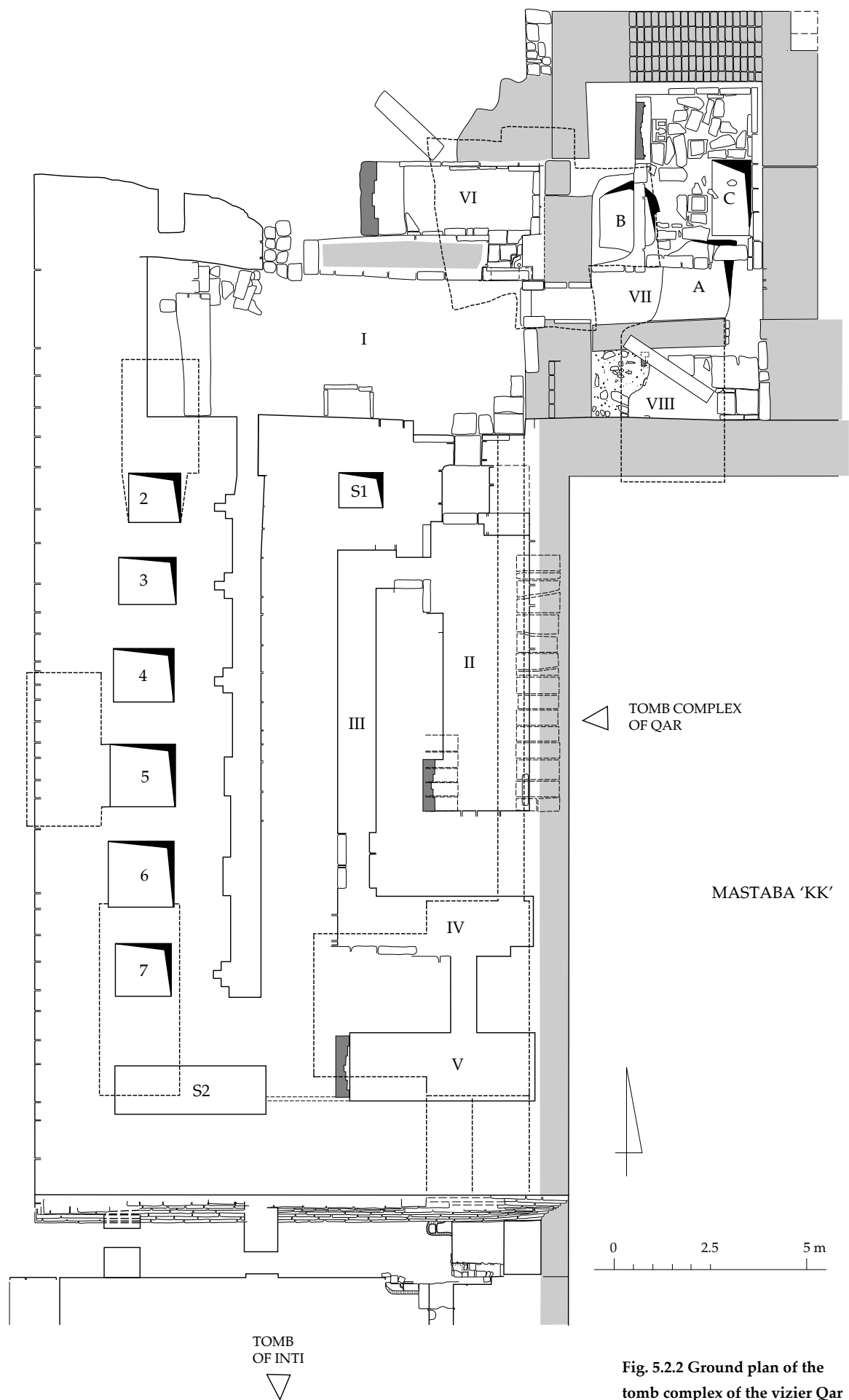


Fig. 5.2.2 Ground plan of the tomb complex of the vizier Qar

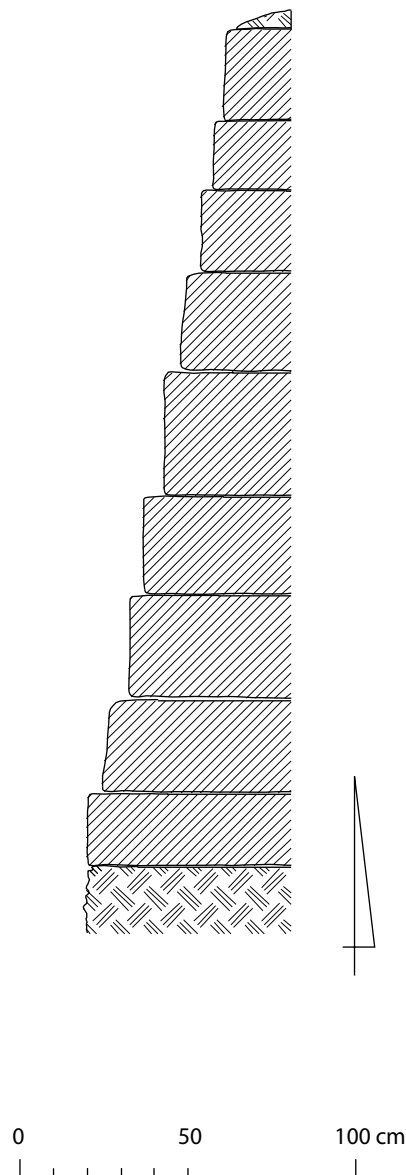


Fig. 5.2.3 Detail of the western perimeter wall of the mastaba

The northern perimeter of Qar's tomb is delineated by the chapel of Qar Junior in the north; to the east stands an older tomb 'KK', possibly of a late Fifth Dynasty date, and in the south Qar's tomb abuts a later tomb of another of his sons, Inti.

The complex consists of several structural elements: a rather spacious Open Court, north-south Chapel 1 for Qar's cult and an east-west oriented Chapel 2, which was built when Qar became appointed to the office of vizier, a decorated burial chamber accessible via a descending corridor, and two serdab installations. The western part of the complex incorporates a corridor chapel designed for the cult of some other members of the family and has to the west a row of six shafts with their respective burial chambers.

5.2.1.1 Open Court

Originally, the tomb of Qar was entered directly from the north. Only when it was decided to build additional cult structures for the vizier's sons to the north of his tomb, did a large Open Court come into existence. It is the first principal component of the tomb in the north. It is orientated east-west and measures 10.80 (NS) $\times$ 3.80 (W)–4.00 (E) m in ground plan. Given the local topography and specifically the steep slopes of the natural hilltop on which the tomb is sited, the entrance was situated close to its north-west corner, in the north wall. It is a short, about 0.95 m long and 1.10 m wide passage which preserves limestone flagging stones and a pivot for a one-leaf door that opens inwards, into the court. The entrance placement can also be explained by the existence of the so-called Lake of Abusir to the north east of the tomb. From there, both priests and visitors approached the cemetery.² It is therefore likely that the complex of Qar and his sons made use of a wide east-west running wadi to the north that represented the shortest connection to the lake and the residential area further to the east.

The seven steps, built of limestone blocks, which lead from the northwestern corner of the court atop of the mastaba, may be taken as another indication of the building progression. The proper function of this installation may be that it served as an access point during the interments in the western row of shafts. The east wall of the court is represented by a 4 m long course of the wall adjoining the northern tomb's façade and is built of blackish mudbricks which are 36 $\times$ 18 $\times$ 12 cm in size. Only the northernmost part of it was made of stone as part of an entrance into the later tomb of Senedjemib. The northern façade of the mastaba of Qar (which formed the south wall of the court) was built of local limestone blocks which were preserved to a height of more than 2 m above the floor of the court, whereas its core of blackish mudbricks in the whole façade is preserved (including the core) to a height of 2.80 m. The north wall of the court is represented by a limestone wall of the chapel of Qar Junior.

The entire area of the court was found empty. Its floor, made of beaten clay, rises gently towards the west, and so the west end of it is some 30 cm higher than the east. At the court's southern wall, approximately in its middle, was built a simple offering basin, with side walls made of rough and thin limestone blocks, 0.75 m wide, and some 15–20 cm deep. Later on, the inner west wall of the court was reinforced with a massive mudbrick construction (with mudbricks of 30 $\times$ 20 $\times$ 8 cm) 3.15 m long and 0.65–0.90 m wide. The north end of this construction assumes the shape of a flight of seven steps leading from the court to the top of the west perimeter wall of the tomb.

The court was of cultic importance, especially with regard to the offering ceremonies that took place in it:³ any visitor to the tombs of the vizier Qar and his two sons,

² This feature becomes evident both from the architectural layout of the cemetery and from the titles of officials buried within it. Comp. M. Bárta, 'The Title 'Priest of Heket' during the Egyptian Old Kingdom', *JNES* 58,2 (1999), 1–10 and M. Bárta, B. Vachala, 'The Tomb of Hetepi at Abu Sir South', *EA* 19 (2001), 33–35.

³ Cf. M. Bárta, 'The Tomb of Ptahshepses Junior II at Abusir', *Ägypten und Levante* X (2000), 62–63; H. Ernst, 'Der Kult in den Opferhofen der Totentempel des Alten und Mittleren Reiches', *SAK* 29 (2001), 41–53.



Fig. 5.2.4 Western part of Open Court 1



Fig. 5.2.5 Blocks found in Open Court 1

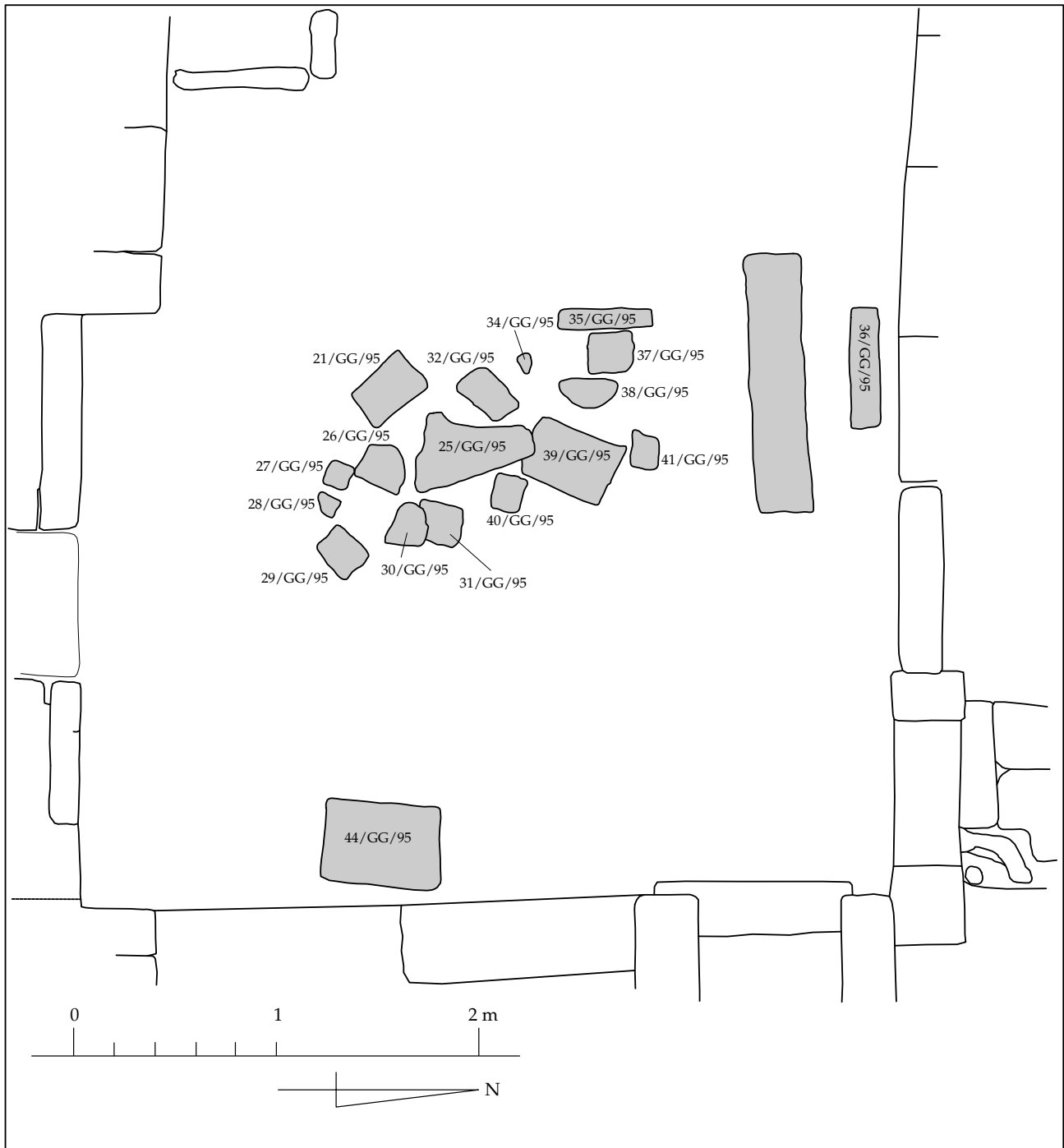


Fig. 5.2.6 Blocks found in Open Court 1, scheme of their distribution

and eventually also to Iykai, first had to pass through the court.⁴ Despite that, the floor of the court did not yield any finds that one could directly associate with the primary activities that took place there. The stratigraphy that developed in the court following the period of its use was rather simple and contained a large number of finds including decorated blocks from the intentionally destroyed chapels of Qar Junior and Senedjemib. The stratigraphy of the court reflects very well the destruction horizon of the cemetery. It consists of two principal layers. Layer 1, 0.30–0.60 m in thickness (in other places even less) is represented by the surface of the desert. It is composed of desert sand containing fragments of eroded Old Kingdom beer jars and *bedja* bread moulds, eroded human and animal (mostly bovine) bones, and mudbrick fragments. The following Layer 2, reaching in places a height of 2.20 m above the floor of Open Court 1, is composed of yellowish-grey sand with Old Kingdom potsherds, decayed

⁴ Cf. P. János, '„Im Schatten“ der Pyramiden - Die Mastabas in Abusir. Einige Beobachtungen zum Grabbau der 5. Dynastie', in Bárta, Krejčí, eds., *Abusir and Saqqara 2000*, 465 and fn. 74.

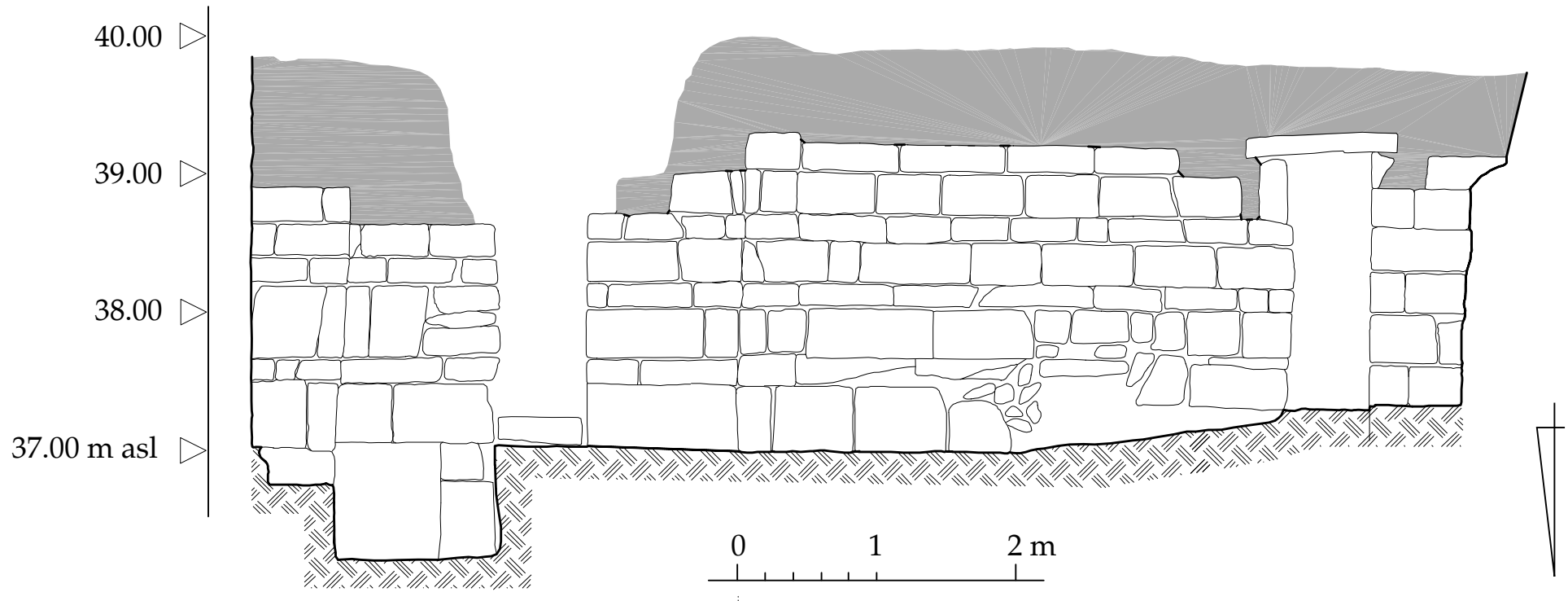


Fig. 5.2.7 North wall of the mastaba of Qar

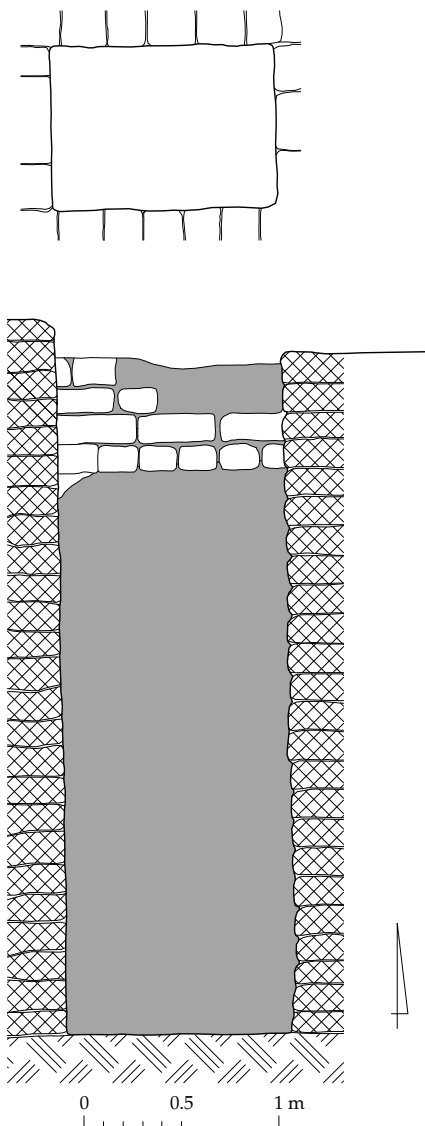


Fig. 5.2.8 Serdab 1 (Shaft 1)

mudbrick, and roughly hewn blocks of local limestone from the partially collapsed north wall of the mastaba (fig. 5.2.4). To the north of the entrance into Chapel 1 was a large mound measuring 3.0×3.0 m in ground plan and of max. 0.80 m thickness of debris with a large number of broken mudbricks.

About 0.60 m above the floor of Open Court 1, a large accumulation of 18, mainly decorated blocks from the chapel of Qar Junior was documented (figs. 5.2.5 and 5.2.6). The deposit started about 1 m to the north of the entrance into Chapel 1 and covered an area of 2.0×1.60 m (NS $\times$ EW). Interestingly, the blocks were laid flat on the surface of a sandy layer, most of them face up.⁵ More decorated fragments were found in the area, distributed in Layer 2, 1.20–0.60 m above the floor of the court. The relatively significant thickness of the layer and the homogeneity of the finds indicate that the layer developed quickly over a very short period of time, implying intentional dismantling of the decorated chapel of Qar Junior. Directly on the floor of the court were lying some more blocks and limestone altars. Resting on the floor in the central part of the court, limestone ceiling blocks originating from a dismantled chapel were found. To the south of them another destruction of mudbrick from the collapsed top of the north wall of the mastaba could be identified.

The south wall of the court, *i.e.* the northern façade of the tomb, was built of local limestone blocks in a very specific manner, using alternating courses of relatively high and low blocks. The low courses are only 0.08–0.14 m high and served as a kind of anchor for the other rows, thus improving stability of the constructed wall, because despite their height, they reached several decimetres into the wall. The high courses, on the other hand, more than 30 cm high, were only 0.15–0.25 cm in thickness (fig. 5.2.7).⁶ The same masonry technique may be found throughout the tomb complex.

5.2.1.2 Serdab 1

Embedded deep in the wall forming the south wall of the court a shaft was concealed (fig. 5.2.8). Only later did it become clear that this shaft must be interpreted as a serdab (labelled as Serdab 1). The mouth of Serdab 1 measured only 0.85×1.15 m and was 3.50 m deep. Its walls were lined with mudbricks measuring $40 \times 20 \times 15$ cm, laid in regular courses A-B-A.⁷ The walls were plastered with dark mud with a very high straw temper inclusion. The serdab was filled with wind blown sand. Clearly, the explanation of its position and function must be sought in the existence of the Open Court and cult activities connected with the basin. Serdab 1 is located roughly to the south of it, and thus a link between them may be supposed. It is rather unusual that there is no aperture connecting the serdab with the area to the north of it.⁸ It is possible, however, that the slot may have gone with the destruction of upper courses of the shaft and the limestone casing of the mastaba. Out of 118 tombs with serdabs collected by K. Lehmann from the Saqqara site, only a few have serdabs directly associated with courts. They are as follows: S 22, 25, 26, 46, 47, 49, 77, 113, and 118.⁹ From the serdab come two wooden left-hand arm fragments which indicate that at least two statues were displayed here (Excav. Nos. 154 and 155/GG/95).

5.2.1.3 Chapel 1

During the initial clearance works in the tomb it became evident that the mastaba was built of core mudbrick masonry (mudbricks of $36 \times 18 \times 12$ cm in size) joined

⁵ Excav. Nos. 21, 25–32, 34–41 and 44/GG/1995.

⁶ For parallels see Di. Arnold, *Building in Egypt. Pharaonic Stone Masonry* (New York, Oxford, 1991), 148, fig. 4.72–4 and 155, fig. 4.82–3b.

⁷ Spencer, *Brick Architecture*, Corpus, pl. 1, bond A1.

⁸ Lehmann, *Serdab in den Privatgräbern*, 45–46.

⁹ *Ibid.*, Katalog, 228–282.

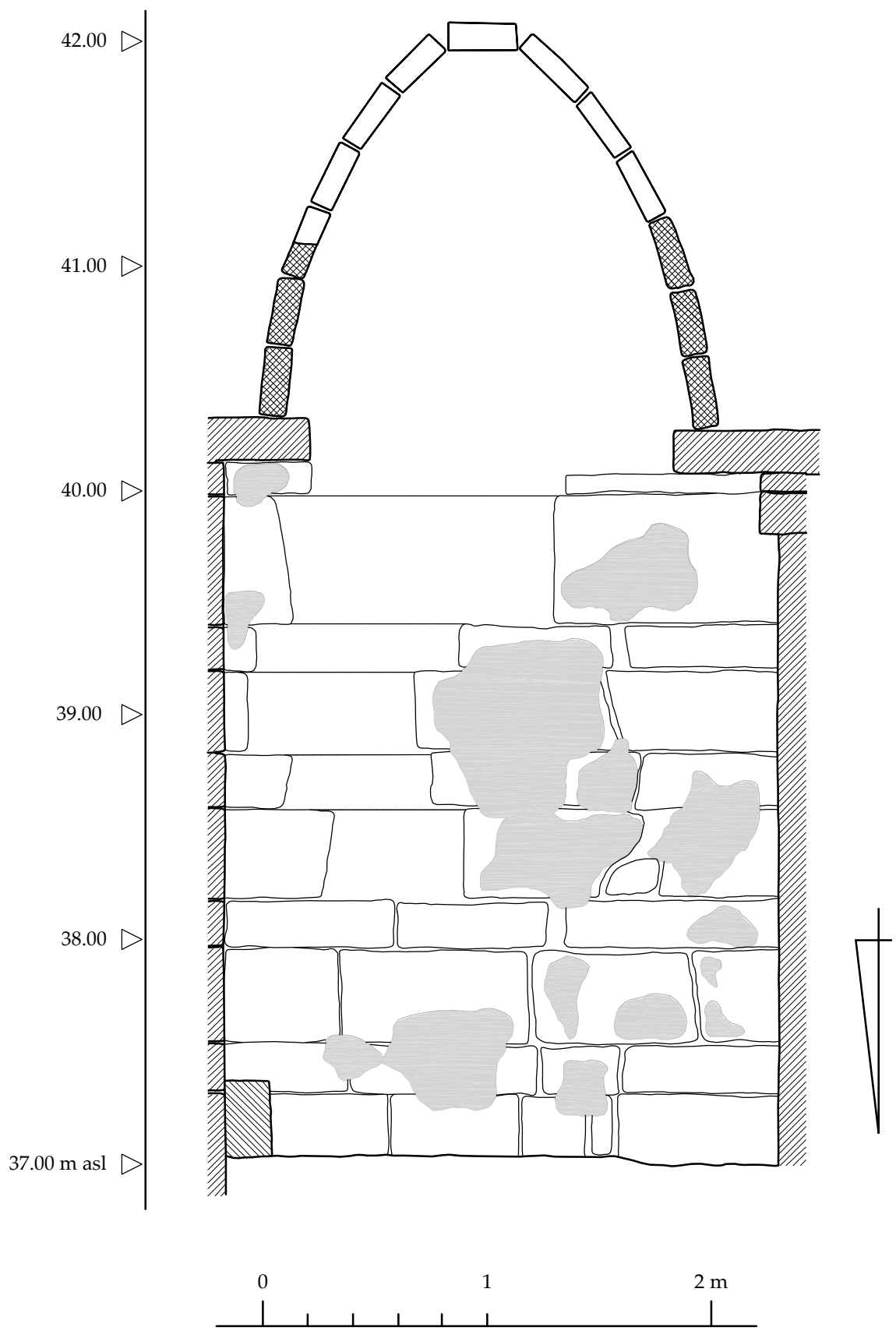


Fig. 5.2.9 East-west cross-section of Chapel 1

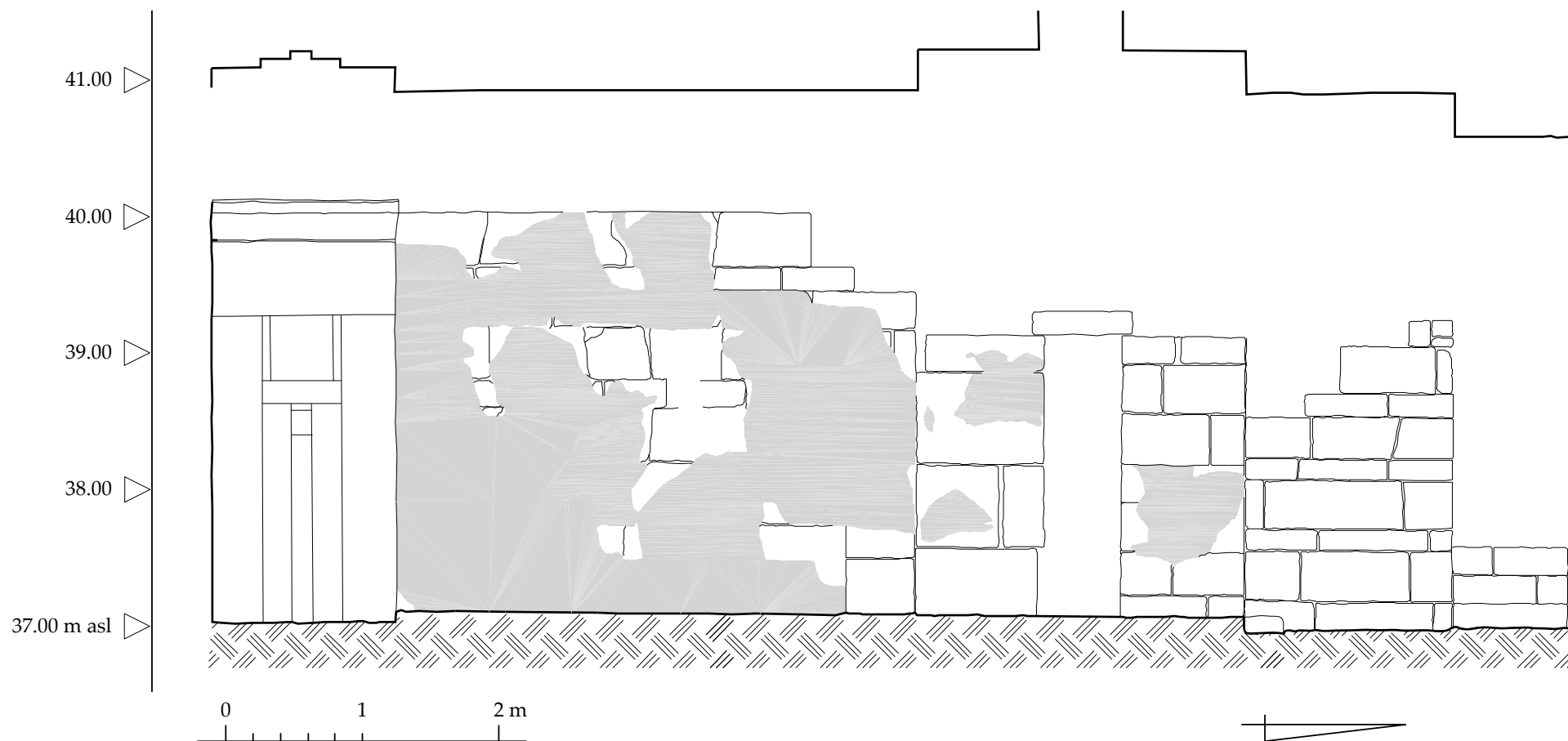


Fig. 5.2.10 West wall of Chapel 1

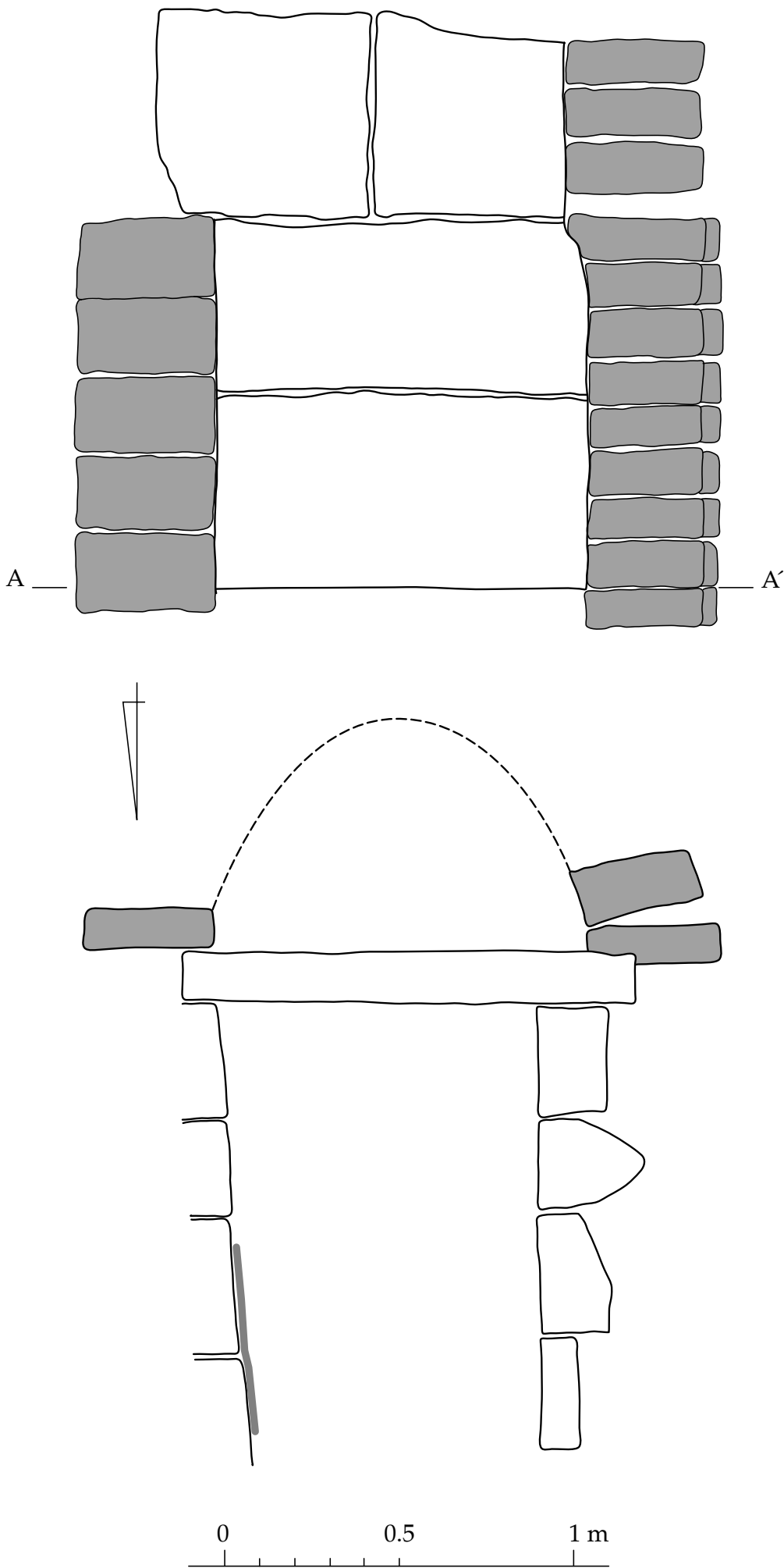


Fig. 5.2.11 East-west cross-section and ground plan of the ceiling construction above the corridor connecting Chapel 1 and 2

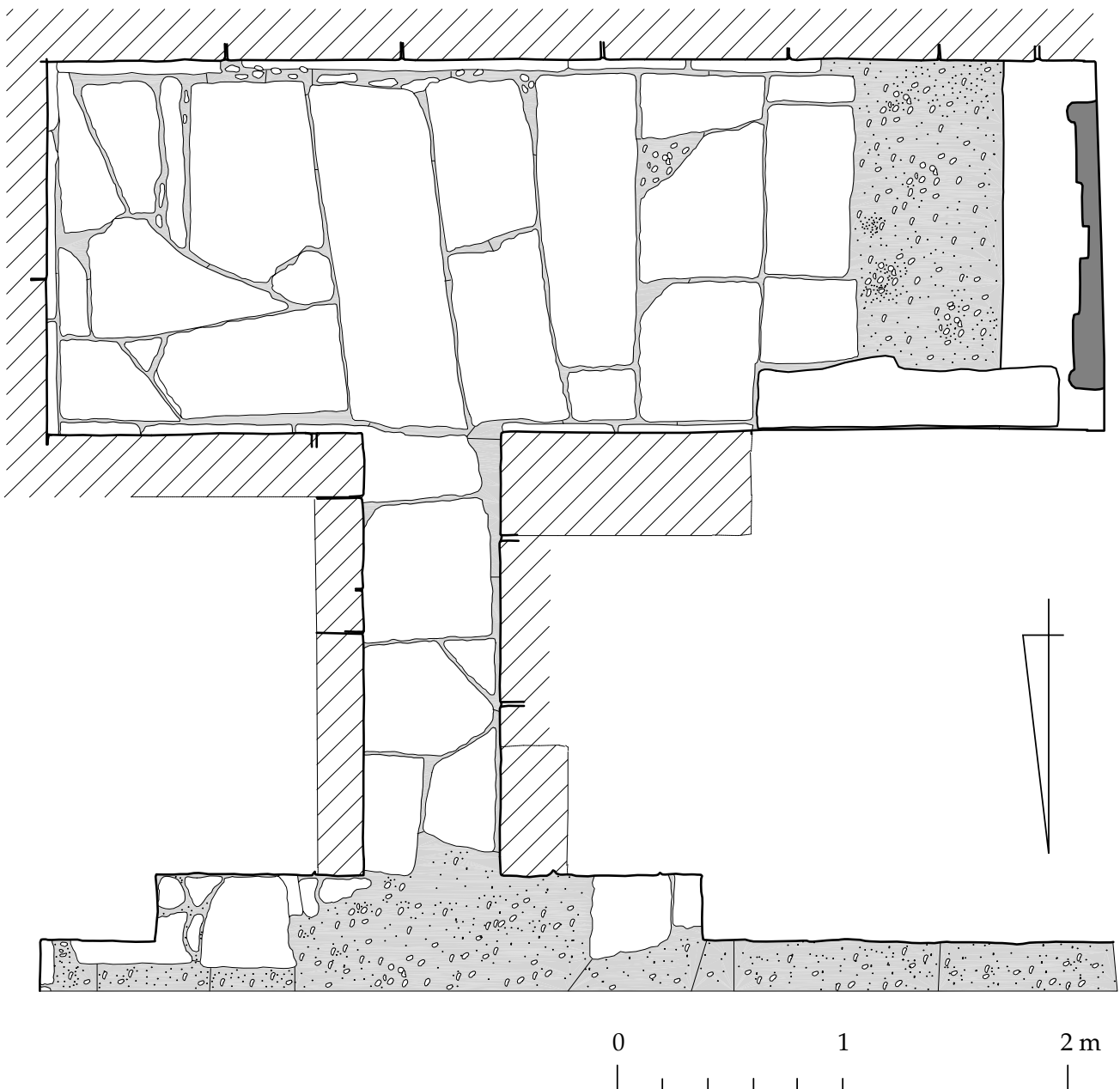


Fig. 5.2.12 Ground plan of
Chapel 2

with dark grey mortar. Most of the outer casing walls in the tomb were made of local greyish-white limestone blocks.¹⁰ The surface of the inner side walls in the mastaba was frequently covered with a thick coat of blackish plaster with a high ratio of organic inclusions.

In the first building stage, the tomb was conceived as a much smaller structure containing a north-south oriented chapel with a monolithic limestone false door embedded in the south end of the west wall. The ground plan of the chapel is irregular, due to its architectural design. It is entered from the south wall of Open Court 1, through a portico in its southeast corner. The portico is 2.90 m wide and 0.40 m deep; both wings measure 1.07 m. The entrance is 0.76 m wide and 0.80 m long. Its original height is a mere estimate at 1.80 m. Its floor is made of a single limestone block. In front of it was a small, about 20 cm high step made of two limestone blocks. After the entrance proper follows a small anteroom, 1.25 m long and 1.25 m wide. Its floor, which is flagged with limestone blocks is some 18 cm lower than the one in the entrance.

¹⁰ It is well possible that these blocks were procured in quarries located a short distance from the west of the tomb. See M. Verner, 'Abusir pyramids quarry and supply road', in Jánosi, ed., *Structure and Significance*, 531–538.

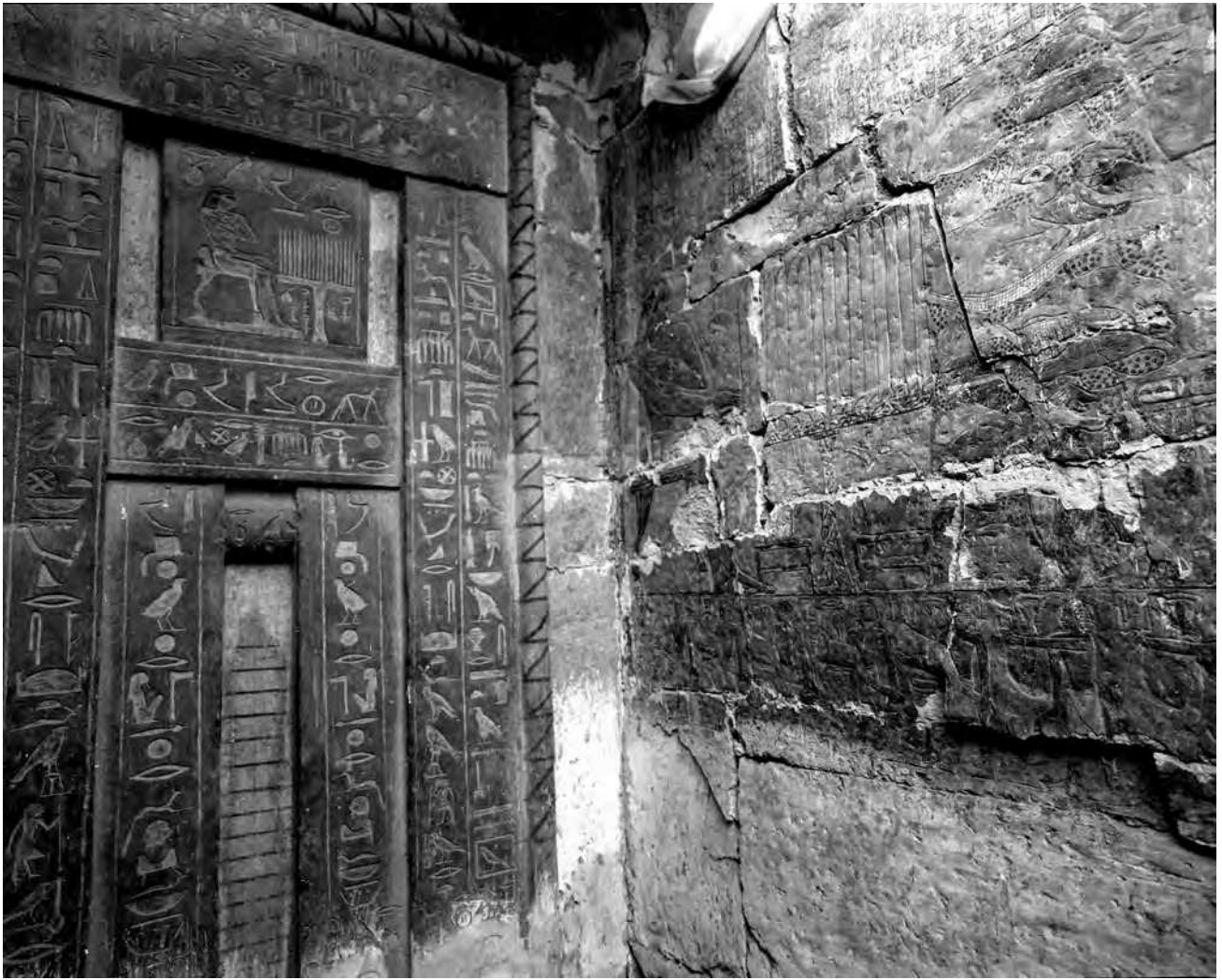


Fig. 5.2.13 Chapel 2, false door and north wall shortly after their discovery

The anteroom leads into a spacious corridor chapel orientated in a north-south direction, with a floor of beaten clay which is some 8 cm above the floor of the anteroom.¹¹ The two rooms are separated by a 30 cm wide threshold which rises 10 cm above the anteroom's floor. The basic measurements of Chapel 1 are 7.80×2.25 (2.46 m at the south wall). The height of the chapel side walls is 3.00 m. On the top of both the east and west walls were laid limestone blocks measuring approximately 1.20×0.50 m each and 0.50 m in thickness. These were arranged in a single row protruding about 1.00 m into the chapel (there were sixteen blocks on the top of the east wall and only five that remain *in situ* from the west wall). These blocks were intended to form a stone platform for the mudbrick vault representing the actual roof of the chapel. This structural element in the vault construction seems to be rather rare.¹² The remains of the vault were identified during the course of excavation in the southern part of the chapel. The vault was built of upright mudbricks measuring $30 \times 16/15 \times 12$ cm. Only the three lowest courses of this *voûte en berceau*, reaching a height of about 0.90 m and leaning against the south massive core of the mastaba, survived. It appears that the total height of the vault construction equalled 1.66 m, making the height of the chapel an impressive 5.00 m (fig. 5.2.9).¹³ Interestingly, the architecturally attested height of the chapel corresponds with the calculated result using S. Seidlmayer's formula, *i.e.* 4.92 m. The difference is only 8 cm.¹⁴

¹¹ Chapel of type 5a: Reisner, *Giza Necropolis I*, 256ff. and 257, fig. 158.

¹² S. El-Naggar, *Les voûtes dans l'architecture de l'Égypte ancienne*, BdE 128/1–2 (1999), *Planches*: pl. 2134ff.

¹³ For parallels see *ibid.*, *Texte*: 165ff., *Planches*: pl. 228, for instance.

¹⁴ Alexanian, *Dahschur II*, 33 and footnote 95, the formula being mastaba height = $3.5 + 0.06 \times$ length of the mastaba. See also *ibid.*, 34, fig. 13, depiction of the linear dependence between the length and the height of mastaba tombs.

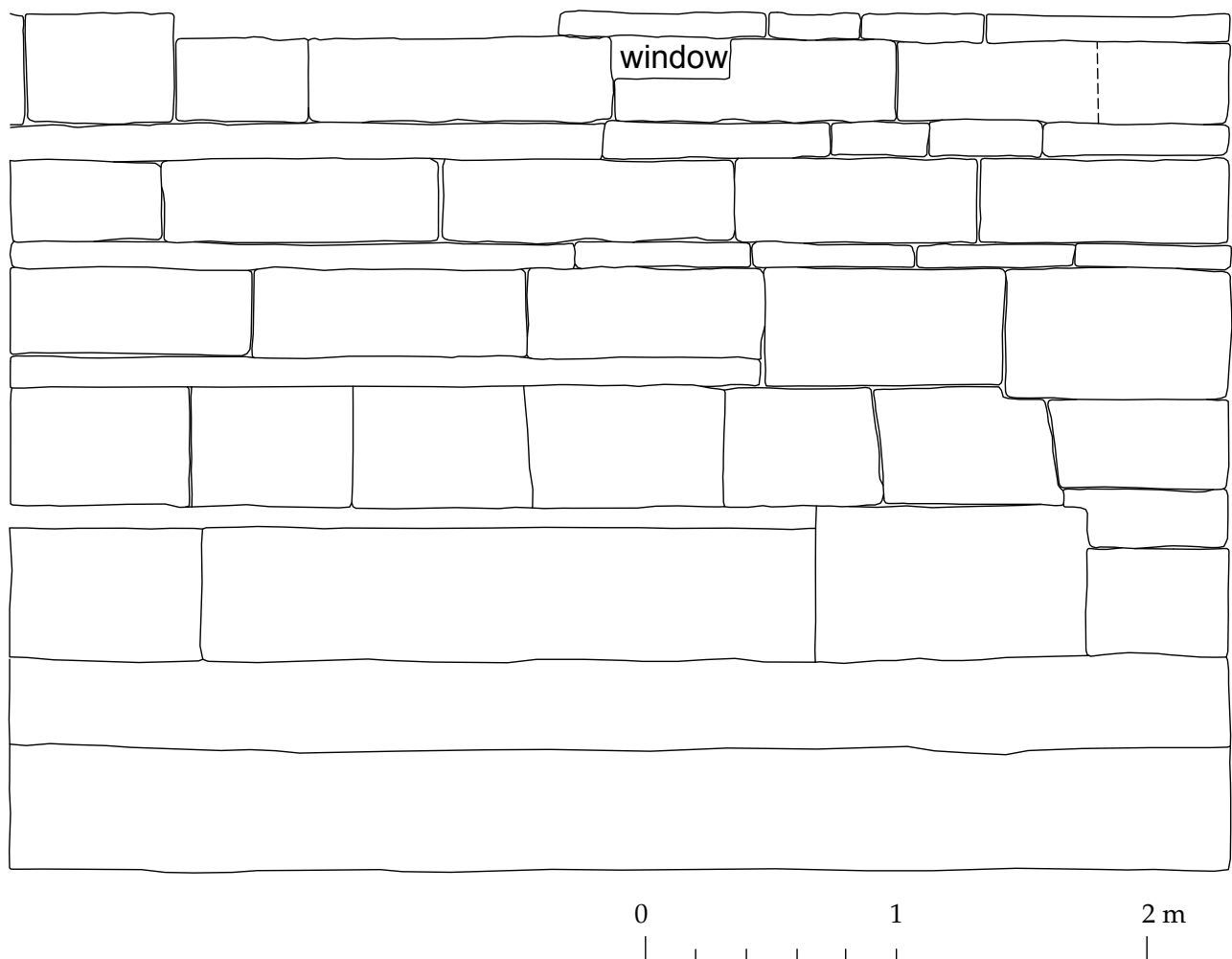


Fig. 5.2.14 Chapel 2, south wall scheme

At the south end of the west wall stood a monolithic limestone false door built of a single piece of limestone and decorated with sunken relief. The false door is 1.35 m wide and 2.92 m high. It is set in a 0.17 m deep niche embedded in the west wall, thus increasing the length of the south wall by 2.53 m. The floor in front of the false door is 10 cm lower than the surrounding terrain (5.2.10).

5.2.1.4 Chapel 2

Some time after the construction of Chapel 1 had begun, a decision was taken to build a new chapel which would better reflect the newly acquired status of Qar. This decision had to be taken relatively early as there are no traceable remains of subsequent building stages visible in the masonry of the tomb.

Close to the north end of the west wall of Chapel 1 is an entrance leading into a north-south running corridor. It is located 1.55 m south of the entrance connecting Open Court 1 with Chapel 1. It is in the centre of a 2.40 m long and 0.30 m deep recess (the north wing is 0.90 m and the south one 0.94 m wide) and it is 0.58 m wide, 0.90 m long and 2.02 m high. A similar recess is also at its western end, this time only 1.05 m wide and 0.50 m deep. The passage opens into a 7.90 m long, 1.00 m wide and 3.80 m high corridor continuing to the south. Originally, it was also covered with roofing limestone blocks. The ceiling of the room was painted pink with black dots imitating red granite. Only three ceiling blocks were found *in situ*; most of them probably fell down into the room after a period of disuse. Originally, above the ceiling blocks a mudbrick vault was built of which only the two lowest courses of bricks ($40 \times 18 \times 12$ cm) were preserved. Its height may be estimated at 0.60–0.70 m (fig. 5.2.11).

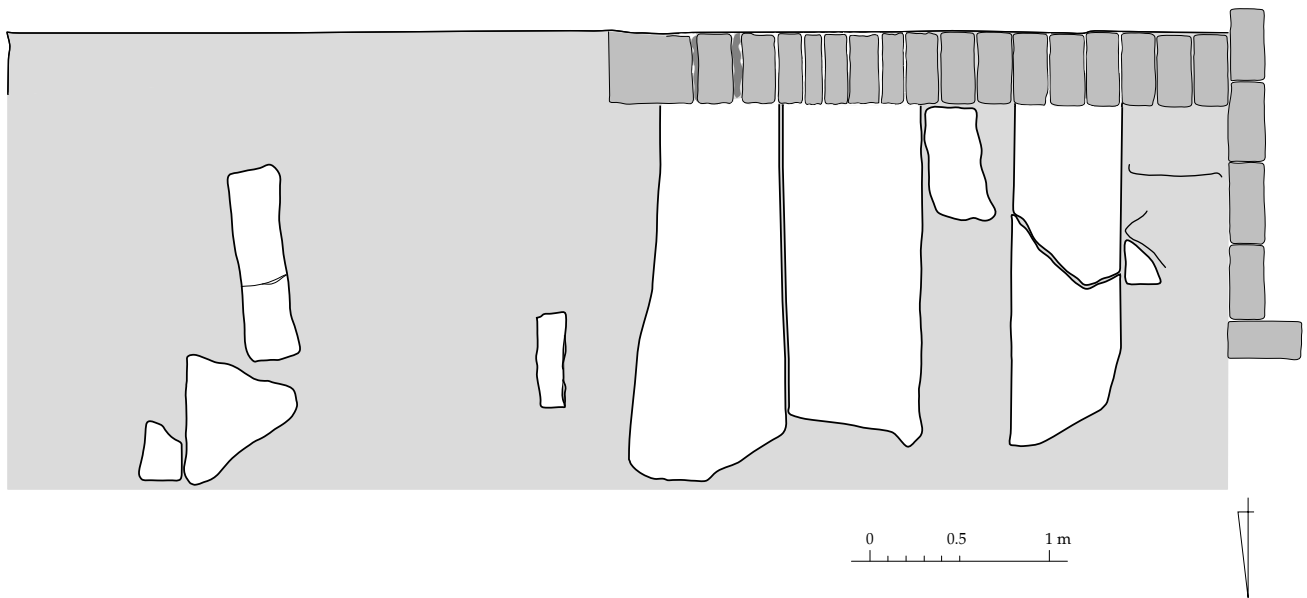


Fig. 5.2.15 Chapel 2, roofing blocks

The walls of the corridor were built of local limestone blocks plastered with a thick black coat with large inclusions of well-visible organic articles. The plaster is in some places more than 0.5–1.0 cm in thickness. Its floor is made of beaten clay. A short distance from the entrance of Chapel 1 is an east-west dry-laid mudbrick wall. It indicates that the entrance into Chapel 2 was closed at a certain stage.

The south end of the corridor narrows down into a passage that is 1.45 m long, 0.60 m wide and 2.08 m high. It opens into an east-west orientated anteroom measuring 5.10×1.30 m. It was probably open, as no traces of any ceiling could be found. In its south wall a portico, 2.52 m wide and 0.30 m deep, opens into a short, 1.95 m long, 0.65 m wide, and 2.30 m high corridor. It leads into Chapel 2, an east-west orientated room measuring 4.86×1.73 m in ground plan (8.41 sq. m) with a height of 3.47 m.¹⁵ In its western part, next to the north wall, there is a limestone bench 1.44 m long, 0.36 m wide and 0.40 m high. The floor of the chapel is flagged with limestone. In contrast to Qar's original chapel, it was fully decorated. Its western wall comprises a monolithic limestone false door measuring 3.18×1.30 m (fig. 5.2.12).

The decoration of the chapel starts at a height of 1.33 m above floor level. The technique used for erecting the walls of the chapel consisted of using regular courses of relatively high and low blocks of limestone such as the ones described above (figs. 5.2.13 and 5.2.14). High in the west wall of the chapel, starting 2.40 m to the west of the eastern wall and 3.20 m above the floor of the chapel, there was a small window connecting the chapel of Qar with the entrance façade of the tomb of his son, Inti. The window is 0.44 m wide and 0.16 m high. When excavated, the chapel was found still with original, roughly cut roofing slabs (fig. 5.2.15). These had to be removed in order to protect the workmen working inside the chapel.¹⁶ Above the chapel a mudbrick vault was built of bricks measuring $40 \times 20 \times 15$ cm. The three lowest courses that were preserved show that the bricks were mounted in an upright position, leaning against the western wall of the mastaba superstructure. The estimated height of this original vault is approximately 0.80–0.90 m (figs. 5.2.16–17).

5.2.1.5 Serdab 2 (figs. 5.2.18–20)

Some 2.15 m to the west of Chapel 2, the east-west oriented and remarkably well-preserved Serdab 2 was built. The serdab itself was sunk 0.50 m into the mass of the

¹⁵ Type 7a: Reisner, *Giza Necropolis I*, 260 and 262ff. The same type is in Abusir known from the tomb of the vizier Ptahshepses and Ptahshepses Junior: cf. M. Bárta, 'The Tomb of Ptahshepses Junior II at Abusir', *Ägypten und Levante X* (2000), 55–56 and 47, fig. 2. This type emerges during the reign of Nyuserra.

¹⁶ They closely resemble those found over an early Sixth Dynasty chapel of Idut at Saqqara, Macramallah, *Idout*, pl. 4.

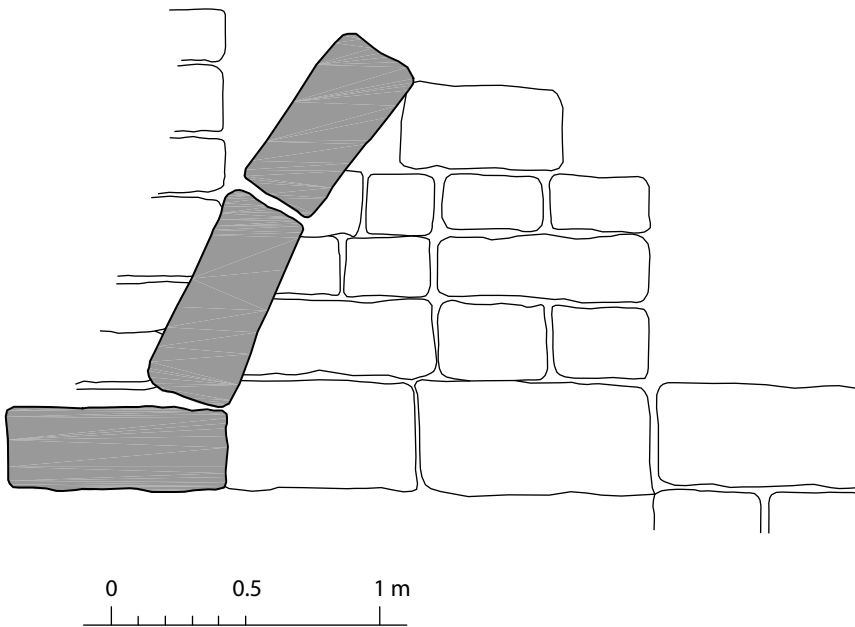


Fig. 5.2.16 Chapel 2, roofing vault

walls were built 1.30 m apart from each other. Their only function was to provide a platform for the construction of a mudbrick vault that was 1.02 m high. The mudbricks used for the construction of the vault measured $0.36 \times 0.18 \times 0.14$ m (figs. 5.2.18–20).

To date, the tomb of Qar has been only the fifth known example from Saqqara to contain two serdabs. The other four known tombs are the tomb of Kai (D 19/1), Ti (D 22), Raneferefankh, and Ptahenuikai.¹⁷ The statuary found in Serdab 2 (Excav. Nos. 128–130/GG/95) confirms that originally, the serdab was equipped with at least one wooden statue. The finds from Shaft 6 (see below, Excav. Nos. 33 and 156/GG/95) suggest that the number could have been higher and a stone statue could have originally been placed in the room.

Fig. 5.2.17 Chapel 2, roofing vault

¹⁷ Lehmann, *Serdab in den Privatgräbern*, Katalog, S 25 and S 26, S 29, S 43, S 49.

mastaba. It is 3.06 m long, 1.25 m wide, and 2.00 m high. Its walls were built of seven courses of limestone blocks that were covered with white plaster. Even the roofing blocks of local limestone were found *in situ*. They were eight in number, of different dimensions and measuring 0.16 m in thickness. The gaps between the blocks were filled with mud mortar. The room was filled with grey sand with fragments of mudbrick and contained sporadic finds. Its floor consisted of beaten tafl. At a height of 1.48 m above the floor, in the east wall, there was a window connecting the room with Chapel 2. The window was 0.32 m high and 0.09 m wide. Above the north and south roofing blocks, 0.84 m high mudbrick



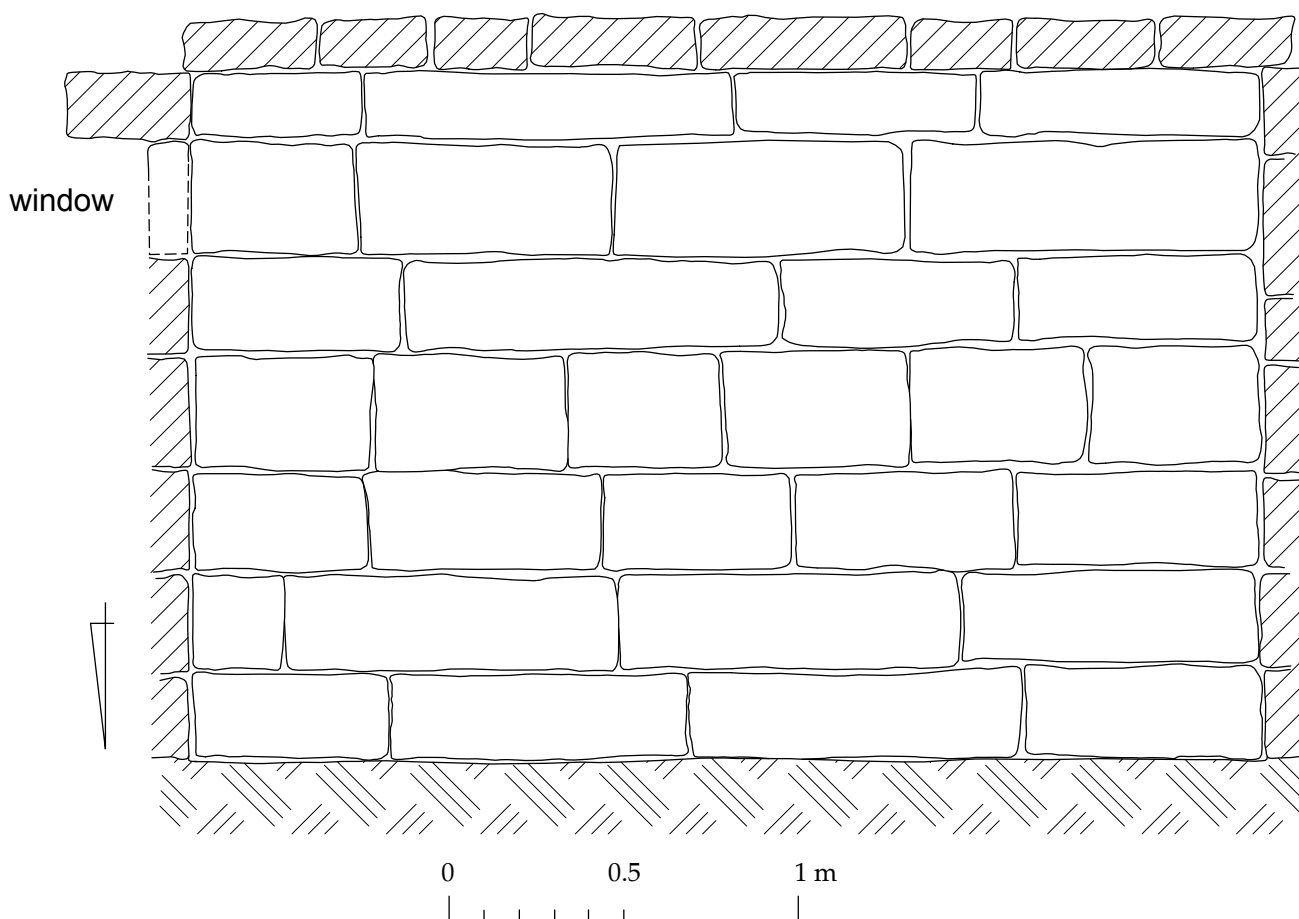


Fig. 5.2.18 Serdab 2, south wall scheme

5.2.1.6 Corridor chapel

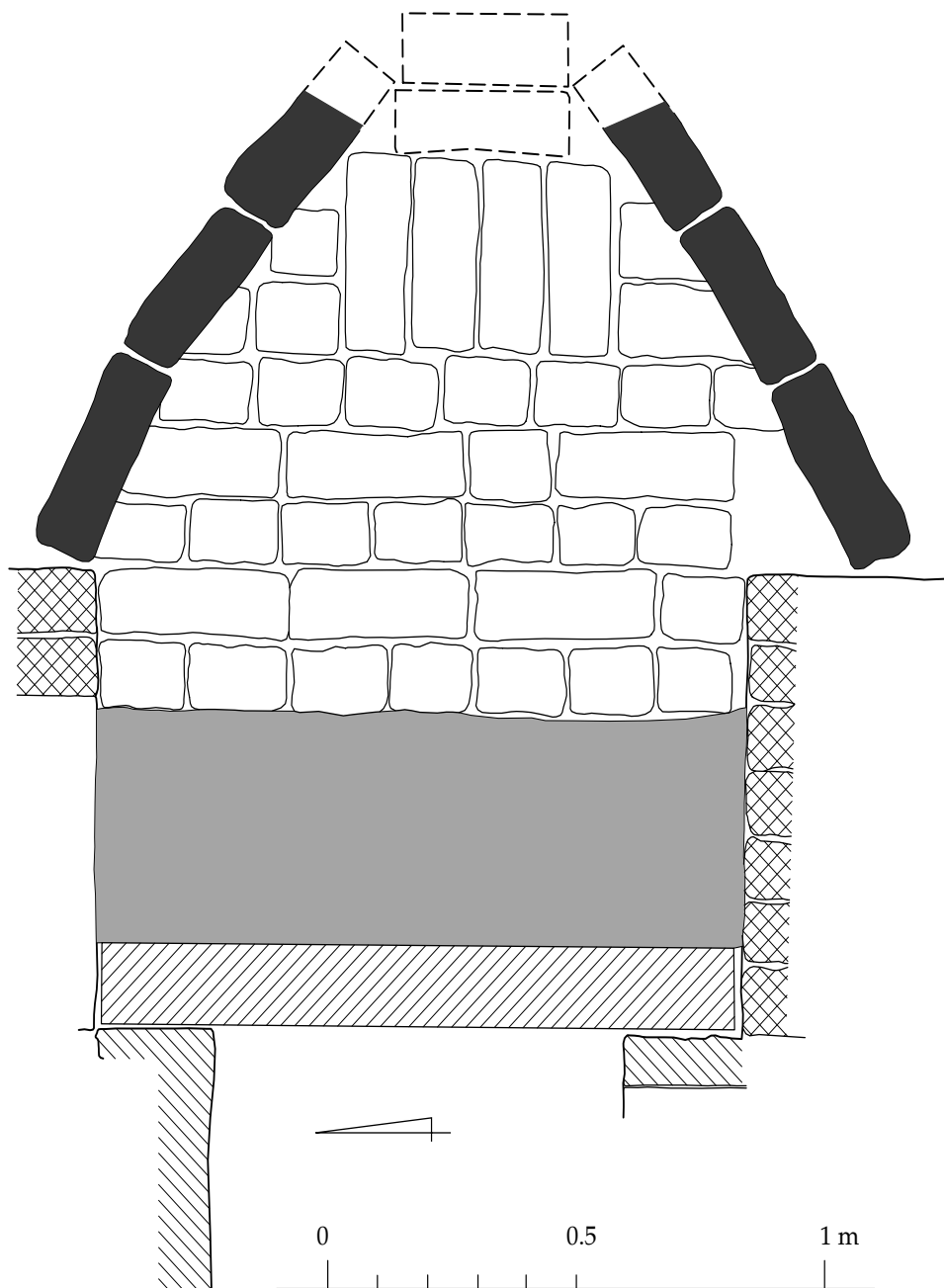
This chapel was built as an integral part of the tomb complex for the unified cult of another six persons, possibly relatives of the tomb owner Qar.¹⁸ The corridor chapel is entered from the Open Court through a short passage which is 0.60 m wide, 1.60 m long, and 1.84 m high (fig. 5.2.21). It opens into a long corridor that was 13.63 m long and 0.88 m wide. Its maximum preserved height was 4.20 m. It is interesting to compare the building techniques applied in this part of the complex. The passage has both side walls built of local limestone. The change in the building material used becomes apparent upon entering the corridor proper. While its eastern wall is built of limestone blocks, the western wall is built of mudbrick laid in regular courses of headers and stretchers (measuring 40 × 18 × 14 cm), mud-plastered and whitewashed. The western wall conceals a total of six cult niches corresponding directly with shaft openings situated some 1.20 m further to the west (Shafts 2–7) (figs. 5.2.22–23).

Proceeding from the north, Niche 1 (corresponding with Shaft 2) is double recessed, 0.62 m wide, with a central recess 0.18 m wide and 0.28 m deep. The total depth of the niche is 0.52 m. Its lower part is completely damaged but it may be estimated that its original height was about 2.00 m, its upper end being topped by a limestone block. The niche started about 0.24 m above the floor level. Some 0.30 m south of Niche 1, a 0.24 m high mudbrick threshold (mudbricks 40 × 18 × 14 cm) runs across the corridor. South of the threshold the floor of the corridor sinks about 0.60 m below the top of the threshold and is thus 0.36 m below the floor at Niche 1.

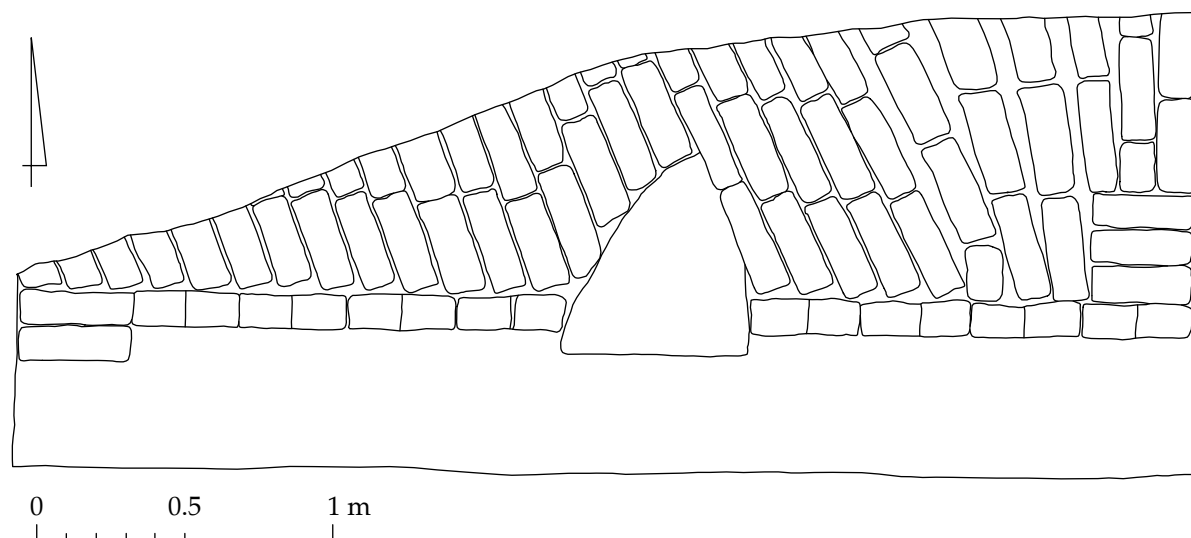
Niche 2 (Shaft 3) is double recessed, 0.66 m wide and 0.50 m deep, with a central recess 0.18 m wide and 0.26 m deep. It starts 0.64 m above the floor and is 1.96 m high.

¹⁸ For corridor chapels see Reisner, *Giza Necropolis I*, 185 and 256ff. For this type in Abusir South see Bárta, *Abusir V*, 22, fig. 2.2, LA – Tomb 6; 56, fig. 3.1, tombs of Fetekty and Mety, Hetepi, Rahotep and Isesiseneb, Tomb I–IV; L. Bareš, M. Bárta, K. Smoláriková, E. Strouhal, 'Abusir – Spring 2002', *ZAS* 130, 2 (2003), 156, fig. 2.

Fig. 5.2.19 Serdab 2, roofing construction



▼ Fig. 5.2.20 Serdab 2, south part of the mudbrick vault



Niche 3 (Shaft 4) is double recessed, 0.62 m wide and 0.44 m deep, and the central niche is 0.20 m wide and 0.22 m deep. It starts 0.72 m above the floor level. At the bottom of the niche, sunk in its floor, was a limestone offering plate without any inscription (Excav. No. 146/GG/95). Its measurements are $0.52 \times 0.32 \times 0.05$ m. Due to its dimensions, the plate reaches into the corridor, and so it was necessary to build a mudbrick platform in front of the niche that would support the plate in its position. The platform is 1.40 m long, 0.16 m wide and 0.72 m high.

Niche 4 (Shaft 5) is single recessed and starts at the bottom of the corridor. It is 2.70 m high, 1.00 m wide and 0.24 m deep, and is topped by a 0.16 m high limestone lintel running the width of the niche.

Niche 5 (Shaft 6) is single recessed and starts at the bottom of the corridor. It is 2.70 m high, 0.92 m wide and 0.22 m deep.

Niche 6 (Shaft 7) is double-recessed and starts at the bottom of the corridor. It is 2.70 m high, 0.64 m wide and 0.50 m deep and its central niche is 0.22 m wide and 0.24 m deep. It is topped by 0.12 m high limestone lintel running the width of the niche. It is only at the very end of the corridor that the highest section of the west wall has been preserved, reaching a height of 4.20 m which is probably close to the original height of the chapel.



Fig. 5.2.21 Corridor chapel, entrance

5.2.2 Substructure of the tomb

5.2.2.1 Burial chamber of the vizier Qar (figs. 5.2.24–29)

The entrance into the burial chamber of the vizier Qar starts in the south-east corner of the Open Court. It assumes the form of a shallow pit sunk in the floor of the court. The pit is 1.80 m long, 0.90 m wide and 0.40 m deep, its last 0.60 m on the south sloping to the south at an angle of 9° . The floor and the side walls of the pit are built of worked limestone blocks. Its floor was originally plastered with dark mud. In its south wall is a rectangular opening 0.90 m wide and 0.85 m high which provides the entrance into a descending corridor. The corridor leads to the burial chamber and is 13.80 m long (descending at an angle of $29^\circ 30'$), 0.85 m high and 0.70 m wide, and opens into a spacious burial chamber.¹⁹ The chamber is located precisely below Chapel 2. It is entered through an opening 0.70 m wide and 1.75 m high which starts about 0.70 m above the floor of the chamber. From there a descending ramp was built (it was originally 4.35 m long – its currently preserved length is 2.35 m and it is 1.35 m wide). The chamber's outer walls were built of local limestone lumps and its core was filled with loose *tafl*.

The walls of the chamber proper rest on a limestone base built of small blocks reaching about 10 cm above the floor and protruding some 10 cm into the room. The walls were dressed with local limestone blocks. These were arranged in regular alternating courses of large, 0.35–0.55 m high blocks and 'anchor' stones about 0.10 m high, reaching deeper into the wall and thus providing additional stability for the casing as was the case in Chapel 2. The chamber may be divided into two parts of equal height (3.07 m). Its ceiling is cut out of the bedrock and sprinkled with black and pink-red paint to imitate red granite. Given the size of the sarcophagus chest ($3.08 \times 1.50 \times 1.42$ m), it becomes evident that the sarcophagus was lowered into the burial chamber by means of an inclined plane descending into the chamber from the north. The plane was later on converted into a proper, limestone lined sloping passage.

¹⁹ Type 9, cf. Reisner, *Giza Necropolis I*, 150ff.

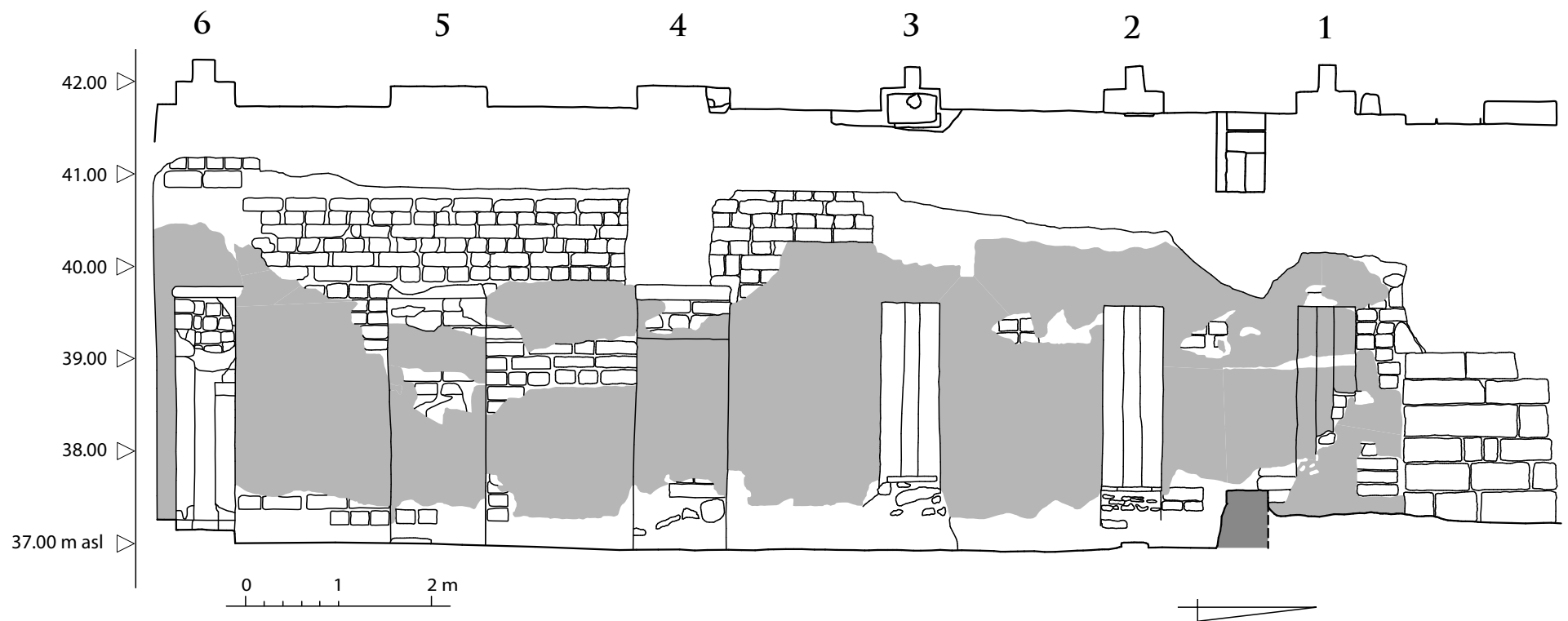


Fig. 5.2.22 Corridor chapel, west wall



Fig. 5.2.23 Corridor chapel,
Niche 1

The eastern part of the chamber is 5.15 m long (NS) and 2.68 m wide (EW). Its east and south walls suffered considerable damage caused by the robbers who removed some casing blocks while searching for hidden treasures. Another such hole is visible above the entrance into the burial chamber, high up in the north wall.

The western part, a large sarcophagus recess, measures 3.83×2.92 m. There is a ledge cut in the west wall of the recess. It starts 1.50 m above the floor and is 0.80 m wide. It was used to support the sarcophagus lid before the sealing of the burial. The sarcophagus chest measures 3.08×1.50 m and is 1.42 m high. Its inside measurements are $2.22 \times 0.68 \times 0.73$ m. The lid is 2.92 m long, 1.45 m wide and 0.60 m high, with two rounded handles on both the north and the south.²⁰ The southern part of the east face of the chest is broken due to a huge robbers' hole which is 2.50 m long and 1.20 m high. A substantial part of the sarcophagus' interior is blackened, suggesting a fire. Lying on the floor of the sarcophagus chest were found bits of human bones and some other material including organic remains (*pls. 7a and b*).

5.2.2.2 Western burial apartments

Shaft 2 (*figs 5.2.30–31 and 42*)

Shaft opening 1.25 (NS) $\times$ 1.40 (EW) m, the depth 10.20 m (lining with mudbrick of $0.40 \times 0.20 \times 0.15$ m to a depth of 7.55 m in regular courses of headers and stretchers). All the way down was a homogenous fill of wind blown sand.

At the bottom of the shaft, an opening in the north wall measuring 1.70×1.80 m leads into a chamber of 3.00×2.02 m in ground plan and 1.80 m high, orientated in the north-south direction and containing a limestone sarcophagus orientated in the same direction.²¹ The sarcophagus was found robbed. Its chest measures $2.00 \times 0.86 \times 0.90$ m on the outside and $1.62 \times 0.50 \times 0.50$ m on the inside. The lid is flat and identical in dimensions (2.00×0.86 m but only 0.35 m high).

²⁰ Donadoni Roveri, *I sarcofagi egizi*, 64–65, lid of the Type A, 66 and fig. 12a.

²¹ Burial chamber of Type 6, cf. Reisner, *Giza Necropolis I*, 95–97.

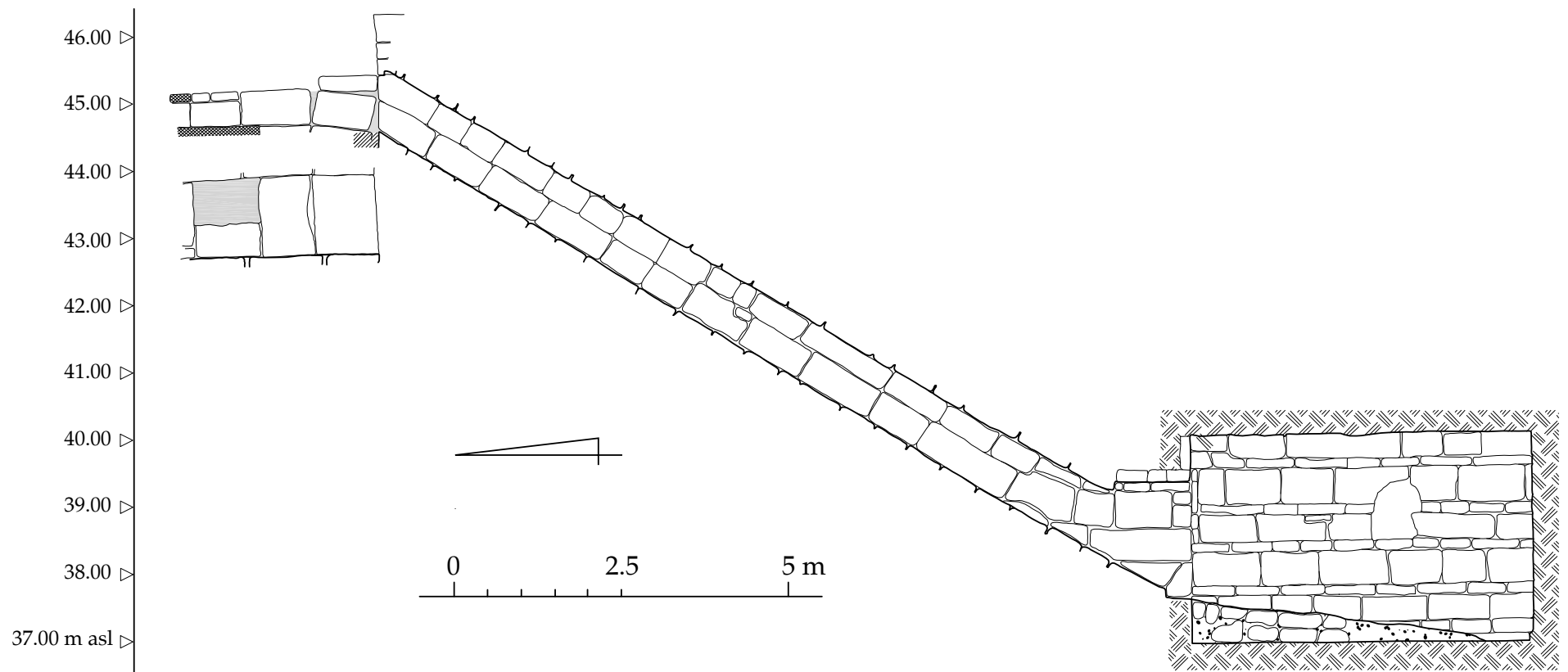


Fig. 5.2.24 Burial chamber of Qar, north-south cross-section



Fig. 5.2.25 Burial chamber of Qar, entrance from Open Court 1

Shaft 3 (fig. 5.2.32)

Shaft opening 1.25 (NS) $\times$ 1.50 (EW) m, the depth 8.00 m (lining with mudbrick of 0.40 $\times$ 0.20 $\times$ 0.14 m to a depth of 5.00 m in regular courses of headers and stretchers). All the way down the shaft was a homogenous fill of wind blown sand. At a depth of 5.00 m the east-west width of the shaft narrowed down by 0.15 m owing to a rock left behind in the west wall which continues to the shaft's very bottom. The shaft had never been used.

Shaft 4 (figs. 5.2.33–34)

Shaft opening 1.35 (NS) $\times$ 1.60 (EW) m, the depth 11.00 m (lining with mudbrick of 0.40 $\times$ 0.20 $\times$ 0.15 m to a depth of 7.20 m in regular courses of headers and stretchers). Between 7.20–8.00 m long limestone chips were used to line the wall, instead of mudbrick. The remaining section of the shaft walls were hewn from *tafl* bedrock and was left bare. All the way down the shaft was a homogenous fill of wind blown sand mixed with decayed mudbrick and limestone blocks (reaching to a depth of some 0.60 m). At the bottom of the shaft, an opening cut into its eastern wall and measuring 1.40 $\times$ 1.50 m gives access to a burial chamber that was left unexcavated due to the collapsed ceiling.²² Only its basic dimensions could be obtained – 2.90 $\times$ 1.40 $\times$ 1.50 m. It is uncertain whether or not there was a sarcophagus in the shaft.

Shaft 5 (figs. 5.2.35–39 and 5.2.42)

Shaft opening 1.60 (NS) $\times$ 1.70 (EW) m, the depth 13.30 m (lining with mudbrick of 0.40 $\times$ 0.20 $\times$ 0.15 m to a depth of 7.20 m in regular courses of headers and stretchers). At a depth of 7.20–8.00 m, the side walls of the shaft were reinforced with limestone chips. The remaining part of the shaft walls was left unlined. All the way down the shaft was a homogenous fill of wind blown sand. At the bottom of the shaft, cut into the western wall, was a 1.60 $\times$ 1.75 m opening, 0.80 m long, leading into a north-south

²² Burial chamber of Type 6, cf. Reisner, *Giza Necropolis I*, 95–97.

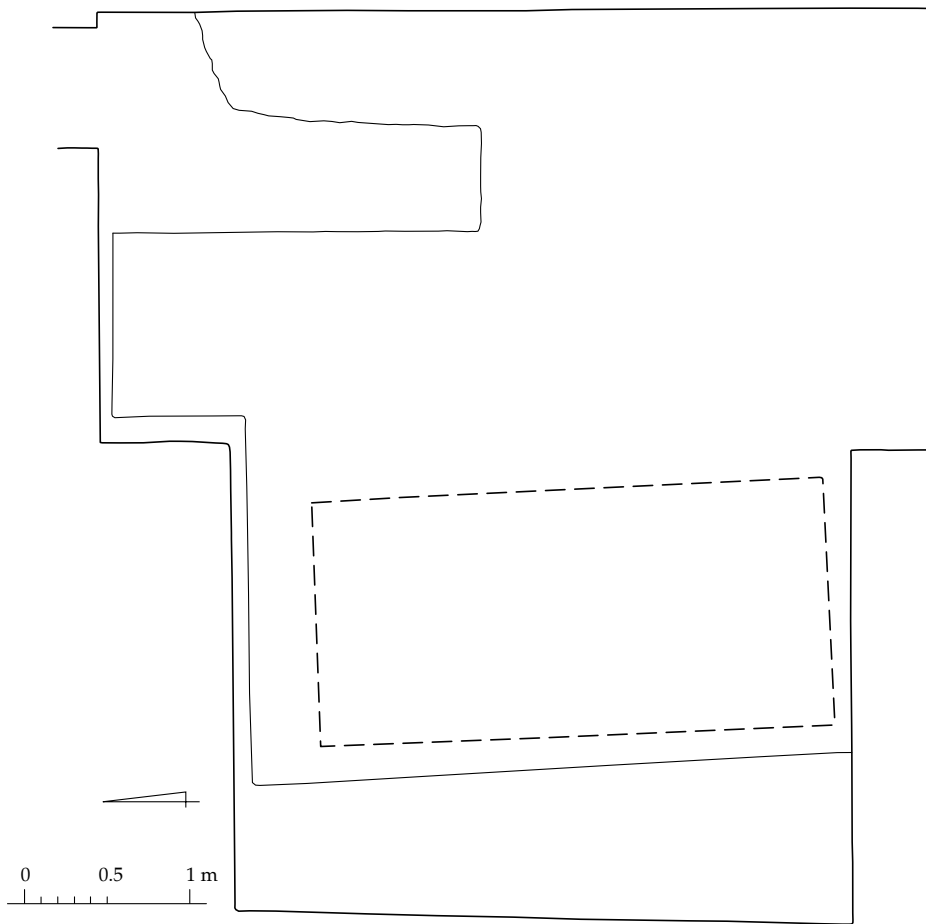


Fig. 5.2.26 Burial chamber of Qar, ground plan

2.00 × 0.50 × 0.35 m on the inside. The lid measures 2.50 × 1.00 × 0.30 m and its upper side is shaped into a slight curve rising some 0.08 m in the centre. The fissure between the chest and the lid was carefully filled with white mortar, evidence that the sarcophagus was not robbed. When the lid was moved aside, a male burial lying on his back, with the head oriented to the north, was discovered. Inside the chamber the original burial equipment was found. South of the sarcophagus originally was a wooden box (now decayed) containing four canopics made of limestone. To the east of the sarcophagus, lying on the ramp, were three partially sealed Nile mud jugs. At the northeast corner of the chest, cattle bones and another jar were found.

Interesting evidence has emerged thanks to the discovery of three pebbles that were lying close to the chest at the west end of the ramp. The fourth pebble was found towards the southeast corner of the chest. These pebbles bore original traces of green copper ore. On closer inspection, the sarcophagus showed that there had been an unsuccessful attempt to cut through its south wall. This had clearly happened before the tomb was sealed and the shaft filled.

Shaft 6 (figs. 5.2.40 and 5.2.42)

Shaft opening 1.70 (NS) × 1.75 (EW) m, depth 13.80 m (lining with mudbrick of 0.40 × 0.20 × 0.15 m to a depth of 7.20 m in regular courses of headers and stretchers). Between 7.20–8.40 m long limestone chips were used instead of mudbrick. The remaining section of the shaft walls hewn from *tafl* bedrock and left bare. The shaft was filled with a homogenous fill of wind blown sand mixed with limestone flakes. At a depth of 3.00 - 4.00 m, pieces of wood from a destroyed coffin were found, together with the remains of bandages (some with white plaster) and fragments of Old Kingdom pottery, including Meidum ware. At the narrow bottom of the shaft (measuring only

oriented chamber with a limestone sarcophagus.²³ The total length and height of the passage was blocked by a stone wall built of carefully arranged limestone blocks. This wall was found *in situ* when we reached the bottom of the shaft. Its lower part consisted of a ramp rising from east to west which reaches the upper edge of the sarcophagus chest. The ramp was used during the transportation of the lid into the chamber. The stone wall proper, protecting the entrance into the burial chamber, was built only atop the ramp (some 0.60 m above the floor level of the shaft). A vertical joint discernible in the wall suggests it was erected in two different stages.

The chamber measures 4.00 × 2.00 × 1.80 m. Most of it is taken up by a huge limestone sarcophagus measuring 2.50 × 1.00 × 0.75 m (the chest) and

²³ Burial chamber of Type 4, cf. Reisner, *Giza Necropolis I*, 94.



Fig. 5.2.27 Burial chamber of Qar, entrance from the north

1.40 × 1.70 m), an opening in the south wall measuring 1.70 × 1.85 m leads into a north-south orientated burial chamber.²⁴ The chamber measures 4.95 × 3.00 × 1.90 m. Most of the area is taken up by a limestone sarcophagus orientated at north-south direction, with the long axis shifted slightly to the south-west. The chest measures 2.70 × 1.05 × 1.15 m on the outside and 2.00 × 0.55 × 0.40 m on the inside. The lid measures 2.60 × 1.05 × 0.35 m. At the southern wall of the chamber is a ledge 1.00 m deep and 1.05 m high on which the lid rested prior to the burial.

In the fill and at the bottom of the shaft two statue fragments were found, one made of wood and another one of red granite and both of them in clearly secondary contexts. Given the proximity of Serdab 2, it is likely that they originally came from there.

Shaft 7 (fig 5.2.41)

Shaft opening 1.45 (NS) × 1.50 (EW) m, the depth 9.00 m (lining with mudbrick of 0.38 × 0.17 × 0.13 m to a depth of 0.60 m in regular courses of headers and stretchers). All the way down the shaft was a homogenous fill of wind blown sand. At a depth of 3.00–3.70 m pieces of wood from a destroyed coffin were found, together with the remains of bandages (some with white plaster) and fragments of Old Kingdom pottery, including Meidum ware. The shaft was never used. We may assume that the shaft was used for storing superfluous items from the mummification ritual.

Interestingly, all shafts were equipped with a corresponding niche in the Corridor chapel. Despite this formal appearance, Shafts 3 and 7 were never used for burials, even though they had been excavated to their definite depth. At least in the case of Shaft 7 we may assume that the cult niche was considered appropriate even though the shaft had been used for a ritual burial of mummification artefacts.

²⁴ Burial chamber of Type 6, cf. Reisner, *Giza Necropolis I*, 95–97.

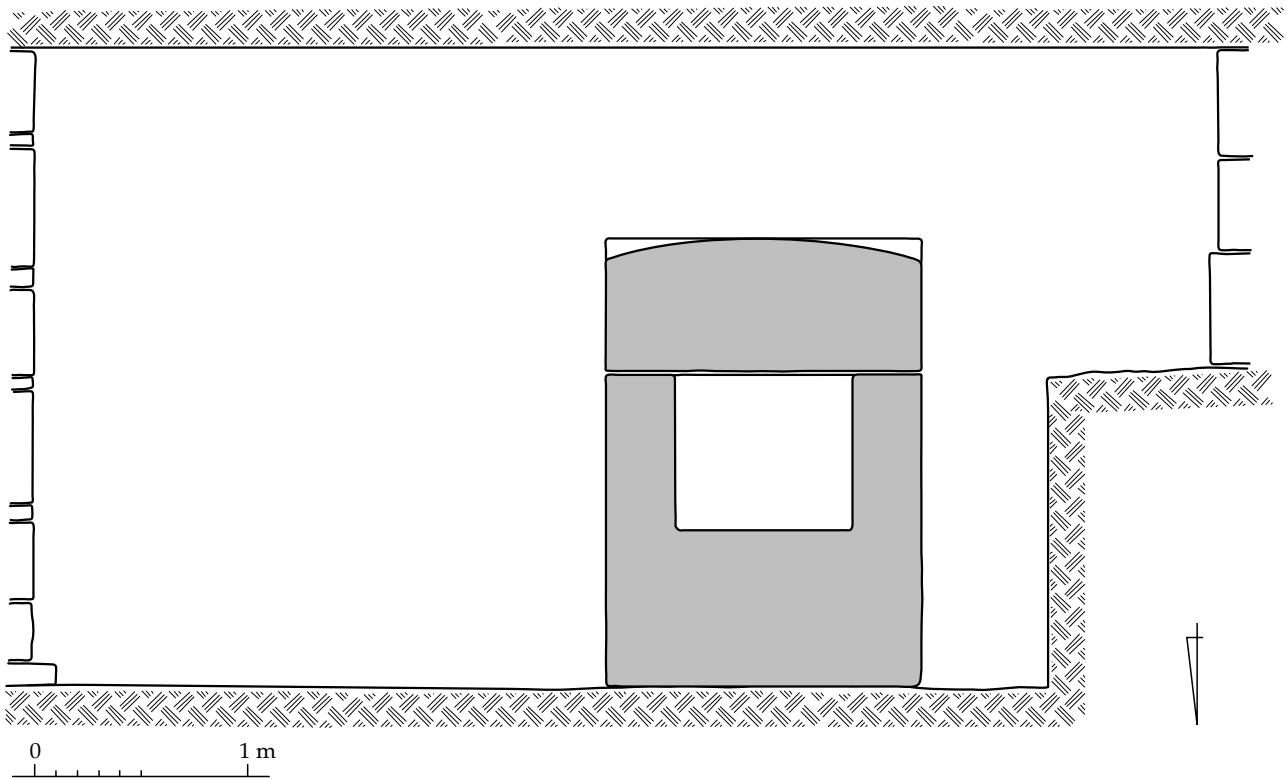


Fig. 5.2.28 Burial chamber of Qar, east-west cross-section

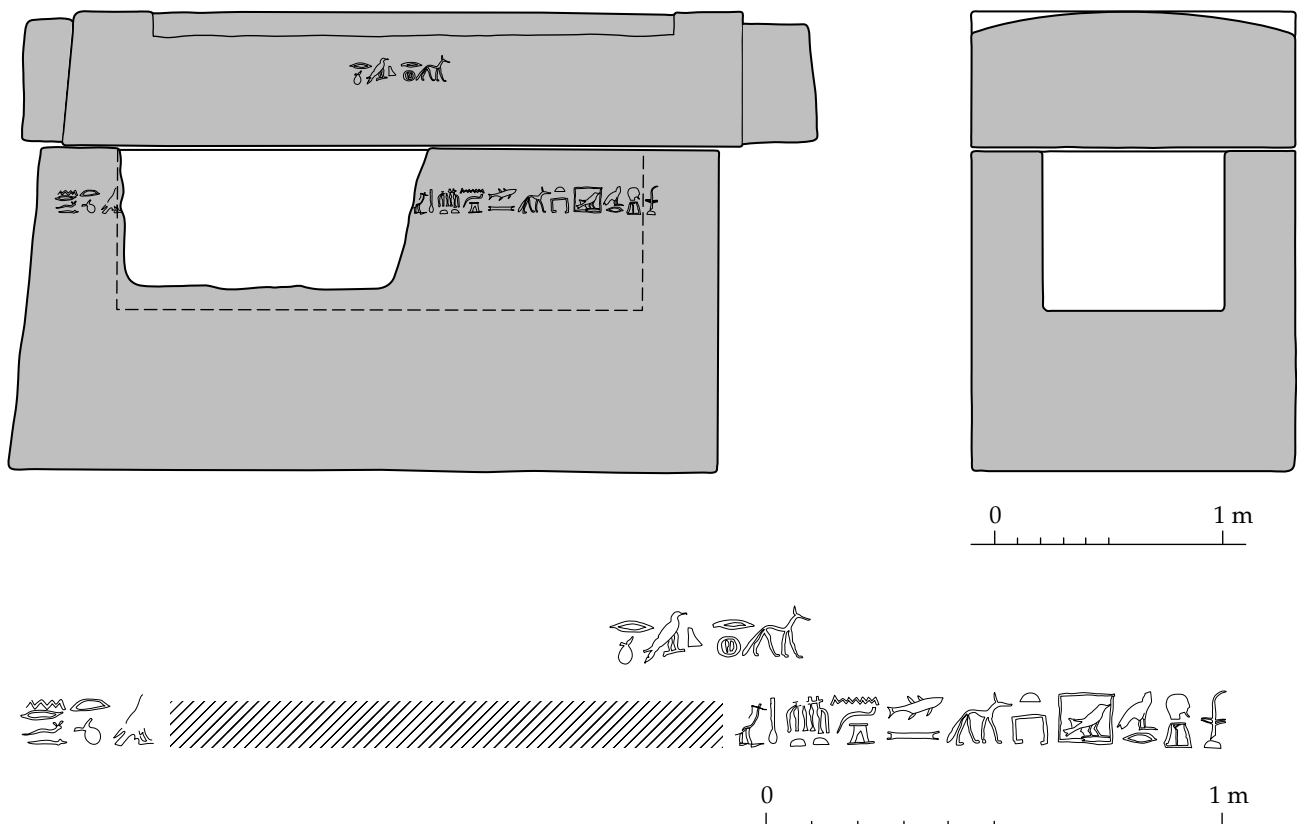


Fig. 5.2.29 Burial chamber of Qar, sarcophagus

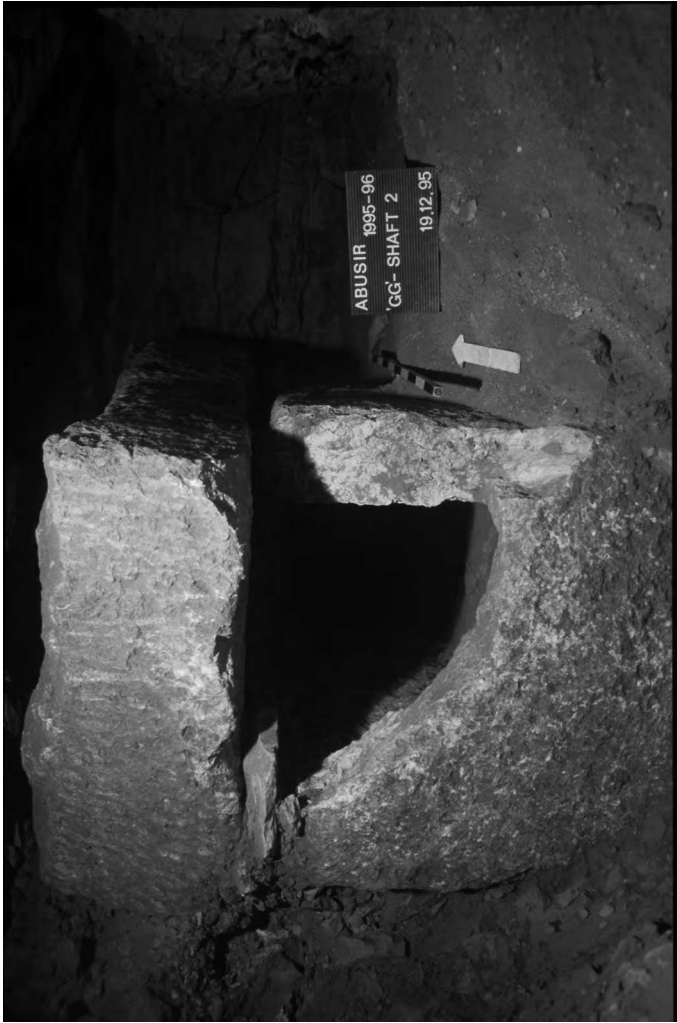
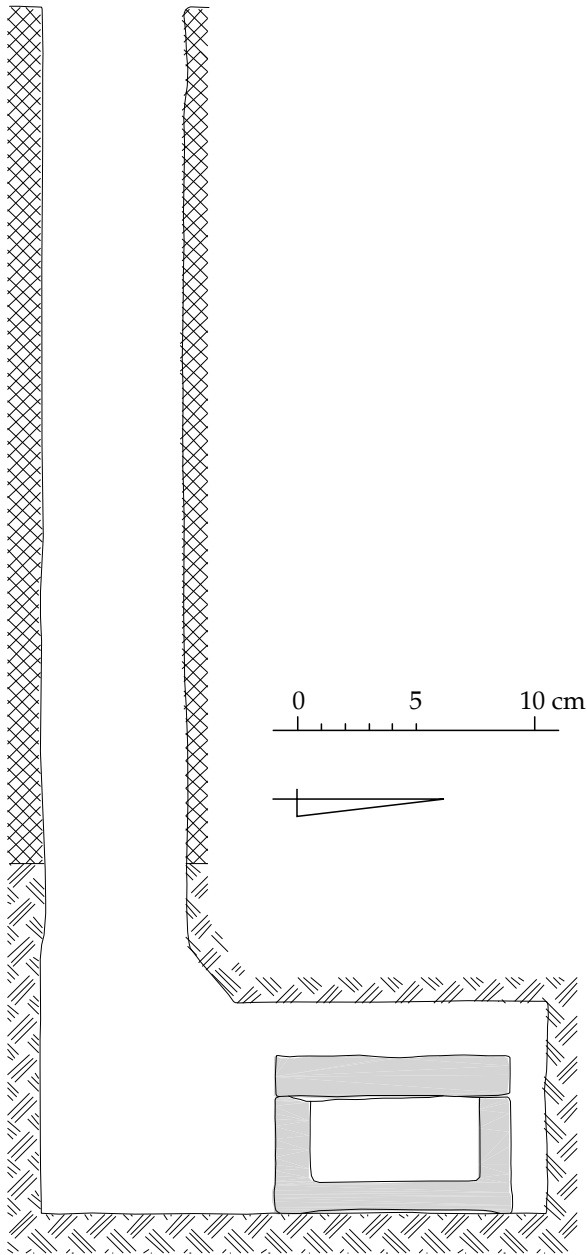


Fig. 5.2.31 Shaft 2

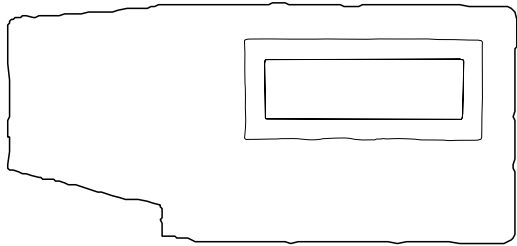


Fig. 5.2.30 Shaft 2

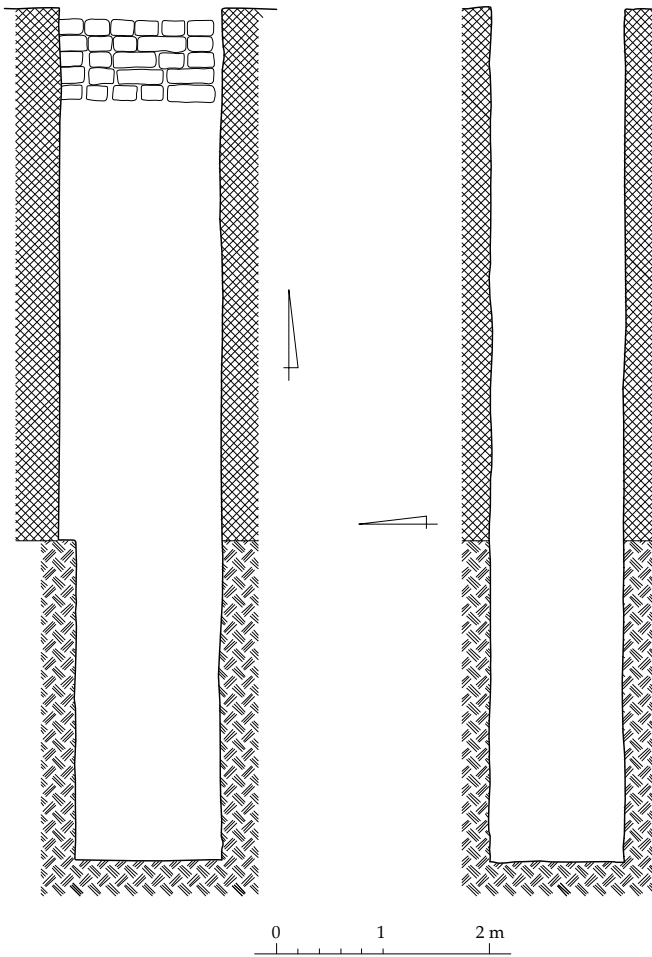


Fig. 5.2.32 Shaft 3

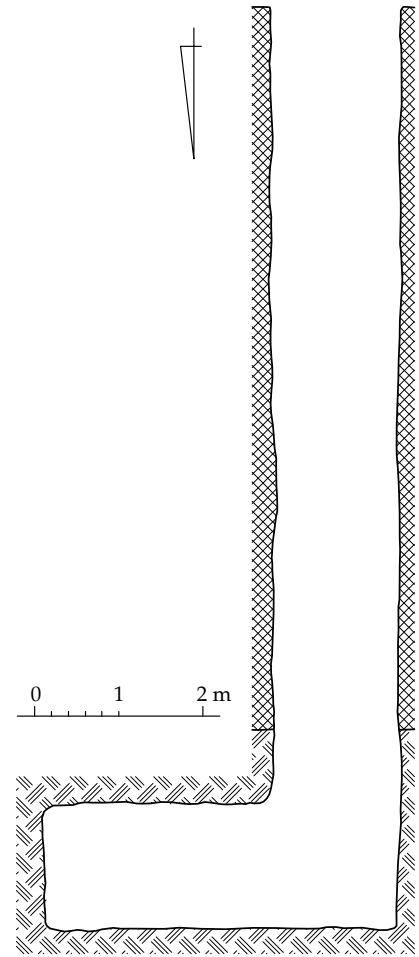


Fig. 5.2.33 Shaft 4



Fig. 5.2.34 Shaft 4

Fig. 5.2.35 Shaft 5

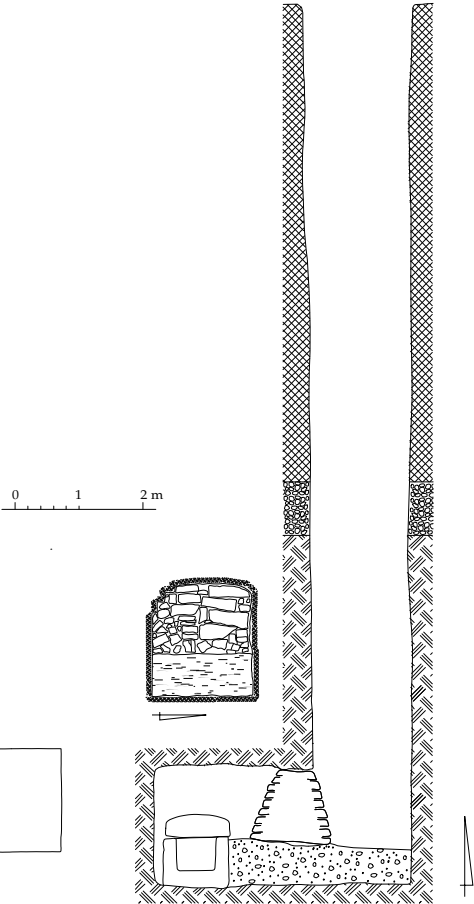


Fig. 5.2.36 Shaft 5, major archaeological features

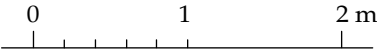
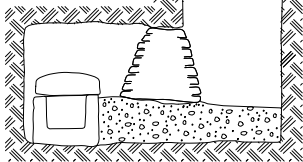
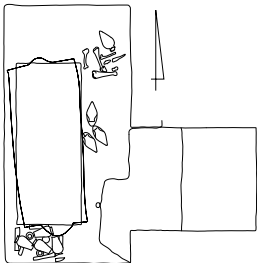




Fig. 5.2.37 Shaft 5, looking west



Fig. 5.2.38 Shaft 5, detail of the canopic vessels

Fig. 5.2.39 Shaft 5, burial

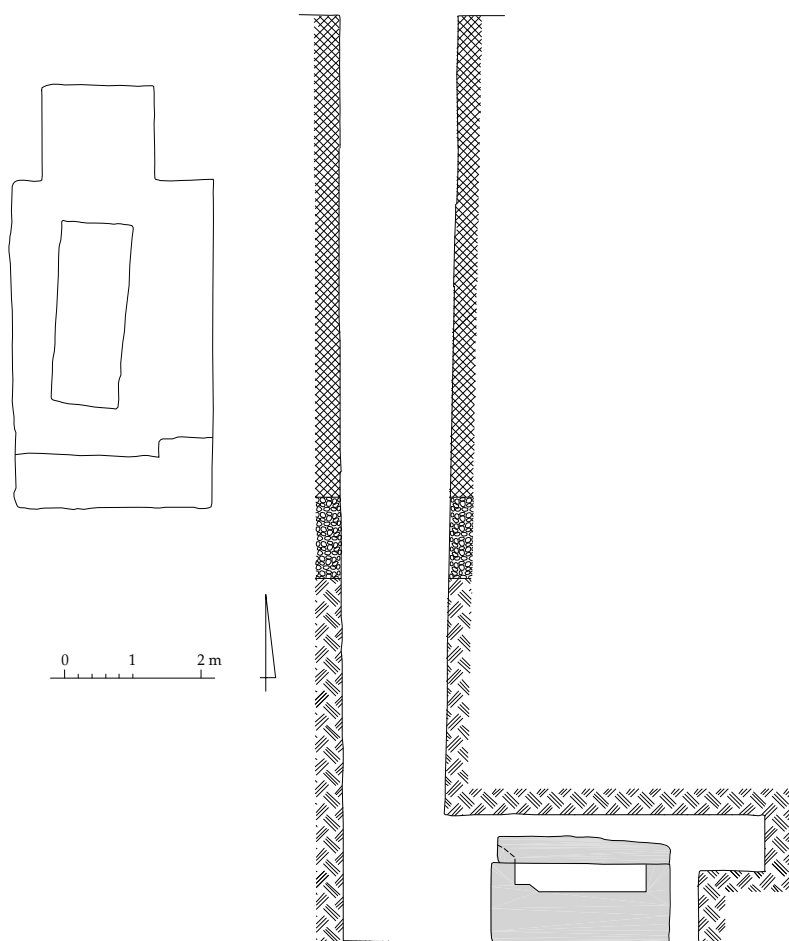


Fig. 5.2.40 Shaft 6

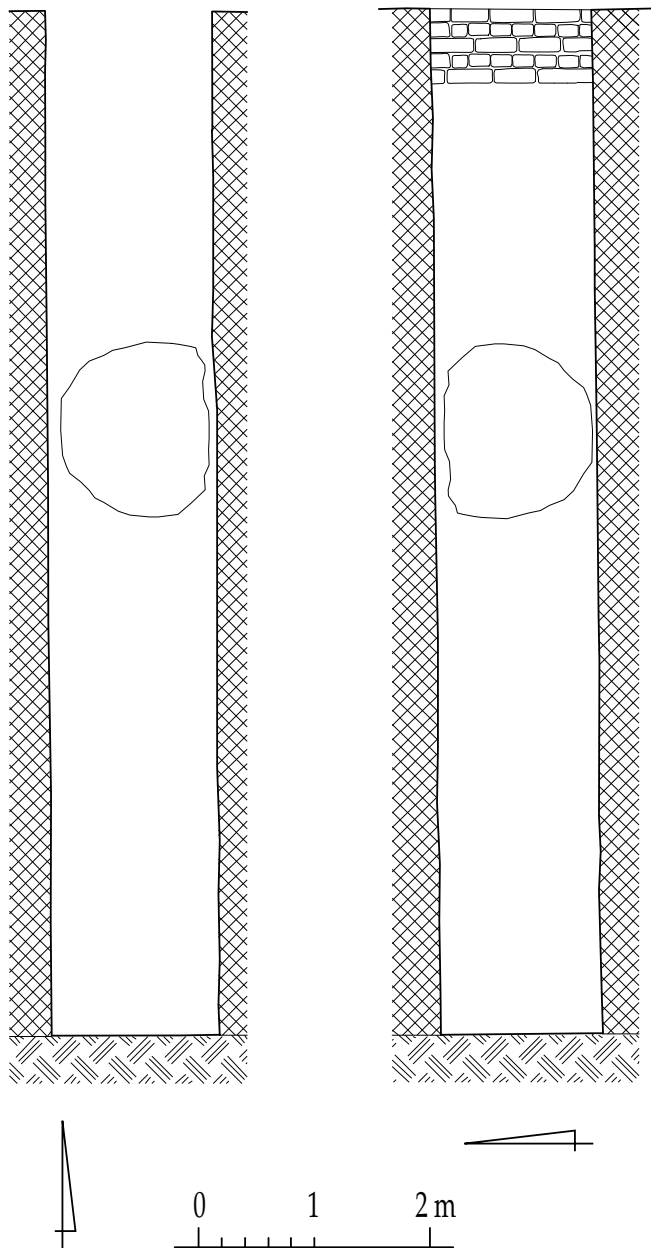


Fig. 5.2.41 Shaft 7

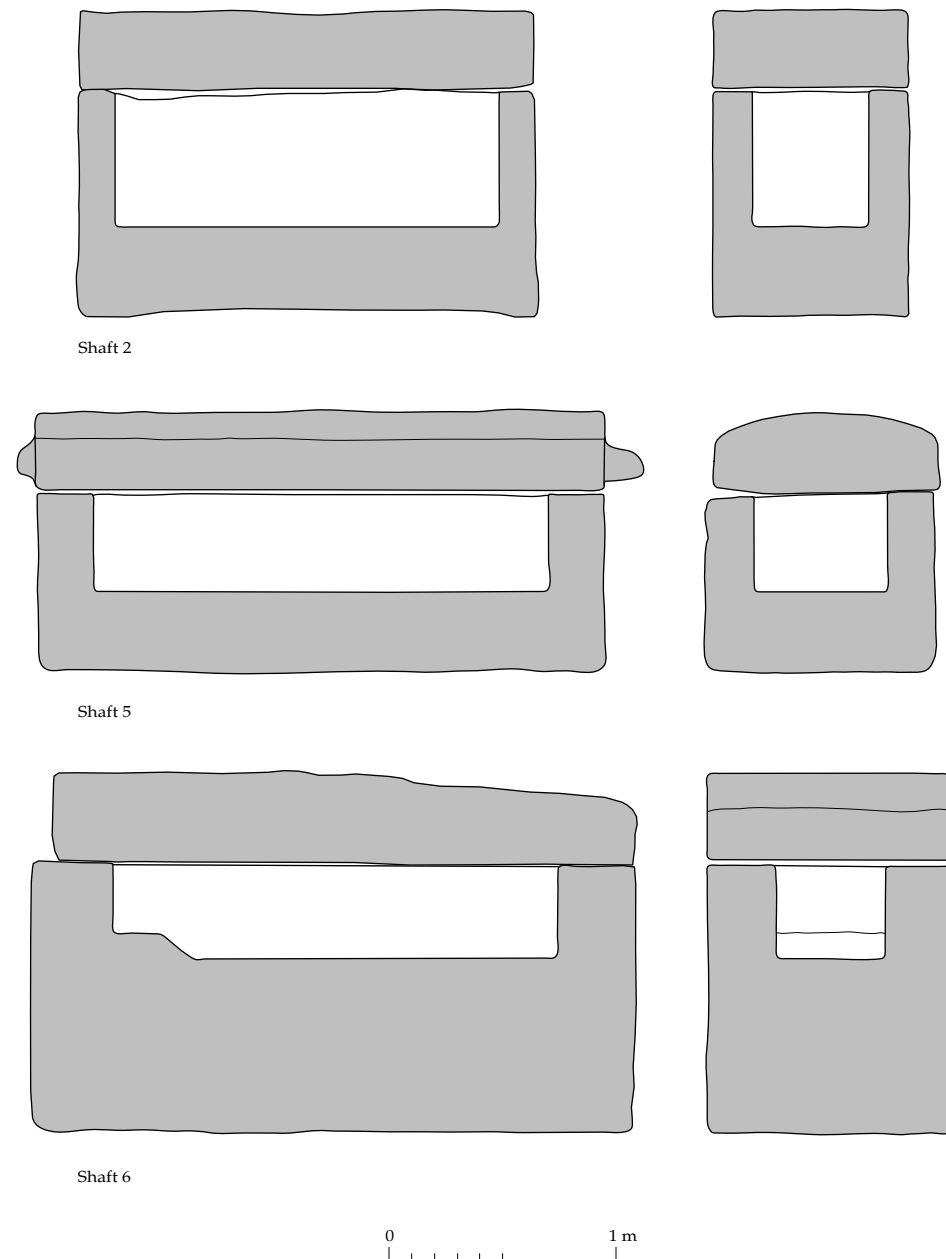


Fig. 5.2.42 Sarcophagi from Shaft 2, 5 and 6

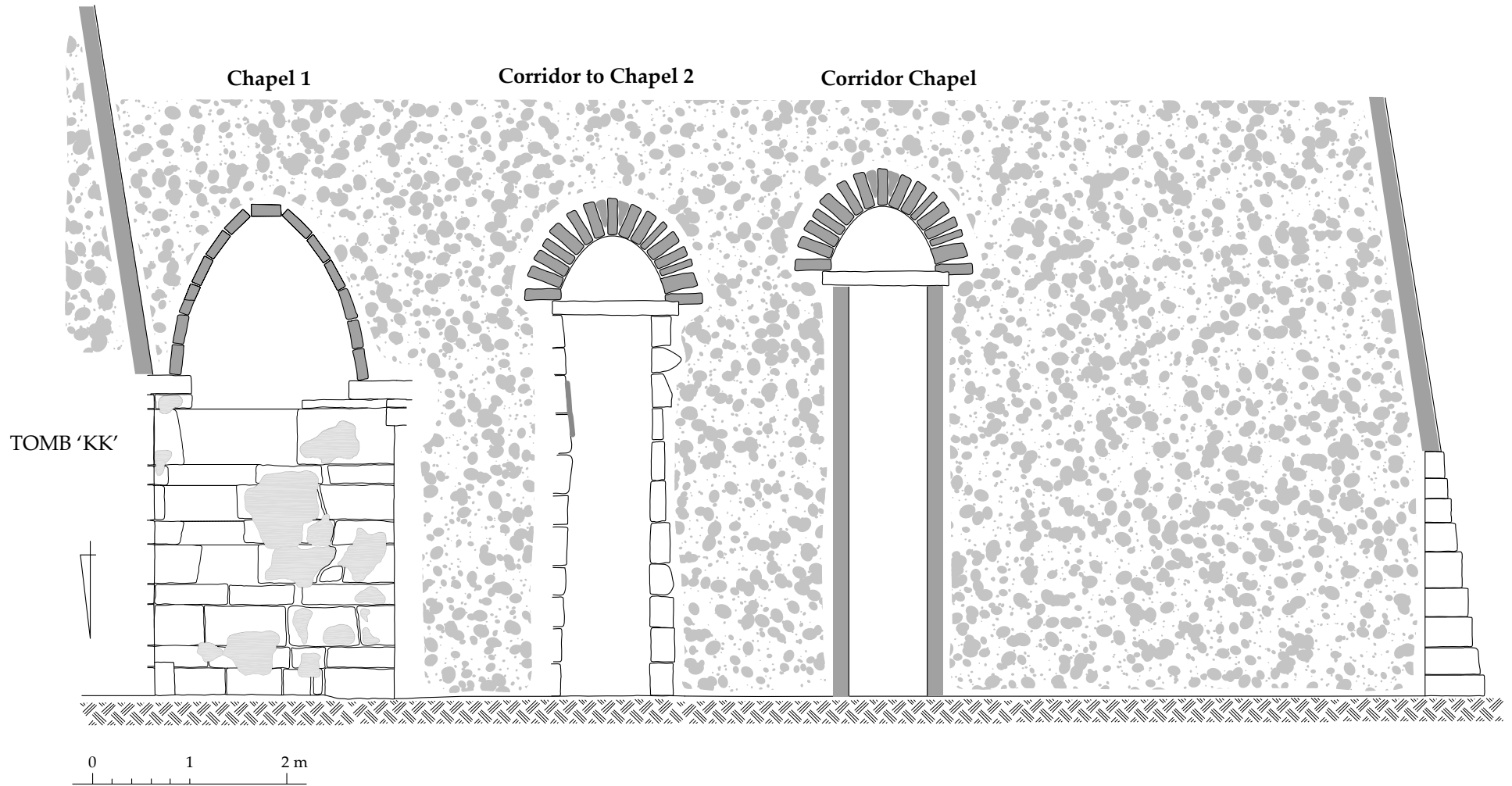


Fig. 5.2.43 East-west cross-section of the mastaba of vizier Qar

5.3 Tomb of Qar, decoration and inscriptions *in situ*

Several parts of the mastaba of Qar had been decorated. First of all, it was the lintel above the actual entrance into the tomb. This was found misplaced in the fill of Open Court 1 and is discussed in the chapter dealing with finds (Excav. No. 11b/GG/95). Chapel 1 contained only one decorated element – the false door. The walls of the chapel were left without decoration and were covered only with a thick (1–2 cm) layer of black plaster rich in organic inclusions. This apparent lack of decoration might have been caused by the decision to change and expand the tomb and incorporate in it one more chapel. Chapel 2 developed as a consequence of Qar's appointment to the office of vizier and was fully decorated including its entrance passage. The third room in the tomb, originally fully decorated, was Qar's burial chamber. In this case, the room was decorated with painted plaster which suffered substantial damage so that only small fragments of it could be documented and restored.

5.3.1 Superstructure

5.3.1.1 Chapel 1

Chapel 1 contains a double-recessed false door which was commissioned while Qar was executing the office of the 'keeper of Nekhen of the king'. At that stage, it was the only decorated element of his otherwise very simple chapel (*fig. 5.3.1, pl. 9*). The false door consists of the following parts: a large upper lintel (A), small lintel (C), central panel in between them (B), central niche with the drum devoid of any inscription, and the outer and inner jambs (D). The six figures sculpted at the bottom of the jambs show Qar striding, dressed in a white kilt with a flaring front panel reaching above the knees, and with a broad collar around his neck. The figures wear two different types of wigs, the shoulder-length wig and the tight fitting one. They are leaning against a long staff and holding a *kheryp*-sceptre. The figure of Qar at the end of Lintel A shows him with a shoulder-length wig, with a broad collar, and in a nearly identical posture, except that instead of the *kheryp*-sceptre he holds a 'handkerchief' in his right hand.¹

The superficial quality of the false door craftsmanship is manifested in the rather hasty cutting of individual signs. The lack of expertise in arranging the signs into groups becomes evident in the final sections of individual columns of inscriptions when the spacing becomes narrower and the signs and their grouping become very dense.

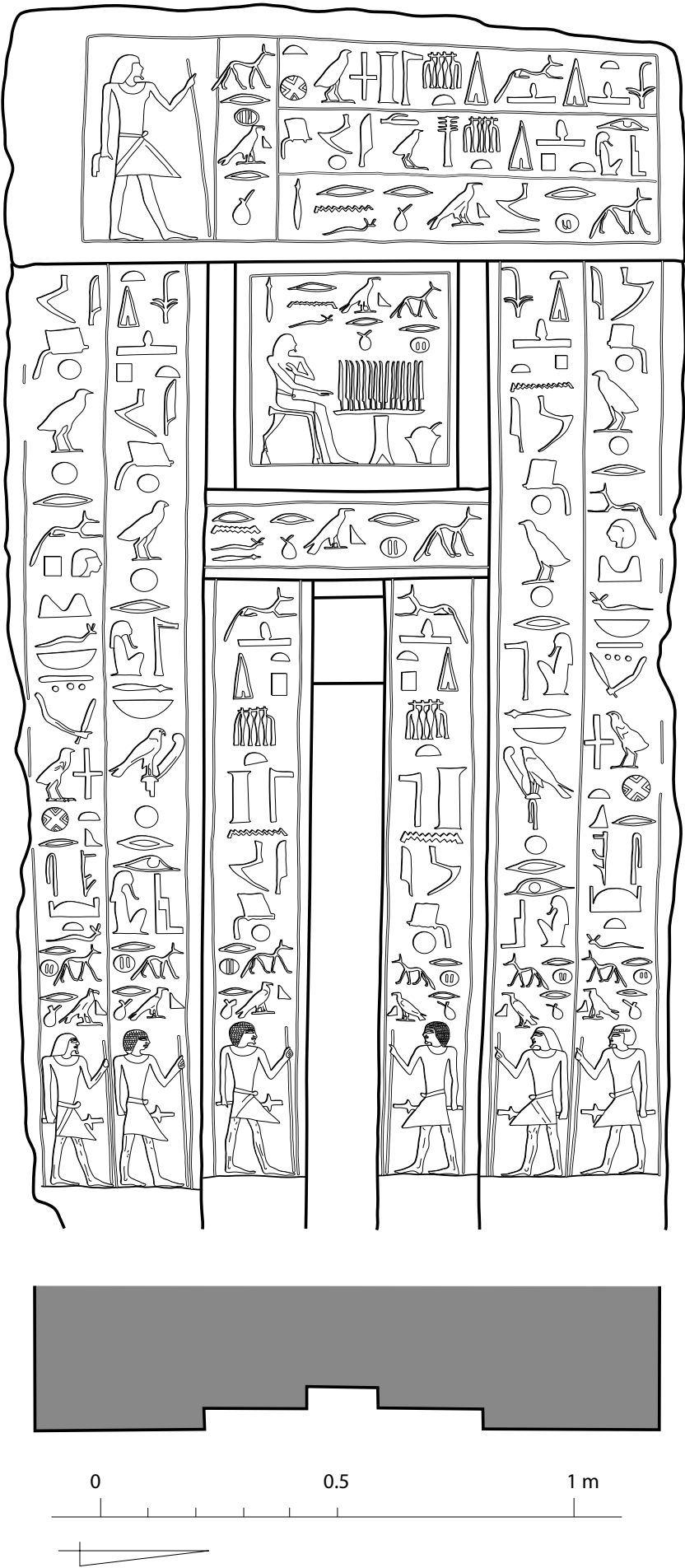
A Top lintel

The larger part of the upper lintel space is taken up by three lines of inscriptions, reading from the right to the left:

1. *ḥtp dj nswt, ḥtp dj Jnpw, ḥnt(j) zḥ ntr, jmj-wt,*
2. *ḥtp dj Wsjr, ḥnt(j) Ddw, jm3ḥ(w),*
3. *(j)r(j) Nḥn (n) z3b m3ʿ, K3r, rn.f ʿ3.*

¹ On this object, likely a 'handkerchief' see H. G. Fischer, 'An elusive shape within the fistful hands of Egyptian statues', *MMJ* 10 (1975), 9–21 and A. Fehlig, 'Das sogenannte Taschentuch in den ägyptischen Darstellungen des Alten Reiches', *SAK* 13 (1986), 55–94. For the summary see H. Benešová, 'Statues from the Pyramid complex of the king Raneferef', in Verner *et al.*, *Raneferef I*, 364, fn. 8.

Fig. 5.3.1 False door
of Qar in Chapel 1



1. 'An offering which the king gives, an offering which Anubis gives, Foremost of the god's booth, Who is in the embalming place.
2. An offering which Osiris gives, Foremost of Djedu,² well-provided.
3. True keeper of Nekhen of the king, Qar (which is) his great name'.

After it follows a column with his title and name:

(j)r(j) Nhn (n) z3b, K3r.

'Keeper of Nekhen of the king, Qar'.

B Central panel scene

The panel features the tomb owner seated at the table of offerings. The seated figure of Qar on the central panel depicts him dressed in a kilt, his left arm folded on the chest and right one outstretched to the table of offerings. He sits on a chair with legs in the form of lion's paws with a clearly discernible front and hind legs supported by conical feet.³ The offering table is composed of a biconical stand with a horizontal table on top of it. On the table reed leaves are piled up to the height of the seated figure's shoulder.⁴ They are arranged asymetrically and pointing in opposite directions.⁵ Below the table, in the right corner of the scene, stands a libation set consisting of a single bowl and a censer. Above the scene a single line of inscription with the name and title of Qar reads: (j)r(j) Nhn (n) z3b, K3r, rn.f^c3 – 'the true keeper of Nekhen of the king, Qar (which is) his great name'.

C Small lintel

Below the panel is a small lintel with the same inscription reading from the right to the left: (j)r(j) Nhn (n) z3b, K3r, rn.f^c3 – 'the true keeper of Nekhen of the king, Qar (which is) his great name'.

D Jambs

The inner jambs contain a single column of inscription each.

The inner left jamb:

htp dj Jnpw, hnt(j) zh ntr; n jm3h(w) (j)r(j) Nhn (n) z3b K3r.

'An offering which Anubis gives, Foremost of the divine booth, to the well-provided, keeper of Nekhen of the king, Qar'.

The inner right jamb:

htp dj Jnpw, hnt(j) zh ntr; n jm3h(w) (j)r(j) Nhn (n) z3b K3r.

'An offering which Anubis gives, Foremost of the divine booth, to the well-provided, keeper of Nekhen of the king, Qar'.

Similarly, the outer jambs feature similar symmetrically arranged inscriptions; each jamb bears two columns:

The inner left column:

htp dj nswt (n) jm3hw hr ntr-^c3, Nb-jmnt, hr Wsjr; (j)r(j) Nhn (n) z3b K3r.

'An offering which the king gives (to) the well-provided before the Great God, Lord of the West, before Osiris, keeper of Nekhen of the king, Qar'.

² Busiris: Zibelius, *Ägyptische Siedlungen*, 270–273. The place name is attested in the offering formulas from the Fifth Dynasty onwards, in connection with Osiris.

³ Cherpion, *Mastabas et hypogées*, 32–33, Criterion 9. For the differentiation of the front- and hind-legs see *ibid.*, 35, Criterion 12, fig. 18. For the conical feet see *ibid.*, 37, fig. 21.

⁴ For the iconography of this type of scene see Bárta, 'Archaeology and Iconography: *bedja* and *aperet* bread moulds and 'Speisetischszene' development in the Old Kingdom', *SAK* 22 (1995), 21–35 with the bibliography of previous studies.

⁵ *Ibid.*, 48, Criterion 20.

The outer left column:

jm3ḥw ḥr Jnpw, tp(j)-dw:f, Nb t3-dsr, jmj-wt, krs.t(j).f, (j)r(j) Nḥn (n) z3b K3r:

‘Well-provided before Anubis, Who is upon his mountain, Lord of the Sacred Land, Who is in the embalming place, may he be buried, keeper of Nekhen of the king, Qar’.

The inner right column:

ḥtp dj nswt n jm3ḥw ḥr nḥr-ꜣ, Nb-jmnt, ḥr Wsjr, (j)r(j) Nḥn (n) z3b K3r:

‘An offering which the king gives to the well-provided before the Great God, Lord of the West, before Osiris, keeper of Nekhen of the king, Qar’.

The outer left column:

jm3ḥw ḥr Jnpw, tp(j)-dw:f, Nb t3-dsr, jmj-wt, krs.t(j).f, (j)r(j) Nḥn (n) z3b K3r:

‘Well-provided before Anubis, Who is upon his mountain, Lord of the Sacred Land, Who is in the embalming place, may he be buried, keeper of Nekhen of the king, Qar’.

5.3.1.2 Chapel 2

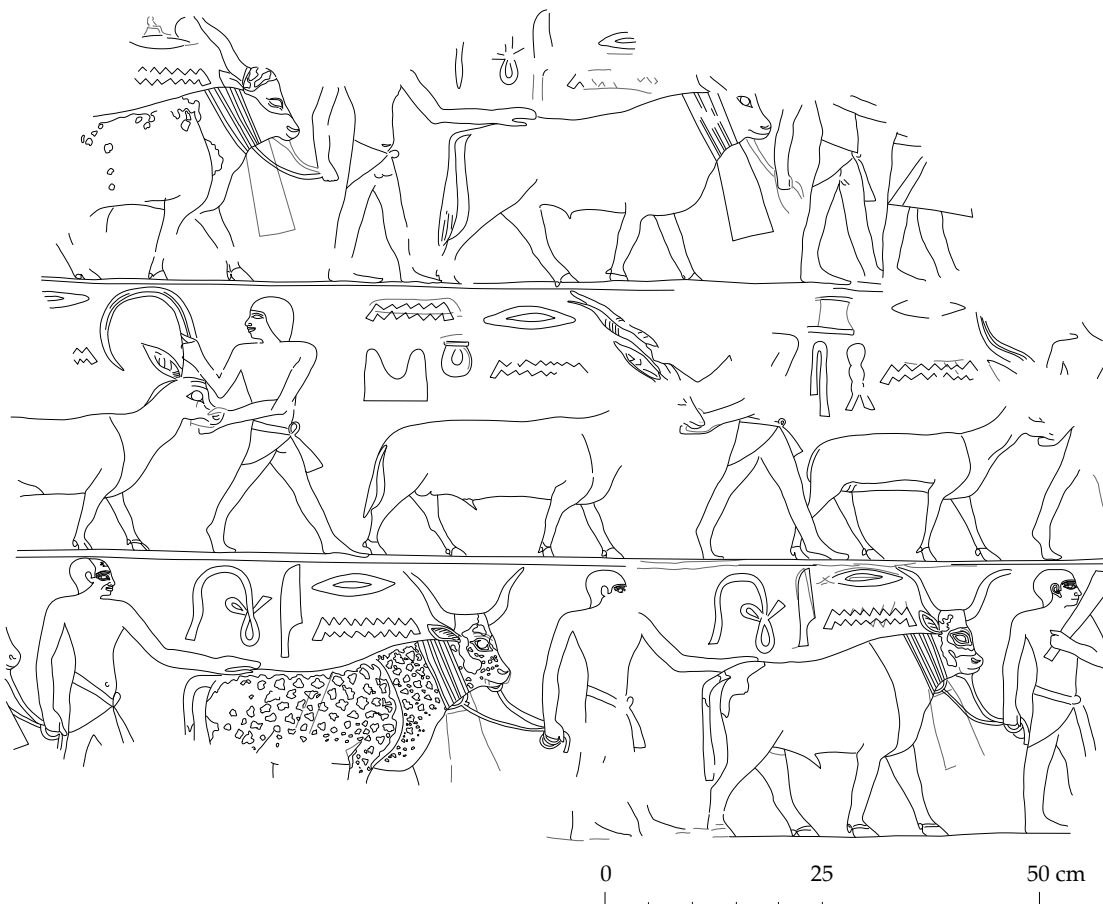
5.3.1.2.1 The entrance

The decoration of the entrance consists of two decorated walls – the east and west ones. Both of them, as well as the ceiling, were extensively blackened by candles which were once used inside when the chapel was still used for cult activities. The north part of the entrance was largely destroyed and its decoration is lost. From the context and location of the remaining scenes it is clear that the entrance was once fully decorated with standard processions of cattle and other animals proceeding towards the interior of the chapel.

East wall (fig. 5.3.2, pl. 10)

The decoration of the wall starts at a height of 1.30 m above the floor. The wall, nowadays 1.35 m long, contains three main registers. They are 31, 31 and 38 cm high

Fig. 5.3.2 Entrance of Chapel 2 of Qar, east wall



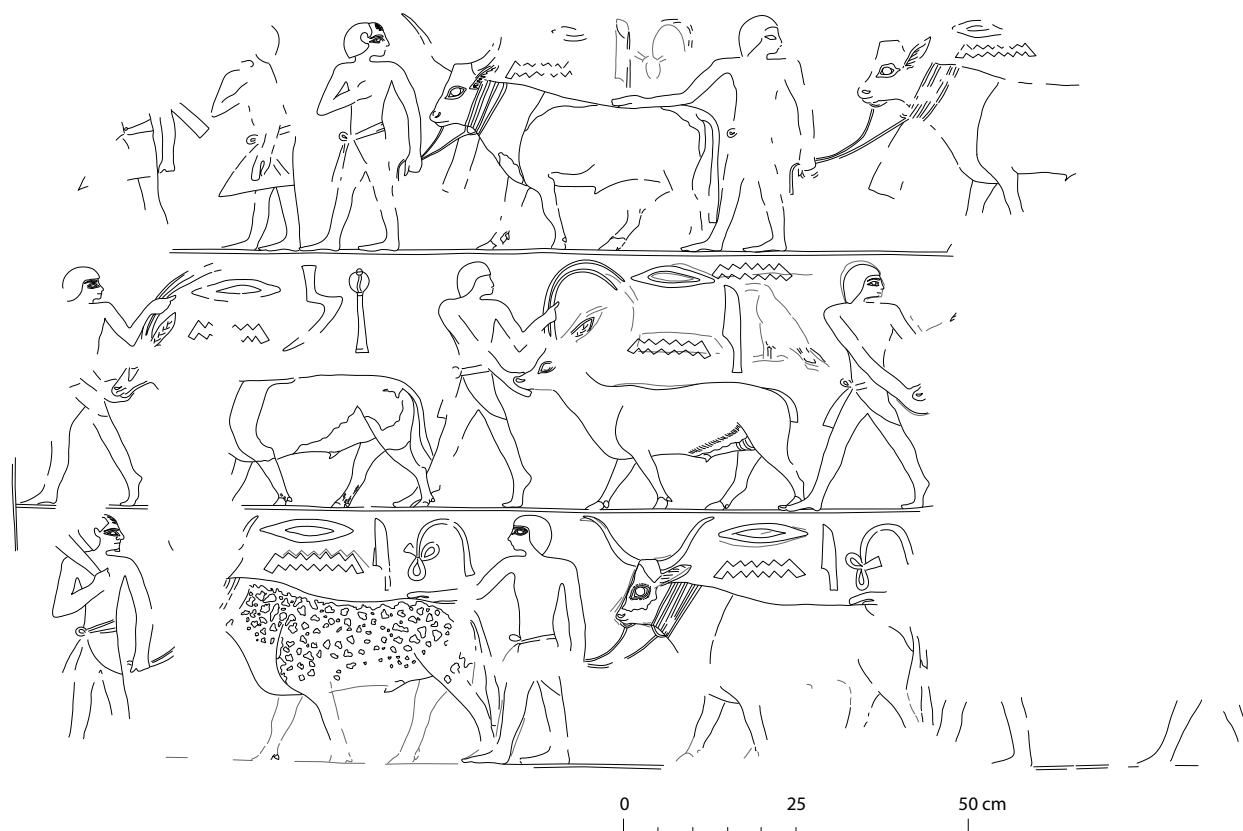


Fig. 5.3.3 Entrance of Chapel 2 of Qar, west wall

(proceeding upwards). The male figures are dressed in a short simple loin-cloth,⁶ except for the figures of the 'overseer' which are dressed in a knee-length kilt with a flaring front panel.⁷ The kilts have a clearly visible knot and a diagonal overlap.⁸ The registers are separated by 0.5 cm wide black stripes. Interestingly, the 'overseers' were originally rendered at the beginning of the uppermost registers both on the east and west walls. Today, one figure is preserved on the east wall and two incomplete ones on the west wall.

First register

Starting on the right, there is a male figure of an 'overseer' of which only the lower part is preserved, however his distinctive kilt and posture are still clearly recognisable. He is bending forward, probably in the same manner as the figure on the better preserved beginning of the first register on the west wall. He is followed by a man leading on a rope a bull with a sash around its neck and labelled *rn jw3*, 'young long-horn ox'.⁹ The man behind him is leading forward another large ox, *rn jw3*, and touching it with his hand. The outlines of a fourth man with yet another bull are visible on the very left. All bulls depicted have a long neck ornament.

Second register

The first male figure is only partially preserved. He turns back and leads forward a Dorcas gazelle, *ghs*, which he holds with both hands at its horns and mouth.¹⁰ The second man also turns back, leading an Addax antelope, *nwd*.¹¹ The third man turns back as well, holding an ibex with its typically recurved horns by the horns and mouth.¹² The scene is partially damaged as is the inscription reading *rn....*

⁶ Zoffili, *Kleidung und Schmuck*, 86.

⁷ *Ibid.*, 88.

⁸ Staehelin, *Tracht*, 8, figs. 7–8.

⁹ Osborn, Osbornová, *Mammals*, 194ff.; Hannig, *Wb I*, 718 [17992]: 'Langhornrind-Zuchttier',

¹⁰ Osborn, Osbornová, *Mammals*, 175; Hannig, *Wb I*, 1372 [36035]: 'Dorcasgazelle'. See also Harpur, Scremin, *Kagemni*, 306, fig. 476.

¹¹ Osborn, Osbornová, *Mammals*, 158ff.; Harpur, Scremin, *Kagemni*, 306, fig. 477.

¹² Ch. A. Reed, D. J. Osborn, 'Taxonomic transgressions in Tutankhamun's treasures', *AJA* 82 (1978), 276–280; Harpur, Scremin, *Kagemni*, 304, fig. 472.

Third register

The procession starts with a man leading on a rope a bull labelled *rn jw3*. The man carries in his left hand and across his left shoulder an object, likely a bunch of herbage.¹³ The bull has a large neck ornament around its neck. The following man leads on a rope a dappled bull labelled *rn jw3*. While his right hand holds the rope, the left hand touches the back of the bull in front of him. The third man is rendered in the same fashion, only the bull that he leads on a rope is almost completely lost. All bulls depicted have a long neck ornament.

West wall (fig. 5.3.3, pl. 11)

Its decoration starts at a height of 1.29 m above the floor. The first, uppermost register is 36.5 cm high whereas the following two registers are both 31 cm high. All men depicted are dressed in short tight-fitting kilts. The registers are divided by 0.5 cm wide black bands.

First register

The upper part of the beginning of this 1.34 m long register is damaged. The procession is led by two 'overseers', men dressed in distinctive, knee-length kilts with flaring front panels. The man on the extreme left is bending forward; the upper part of his body is missing. He is followed by another forward bending man with his left arm along his body and his right arm folded on his chest, clearly indicating an adoring posture.¹⁴ The third man is dressed in a short, tight-fitting kilt and turns back, his right arm bent on his chest. He is leading on a rope a calf with a sash around its neck. The calf is specified as *rn jw3*. The last man on the right is turned back, his right hand laid on the back of the animal before him. He is leading a calf labelled *rn [jw3]* with a sash around its neck.

Second register

This register is substantially shorter than the previous one as it is only 1.16 m long. The first man on the left is turned back and holds an oryx designated as *m33 ḥd* by its horns and mouth.¹⁵ The following two men are again turned back. The first one holds a Nubian ibex, *rn nj3*, by its horns and mouth. The second man is rendered in an identical posture but the specific animal which he holds by the horns and mouth is not preserved.

Third register

Compared to the previous two registers, this one is longer, measuring 1.60 m, but the last 40 cm on the very right are preserved to a height of some 11 cm only. The first man on the left is turned back and holds in his right hand a bunch of herbage and leads on a rope a black dappled calf designed as *rn jw3* 'young long-horn bull'. The second man has his hand laid on the back of the calf and leads on a rope another calf which follows him. It has a sash around its neck. On the extreme right, two pairs of male feet are preserved. Given the context and different positions, the first one was most probably proceeding to the left and touching the back of the calf striding before him, whereas the second figure was turning back towards another, now missing calf.

5.3.1.2.2 Chapel 2

The decoration of the chapel walls was done using an incision technique. The result once again gives the impression of a hasty and superficial artwork. One can observe that in some places only sketchy painting was used instead of any carving. In many instances, the incised lines do not merge with the painted ones, which results in

¹³ Following Kanawati, *Teti Cemetery VIII*, 34.

¹⁴ Dominicus, *Gesten und Gebärden*, 22, fig. 7, b and f.

¹⁵ Osborn, Osbornová, *Mammals*, 160ff.; Harpur, Scremin, *Kagemni*, 269, fig. 417.



Fig. 5.3.4 Chapel 2 of Qar,
wine grapes, detail of their
spatial distribution

double outlines of the figures/objects. Disregarding the painting, the quality of the decoration in general may be considered very poor, with lots of not very precise lines and unfinished details. The individual scenes are executed in a rather general manner, with many details omitted. The best quality may be observed close to the false door, both on the north and south walls. These *loci* are dominated by the seated figures of Qar overlooking a procession of offering bearers approaching from the east and led by his four sons. Towards the east, the quality of the chapel's decoration declines.

The decoration scheme reveals three stages of work of the ancient craftsmen. First the basic outlines were roughly incised. As the next step, outlines in red paint were carried out, followed by a process of the final painting of the entire decoration. From time to time some details were modified and so the painting does not always follow what the incised lines suggest. Final touches might have been made by another hand which added some minute details to individual scene components or introduced sporadic captions in black paint. Interestingly, in registers featuring piled up offerings, wine grapes are frequently used to fill in small blank places in the composition (fig. 5.3.4). When a single offering item was depicted repeatedly one next to another, colour conventions were used to facilitate their perception. Thus, when four or more beer jars occur, their bodies are alternatively painted black and red. The entire decoration was executed on a background that appears to be light greyish-blue today; originally, it was probably blue.

East wall (fig. 5.3.5, pl. 12)

This wall is the least preserved part in the chapel, mainly due to the fact that at a height of 3 m above the floor of the chapel there was a window. The water marks on the walls suggest that the main cause of damage to the decoration was rain water, penetrating the tomb through the window. The rain water ran down the wall and washed off all colours. The heaviest damage was inflicted on the lowermost registers. The same kind of damage occurs on the east and west walls as well, especially their western parts.

The wall is divided into seven horizontal registers. The top features a relatively well preserved *kheker*-frieze painted in red, black, yellow and green. Its decoration starts 1.30 m above the floor of the chapel.

The *kheker*-frieze is 33 cm high and sits on a 2 cm wide band with alternating white, red and black fill compartments. In its centre a stone window was built, allowing additional daylight to enter the interior. The window is 33 cm wide and 42 cm high and its lower part reaches into the first register.

The first three registers (to a height of 19, 23 and 22 cm, respectively) are occupied by piles of assorted offerings consisting of bread moulds filled with bread (or bread dough); long conical bread loaves; cones of meat; oxen heads and forelegs; roasted ducks; bunches of grapes, and lettuce. Then there are vessels (some of them coloured so as to imitate stone) filled with wine grapes, beef ribs, beer jars on low stands and with mud stoppers, baskets and mats with figs, and jar rags with sealed beer jars.



Fig. 5.3.5 Chapel 2 of Qar, east wall

Fourth register

The fourth register is 28 cm high and features ten male offering bearers striding to the right. All of them are dressed in short and tight kilts reaching above the knees and wear short wigs.

Man: an offering bearer with a papyrus stalk and lotus flower.¹⁶

Man: an offering bearer, partially destroyed, holds in his right hand a jar suspended on a rope. An incised decoration under his left elbow indicates that originally, he was supposed to carry a drawstring basket as well.¹⁷

Man: an offering bearer, partially destroyed, carrying a milk jug suspended on a rope.¹⁸

Man: an offering bearer carrying aloft two mats with bread, a rolled *haseera*-mat and a lotus flower.¹⁹

Man: an offering bearer, partially destroyed, carrying a lotus flower.

Man: an offering bearer, also partially destroyed, carrying a stalk of papyrus or lotus.

Man: an offering bearer carrying a papyrus stalk and a mat with figs.

Man: an offering bearer carrying a plate with figs and a rolled *haseera*-mat. The remains of an incised decoration show that the bearer was originally supposed to carry a calf on his shoulders and a drawstring basket over his right arm.

Man: an offering bearer carrying a plate with figs and lotus flowers.

Man: an offering bearer carrying aloft two plates with bread and a drawstring basket hanging over his left arm.

Fifth register

The fifth, 28 cm high register depicts another ten male offering bearers dressed in the very same manner.

Man: an offering bearer carrying a lotus stalk and a milk jug suspended on a rope.

Man: an offering bearer carrying a rolled *haseera*-mat and a goose in his arms, holding it by its beak and legs.

Man: an offering bearer carrying a rolled *haseera*-mat and a papyrus-skiff shaped basket laden with figs.²⁰ The preserved incised lines indicate that originally, he was supposed to carry a lotus flower and lead a calf on a rope.

Man: an offering bearer carrying two plates laden with figs and cones of bread and meat, and a drawstring basket.

Man: an offering bearer, largely obscured due to the rain water, yet it appears that he was carrying a calf and a drawstring basket.

Man: an offering bearer largely obscured due to the rain water, who was originally carrying a plate with conical bread loaves.

Man: an offering bearer carrying a milk jug suspended on a rope.

Man: an offering bearer carrying a drawstring basket and a rolled *haseera*-mat and a plate laden with figs.

Man: an offering bearer carrying a crane, holding it by the beak and legs.²¹

Man: an offering bearer carrying aloft two plates laden with bread and meat offerings and a lotus flower.

¹⁶ On iconography of lotus flowers and papyrus stalks in Old Kingdom tombs see Dittmar, *Blumen und Blumensträuße*, 8–13 and figs. 1–2, 17–21 (lotus) and 13–16, figs. 5 and 22 (papyrus). On the religious connotations of these two plants see *ibid.*, 132–143.

¹⁷ For drawstring baskets cf. von Bissing, *Gem-ni-kai*, pl. XXVIII, figs. 124–128 and Harpur, Scremin, *Kagemni*, 311, fig. 484.

¹⁸ For milk jugs cf. *ibid.*, 271, fig. 420.

¹⁹ I am indebted to Mohammad Ismail for introducing me to the '*haseeras*' and the production of cheese in both ancient and modern Egypt. Cf. von Bissing, *Gem-ni-kai*, pl. XXVIII, figs. 143 and Harpur, Scremin, *Kagemni*, 271, fig. 420.

²⁰ For the baskets of the same type cf. von Bissing, *Gem-ni-kai*, pl. XXVIII, fig. 134.

²¹ Houlihan, *Birds*, 83–85, Common crane (*Grus grus*).

Sixth register

The register is 28 cm high and was reserved for butchering scenes just like the following, equally high seventh register. The number (two) of registers was almost canonical at the time when the chapel was decorated and the same number occurs both in the tomb of Mereruka and Inumin.²² Simultaneously, these two registers suffered the most from the rain water damage and internal cracks of individual blocks of the wall. Each register depicts four male couples involved in different stages of slaughtering the cattle. There were no captions to the scenes. The butchers are depicted dressed in loin-cloths. The sixth register shows on the right a butcher cutting off an ox's foreleg whilst looking away to the left, as if paying attention to or being involved in some hasty talk with the next couple of working men. He is assisted by a man to his right who holds the ox's foreleg upright. The next couple to the left is largely damaged but the same activity may be presumed. The same holds true for the third couple, and the fourth depicts two men tying up legs of another ox/calf lying on the ground. The first and fourth ox/calf still retain some traces of the original paint which shows that they were originally white with black spots.

Seventh register

The last, 28 cm high register has an almost identical composition. Starting on the right, we observe a butcher cutting a haunch which is held upright by another man. The second pair of men is quite destroyed but the man on the right is clearly carrying away a foreleg whereas the butcher, looking back over his shoulder, works the body of the lying cattle. The third couple is identical to the first one. The calf's skin still bears traces of the original white paint with black spots. As was the case with the first register, the last two butchers are involved in tying up a calf lying on the ground.

North wall (fig. 5.3.6, pls. 13–15)

The decoration of the wall is divided into seven registers topped with a *kheker*-frieze preserved only on the eastern part of the wall. The decoration starts 1.34 m above the floor of chapel. The westernmost part of the wall is taken up by the traditional offering scene with the seated tomb owner, his titles, and an extensive offering list complemented by the piled up offerings. The three uppermost registers display piled up offerings. The following four registers are occupied by processions of offering bearers. The sequence of these four registers is interrupted by a door, the actual entrance into the chapel.

The seated figure of Qar is dressed in a tight-fitting belted kilt reaching above the knees. Around his neck he wears an elaborate *wesekh*-collar and on the head a shoulder-length striated wig (pl. 15).²³ On his right wrist he wears a wide armband. His left arm is folded on his chest, the other one is touching the table laden with bread loaves formalised in the form of reed leaves. The chair is made of wood and supported by bull's legs²⁴ sitting on short trapezoid drums.²⁵ The side rail of the chair terminates at the rear in a papyrus flower ornament.²⁶ Qar is leaning against a low cushion which slopes gradually from back to front.²⁷ The individual reed leaves are arranged symmetrically into two halves each consisting of eight leaves pointing inwards. This is a different arrangement from the one that occurs on the south wall where the numbers of individual reed leaves are asymmetrical (10 and 9) and pointing outwards. To the east of this scene is a column with assorted offerings piled up to a height spanning from the bottom of the fifth to the top of the fourth register. Behind Qar's seat is a vertical band marking the end of the wall and running from the bottom of the lowermost

²² Duell, *Mereruka*, pls. 201, 205; Kanawati, *Teti Cemetery VIII*, pl. 52. For the discussion of the scene in context cf. *ibid.*, 43–44.

²³ Staehelin, *Tracht*, 88–89, fig. 17.

²⁴ Cherpion *Mastabas et hypogées*, *Criterion* 10, 34, fig. 15.

²⁵ *Ibid.*, *Criterion* 13c, 37–40, figs. 21–22.

²⁶ *Ibid.*, *Criterion* 9, 32–33, fig. 11.

²⁷ This type of cushion is attested from the reign of Unas onwards: cf. *ibid.*, 31.

register up to the highest point of the preserved wall. It imitates a pole rendered as a yellow piece of wood with black patches.

Below the table are two jar racks, each one containing a ewer and libation basin set. Above the table is a list of the most important offering commodities reading as follows: *t(j) ḥ3, pzn ḥ3, ḥnkt ḥ3, jḥ ḥ3, 3pdw ḥ3, šs ḥ3* – *tj*-bread: one thousand, *pzn*-bread: one thousand, beer: one thousand, cattle: one thousand, fowl: one thousand, travertine vessels: one thousand.²⁸ It is likely that these items relate to the offering ritual performed by four priests at the beginning of the fourth register which is approximately on the same level as the enumerated offerings. The five columns comprising the titles and name of Qar start in the upper left corner of the wall, to the west of the offering list. They read from left to right:

1. *(j)m(j)-ḥt ḥm(w)-ntr [Dd-swt Ttj], (j)r(j) Nḥn (n) z3b m3ʿ, K3r;*
2. *[jm3ḥw ḥ]r ntr-ʿ3, Wsjr, nb Ddw;*
3. *ḥm-ntr [Nfr-swt Wnjs], jm3ḥw;*
4. *[ḥr Nb-t]nnt, ḥr Jnpw tp(j) dw:f, (j)r(j) Nḥn (n) z3b, [K]3r;*
5. *[tp(j)]-ḥrt [nswt], (j)m(j)-r ḥwt-wrt, (j)r(j) [Nḥn] (n) z3b, [K]3r.*
1. ‘Assistant of the *ḥmw-ntr* priests in (the pyramid complex) [“Teti’s (cult) places are enduring”], the true keeper of Nekhen of the king, Qar,
2. [well-provided be]fore the Great God, Osiris, Lord of Djedu,
3. *ḥm-ntr* priest in (the pyramid complex) [“Beautiful are the (cult) places of Unas”], well-provided,
4. [before Nebtj]enenet, before Anubis, Who is upon his mountain, keeper of Nekhen of the king, [Q]ar,
5. property [administrator of the king], overseer of the Great (law) Court, keeper of [Nekhen] of the king, [Q]ar’.

All five columns have their top part destroyed; the ends of the columns are not flush with the bottom line of the offering list but penetrate the space around the upper part of the seated figure of Qar. To the right runs an extensive offering list.²⁹ As on the south wall, the columns read from west to east, *i.e.* from left to right and consists of three rows with identically arranged compartments. The list, however, differs slightly from the one on the south wall as it contains 33 compartments in the first row, 32 in the second and 31 in the third one, making the grand total of 96 offering items.³⁰ The reasons for differentiated spacings are difficult to explain.

Each entry is written in a compartment divided into four parts: the first provides the name of the item, the second shows its appropriate determinative, the third one depicts a small male kneeling figure presenting a particular item (always facing to the west), and the fourth part gives the amount for each item. Interestingly, the formal arrangement of the list, as well as the order and the number of the items enumerated, conform to the late Fifth Dynasty tradition (Unas) and not the Sixth Dynasty, as one would expect; the same holds true for the south wall.³¹

- 1.–34. *m i s s i n g*,
 35. *t-r[th]* – a kind of bread: 1 loaf,
 36. *ḥ[B]* – a kind of bread: 1 loaf ,
 37. *nhrw* – a kind of bread: ...,
 38. *dpt3* – a kind of bread: 4 loaves,
 39.–42. *m i s s i n g*,

²⁸ For reading of the individual items in the list see Lapp, *Opferformel*, 111ff.

²⁹ On the offering lists in general see Junker, *Giza II*, 69–96; Hassan, *Giza VI.2* and Barta, *Opferliste*, 5–90.

³⁰ The same number of items is preserved on the north wall in the chapel of Merefnebef of Saqqara – Myśliwiec *et al.*, *Merefnebef*, 107ff (his south wall contains 105 items). However, 96 offerings occur as early as during the reign of Unas – Teti, in the tomb of Ihy (Idut) – Kanawati, Abder-Raziq, *Unis Cemetery II*, 56–59.

³¹ The Sixth Dynasty offering lists are usually longer, comprising more than 100 items.

43. [h]bnn[wt] – hbnnwt-bread: x pieces,
44. [km]hw [km³] – kmhw km³ -bread: x pieces,
45. jdt [h³k] – jdt h³k-bread: x pieces,
46. p³[wt] – p³wt-bread: x pieces,
47. t-³[šr] – t-³šr-bread: x pieces,
48. hdw – onions: x pieces,
- 49.–54. m i s s i n g
55. nn[šm] – spleen: 1 piece,
56. h³ – a piece of meat: 1 piece,
57. jwf n h³t – fillet: 1 piece,
58. [z] r – zr-goose: 1,
59. trp – trp-goose: 1,
60. zt – zt-goose: 1,
61. s – s-goose: 1,
62. mnwt – pigeon: 1,
63. t-z(j)f – a kind of bread: 1 cone,
64. šʿt – šʿt-bread: 1 cone,
65. np³t ʿ – a kind of bread: 2 vessels,
66. mz(w)t ʿ – a vessel of meal made of wheat: 2 vessels,
67. dsrt ʿ – a vessel of dsrt-drink: 2 vessels,
68. dsrt j³tt – a milky beverage: 2 vessels,
69. h[nkt ʿ] – a kind of beer: 2 vessels,
70. not preserved,
71. shpt ʿ – a kind of drink: 2 vessels,
- 72.–87. not preserved,
88. wʿh – carob beans: ...,
89. ht nbt [bnrt ʿ] – [a vessel of] all [sweet] things: ...,
90. rnpt nbt – all-year offerings: ...,
91. not preserved,
92. gsw – half-loaves: ...,
93. stpt [hps] – the choicest [foreleg]: ...,
- 94.–95. h³t wdhw – the best of the offering table: (1 and 1 jar),
96. not preserved.

A comparison of both offering lists shows that they are almost identical and differ only in some minute points, especially in the sequence of certain items enumerated. Thus nos. 95 and 96 on the south wall occur as 93 and 94 on the north wall, and the enumeration of the five different species of birds follows a different order as well. One may also suppose that the closing part on the north wall, *i.e.* compartments 95 and 96 were originally taken by the reference to ‘sweeping the footprints’ – *jnjt rd* ritual which starts to appear as early as the Fifth Dynasty.³²

The first three registers (starting from the top, 31, 24 and 25 cm) contain extensive lists of assorted offerings including standing beer jars sealed with mud stoppers, oxen heads and forelegs, bread loaves, ribs, cones of meat, papyrus-skiff shaped baskets³³ on a low stand laden with figs, wine grapes, lettuce, a low plate laden with some fruit on low stands, jar racks with beer jars, covered bell-beaker vessels, and baskets in the form of sea-going ships resting on low bi-conical stands with figs.

Fourth register

The 27 cm high register features four priests performing ritual activities and a procession of 13 male offering bearers. The importance of the priests was twofold: to

³² Barta, *Opferliste*, 71–72 and 86; Lapp, *Opferformel*, 176, § 298ff. with pertinent literature.

³³ On baskets in the shape of various boats see Montet, *Scènes de la vie privée*, 13, fig. 4. For the papyrus skiff comp. Landström, *Ships of the pharaohs*, 56–57, figs. 161–170.

secure the transmission of the funerary offerings and to assist the deceased in attaining the spiritual stage of being ‘well-provided’.³⁴

The first three priests are dressed in tight-fitting kilts and wear short wigs. The first figure performs the ‘fumigation’ ritual.³⁵ The man is depicted slightly bent forward and holding a double-bell censer with a lid raised to let the incense out.³⁶ The following two men are performing the *z3t-mw* ritual whose purpose was to clean the place/offering altar.³⁷ The second man is kneeling on the floor, touching it with both hands. The man approaching him from behind purifies the place by pouring water mixed with natron from the *znbt*-jar over the head of the kneeling man onto his hands.³⁸ The fourth priest is dressed in a different manner. He wears a knee-length belted kilt with a flaring front panel, a long striated wig and a sash across his chest. His right arm is slightly bent and stretches forward in an exclamatory gesture while his left hand holds a papyrus roll.³⁹ The black ink caption refers to him as to: *hr(j)-hbt*, ...*tn-nh*... ‘lector priest, ... tenankh...’. The priests are followed by 13 offering bearers. All offering bearers on the wall are dressed simple lonh-cloth. On their heads they wear tight-fitting wigs with short horizontal rows of curly locks from crown to base.

Man: an offering bearer carrying in his arms a crane. The black ink caption in front of him reads: *hm-k3*, ...*hmw* (?), ‘*hm-k3* priest, ...hemu’.

Man: an offering bearer carrying aloft a stone bell-beaker vessel with fruits, a drawstring basket over his right arm and a papyrus stalk over his left shoulder.⁴⁰

Man: an offering bearer carrying a calf in his arms.

Man: an offering bearer carrying a bag over his right arm. The rest is damaged.

Man: an offering bearer, only his feet are discernible.

The entrance door.

Man: an offering bearer, only the lower part of his body is discernible.

Man: an offering bearer carrying aloft a tray with figs.

Man: an offering bearer carrying a papyrus stalk and a milk jug suspended on a rope.

Man: an offering bearer carrying aloft a tray and a bowl with assorted offerings.

Man: an offering bearer carrying aloft a tray and holding a bird.

Of the remaining three offering bearers only the lower parts of their bodies have been preserved.

Fifth register

The 26 cm high register features sixteen male offering bearers dressed in tight-fitting kilts and wearing short wigs.

Man: an offering bearer carrying papyrus stalks and a tray with conical bread.

Man: an offering bearer carrying a papyrus-skiff shaped basket.

Man: an offering bearer carrying a Dorcas gazelle in his arms.

Man: an offering bearer carrying a stone vessel with a spout and another unidentifiable item. Originally he was also supposed to carry a drawstring basket.

³⁴ For the most complete analysis of the scenes in context cf. Junker, *Giza III*, 98–115 and Lapp, *Opferformel*, 153–192. Additional literature and treatment of the topic includes Brovarski, *Senedjemib I*, 73ff.; A. Badawi, ‘The Spiritualisation of Kagemni’, *ZÄS* 108 (1981), 85–93; Hassan, *Giza VI.2*, 84–98; J. A. Wilson, ‘Funeral Services of the Egyptian Old Kingdom’, *JNES* 3/4 (1944), 213–217.

³⁵ Lapp, *Opferformel*, 169, § 282 bff. Cf. Harpur, Scremin, *Kagemni*, 291, fig. 450.

³⁶ For censers/incense burners with pot and lid comp. Bolshakov, *Old Kingdom Reliefs and Sculpture*, 86, fig. 5.9 and M. Marcolin, ‘Iny, a much-traveled official of the Sixth Dynasty: unpublished reliefs in Japan’, in Bárta, Krejčí, Coppens, eds., *Abusir and Saqqara in the Year 2005*, fn. 47.

³⁷ Lapp, *Opferformel*, 166, § 280ff. Cf. Harpur, Scremin, *Kagemni*, 289, fig. 448; 290, fig. 449.

³⁸ Cf. Brovarski, *Senedjemib I*, 73.

³⁹ Lapp, *Opferformel*, 160, fig. 34c; Dominicus, *Gesten und Gebärden*, 92, fig. 22 b.

⁴⁰ For this type of basket cf. Harpur, Scremin, *Kagemni*, 311, fig. 484.

Man: an offering bearer carrying a Dorcas gazelle over his shoulders and a milk jug suspended on a rope.

Man: an offering bearer carrying a sea-going-boat shaped basket filled with bread, and a papyrus stalk. Originally he was to carry a bouquet of lotus flowers over his right arm as well.

Man: an offering bearer carrying aloft a stone vessel with a lid. Originally he was also to carry a bouquet of lotus flowers and a papyrus stalk.

Man: a damaged figure of an offering bearer.

Entrance into the chapel.

Man: an offering bearer carrying a lotus flower and a milk jug suspended on a rope. Originally he was to hold a brace of birds in his right hand.

Man: an offering bearer carrying a tray laden with figs. Originally he was to carry a Dorcas gazelle.

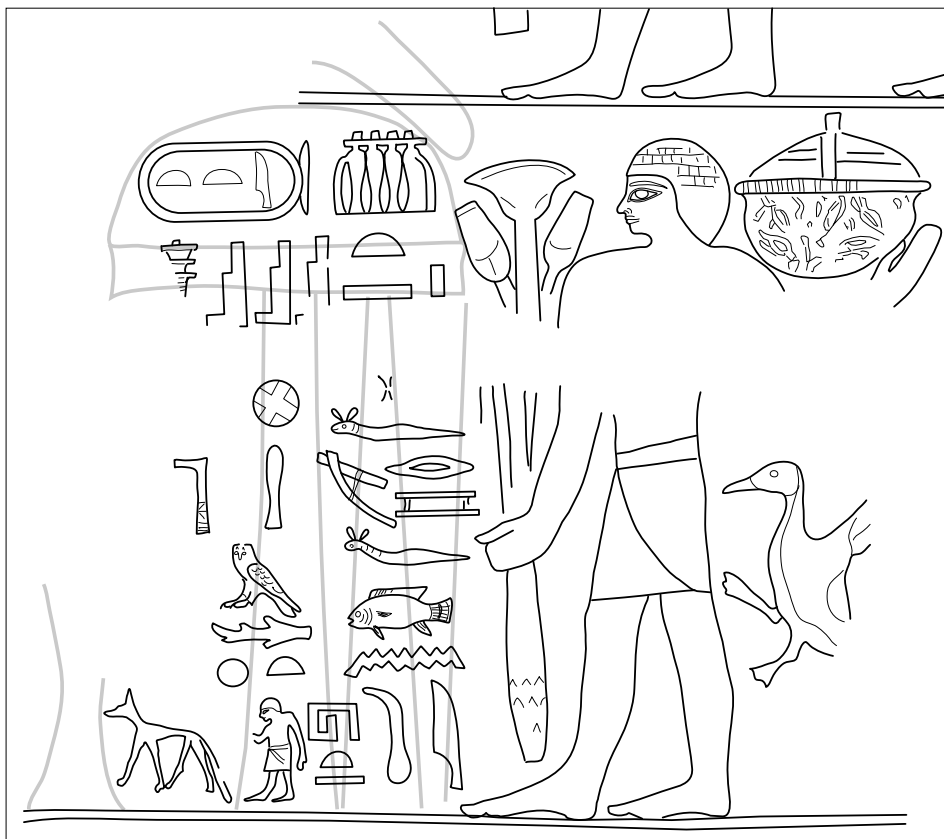
Man: an offering bearer carrying a crane by the beak and legs. The caption in black ink reads: *zš hm(w)-k3 (n) z3b, Hw(j).n-Hnm[w]* 'scribe of the *hm(w)-k3* priests of the king, Khu(i)khnum'.

Man: an offering bearer carrying aloft a tray with conical bread and a stone vessel with a lid.

Man: an offering bearer carrying aloft a papyrus-skiff shaped basket and a tray with bread and lettuce.



5.3.7a Chapel 2 of Qar, detail of the figure of Inti on the north wall



5.3.7b Chapel 2 of Qar, detail of the figure of Inti on the north wall

Man: an offering bearer carrying aloft a stone vessel.

Man: an offering bearer carrying a lotus flower.

Man: an offering bearer carrying aloft two sealed beer jars.

Sixth register

The 28 cm high register continues the procession of male offering bearers, sixteen in the row. The first one is carrying a stone vessel painted white, with red strokes and a lid made of organic material, indicated in yellow and red colour. He holds a bouquet of papyrus in his right hand. It is interesting to observe that, also on the south wall, the offering bearer with a bouquet of papyrus plays a very important role – he follows Inti. It is quite possible that the plants served as a reference symbol for the idea of resurrection as exemplified by the *zšš w3d* scenes.⁴¹ The inscription before him gives his titles and the name. From the context it is clear that this person was given priority on the wall as he is the person in front of all the other offering bearers, and also on the same base line as the tomb owner. The inscription reads as follows:

hnt(j)-š (m) [Dd-swt Ttj], (j)m(j)-ht hm(w)-ntr (m) [Dd-swt Ttj], smsw h(3j)t (n) z3b, z3.f mr(j).f Intj.

‘attendant (in the pyramid complex) [“Teti’s (cult) places are enduring”], assistant of the *hm(w)-ntr* priests (in the pyramid complex) [“Teti’s (cult) places are enduring”], elder of the (judicial court) of the king, his beloved son, Inti’.

A thorough scrutiny of the scene has shown, however, that the inscription was wrought only secondarily over the original decoration. Even today some remains of the initial decoration are discernible: a tall biconical stand with a table laden with bread may be reconstructed at the place, with some more bread cones placed under the table. Thus it may be assumed that originally the figure of Inti was conceived as an ordinary offering bearer lacking both titles and his name. Only later on the figure was transformed into the person of Inti, who became, at some stage, probably the most esteemed son of Qar and as such is heading the procession of offering bearers (*fig. 5.3.7*).⁴²

Man: an offering bearer carrying a bird by the wing in his right hand and a tray laden with vegetables on his left shoulder, with onions over his arm.

Man: an offering bearer carrying a rolled *haseera*-mat, a tray loaded with bread and across his chest a stalk of papyrus.

Man: an offering bearer carrying a calf on his shoulders, a drawstring basket and a rolled *haseera*-mat.

Man: an offering bearer carrying aloft a papyrus-skiff shaped basket with cones of bread. Originally he was supposed to lead an oryx on a rope.

Man: an offering bearer carrying a crane in his arms and holding it by the beak. Originally he was supposed to carry a drawstring basket over his right arm.

Man: an offering bearer carrying aloft a tray with two stone vessels filled with cones of bread. Originally he was supposed to carry a bouquet of lotus flowers over his right arm.

Man: an offering bearer carrying a seagoing-boat shaped basket with bread and a large vessel.

Entrance into the chapel.

Man: an offering bearer with items not preserved.

Man: an offering bearer carrying a papyrus stalk.

Man: an offering bearer with items not preserved.

Man: an offering bearer carrying a drawstring basket.

⁴¹ Y. Harpur, ‘ZSS W3D scenes of the Old Kingdom’, *GM* 38 (1980), 53–61.

⁴² Brovarski, *Senedjemib I*, 75 – Senedjemib heading a procession of the offering bearers in the Sixth register and 75, note 547 with more examples.

The bottom register starts 1.34 m above the floor of the chapel and is 28 cm high. It contains fifteen + nine men carrying offerings and proceeding to the west. All of them are dressed in short kilts reaching above the knees and wear short wigs with horizontal rows of locks from crown to base. The first five are presenting an ox's foreleg and the introductory caption specifies the activity depicted as *shpt stpt*, 'bringing choice viands'.

Man: an offering bearer carrying aloft a stone vessel and a sealed beer jar and a calf which is striding next to him; originally he was also supposed to carry a drawstring basket over his left arm.

Man: an offering bearer carrying a tray with figs and a papyrus stalk.

Man: an offering bearer carrying a papyrus stalk and an empty crescent-shaped tray.⁴³

Man: an offering bearer carrying a rolled *haseera*-mat and a papyrus stalk.

South wall (fig. 5.3.8, pls. 16–18)

The decoration scheme follows the one described for the north wall. The westernmost part of the wall is occupied by a seated figure of Qar. He is dressed in a tight-fitting belted kilt reaching above the knees. Around the neck he wears an elaborate *wesekh*-collar and on the head a shoulder-length striated wig.⁴⁴ His arms are slightly bent, the left arm holding a ‘handkerchief’, the right one touching the table with formalised bread loaves imitating reed leaves. These are oriented outwards and are not symmetrical: the left half is composed of ten leaves whereas the right half only of nine. The chair, made of wood, is supported by short legs and ornamented behind the seat with a papyrus flower. Below the table are two jar racks, each containing ewer and libation basin set. To the east (left) of the table is a pile of assorted offerings starting at the bottom of the sixth register and reaching to the height of the fifth register.

Five columns with the titles and names of Qar start in the upper left corner, to the west of the offering list.

1. (j)m(j)-ht hm(w)-ntr [Dd-swt] Ttj,
2. ... hm-ntr [Nfr]-swt Wnjs,
3. ... [j]m3h(w) hr ntr-^{c3},
4. ...^{c4}d-mr; (j)r(j) Nhn (n) z3b, [K]3[r].
1. ‘Assistant of the hmw-ntr priests in (the pyramid complex) “Teti’s [(cult) places are enduring”],
2. ... hm-ntr priest in (the pyramid complex) [“Beautiful] are the (cult) places of Unas”,
3. ... well-provided before the Great God,
4. ... administrator, keeper of Nekhen of the king, Qar’.

South Wall, offering list

The offering list occupies a substantial part of the wall above the seated figure of the tomb owner and starts immediately above the stylised bread loaves.⁴⁵ The area occupied by the list is 1.05 m high and 3.00 m long. The list reads from west to east, *i.e.* from right to left, and consists of three rows of inscriptions. The list contains 96 entries, 32 in each band. The formal division of each entry follows the system described for the north wall. The offering list reads as follows:

- 1.–2. missing
3. s[tj] hb – ‘oil’ of the feast: 1 vessel,⁴⁶
4. hknw – mint oil: 1 vessel,
- 5.–6. missing :1 vessel,
7. t[w3wt] – t[w3wt]-oil: 1 vessel,
8. h3t[t nt cš] – the best cedar oil: 1 vessel,
- 9.–11. missing
12. wn[hw] wn[hw] – cloth: 1 measure,
13. [sntr sdt] – incense (on) fire: 1 censer,
14. kbhw (ntrj) B – water offering and pellet(s) of natron: 2 vessels,
15. [h3wt?] – [offering table]: 2 pieces,
16. htp-[nswt] – offering [of the king]

⁴³ For this type of trays cf. von Bissing, *Gem-ni-kai*, pl. XXVIII, fig. 139 and 141.

⁴⁴ Staehelin, *Tracht*, 88–89, Abb. 17.

⁴⁵ Type A, following the classification of Barta, *Opferliste*, 47ff.

⁴⁶ For the seven sacred oils in the offering lists of the Fifth and Sixth Dynasties cf. Koura, *Die “7-Heiligen Öle”*, 30–31.

- 17.–18. *m i s s i n g*,
19. *šn[s n j^{rw}-r³]* – bread [for breakfast]: 1 loaf,
20. *dw[jw n j^{rw}-r³]* – (drinking in the) *dw[jw]*-vessel for breakfast...]: 1 loaf,
21. *t-[wt]* – [wt]-bread: 2 loaves,
22. *m i s s i n g*,
23. *nmst nt dsrt* – jar of *dsrt* drink: 1 jar,
24. *nmst nt dsrt j³tt* – jar of *dsrt j³tt* drink: 1 jar,
25. *šns [n f³jt]* – *šns*-bread [for serving]: 1 bread,
26. *° [n f³jt]* – (drink in the vessel) [for serving:] 1 jar,
27. *šns [n š]b[w]* – a *šns* bread [for mai]n [meal:] 1 loaf,
28. *dwjw [n šbw]* – a *dwjw* jar [for main meal:] 1 jar,
29. *sw[t]* – a piece of meat: 1 piece,
30. *mw °* – a vessel of water: 2 vessels,
31. *bdj* – natron: 2 cups,
32. *šns dwjw [n j^{rw}-r³]* – a bread and drink in the *dwjw* jar [for breakfast:] 2 jars,
33. *[t-w]t* – [w]t [bread:] 1 loaf,
34. *t-rt[h]* – *rt[h]* bread: 2 loaves,
35. *ht[³]* – *ht[³]* bread: 2 loaves,
36. *nh^{rw}* – *nh^{rw}* bread: 2 loaves,
37. *dpt³* – a kind of bread: 3 loaves,
38. *pzn* – a kind of bread: 3 loaves,
39. *šns* – a kind of bread: 2 loaves,
40. *t-jmj-t* – a kind of bread: 3 loaves,
41. *hnfw °* – a vessel of bread: 3 vessels,
42. *hbnwt* – a kind of bread: 3 pieces,
43. *kmhw km³* – a kind of bread: 3 pieces,
44. *jd³t h³.k* – a kind of bread: put behind you!: 3 pieces,
45. *p³(w)t* – *p³wt*-bread: 3 loaves,
46. *m i s s i n g*,
47. *hdw* – onions: 3 bundles,
48. *hps* – a foreleg: 1,
49. *jw°* – a thigh: 1 piece,
50. *zhn* – a kidney: 1 piece,
51. *swt* – a piece of meat: 1 piece,
52. *spht nt spr* – a piece of meat with ribs: 3 ribs,
53. *šrt* – a roasted piece of meat: 2 pieces,
54. *mjzt* – a liver: 1 piece,
55. *nn[šm]* – a spleen: 1 piece,
56. *h°* – a piece of meat: 1 piece,
57. *jwf n h³t* – a fillet: 1 piece,
58. *r³* – *r³*-goose: 1 piece,
59. *trp* – *trp*-goose: 1 piece,
60. *zt* – *zt*-goose: 1 piece,
61. *s* – *s*-goose: 1 piece,
62. *mnwt* – a pigeon: 1 piece,
63. *t-z(j)f* – a kind of bread: 1 cone,
64. *š°t* – *š°t* – bread: 2 cones,
65. *np[³]t °* – a kind of bread: 2 vessels,
66. *mz[(w)t] °* – a vessel of meal made of wheat: 2 vessels,
67. *ds[rt °]* – a vessel of *dsrt-j³tt* drink: ... vessels,
68. *ds[rt j³t]t °* – a vessel of *dsrt*-drink: ... vessels,
69. *h[nkt] °* – a vessel of beer: 2 jars,
70. *hnkt [hnms]* – a kind of beer: 2 jars,
71. *shpt °* – a vessel of *shpt* drink: 2 vessels,
72. *[p]h[³] °* – a vessel of a drink: 2 vessels,

73. *dw[jw – dw[jw*-vessel of a drink: [2] vessels,
74. *d3b ʕ* – a vessel of figs: 2 vessels,
75. *jrp ʕ* – a vessel of wine: 2 vessels,
76. *jrp [ʕbš]* – wine in the ʕbš jar: 2 jars,
77. *jrp [jmtj ʕ]* – a vessel of wine: 2 vessels ,
78. *m i s i n g*: 2 vessels,
79. [*hnfw*] ʕ – a kind of bread: 2 vessels,
80. *hb[nn]wt – hb[nn]wt*-bread: 2 vessels,
81. *m i s i n g*: 2 vessels,
82. *s[ht hdt ʕ]* – a vessel [of white *sh*t fruits:] 2 vessels,
83. *s[ht w3dt ʕ]* – a vessel [of green *sh*t fruits:] 2 vessels,
84. [*ʕgt zw*]t ʕ – a vessel of [prepared wheat]: 2 vessels,
85. ʕgt [jt] ʕ – [a vessel of prepared barley:] 2 vessels,
86. *b3b3wt – b3b3wt*-fruits: 2 vessels,
87. *nbs [ʕ]* – a vessel of *nbs*-fruit: 2 vessels,
88. *t nbs* – bread (made) of *nbs*-fruit: 2 vessels,
89. *wʕh* – carob beans: 2 vessels,
90. *ht nbt [bnr]t ʕ* – a vessel of all [sweet]t things: 1 vessel,
91. *rnpt nbt* – all-year offerings: 1 jar,
92. *hnkt – hnkt*-offerings: 1 jar,
93. *gsw* – half-loaves: 1 piece,
94. *shp[t hpš]* – the choicest foreleg: 1 piece,
- 95.–96. *h3t wd[h]w* – the best of the offering table: (1 and 1 jar)ʕ.

The remaining space of the wall is taken by seven horizontal registers; the three uppermost ones (14, 18 and 18 cm high) are reserved for the display of various offering items and assorted offerings, very similar to the first three registers on the north wall. The next four registers are reserved for an elaborate procession of male offering bearers. All of these men are depicted dressed (if not stated otherwise) in simple short loin-cloths. On their heads they wear tight-fitting wigs with short horizontal rows of locks from crown to base.

The top of the wall was originally decorated with a band with a *kheker*-frieze, most of which is gone.

Fourth register

Most of the length of the 31 cm high register is taken up by a row of fourteen officiating priests. With regard to their number, it is one of the most elaborate scenes of its kind attested from the Abusir – Saqqara necropoleis (*pl. 18*). Typologically identical scenes are known from the tomb of Sekhemka,⁴⁷ Usernetjer,⁴⁸ the royal mother Khentkawes in Abusir,⁴⁹ the queen Nebet,⁵⁰ Iynefert,⁵¹ Akhethotep,⁵² Kagemni,⁵³ Mereruka,⁵⁴ Meryteti,⁵⁵ Khentika,⁵⁶ Mereri,⁵⁷ Mehu⁵⁸ and Inti.⁵⁹ The activities performed by the priests may be divided into two groups: the recitation of the magical and mythical spell and the transmission of the offerings divided by the ‘bringing the foot’ rite.⁶⁰ The

⁴⁷ Murray, *Saqqara Mastabas*, pl. VII.

⁴⁸ *Ibid.*, pl. XXI.

⁴⁹ Verner, *Khentkaus*, 85–86, Excav. Nos. 5/A/78 and 90/A/78.

⁵⁰ Munro, *Unas-Friedhof*, 26.

⁵¹ Kanawati, Abder-Raziq, *Unis Cemetery II*, pls. 11b, 46 and 47.

⁵² Davies, *Akhethotep*, pls. XXXI and XXXIV.

⁵³ Badawi, *ZÄS* 108 (1981), 85; Harpur, Scremin, *Kagemni*, pls. 286–291.

⁵⁴ Duel, *Mereruka I*, pls. 61C and 67.

⁵⁵ Kanawati, Abder-Raziq, *Mereruka and his family I*, pls. 19b, 49, 50.

⁵⁶ Badawi, *ZÄS* 108 (1981), 85; James, *Khentika*, pls. 14 and 21.

⁵⁷ Badawi, *ZÄS* 108 (1981), 86.

⁵⁸ Altenmüller, *Mehu*, pls. 58–59.

⁵⁹ In preparation by M. Bárta and B. Vachala as a second part of this publication.

⁶⁰ For a detailed treatment of the topic cf. Badawi, *ZÄS* 108 (1981), 88.

first two priests perform the *z3t-mw* ritual whose purpose was to clean the offering place/altar.⁶¹ The first man is depicted kneeling on the floor, touching a low mound of sand with his hands. The details are not particularly well preserved. The second man, approaching the first one from behind, purifies the place by pouring water mixed with natron from the *znbt*-jar over the head of the kneeling man onto his hands.⁶² The third priest is dressed in a knee-length kilt with front panel and probably wears a long striated wig and a sash across his chest. His right arm is stretched forwards in an exclamatory gesture while his left hand holds a papyrus roll. The following three priests are kneeling with one knee on the floor, left arm folded on the chest whereas the right arm is slightly bent and raised. Both hands are clenched.⁶³ The first phase of the ritual is closed by a priest walking in the same direction, dressed in a kilt with a flaring front panel and with a sash over the chest. He holds a broom and performs the 'removing the footprints' ritual that concluded the offering ceremonies, leaving the chapel empty, pure and inaccessible to evil forces.⁶⁴ The priest also holds a papyrus roll in his left hand. Surprisingly he is not moving in the opposite direction but proceeds in the same direction as the remaining priests.⁶⁵

The next priest is again rendered kneeling and touching an altar with both hands. He is followed by another kneeling priest whose arms are bent forward to the level of his face and he holds a large stone flat-bottomed jar in his hand. Both priests wear short wigs. After them proceed three priests. The first figure is partially damaged and wears a short wig and a tight-fitting kilt. The next two persons are lector priests dressed in kilts with a flaring front panel and striated wigs reaching on their shoulders, with a sash over the chest and an unrolled papyrus in their hands. The whole ritual is closed by another pair of priests dressed in tight-fitting kilts with an overlap and with short wigs. The first one is kneeling, touching the ground with his arms, whereas the priest behind him pours water from a *znbt*-jar over the head of the priest in front of him onto his hands. An exact parallel to the scene may be found in the tomb of Kagemni. The most striking differences that can be found between these two scenes include the number of acting priests (sixteen by Kagemni and fourteen by Qar), individual activities of the participating priests, and the fact that the priest performing the ritual of 'removing the footprints' in Qar's tomb is orientated in the same direction as the remaining priests taking part in the rites and thus is not leaving the scene, which makes him exceptional within the framework of the known evidence.⁶⁶

The priests are followed by a row of offering bearers.

Man: an offering bearer carrying aloft a tray with meat offerings, a rolled *haseera*-mat, a milk jug suspended on a rope and a calf on a rope. The black-ink caption in front of him reads: *pr(j) (n) ḥb-nfr n ḥsw.f'* 'coming forth to the beautiful feast for his praise'. The caption clearly refers to the cultic activities performed by the preceding priests.

Man: an offering bearer, largely destroyed. A rolled *haseera*-mat and a lotus flower are discernible.

Man: an offering bearer carrying aloft a tray with conical bread and a sealed beer jar. He carries over his arms a lotus flower, a drawstring basket and a rolled *haseera*-mat.

Man: an offering bearer carrying aloft a tray laden with bread and a stone vessel with offerings, and a lotus flower over his right arm.

Man: an offering bearer carrying aloft trays with conical bread and assorted offerings, a drawstring basket and a rolled *haseera*-mat over his arms.

⁶¹ Lapp, *Opferformel*, 166, § 280ff.

⁶² Cf. Brovarski, *Senedjemib I*, 73.

⁶³ Cf. Harpur, Scremin, *Kagemni*, 287, fig. 446.

⁶⁴ Altenmüller, 'Eine neue Deutung der Zeremonie des INIT RD', *JEA* 57 (1971), 146–153. Cf. Harpur, Scremin, *Kagemni*, 288, fig. 447.

⁶⁵ Badawi, *ZÄS* 108 (1981), 88.

⁶⁶ Comp. Altenmüller, *JEA* 57 (1971), 146.

Fifth register

The register is 30 cm high. In the first position dominates Tjenti, son of Qar, who is leading a row of offering bearers. He carries a brace of birds. In front of him walks an oryx. The caption reads: *z3.f mr(j).f, smsw h(3j)t, [Tn]tj* his beloved son, elder of the (judicial) court, [Tjen]ti'.

Man: an offering bearer carrying aloft two offering trays with conical bread and assorted offerings, a lotus flower and two ibex in a bag.

Man: an offering bearer carrying a calf on his shoulders and two bags over his arms – a drawstring basket and a rolled *haseera*-mat.

Man: an offering bearer carrying aloft a stone vessel with a lid, three round-bottomed milk jugs and two rolled *haseera*-mats over his arms.

Man: an offering bearer carrying a calf in his arms and two Dorcas gazelles which walk next to him.

Man: an offering bearer carrying aloft a jar and a tray with assorted offerings and two Dorcas gazelles in a bag. In front of him walks a calf.

Man: an offering bearer carrying three ducks in his arms and a drawstring basket over his left arm, whilst over his right arm hangs a bag with two Dorcas gazelles.

Man: an offering bearer carrying four cranes in his arms and two drawstring baskets. In front him black-ink traces of his name.

Man: an offering bearer carrying aloft a wooden jar rack with four sealed beer jars and a tray with fruit. Beside him walks a calf.

Man: an offering bearer carrying aloft a tray with meat offerings and a papyrus-skiff shaped basket with figs, a milk jug suspended on a rope and a bouquet of lotus flowers.

Man: an offering bearer carrying aloft a stone vessel with a lid and a papyrus stalk.

Man: an offering bearer carrying a crane in his arms and two Dorcas gazelles in the bag hanging over his left arm.

Man: an offering bearer – destroyed.

Man: an offering bearer carrying a stone vessel with a lid and a lotus flower over his right shoulder. Over his right arm probably was a drawstring basket.

Man: an offering bearer carrying aloft a tray with bread and meat offerings and holding a drawstring basket.

Man: an offering bearer carrying aloft a tray with conical bread and a papyrus flower over his right shoulder. Over his left arm hangs a bag. In front of him faint outlines of an ibex.

Man: an offering bearer carrying aloft trays with bread, over his left arm a rolled *haseera*-mat, over his right arm a bag with two ibexes.

Sixth register

This 30 cm high register contains fifteen offering bearers led by Qar's son Inti. He is carrying aloft a tray piled with figs and holding a stone bowl. Over his arms hang a drawstring bag and a rolled *haseera*-mat. In front of him walk two calves. The caption reads: *(j)m(j)-ht hm(w)-ntr (m) [Dd-swt Tj], z3.f mr(j).f, smsw h(3j)t, 'Intj* 'assistant of the *hmw-ntr* priests (in the pyramid complex) ["Teti's (cult) places are enduring"], his beloved son, elder of the (judicial) court, Inti'.

Man: an offering bearer carrying a bouquet of lotus flowers and holding a drawstring basket.

Man: an offering bearer carrying aloft a stone with a lid, a tray with assorted offerings and a papyrus stalk over his left arm.

Man: an offering bearer carrying a tray with bread, a rolled *haseera*-mat and a lotus flower.

Man: an offering bearer carrying a calf on his shoulders.

Man: an offering bearer carrying an oryx in his arms and leading a calf on a rope.

Man: an offering bearer carrying aloft a stone vessel with a lid, a tray with meat offerings and a papyrus stalk over his right arm.

Man: an offering bearer carrying two birds.

Man: an offering bearer carrying several birds. The black-ink caption reads: *hm-k3 Zt(w) hm-k3* priest, Setju.

Man: an offering bearer carrying aloft a tray with bread offerings and a lotus flower over his right shoulder. A drawstring basket is hanging over his right arm.

Man: an offering bearer carrying a duck.

Man: an offering bearer carrying a calf in his arms and leading an ibex on a rope.

Man: an offering bearer carrying aloft trays with assorted offerings and leading a calf on a rope.

Man: an offering bearer carrying a tray with offerings, a papyrus stalk over his right shoulder and a drawstring basket.

Man: an offering bearer carrying aloft a stone vessel with a lid, a drawstring basket and a lotus flower.

Man: an offering bearer carrying aloft trays with conical bread and figs, a jar suspended on a rope and a lotus flower over his right arm.

Seventh register

The register is 30 cm high and starts 1.41 m above the floor of the chapel. It contains, in a close parallel to the same register on the opposite wall, a procession of twenty-three offering bearers starting with five bearers of oxen forelegs, five bearers with birds and the remaining thirteen offering bearers.

Man: an offering bearer presenting an ox's foreleg. Caption: *(j)r(j) md3t (n) z3b, Jr-n-Pth* 'keeper of documents of the king, Irenptah'.

Man: an offering bearer presenting an ox's foreleg. Caption: *(j)m(j) ht hm(w)-k3, Jr-n-Pth* 'assistant of the *hm(w)-k3* priests, Irenptah'.

Man: an offering bearer presenting an ox's foreleg.

Man: an offering bearer presenting an ox's foreleg.

Man: an offering bearer presenting an ox's foreleg.

Man: an offering bearer presenting a goose held by the wings and neck.

Man: an offering bearer presenting a goose held by the wings and neck.

Man: an offering bearer presenting a goose held by the wings and neck.

Man: an offering bearer presenting a goose held by the wings and neck.

Man: an offering bearer presenting a goose held by the wings and neck.

Man: an offering bearer carrying aloft a tray with bread and a boat-shaped basket with meat. Over his right arm hangs a lotus flower. Before the man there are birds fluttering just above the floor, probably a pair of ducks.

Man: an offering bearer carrying aloft a tray with an ox's head and a papyrus stalk.

Man: an offering bearer carrying aloft trays with various sorts of meat and bread.

Man: an offering bearer carrying a bread form filled with dough; in front of him walks an ibex.

Man: an offering bearer holding a crane by the beak and legs; in front of him probably walks an oryx and an ibex.

Man: an offering bearer carrying in his arms a calf; another one is depicted next to him.

Man: an offering bearer carrying aloft a papyrus skiff-shaped basket filled with fruit and a papyrus stalk; over his left arm hangs a drawstring basket.

Man: an offering bearer carrying aloft a stone vessel with meat offerings and a tray with conical breads, and a drawstring basket over his left arm.

Man: an offering bearer carrying aloft a sealed beer jar and a tray with cakes.

Man: an offering bearer carrying aloft a tray with roasted duck and a bouquet of lotus flowers.

Man: an offering bearer carrying aloft a stone vessel covered with a lid and a sealed beer jar.

Man: an offering bearer carrying aloft a tray with conical bread and a papyrus stalk.

Man: an offering bearer carrying aloft trays with meat, with a drawstring basket over his right arm.

False door (fig. 5.3.9, pl. 19)

The decoration and inscriptions of this double-recessed false door are executed in a comparably much better fashion compared to the false door in Chapel 1, but were still done rather hastily. Its shape conforms to the later Old Kingdom false door form with the cavetto cornice and torus moulding that developed from the beginning of the Fifth Dynasty onwards.⁶⁷ Other than that, the false door can be divided into the same functional units as the false door in Chapel 1. It consists of the following parts: a large top lintel (A), a small lintel (C), a central panel accommodated in between them (B), a central niche with a drum, and inner and outer jambs (D). The false door is painted dark red with black dots imitating red granite.⁶⁸

A Large lintel

Its inscriptions consist of three horizontal lines reading from right to left and a single vertical register behind which there is the striding figure of Qar, dressed in a short kilt with a flaring front panel, leaning against a long staff and holding a 'handkerchief' in his right hand. The inscription reads as follows (Inscr. No. 1):

1. *Htp dj nswt, htp dj Jnpw, hnt(j) zh-ntr; pr(j)t-hr(w).f(n) t(j), hnkt, pzn m hb-nb, r^c nb.*
2. *Jm3hw hr Wsjr, hnt(j) Ddwt, (jm3hw) hr ntr^c3,*
3. *t3tj t3tj (n) z3b, (j)m(j)-r hwt-wrt 6, tp(j)-hr(t) nswt, hr(j)-s3t3,*
4. *(j)r(j) Nhn (n) z3b, K3r.*

1. 'An offering which the king gives and an offering which Anubis gives, Foremost of the divine booth: his invocation offerings (consisting of) of *t(j)* and *pzn* bread and beer during every feast and every day.
2. Well-provided before Osiris, Foremost of the necropolis in Heliopolis, (well-provided) before the Great God,
3. vizier, overseer of the Six Great (law) Courts, property administrator of the king, privy to the secret(s),
4. keeper of Nekhen of the king, Qar'.

B Central panel

The central panel shows the seated tomb owner, with his right hand reaching towards the table of offerings and his left arm bent on his chest. Qar sits on a chair with the feet of unidentifiable animal (most probably those of a bull, based on the parallels on the north and south walls) set on trapezoid drums⁶⁹ and a frustrum-shaped stone which protected the furniture from the wet floor and insects.⁷⁰ The side rail of the chair terminates at the rear in a papyrus flower ornament. Qar leans against a low cushion which slopes gradually from back to front. In front of him is a table of offerings placed on a biconical stand. It is laden with reed leaves pointing outwards. Below the table an enumeration of the abbreviated offering items can be seen: : *jh h3, ss h3, mrht h3* cattle: one thousand, travertine vessels: one thousand, *merekhet*-vessels: one thousand.⁷¹ Above the man's head, his principal title and the name of Qar can be read (Inscr. No. 2):

(j)r(j) Nhn (n) z3b m3^c, K3r.

'Keeper of Nekhen of the king, Qar'.

⁶⁷ Wiebach, *Scheintür*, 133–135; Strudwick, *Administration*, 9ff.; Bolshakov, *Old Kingdom in the Hermitage*, 150–151.

⁶⁸ Myśliwiec et al., *Merefnebef*, 93.

⁶⁹ Cherpion, *Mastabas et hypogées*, Criterion 13c, 38–40, figs. 23–24.

⁷⁰ Brovarski, *Senedjemib I*, 71 and fn. 504.

⁷¹ For the *merekhet*-vessel reading see Lapp, *Opferformel*, 119, §208, 6–7.

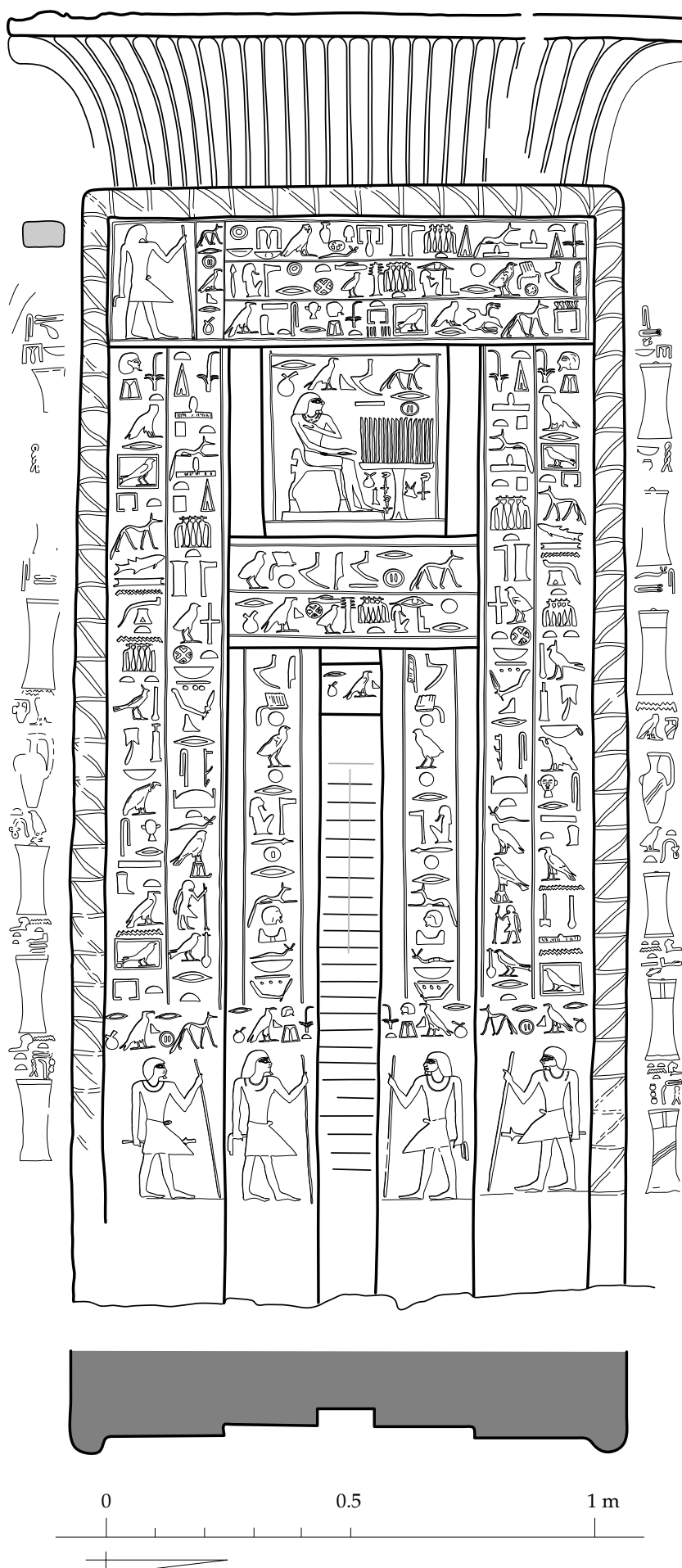


Fig. 5.3.9 Chapel 2 of Qar, false door

C Small lintel

The lintel below the central panel comprises two horizontal lines with the following text (Inscr. No. 3):

1. (j)r(j) Nhn (n) z3b m3^c, jm3hw
2. hr Wsjr, hnt(j) Ddw(t), K3r:
1. 'True keeper of Nekhen of the king, well-provided
2. 'before Osiris, Lord of Busiris, Qar'.

D Jambs

The inner left and right jambs are symmetrical and contain the same text (Inscr. No. 4):

jm3hw hr ntr-^c3, hr Jnpw, tp(j)-dw.f, nb t3-dsr, tp(j)-hrt nswt, K3r:

'Well-provided before the Great God, before Anubis, Who is upon his mountain, Lord of the sacred land, property administrator of the king, Qar'.

The outer jambs are almost identical and are composed of two columns of inscriptions each; the only difference between them occurs at the bottom of the inner columns where the title hr(j)-sšt3 n hwt-wrt on the left corresponds with the title hr(j)-sšt3 n wd^c-mdw n hwt-wrt on the right. The resulting difference may be explained by the scribe's miscalculating the space necessary for the intended inscription in the first case, which resulted in the need to shorten the title.

The inscriptions on the left outer jambs (Inscr. No. 4) read from right to left (Inscr. No. 5):

1. htp dj nswt, htp dj Jnpw, hnt(j) zh-ntr, jmj-wt, nb t3-dsr, krs.t(j).f (m) hrt-ntr (m-ht) j3wt nfrt wrt.
2. tp(j)-hrt ntr, (j)m(j)-r hwt-wrt, ^cd-mr (n) z3b, n(j) nst hntt, mdw rhjt, jwn Knmwt, hr(j)-sšt3 n hwt-wrt,
3. (j)r(j) Nhn (n) z3b, K3r:
1. 'An offering that the king gives and an offering that Anubis gives, Foremost of the divine booth, Who is in the embalming place, Lord of the Sacred Land, may he be buried in the cemetery (after having attained) a good old age.
2. Property administrator of the king, overseer of the Great Court, administrator of the king, He who belongs to the foremost seat, staff of the rekhyt-people, support of Kenemut, keeper of the secret(s) of the Great Court,
3. keeper of Nekhen of the king, Qar'.

Outer right jambs (Inscr. No. 6):

1. htp dj nswt, htp dj Jnpw, hnt(j) zh-ntr, jmj-wt, nb t3-dsr, krs.t(j).f (m) hrt-ntr (m-ht) j3wt nfrt wrt,
2. tp(j)-hrt ntr, (j)m(j)-r hwt-wrt, ^cd-mr (n) z3b, n(j) nst hntt, mdw rhjt, jwn Knmwt, hr(j)-sšt3 n wd^c-mdw n hwt-wrt,
3. (j)r(j) Nhn (n) z3b, K3r:
1. 'An offering that the king gives and an offering that Anubis gives, Foremost of the divine booth, Who is in the embalming place, Lord of the Sacred Land, may he be buried in the cemetery (after having attained) a good old age.
2. Property administrator of the king, overseer of the Great Court, administrator of the king, He who belongs to the foremost seat, staff of the rekhyt-people, support of Kenemut, privy to the secret judgement(s) in the Great Court,
3. keeper of Nekhen of the king, Qar'.

The bottom of the false door is reserved for four striding figures of Qar, two on each side. He is dressed in a short kilt with a flaring front panel, with a wide beaded wesekh-collar on his chest and wearing a short ceremonial beard. He is leaning against a long staff. The individual figures differ only in minor details. Starting from the left: figure

1 – Qar holds a *khrep*-sceptre in his left hand and wears a short wig with horizontal rows of curls from the top to the bottom; figure 2 – Qar holds a *khrep*-sceptre in his right hand and wears a shoulder-length striated wig. Figures 3 and 4 are mirrored images of figures 2 and 1.

To the left and right of the false door is a single column of incised inscription comprising a list of the seven sacred oils. The columns are identical and read from the top to the bottom as follows:

1. *st(j)-hb*,
2. *hk(n)w*,
3. *sft*,
4. *n(j)nhm*,
5. *tw^cwt*,
6. *h³tt nt ^cš*,
7. *h³tt nt Thnw*.

1. 'oil of the feast,
2. mint oil,
3. pine oil,
4. *ninekhem* oil,
5. *twawt* oil,
6. the best cedar oil,
7. the best Libyan oil'.

Corridor chapel

The only architectural element associated with decoration was Niche 3. The remains of a hieroglyphic inscription were found to the north of the niche, at a height of 1.80 m above the floor level. It is inscribed in fading black ink and reads from left to right (fig. 5.3.10):

Line 1: *h³tp dj Jnpw, tp(j) dw.f, jm³h(w) hr Wsjr; ntr ^c3*,

Line 2: *(j)r(j) Nhn (n) z³b ...*

'A boon which Anubis gives, Who is upon his mountain, well-provided before Osiris and Great God, keeper of Nekhen of the king,...'

To the right of the inscription, contours of a seated male figure facing south can be recognised.



Fig. 5.3.10 Ink inscription in the Corridor chapel relating to Niche 3

5.3.2 Substructure

5.3.2.1 Burial chamber of Qar

This burial chamber is the only decorated room within the tomb situated underground. The decoration is located on the sarcophagus and on the walls of the chamber.

Sarcophagus

Hieroglyphic inscriptions on the sarcophagus are located on the east face of the chest and on the inner east and west wall of the chest, at its north end. All of them are incised with partially preserved black contour lines and blue paint. The east wall of the sarcophagus chest bears a single horizontal band of inscription reading from right to left; its final part is substantially damaged by a tomb robber's hole (fig. 5.3.11). It reads as follows:

tp(j)-hr(t) nswt, (j)m(j)-r hwt-wrt, 'd-mr (n) z3b, n(j) nst hntt, mdw rhjt ...[K]3r rn.f nfr:

'Property administrator of the king, overseer of the Great (law) Court, administrator of the king', He who belongs to the foremost seat, staff of the *rekhyt*-people...Qar, his beautiful name'.

The east wall of the lid features a short inscription reading from right to left:

(j)r(j) Nhn (n) z3b, K3r:

'Keeper of Nekhen of the king, Qar'.

Fig. 5.3.11 Burial chamber of Qar, eastern side of the sarcophagus



Fig. 5.3.12 Burial chamber of Qar, inner east wall of the sarcophagus chest



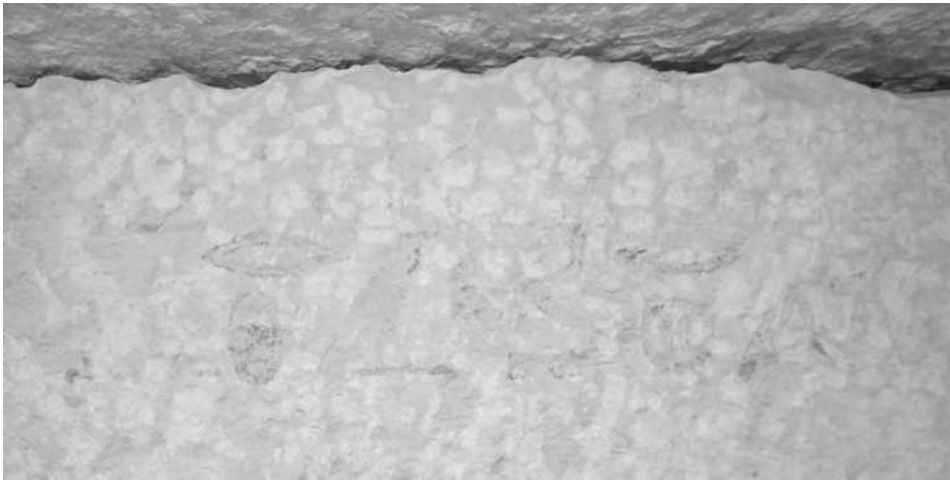


Fig. 5.3.13 Burial chamber of Qar, inner west wall of the sarcophagus chest

The inner east wall of the sarcophagus chest (fig. 5.3.12):

(j)r(j) Nḥn (n) z3b, K3r.

'Keeper of Nekhen of the king, Qar'.

The inner west wall of the sarcophagus chest (fig. 5.3.13):

(j)r(j) Nḥn (n) z3b m3^c, K3r.

'True keeper of Nekhen of the king, Qar'.

The walls

Undoubtedly the most unique feature of the burial chamber is its decoration – despite the fact that its original painted plaster has survived only in a few places. The chamber thus adds to the information provided by eleven similar burial installations known from the late Fifth and the Sixth Dynasties from the residence necropoleis of Abusir and Saqqara.⁷² There, most of the tombs with decorated burial chambers concentrate relatively close to the tomb of Qar, in the Teti pyramid cemetery, and belong to the viziers Kagemni, Mereruka, Khentika-Ikheki (with two decorated chambers in his complex), Ankhmahor, and Inumenu.⁷³ Another four published tombs are situated in the cemetery of Unas and belong to Ihy, Niankhba, Mehu, and Idut.⁷⁴ One more tomb is located west of the Step Pyramid (Ptahhotep/Iynankh) and another one remains unpublished – that of Kairer.

The walls of Qar's burial chamber were plastered with dark mud and smoothed with white wash finish. This adjustment of the walls served as a surface for the painted decoration. Today only several small patches remain of the original decoration that most likely covered all the walls of the chamber.

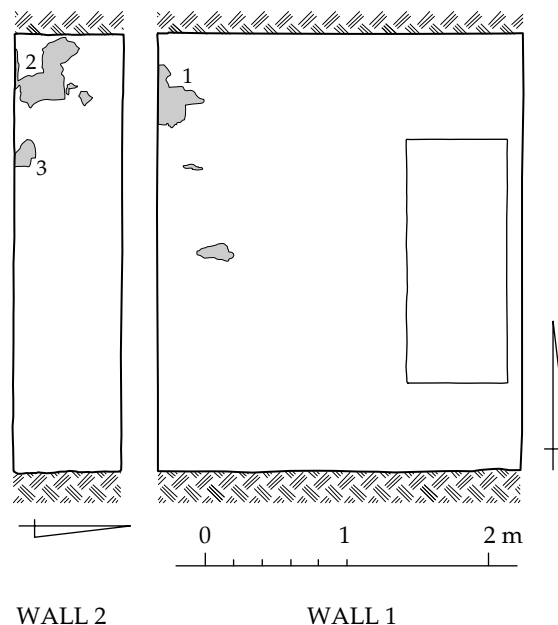


Fig. 5.3.14 Burial chamber of Qar, Wall 1 and 2

⁷² Lapp, *Särge und Sargkammern*, 2, § 3.

⁷³ For the summary see Bolshakov, *Man and his Double*, 109–122; K. Dawood, 'Animate decoration and burial chambers of private tombs during the Old Kingdom', in Pantalacci, Berger-El-Naggar, eds., *Des Néferkarê aux Montouhotep*, 117. Ankhmahor: Kanawati, Hassan, *Teti Cemetery II*, 55–64, pls. 23–29 and figs. 63–70.

⁷⁴ Ihy: Kanawati, Abder-Raziq, *Unis Cemetery II*, 62–64, pls. 28, 72–74.

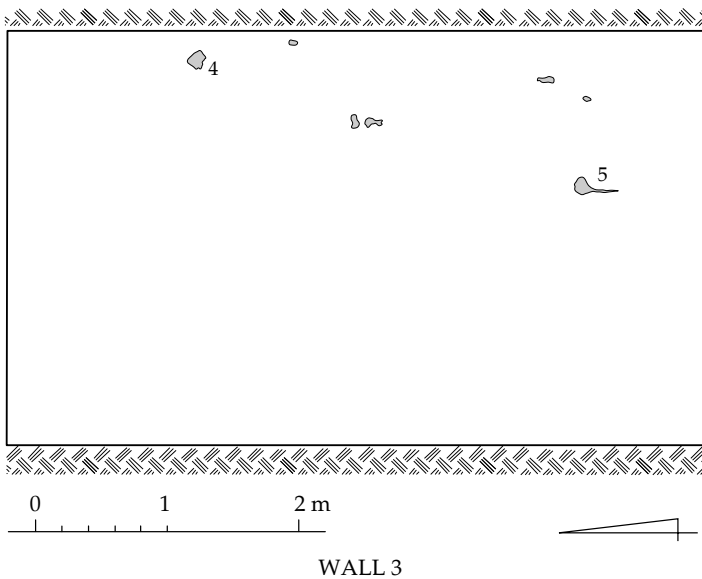


Fig. 5.3.15 Burial chamber of Qar, Wall 3

From the remains that have been left *in situ*, it can be established that the decoration started at a height of 0.80 m above the floor level. Its lower part was formed by a 13 cm thick red band, delineated by black lines. The decoration of the east part of the chamber can with some certainty be reconstructed only on the north and west walls.

Wall 1: East part, north wall (fig. 5.3.14)

Fragment 1 (17 × 22 cm) (pl. 20.1), shows several pottery vessels, perhaps bread moulds, and a white stone vessel on the right. The vessels are painted yellow, with red contours, and rest right on the base line. On the left end of the wall a ladder pattern is clearly visible. It consists of larger rectangular compartments filled alternatively with red, white or yellow. These compartments are always divided by two narrow bands of black separated by another band painted white.

Wall 2: East part, west wall (fig. 5.3.14)

Fragment 2 (40 × 40 cm) (pl. 20.2), shows the upper parts of two males striding to the left and dragging a sledge with large (oil) jars.⁷⁵ The men are painted red, wear black wigs and tight white kilts, with contour lines rendered in red including the knots and the front fold. The whole scene is set against a grey background. Above the men is a white field containing Qar's name outlined in a thin black line: *K3[r]*.

Fragment 3 (15 × 20 cm) (pl. 20.2), shows the front part of an arm and a leg of another male figure painted on a grey background and striding to the left, holding a taut rope. To the left of both fragments is a preserved ladder pattern that framed the individual walls. It features black contour lines and consists of rectangular compartments filled with black, red and yellow colour.

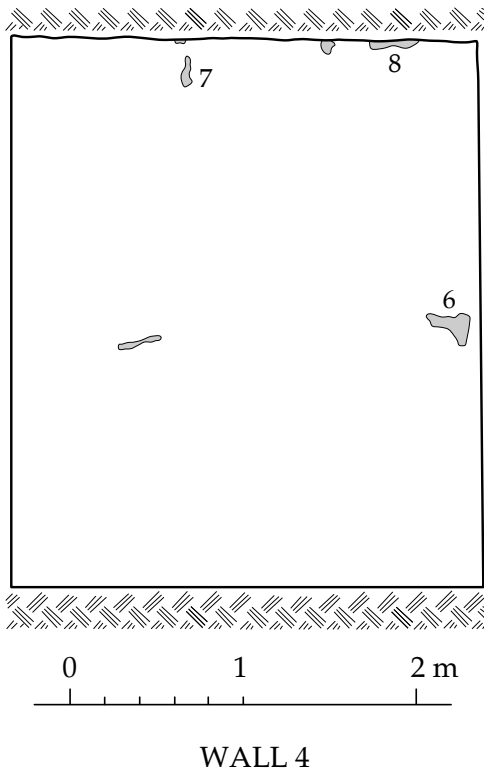


Fig. 5.3.16 Burial chamber of Qar, Wall 4

Wall 3: East part, east wall (fig. 5.3.15)

Fragment 4 (9 × 12 cm) (pl. 20.3), the remains of two rectangular compartments with a partly preserved inscription painted black and red on a white background, which may be reconstructed as [*h3tt n(jt)*] *ṣ*, [*t*] *hnw* [the best] ash oil: x+1, [the best] tjehehu oil: x+1 jar. This is probably the only part of an offering list A preserved on this wall.⁷⁶

Fragment 5 (12 × 23 cm) (pl. 20.4), probably a shield, painted white with red strokes.⁷⁷

Wall 4: East part, south wall I (fig. 5.3.16)

Fragment 6 (24 × 16 cm) (pl. 21.1), depicts the feet of a striding man proceeding to the right, painted red on grey background. Below him, at a height of 1.26–1.37 m above the floor, there is a red band framed with black lines.

Fragment 7 (4 × 18 cm) (pl. 21.2), features two preserved hieroglyphic signs: *m3... h....* The respective signs are painted white with black and red contour lines.

Fragment 8 (25 × 4 cm) shows a zigzag pattern on white background dividing the top of the decorated wall from the ceiling.

⁷⁵ Cf. Bolshakov, *Old Kingdom Reliefs and Sculpture*, 128–130.

⁷⁶ 'Listentyp A': Barta, *Opferliste*, 84–88.

⁷⁷ Compare Jéquier, *Frises d'objects*, 615–618.

Wall 5: West part, south wall (fig. 5.3.17)

Fragment 9 (46 × 20 cm), shows a zigzag pattern on white background and traces of Qar's name in black outlines: [K]ḥr.

Fragment 10 (40 × 20 cm) (pl. 21.3), the upper parts of three beer jars with bodies painted red and with black mud caps. To the right is perhaps a fourth vessel with a white body and black cap.

Fragment 11 (65 × 20 cm) (pl. 21.4), shows a *wesekh* collar on the left and its counterpoise on the right.⁷⁸ They are outlined in black and painted white with yellow ends. Above them is a black register line. Placed on this line, on the right-hand side are items of which only fragments are preserved.

Fragment 12 (30 × 23 cm) (pl. 21.5), shows partially preserved vessels painted white and a wooden box painted white, with a yellow top.⁷⁹

Wall 6: West part, west wall (fig. 5.3.18)

Fragment 13 (70 × 12), shows a zigzag pattern on white background.

Fragment 14 (20 × 12 cm) (pl. 21.6) is likely to be a piece of furniture, a chair, the surface of which is painted with alternating red and white bands, with yellow framing; the right leg is visible.

Wall 7: West part, north wall (fig. 5.3.19, pl. 22.1)

Fragment 15 (30 × 14 cm) (pl. 22.2), most likely a carrying chair, painted yellow, with a *kheker*-frieze on the top.⁸⁰

Fragment 16 (93 × 25 cm) (pl. 22.3), a chair and a headrest; on the extreme right the last compartments can be seen of an extensive offering list which continues along the wall towards the east.⁸¹

Fragment 17 (73 × 33 cm) (pl. 23.1), part of an extensive offering list reading from right to left.⁸² At least the first six columns failed to survive to date. The reconstructed numbers used here follow the order of the early Sixth Dynasty offering lists. The row (as well as the rows that follow below it) seems to consist of twenty compartments. Each of them is divided into three parts: the upper one for the name of the offering or rite, the middle one for the unit or measure of each item/handling, and the bottom one for an indication of quantity. The offering list copies the lists on the walls in Chapel II of the vizier Qar.

1.–6. not preserved,

7. *t[wʕwt]* – *twawt* sacred oil...,

8. *ḥ3[tt (n)jt] ʕš* – the best ash oil...,

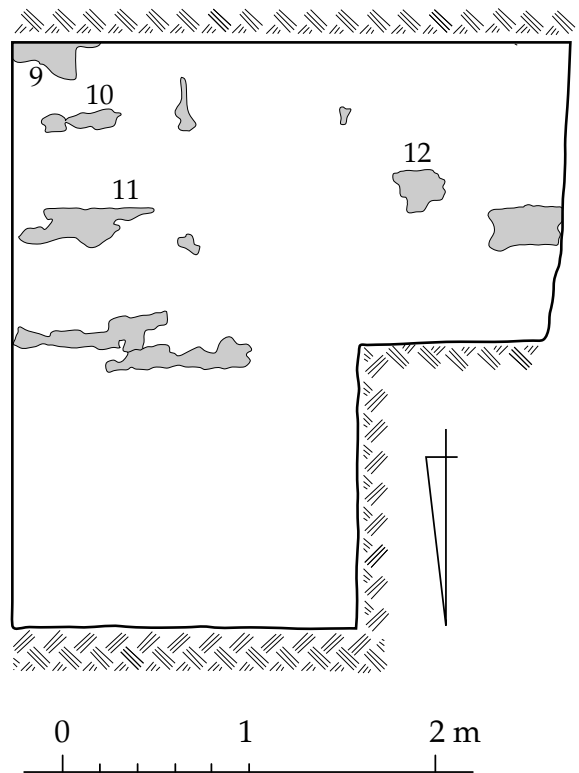
9. *ḥ3tt (n)jt thnw* – the best tjeheanu oil...,

10. [*ʕr*]/[*w3d*] – a bag of green-eye paint...,

11. [*ʕr*]/*msdt* – a bag of black-eye paint...,

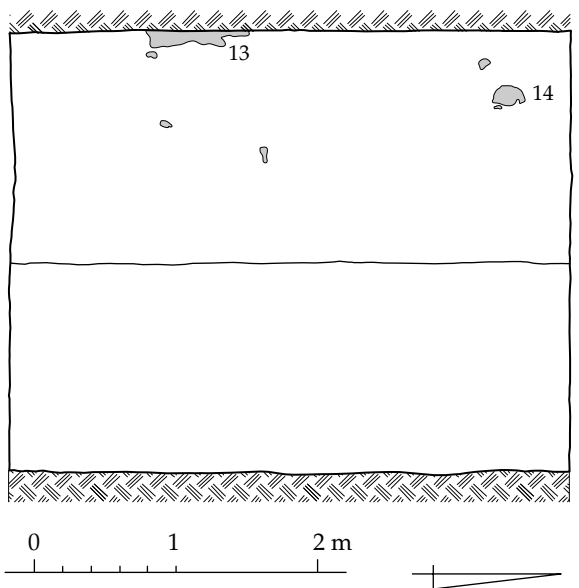
12. [*wnh*]/*wj* – cloth: two measures,

13. *sntr sdt* – incense (on) fire...,



WALL 5

Fig. 5.3.17 Burial chamber of Qar, Wall 5



WALL 6

Fig. 5.3.18 Burial chamber of Qar, Wall 6

⁷⁸ *Wesekh* of Type I following Jéquier's classification, see Jéquier, *Frises d'objets*, 62, figs. 158–160. For the counterpoise *ibid.*, 65, figs. 171–175.

⁷⁹ *Ibid.*, 247, fig. 648.

⁸⁰ Compare *ibid.*, 251, fig. 663.

⁸¹ *Ibid.*, 242, fig. 638.

⁸² Location of the offering list on the north wall of the burial chamber was quite characteristic for tombs in Central Saqqara, comp. Bolshakov, *Man and his Double*, 117.

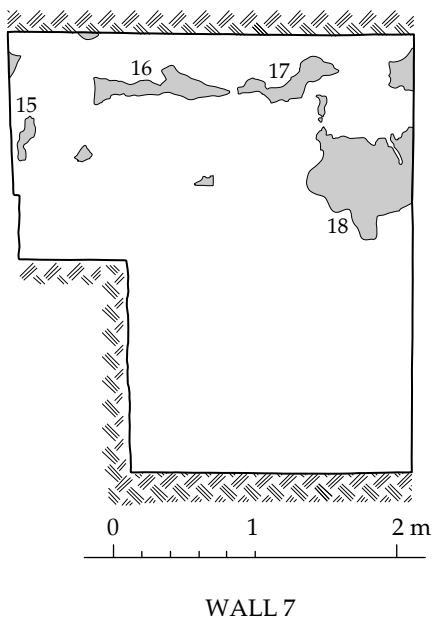


Fig 5.3.19 Burial chamber of
Qar, Wall 7

14. [*ḳbh*w] *ḳ* – libation and a ball...,
15. *ḥ3wt* – offering table...,
16.–20. are not preserved.

Fragment 18 (75 × 70 cm) (*pl.* 23.2), a continuation of an extensive offering list reading from right to left, which is preserved on Fragment 3. It consists of the second, third and fourth row, the second and fourth rows containing only one and three items respectively, with hypothetical numbers 30 and 66–68.

Second row:

- 21.–29. not preserved,
30. *mw* [ḳ] – vessel of water,
31.–40. not preserved.

Third row:

- 41.–43. not preserved
44. *jd3t* [*ḥ3.k*] – a kind of bread, (put) behind you...
45. *p3wt* – a kind of bread, 2 loaves,
46. *t3šr* – a kind of bread, 4 loaves,
47. *ḥdw* [ḳ] – vessel of onion, 4 vessels,
48. *ḥpš* – foreleg, 1 piece...

Fourth row:

67. *dsr*[*t j3tt*] – a vessel of *djeseret* drink...,
68. [*ḥn*]*ḳ*[*t* ḳ] – a vessel of beer...,
69. *ḥnḳt* *ḥnms* – a kind of beer....

A comparison of the decoration preserved in Qar's burial chamber with other known examples shows that it contains one unique feature, namely several male figures preserved on the west wall of the entrance area. Thus the burial chamber of Qar belongs to the very few known examples from Saqqara which feature human figures in the decoration scheme.⁸³ For the time being, it is difficult to provide a satisfying explanation for this phenomenon. Nevertheless, it seems clear that this development precedes the later Heracleopolitan and Eleventh Dynasty tradition.⁸⁴

⁸³ Bolshakov, *Man and his Double*, 107–116, together with tombs of Kairer (the publication has been in preparation by K. Dawood) and Inumin (Kanawati, *Teti Cemetery VIII*, 46–51, pls. 30–34, 53–56).

⁸⁴ Bolshakov, *Man and his Double*, 116.

5.4 Tomb of Qar: the finds

Miroslav Bárta

with an entry by Petra Vlčková

During the excavation of the tomb of Qar, numerous groups of artefacts were brought to light. Most of them can be associated directly with the existence of the tomb and the original function of the individual rooms and areas therein; however, some of them accumulated as a consequence of secondary activities such as tomb robberies and/or the dismantling of older Old Kingdom tombs and, in some instances, also later tombs existing in their close vicinity. These finds will be dealt with in a separate volume of the Abusir South publications. Below are listed only those artefacts and finds that relate directly to the owner of the tomb and his family members. Individual excavation numbers are discussed according to their association with other finds and/or provenance in different sectors of the tomb.

5.4.1 Surface finds

Shortly after the excavations started, some decontextualised artefacts could be documented. Their distribution as well as dating ranges from the Old Kingdom to the Late Period and indicates that they were found in secondary locations. In several instances it seems likely that they were originally part of the tomb equipment of the discussed tombs.

Excav. No. 1/GG/1995 (fig. 5.4.1)

A bronze statuette of Osiris found at the southwest corner of the tomb, in a layer of wind-blown sand and limestone chips. He wears an *atef* crown with cobra and holds a crook and flail in his crossed arms. H. 6 cm. At the back there is a 'T'-shaped sign upside down.

Date: Late Period.¹

Excav. No. 2/GG/1995 (fig. 5.4.2)

A fragment of a wooden oar made of accacia wood with remains of white plaster (max. l. 10.5 cm, max. w. 4.5 cm) discovered above the corridor leading into Chapel 2, in a layer of sand, mudbrick destruction, at the height of the roofing blocks.

Date: Old Kingdom, probably part of the original burial equipment of the vizier Qar.

Excav. No. 3/GG/1995 (fig. 5.4.3)

A flint knife retouched on both sides, with a triangular cross-section, l. 6.5 cm, found in the same context as Excav. No. 2/GG/1995.

Date: Old Kingdom.²

¹ For similar though much better parallels cf. Daressy, *CG 38001–39384*, 66–115, pls. XV–XXI; G. Roeder, *Mitteilungen aus der Ägyptischen Sammlung, Band VI. Ägyptische Bronzefiguren* (Berlin, 1956), 133–194, pls. 22–26, and Page-Gasser, M., Winterhalter, S., eds. *Ägypten. Augenblicke der Ewigkeit. Unbekannte Schätze aus Schweitzer Privatbesitz* (Mainz, 1997), 260–261, No. 172.

² Compare J. A. Svoboda, 'The King's Knives: Chipped Lithics from Raneferef's Mortuary Complex', in Verner *et al.*, *Raneferef I*, 502–512.



Fig. 5.4.1 Excav. No. 1/GG/1995



Fig. 5.4.2 Excav. No. 2/GG/1995



Fig. 5.4.3 Excav. No. 3/GG/1995

Excav. No. 4/GG/1995 (fig. 5.4.4)

A fragment (3 × 4 cm) of a travertine miniature bowl with upright and attenuated rim with a groove below it, and with smoothed surface. Found in the surface layer to the east of the tomb.

Date: Early Dynastic Period?³

5.4.2 Finds from Open Court 1

Excav. No. 6a/GG/1995 (figs. 5.4.5–6)

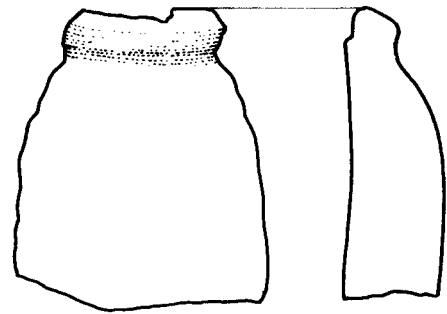
A fragment of a limestone offering altar measuring 24 × 19 cm, found in Chapel 1, Layer 2. On the upper side are two rectangular cavities with slanting inner sides, two *hetep* signs and remains of a sunk inscription:

[*h*tp] *dj nswt, dj Wsjr, nb j[m³hw]*...

'[An offering] which the king gives and Osiris gives, Lord of the well[-provided]....'

It belongs to Excav. No. 6b/GG/1995.

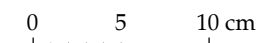
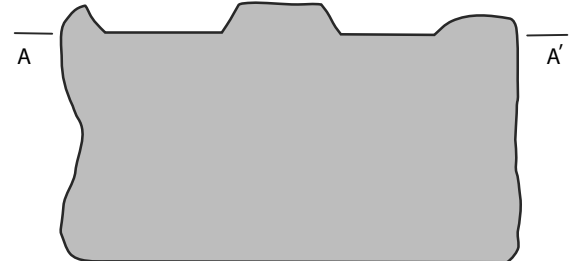
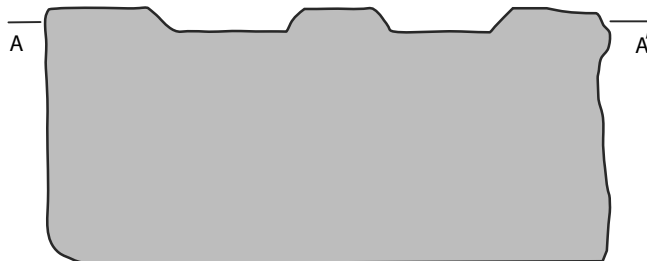
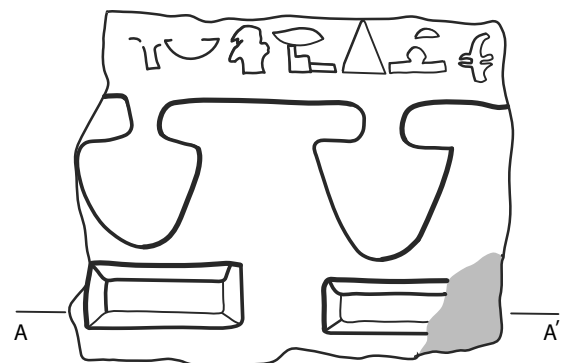
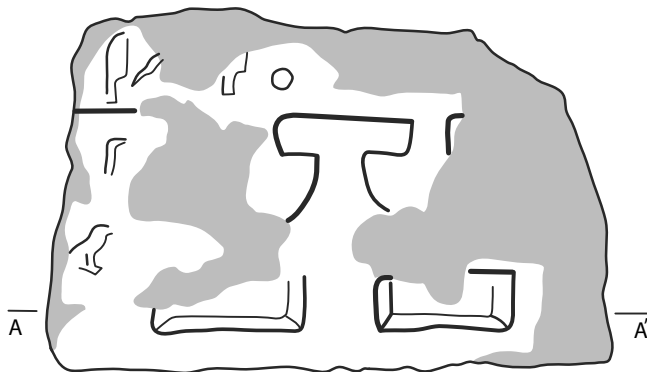
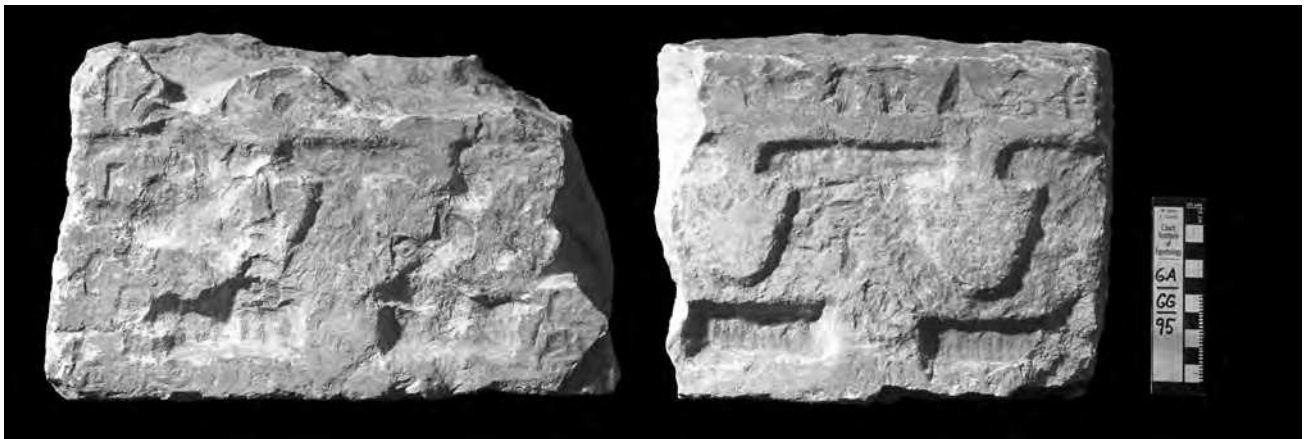
Hölzl, Type B+C.⁴



▲ Fig. 5.4.4 Excav. No. 4/GG/1995

▼ Fig. 5.4.5 Excav. No. 6 a and b/GG/1995

▼▼ Fig. 5.4.6 Excav. No. 6 a and b/GG/1995



³ Cf. Excav. Nos. 140/GG/1995.

⁴ Hölzl, *Opfertafeln und Kultbecken*, 15; 24 (AR-28).

Excav.No. 6b/GG/1995

A fragment of a limestone offering altar measuring 24 × 19 × 15 cm, found in Chapel 1, Layer 2. On the upper side are two rectangular cavities, remains of two *hetep* signs and remains of a sunk inscription, almost completely gone, containing, perhaps, a personal name:

..[*jm3h*](w)...*Jdj*.

‘...[well-]provided, Idji’.⁵

On the extreme left of the altar are the remains of two more hieroglyphic signs: ...*j*...*3*...?



Fig. 5.4.7 Excav. No. 9+18/GG/1995

Excav. No. 9a/GG/1995 (figs. 5.4.7–8)

A limestone block broken into three parts, measuring 65 × 29 cm, decorated with two lines of inscriptions, reading from the right. Fragment 9a measures 29 × 47 cm. It was found in Layer 2 in front of Chapel 1 entrance. It joins two more fragments found in the same location: 9b/GG/1995 (9 × 22 cm) and 18/GG/1995 (26 × 32 cm).

The two preserved horizontal lines with hieroglyphs in sunk relief read from the right to the left as follows (the reading includes all three fragments joined together):

1. ...[*jmj*]-*wt*, *nb t3-dsr*, *ḳrs.t.[f]* *m*...

2. ...*hs(w) m ḥb-nb*, *Dd-[swt]* *Ttj*-...

1. ‘...[the one belonging to] *wt*, Lord of necropolis, may he be buried in ...

2. ...praised, during every feast, ...“Teti’s (cult) – [places] are enduring”...’

⁵ Ranke, *PN I*, 54.23.

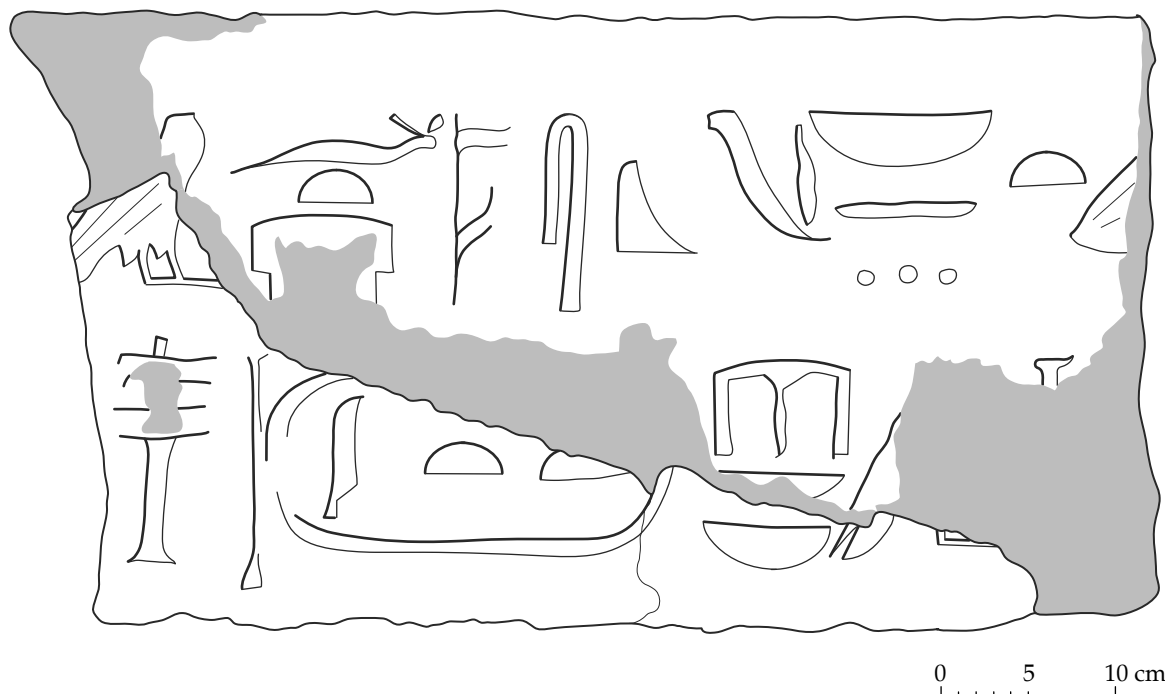


Fig. 5.4.8 Excav. No. 9+18/GG/1995

Excav. No. 9b/GG/1995, see 9a/GG/1995

A fragment of a limestone relief measuring 22×9 cm, decorated in sunk relief.

Excav. No. 18/GG/1995

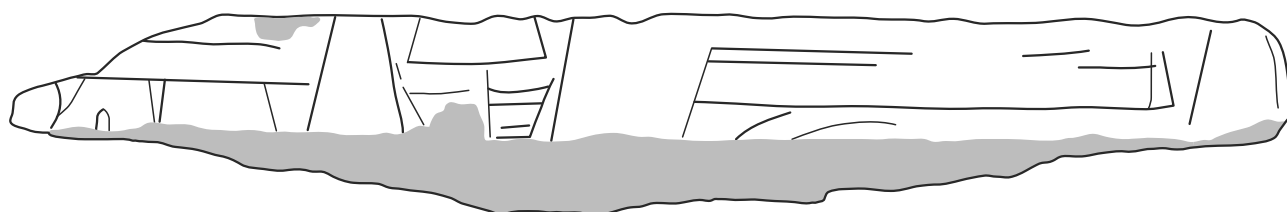
A limestone fragment measuring 26×32 cm, decorated in sunk relief.

Excav. No. 10/GG/1995 (figs. 5.4.9–10)

A limestone fragment 7×73 cm, showing part of a register with piled up offering items, incised decoration, much weathered. Found in the layer of debris in front of entrance to Chapel 1.

▼ Fig. 5.4.9 Excav. No. 10/GG/1995

▼▼ Fig. 5.4.10 Excav. No. 10/GG/1995





Excav. No. 11b/GG/1995 (figs. 5.4.11–12)

A limestone lintel measuring 0.50 × 1.56 m. The lintel was originally placed above the entrance into Chapel 1.⁶ Decorated in sunk relief, it shows five striding figures of Qar heading to the right (the figures on both ends are heavily damaged). Qar is depicted standing, leaning against a long staff and holding a 'handkerchief' in his right hand. He wears a short kilt with a frontal piece. Clear differences in the wigs are well recognisable: whereas the first and last figures are much damaged, the second and fourth figure wear a short wig with horizontal rows of locks from the crown to the bottom while the third one is shown with a shoulder-length striated wig. The figures alternate with columns (four in total) of inscriptions, starting on the right. Pink red paint is largely preserved on the block. In comparison with Excav. No. 11a/GG/1995, the signs in individual columns are arranged in a more loose fashion.

1. *[jm3h]w hr Jnpw, tp(j) dw.f,*
2. *tp(j)-hr(t) nswt, r Nhn (n) z3b, K3r,*
3. *jm3hw hr Wsjr,*
4. *ꜥd-mr (n) z3b, K3r.*

1. '[Well-provided] before Anubis, Who is upon his mountain,
2. property administrator of the king, keeper of Nekhen of the king, Qar,
3. well-provided before Osiris,
4. administrator of the king, Qar'.

▲▲Fig. 5.4.11 Excav. No. 11b/GG/1995

▲Fig. 5.4.12 Excav. No. 11b/GG/1995

⁶ Junker, *Giza VII*, 96–100; Simpson, *Western Cemetery I*, 26; Harpur, *DETOK*, 44–45.

Excav. No. 32/GG/1995 (figs. 5.4.13–14)

A large part of a limestone offering altar measuring $52 \times 35 \times 14$ cm, found 1.15 m above the floor level of Open Court 1, at the entrance into Chapel 1, in Layer 2. Both longer ends are bordered with raised *hetep* signs. In the middle there are five rectangular depressions with slanting walls measuring 10×5 cm and 4 cm deep.

It may be classified as Hölzl, Type B+C, although specifically this type is not given.⁷

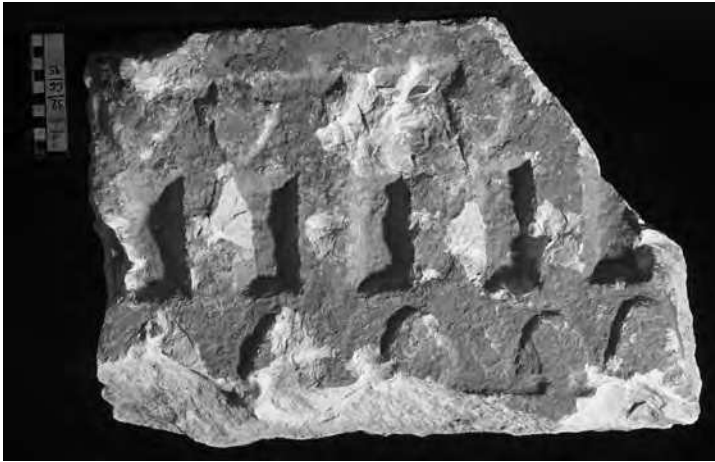


Fig. 5.4.13 Excav. No. 32/GG/1995

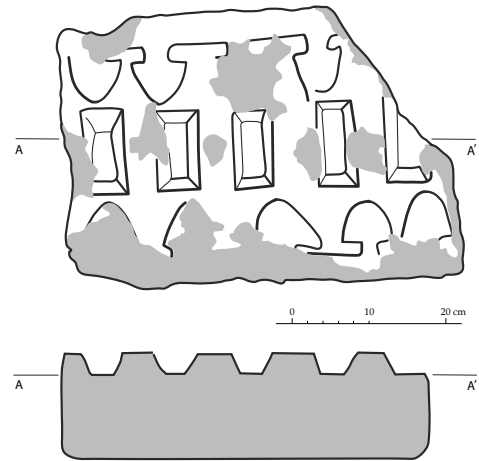


Fig. 5.4.14 Excav. No. 32/GG/1995

Excav. No. 53/GG/1995 (figs. 5.4.15–16)

A rough headrest made of limestone and measuring 13×15 cm. It was found in Layer 2, Open Court 1, about 60 cm above its floor, opposite the entrance into Chapel 1.



Fig. 5.4.15 Excav. No. 53/GG/1995

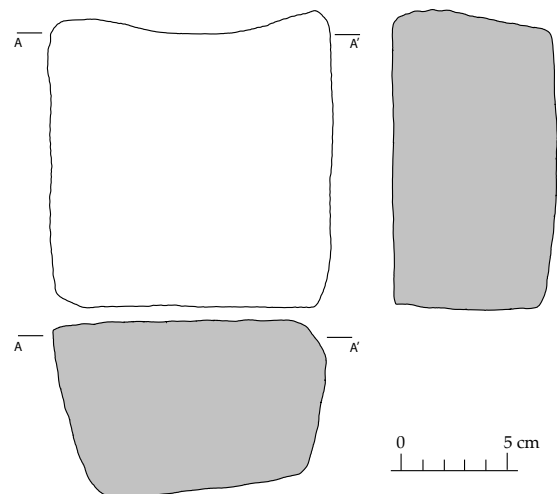


Fig. 5.4.16 Excav. No. 53/GG/1995

⁷ Hölzl, *Opfertafeln und Kultbecken*, 15; 23–24.

Excav. No. 104/GG/1995 (figs. 5.4.17–18)

A limestone offering table measuring $40.0 \times 23.5 \times 15.5$ cm. It was found in Layer 2, Open Court 1, at floor level. Its surface is decorated with a *hetep*-sign and two rectangular depressions with slanting walls.

Hölzl, Type B+C.⁸



Fig. 5.4.17 Excav. No. 104/GG/1995

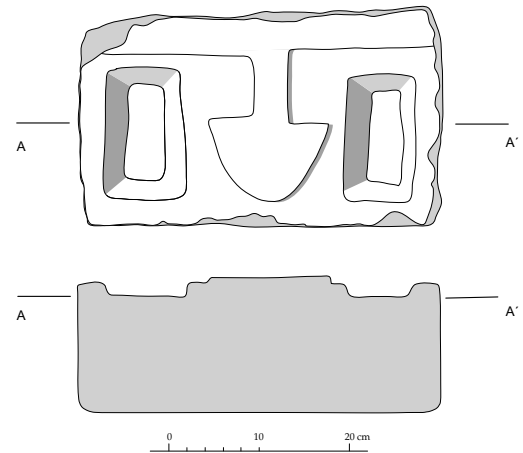


Fig. 5.4.18 Excav. No. 104/GG/1995

Excav. No. 105/GG/1995 (figs. 5.4.19–20)

A limestone offering table measuring $28.5 \times 23.0 \times 16.0$ cm. It was found in Layer 2, Open Court 1, at floor level. Its surface is decorated with a *hetep*-sign and two rectangular depressions with slanting walls.

Hölzl, Type B+C.⁹

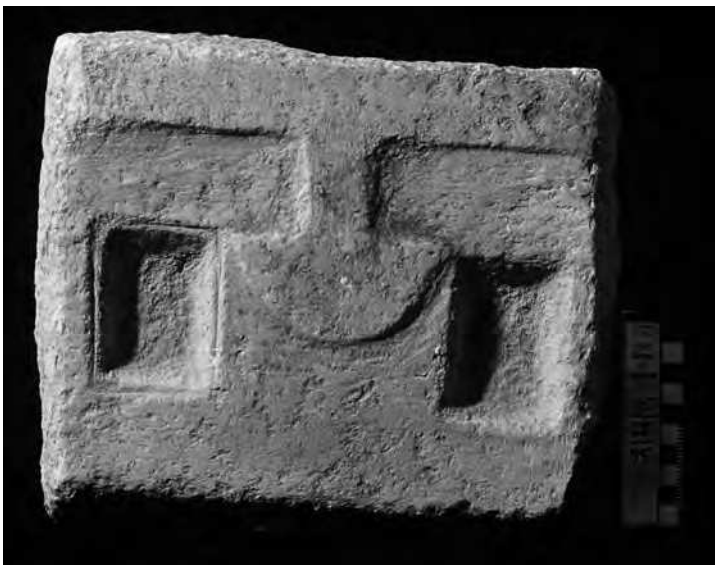


Fig. 5.4.19 Excav. No. 105/GG/1995

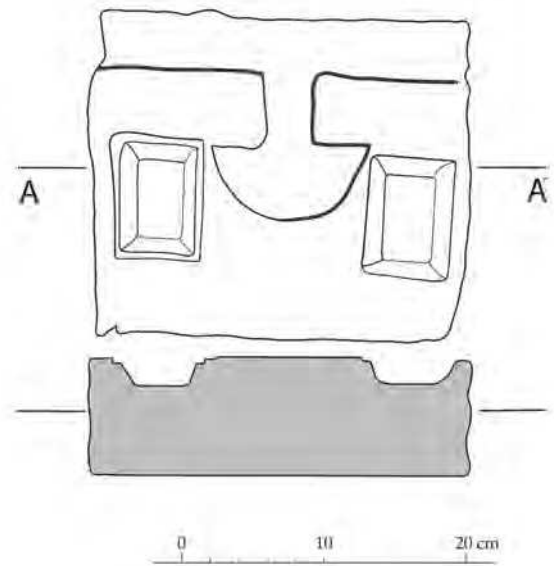


Fig. 5.4.20 Excav. No. 105/GG/1995

Excav. No. 106/GG/1995 (figs. 5.4.21–22)

A part of a limestone offering table measuring $24.0 \times 17.5 \times 9.3$ cm. It was found in Layer 2, Open Court 1, lying on the floor in the northeast area. It is probably a fragment of the typologically identical offering tables Excav.Nos. 104 and 105/GG/1995.

⁸ Hölzl, *Opfertafeln und Kultbecken*, 15; 23 (CG 1355).

⁹ *Ibid.*, 15; 23 (CG 1355).

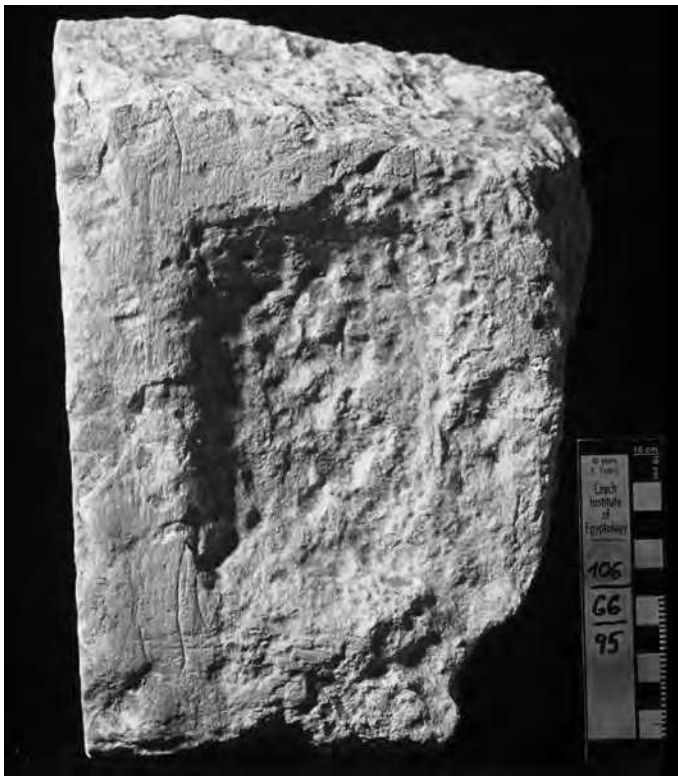


Fig. 5.4.21 Excav. No. 106/GG/1995

Excav. No. 107/GG/1995 (figs. 5.4.23–24)

A limestone offering table measuring 40.0 × 23.5 × 15.5 cm. It was found in Layer 2, Open Court 1, at floor level, broken into four pieces. Its surface is decorated with a *hetep*-sign and two rectangular depressions with slanting walls. The inscriptions, executed in sunk relief, are confined to the surface delineated by the *hetep*-sign. They read:

1. *jm3h(w) hr nb.f, (j)m(j)-r pr Tw3j.*
2. *h̄tp dj nswt, [h̄tp dj Jnpw] tp(j) dw.f, jmj-wt, nb t3-dsr...*

1. 'Well-provided before his lord, Tjuai,
2. A boon which the king gives, [a boon which Anubis gives],
Who is upon his mountain, Who is in the embalming place, Lord of the necropolis...'.
Hölzl, Type B+C.¹⁰



Fig. 5.4.23 Excav. No. 107/GG/1995

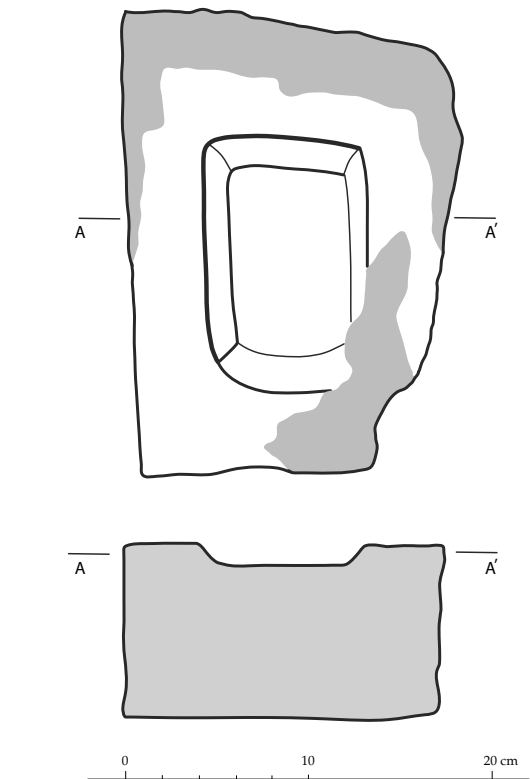


Fig. 5.4.22 Excav. No. 106/GG/1995

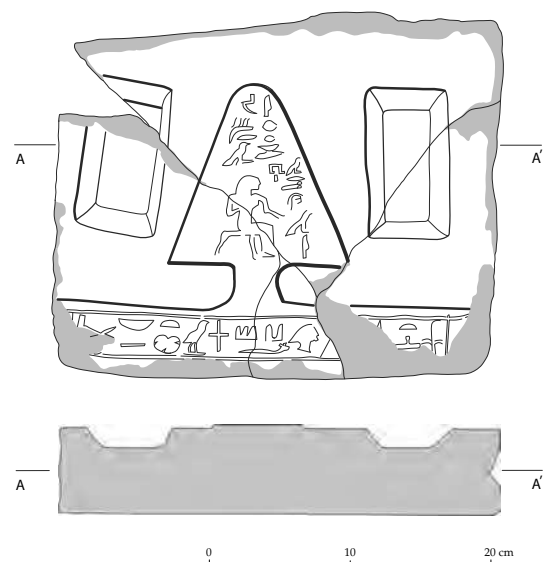


Fig. 5.4.24 Excav. No. 107/GG/1995

¹⁰ Hölzl, *Opfertafeln und Kultbecken*, 15; 23 (CG 1355).

Excav. No. 114/GG/1995 (fig. 5.4.25)

A limestone plummet found close to the entrance into Chapel 1, Layer 2. It is 4.0 cm high with a max. diam. of 2.5 cm. Its base is rounded, the top tapering and flat.

Excav. No. 115/GG/1995 (figs. 5.4.26–27)

A limestone headrest of 19.5 × 14.0 × 8.0 cm. It was found in Layer 2, Open Court 1, at floor level.



Fig. 5.4.25 Excav. No. 114/GG/1995



Fig. 5.4.26 Excav. No. 115/GG/1995

Excav. No. 120/GG/1995 (figs. 5.4.28–29)

A limestone drum of Qar found close to the entrance into Chapel 1, lying on the floor of Open Court 1.¹¹ It was found broken into two pieces. Its total length is 71 cm, w. 23 and th. 19 cm. The inscription in sunk relief is partially damaged:

(J)r(j) Nḥn (n) z3b [m3ʿ], [K]3r

‘[True] keeper of Nekhen of the king, [Q]ar.’

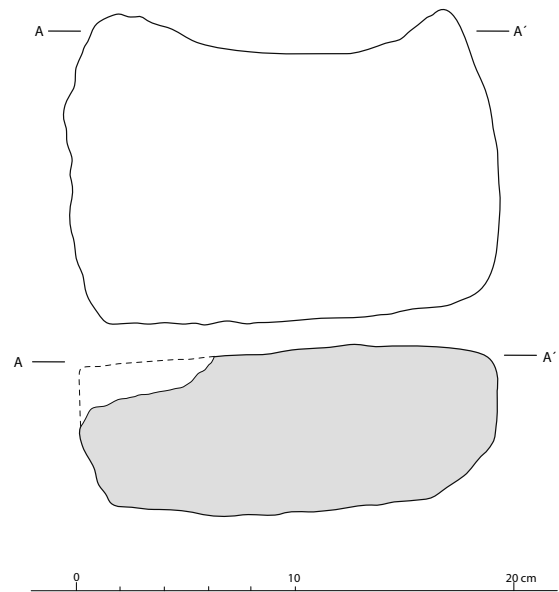
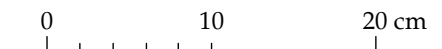
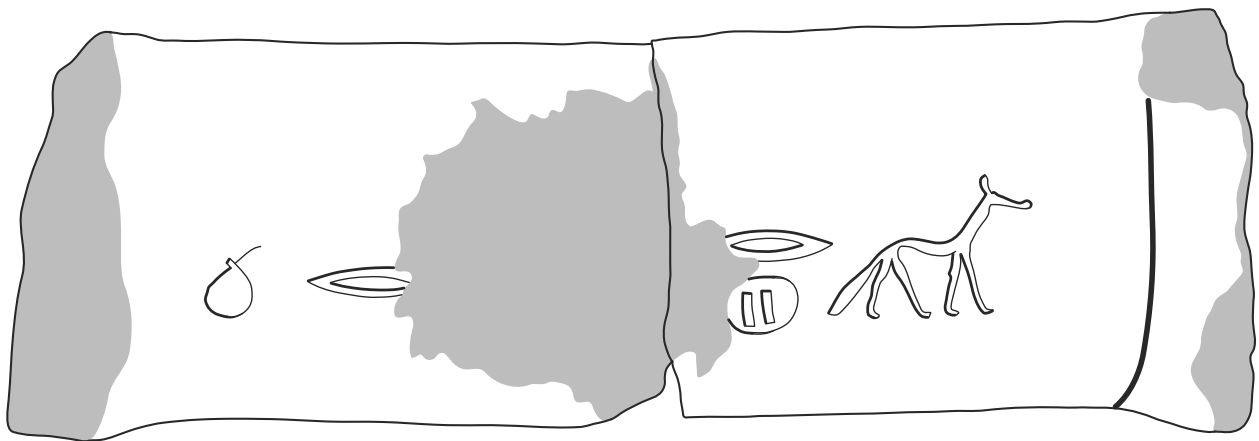


Fig. 5.4.27 Excav. No. 115/GG/1995



Fig. 5.4.28 Excav. No. 120/GG/1995

¹¹ Harpur, *DETOK*, 48–49.



Excav. No. 122/GG/1995 (*fig. 5.4.30*)

A limestone model of a column 7.5 cm high, diam. 2.0 cm. Found in Open Court 2, Layer 2. It features two horizontal grooves close to its top end. It probably comes from the burial chamber of the vizier Qar.

Fig. 5.4.29 Excav. No. 120/GG/1995

Excav. No. 140/GG/1995 (entry by P. Vlčková) (*fig. 5.4.31*)

A specific group of artefacts is represented by a set of stone vessels fragments found in a mound of debris in Open Court 1, to the north of entrance into Chapel 1. None of the fragments could be linked directly to a specific burial within the tomb complex or to the performance of mortuary cult activities. The shape terminology used here for their classification is more or less based on the scheme devised by the International Group for the Study of Egyptian Pottery and modified for the stone vessels by Barbara G. Aston.¹² In this entry, only significant fragments of vessels, *i.e.* profiles, rims, and bases, are included. Fragments of bodies were excluded since they cannot be used for the vessel shape classification.¹³

Excav. No. 140a/GG/1995

A profile fragment of a cylinder jar with a short, rounded rim and simple vertical sides made of travertine.¹⁴ On the inner walls of the shaft, traces of boring are still clearly visible. The walls of the shaft had not been extra modified to follow the outlines of the jar, and the bottom of the shaft was left plain. The surface was well treated and polished. The vessel is badly damaged with a partly chipped off base. No visible traces of the original content

¹² Cf. Aston, *Stone Vessels*, 179f, fig. 22.

¹³ A total of 14 fragments of bodies of vessels made of various kinds of stones are reported for the Excav. No. 140/GG/1995.

¹⁴ For the debate on the usage of geological rather than traditional Egyptological nomenclature of various kinds of stones, cf. J. A. Harrell, 'Misuse of the Term "alabaster" in Egyptology', *GM* 119 (1991), 37–42; D. Klemm, R. Klemm, 'Calcit-Alabaster oder Travertin? Bemerkungen zu Sicht und Unsicht petrographischer Bezeichnungen in der Ägyptologie', *GM* 122 (1991), 57–70.



Fig. 5.4.30 Excav. No. 122/GG/1995

of the jar were detected. Cylinder jars with vertical sides and rounded rims with no indication of flaring at the base could only be dated for guidance from the Naqada II through the Fourth Dynasty. However, because of the absence of a cord in relief below the neck, dating to the Predynastic period seems more plausible.¹⁵

H. 17.0 cm, base diam. 8.0 cm, w. of the lip-rim 1.9 cm, th. of the sherd 2.0 cm, th. of the base 4.0 cm.

Excav. No. 140b/GG/1995

A rim fragment of a large, thick-walled vessel with a short, rounded rim made of limestone. The surface was well treated; it was smoothed, yet not polished. Dating uncertain.

Preserved h. of the vessel: 7.5 cm, max. th. 2.9 cm.

Excav. No. 140c/GG/1995

A profile fragment of a convex-sided beaker with a plain (sharp) rim and uneven inner walls made of banded travertine.¹⁶ This type of stone vessel is dated into the period spanning from late Naqada II to the First Dynasty.

H. 10.8 cm, base diam. min. 2.9 cm, th. of the walls 1.2 cm, th. of the base 1.8 cm.

Excav. No. 140d/GG/1995

A rim fragment of a restricted bowl with a sloping rim above sharp shoulders made of travertine.¹⁷ The external rim is very flat and has a plain orifice with a narrow groove that circumscribes the bowl just below the rim; it is only slightly indicated. This kind of vessel used for storing cosmetics reached the height of popularity during the Second and Third Dynasties but, in degenerated form, survived through the Sixth Dynasty.¹⁸

Preserved h. of the vessel 3.9 cm, w. of the rim 0.8 cm, th. 0.9 cm.

Excav. No. 140e/GG/1995

A rim fragment of a bowl/plate with a plain, slightly incurving rim. Nothing can be said about the shape of the base such as to whether it was flat or rounded. Thus, only a tentative dating can be suggested, from the Naqada II period through the Sixth Dynasty.

Preserved h. of the vessel 5.5 cm, max. th. 0.9 cm.

Excav. No. 140f/GG/1995

A base fragment of a bowl/plate made of rather dark diorite. On the inner side of the base, a recessed rounded depression is preserved with sharply cut edges. The surface was well treated and both sides were highly polished. Nothing can be said about the dating of this fragment.

L. 6.0 cm, w. 7.0 cm, max. th. 0.5 cm.

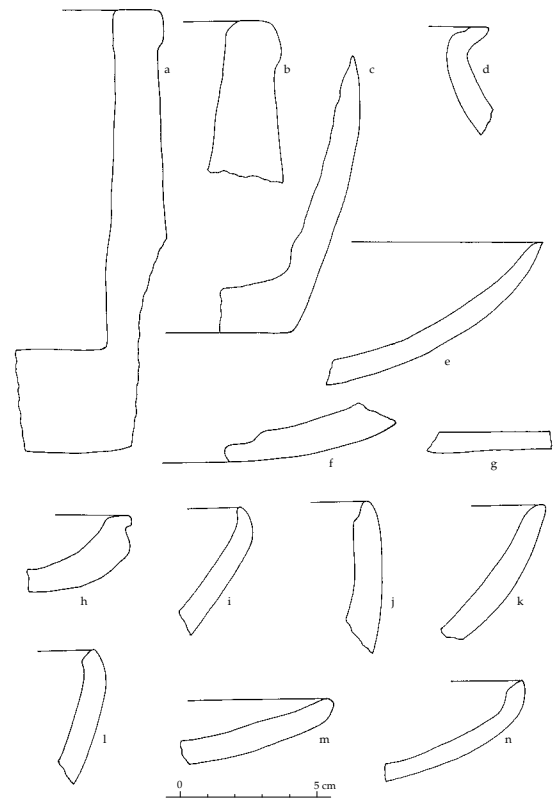


Fig. 5.4.31 Excav. No. 140/GG/1995

¹⁵ Cf. A. C. Mace, *The Early Dynastic Cemeteries of Naga ed-Dêr*, (Leipzig, 1909), 42; Reisner, *Mycerinus*, 131.

¹⁶ Aston, *Stone Vessels*, 116, No. 62.

¹⁷ *Ibid.*, 130, No. 106.

¹⁸ Similar vessels are in the Cleveland Museum, cf. L. M. Berman, *The Cleveland Museum of Art. Catalogue of Egyptian Art* (New York, 1999), 96–98, Nos. 33–37.

Excav. No. 140g/GG/1995

A fragment of a slate, completely flat object with only a slightly indicated lift on the left-hand side. Perhaps a fragment of a palette. Dating uncertain.

L. 4.6 cm, w. 3.0 cm, th. 0.4 cm.

Excav. No. 140h/GG/1995

A small fragment of a rim of a shallow bowl made of red breccia. Although the surface of the vessel is much worn, it had once been polished on the outer and inner sides.

Preserved h. 4.0 cm, max th. 1.5 cm.

Excav. No. 140i/GG/1995

A small fragment of a rather shallow bowl with a slightly contracted rounded rim made of banded travertine.

Preserved h. 2.0 cm, th. 0.9 cm.

Excav. No. 140j/GG/1995

A small fragment of a deeper bowl or beaker with a slightly contracted rounded rim made of banded travertine.

Preserved h. 5.8 cm, max. th. 1.2 cm.

Excav. No. 140k/GG/1995

A small fragment of a rather shallow bowl with a simple inner rim with rounded edges made of travertine.

Preserved h. 5.9 cm, max. th. 1.2 cm.

Excav. No. 140l/GG/1995

A fragment of a bowl with an inner, slightly contracted rim with rounded edges made of banded travertine.

Preserved h. 3.2 cm, max. th. 0.9 cm.

Excav. No. 140m/GG/1995

A fragment of the rim of a deep beaker rim with a rather sharp orifice-plane and convex sides made of travertine. Originally, the beaker might have been of the same type as the Excav. No. 140c/GG/1995, however, the fragments do not match.

Preserved h. 6 cm, th. 1 cm.

Excav. No. 140n/GG/1995

A rim fragment of a deep bowl with a contracted rim and sharp edges made of travertine.

Preserved h. 3.9 cm, th. 0.6 cm.

The majority of the stone vessels discussed above were made of travertine; other stone types such as breccia or limestone occur only sporadically. Due to the small number of discovered stone vessel fragments and their inconclusive archaeological context (they were found in debris), no conclusions, either typological or interpretative, can be drawn about them.

The presence of rather archaic forms of stone vessels may well be connected with the presence of earlier tombs not far from Qar's mastaba and with the robbers' activities in them. In fact, some of

the stone vessel types¹⁹ attested in Qar's mastaba were discovered in large quantities in the subterranean chambers of the mastaba 'MM' dating to the Third Dynasty. There, rather large amounts of stone vessels of archaic forms were found. As yet, none of the stone vessel fragments discovered in the area of Qar's mastaba can be associated with the funerary cult of the vizier.

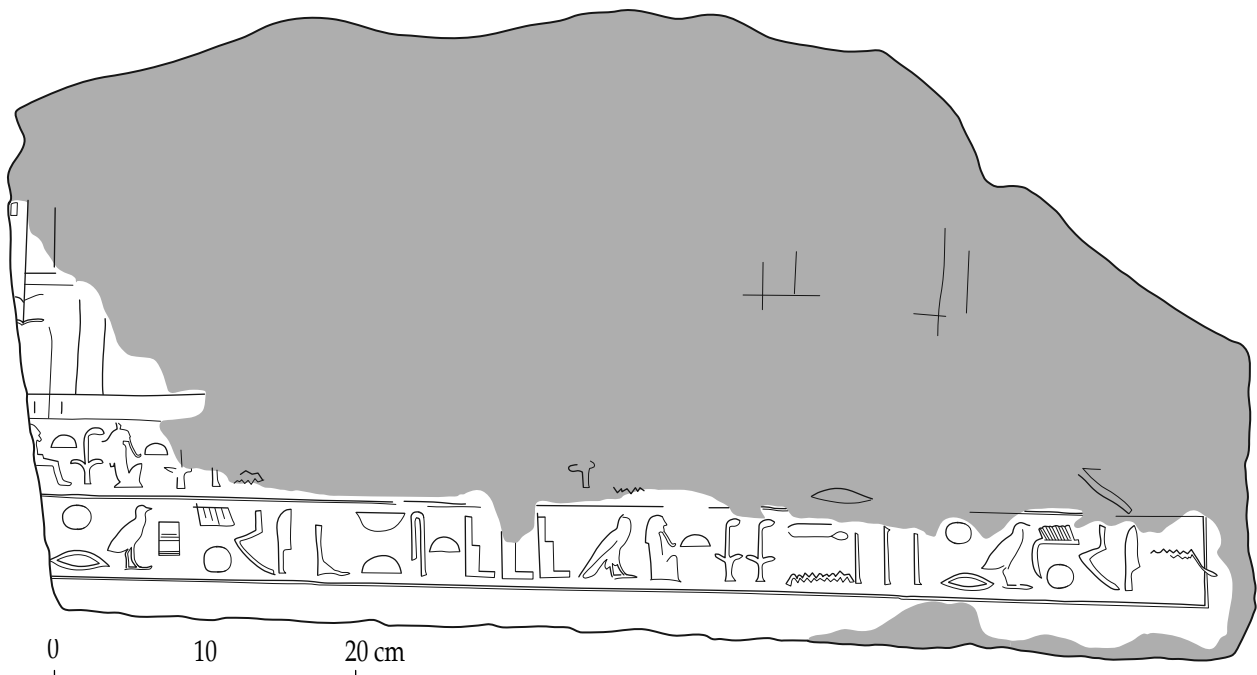
Excav. No. 142/GG/1995 (*figs. 5.4.32–33*)

A limestone fragment of a tomb wall decoration 83 × 47 cm in size, reused as the base of the libation basin built in Open Court 1, abutting the north wall of Qar's mastaba. Despite its worn form, the bottom two lines of a sunken hieroglyphic inscription are preserved on it. The vertical lines above it indicate that there

¹⁹ Mainly convex-sided beakers with a plain (sharp) rim and uneven inner walls that were made of banded travertine.

▼ Fig. 5.4.32 Excav. No. 142/GG/1995

▼▼ Fig. 5.4.33 Excav. No. 142/GG/1995



originally existed an extensive offering list. The inscription reads from the right to the left as follows:

1. ...*n jm3hw*...[*hr*] ...*t* ...*ntr*...*hnt(j) nswt*,...[*T*]*nnt*, *šps nswt*...

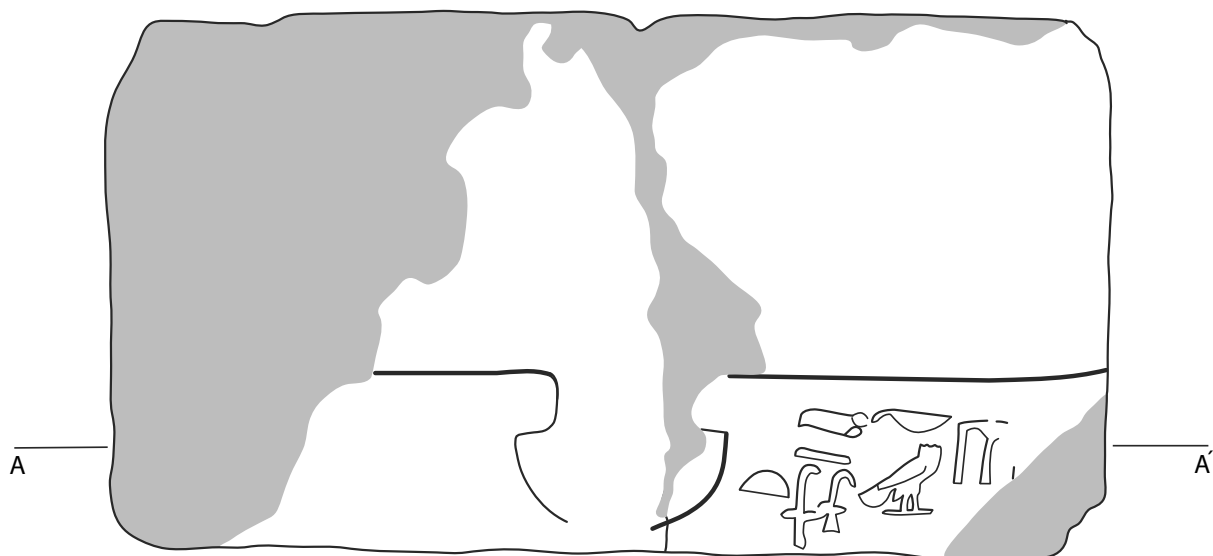
2. ...*n jm3hw hr ntrw Tnnt m swt.s nbt sb jm3h(w) pw hr*...

1. '...to the well-provided [before].....god...Foremost of the king...Tjenenet, noble of the king,...

2. ...to the well-provided before the gods (and) Tjenenet,²⁰ in all her places, it is the one who attained happiness²¹ before...'

▼ Fig. 5.4.34 Excav. No. 143/GG/1995

▼▼ Fig. 5.4.35 Excav. No. 143/GG/1995



²⁰ For Tjenenet cf. Leitz, ed., *Lexikon VII*, 475–476, although this epithet is not given.

²¹ See Hannig, *Wb I*, 1094 [26987].

Excav. No. 143/GG/1995 (figs. 5.4.34–35)

A limestone offering table of 52×29 cm, found in Open Court 1 lying on its floor. It is roughly worked and was found broken into two pieces and heavily eroded. Its upper surface is decorated with the *hetep*-sign, to the right of its top remains of a sunken inscription are retained:

...*hb* [*nb*], *K(3.j)-m-Tnnt*, '...[every] feast, Kaientjeneret'.

Hölzl, Type C2.²²

5.4.3 Finds associated with Chapel 1

Excav. No. 5a/GG/1995 (figs. 5.4.36–37)

A fragment of a limestone offering altar measuring $23 \times 17 \times 8$ cm, found in a layer of mudbrick destruction of mixed sand and limestone chips to the north of Chapel 1. It joins Excav. Nos. 5b and 5c/GG/1995. The altar is badly damaged; the upper side shows three rectangular cavities with slanting side walls and traces of three *hetep*-signs that were associated with them. It may be classified as Hölzl, Type B+C.²³



Fig. 5.4.36 Excav. No. 5/GG/1995

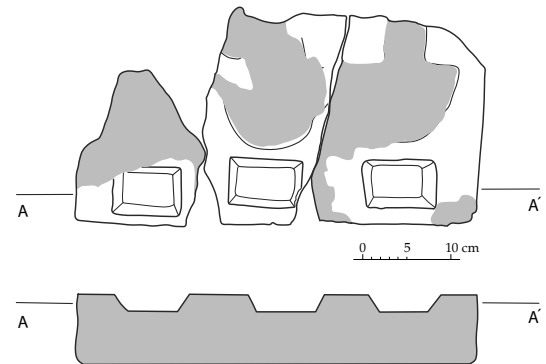
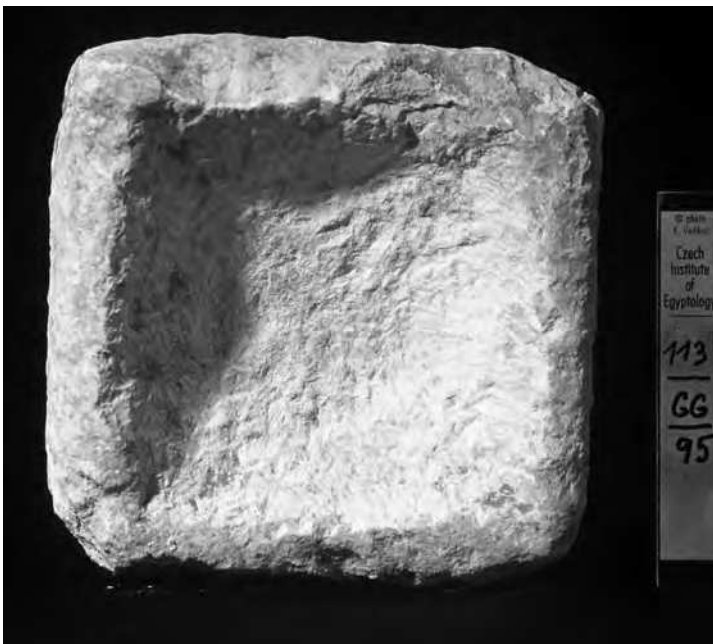
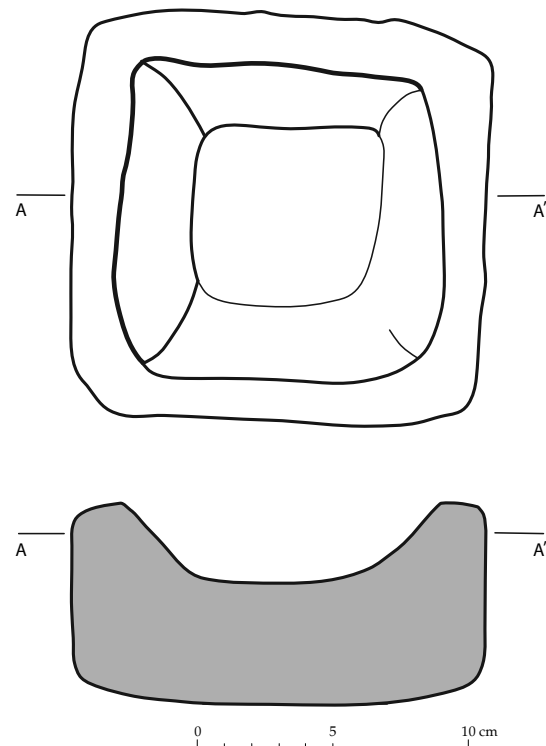


Fig. 5.4.37 Excav. No. 5/GG/1995



◀ Fig. 5.4.38 Excav. No. 113/GG/1995

▲▲ Fig. 5.4.39 Excav. No. 113/GG/1995

²² Hölzl, *Opfertafeln und Kultbecken*, 14; 20.

²³ *Ibid.*, 15; 23 (AR-24).

Excav. No. 5b/GG/1995

A fragment of a limestone offering altar measuring $23 \times 13 \times 8$ cm, found in Layer 2 in Chapel 1.

Excav. No. 5c/GG/1995

A fragment of an offering altar measuring $17.5 \times 13.5 \times 8.0$ cm, found in Layer 2 in Chapel 1.

Excav. No. 113/GG/1995 (figs. 5.4.38–39)

A limestone libation basin of $15.0 \times 15.0 \times 7.5$ cm. It was found lying on the floor of Chapel 1. It is only roughly smoothed with a central cavity having a max. depth of 3.5 cm. Its base is rounded.

Excav. No. 118/GG/1995 (fig. 5.4.40)

Two cross-cut chisels found in the corridor connecting Chapel 1 and Corridor 1. They are 6 and 4 cm long, respectively, and 4 mm in width.

Excav. No. 119/GG/96 (figs. 5.4.41)

A limestone model of a sealed beer jar, h. 5.0 cm, max. diam. 2.3 cm. Found on the floor of Chapel 1, close to its entrance. Its likely origin is the burial chamber of the vizier Qar. The original paint is well preserved – red for the pottery and black for the stopper.

Excav. No. 123a/GG/1995 (figs. 5.4.42–43)

A limestone fragment of a cornice. Found on the floor of Chapel 1. It measures 26×16 cm. The individual compartments are painted with different colours: red, green, and yellow.



Fig. 5.4.40 Excav. No. 118/GG/1995



Fig. 5.4.41 Excav. No. 119/GG/1995



Fig. 5.4.42 Excav. No. 123 a and b/GG/1995

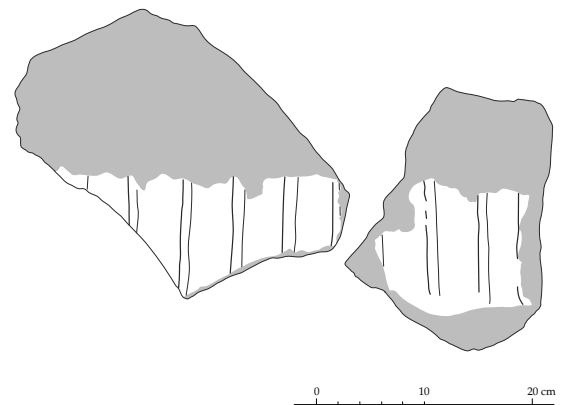


Fig. 5.4.43 Excav. No. 123 a and b/GG/1995

Excav. No. 123b/GG/1995

A limestone fragment of a cornice, identical to 123a/GG/1995 though not joined to it. Found on the floor of Chapel 1. It measures 14×13 cm. The individual compartments are painted with different colours: green, red and yellow.

Excav. No. 126/GG/1995 (figs. 5.4.44–45)

A travertine fragment of an offering plate of $7.5 \times 10.0 \times 1.8$ cm with a rounded edge, found in Chapel 1 in front of the false door

of Qar, about 50 cm above the floor level.²⁴ It joins Excav. No. 26/HH/1995. It comes from the same artefact as Excav. Nos. 132 and 150/GG/1995.²⁵ The fragments probably come from a flat-topped table.²⁶ The signs and inscriptions were originally filled with a blue paste.

Two lines of incised inscription are preserved:

1. ...[prt-*h*rw] *n.f*(*m*) [*t3*], *pzn*, *hnkt*, *hft dbht*-[*htpt*]...

2. ...*šps* [*nswt*], *jm3hw*...

1. '...[invocation offerings] for him (consisting of) *ta*-bread, *pzn*-bread, beer following the complete requirements of offerings,²⁷

2. ...noble of the king, well-provided...'



Fig. 5.4.44 Excav. Nos. 126, 132 and 150/GG/1995

Excav. No. 132/GG/1995

A travertine fragment, l. 6 cm, w. 4.5 cm, th. 1.9 cm.

It contains two compartments, the first one with the *st-hb*, 'oil of the feast'.

Excav. No. 150/GG/1995

A travertine fragment of an offering plate of 4.5 × 4.5 × 2.0 cm, found in the debris of Serdab 2, identical to 126, 132/GG/1995

²⁴ Throughout the publication the term 'travertine' has been used instead of the traditional 'alabaster' or 'Egyptian alabaster'. Comp. B. G. Aston, J. A. Harrell, I. Shaw, 'Stone', in Nicholson, Shaw, eds., *Ancient Egyptian Materials*, 59–60.

²⁵ For the best contemporary parallels see Hawass, *Hidden Treasures*, 20, tomb of Qar in Saqqara; Reisner, *Giza Necropolis I*, pl. 64d (G 4631). See also Hölzl, ed. *Pyramiden Ägyptens*, 266, Cat. No. 81 and 311, Cat. Nos. 146–148 – un-inscribed.

²⁶ Aston, *Stone Vessels*, 131–132.

²⁷ Barta, *Opferformel*, 16, Bitte 2; Lapp, *Opferformel*, 111/112.

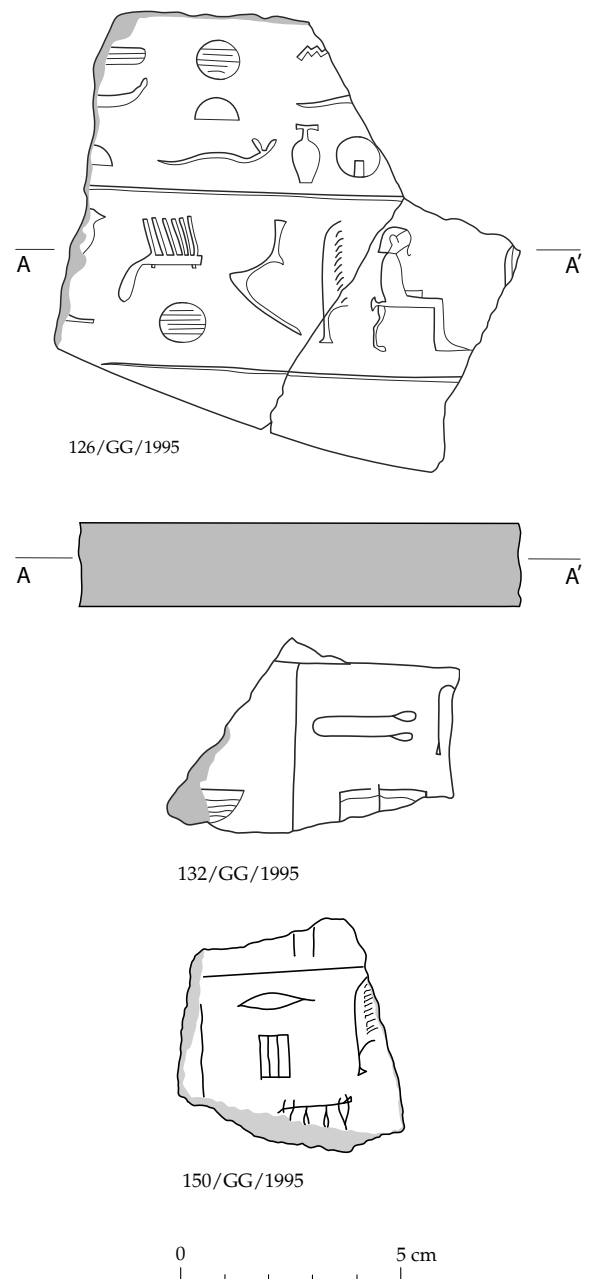


Fig. 5.4.45 Excav. No. 126, 132 and 150/GG/1995

and 26/HH/1995. The preserved compartment shows the hieroglyphic inscription of *jrp*, 'wine'.

Excav. No. 26/HH/1995

A travertine fragment of a table of $4.2 \times 6.1 \times 1.5$ cm, with a rounded rim and incised decoration on the upper surface. It was found in Open Court 2, lying on the floor in a layer of wind-blown sand, beneath the west wall.

Excav. No. 127a/GG/1995 (figs. 5.4.46–47)

A limestone fragment of a lintel with Qar's name, measuring $48 \times 30 \times 21$ cm. It was found in Chapel 1, about 20 cm above the floor level. It joins 127b/GG/1995. The sunken inscription reads as follows:....*K3r*, '...Qar'.²⁸

Excav. No. 127b/GG/1995

A limestone fragment of a lintel with Qar's name, measuring $18 \times 21 \times 4$ cm. Found in Chapel 1, about 20 cm above the floor level.



Fig. 5.4.46 Excav. No. 127 a and b/GG/1995

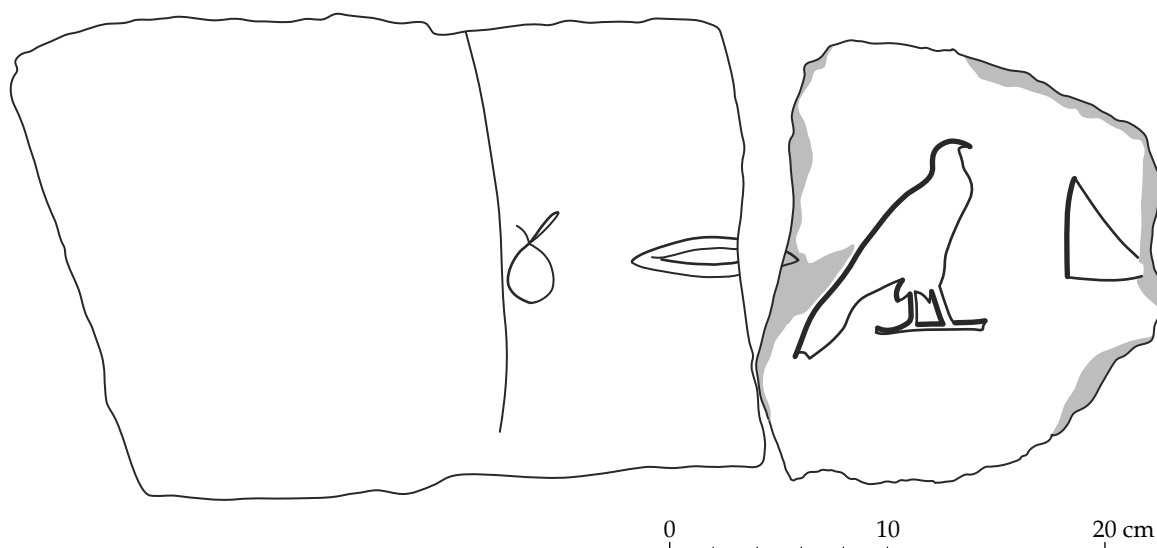


Fig. 5.4.47 Excav. No. 127 a and b/GG/1995

²⁸ According to Harpur, interior drums are only exceptionally inscribed, cf. Harpur, *DETOK*, 48.

5.4.4 Serdab 1

Excav. No. 151a–c/GG/1995 (*fig. 5.4.48*)

Limestone fragments of three small artefacts of an unclear function (gaming stones?). Found in the fill of Serdab 1.

151a: a rectangle with two holes, 3.9 × 3.0 cm,

151b: rectangular plate with two grooves, 5.5 × 3.4 cm,

151c: a cone painted red, h. 4.0 cm, diam. 2.9 cm.

Excav. No. 154/GG/1995 (*fig. 5.4.49*)

The accacia wood left arm (slightly bent) of a statuette with fingers broken off and with traces of the original gesso. The arm is 31.0 cm long and 2.5 cm wide. Found in the fill of Serdab 1.



Fig. 5.4.49 Excav. No. 154/GG/1995

Excav. No. 155/GG/1995 (*fig. 5.4.50*)

The accacia wood left forearm of a statuette with finger tips broken off and with traces of the original gesso. The arm is 13 cm long and 3 cm wide. Found in the fill of Serdab 1.



Fig. 5.4.48 Excav. No. 151 a, b and c/GG/1995

Fig. 5.4.50 Excav. No. 155/GG/1995

5.4.5 Serdab 2

Excav. No. 128/GG/1995 (*fig. 5.4.51*)

Accacia wood fragments of a statue/statues. Found in Serdab 2, Layer 2. The group consists of three small fragments: left foot (8 × 16 cm), thumb (2.5 × 8.7 cm), tip of a staff (4.5 × 8.5 cm). The foot still contains a wooden peg used for fixing it to its base. The base of the statue was found as well, but almost decayed, yet with remains of the original gesso layer discernible. Traces of the gesso were recognisable on the foot as well. The tip of the staff still features white plaster remains.



Fig. 5.4.51 Excav. No. 128/GG/1995

Excav. No. 129/GG/1995 (*fig. 5.4.52*)

A badly decayed accacia wood fragment of a statue's forearm, 16.5 cm long and 1.9 cm wide. Found in Serdab 2, Layer 2. An index finger and a thumb are partly preserved.

Excav. No. 130/GG/1995 (*fig. 5.4.53*)

An accacia wood fragment of a statue's foot. Found in Serdab 2, Layer 2, it measures 6 × 11 cm. The foot still contains a rectangular hole for a wooden peg fixing the statue to its base. It features finely modeled tips of the toes with their nails.



Fig. 5.4.52 Excav. No. 129/GG/1995



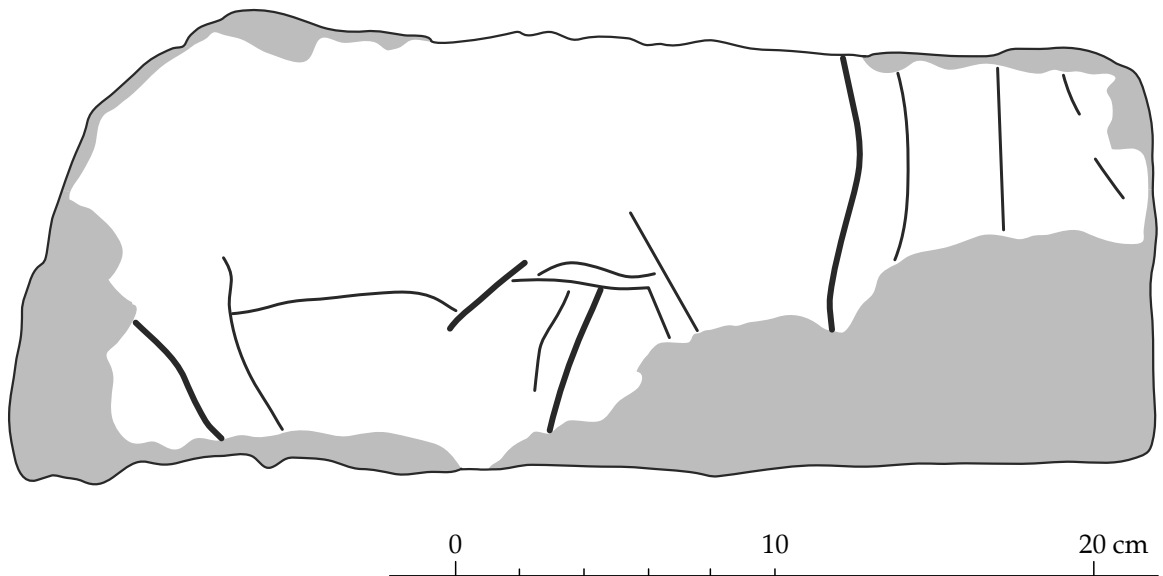
Fig. 5.4.53 Excav. No. 130/GG/1995

5.4.6 Corridor chapel

The group of finds from the floor level in Corridor Chapel were not numerous, yet, given their context they are indicative of the activities that took part there while the tomb was in use.

Excav. No. 131/GG/1995 (*figs. 5.4.54–55*)

A fragment of a limestone relief of 34 × 14 cm, found at the entrance into the Corridor Chapel, lying on the floor layer. Part of an incised figure of a bull proceeding to the left is still visible.



Excav. No. 135/GG/1995 (fig. 5.4.56)

A bifacial flint knife of $8.5 \times 2.7 \times 0.5$ cm, found in the debris north of the entrance to the Corridor Chapel.²⁹

▲▲ Fig. 5.4.54 Excav. No. 131/GG/1995

▲ Fig. 5.4.55 Excav. No. 131/GG/1995



Fig. 5.4.56 Excav. No. 135/GG/1995

²⁹ For this type of knives see Svoboda, in Verner *et al.*, *Ranefereh I*, 505, fig. 2.11.4.

Excav. No. 152/GG/1995 (fig. 5.4.57)

A fragment of a bone of 8.9×3.6 cm in size with red painted elements. Found in the fill at the floor level of the Corridor Chapel.



Fig. 5.4.57 Excav. No. 152/GG/1995

Excav. No. 153/GG/1995 (fig. 5.4.58)

A wooden tool (a pen?) with a pointed top and a thickened base, 21.7×1.0 cm. Found in the fill at floor level in the Corridor Chapel.



Fig. 5.4.58 Excav. No. 153/GG/1995

Excav. No. 146/GG/1995 (figs. 5.4.59–60)

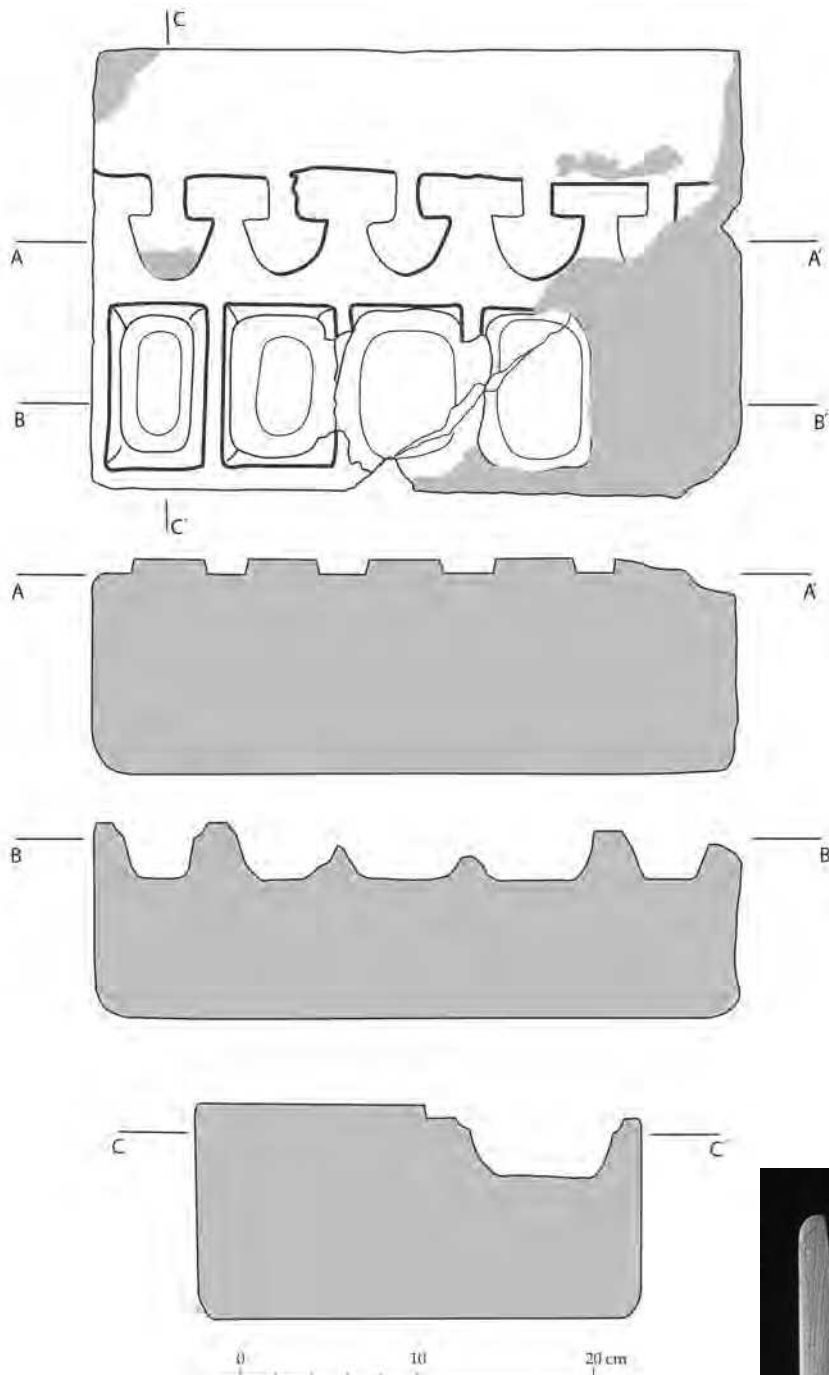
An uninscribed limestone offering table measuring 37×25 cm. It is decorated with a row of five *hetep* signs with five rectangular basins with slanting walls in front of them. Found *in situ* in the Corridor Chapel, Niche 2.

Hölzl, Type B+C.³⁰



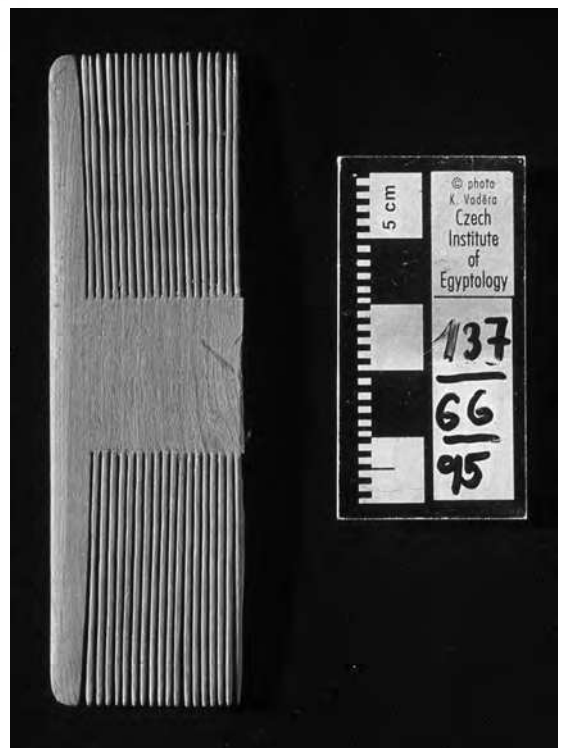
Fig. 5.4.59 Excav. No. 146/GG/1995

³⁰ Hölzl, *Opfertafeln und Kultbecken*, 15; 24 (AR-28).



◀ Fig. 5.4.60 Excav. No. 146/GG/1995

▼ Fig. 5.4.61 Excav. No. 137/GG/1995



5.4.7 Descending Corridor

Excav. No. 137/GG/1995 (fig. 5.4.61)

A wooden comb discovered in the fill of the descending corridor opening into the burial chamber of Qar, in its lower part.³¹ It measures 2.9×10 cm, max. w. 0.4 cm.

Excav. No. 138/GG/1995 (figs. 5.4.62–63)

A fragment of a limestone block (7.0×7.3 cm) with raised relief decoration, the contours of which are not clear. Found in the fill of the descending corridor opening into the burial chamber of Qar, in its lower part. Traces of red paint are visible.

³¹ For close parallels cf. J. Vandier d' Abadie, *Les objets de toilette égyptiens au Musée du Louvre* (Paris, 1972), 146, nos. 623, 627.

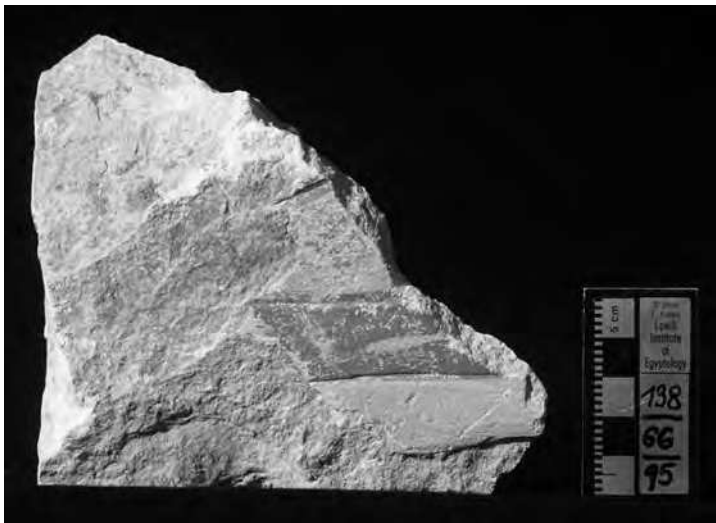


Fig. 5.4.62 Excav. No. 138/GG/1995



Fig. 5.4.63 Excav. No. 138/GG/1995

5.4.8 Shaft 5

Excav. No. 141a-d/GG/1995 (figs. 5.4.64–65)

Four limestone canopics with lids from the burial chamber of Shaft 5, found *in situ*. The vessels are roughly cut with a smoothed surface and upright angular rims, empty when found. Originally closed with lids, the vessels are slightly convex on the upper side and with a section at the bottom to hold them in position when sealing the vessels.³²



Fig. 5.4.64 Excav. No. 141 a-d/GG/1995

³² For close parallels cf. Brovarski, *Canopic Jars*, Boston, 1,64–67 (G 2353B), 1,83–84 (G 4733), 1,195–196 (G 7530A); Martin-Pardey, *Eingeweidegefäße* Hildesheim, 5,1–6 (Giza G20), 5,75–82 (Giza, mastaba of Setka/Ptahhotep), 5,81–82, 5,89–94 (Giza, mastaba of Setka/Ptahhotep), 5,121–125 (Niankhra), 5,126–127, 5,134–135 (G VIIS), 5,138–146 (Giza, tomb of Seshemnefer IV), 5,147–150 (G IIS); Simpson, *Western Cemetery I*, pl. Xa (G 1029A); Reiser-Haslauer, *Kanopen Wien II*, 3,139–150 (Junker's excavations, Giza), E. Brovarski, 'Set of canopic jars', in D'Auria, Lacovara, Roehrig, eds., *Mummies and Magic*, 80, No. 10, fig. 10. It is interesting to observe that even during the Old Kingdom were produced at least four of five different types of canopic vessels made of limestone or travertine. They can be differentiated mainly according to the shape of the vessel's body and rim.

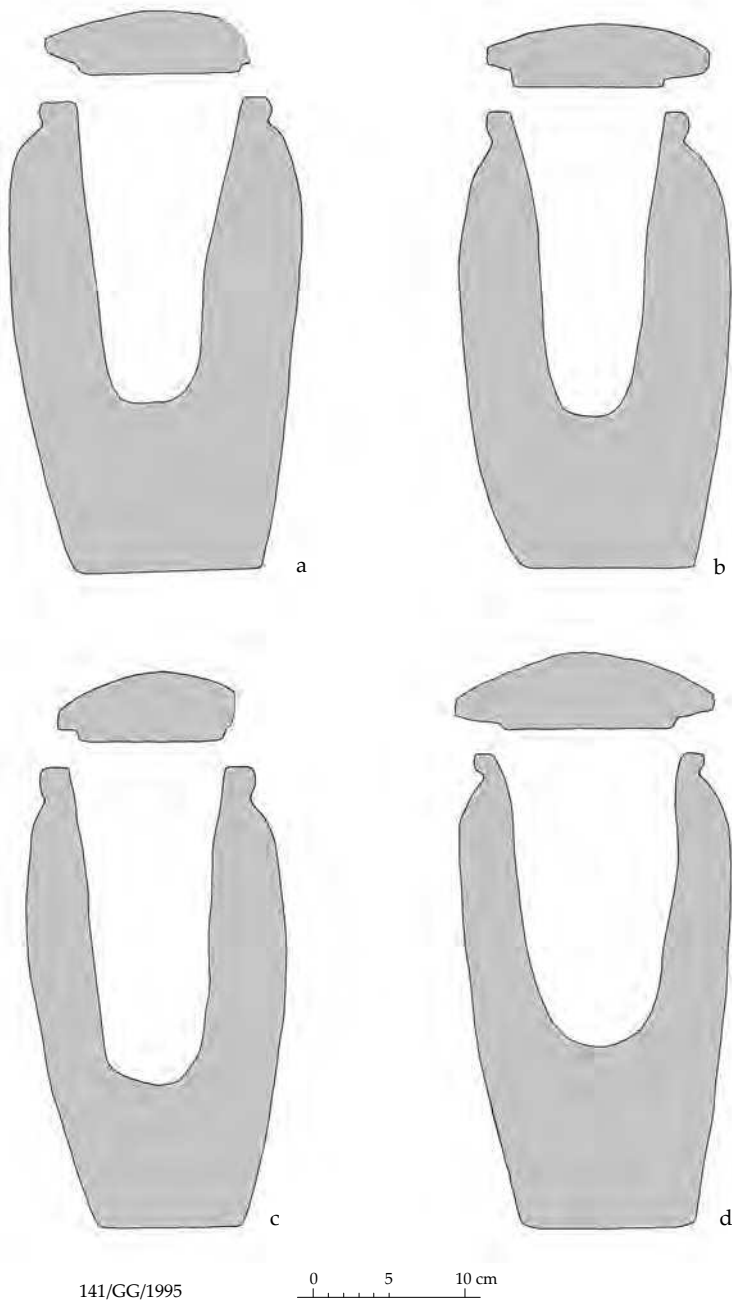


Fig. 5.4.65 Excav. No. 141 a–d/GG/1995

141a: h. 31 cm, max. diam. 18 cm, lid: th. 4 cm diam. 14 cm,
 141b: h. 29 cm, max. diam. 16.5 cm, lid: th. 4.5 cm, diam. 14 cm,
 141c: h. 29 cm, max. diam. 17 cm, lid: th. 4 cm, diam. 12 cm,
 141d: h. 30 cm, max. diam. 15 cm, lid: th. 4 cm, diam. 16 cm.

5.4.9 Shaft 6

Excav. No. 33/GG/1995 (*pl. 8a*)

A torso of a wooden male figurine, 12.6 cm high, found in burial Shaft 6. It is a painted figurine dressed in a short kilt and wearing a tight wig. Remains of red paint for the flesh, white for the kilt and black for the wig are still visible. The arms were attached to the body by means of wooden pegs of which the one in the right shoulder is still preserved *in situ*. The figure is carefully modelled, with a narrow waist and a navel.

Excav. No. 156/GG/1995 (*pl. 8b*)

The right shoulder of a red granite statuette of 12.0 × 15.2 cm, found at the floor level of Shaft 6. Traces of green copper ore on it indicate that it was used secondarily as a hammer.

PART 6

Lesser tombs of Qar's sons: Qar Junior and Senedjemib

Miroslav Bárta

6.1 Sons of the vizier Qar

6.1.1 Names, titles and epithets of Qar Junior

Names

Ḳ3r – ‘Qar’.¹

Occurrence: Excav. Nos. 11a, 127/GG/1995, 59, 85, 86/HH/2000.

Nfr Mrjj-Rʿ – ‘Nefermeryra’.²

Occurrence: mud stoppers from the burial chamber of Qar Junior (either completely or partially preserved) – Excav. Nos. 86, 2–6, 12/HH/2000.

Titles

1. *(j)r(j) Nḥn (n) z3b* – ‘keeper of Nekhen of the king’ (see 5.1.1, No. 5).

Occurrence: Excav. Nos. 11a/GG/1995, 59, 85, 86/HH/2000.

2. *ḥm-ntr M3ʿt* – ‘priest of Maat’.³

Occurrence: Excav. No. 11a/GG/1995 and mud stoppers from his burial chamber (either completely or partially preserved) – Excav. Nos. 86, 2–6, 12/HH/2000.

3. *ḥm-ntr M3ʿt (m) Mn-ʿnḥ Nfr-k3-Rʿ* – ‘priest of Maat (in the pyramid complex) “Enduring is the life of Neferkara”’.

Occurrence: mud stoppers from his burial chamber (either completely or partially preserved) – Excav. Nos. 86, 2–6, 12/HH/2000.

According to B. Begelsbacher-Fischer, most priests of Maat are attested from the Fifth Dynasty whereby only three of them reached position of the vizier. Typically, these persons were associated with juridical titles at the court and frequented titles associated with the ‘Great Court’ and ‘judgement’ (*wḏʿ-mdw*).⁴

4. *ḥnt(j)-š (m) Mn-nfr Ppjj* – ‘khentiu-she (in) (the pyramid complex) “Eternal is the beauty of Pepy I”’.⁵

Occurrence: mud stoppers from his burial chamber (either completely or partially preserved) – Excav. Nos. 86, 2–6, 12/HH/2000.

5. *ḥr(j)-sšṯ n wḏʿ-mdw (m) ḥwt-wrt 6* – ‘privy to the secret judgement(s) in the six Great Courts’.⁶

Occurrence: Excav. No. 11a/GG/1995.

6. *ḥtm(w) bjtj* – ‘sealer of the king of Lower Egypt’.⁷

Occurrence: Excav. No. 85/HH/1995.

7. *smr wʿt(j)* – ‘sole companion’.⁸

Occurrence: Excav. No. 85/HH/1995 and mud stoppers from his burial chamber (either completely or partially preserved) – Excav. Nos. 86, 2–6, 12/HH/2000.

¹ Ranke, *PN I*, 333.9; Scheele-Schweitzer, *Personennamen des AR*, 702–704, No. 3393.

² Ranke, *PN I*, 161.2; Scheele-Schweitzer, *Personennamen des AR*, 472–473, No. 1896.

³ Jones, *Index I*, 516–517, No. 1930.

⁴ Begelsbacher-Fischer, *Götterwelt*, 96–103.

⁵ For the first part of the title see Jones, *Index II*, 691–692, No. 2530. For its meaning see the latest discussion of the available evidence by Roth, *Giza Mastabas 6*, 40–43.

⁶ Jones, *Index II*, 615, No. 2256.

⁷ *Ibid.*, 763, No. 2775; Windus-Staginsky, *Der ägyptische König*, 242.

⁸ Jones, *Index II*, 892, No. 3268.

8. *šps nswt* – 'noble of the king'.⁹

Occurrence: at least one mud stopper from his burial chamber – Excav. Nos. 86, 4/HH/2000.

The title 'noble of the king' was introduced only during the Sixth Dynasty, probably by Pepy I.¹⁰

9. Uncertain

ḥ3tj-ꜥ, ḥtm(w) bjtj, smr-wꜥtj... 'count,¹¹ sealer of the King of Lower Egypt, sole companion'.

Occurrence: Excav. No. 51/GG/1995, anonymous.

The title of *ḥtm(w) bjtj* is attested both for Qar Junior (from the mud stoppers in his burial chamber, Excav. Nos. 86, 2–6, 12/HH/2000) and Senedjemib (false door fragment, Excav. No. 20/GG/1995). The same is the case with the title *smr-wꜥtj*. Thus the sequence may belong to either of them. As the oldest son of the vizier Qar and, therefore, more likely to hold the first title in the sequence – *ḥ3tj-ꜥ*, the present author's opinion favours Qar Junior as the owner of this fragment.

Epithets

I. *jm3ḥw ḥr Ḥnt(j)-Tnnt* – 'well-provided before 'One who is the Foremost of Tjenenet'.¹²

Occurrence: Excav. No. 11a/GG/1995.

6.1.1.1 Name and epithets of Qar Junior's wife

Name

Jpwt – 'Ipwt'.¹³

Occurrence: Excav. No. 25etc./GG/1995.

Epithets

I. *jm3ḥwt*... – 'well provided one...'.¹⁴

Occurrence: Excav. No. 25etc./GG/1995.

II. *ḥmt.f mrt.f nt st-jb.f* – 'his beloved wife of his heart'.

Occurrence: Excav. No. 25etc./GG/1995.

III. *mr[t.f]* '[his] beloved'.¹⁴

Occurrence: Excav. No. 25/GG/1995.

IV. *snfṛt* – 'beautifying/who makes perfect/who pleases'.¹⁵

Occurrence: Excav. No. 25/GG/1995.

6.1.2 Name, titles and epithets of Senedjemib

Name

Sndm-jb – 'Senedjemib'.¹⁶

Occurrence: Chapel 2 – jamb in the entrance into Senedjemib's tomb, Excav. Nos. 8/GG/1995, 17, 44etc., 125/GG/1995, 122/HH/2001 and 150/HH/2002.

⁹ Jones, *Index II*, 988, No. 3648.

¹⁰ H. G. Fischer, 'Three Old Kingdom Palimpsests in the Louvre', *ZÄS* 86 (1961), 26–28 and Daoud, *Corpus of Inscriptions*, 77.

¹¹ Jones, *Index I*, 496, No. 1858.

¹² *Ibid.*, 36, No. 177.

¹³ Ranke, *PN II*, 263.2; Scheele-Schweitzer, *Personennamen des AR*, 223, No. 246.

¹⁴ Jones, *Index I*, 445, No. 1666.

¹⁵ Comp. *idem*, *Index II*, 908, No. 3329.

¹⁶ Ranke, *PN I*, 316.21; Scheele-Schweitzer, *Personennamen des AR*, 670–671, No. 3180.

Titles

1. $[(j)m(j)-r] wp(w)t \dot{h}tpw$ – ‘overseer of the distribution of offerings (?)’.¹⁷
Occurrence: Excav. Nos. 13/GG/1995 + 9/HH/2000.
2. $(j)m(j)-(j)\dot{h}t \dot{h}m(w)-n\dot{t}r (m) Mn-nfr Ppjj$ – ‘assistant of the $\dot{h}m(w)-n\dot{t}r$ priests (in the pyramid complex) “Eternal is the Beauty of Pepy (I)”’.¹⁸
Occurrence: Excav. Nos. 44, 103, 116 and 140/GG/1995. Probably also 116/GG/1995.
3. $(j)m(j)-\dot{h}t [\dot{h}mw-n\dot{t}r (m) Nfr-sw\dot{t}] Wnjs$ – ‘assistant of the $[\dot{h}mw-n\dot{t}r]$ priests (in the pyramid complex) “Beautiful are the places] of Unas”’.¹⁹
Occurrence: Excav. No. 134a/GG/1995.
4. $(j)r(j) N\dot{h}n$ – ‘keeper of Nekhen’.²⁰
Occurrence: Excav. Nos. 13/GG/1995 + 9/HH/2000, 122/HH/2001 and 150/HH/2002.
5. $(j)r(j) N\dot{h}n (n) z3b$ – ‘keeper of Nekhen of the king’ (see 5.1.1, No. 6).
Occurrence: Excav. Nos. 13/GG/1995 + 9/HH/2000, 44/GG/1995.
6. $\dot{h}r(j)-s\dot{s}t3 n w\dot{d}^c-mdw$ – ‘privy to the secret of the (royal) decrees’.²¹
Occurrence: Excav. No. 44etc./GG/1995.
7. $\dot{h}r(j)-tp M[\dot{h}b]$ – ‘chief Nekhbite’.²²
Occurrence: Excav. No. 125/GG/1995.
8. $\dot{h}tm(w) bjtj$ – ‘sealer of the King of Lower Egypt’ (see 6.1.1, No. 6).
Occurrence: Excav. Nos. 20/GG/1995, 150/HH/2002.
9. $[s]mr w^c t(j)$ – ‘sole companion’ (see 6.1.1, No. 7) .
Occurrence: Excav. No. 20/GG/1995.
10. $smsw h(3j)t$ – ‘oldest of the (judicial) hall’.²³
Occurrence: Chapel II, north wall.

Epithets

- I. $jm3\dot{h}w$ – ‘well provided one’ (see 5.1.1, No. I).
Occurrence: Excav. No. 44etc., 103/GG/1995, 13/GG/1995 + 9/HH/1995.
- II. $jm3\dot{h}w \dot{h}r n\dot{t}r-^c3$ – ‘well-provided before the Great God’ (see 5.1.1, No. VI).
Occurrence: Excav. No. 44etc./GG/1995.

6.1.2.1 Members of the family

- $Sndm[-jb]$ – Senedjem[ib].
 $z3[f]...$ – ‘[his] son...’.
 Occurrence: Excav. No. 42/GG/1995.

¹⁷ Jones, *Index I*, 97, No. 401.

¹⁸ *Ibid.*, 288, No. 1047.

¹⁹ *Ibid.*, 289–290, No. 1054; Zibelius, *Ägyptische Siedlungen*, 113–114.

²⁰ Jones, *Index I*, 491, No. 1833.

²¹ *Idem*, *Index II*, 616, No. 2261.

²² *Ibid.*, 648, No. 2374.

²³ *Ibid.*, 902–903, No. 3313.

6.1.3 Dependants of Qar Junior and Senedjemib

1. *Jj-mrjj* – 'Iymery'.²⁴

(*j*)*m(j)-r hm(w)-k3* – 'overseer of the *hm(w)-k3*-priests'.²⁵

Occurrence: Excav. No. 29etc./GG/1995.

2. *Jpj* – 'Ipi'.²⁶

hr(j)-hb smsw – 'senior lector priest'.²⁷

Occurrence: Excav. No. 58etc./GG/1995 and 124/GG/1995.

3. *Jnj* 'Ini'.²⁸

shd sr(w) k[nb]t – 'inspector of the law [court] *sr(w)*-officials (?)'.²⁹

Occurrence: Excav. No. 22etc./GG/1995.

4. *Jntj* – 'Inti' (1) (see 5.1.3).

...*smsw*' – ...oldest'.

Occurrence: Excav. No. 21etc./GG/1995.

5. [*J*]*ntj* – '[I]nti' (2).

(*j*)*m(j)-[r pr]* 'overseer [of the house]'.³⁰

Occurrence: Excav. No. 45etc./GG/1995.

This title referred to the officials in charge of estate administration. In addition to it, officials in the capital could also be associated with funerary services, as is probably the case here.³¹

6. *Jntj* – 'Inti' (3).

(*j*)*m(j)-r sšr, shd hm(w)-k3* – 'overseer of cloth distribution,³² inspector of the *hm(w)-k3* priests'.³³

Occurrence: Excav. No. 45etc./GG/1995.

7. *Jnt.f'* 'Intef'.³⁴

...*zš pr-ntr* – '...scribe of the god's estate'.

Occurrence: Excav. No. 21etc./GG/1995.

8. *Jrj* – 'Tri'.³⁵

(*j*)*m(j)-r pr* – 'overseer of the house' (see No. 5).

Occurrence: Excav. No. 45etc./GG/1995.

9. *Jd(w)* – 'Idu' (1).³⁶

shd zš(w) ʿ(w) (nw) nswt 'inspector of scribes of the royal documents'.³⁷

Occurrence: Excav. No. 58etc./GG/1995.

10. *Jdw* – 'Idu' (2) (see No. 9).

Excav. No. 57/GG/1995.

²⁴ Ranke, *PN I*, 9.16; Scheele-Schweitzer, *Personennamen des AR*, 200–201, No. 92.

²⁵ Jones, *Index II*, 176–177, No. 675.

²⁶ Ranke, *PN I*, 22.15; Scheele-Schweitzer, *Personennamen des AR*, 220–221, No. 233.

²⁷ Jones, *Index II*, 785–786, No. 2863.

²⁸ Ranke, *PN I*, 33.4; Scheele-Schweitzer, *Personennamen des AR*, 232, No. 318.

²⁹ For the *shd srw* title cf. Jones, *Index II*, 966, No. 3564.

³⁰ Jones, *Index I*, 114, No. 461.

³¹ Daoud, *Corpus of Inscriptions*, 31 and 50.

³² Jones, *Index I*, 234, No. 864.

³³ *Idem*, *Index II*, 943–944, No. 3475.

³⁴ Ranke, *PN I*, 34.1; Scheele-Schweitzer, *Personennamen des AR*, 234–235, No. 327.

³⁵ Ranke, *PN I*, 22.15; Scheele-Schweitzer, *Personennamen des AR*, 244, No. 382.

³⁶ Ranke, *PN I*, 54.10; Scheele-Schweitzer, *Personennamen des AR*, 278–277, No. 609.

³⁷ Jones, *Index II*, 956, No. 3527.

11. *H3j* – ‘Khai’.³⁸*hr(j)-hb* – ‘lector priest’ (see 5.1.3, No. 8).

Occurrence: Excav. No. 29etc./GG/1995.

12. *Sndm-jb* – ‘Senedjemib’ (1) (see 6.1.2).

Offering bearer without title.

Occurrence: Excav. No. 45etc./GG/1995.

13. *Snd[m-jb]* – Senedj[emib]’ (2).*(j)m(j)-r pr* – ‘overseer of the house’ (see No. 5).

Occurrence: Excav. No. 19/GG/1995.

14. *Ssj* – ‘Sesi’.³⁹*sn.f, šps nswt, (j)m(j)-r pr-šn^c k3-nswt* – ‘his brother, noble of the king, overseer of the storehouse of the royal ka’ (most likely of Pepy II).⁴⁰

Occurrence: Excav. No. 45etc./GG/1995.

Dependants with names not preserved or with incomplete names

15. Anonymous (1).

hr(j)-hb smsw – ‘senior lector priest’ (see No. 2).

Occurrence: Excav. Nos. 26 and 30/GG/1995.

16. Anonymous (2).

hr(j)-hb – ‘lector priest’ (see 5.1.3, No. 8).

Occurrence: Excav. Nos. 26 and 30/GG/1995.

17. Anonymous (3).

hr(j)-hb – ‘lector priest’ (see 5.1.3, No. 8).

Occurrence: Excav. No. 29etc./GG/1995.

18. Anonymous (4)

[hr(j) wdb] (n) z3b, (j)m(j)-r pr – ‘[master of largesse] (of) the king, overseer of the house’.

Occurrence: Excav. No. 29etc./GG/1995.

19. Anonymous (5).

[hr(j) wdb] (n) z3b – ‘[master of the largesse] (of) the king’.

Occurrence: Excav. No. 29etc./GG/1995.

20. Anonymous (6).

hr(j)-hb – ‘lector priest’ (see 5.1.3, No. 8).

Occurrence: Excav. No. 34/GG/1995.

21. Anonymous (7).

hm-k3 – ‘hm-k3-priest’ (see 5.1.3, No. 6).

Occurrence: Excav. No. 157/GG/1995.

³⁸ Ranke, *PN I*, 262.3; Scheele-Schweitzer, *Personennamen des AR*, 592, No. 2654.³⁹ Ranke, *PN I*, 320.11; Scheele-Schweitzer, *Personennamen des AR*, 677, No. 3223.⁴⁰ For ‘overseer of the storehouse’ see Jones, *Index I*, 125–126, No. 501. Note, however, the unusual form of writing in this particular case. See also P. Andrassy, ‘Das *pr-šn^c* im Alten Reich’, *SAK* 20 (1993), 17–35 and 34–35 with fig. 1 summarising the graphic forms of *pr-šn^c* and Papazian, *Domain of Pharaoh*, 119ff. De defines *pr-šn^c* as ‘...entire storage and processing complex,...’ (*ibid.*, 144).

22. ...*h...jj* – '...kh...y'.

[*z*]š *pr-md3t* – 'scri[be] of the archives'.⁴¹

Occurrence: Excav. No. 29etc./GG/1995.

23. ...*nj* – '...ni'.

(*j*)*m(j)*[-*r*]... 'over[seer] of ...'.

Occurrence: Excav. No. 121/GG/1995.

24. *K-n*[-...] *nn* – 'Kane[...]nen'.

sn.f, š*ps nswt*, (*j*)*m(j)*-*r pr-šn*^c [*k3*]-*nswt* – 'his brother, noble of the king, overseer of the storehouse of the royal ka'.

Occurrence: Excav. No. 45etc./GG/1995.

6.1.4 Name, titles and epithets of Iykai

Name

Ijk3j – 'Iykai'.⁴²

Titles

1. *hm-ntr M3t* – 'priest of Maat' (see 6.1.1, No. 2).

Occurrence: false door of Iykai.

2. [*hr(j)*-*sšt3*] (n) *hwt-wrt 6* – 'privy to the secret of the Six Great Courts' (see 5.1.1, No. 14).

Occurrence: false door of Iykai.

3. [*hr(j)*-*sšt3*] *n pr-dw3t* – 'privy to the secret of the Morning House'.⁴³

Occurrence: false door of Iykai.

4. *hm-ntr [Mrt?]* – 'priest of [Meret?]'.⁴⁴

Occurrence: false door of Iykai.

Epithets

I. *jm3h(w)* – 'well-provided one' (see 5.1.2, No. I).

Occurrence: false door of Iykai.

II. [*jm3hw h*] *r Jnpw tp(j) dw:f* – '[well provided one] before Anubis, Who is upon his mountain' (see 5.1.2, No. III).

Occurrence: false door of Iykai.

III. [*jm3*] *hw hr Wsjr* – '[well] provided one before Osiris'.⁴⁵

Occurrence: false door of Iykai.

IV. ...*n nb.f* – '... of his lord'.

Occurrence: false door of Iykai.

⁴¹ Jones, *Index II*, 848, No. 3099.

⁴² Ranke, *PN I*, 11.1.; Scheele-Schweitzer, *Personennamen des AR*, 206, No. 124. On similarly constructed Old Kingdom personal names cf. Bolshakov, *Old Kingdom Reliefs and Sculpture*, 29–31. For personal names containing the element '*k3*' see Scheele-Schweitzer, *Personennamen des AR*, 101–105 and Kusber, *KA*, 128–138. 'My ka has come' is one of the few personal names indicating patrilinear concept of the ka transfer from father to his son, cf. J. Janák, 'DE TRINITATE. An outline of the problem', *GM* 178 (2000), 66–67; *ibid.*, *Staroegyptská Kniha mrtvých, kapitola 105/Ancient Egyptian Book of the Dead, Chapter 105* (in Czech, Brno, 2003), 33–34.

⁴³ Jones, *Index I*, 620–621, No. 2275.

⁴⁴ Begelsbacher-Fischer, *Götterwelt*, 243 (attested in the reign of Khufu and Unas).

⁴⁵ Jones, *Index I*, 19–20, No. 89.

6.2 Lesser tombs of Qar Junior, Senedjemib and Iykai: the architecture

Two of the four known sons of the vizier Qar were buried to the north of his tomb: Qar Junior and Senedjemib (*figs. 6.2.1–6.2.3*). The third shaft discovered within their compound is probably to be associated with Iykai, an official who was responsible for the final remodelling of the whole area originally developed for the mortuary cult of the above two brothers. Inti, upon the death of the vizier Qar probably his most favourite son, built his tomb to the south of his father's. At the time of this writing, we are not certain about the final resting place of Tjenti, the fourth attested son of the vizier Qar. The whole burial ground, labelled 'HH' during the excavation (seasons 1995, 2000–2002), underwent at least one substantial modification in terms of its architectural composition. Moreover, at some point in its existence, but certainly only after the chapels of Qar Junior and Senedjemib had been finished, they were deliberately destroyed and their decoration smashed into pieces. Most of these fragments could be collected during the excavation, yet a large portion of them is missing. The wave of destruction hit also the secondarily developed chapel of Iykai whose false door was also damaged so that only its lower part remained *in situ*.

Fig. 6.2.1 Tomb chapels of
Qar Jr., Senedjemib and Iykai,
looking south





6.2.1 Superstructures

6.2.1.1 Qar Junior

The eldest son of the vizier Qar, Qar Junior, built his chapel to the north of Open Court 1 (figs. 6.2.3–6.2.5). In the north wall of the court, close to its eastern end, is a relatively small, 1.35 m wide and 0.35 m deep recess giving way into a 1.15 m long and 0.90 m wide entrance paved with flagging stones of limestone. It starts with a threshold 0.35 m wide and 0.15 m high on which originally stood two jambs (0.20 × 0.35 and 0.40 × 0.35 m in ground plan), now missing. The chapel proper had a floor made of beaten clay. The entrance was originally closed by a one-leafed door opening to the north. The chapel was orientated in an east-west direction and measured 3.65 × 1.85 m in ground plan. The west wall was taken up by a huge monolithic limestone slab of 2.00 × 1.15 × 0.40 m which served as a base for the false door, now missing. The walls of the chapel were lined with finely dressed blocks of limestone. The courses of the stone masonry were built in the common fashion applied in the complex: 0.35–0.55 m high blocks in combination with ‘anchor’ courses about 0.10 m high. The inner core of the walls consisted of the usual blackish mudbricks joined with dark mortar (mudbricks of 32 × 16 × 12 cm) (figs. 6.2.6–6.2.7). Along the inner south, east and north walls of the chapel, limestone blocks used as their base are visible – they are protruding 2–10 cm into the chapel and are of the same height, some 5 cm above the floor. The same technique for solidifying masonry of the walls was used in the viziral chapel of Qar and in his burial chamber. Almost all decoration and the false door were removed and destroyed. During the course of excavation many fragments of the original decoration

Fig. 6.2.2 Tomb chapels of Qar Jr., Senedjemib and Iykai, looking west

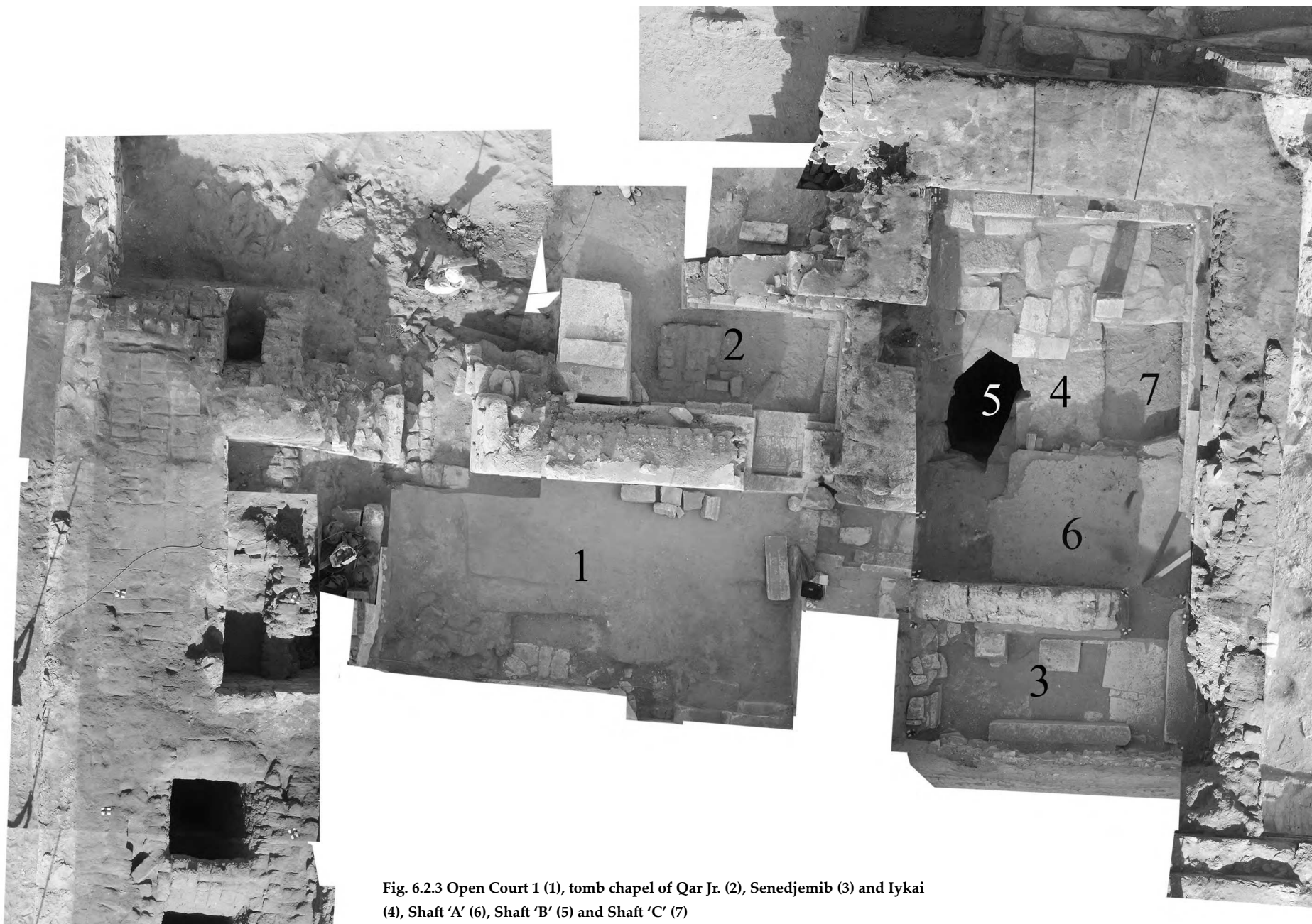


Fig. 6.2.3 Open Court 1 (1), tomb chapel of Qar Jr. (2), Senedjemib (3) and Iykai (4), Shaft 'A' (6), Shaft 'B' (5) and Shaft 'C' (7)

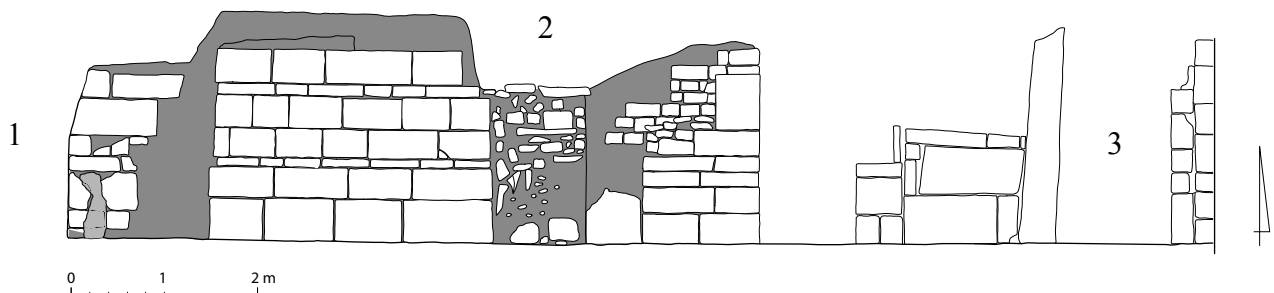


in Open Court 1 and its vicinity could be found. There was only one case where the decoration was preserved *in situ*: two blocks with decoration in the eastern part of the south wall (Excav. Nos. 27 and 28/HH/1995). Fragments of the original decoration and the ground plan of the tomb suggest that it was above all its north and south wall that were richly decorated.¹

Strikingly enough, originally the chapel could be entered from the east, from Open Court 2.² At least this seems to be indicated by the masonry development. Should the hypothesis be correct, this would be a most unusual case - an entrance to an east-west oriented chapel situated close to the north wall of the chapel, rather than symmetrically, that is in the middle of the east wall. However, when looking at the entrance from the east, one can observe that the entrance is accommodated almost in the centre of the mudbrick façade of the chapel. From the preserved architectural features it may be inferred that this entrance was 1.05 m wide and at least 1.10 m long (Stage I, *figs. 6.2.8a, 6.2.9–6.2.10*). This plan, however, was dismissed at an early stage, before the casing and decoration of the chapel was put into place, and the chapel was remodelled into a

Fig. 6.2.4 Open Court 1: 1 – entrance from the north, 2 – entrance into the chapel of Qar, 3 – entrance into the tomb of Qar Jr., 4 – entrance into the tomb of Senedjemib and Iykai

▼ **Fig. 6.2.5 North wall of Open Court 1** (1 – entrance from the north) and the entrance into the tombs of Qar Jr. (2) and Iykai (3)



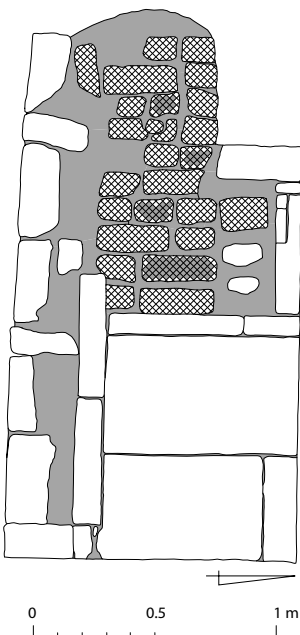
¹ Cf. the evidence collected by Harpur, *DETOK*, 88–89.

² *Ibid.*, 86–88, plans 97 and 98.



Fig. 6.2.6 Entrance into the chapel of Qar Jr., west wall, detail

▼ Fig. 6.2.7 Entrance into the chapel of Qar Jr., west wall, detail



typical east-west offering room with an entrance from the south and the original entrance was blocked by a mudbrick wall (Stage II, *fig. 6.2.8b*).³ It is easy to see the main reasons that were at play both for Stage I and II. The explanations may be the same: cult and practical requirements. The entrance from the east connected the chapel with Open Court 2 where many cult ceremonies for the sake of Qar Junior. could be performed.⁴ The entrance from the south was probably the result of two more persons entering the area, Senedjemib and somewhat later Iykai (Stages II and III, see below, *fig. 6.2.8b* and *c*). As a matter of fact, it was the only way how to retain an open wide space in front of Qar Junior.'s chapel that he had to share with his father.

6.2.1.2 Senedjemib and Iykai

In the east wall of Open Court 1, in its north-east corner, a 0.75 m wide and 1.85 m long entrance gives way into a large courtyard. Open Court 2 was orientated in a north-south direction (*fig. 6.2.3*). Originally, it was planned as a relatively huge space of 9.10 (NS) × 4.60 (EW) m, designed to be a court for Qar Junior (Stage I). It was surrounded by an outer perimeter wall of mudbricks (black mudbricks of 40 × 20 × 15 cm, joined with dark grey mortar) measuring 11.00 × 7.90 m, 1.50 m wide on the east, 1.90 m on the north and 0.95 m on the west. In the south the court made use of

an older mastaba 'KK' with mudbrick casing. Similarly, the wall forming the east wall of the court was constructed some time before the court came into existence and its original function must be clarified by further excavation in the area.⁵

The walls of the entrance were substantially modified when a decision was made to convert Open Court 2 into the cult facility of Senedjemib (Stage II) and later on of Iykai (Stage III). The entrance from Open Court 1 was cased with well-dressed Tura limestone blocks and the entrance was decorated with two limestone jambs. Originally each bore a vertical column of inscriptions executed in sunk relief containing the name (in one case partially preserved) and titles and epithets of Senedjemib (*figs. 6.2.11–6.2.12*). The lower part of the southern entrance jamb was found *in situ*. The block measures 0.30 (NS) × 0.60 (EW) m in ground plan and is 0.80 m high. Of the northern jamb, only two small fragments were found (Excav. Nos. 8 and 55/GG/1995). From the south jamb also originate Excav. Nos. 49, 50 and 54/GG/1995.

From the same entrance may originate Excav. No. 103/GG/1995, an incomplete limestone lintel found close by broken into two parts. One of the incomplete titles referring to an assistant of mortuary priests in the pyramid complex of Pepy I appears to be identical to the one featuring on the false door fragment of Senedjemib (Excav. No. 116/GG/1995).

In the southern part of Open Court 2 an east-west running partition wall made of mudbrick of 36 × 18 × 12 cm, 3.65 m long and 0.80 m in thickness was built, reaching a height of almost 2.20 m upon its discovery. The area to the south of this wall was converted into the chapel of Senedjemib. It could be entered from the north through a 1.00 m wide entrance. The resulting east-west orientated chapel measured 3.05 × 2.00 m. The chapel later on incorporated one pillar of Stage III (see below) (*figs. 6.2.13–6.2.15*). Despite the difficulties with arising asymmetry, it was clearly incorporated into the room as it was found lying on its floor during the excavation. The walls of the

³ Reisner, *Giza Necropolis I*, 262ff., Type 7a; Harpur, *DETOK*, 88–89.

⁴ See Báta, in János, ed., *Structure and Significance*, 105–130.

⁵ For the time being it seems that the wall may be associated with the tomb complex of Neferinpu and his family excavated in spring season of 2006 and dated to the reign of Nyusera or shortly thereafter.

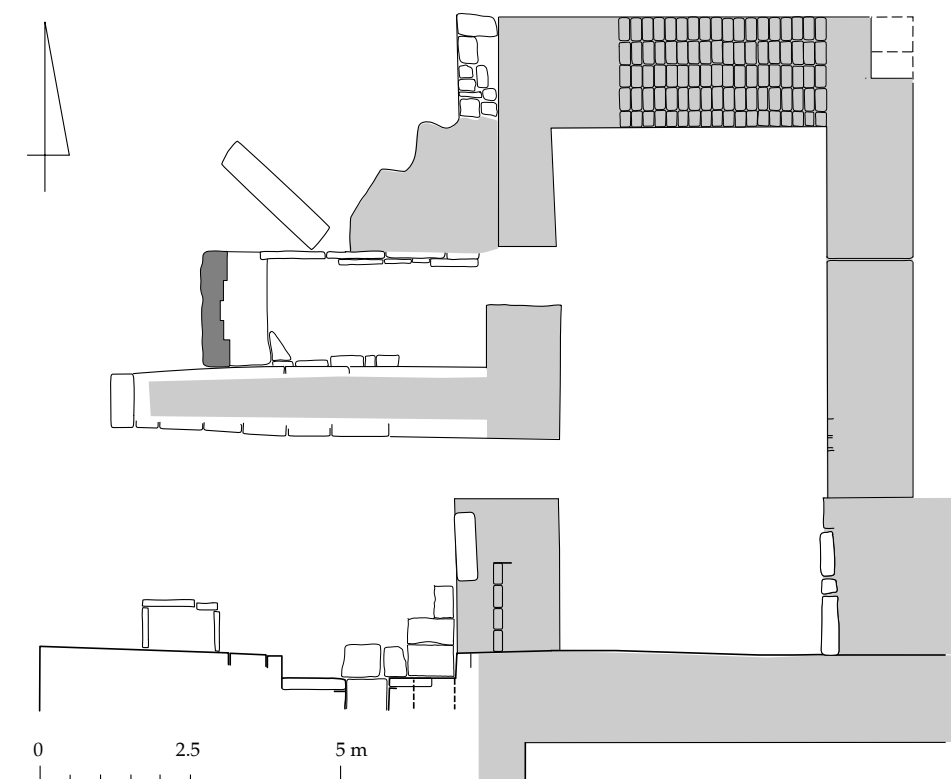


Fig. 6.2.8a Tomb compound, Stage 1, tomb of Qar Jr.

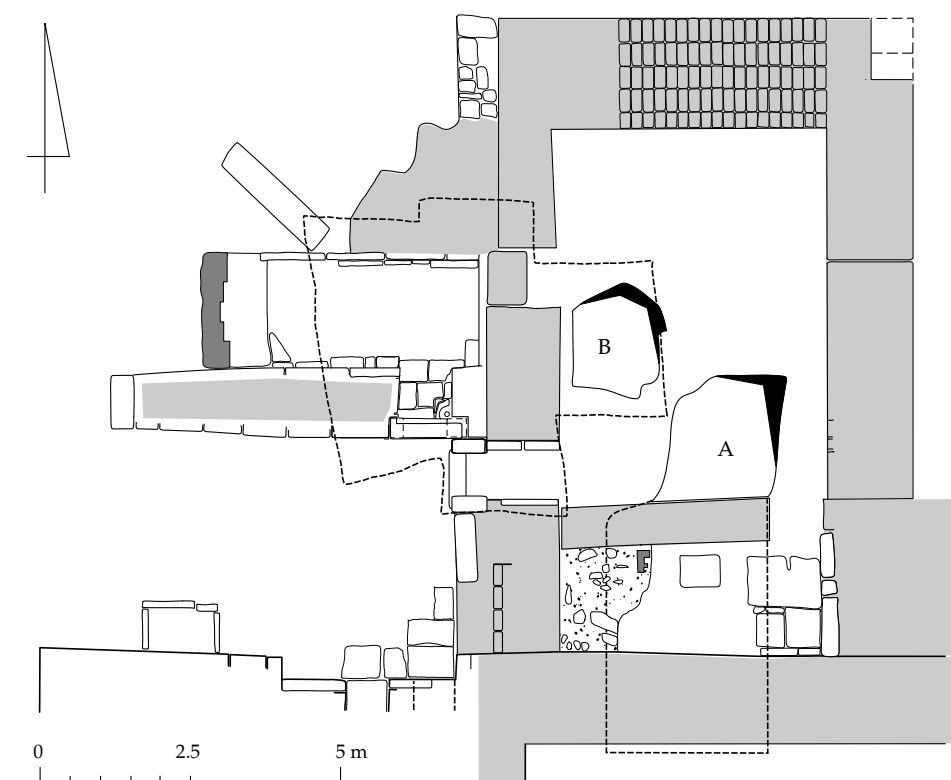
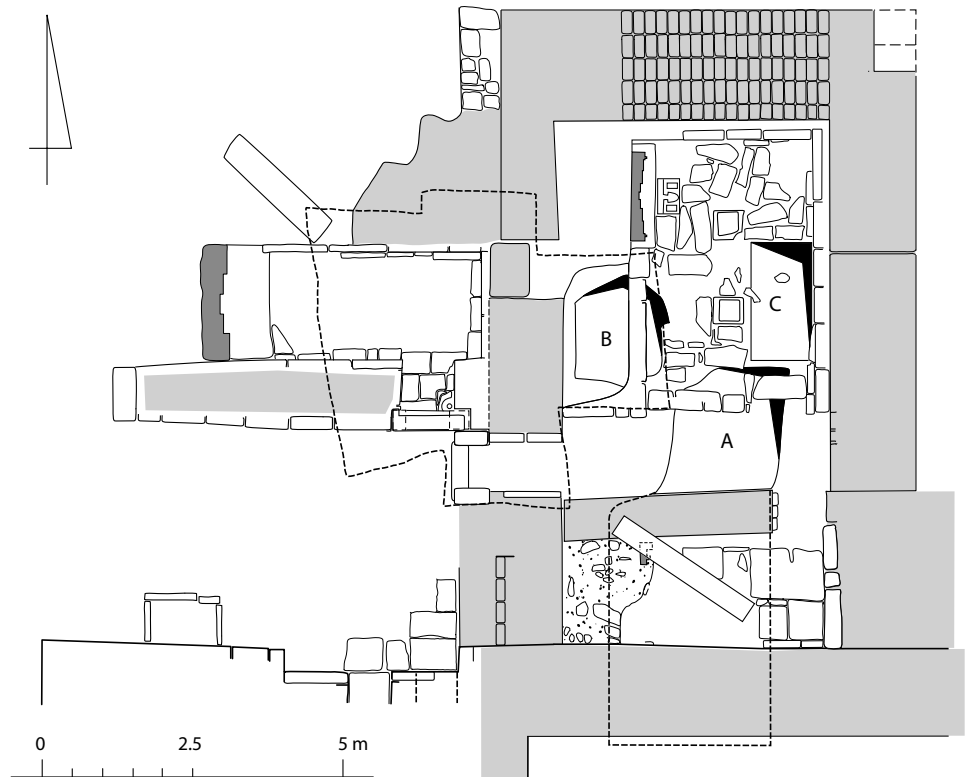


Fig. 6.2.8b Tomb compound, Stage 2, tombs of Qar Jr. and Senedjemib with shafts 'A' and 'B'

chapel were originally faced with limestone blocks. The west wall was occupied by a false door, completely destroyed, many fragments of which were found scattered all across the excavated area (Excav. Nos. 7, 13, 15, 17, 20, 116, 117, 125 and 134/GG/1995 and 9/HH/1995). Only its lower northern end remained *in situ* (15/HH/1995). The door was carved of a single piece of limestone and painted pink-red to imitate red granite. At this stage at the latest, Shafts 'A' and 'B' were prepared, although Shaft 'B' may have developed as early as Stage I.

Fig. 6.2.8c Tomb compound,
Stage 3, tombs of Qar Jr.,
Senedjemib and Iykai



Later on, the width of the court to the north of the entrance shrunk to 3.25 m due to the building of a new west wall of the court. The orientation of the court was maintained, its measurements, however, decreased to 4.60×3.25 m (Stage III). Originally it was paved with flagging stones, a larger part of which is still preserved *in situ*. Precisely in the centre of the newly created area, a row of five pillars with stone bases was built, forming a kind of north-south axis of the room. Today only four of them are preserved, the spacing between them being about 1.00 m. Each base measured about 0.40×0.40 m, the highest pillar reaching a height of 2.35 m. The side walls of the court were cased with finely polished Tura limestone blocks which measured 0.15–0.35 m in thickness and were preserved to a max. height of 2.20 m.

At this stage, a new false door was incorporated into the west wall of the court (figs. 6.2.16–6.2.18). Close to its northern end, the lower part of a false door of Iykai was



Fig. 6.2.9 Open Court 2
with the original entrance into
the chapel of Qar Jr. blocked,
looking west



Fig. 6.2.10 Western part of Open Court 2 with the original entrance into the chapel of Qar Jr.

found, placed on a low base formed by a large limestone block measuring $1.80 \times 0.50 \times 2.5$ m. In front of it a limestone altar with a *hetep* sign on the top and a rectangular basin on each side was found (Excav. No. 14/HH/95).

On the south a new east-west wall was built of limestone blocks, incorporating one of the pillars. The result of these new building modifications was Iykai's open-air chapel measuring 4.25 (NS) $\times$ 2.90 (EW) m, entered from the south through a 0.90 m wide entrance. It is probably at this moment that the casing of the side walls and the flagging stones of the pavement were finished. Also Shaft 'C' was built at this stage. The newly built west and south walls of Iykai's court partially covered the lips of Shaft 'A' and 'B' belonging to Senedjemib and Qar Junior.

It is interesting to observe that both false doors, that of Senedjemib and that of Iykai, were built approximately on the same north-south line. This may indicate that both chapels were eventually incorporated into the same chapel design.

Of the same importance is the positioning of Shafts 'A' and 'B'. From the modifications ascribed to Stage III it appears that the shafts were to some extent built over by the west and south walls delineating the court in front of Iykai's false door.

6.2.2 Substructures

6.2.2.1 Burial chamber of Qar Junior ('HH', Shaft B)

The opening of the shaft which provides access into the burial chamber of Qar Junior was situated in the southwest corner of the original Open Court 2. It was slightly irregular in ground plan (especially its north wall) and measured 2.30×1.50 m. Later on, it was partially built over (its eastern part) by the west wall of the newly arranged court of Iykai (Stage III) and actually made inaccessible by this wall of the rebuilt court.

The burial chamber of Qar Junior was situated at the bottom of a 16 m deep shaft filled with wind-blown sand. Its fill contained many artefacts such as large fragments of original tomb decoration, parts of false doors, lintels, jambs and altars. The



Fig. 6.2.11a Entrance into the tomb of Senedjemib



Fig. 6.2.11b Entrance into the tomb of Senedjemib (2006)

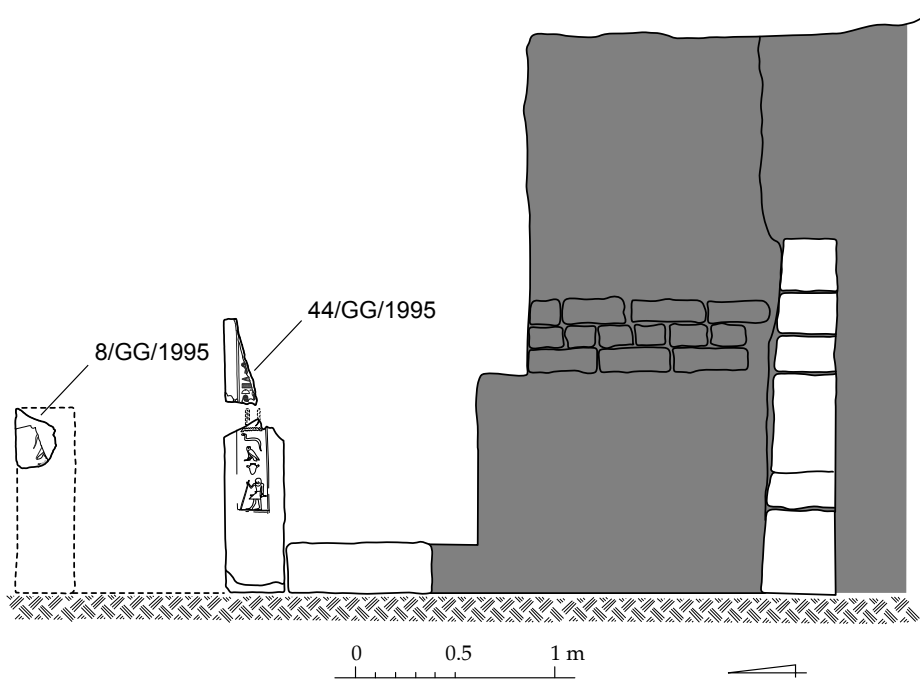


Fig. 6.2.12a Partial reconstruction of the entrance into the tomb of Senedjemib

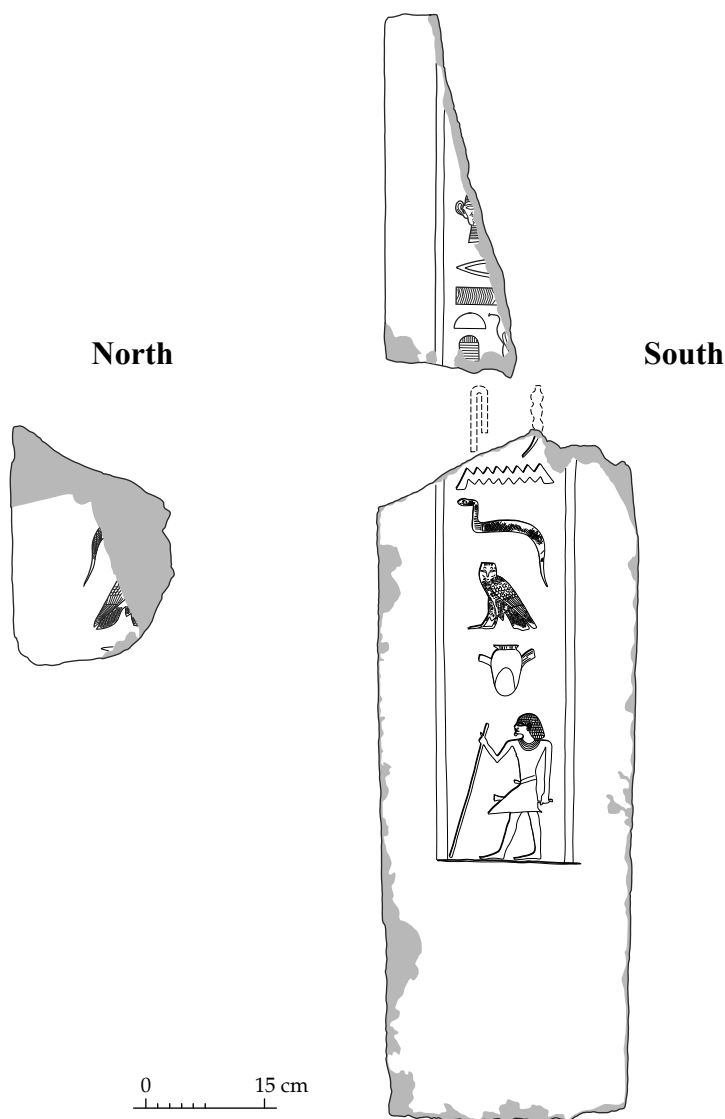


Fig. 6.2.12b Detail of the north and south jamb decoration

archaeological context suggests that these artefacts were parts of tombs dismantled prior to the building of Qar's complex and as such will be treated separately in another volume of the Abusir series.⁶ They belong to a significantly larger corpus of finds from these tombs. It is interesting to observe that most of these artefacts were passionately used as secondary fill of shafts built in the complex of Qar and Inti, Shaft A of Inti's complex being the most striking indication of this practice.

Qar's burial chamber was entered from the bottom of the shaft, through its west wall. The bottom of the shaft measured 2.37×1.90 m. Another, secondarily broken entrance from the bottom of the shaft led to the north, to another burial chamber (HH – burial chamber 'D'). This entrance is 0.75 m wide, 0.80 m high and starts 0.50 m above the floor. The chamber, however, does not belong to the tomb complex.

The burial chamber of Qar itself had a quite irregular ground-plan and consisted of two parts. The eastern one measured 5.20×1.80 m, the western niche 3.95×1.90 m. The chamber was only 1.56 m high. To the north of the entrance, cut in the east wall of the chamber, was an irregular niche. It starts about 0.80 m above the floor of the chamber, is approximately 0.50 m high, 0.58 m wide and 0.80 m deep, and orientated NE-SW.⁷

The western niche contained a burial installation – a 'coffin pit' cut in the limestone floor of the room – measuring 2.70×1.00 m and 1.04 m deep (figs. 6.2.19–6.2.21).⁸ The flat limestone slabs that originally sealed the burial pit were found scattered all over the room; only one of them was found *in situ* (measuring $1.34 \times 0.50 \times 0.12$ m). The sizes of the remaining six slabs were similar:

Slab 2: $1.12 \times 0.44 \times 0.10$ m,

Slab 3: $1.16 \times 0.36 \times 0.12$ m,

Slab 4: $1.38 \times 0.46 \times 0.13$ m,

Slab 5: $1.34 \times 0.52 \times 0.10$ m,

Slab 6: $1.22 \times 0.50 \times 0.12$ m (found in the coffin pit).

When the burial was sealed, the blocks were on the eastern side resting directly on the bedrock floor. On the western side, at a height of 1.00 m above the floor of the burial cavity, a 2.70 m long, 0.14 m high and 0.10 m deep ledge was cut which served as a platform for the western ends of the sealing blocks. Despite the fact that the burial chamber was found robbed, rich remains of the original burial equipment were found scattered on the floor (figs. 6.2.22–6.2.23). In the northeast corner of the chamber there was a huge copper hoard consisting of dozens of implements (Excav. No. 62/HH/2000); similar yet less numerous collection of copper implements was discovered in the fill of the chamber (Excav. No. 66/HH/2000). Its weight was estimated at no less than 2.5 kg. Further to the west, still along the north wall of the chamber, were found birds, cattle bones and oxen ribs, and remains of the original food offerings (Excav. No. 78/HH/2000). Their evaluation has shown that there were deposited at least seven birds and one calf (see the chapter by Ikram). In front of the sarcophagus pit, lying on the floor, were found several miniature lids of travertine and some other miniature copper and stone vessels made of travertine, rock quartz and obsidian (Excav. Nos. 57, 58, 59, 63, 66 a–d, 76, 79, 81–84, 90, 93 and 94/HH/2000); a very delicate part of the headrest setup (Excav. No. 85/HH/2000); five limestone models of goose offerings (Excav. Nos. 61, 65, 67, 68, /HH/2000); elements of golden jewellery (Excav. No. 64/HH/2000); pottery (Meidum bowls, Excav. Nos. 69–73/HH/2000 and large storage amphoras with jugs, Excav. No. 86/HH/2000), and in the south-east corner of the chamber, piled one over another, fifteen jugs and amphoras (86, 1–15/HH/2000), some of them imitating Levantine imports.

⁶ Excav. Nos. 39–56/HH/2000.

⁷ Speculatively, one could try to connect it functionally with older parallels of mummification recesses cut above floors of some Early Dynastic and Early Old Kingdom burial chambers, cf. Bárta, *Abusir V*, 11 with examples.

⁸ This type of burial appears from the Fourth Dynasty onwards, cf. Reisner, *Giza Necropolis I*, 162–163; Donadoni Roveri, *I sarcophagi egizi*, 71, h, fig. 15b.



Fig. 6.2.13 Chapel of Senedjemib, looking west

Fig. 6.2.14 Chapel of Senedjemib, detail of the false door fragment *in situ*

In comparison with other burial shafts within the complex, the burial chamber of Qar Junior provided the largest variety of items which included offerings of food, a large number of various copper implements, pottery vessels and miniature stone vessels. The copper tool models included several groups of artefacts: leaf blade knives, necked adze blades, axe heads, flat chisels, cross-cut chisels and model 'blow pipes'. Supplementary to them were copper cups and bowls. In addition, the loose fill of the corridor at the bottom of the shaft that led to the north contained five limestone models of geese (Excav. Nos. 61, 65, 67, 68 and 74/HH/2000) found together with finely polished Meidum ware plates.

6.2.2.2 Burial chamber of Senedjemib ('HH', Shaft A)

The shaft opening occupies a substantial area in the south-eastern part of the court of Iykai. Its south wall respects the east-west course of the north wall belonging to the chapel of Senedjemib. The shaft opening measures 2.20×2.00 m, its east and west walls running parallel in a northeast-southwest direction. The burial chamber was reached by a 15.90 m deep shaft. In its opening, 1.18 m below the floor of the chapel, a Meidum bowl with remains of some organic substance at the bottom was found (Excav. No. 38/HH/2001). At a depth of 12 m a large bag-shaped jar (Excav. No. 106/HH/2001) was found and some two metres deeper an example of a faked Levantine amphora was discovered, broken into pieces (Excav. No. 105/HH/2001).

At the bottom of the shaft were three steps cut into the bedrock, about 0.30 m high and descending to the south where a north-south oriented burial chamber was situated. The north wall of the shaft contained a vertical, 1.25 m wide, 1.80 m high and max. 0.20 m deep maneuvering recess designed to provide additional space when



Fig. 6.2.15 Chapel of Sendjemib

moving the sarcophagus chest and lid into the chamber.⁹ The recess ends 0.80 m above the highest step at the bottom of the shaft (figs. 6.2.24–6.2.25).

The north-south oriented chamber measured 4.10 × 2.60 m and was 2.10 m high. Along the west wall stood a limestone sarcophagus still containing a mummy of the tomb owner though robbed in antiquity (chest 3.10 × 1.50 × 1.26 m; lid 3.24 × 1.46 × 0.50 m, interior of the sarcophagus 2.30 × 0.66 × 0.68 m). The floor of the chamber was irregular, the sarcophagus chest being placed in a 25 cm deep cavity measuring 3.80 × 1.90 m in ground plan (figs. 6.2.26–6.2.28).

Remains of the original burial equipment were found along the eastern side of the sarcophagus, in the loose fill of the chamber that consisted of *tafl* and limestone chips. The only part of the burial equipment that was found *in situ* was a set of twelve jugs laid at the northwest corner of the sarcophagus (Excav. Nos. 103, 1–12/HH/2001 and copper bowl 104/HH/2001, fig. 6.2.26). In front of the sarcophagus, misplaced in the fill of sand and limestone chips along its east wall, were found many items of the original burial equipment including pottery (Excav. Nos. 100, 101, 125/HH/2001); flint knives (Excav. Nos. 109a, b/HH/2001); small stone vessels and lids made of travertine, quartz, basalt and obsidian (Excav. Nos. 107, 110–116, 117/HH/2001); headrest setups made of travertine and black schist (Excav. Nos. 118–121/HH/2001); seven sacred oils palettes (Excav. No. 122/HH/2001); copper implements (Excav. No. 108/HH/2001), and copper vessels (154/HH/2001).

After the insertion of the sarcophagus chest into the burial chamber, a 1.00–1.20 m high layer of dug *tafl* and limestone chips was piled up to the east of the sarcophagus, flush with its upper edge and northern face. Its north end was blocked by a dry-laid wall made of larger blocks of limestone. At the same height, *i.e.* 1.00 m above the floor, a ledge 0.25 m wide, 0.74 m high and 4.20 m long was cut in the east wall to support the sarcophagus lid before the sealing of the sarcophagus after the interment. Inside the sarcophagus, a destroyed burial was found (Excav. No. 143/HH/2004). It bore no indications of mummification as the body was only wrapped in linen bandages.

⁹ Reisner, *Giza Necropolis I*, 164–168; Donadoni Roveri, *I sarcofagi egizi*, fig. 16.



Fig. 6.2.16 Open Court 2/chapel of Iykai with his false door, looking west



Fig. 6.2.17 Open Court 2/chapel of Iykai with his false door, looking west



Fig. 6.2.18 Open Court 2/chapel of Iykai with his false door, looking south

6.2.2.3 Shaft 'C'

The opening of this shaft is situated in the south-eastern part of Open Court 2. Its basic measurements are 2.20 (NS) × 1.30 (EW) m, its depth is 14.50 m. It was built only after the casing of the east wall of the court was finished. This is clearly visible at the top part of the shaft's east wall which starts close to the east wall of the court. When the shaft was dug, the stability of the court's walls was compromised and it was necessary to support it by a construction made of larger limestone blocks and chips which was some 60–80 cm high. Despite this measure, some blocks of the casing sunk several centimetres deep (fig. 6.2.29).

The shaft was filled with windblown sand and limestone blocks and flakes. The fill also contained a number of decorated blocks and artefacts originating from different tombs in the vicinity as was the case with Shaft 'A' (Excav. Nos. 127, 128, 132–153/HH/2001). The bottom of the shaft is irregular and devoid of any burial chamber or sarcophagus recess yet human remains were found there (figs. 6.2.30–6.2.31). It is impossible to associate the shaft with any known person from Qar's family, nor with Iykai. The fact that Tjenti is the only person lacking a burial installation favours the conclusion that this was his place of burial.

The finds from the lower part of the shaft included two flat-bottomed amphoras with two handles (Excav. No. 2, 3/HH-Sh 'C'/2002) which may come from the original burial equipment.

▼ Fig. 6.2.19 Burial chamber of Qar Jr.





Fig. 6.2.20 Burial chamber of Qar Jr., looking north

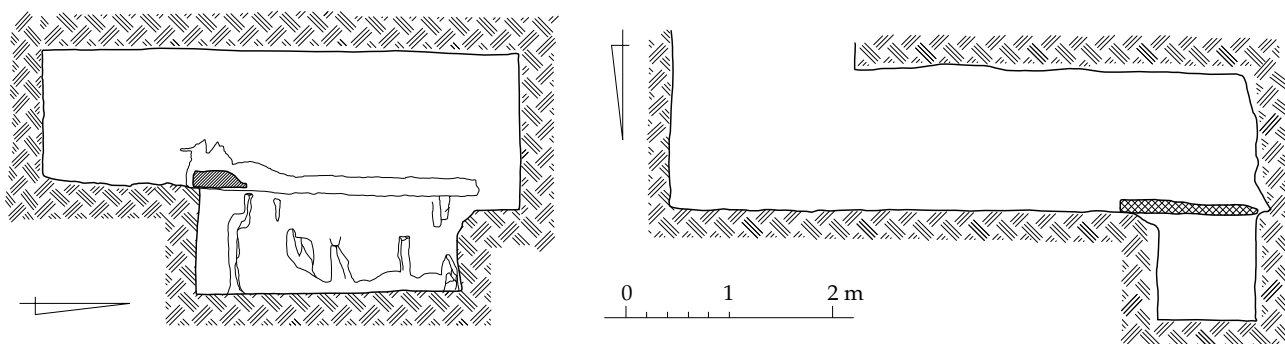


Fig. 6.2.21 Burial pit of Qar Jr.

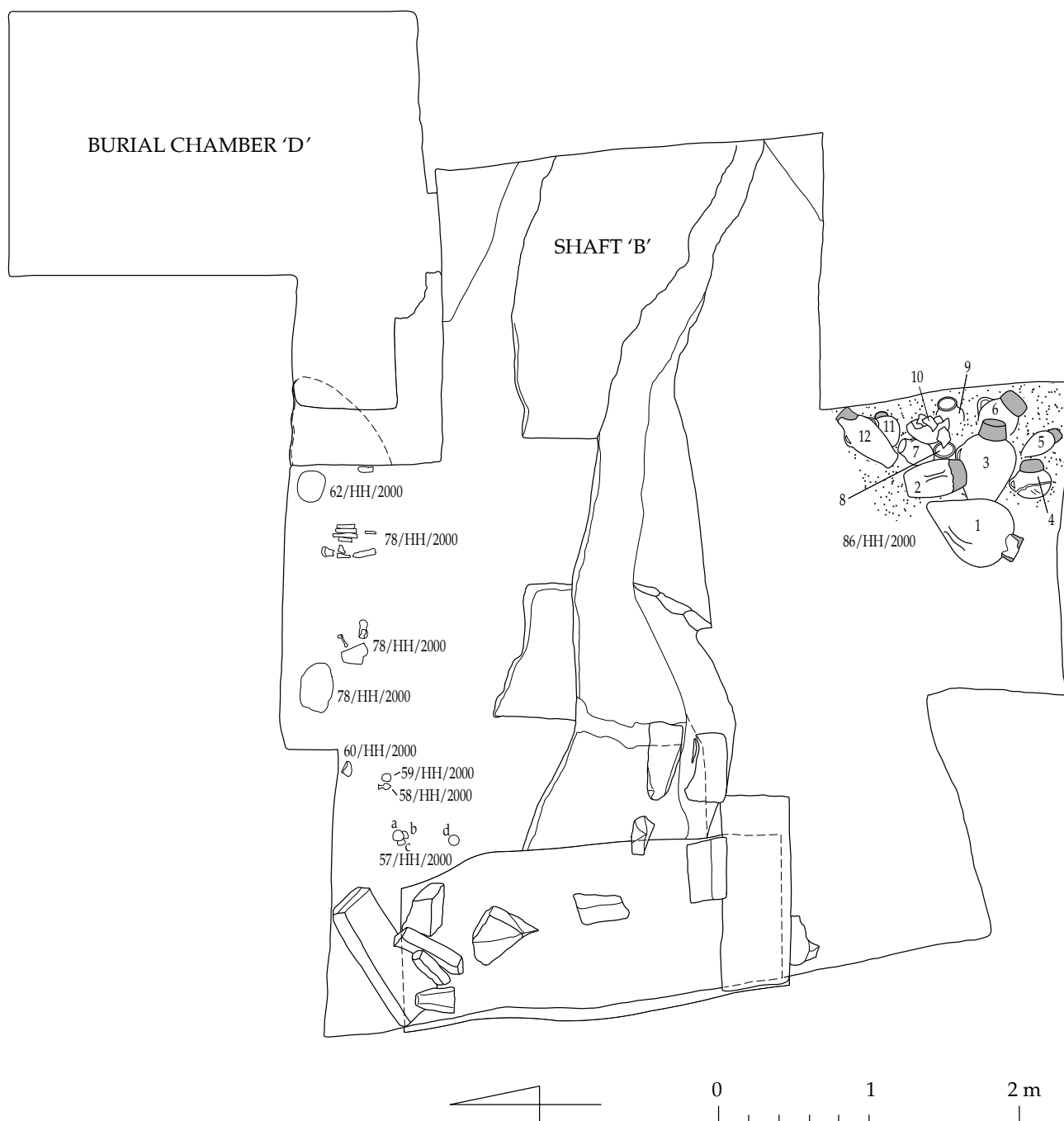


Fig. 6.2.22 Burial chamber of Qar Jr., location of finds

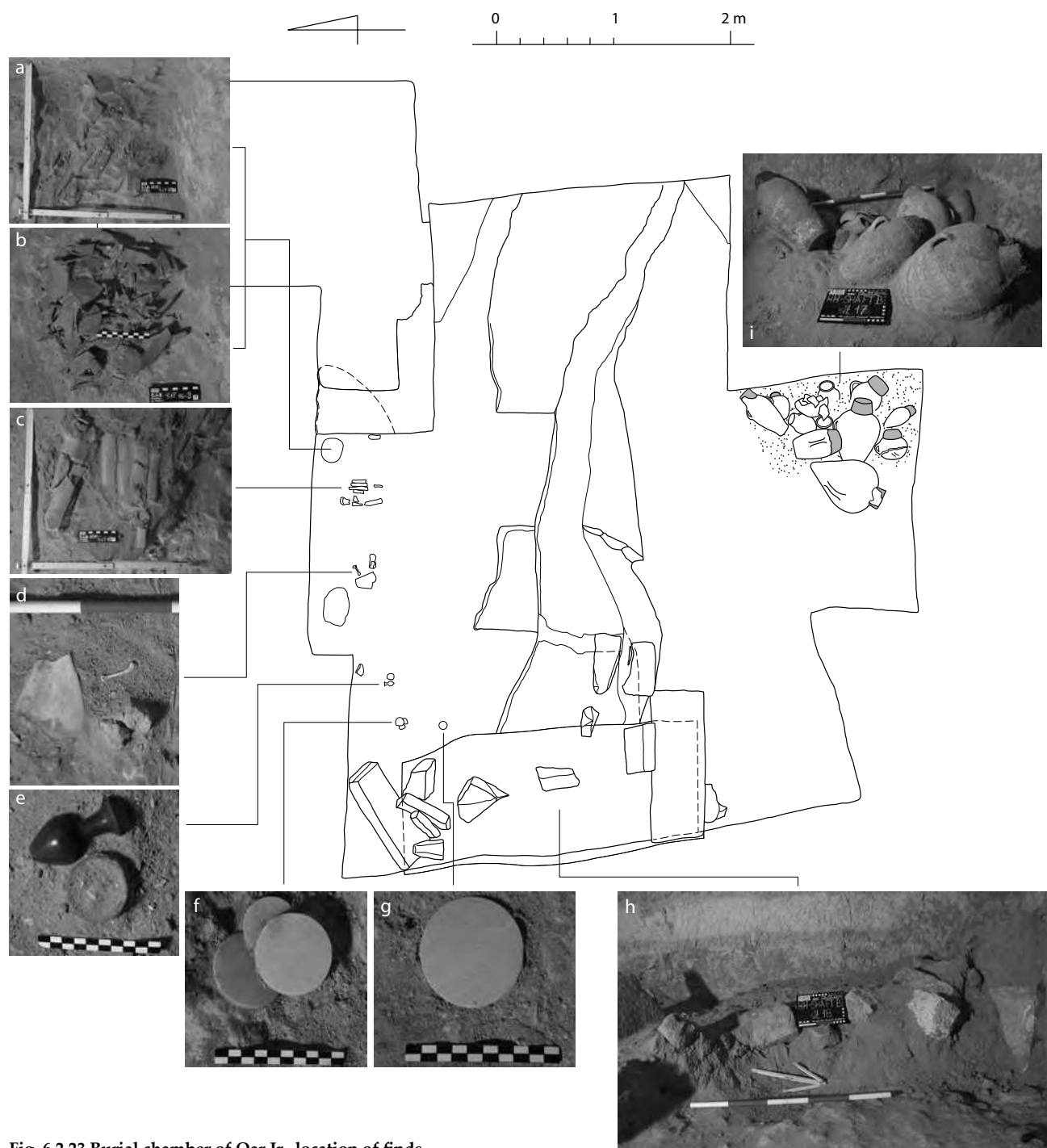


Fig. 6.2.23 Burial chamber of Qar Jr., location of finds



◀ Fig. 6.2.24 Manoeuvring recess at the bottom of Shaft 'A'

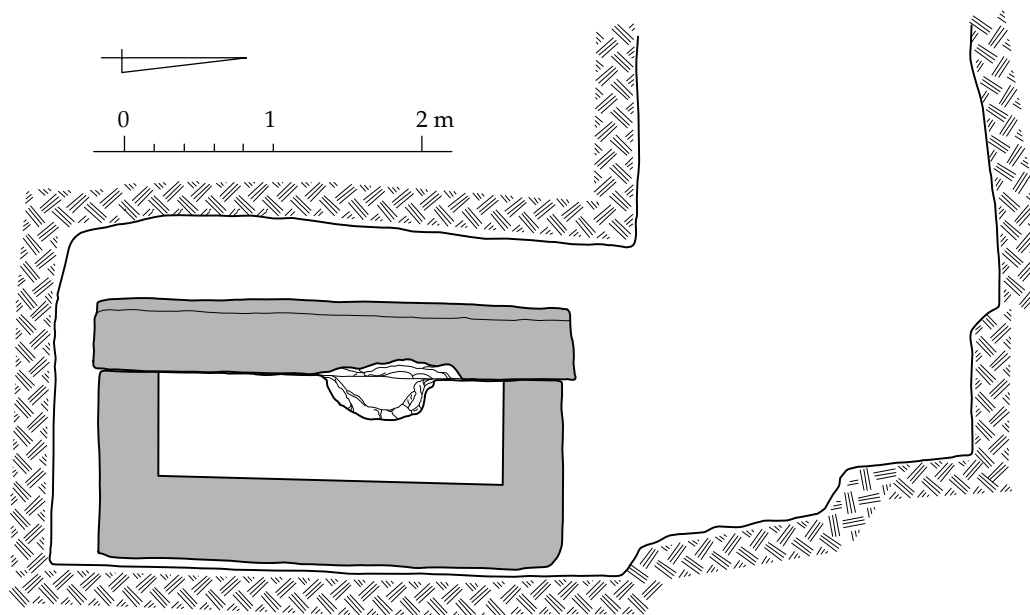
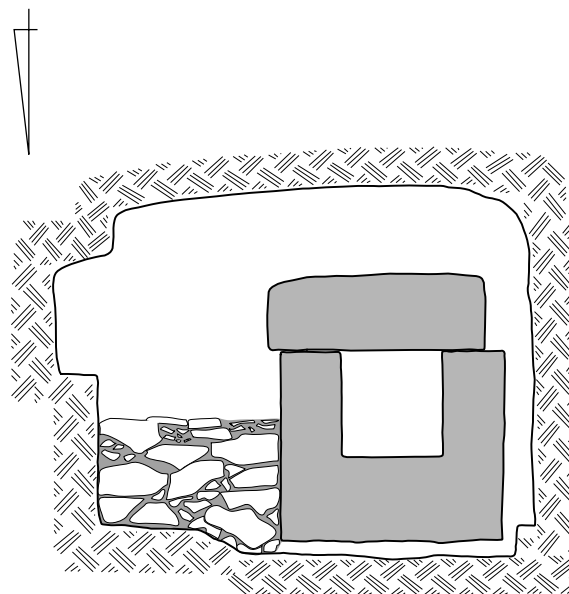


Fig. 6.2.25 Burial chamber of Senedjemib



◀ Fig. 6.2.26 Burial chamber of Senedjemib, looking south

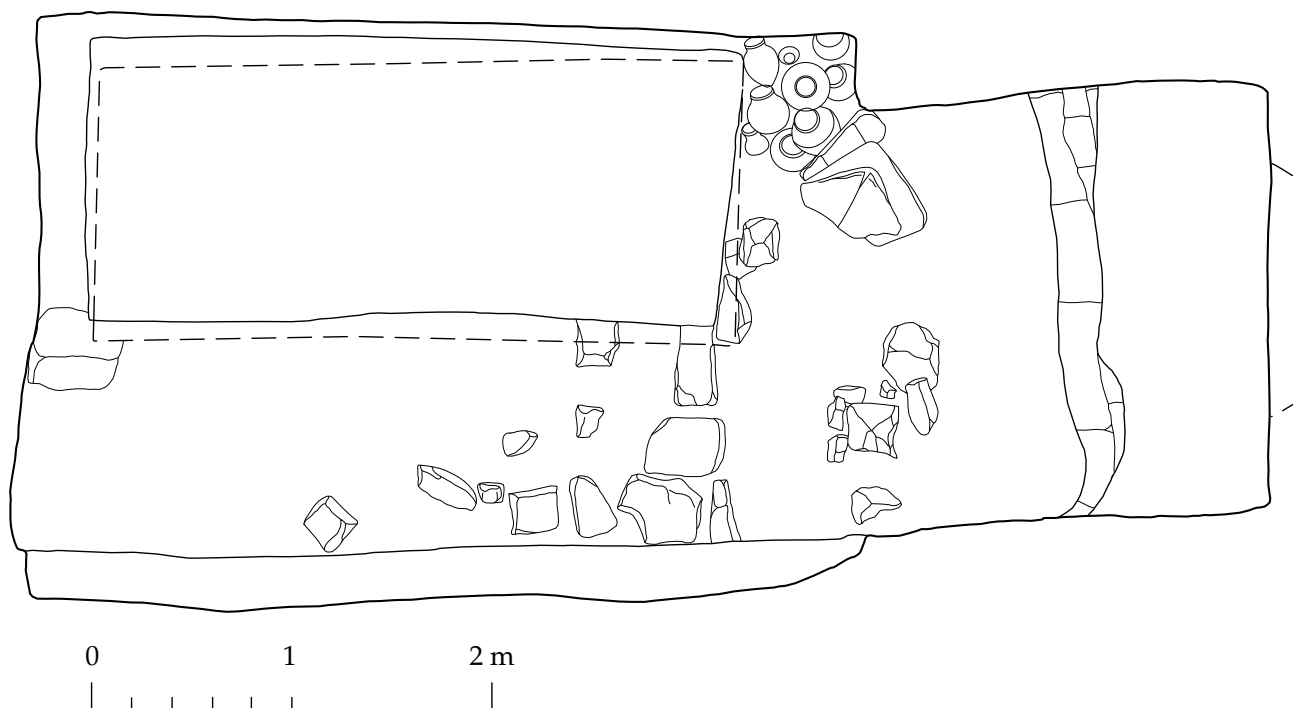


Fig. 6.2.27 Burial chamber of Senedjemib



Fig. 6.2.28 Sarcophagus of Senedjemib, eastern face



Fig. 6.2.29 Eastern wall of Open Court 2 with the Shaft 'C' opening



Fig. 6.2.30 Bottom of Shaft 'C'

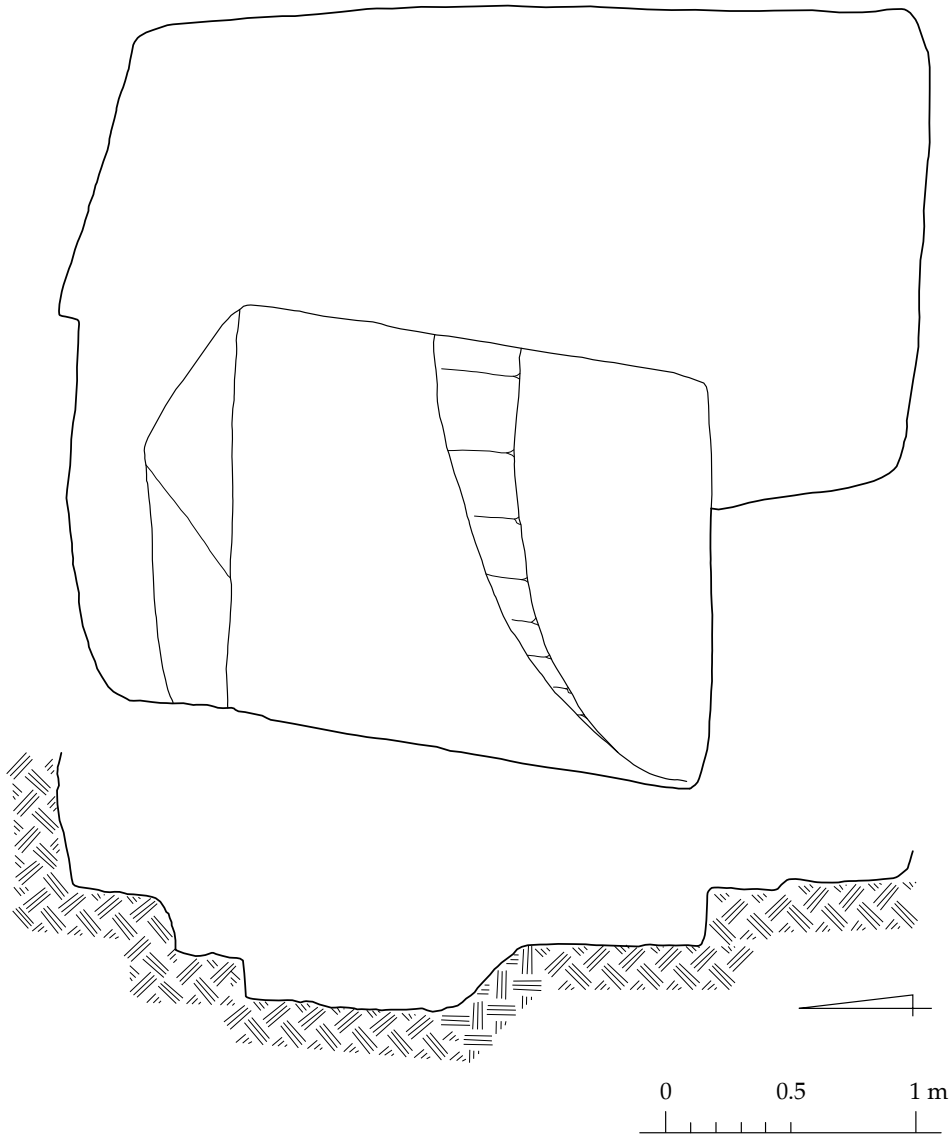


Fig. 6.2.31 Bottom of Shaft 'C'

6.3 The tombs of Qar Junior and Senedjemib: finds and remains of decoration *in situ*

The bulk of finds presented below was found mainly during the 1995 and 2000 excavation seasons, some minor parts came to light later on, in the seasons of 2001 and 2002 when the shafts and burial apartments of Senedjemib and Iykai (?) were found.

The below enumerated finds are divided into several groups according to their archaeological contexts and provenience. They include above all fragments that can be associated with the decoration of the chapels of Qar Junior and Senedjemib, and the entrance into the tomb of Senedjemib and his false door fragments (*fig. 6.3. 6.2.3*, nos. 2 and 3). As was mentioned elsewhere, the chapels of both Qar Junior and Senedjemib were thoroughly destroyed and only two blocks of the original decoration in the chapel of Qar Junior remained *in situ*. In addition to this, a small fragment of the false door of Senedjemib also survived *in situ*. Following a close scrutiny of the preserved blocks with decoration, it may be claimed that they originate from two different chapels. This results from the scene themes, an attempted reconstruction of some of the scenes, different workmanship regarding some iconographic details and, last but not least, also by the length of some of the scenes. This last involves an important element of analysis with regard to the different lengths of the north and south long walls in the respective chapels. It must be realised at the very beginning, however, that most of the decorated blocks were found in Open Court 1 and/or in its surroundings and thus the unambiguous attribution of many of the blocks to one or another chapel is almost impossible.

Four different types of relief were used for decoration of both sons. The sunk relief can be found only on the entrance jambs of the tomb of Senedjemib (deep sunk relief with rich internal details) and on his false door (less pronounced sunk relief lacking internal details). Low relief is then found only in the entrance into the tomb of Senedjemib and the same technique was applied also on the offering scene with Qar Junior and his wife. The remaining blocks that once decorated both chapels were executed either in a carved relief or in a style described by W. S. Smith as 'labour-saving' low relief.¹ This technique reduced a substantial portion of the craftsmens' labour by leaving most of the relief background *in situ*. The cutting away of the background stone is gradually deepened only very close to the outlines of the figures or items. According to Smith, the technique came into being during the time of Shepseskaf but today there is evidence that it was in use in Saqqara by the end of the Third Dynasty or the early reign of Sneferu at the latest.²

The catalogue of decorated blocks and decoration *in situ* is followed by a list of objects found in the burial apartments of Qar Junior and Senedjemib. The collection of these finds represents one of the richest sets of burial equipments known from the Old Kingdom. Equally important are individual categories of artefacts collected there, especially the groups of pottery, stone artefacts and copper implements.

¹ Smith, *HESPOK*, 162–163.

² *Ibid.*, 163; M. Bárta, 'The panel of Hetepi', in H. Benešová, P. Vlčková, eds., *Abusir. Secrets from the Sand* (Prague, 2007), 264.

6.3.1 Decoration and finds from the chapel of Qar Junior

Excav. No. 11a/GG/1995 (figs. 6.3.1–2)

A limestone lintel measuring 0.50×1.39 m was found in Layer 1 at the north wall of Open Court 1, opposite to the entrance to Chapel 1. The lintel had originally been placed above the entrance into the chapel of Qar Junior. Decorated in inferior quality sunk relief, it shows four striding figures of the tomb owner Qar proceeding to the right, the fifth figure (on the extreme left) has not been preserved. Qar is depicted standing, leaning against a long staff and holding a 'handkerchief' in his right hand. The only exception is the first (from the right) figure which shows him with his arms alongside his body. He wears a short kilt with a flaring front panel and with a diagonally running fold clearly visible. Despite the low quality of the relief, one can recognise the difference in the wigs on Qar's head: whereas the first and third figures wear a shoulder-long wig, the second and fourth figures are shown with a short wig. The figures alternate with columns (five together) of inscriptions, starting on the right of the lintel. In comparison with Excav. No. 11b/GG/1995 the signs in individual

Fig. 6.3.1 Excav. No. 11a/GG/1995



Fig. 6.3.2 Excav. No. 11a/GG/1995

columns are arranged in a more condensed fashion, otherwise the two blocks are very similar and show the same artistic hand. Traces of the original pinkish red paint are largely preserved on the decorated surface of the block.

1. *(j)r(j) Nhn (n) z3b...*,
 2. *hr(j)-sšt3 n wdꜥ-mdw (m) hwt-wrt 6, K3r;*
 3. *hm-ntr M3ꜥt, K3r;*
 4. *hr(j)-sšt3 n wdꜥ-mdw, K3r;*
 5. *jm3hw hr Hnt(j)-Tnnt.*
1. 'Keeper of Nekhen of the king...',
 2. privy to the secret judgement(s) in the Six Great Courts, Qar,
 3. priest of Maat, Qar,
 4. privy to the secret judgement/determining cases, Qar,
 5. well-provided before Khentjenenet'.

The association of the lintel with the person of Qar Junior has been made possible due to the unique title of 'priest of Maat' which does not occur in the titulary of the vizier Qar.

Excav. Nos. 27/HH/95 and 28/HH/95 (figs. 6.3.3–4)

Two limestone blocks with an offering procession of men and women. They are the only examples of relief decoration preserved *in situ* on the south wall in the chapel of Qar Junior. They measure 96.0 × 35.0 × 15.50 cm and 82.0 × 48.0 × 10.0 cm, respectively, and are decorated with incised relief depicting a procession of offering bearers of men and women. The blocks were placed one above another.

The preserved scene depicts six human figures proceeding to the right (west). It starts with an incomplete figure of a man carrying fowl, with a sash cloth over his chest. Behind him remains of an inscription ...*m zšnt* are preserved. He is followed by another incomplete figure, a woman dressed in a long tight dress hanging from two shoulder straps and with a necklace on her chest. Her arms hang alongside her body and behind her there is another caption: ...*t3-ntr*, '...necropolis'. The third person, a woman,

Fig. 6.3.3 Excav. Nos. 27 and 28/HH/1995



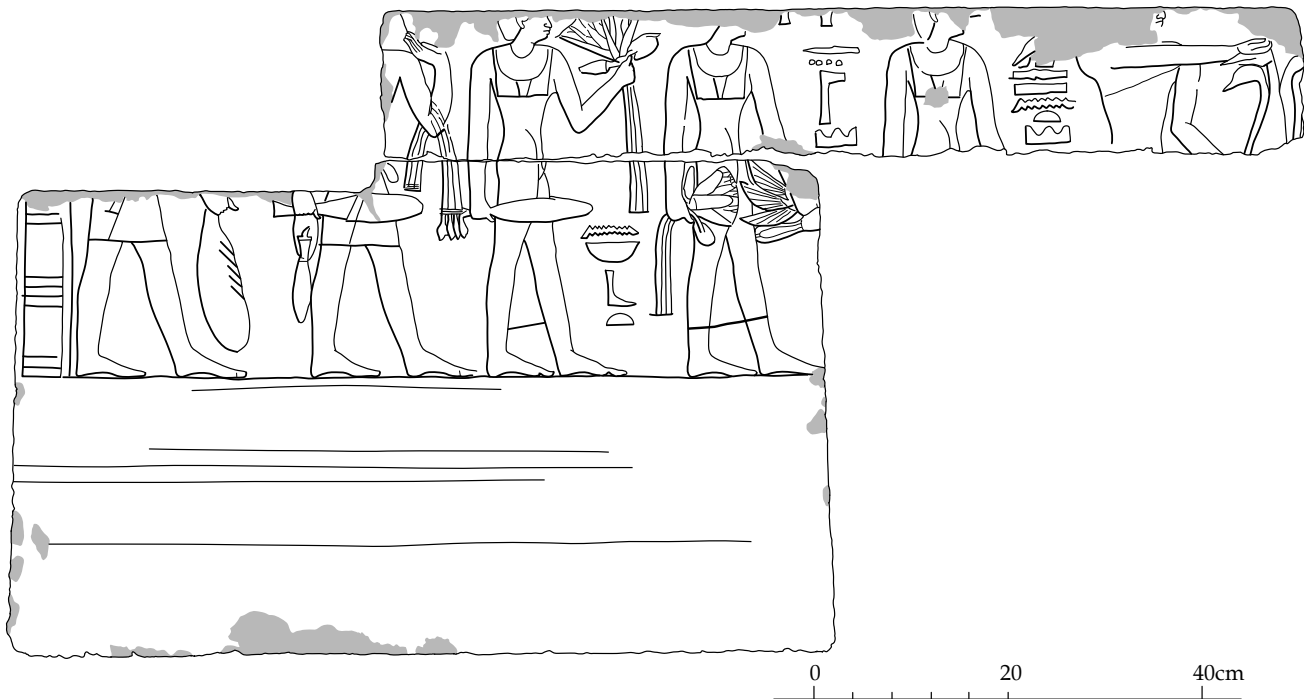


Fig. 6.3.4 Excav. Nos. 27 and 28/HH/1995

is rendered in the same manner. Her arms hang alongside her body as she carries a bird and lotus flower. The fourth woman is dressed also in the same fashion. Her left arm is bent forward and holds a lotus flower. In her right arm she holds an unidentified object of an oblong shape (a cucumber?).³ In front of her is a caption: *Nbt* 'Mistress'. Of the fifth, male figure, only its front part is preserved. He is dressed in a short tight kilt with a visible diagonal fold and his left arm is bent upwards as he is carrying onions and a vessel. In his right arm he holds an unidentified object (the same as in the previous case) and a bag. The sixth male figure of which only its lower part is preserved, is dressed in the same manner and carries a bag in his left hand. Behind him the 'ladder pattern' indicating end of the wall is clearly visible.

The base of the scene is painted black and below it is a dado composed of two broad bands of yellow, 7.5 cm in thickness, divided by a 1.5 cm wide black line. Below it is a black band of 10.5 cm. The decoration started 1.25 m above the floor of the chapel.

Excav. No. 25/GG/1995 (*fig. 6.3.5, pl. 24.1*)

A limestone fragment originating from an elaborate offering table scene with a figure of the seated tomb owner and his wife preserved. The scene is executed in a very delicate low relief. The fragment was found 1.20 m above the floor level of the Open Court 1, at the entrance to Chapel 1, in Layer 2. It joins Excav. Nos. 37, 41, 58, 65, 71, 72a, b and c, 74, 76–78, 80, 87–90, 97, 98/GG/1995.

Excav. No. 37/GG/1995

A low relief fragment of limestone measuring 29 × 13 cm discovered 0.60–1.20 m above the floor level of the Open Court 1, at the entrance to Chapel 1, in Layer 2.

³ For parallels see Kanawati, Abder-Raziq, *Teti Cemetery VI*, pls. 53 and 56 showing that this artefact carried both by male and female offering bearers was not gender-specific.

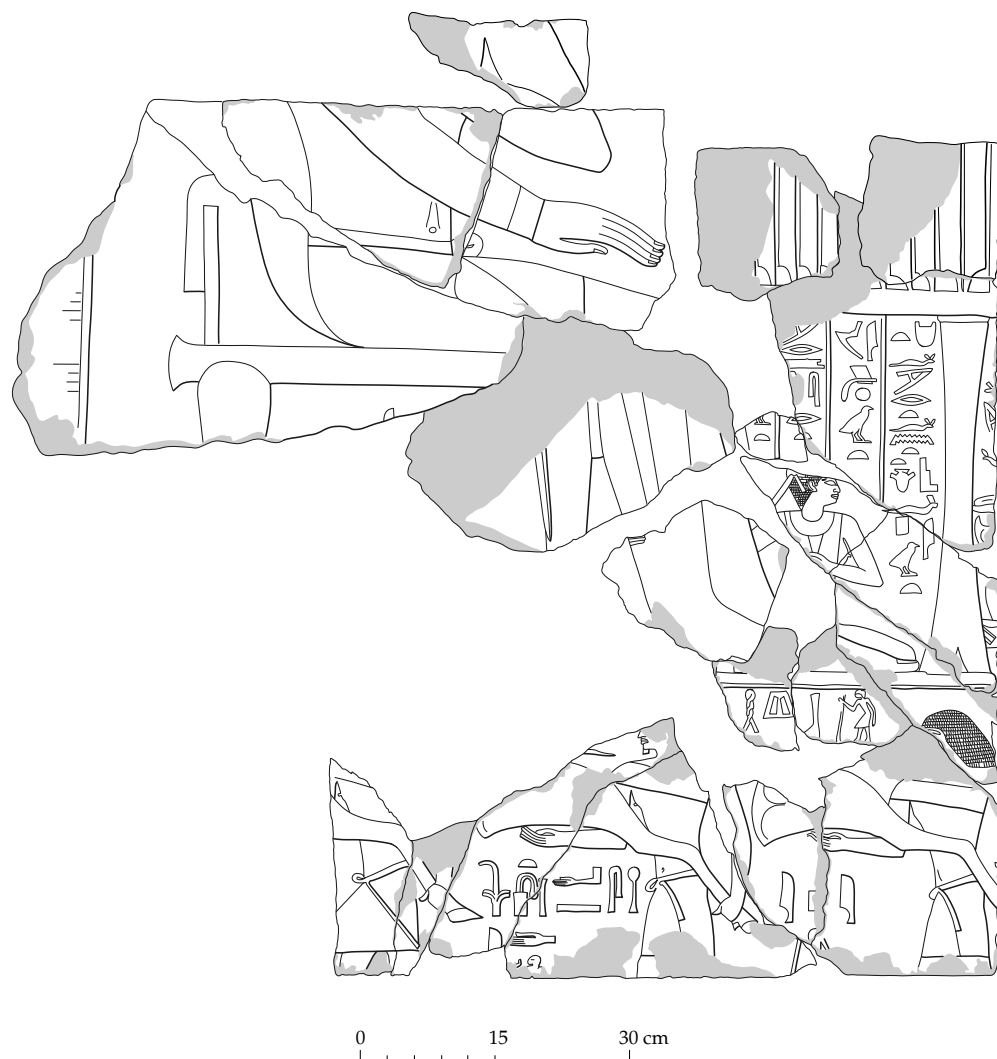


Fig. 6.3.5 Excav. No. 25etc./GG/1995, reconstruction of Qar's Junior offering scene



Excav. No. 41/GG/1995

A low relief fragment of limestone measuring 13.0 × 17.6 cm, found in Layer 2 of the Open Court 1, in front of the entrance to Chapel 1. It shows part of what originally were slices of bread piled on an offering table.

Excav. No. 58a/GG/1995

A low relief fragment of limestone measuring 27 × 22 cm. It was found in Open Court 1, Layer 2, 60 cm above the floor level, close to the entrance to Chapel 1.

Excav. No. 58b/GG/1995

A low relief fragment of limestone measuring 10 × 35 cm.

Excav. No. 63/GG/1995

A low relief fragment of limestone measuring 8 × 22.5 cm, found in Open Court 1, Layer 2, 60 cm above the floor level.

Excav. No. 65/GG/1995

A low relief fragment of limestone measuring 11 × 9 cm. It was found in Open Court 1, Layer 2, 50 cm above the floor level.

Excav. No. 71/GG/1995

A low relief fragment of limestone measuring 4.3 × 12.4 cm. It was found in Open Court 1, Layer 2, 40 cm above the floor level.

Excav. No. 72a, b/GG/1995

A low relief fragment of limestone measuring 29.7 × 13.0 cm, discovered in Open Court 1, Layer 2, 40 cm above the floor level, located in the northeastern part of the area.

Excav. No. 72c/GG/1995

A low relief fragment of limestone measuring 24 × 29 cm, discovered in Open Court 1, Layer 2, 40 cm above the floor level, located in the northeastern part of the area.

Excav. No. 74/GG/1995

A low relief fragment of limestone measuring 12.0 × 6.5 cm, discovered in Open Court 1, Layer 2, 40 cm above the floor level, located in the northeastern part of the area.

Excav. No. 76/GG/1995

Low relief fragment of 23.5 × 25.0 cm, discovered in Open Court 1, Layer 2, 30 cm above the floor level, located in the northeastern part of the area.

Excav. No. 76bis/GG/1995

A low relief fragment of limestone measuring 34 × 16 cm, discovered in Open Court 1, Layer 2, 20 cm above the floor level, located in the northeastern part of the area.

Excav. No. 77/GG/1995

A low relief fragment of limestone measuring 19.5 × 30.0 cm, discovered in Open Court 1, Layer 2, 20 cm above the floor level, located in the northeastern part of the area.

Excav. No. 78/GG/1995

A low relief fragment of limestone measuring 19 × 17 cm, discovered in Open Court 1, Layer 2, 20 cm above the floor level, located in the northeastern part of the area.

Excav. No. 80/GG/1995

A low relief fragment of limestone measuring 11.5 × 17.9 cm, discovered in Open Court 1, Layer 2, 15 cm above the floor level, located in the northeastern part of the area.

Excav. No. 87/GG/1995

A low relief fragment of limestone measuring 5.3 × 12.0 cm, discovered in Open Court 1, Layer 2, 10 cm above the floor level, located in the northeastern part of the area.

Excav. No. 88/GG/1995

A low relief fragment of limestone measuring 10.3 × 6.0 cm, discovered in Open Court 1, Layer 2, 10 cm above the floor level, located in the northeastern part of the area.

Excav. No. 89/GG/1995

A low relief fragment of limestone measuring 20 × 24 cm, discovered in Open Court 1, Layer 2, 10 cm above the floor level, located in the northeastern part of the area.

Excav. No. 90/GG/1995

A low relief fragment of limestone measuring 10 × 19 cm, discovered in Open Court 1, Layer 2, 10 cm above the floor level, located in the northeastern part of the area.

Excav. No. 97/GG/1995

A low relief fragment of limestone measuring 4 × 26 cm, discovered in Open Court 1, Layer 2, 10 cm above the floor level, located in the northeastern part of the area.

Excav. No. 98/GG/1995

A low relief fragment of limestone measuring 9 × 14 cm, discovered in Open Court 1, Layer 2, 10 cm above the floor level, located in the northeastern part of the area.

The reconstructed parts of the scene show the seated tomb owner in front of the table with stylised loaves of bread in the form of reed leaves. He is facing to the right and wears a tight-fitting kilt reaching above his knees with a flaring front panel, a belt and a knot. His right arm is outstretched towards the table and is adorned with a wide wristband. His left arm is folded on his chest. He sits on a finely carved chair with a back pillow and with a papyrus blossom finial at the back.⁴ The figure is exceptionally well-modelled which can best be seen in the navel area and on the fingers and calf muscles. The table with reed leaves rests on a biconical foot. Below the table, to its left, is a kneeling figure of the tomb owner's wife Iput. She is dressed in a tight-fitting dress suspended from two shoulder straps,

⁴ Cherpion, *Mastabas et Hypogées*, 32–33, Criterion 9, cf. also p. 33, figs. 11–14.

with a wide collar around her neck and a headband with long hanging ribbon.⁵ The wig is of the short type, with horizontal rows of locks reaching from the crown to the bottom. Her left arm is folded on her chest, and her right arm embraces the legs of her husband. Above her head, three preserved columns of hieroglyphic inscriptions read from the right to the left:

1. *hmt.f mrt.f nt st-jb.f, Jpwt,*
2. *jm3hwt...*
3. *Mr[t.f], snfirt,*
4. *...[Jp]wt.*
1. 'his beloved wife of his hearth, Iput,
2. well-provided....
3. his beloved, who pleases...
4. *...[Ip]ut'.*

To the right of the table, remains of another column of inscriptions are discernible. It reads from the left to the right:

1. *...fmr:f...*
1. 'his ..., he loves...'

At the end of the column there is probably an ox's foreleg as a part of the pile of offerings that continue downwards where a vessel is partially preserved.

Below the offering scene is a longer section of a register with offering bearers striding to the left. The register is composed of Excav. Nos. 58 a and b, 63, 65, 71, 89a and b, 97 and 98/GG/1995.

It may be supposed that there were originally five offering bearers presenting the forelegs of an oxen. The first one is missing entirely. The second bearer is only partially preserved, dressed in a kilt with flaring front panel reaching above the knees with an overlap and a belt. The kilt differentiates him from the following two bearers of forelegs, who wear only 'plain' tight-fitting kilts reaching above the knees with a belt and an overlap. The caption in front of the third one reads: *shd zš(w) ʕ(w) (nw) nswt* 'inspector of scribes of the royal documents, Idu'. In front of Idu's face are traces of the sign *f* (Gardiner, I 9). The fourth offering bearer has a shoulder-length wig with horizontal rows of locks from the crown to the bottom. His title reads *hr(j)-hb(t) smsw* 'senior lector priest' and his name is given further below as *Jpj* 'Ipi'.

The scene is characterised by the well-preserved polychromy of white (kilt of the tomb owner, kilts of the offering bearers and the pillow), yellow (wooden parts of the chair, skin of the woman), green (ladder pattern on the extreme left of the scene) and grey-blue (background) paint and was framed by a ladder pattern preserved on the extreme left, to the left of the chair.

It may be assumed, based on contemporary parallels that following five men with forelegs were five men presenting birds. This section of the wall decoration survived through the following three fragments that relate to the offering scene discussed above:

Excav. No. 57/GG/1995 (figs. 6.3.5–6)

A low relief fragment of limestone measuring 26.0 × 19.5 cm, which joins Excav. Nos. 64 and 73/GG/1995. It was found in Open Court 1, Layer 2, 60 cm above the floor level, close to the entrance

⁵ Cherpion, *Mastabas et Hypogées*, 67–68, Criterion 44.



Fig. 6.3.6 Excav. No. 57/GG/1995

to Chapel 1. The reconstructed scene shows a partially preserved procession of two male offering bearers. The man on the left is attested only by his left arm holding the foreleg of an ox. The following man carries the same item. Across his chest is a sash cloth. The caption in front of him gives his name as *Jdw*, 'Idu'. In the upper left corner traces of the sign *b* (Gardiner, D 58) are discernible. Traces of the original red paint for the bodies, black for the wig and white for the cloth are still partially visible.

Excav. No. 64/GG/1995

A low relief fragment of limestone measuring 21 × 10 cm, found in Open Court 1, Layer 2, 45 cm above the floor level.

Excav. No. 73/GG/1995

A low relief fragment of limestone measuring 8.5 × 9.0 cm, found in Open Court 1, Layer 2, 40 cm above the floor level.

Excav. No. 136/GG/1995 (figs. 6.3.7–8)

A limestone block fragment (13 × 10 cm) with low relief decoration depicting loaves of bread. Found in the debris in the northeastern part of Open Court 1. It is likely to be part of the offering table scene of Senedjemib.



Fig. 6.3.7 Excav. No. 136/GG/1995

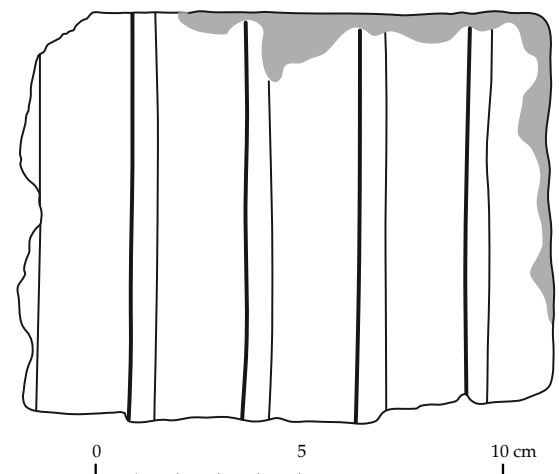


Fig. 6.3.8 Excav. No. 136/GG/1995

Given the total length of the reconstructed scene – 1.70 m – it is certain that the entire composition originates from the north wall of Qar Junior's chapel which was long enough to accommodate it (the north wall of Senedjemib's chapel was only 2.05 m long and would not be capable of accommodating the scene when complete).

The following two fragmentarily preserved scenes with offering bearers may be easily attributed to the chapel of Qar Junior given their stylistic characteristics and the sheer size of the individual bearers: those from the chapel of Senedjemib are almost 1/5 bigger. The bearers with birds continue the procession of the foreleg bearers despite the fact that the reconstruction is far from being complete. The stylistic similarity and identical height of the offerings bearers make it certain that the scene may be attributed to the north wall of the chapel of Qar Junior.

Excav. No. 21/GG/1995 (*figs. 6.3.9–10*)

A limestone block with very fine low relief, w. 32, h. 19 cm, discovered in Layer 2 in Open Court 1, to the north of Chapel 1 entrance, 1 m above the floor level.

It joins Excav. Nos. 28, 36, 60, 75 and 84/GG/1995.



Fig. 6.3.9 Excav. No. 21etc./GG/1995

Excav. No. 28/GG/1995

A low relief limestone fragment measuring 15.2 × 14.7 cm, found 1.15 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2.

Excav. No. 36/GG/1995

A low relief limestone fragment measuring 63.0 × 8.5 cm, discovered 0.80 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2.

Excav. No. 60/GG/1995

A low relief limestone fragment measuring 19 × 27.5 cm, found 1.15 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2.

Excav. No. 75/GG/1995

A low relief limestone fragment of 17 × 16 cm, discovered in Open Court 1, Layer 2, 40 cm above the floor level, located in the northeastern part of the area.

Excav. No. 84/GG/1995

A low relief limestone fragment of 33.0 × 24.5 cm, discovered in Open Court 1, Layer 2, 10 cm above the floor level, located in the northeastern part of the area.

The reconstructed scene shows two partially preserved registers depicting procession of male offering bearers proceeding to the left. The upper register depicts lower part of an offering bearer wearing a pointed kilt with an overlap reaching his knees. To his left and right are cages with ducks. The lower register shows three offering bearers proceeding to the left. They are dressed in tight-fitting kilts with belts and overlaps reaching above the knees; on their chins are small ritual beards. The second and third bearers with their heads preserved have short wigs with horizontal rows of locks and a ritual beard on their chins. The first offering bearer has a sash over his chest and is missing his head. He carries birds held up by the wing and neck. In front of him are the remains of a title and his name: ...*smsw*, *Jntj* '...oldest, Inti'. The second offering bearer presents birds held up by the wings and neck. In front of him is a cage with ducks. It also seems that originally he was leading by a rope a calf with mat on its back; it is striding behind him. The third offering bearer carries a tray laden with a goose and lettuce. His left bent arm carries aloft a vessel with a rounded base. The caption in front of him reads: ...*zš pr-ntr*, *Jnt.f* '...scribe of the god's estate, Intef'.

Well preserved is red and black paint used for male bodies (skin and the wigs), yellow for the birds and the hieroglyphic sign of *ntr* (Gardiner, R 8) and blue-grey for the background.

It is well quite possible that the blocks that were once below continued the scene:

Excav. No. 22etc./GG/1995 (figs. 6.3.10–11)

A limestone fragment with decoration in low relief, measuring 15 × 6 cm, found in Open Court 1, in Layer 2, about 1.20 m above the floor level. It joins Excav. Nos. 150 a–c/GG/1995.

Excav. No. 150a/GG/1995

A limestone fragment of 19 × 27.5 cm decorated with low relief inscription. It was found in Open Court 1, Layer 2, 50 cm above the floor level, opposite the entrance.

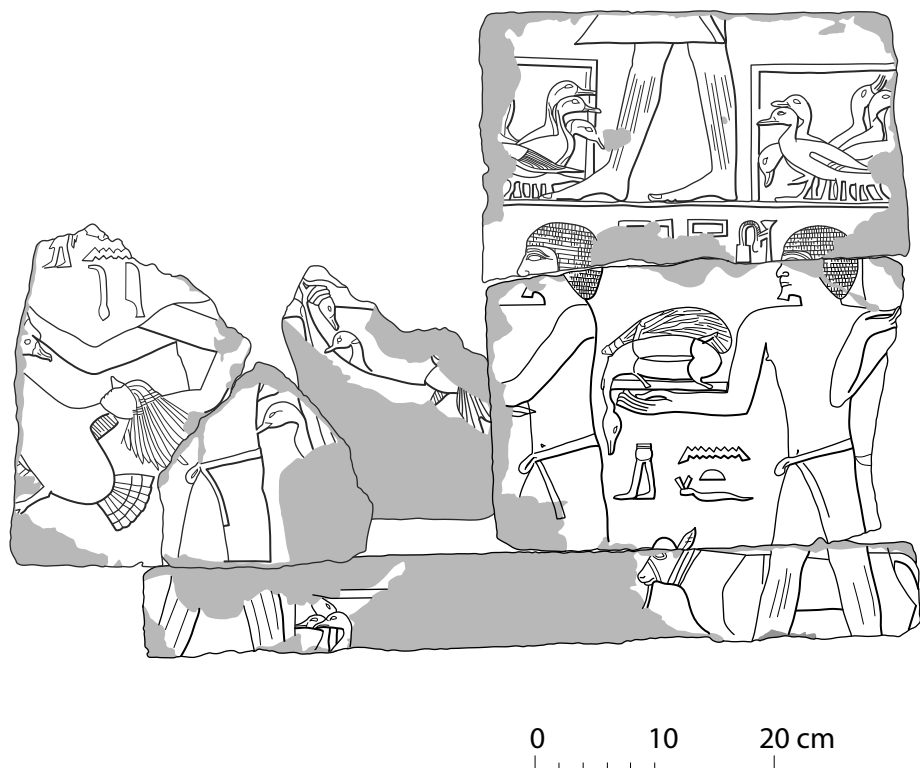
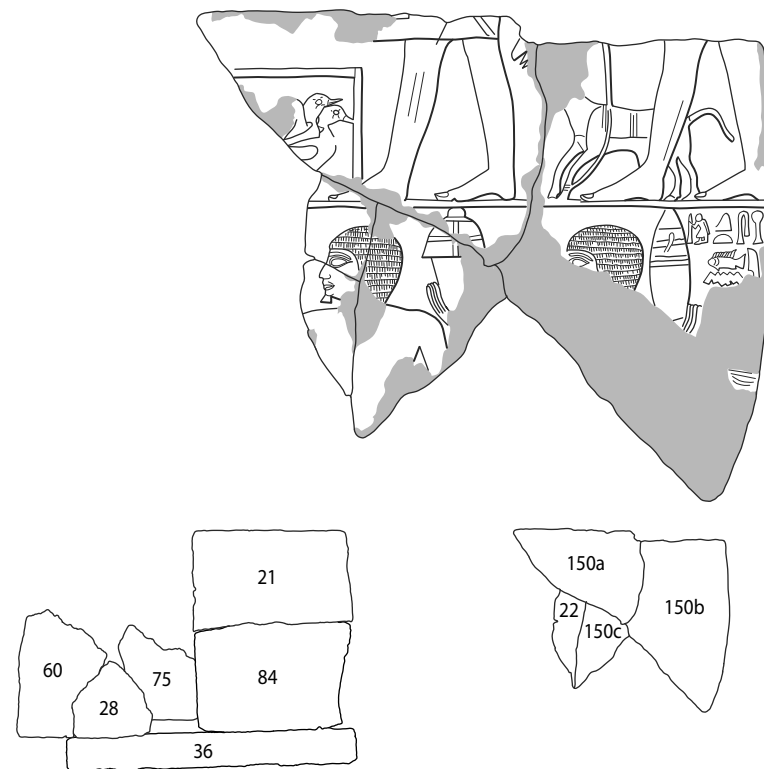


Fig. 6.3.10 Excav. No. 21etc./GG/1995



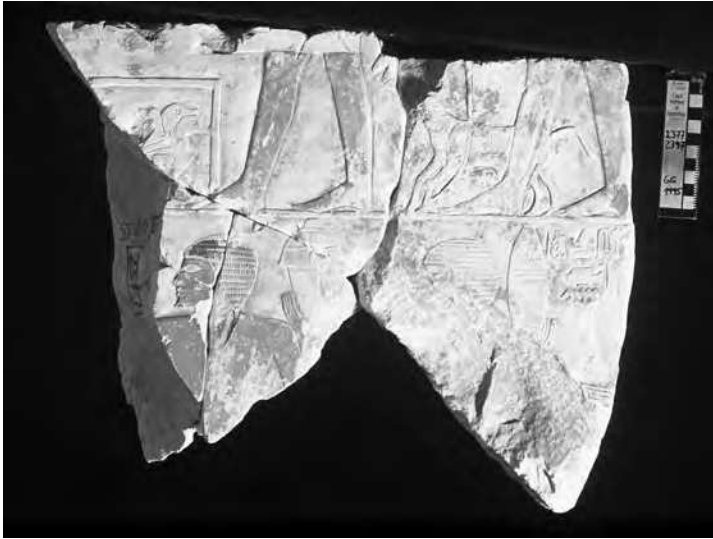


Fig. 6.3.11 Excav. No. 22etc./GG/1995

Excav. No. 150b/GG/1995

A limestone fragment of 26.5 × 18 cm decorated with low relief inscription. It was found in Open Court 1, Layer 2, 10 cm above the floor level, in the northeastern area.

Excav. No. 150c/GG/1995

A limestone fragment of 8 × 18 cm decorated in low relief. It was found in Open Court 1, Layer 2, 50 cm above the floor level.

The reconstructed part of the scene shows two registers with offering bearers proceeding to the left. The upper register starts with a birds' cage and continues with two male offering bearers. The man on the left is dressed in a kilt with flaring front panel, the one on the right brings a calf on a lead.

The register below it shows another two offering bearers. The man on the left has a small beard, the one on the right is engaged in carrying two ovoid jugs covered with elaborate lids. The figure of the third one on the extreme right has not survived but it is referred to by a caption: *shd srw k[nb]t, Jnj* 'inspector of the *sr*-officials (?) of the law [court], Ini'. The translation of the title must be considered to be a provisional one as it was not possible to find any close contemporary parallel for the title. Traces of the original paint survived: red for the skin, black for the wigs and parts of the vessels, white for the kilts and dark blue for the background.

6.3.2 Decoration and finds from the chapel of Senedjemib

6.3.2.1 The entrance

The entrance into the tomb of Senedjemib was situated at the northern end of the east wall of Open Court 1. It had the shape of a short corridor whose entrance was flanked by two jambs. The jambs' western faces were each decorated with a single column of inscription executed in sunk relief. Of this original decoration only the lower part of the southern jamb survived up to date. It is 30 cm wide, 60 high cm and still preserves the lower part of the name of Senedjemib: *[S]ndm-jb* (figs. 6.2.11–12).

Excav. No. 44/GG/1995 (figs. 6.3.12–13)

Large fragment of 32 × 42 cm, found in Layer 2, Open Court 1. Part of a larger limestone block broken into several pieces – the restored block consists of the following, during the excavation independently catalogued numbers: Excav. Nos. 47, 48, 99, 100, 102/GG/1995 found in Layer 2, Open Court 1, about 60 cm above its floor, opposite the entrance to Chapel 1.

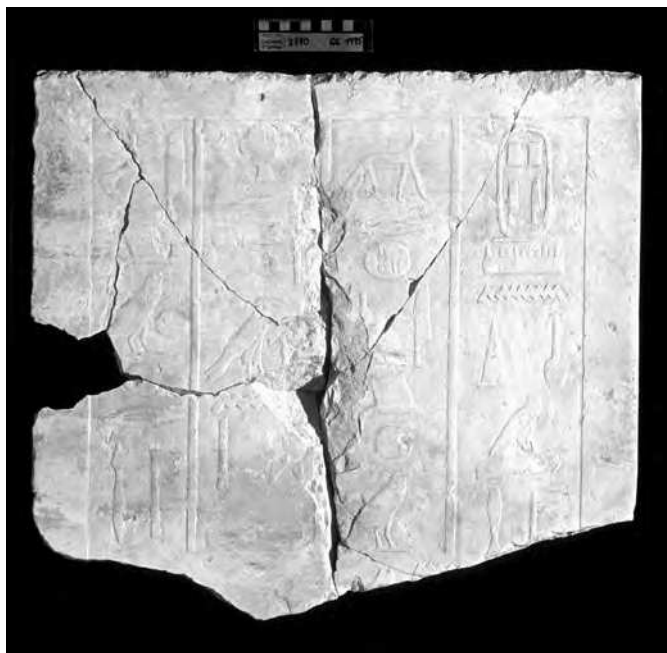


Fig. 6.3.12a Excav. No. 44/GG/1995



Fig. 6.3.12b Excav. No. 44/GG/1995, western face



Fig. 6.3.13a Excav. No. 44/GG/1995

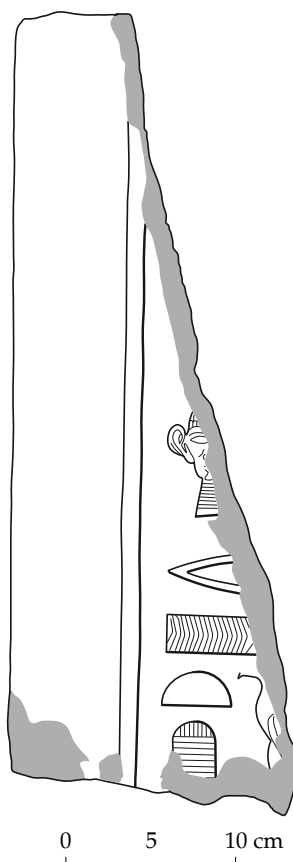


Fig. 6.3.13b Excav. No. 44/GG/1995, western face

Excav. No. 47/GG/1995 – 43.0 × 16.0 cm,
 Excav. No. 48/GG/1995 – 8.0 × 3.5 cm,
 Excav. No. 99/GG/1995 – 28.0 × 23.0 cm,
 Excav. No. 100/GG/1995 – 21.5 × 26.0 cm,
 Excav. No. 102/GG/1995 – 28.0 × 23.0 cm.

The large fragment was certainly a corner element decorated on two adjoining sides. The attempted reconstruction shows that it comes from the southern entrance jamb and that it was placed above the block *in situ* (fig 6.2.12). Its larger side measures 42 × 60 cm, the other 16 × 43 cm. The outer border has shape of a 6 cm wide, low band, the hieroglyphs are executed in finely carved low relief and arranged in four columns (1.–4.) divided by another band. Below it small traces of a horizontal line, in all likelihood containing the name of Senedjemib are to be found. The text reads from right to left:

1. (j)m(j)- (j)ht hm(w)-ntr (m) Mn-nfr-Ppjj,
2. (j)r(j) Nhn (n) z3b, jm3hw,
3. hr(j)-s3t3 n wd-mdw,
4. jm3hw hr ntr-3,
5. [S]n[dm]-jb.
1. 'Assistant of the mortuary priests (in the funerary complex)
 "Eternal is the Beauty of Pepy I",
2. keeper of Nekhen of the king, well provided,
3. privy to the secret(s) of the (royal) decrees,
4. well-provided before the Great God,
5. [Se]ne[djem]ib'.

Its western face is much damaged and has only part of the title hr(j)-s3t3, 'privy to the secret(s)' executed in sunk relief (fig. 6.2.12).

Excav. No. 8/GG/1995 (figs. 6.3.14–15)

Limestone fragment of an inscription of 20 × 10 cm, found in front of the entrance to Chapel 1, in the layer of mudbrick destruction.

Remains of an inscription executed in sunk relief:

...[Sn]dm-jb.
 '...[Sene]djemib'.

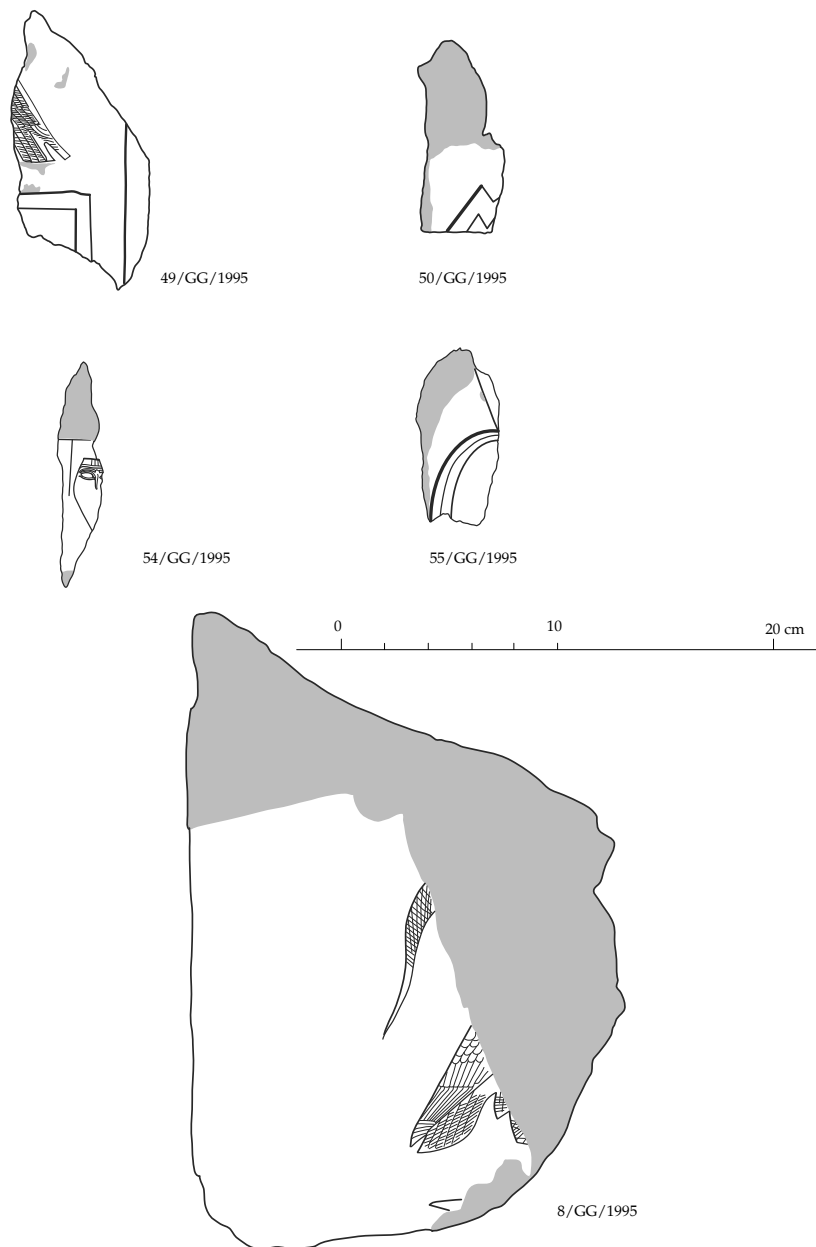
Given the location of the fragment and remains of the inscription, the piece must originate from the left, northern door jamb of the entrance to the tomb of Senedjemib. The upper part of the fragment shows traces of modern stone cutting by means of an electric saw.

Excav. No. 49/GG/1995

A small limestone fragment measuring 6.0 × 10.5 cm, with sunk relief decoration preserving parts of the signs 'm' and 'pr' (Gardiner, G 17 and O 1). It was found in Layer 2, Open Court 1 and it must originate from the left (northern) entrance jamb.

Excav. No. 50/GG/1995

A small limestone fragment measuring 3 × 4 cm, with sunk relief decoration preserving part of the sign 'n' (Gardiner, N 35). It was found in Layer 2, Open Court 1 and it must originate from one of the entrance jambs.



◄ Fig. 6.3.14 Excav. Nos. 8, 49, 50, 54 and 55/ GG/1995, northern jamb fragments

◄◄ Fig. 6.3.15 Excav. Nos. 8, 49, 50, 54 and 55/ GG/1995, northern jamb fragments

Excav. No. 54/GG/1995

A relief fragment of limestone measuring 1.7×7.0 cm, with part of a sunken 'm' sign (Gardiner, G 17). It was found in Open Court 1, Layer 2, about 60 cm above its floor, opposite the entrance to Chapel 1. It originates from the right (southern) entrance jamb.

Excav. No. 55/GG/1995

A relief fragment of limestone measuring 3.4×7.3 cm, with part of a sunken sign 'jm3h' (Gardiner, F 39). It was found in Open Court 1, Layer 2, about 60 cm above its floor, opposite the entrance to Chapel 1. It originates from the left (northern) entrance jamb.

Excav. No. 103/GG/1995 (figs. 6.3.16–17)

Two limestone fragments of a lintel measuring $88 \times 25 \times 10$ cm, found in Open Court 1, Layer 2, 40 cm above the floor level. It is decorated with two lines of hieroglyphic inscriptions in sunk relief, reading from the right to the left.



Line 1: *ḥtp dj nswt, ḥtp (dj) Jnpw, jmj-wt, prt-ḥrw (m) t(j), ḥnkt, pzn n.f...*

Line 2: *(j)m(j)-ḥt ḥm(w)-ntr (m) Mn-nfr Ppjj, jm3hw ḥ[r]...*

'A boon which the king gives, a boon which Anubis (gives), Who is in the embalming place, invocation-offerings consisting of bread *t(j)*, beer and bread *pzn*,⁶ to him...

Assistant of the mortuary priests in the (funerary complex) "Eternal is the Beauty of Pepy I," well-provided before...'

▲▲ Fig. 6.3.16 Excav. No. 103/GG/1995

▲ Fig. 6.3.17 Excav. No. 103/GG/1995

⁶ Barta, *Opferformel*, 16, 'Bitte 2'; Lapp, *Opferformel*, 91, §155 ff.

The title occurs only in connection with the person of Senedjemib as shown clearly by Excav. No. 44/GG/1995. It is thus possible that originally the lintel was placed above the entrance to the tomb of Senedjemib.

6.3.2.2 The false door fragments (figs. 6.3.18–19)

Some eleven fragments originating from the false door of Senedjemib were brought to light during the 1995 season. These are as follows: Excav. Nos. 7/GG/1995, 13/GG/1995 + 9/HH/1995, 15, 17, 20a and b, 116, 117, 125, 134a and b/GG/1995 and 15/HH/1995. Most of them were found in the fill of Open Court 1. The size of individual fragments is indicative of the fact that the false door was very thoroughly smashed into pieces.

Excav. No. 7/GG/1995

A fragment of limestone false door of 0.26 × 0.16 m. It shows part of a cornice with a list of the sacred oils on the left executed in incised relief: *st(j) ḥb* 'oil of the feast'.

Excav. No. 13/GG/1995 + 9/HH/1995

A fragment of a limestone false door (6 × 10 cm) painted a pinkish red, with signs in sunk relief. Found in the debris in Open Court 1m, north of entrance to Chapel 1. It joins Excav. No. 9/HH/1995 (measuring 33 × 43 × 21 cm). It consists of two columns with inscriptions divided by a vertical torus. The signs to the right of it are executed in sunk relief, those to the left are only incised.

Right column preserves some titles of its owner: *[(j)m(j)-r] wpt ḥtpw, (j)r(j) Nḥn (n) z3b, jm3ḥw...* 'Overseer of the distribution of offerings (?), keeper of Nekhen of the king, well-provided...'

The left column originally comprised names of the seven sacred oils, but only the fragment oil *twt* has survived.

Excav. No. 15/GG/1995 (figs. 6.3.18c–19)

A limestone fragment of 12 × 6 cm, found in the debris at the south wall of Open Court 2, lying in the surface layer. It shows part of the cartouche with the name of Teti. The signs are executed in sunk relief.

Excav. No. 17/GG/1995

A fragment of a sunk relief, limestone, 15 × 13 cm, found in the debris north of the entrance to Chapel 1. Originally the fragment was part of a false door decoration. It contains part of Senedjemib's name: *[S]ndm-jb* '[Se]nedjemib'.

Excav. No. 20a/GG/1995

A limestone false door fragment (14.5 × 11.6 cm) painted pinkish red, with sunk relief. It joins Excav. No. 20b/GG/1995 (13.5 × 9.0). Found in the debris north of the entrance to Chapel 1. Remains of a column with inscription:

...ḥtm(w) [bjtj], [s]mr w^rt(j)...

'... sealer of the [King of Lower Egypt], sole companion...'

On both sides of inscription is incised double vertical line forming a band.

Excav. No. 116/GG/1995

A limestone false door fragment painted pink. It measures 13.5 × 11.5 × 4.0 cm. Found in the surface layer to the east of Open Court 1. It preserves only part of one column of sunk hieroglyphic inscription with the title of [(j)m(j)]-*ht* [hm(w)]-*ntr*... '[assis]tant of the [hm(w)]- *ntr* priests...'.
 '

Excav. No. 117/GG/1995

A limestone false door fragment painted pink. It measures 10.0 × 10.5 cm. Found in the surface layer to the east of Open Court 1. It preserves only part of one column of sunk hieroglyphic inscription with the cartouche of *Nfr*[-*k3*]-*r* 'Nefer[ka]ra.'
 '

Excav. No. 125/GG/1995

A limestone false door fragment painted pink. It measures 12.5 × 15.0 cm. Found in the entrance to the Corridor Chapel, on the floor of Open Court 1. It preserves only part of a column of sunk hieroglyphic inscription: *hr(j)-tp* *N[hb]*, *Sndm-[jb]* 'chief Nekhbite, Senedjem[ib].'
 '

Excav. No. 134a/GG/1995

A limestone false door fragment painted pink red with signs in sunk relief and measuring 24 × 15 cm. Found in the debris north of entrance to Chapel 1. Remains of a line with inscription: [(j)m(j)]-*ht* [hmw-*ntr* (m) *Nfr*-*swt*] *Wnjs* 'assistant of [hmw-*ntr* priests in the pyramid complex "Beautiful are the places] of Unas" ...'.
 '

Excav. No. 134b/GG/1995

A limestone false door fragment measuring 14 × 8 cm painted pink red, signs in sunk relief. Found in the debris north of entrance to Chapel 1. Remains of a line with inscription: ...*nb t3-dsr*... '...Lord of the necropolis...'.
 '

Excav. No. 15/HH/95

Limestone fragment of a false door found *in situ* in the northwest corner of Chapel 2 (of Senedjemib?). The fragment measures 68 × 44 × 23 cm. It shows a partly preserved figure of a tomb owner holding a sceptre in his right hand. Above his head, a sign 'j' (Gardiner, M 17) has been preserved. To the right follows a vertical cornice and after it a column with the names of seven sacred oils. The names were only incised and one of them is still preserved: *h3tt nt* ... 'hatet oil...'.
 '

The extreme right end of the false door makes a right angle and continues towards the east. Still visible are remnants of an offering bearer bringing fowl and a bag.

The fragments enumerated above are all typified by their small size, indicating that the original monument was deliberately smashed into pieces. Despite the fact that in most cases only several individual signs have been preserved, one can attempt to collect the titles of its original holder. These were as follows:

- *Htm(w)* [bjtj], [s]mr w^ct(j)..., *hr(j)-tp* *N[hb]*,
- [(j)m(j)]-*ht* [hm(w)]-*ntr*(m) *Nfr*-*jswt*] *Wnjs*,

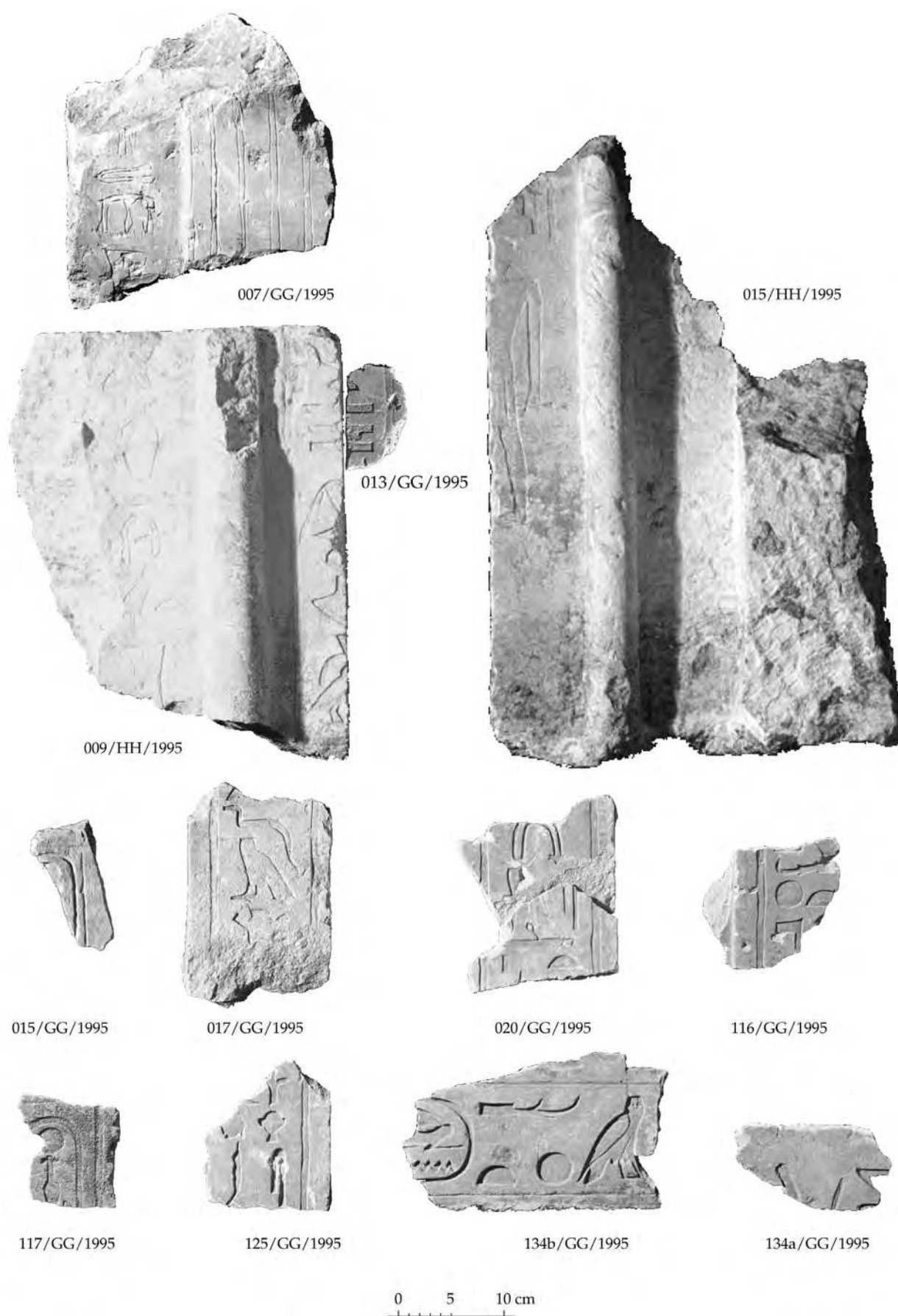


Fig. 6.3.18 Excav. No. 7etc./GG/1995, false door fragments of Senedjemib

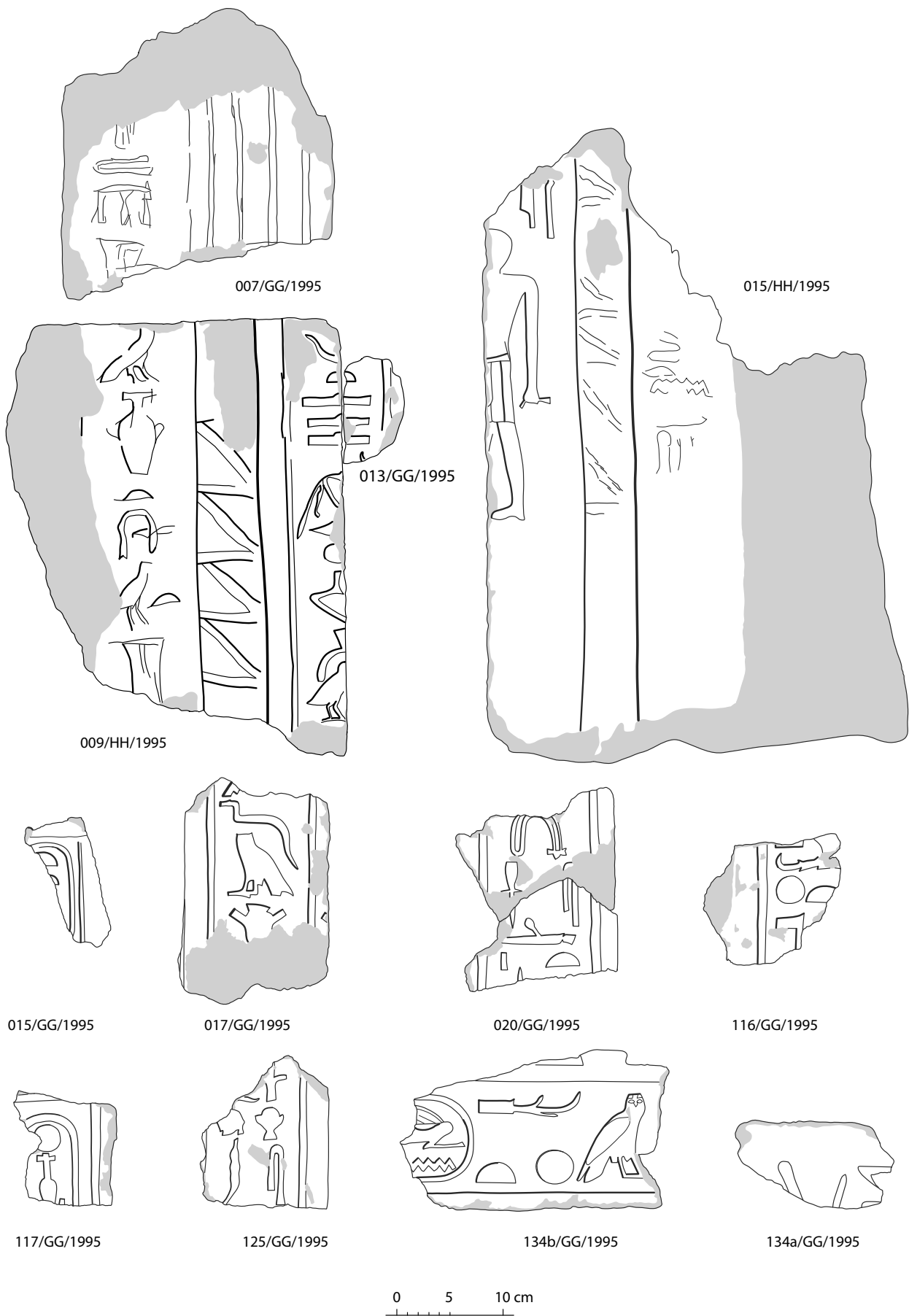


Fig. 6.3.19 Excav. No. 7etc./GG/1995, false door fragments of Senedjemib

- one fragment of an offering formula reading as ...[m] nb t3-dsr; krs.t.[f] m...2. ...hs m hb-nb, Dd-[swt] Ttj-...

In one case, even its holders's name was preserved, that of Senedjemib. From what has been left we know that the inscriptions were executed in sunk relief and that the limestone false door was painted pinkish red to imitate red granite (black dots were not noticed on the available fragments).

6.3.2.3 Reliefs from the chapel

Excav. No. 45a/GG/1995 (fig. 6.3.20, pl. 24.2)

A low relief limestone fragment of 31 × 13.5 cm, found in Open Court 1, Layer 2, 5 cm above the floor level. The fragment joins Excav. Nos. 45b, 56, 59a and b, 70, 82 and 86/GG/1995, all of them found in Open Court 1, Layer 2:

Excav. No. 45b/GG/1995

A low relief limestone fragment of 25 × 24.5 cm, 80 cm above the floor level. Original paint preserved.

Excav. No. 56/GG/1995

A low relief limestone fragment of 28 × 17.5 cm, 60 cm above the floor level. Original paint preserved.

Fig. 6.3.20 Excav. No. 45a etc./GG/1995



Excav. No. 59a/GG/1995

A low relief limestone fragment of 30.5 × 30 cm, 60 cm above the floor level. Original paint preserved.

Excav. No. 59b/GG/1995

A low relief limestone fragment of 30 × 15.5 cm, 60 cm above the floor level. Original paint preserved.

Excav. No. 70/GG/1995

A low relief limestone fragment of 21 × 20.5 cm, 60 cm above the floor level. Original paint preserved.

Excav. No. 82/GG/1995

A low relief limestone fragment of 22 × 18 cm, found 15 cm above the floor level.

Excav. No. 86/GG/1995

A low relief limestone fragment of 28 × 17 cm, found in the northeastern corner of Open Court 1, about 20 cm above the floor level. Original paint is preserved.

Different locations of individual fragments within Layer 2 show, that they were moved around for some time. The reconstructed scene consists of eight fragments and it shows a procession of offering bearers. Two of these registers are partially preserved. The upper one shows six incomplete offering bearers striding to the left. The figures of four of them are well preserved except for their heads. Remains of another two men are discernible on both ends of the register. The men are dressed in short kilts reaching above their knees, with a clearly visible knot at the waist. The accompanying captions give their names and titles and read from the left to the right.

Man 1: an offering bearer - incompletely preserved, carries a jug with a rounded base suspended on a rope.

Man 2: an offering bearer carrying a lotus flower; the caption names him as *Sndm-jb*, Senedjemib.

Man 3: an offering bearer carrying a tray with figs and a bird. The caption refers to him as *(j)m(j)-[r pr] [J]ntj* 'overseer [of the house], [I]nti'.

Man 4: an offering bearer carrying aloft a tray with conical bread loaves, a bag, a cucumber⁷ and bunch of onions. The label identifies him as *(j)m(j)-r pr; Jrj*, 'overseer of the house, Iri'.

Man 5: an offering bearer carrying a duck in his arm and fan with a baton.

Man 6: an offering bearer - only his forearm preserved, carrying a basket and a bunch of onions.

The second register shows four incompletely preserved offering bearers engaged in a procession. Only the upper parts of their bodies, and of the first and last one only some contours have been preserved. Each wears a sash over his chest.

Man 1: an offering bearer - only the crown of his head has been preserved.

⁷ *Cucumis Melo* L., cf. Manniche, *Ancient Egyptian Herbal*, 101–102.

Man 2: an offering bearer referred to as *sn.f, šps nswt, (j)m(j)-r pr-šn^c [(n) k3]-nswt, K-n-[...]nn*, 'his brother, noble of the king, overseer of the storehouse of the royal [ka], Kane...nen'.

Man 3: an offering bearer labelled as *sn.f, šps nswt, (j)m(j)-r pr-šn^c (n) k3-nswt, Ssj*, 'his brother, noble of the king, overseer of the storehouse of the royal ka, Sesi'.

Man 4: an offering bearer, only his right shoulder has survived. His titles identify him as *(j)m(j)-r sšr, šd hm(w)-k3, Intj*, 'overseer of cloth distribution, inspector of the *hm(w)-k3* priests, Inti'.

Original paint preserved. The red was used for skin, white for the kilts, dark grey-blue for the background. The colours of the individual hieroglyphic signs are not distinguishable any more.

The association with the chapel of Senedjemib results from the comparison with the north wall decoration reconstructed for the chapel of Qar Junior (see Excav. No. 25etc./GG/1995). Above all, Senedjemib's offering bearers tend to be at least 20% higher than those of Qar Junior, and the 'spacing' between the individual figures represented is different. Some valuable differences may also be found in the way in which the birds are held by the offering bearers. The way their feathered wings are rendered is also different in each chapel, both in terms of the shapes and internal details.

It is most likely that the two following blocks also originate from the previous scene:

Excav. No. 94/GG/1995 (figs. 6.3.20–21)

A low relief fragment of limestone measuring 8.3 × 19.5 cm, discovered in the northeastern part of Open Court 1, lying at floor level. It joins Excav. No. 96/GG/1995.

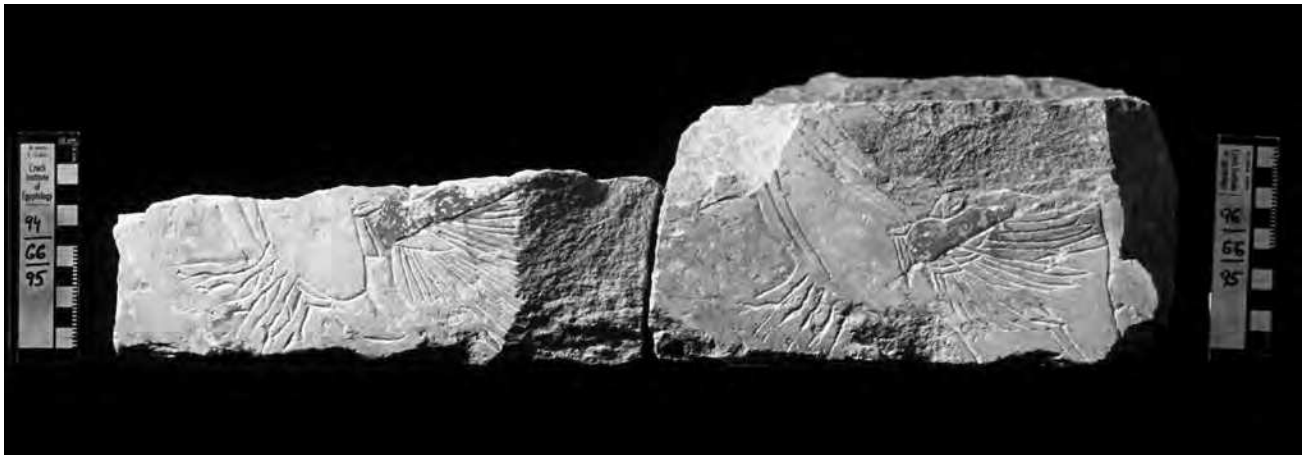


Fig. 6.3.21 Excav. No. 94 and 96/HH/1995

Excav. No. 96/GG/1995

A low relief fragment of 12.4 × 24.2 cm, discovered in Open Court 1, Layer 2, 5 cm above the floor level, located in the northeastern part of the area.

The scene shows two male offering bearers striding to the left and presenting birds held up by the neck and wing. The man on the right wears a tight-fitting kilt. Traces of the original red paint on male bodies and white on the kilt of the second man are preserved.

6.3.4 Decorated blocks not attributable to individual chapels

Excav. No. 12/GG/1995 (figs. 6.3.22–23)

A fragment of limestone (12.5×11.5 cm) with a section of an offering list, signs executed in sunk relief, with individual signs still containing traces of the original green paint. Found in Layer 1 in the northeast corner of Open Court 1. It joins Excav. Nos. 39a–c/GG/1995.



Fig. 6.3.22 Excav. No. 12etc./GG/1995

Excav. No. 39a/GG/1995

Fragment of limestone (38.5×10.0 cm) with remains of an offering list, signs executed in sunk relief, remains of green paint in individual signs. Found in Open Court 1, Layer 2 to the north of the entrance to Chapel 1, about 0.90 m above the floor.

Excav. No. 39b/GG/1995

Six small fragments of limestone (together 19.5×13.5 cm) with remains of an offering list, signs executed in sunk relief, remains of green paint in individual signs. Found in Open Court 1, Layer 2 to the north of the entrance to Chapel 1, about 0.90 m above the floor.

Excav. No. 39c/GG/1995

A fragment of limestone (20.7×14.0 cm) with remains of an offering list, signs executed in sunk relief, remains of green paint in individual signs. Found in Open Court 1, Layer 2 to the north of the entrance to Chapel 1, about 0.90 m above the floor.

The restored fragment contains two registers with a list of offerings reading from the left to the right:

- x+1: *ḥ3tt nt Ṭḥnw* – '[the best] Libyan ointment, 1 jar',
- x+2: *wṛḥ* – 'wṛḥ-ointment',
- x+3: *w3ḏw* 'green paint, 3 balls',
- x+4: *msdmt* 'black paint, 3 balls',
- x+5: *[w]nḥw* 'cloth...'
- x+6:



Fig. 6.3.23 Excav. No. 12etc./GG/1995 ¼

y+1: ...w, 4 – '...w, 4 bags',
y+2: ...4 – '... , 4 balls',
y+3: ...4 – '... , 4',
y+4: *jd(3)t h3k 4* – 'id(a)t-bread. (Place it) behind you! 4',
y+5: *p3(w)t 4* – 'pa(we)t-bread, 4',
y+6: *t-3š(r)*... – 'toasted bread...',
y+7–y+12 are almost completely destroyed.

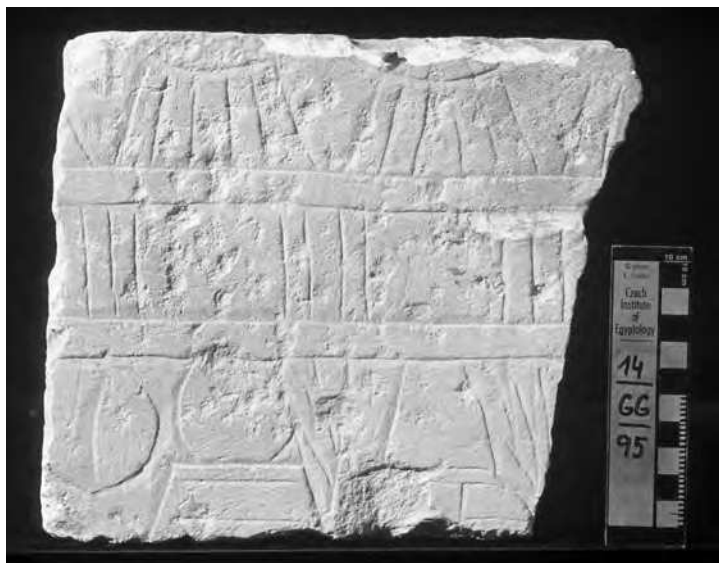


Fig. 6.3.24 Excav. No. 14/GG/1995

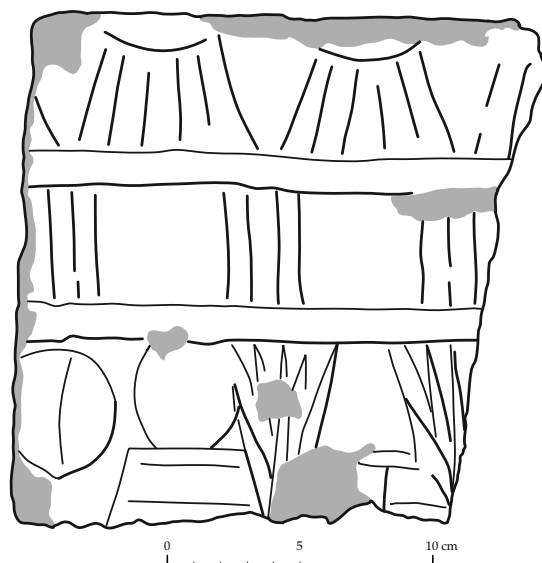
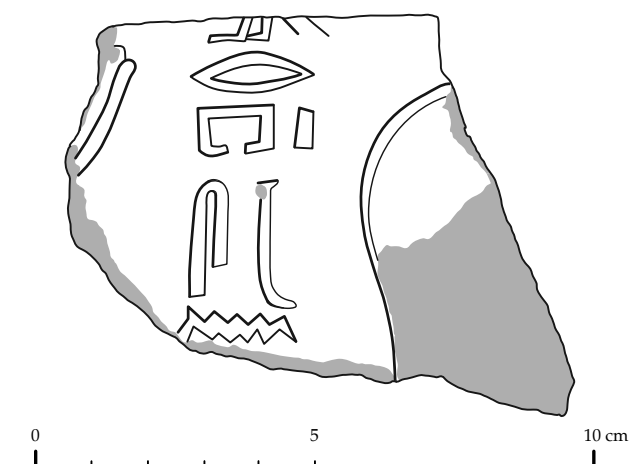


Fig. 6.3.25 Excav. No. 14/GG/1995

Excav. No. 14/GG/1995 (figs. 6.3.24–25)

A limestone fragment of a relief with incised decoration, measuring 22 × 19 cm. Found in the debris in Open Court 1, north of entrance to Chapel 1. It depicts a partially preserved row of three *khekers* forming part of the top wall's *kheker*-frieze. Below it, divided by a horizontal band with a ladder pattern, are three jar tops (?).



◀ Fig. 6.3.26 Excav. No. 19/GG/1995

▲ Fig. 6.3.27 Excav. No. 19/GG/1995

Excav. No. 19/GG/1995 (figs. 6.3.26–27)

A limestone fragment of 9.2×6.3 cm found in the debris in the northeastern part of Open Court 1. It has incised relief with partially preserved polychromy (blue background and dark red paint for the body). It shows the right shoulder of an offering bearer proceeding to the right. To the left, two fingers of another offering bearer are visible. The inscription before him reads:

(j)m(j)-r pr, Snd[m-jb].

'Overseer of the house, Senedj[emib]'.

Excav. No. 24/GG/1995 (figs. 6.3.28–29)

A painted limestone block measuring 46×9 cm. Discovered 1.20 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2. Decoration executed in a low relief, it preserves the remains of a striding offering bearer's leg and a sign *w* (Gardiner, G 43) preserved. The greater part of the originally decorated surface was chipped off. Traces of red (on a man's leg), yellow (quail) and grey-blue paint (background) are preserved.

Excav. Nos. 26 and 30/GG/1995 (figs. 6.3.30–31)

Two limestone fragments of low relief decoration measuring, when joined, 24×26 cm and found 1.20 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2. It shows incomplete remains of two registers. The upper one features piles of assorted offerings consisting of a basket placed on a low stand and with bunches of onions below it (right) and another stand (?) and meat offerings on the left. The lower register was extensively chipped off but still remains of its original arrangement are discernible. It preserves the top part of what was originally a procession of offering bearers. Of the first one only the crown of his head has been preserved. The captions specifies him as *hr(j)-hb smsw*, 'senior lector priest'. He was originally followed by another *hr(j)-hb*, 'lector priest', his figure, however, is completely missing.

Excav. No. 27/GG/1995 (figs. 6.3.32–33)

A limestone fragment with incised relief measuring 19×23 cm, found 1.10 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2. It shows faint traces of two registers. The upper one is almost unreadable, perhaps



Fig. 6.3.28 Excav. No. 24/GG/1995

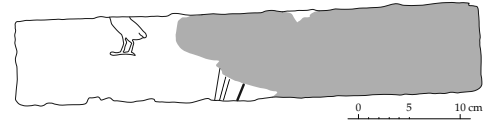


Fig. 6.3.29 Excav. No. 24/GG/1995



Fig. 6.3.30 Excav. Nos. 26 and 30/GG/1995

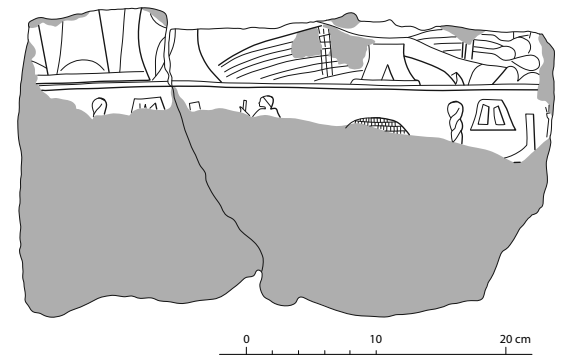
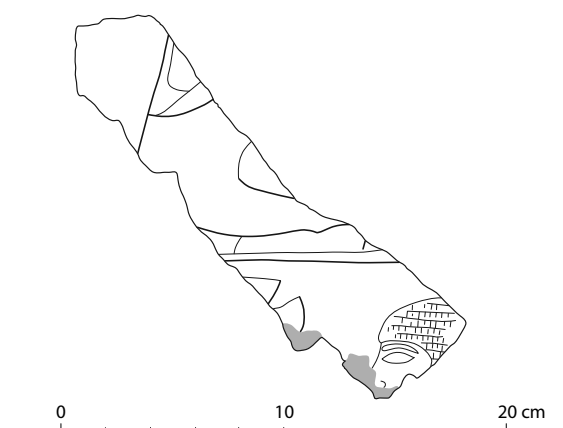


Fig. 6.3.31 Excav. Nos. 26 and 30/GG/1995



◀ Fig. 6.3.32 Excav. No. 27/GG/1995

▲ Fig. 6.3.33 Excav. No. 27/GG/1995

containing the remains of an offering priest, kneeling (?). Lower register still preserves a fragment of an offering bearer's face proceeding to the left and bringing a flower. Faint traces of red, black, blue and green paint.

Excav. No. 29/GG/1995 (figs. 6.3.34–35)

Two fragments of a low relief measuring 17.5 × 24.2 cm (carved section) and 25.0 × 27.0 cm (the whole block), found 1.15 m above the floor level of Open Court 1, in Layer 2 at the entrance to Chapel 1. It joins Excav. Nos. 91–93/GG/1995.

Excav. No. 91/GG/1995

A low relief fragment of limestone measuring 20 × 17 cm, discovered in Open Court 1, Layer 2, 5 cm above the floor level, located in the northeastern part of the area.

Excav. No. 92/GG/1995

A low relief fragment of limestone measuring 18 × 15 cm, discovered in Open Court 1, Layer 2, 5 cm above the floor level, located in the northeastern part of the area.

Excav. No. 93/GG/1995

A low relief fragment of limestone measuring 26.0 × 15.4 cm, discovered in Open Court 1, Layer 2, 5 cm above the floor level, located in the northeastern part of the area.

The reconstructed scene consists of three registers, of which only the middle one is preserved to its complete height. The uppermost register shows two kneeling priests watching to the left, each with a sash across his chest. Their right arms are bent and folded on the chest, left arms bent and raised. The title of the second one from the left is preserved: *hr(j)-hb*. They have tight wigs reaching to their shoulders and small ritual beards. They wear kilts which reach above their knees. The third priest, preserved on the extreme right of the scene, turns back and sweeps the floor of the chapel.

The middle register shows a procession of three male offering bearers proceeding to the left. Of the left man one only his feet and part of his back were preserved. He is kneeling, apparently cleaning either the floor or the altar in front of him. The second priest is most likely pouring a liquid over the first man. The caption above him gives his title as *[z]š pr-md3t*. His name has been largely obscured: ...*h*...*jj*. The third priest holds in his outstretched arms a double-bell censer and is lifting its lid to let out the smoke. His title reads: *(j)m(j)-r hm(w)-k3*. The name written in front of him identifies him as *Jj-mrjj*, Iymery. The final person to the right is a *hr(j)-hb* priest reading from a papyrus roll. His name reads *H3j*, Khai. Further to his right there are assorted offerings. The second and third priests are dressed in short kilts and wear tight wigs with horizontal rows of curls. The fourth priest wears a kilt with a frontal flaring panel.

The lowermost register features remains of assorted offerings on the left. On the right a procession of offering bearers can be reconstructed. The head of the first offering bearer is preserved. He carries a basket laden with offerings. The following man's



Fig. 6.3.34 Excav. No. 29etc./GG/1995

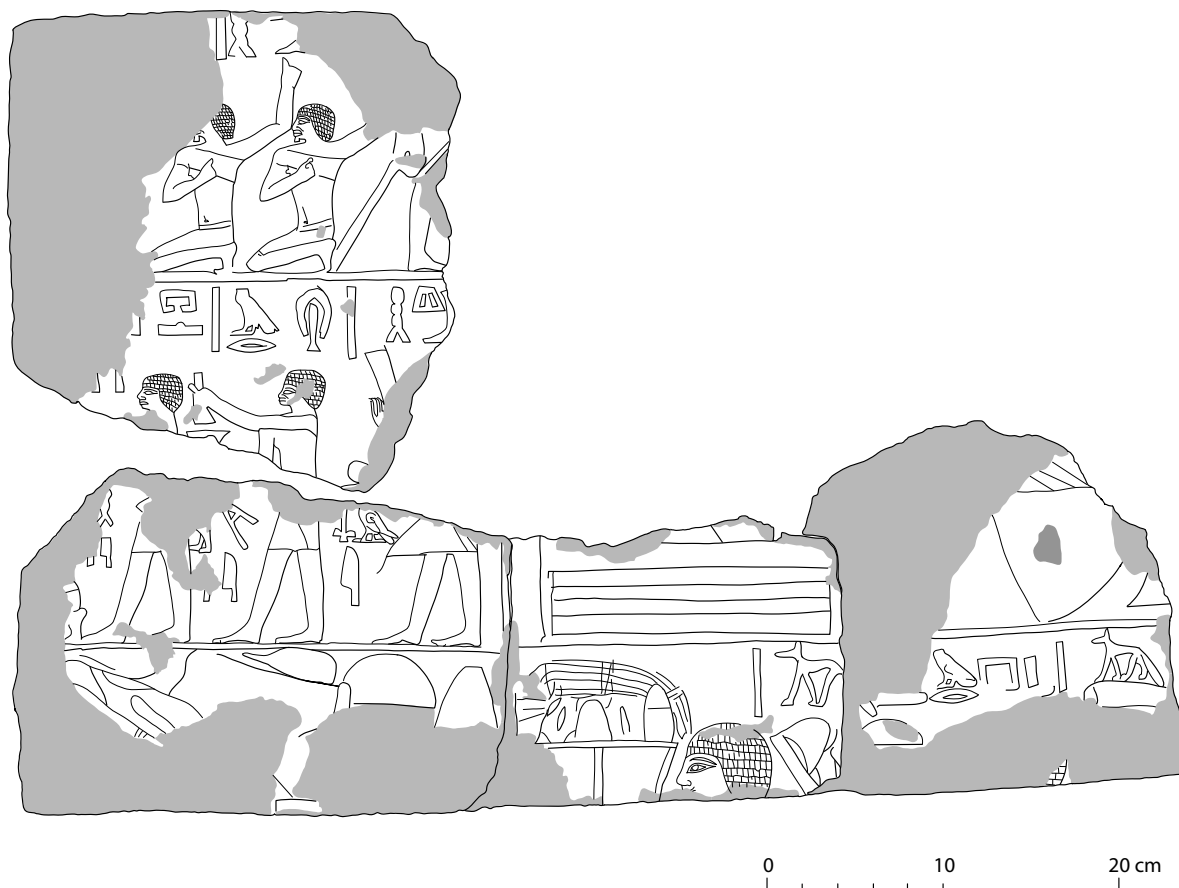


Fig. 6.3.35 Excav. No. 29etc./GG/1995

head is missing but his titles [*hr(j) wdb*] (*n*) *z3b*, (*j*)*m(j)-r pr* '[master of largesse] of the king, overseer of the house' are given. The last man is again not preserved (except for an offering he carries) and only first part of his title is given: [*hr(j) wdb*] (*n*) *z3b* '[master of the largesse] of the king'. The reconstruction of this title is in both instances based on the presence of the sign (Gardiner, N 22) and the fact that such a title would make a perfect sense within the context of the scene.

Excav. No. 31/GG/1995 (figs. 6.3.36–37)

A limestone fragment of an incised relief measuring 15–19 × 22–36 cm, found 1.15 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2. It joins Excav. Nos. 40 (23.0 × 20.4 cm) and 43/GG/1995 (25.0 × 27.3 cm). The reconstructed part of the scene shows piles of offerings arranged in two horizontal registers.

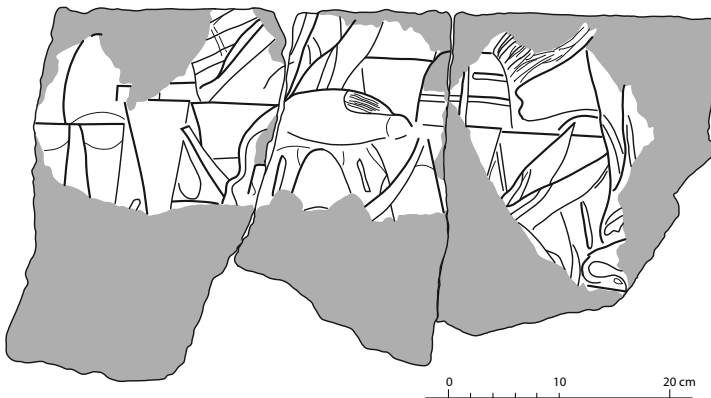


Fig. 6.3.37 Excav. No. 31/GG/1995

Excav. No. 34/GG/1995 (figs. 6.3.38–39)

A limestone fragment with low relief inscription of 7 × 7 cm, discovered 0.90 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2. It shows the title of *hr(j)-hb* reading from left to right.

Excav. No. 35/GG/1995 (figs. 6.3.40–41)

A limestone fragment with low relief decoration of 22.0 × 8.5 cm (the scene) and 49 × 21.5 cm (the entire block), discovered 0.85 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2. It shows the legs of a striding male offering bearer proceeding to the left. Traces of red paint (flesh) are preserved as well as of grey-blue colour for the background. A large section of the block to the right was chipped off.

Excav. No. 38/GG/1995 (figs. 6.3.42–43)

A limestone fragment with incised and painted relief of 14.5 × 4.5 cm, found 1.20 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2. Remains of a composition featuring piled offerings.

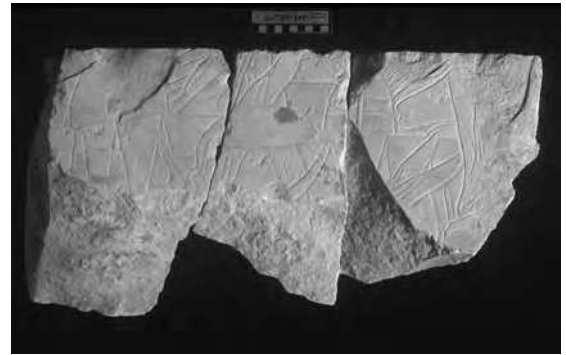


Fig. 6.3.36 Excav. No. 31/GG/1995



Fig. 6.3.38 Excav. No. 34/GG/1995

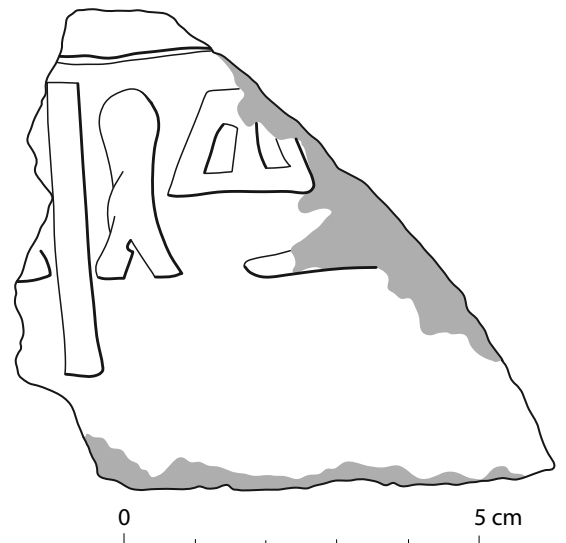


Fig. 6.3.39 Excav. No. 34/GG/1995



Fig. 6.3.40 Excav. No. 35/GG/1995

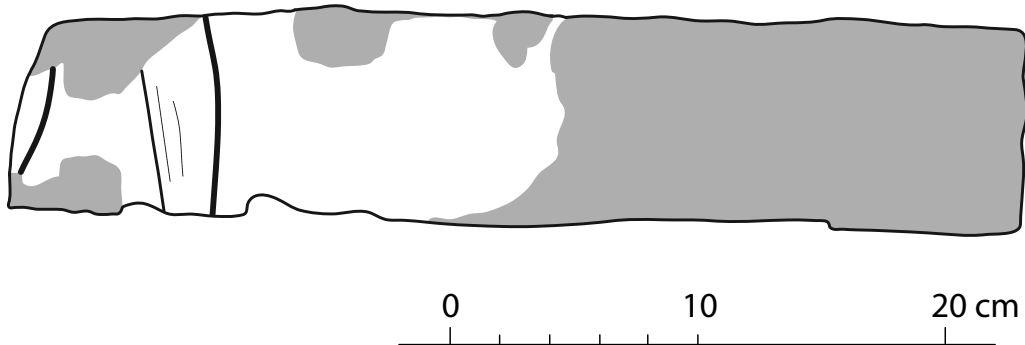


Fig. 6.3.41 Excav. No. 35/GG/1995



Fig. 6.3.42 Excav. No. 38/GG/1995

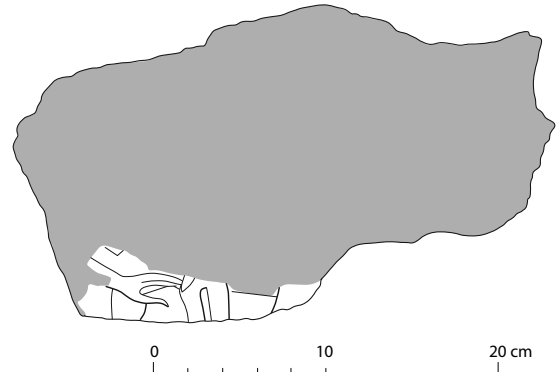


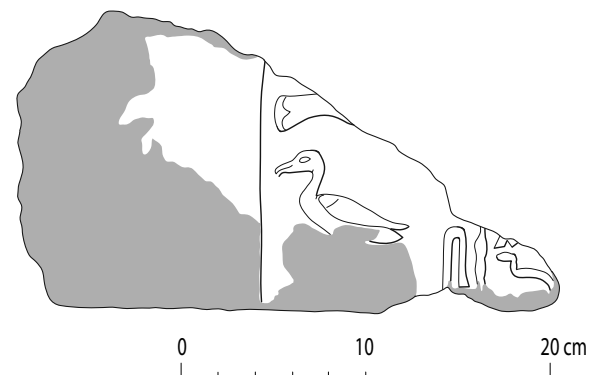
Fig. 6.3.43 Excav. No. 38/GG/1995

Excav. No. 42/GG/1995 (figs. 6.3.44–45)

A low relief fragment of limestone measuring 23 × 13.5 cm, found in Open Court 1, 60–70 cm above the floor level. It shows front part of an ox's foreleg, the offering bearer is missing. Remains of an inscription in two columns reading from the left

◀ Fig. 6.3.44 Excav. No. 42/GG/1995

▼ Fig. 6.3.45 Excav. No. 42/GG/1995



to the right *z3[.f]... Sndm[-jb]* [his] son... Senedjem[ib]. Above his name lower part of the *h*-sign. Traces of its original paint preserved (white, red, yellow, green and brown?).

Excav. No. 51/GG/1995 (figs. 6.3.46–47)

A large limestone architectural element measuring 80.0 × 37.0 × 31.4 cm, discovered in Open Court 1, Layer 2, about 60 cm above its floor, close to the entrance to Chapel 1. Its well polished face is decorated with an inscription executed in sunk relief and reading as follows: *h3tj-^c, htm(w) bjtj, smr-w^ctj...* 'Count, sealer of the king of Lower Egypt, sole companion...'.

The title of *htm(w) bjtj* is attested both for Qar Junior (from the mud stoppers in his burial chamber, Excav. No. 86, nos. 2–6 and 12/HH/2000) and Senedjemib (false door fragment, Excav. No. 20/GG/1995) and thus the association of the item with the correct tomb owner is impossible to establish.

Excav. No. 52/GG/1995 (figs. 6.3.48–49)

A limestone fragment with low relief decoration partially visible. The fragment measures 20 × 21 cm, in its upper right corner two human legs are discernible. It was found in Open Court 1, Layer 2, about 60 cm above its floor, opposite the entrance to Chapel 1. Originally paint preserved – the surface of the block is painted in dark blue-grey, on the left a red stroke is visible.



Fig. 6.3.46 Excav. No. 51/GG/1995

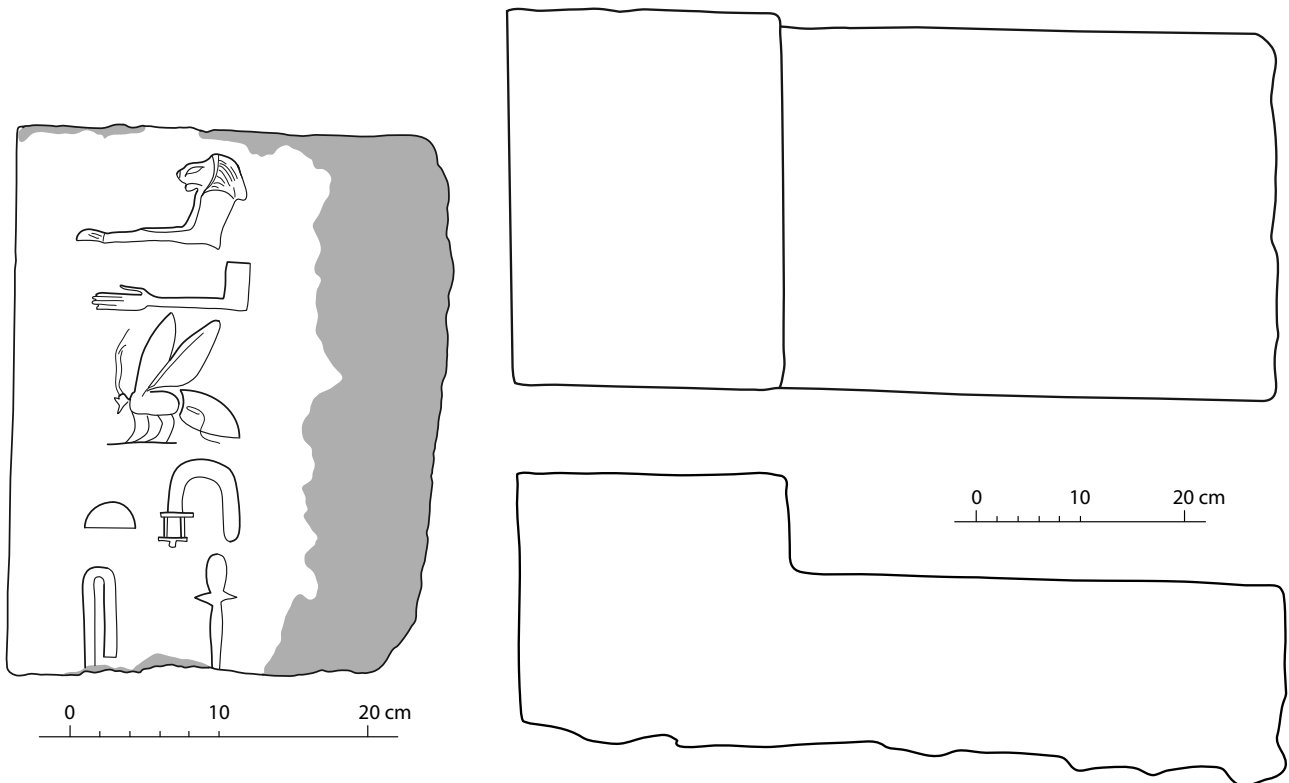


Fig. 6.3.47 Excav. No. 51/GG/1995

Excav. No. 53/GG/1995 (figs. 6.3.50–51)

A rough headrest made of limestone and measuring 13 × 15 × 6 cm. It was found in Open Court 1, Layer 2, about 60 cm above its floor, opposite the entrance to Chapel 1.



Fig. 6.3.48 Excav. No. 52/GG/1995

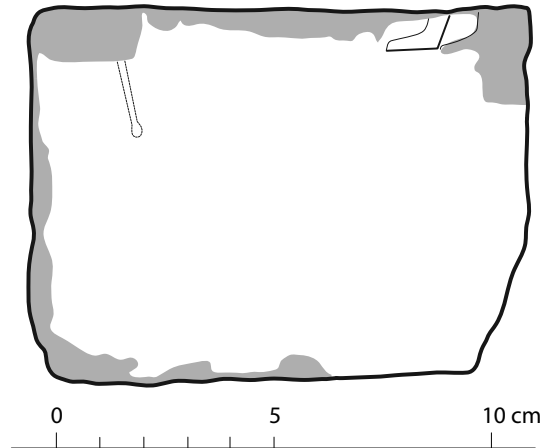


Fig. 6.3.49 Excav. No. 52/GG/1995



Fig. 6.3.50 Excav. No. 53/GG/1995

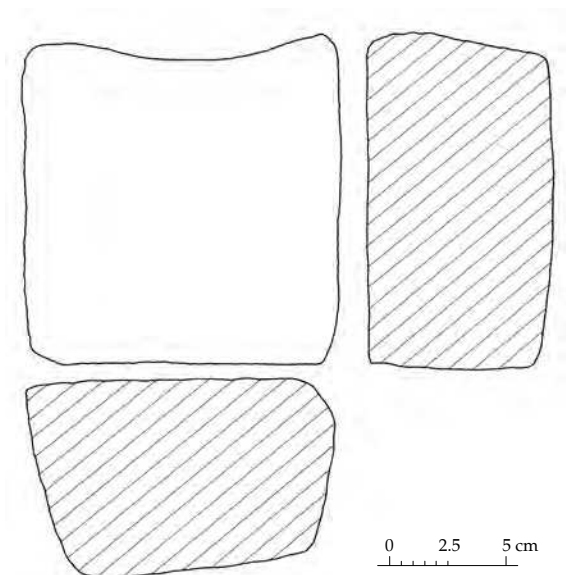


Fig. 6.3.51 Excav. No. 53/GG/1995

Excav. No. 61/GG/1995 (fig. 6.3.52–53)

A limestone fragment of a low relief inscription measuring 40×34 cm, found 1.15 m above the floor level of Open Court 1, at the entrance to Chapel 1, in Layer 2. The fragment shows two incomplete columns of inscription reading from the left.

Column x+1: ...*Ḏd swt [Tt]j*–'...(pyramid complex) "Enduring are the (cult) places of Teti"'.

Column x+2: *ḥtm(w) ḥtj, smr-w^ctj, ḥr(j)-ḥb(t)*... 'sealer of the king of Lower Egypt, sole companion, lector priest...'.

On two of its preserved sides (on the left and on the top), the block is framed by a ladder pattern. Traces of some original black paint on the signs of *s*, *t*, *hr* and *ḏd* are still discernible. The background is painted in dark blue.

Given the preserved titles, the block may be associated either with Qar Junior or Senedjemib.

Excav. No. 62/GG/1995 (figs. 6.3.54–55)

A relief fragment with decoration in low relief measuring 20.5×20.5 . The pile of offerings contains the foreleg of an ox, lettuce and conical bread loaves. Above the block was the lower part of



Fig. 6.3.52 Excav. No. 61/GG/1995

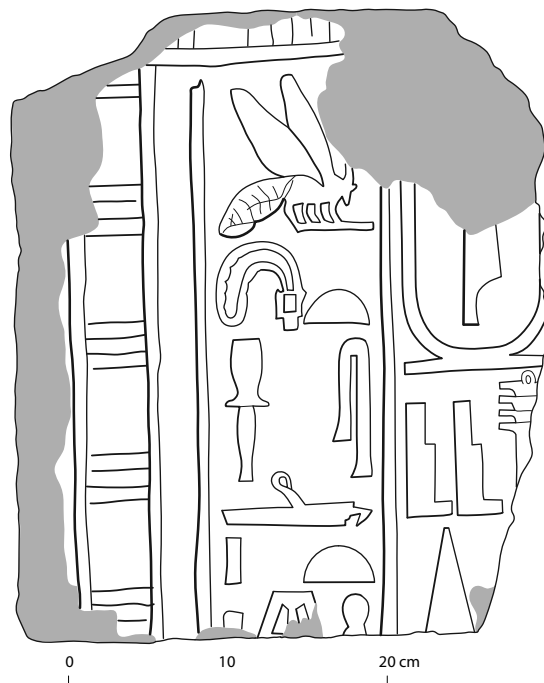


Fig. 6.3.53 Excav. No. 61/GG/1995

another register. It was found in Open Court 1, at the entrance to Chapel 1, in Layer 2, 1.15 m above the floor level.



Fig. 6.3.54 Excav. No. 62/GG/1995

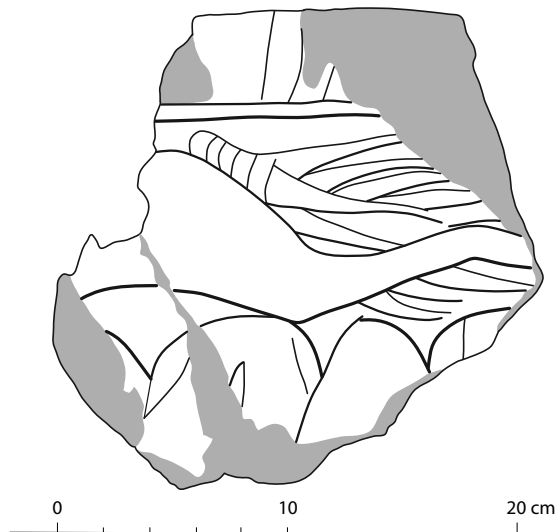


Fig. 6.3.55 Excav. No. 62/GG/1995

Excav. No. 79/GG/1995 (figs. 6.3.56–57)

A limestone fragment decorated in low relief, measuring 7.0×7.4 cm, discovered in the northeastern part of Open Court 1, Layer 2, 40 cm above the floor level. It preserves part of an offering scene with small remains of the hieroglyphic inscriptions at the top which are not indicative of the original signs. Only the central vertical line dividing the inscription into two seems to be certain.

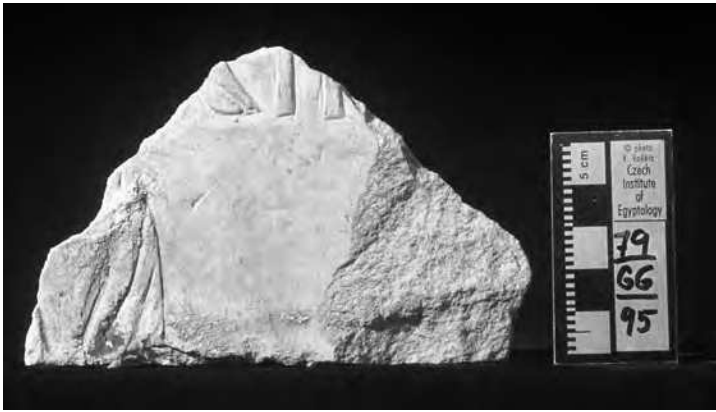


Fig. 6.3.56 Excav. No. 79/GG/1995

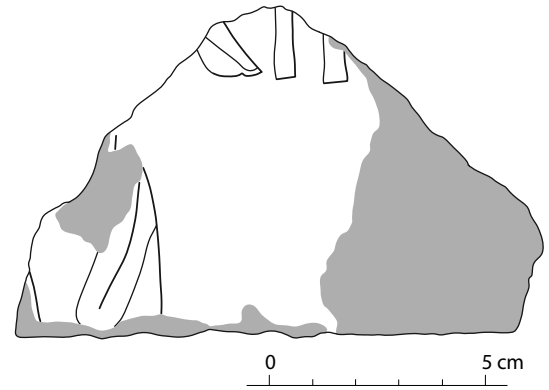


Fig. 6.3.57 Excav. No. 79/GG/1995

Excav. No. 83/GG/1995 (figs. 6.3.58–59)

A limestone fragment decorated in low relief, measuring 8.5 × 11.6 cm, discovered in Open Court 1, Layer 2, 15 cm above the floor level, located in the northeastern part of the area. It shows part of a bovine foreleg, a cone of meat and a vessel with a cover. Remains of some red paint are preserved.



Fig. 6.3.58 Excav. No. 83/GG/1995

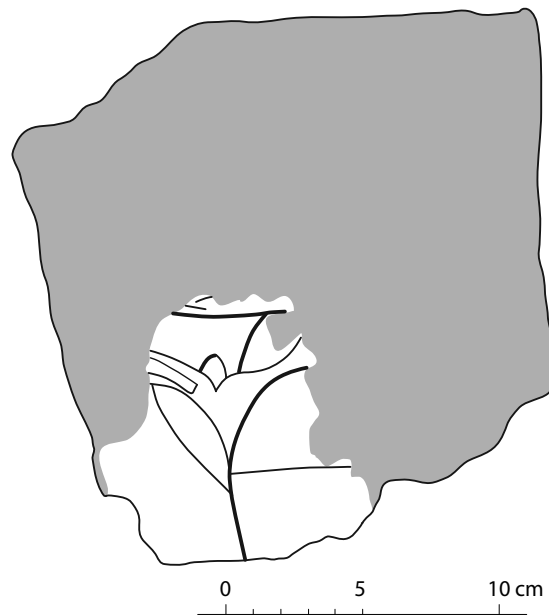


Fig. 6.3.59 Excav. No. 83/GG/1995

Excav. No. 95/GG/1995 (figs. 6.3.60–61)

A low relief fragment of a limestone fragment measuring 16 × 4.5 cm, discovered in Open Court 1, Layer 2, lying on the floor level, located in the northeastern part of the area. It shows the



Fig. 6.3.60 Excav. No. 95/GG/1995

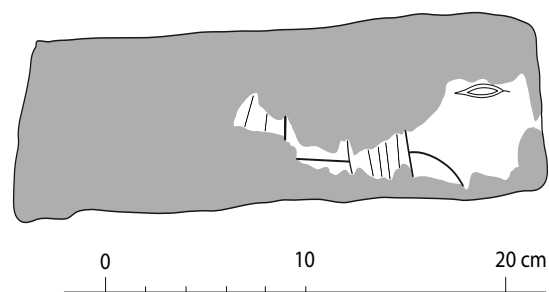


Fig. 6.3.61 Excav. No. 95/GG/1995

legs of a man, perhaps with an animal, and with remains of red paint on his body

Excav. No. 108/GG/1995 (figs. 6.3.62–63)

A limestone fragment of an incised relief measuring $9.5 \times 28.4 \times 6.4$ cm. It was found in Open Court 1, at floor level. It preserves the names of two of the seven sacred oils *ḥ3tt nt ṯḥnw 1*, *ḥ3tt nt ʿš: 3*. Above and below it are the contours of two different objects (a stand and an offering plate?). The hieroglyphic signs can be read in two different directions.



Fig. 6.3.62 Excav. No. 108/GG/1995

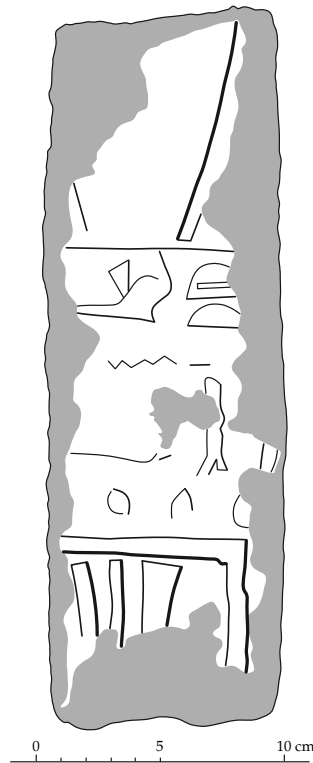


Fig. 6.3.63 Excav. No. 108/GG/1995

Excav. No. 121/GG/1995 (fig. 6.3.64–65)

A limestone relief fragment showing offering bearers and a display of offerings, 38×52 cm. The original decoration is preserved only along the edges, the interior has been deliberately cut away to a depth of 1.7 cm, resulting in the conversion of the block into a basin. Found in Corridor 1, about 25 cm above the floor level.

In the bottom register, a procession of male offering bearers is discernible. The first man has a chin, remains of *(j)m(j)[-r]* title above his head. The body of the second man follows, with part of his name preserved: *...nj*. Of the last man, only his right arm carrying a plate loaded with offerings is preserved. Above his head *...ntt...* is preserved. Above them remains of at least three registers with a display of offerings is preserved.

Excav. No. 123a/GG/1995 (fig. 6.3.66–67)

A limestone fragment of a cornice. Found in Chapel 1, on the floor level. It measures 26×16 cm. Individual compartments in the relief are painted with different colours: red, green, and yellow which are well preserved.



Fig. 6.3.64 Excav. No. 121/GG/1995

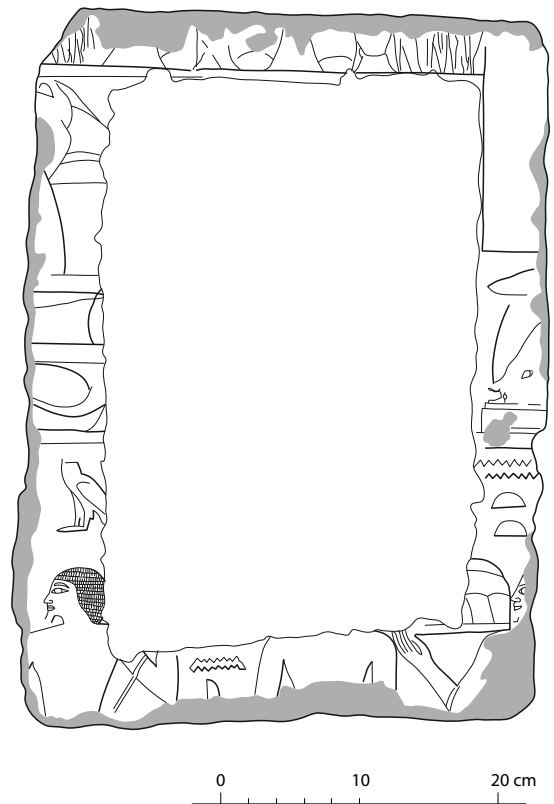


Fig. 6.3.65 Excav. No. 121/GG/1995



Fig. 6.3.66 Excav. No. 123/GG/1995

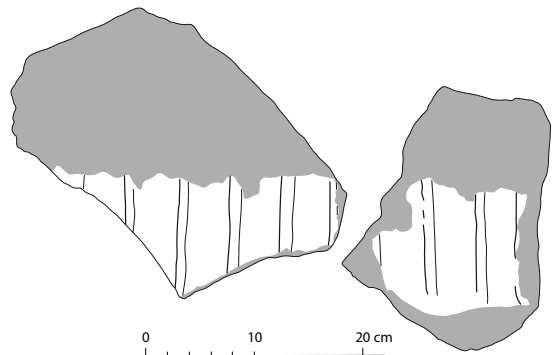


Fig. 6.3.67 Excav. No. 123/GG/1995

Excav. No. 123b/GG/1995

A limestone fragment of a cornice, the same as Excav. No. 123a/GG/1995 though not joining each other. Found in Chapel 1, at floor level. It measures 14 × 13 cm. Individual compartments painted with different colours: green, red and yellow which are well preserved.

Excav. No. 124/GG/1995 (figs. 6.3.68–69)

A limestone fragment with a display of offerings. It measures 29.5 × 29.5 cm. Altogether three registers may be discerned. The best preserved is the central one which is dominated by three sealed *hesi*-jars stored in a rack. To the right, an ox's foreleg. In the lower register possibly another rack with vessels. In the

top register, a low table and another vessel with a flat base are discernible. On the extreme left of the preserved fragment are to be seen another two horizontal registers. The lower one preserves only part of an unidentified sign. In the register above it are the remains of a male person proceeding to the right. He is dressed in a kilt with a flaring front panel and in his left hand he holds what seems to be a papyrus roll. His name is given as *Jpj*, 'Ipi'. Traces of the original red and blue paint are preserved.



Fig. 6.3.68 Excav. No. 124/GG/1995

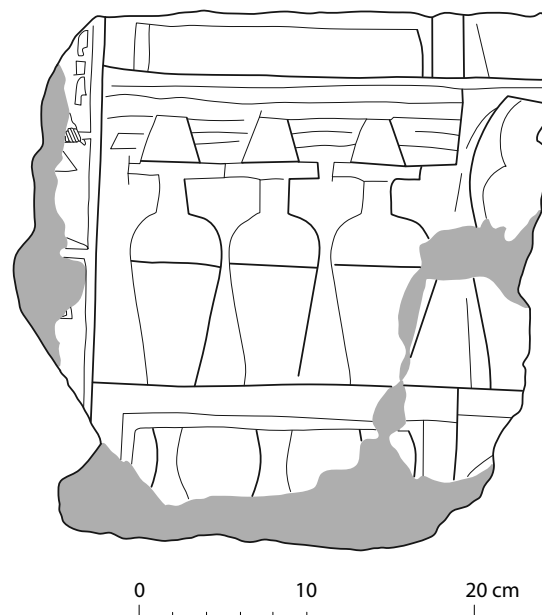


Fig. 6.3.69 Excav. No. 124/GG/1995

Excav. No. 127a/GG/1995 (figs. 6.3.70–71)

A limestone fragment of a lintel with Qar's name, measuring $48 \times 30 \times 21$ cm. It was found in Chapel 1, about 20 cm above the floor level. It joins Excav. No. 127b/GG/1995. The sunk inscription reads as follows: ...*K3r*, '...Qar'.

Excav. No. 127b/GG/1995

A limestone fragment of a lintel with Qar's name, measuring $18 \times 21 \times 4$ cm. It was found in Chapel 1, about 20 cm above the floor level.

Fig. 6.3.70 Excav. No. 127/GG/1995



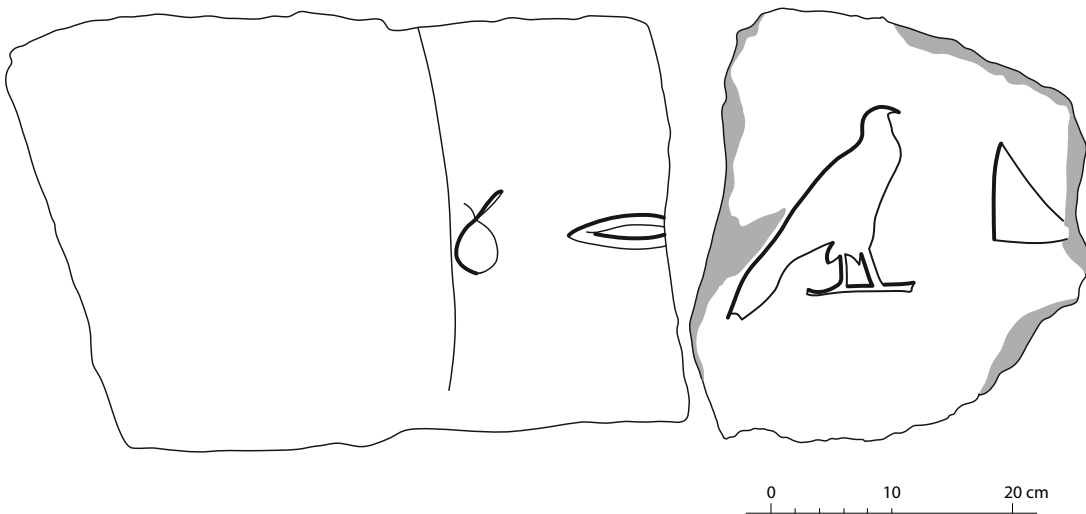


Fig. 6.3.71 Excav. No. 127/GG/1995

Excav. No. 133/GG/1995 (figs. 6.3.72–73)

A limestone fragment with low relief of 24 × 21 cm. It shows an offering bearer striding to the left. Remains of another bearer on the extreme right are preserved. The man is dressed in a short kilt with a knot and the kilt fold clearly visible. His name is given as Ihy. Traces of the red paint on his body and white on the kilt are preserved.



Fig. 6.3.72 Excav. No. 133/GG/1995

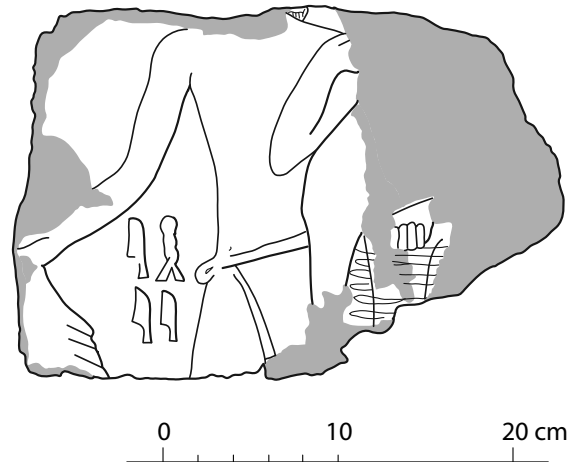
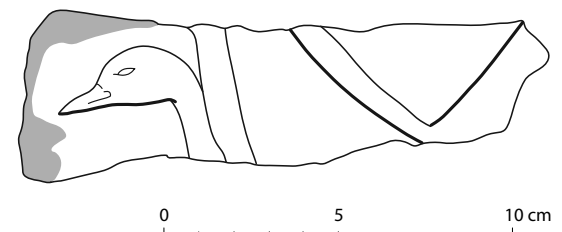
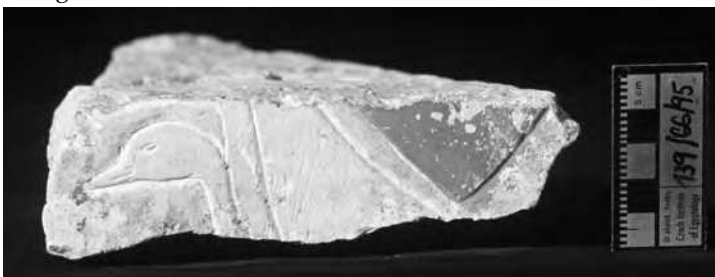


Fig. 6.3.73 Excav. No. 133/GG/1995

Excav. No. 139/GG/1995 (figs. 6.3.74–75)

Fragment of a limestone block (15 × 4 cm) with low relief decoration; it shows the bent elbow of a male offering bearer holding a goose. Found in the fill of the descending corridor opening into the burial chamber of Qar, in its lower part. Traces of the red paint on the male's body and dark blue for the background are still visible.



◄ Fig. 6.3.74 Excav. No. 139/GG/1995

▲ Fig. 6.3.75 Excav. No. 139/GG/1995

Excav. No. 147/GG/1995 (figs. 6.3.76–77)

A very eroded limestone fragment of $36.5 \times 25.5 \times 9.0$ cm showing a procession of two female offering bearers rendered in low relief; of the third woman one only a bent right arm supporting a basket is preserved. The surface of the block is heavily eroded; found in Open Court 1, lying on the floor. Three women are carrying baskets laden with assorted offerings on their heads, the first and third women also carry onions hanging over their right arms. They are clad in close-fitting robes with shoulder straps and proceeding to the left. The first two women are wearing tripartite wigs and around their necks are *wesekh* collars. The lower parts of their bodies are missing. Above them a clear marking for a new register can be discerned.



Fig. 6.3.76 Excav. No. 147/GG/1995

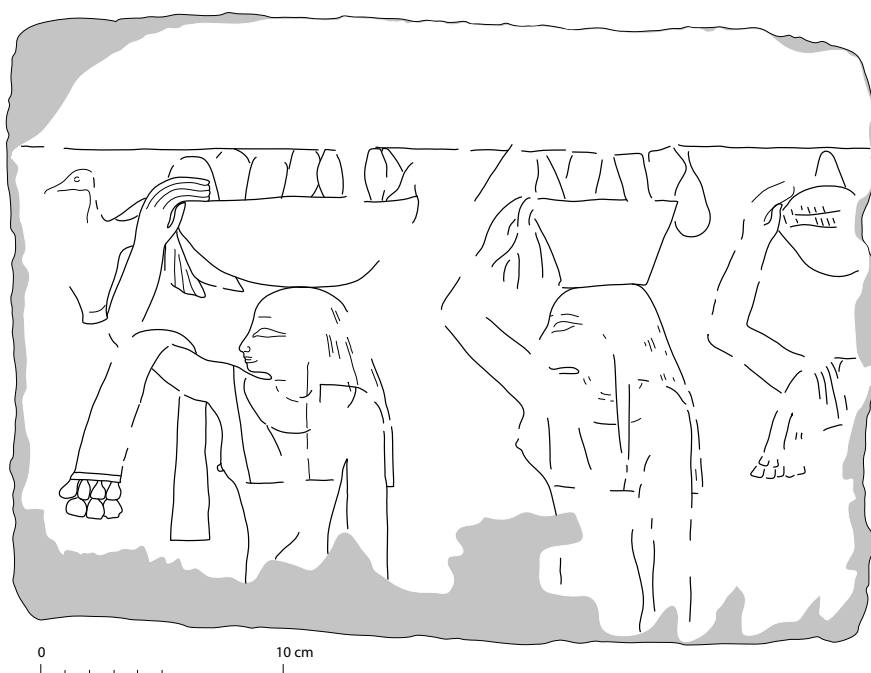


Fig. 6.3.77 Excav. No. 147/GG/1995

Excav. No. 157/GG/1995 (figs. 6.3.78–79)

A low relief fragment of limestone of 12 × 10 cm, depicting part of a male offering bearer carrying a bird and proceeding to the right. Found in the rubble to the east of Chapel 2. In front of him, part of his title *ḥm-k3*, 'ḥm-k3 priest' and the sign for a *hesi-jar* (Gardiner, W14) or a beer-jug (Gardiner, W22) are visible.

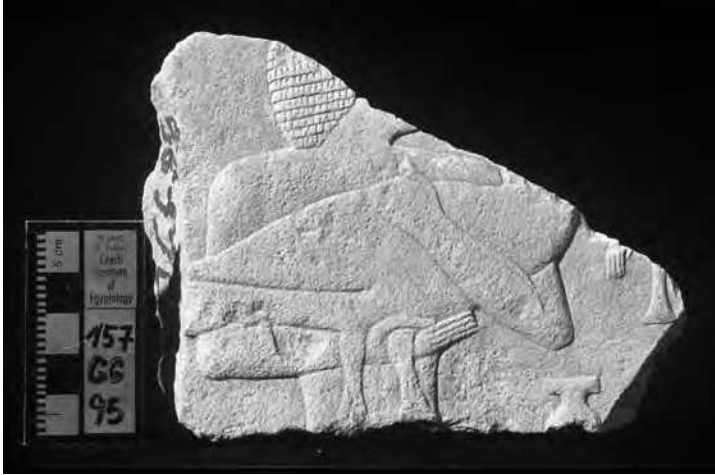


Fig. 6.3.78 Excav. No. 157/GG/1995

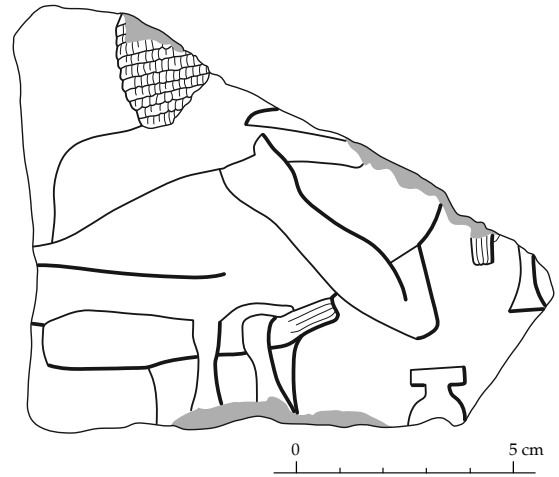


Fig. 6.3.79 Excav. No. 157/GG/1995

Excav. No. 1/HH/1995 (figs. 6.3.80–81)

A limestone block with incised relief decoration of 70.0 × 31.5 × 18.2 cm. It joins Excav. No. 3/HH/1995. Both blocks were found in Open Court 2, in the upper part of Layer 2.

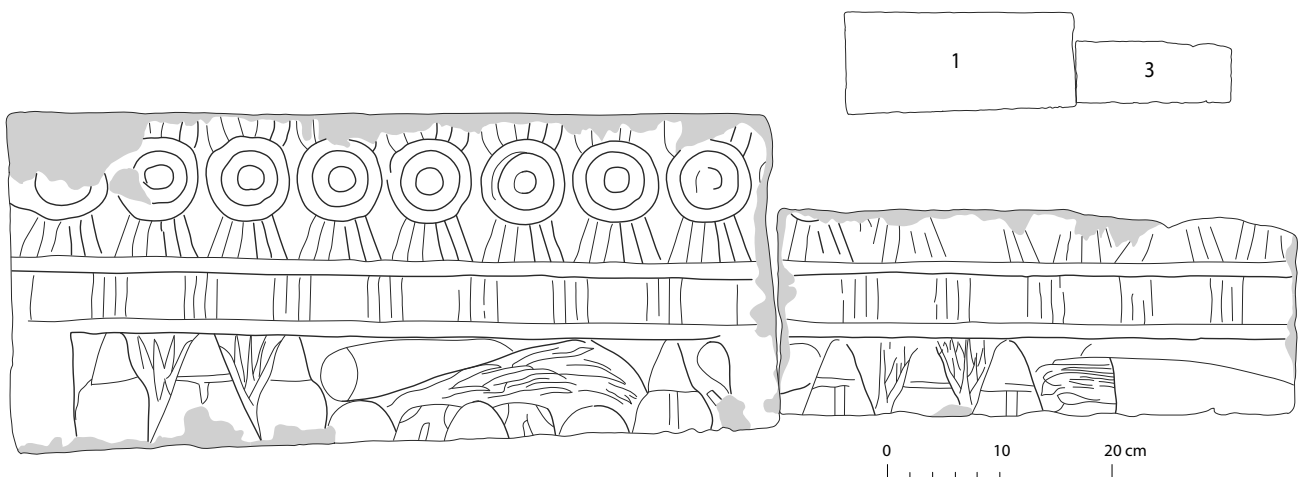


Fig. 6.3.81 Excav. Nos. 1 and 3/HH/1995

Excav.No. 3/HH/1995

A limestone block with incised relief decoration of 47.0 × 19.5 × 22.3 cm.

The reconstructed scene shows the remains of two registers divided by a band with 'ladder pattern'. The lower register preserved contours of sealed jars and vegetables. The upper register shows a *kheker*-frieze. No colours have been preserved.

Excav. No. 2/HH/1995 (figs. 6.3.82–83)

A limestone block with incised relief decoration of 51 × 27 × 18 cm. It was found in Open Court 2, in the upper part of Layer 2. It shows part of a butchering scene showing a butcher bending to the left. He holds a knife in his right hand, his left hand is low and holds the front leg of a bovid. To the right of him, two 'j' signs are partially preserved. The vertical band at the extreme right shows that this was the last scene of a register extending to the left.



Fig. 6.3.82 Excav. No. 2/HH/1995

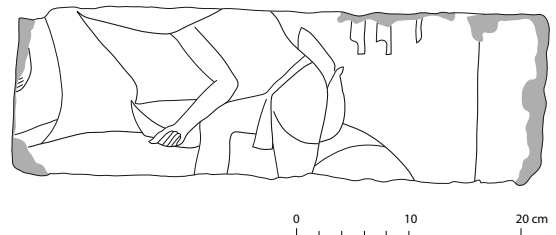


Fig. 6.3.83 Excav. No. 2/HH/1995

Excav. No. 4/HH/1995 (figs. 6.3.84–85)

A limestone block representing the upper part of a false door torus decorated with incised scalloped pattern. It measures 43 × 43.5 × 8.5 cm and it was found in Open Court 2, in the upper part of Layer 2. No colours have been preserved.



Fig. 6.3.84 Excav. No. 4/HH/1995

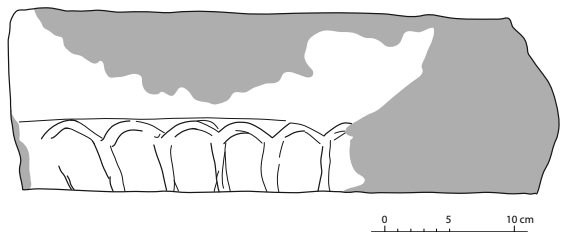


Fig. 6.3.85 Excav. No. 4/HH/1995

Excav. No. 7/HH/1995 (figs. 6.3.86–87)

A limestone fragment of a banquet scene measuring 50.8 × 19.7 × 23 cm. The decoration is executed in a low relief and shows the feet of a seated tomb owner and the front foot of a chair in the shape of a lion's paw. To the right of his feet three signs preserved: *t(j)*-bread, *hnkt* beer and *t*-bread.



Fig. 6.3.86 Excav. No. 7/HH/1995

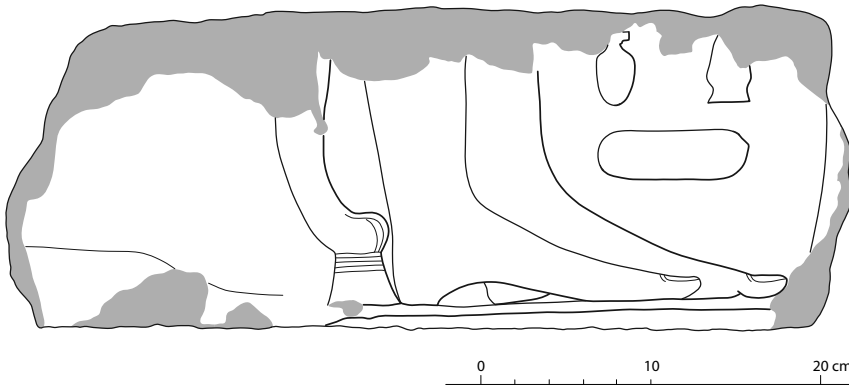


Fig. 6.3.87 Excav. No. 7/HH/1995

Excav. No. 8/HH/95 (*figs.* 6.3.88–89)

A limestone fragment of a banquet scene measuring 30 × 30 × 19 cm. The decoration is executed in a low relief. It shows the right shoulder of a tomb owner and the partially preserved collar on his breast. Colours preserved: red for the man's skin, white for the collar and dark blue for the background. To the left, a vertical band with the 'ladder pattern', partially preserved patches of black colour.



Fig. 6.3.88 Excav. No. 8/HH/1995

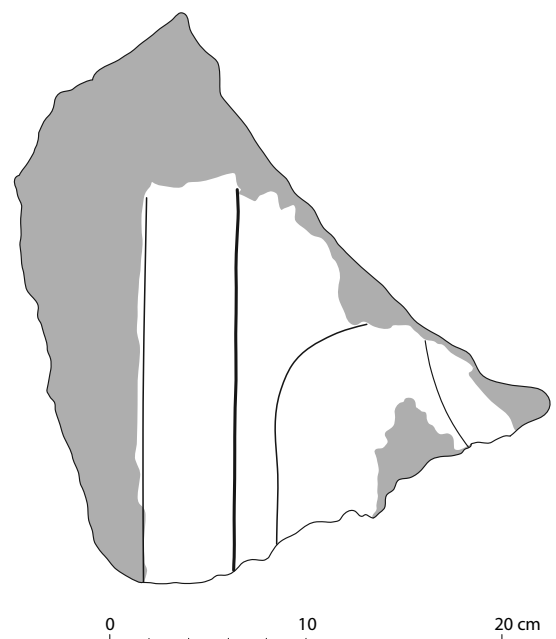


Fig. 6.3.89 Excav. No. 8/HH/1995

Excav. No. 10/HH/95 (figs. 6.3.90–91)

Limestone block with incised relief decoration of $38 \times 22.5 \times 22$ cm. It was found in Open Court 2, in the upper part of Layer 2. It shows remains of a *kheker*-frieze and a band with the 'ladder pattern' below it.



Fig. 6.3.90 Excav. No. 10/HH/1995

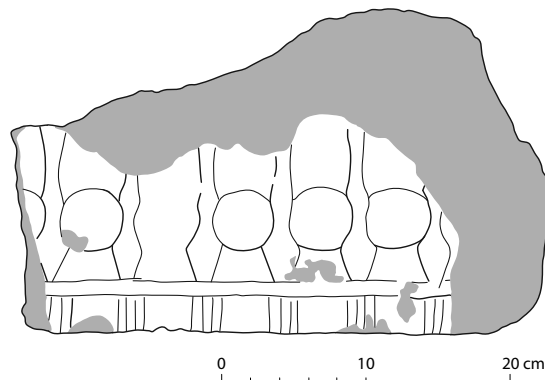
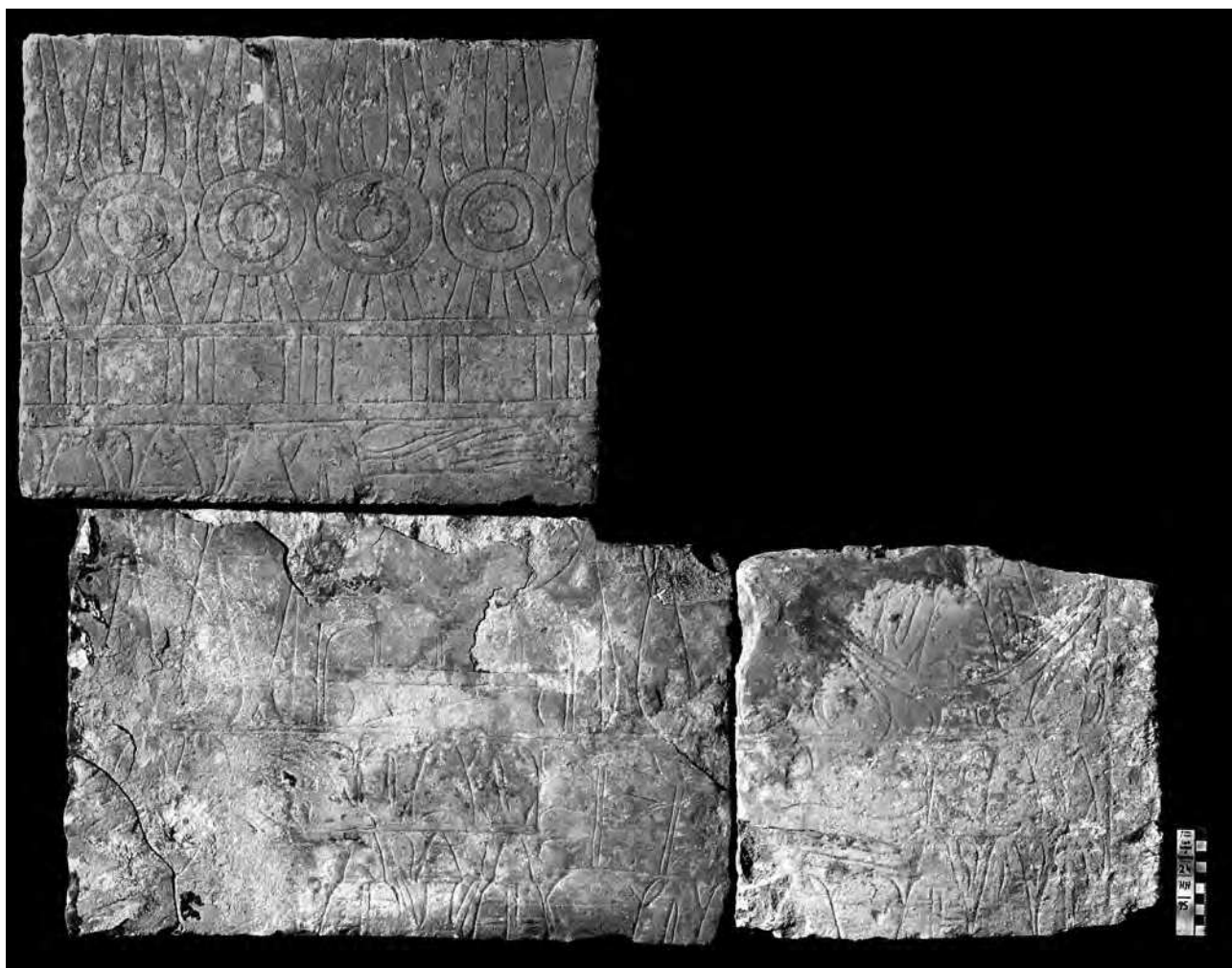


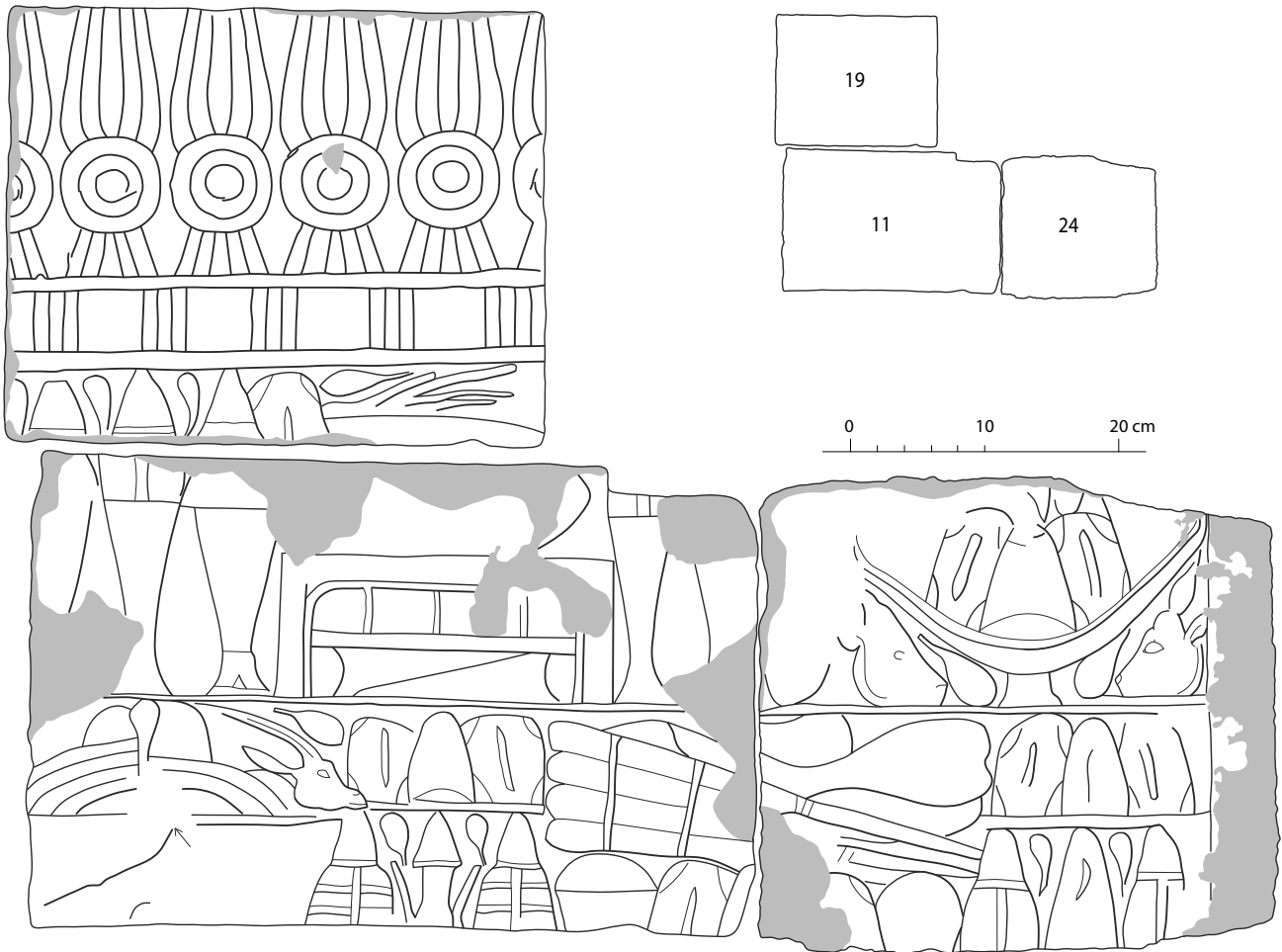
Fig. 6.3.91 Excav. No. 10/HH/1995

Excav. No. 11/HH/1995 (figs. 6.3.92–93)

A limestone block with incised decoration, $60 \times 30 \times 15$ cm. It joins Excav. Nos. 19 and 24/HH/1995. All three fragments were found in Open Court 2, lying on the floor in a layer of wind-blown sand.

Fig. 6.3.92 Excav. No. 11etc./HH/1995





Excav. No. 19/HH/1995

A limestone block with incised relief decoration of 41.5 × 33.0 × 10.0 cm.

Fig. 6.3.93 Excav. No. 11 etc./HH/1995

Excav. No. 24/HH/1995

A limestone block with traces of the original incised decoration, greatly weathered. It measures 41 × 38 × 14 cm.

The composition comprises two registers and the third one on the top reserved for the *kheker*-frieze. The frieze is set off from the remaining registers by a horizontal band with a ladder pattern. The two registers feature assorted offerings. The lower register preserves the contours of sealed vessels and, above them, are some other offerings such as onions, meat and the head of an oryx. The upper register shows on the left a row of slender jugs set in low stands and, in the middle, a low table with an unidentified object on it. Further to the right is a crescent-shaped basket on a low foot, laden with meat offerings. On both sides of the basket is a calf head lying on the floor. The upper left part of the block is obscured by dark mortar.

Again, as was the case in Chapel 2 of Qar, the *lacunae* are filled in with wine grapes diminishing the empty space.

Excav. No. 18/HH/95 (figs. 6.3.94–95)

A limestone block of 63 × 40 × 16 cm with incised decoration. It shows a row of three male offering (?) bearers proceeding to the right and dressed in short kilts. The first one carries behind



Fig. 6.3.94 Excav. No. 18/HH/1995

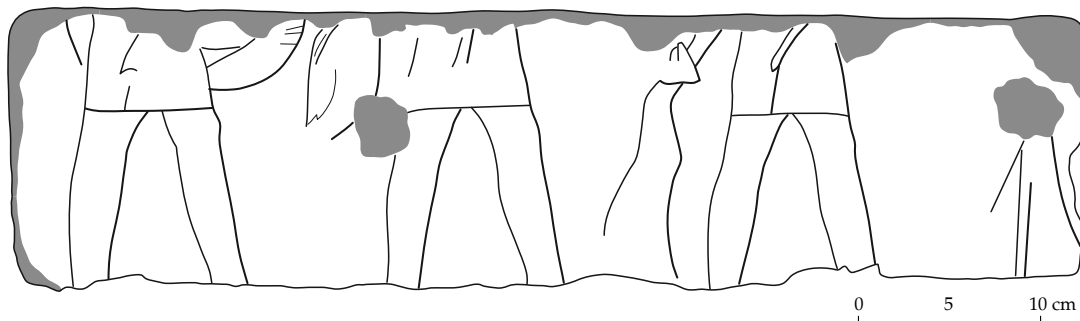


Fig. 6.3.95 Excav. No. 18/HH/1995

him an unidentifiable object with wavy outlines. On the extreme right is another unidentified object.

The block was found in Open Court 2, lying on the floor in a layer of wind-blown sand.

Excav. No. 20/HH/95 (figs. 6.3.96–97)

A limestone block with incised relief decoration of 49×18 cm. It shows the remains of the top part of a *kheker*-frieze. It was found in Open Court 2, lying on the floor in a layer of wind-blown sand.



Fig. 6.3.96 Excav. No. 20/HH/1995

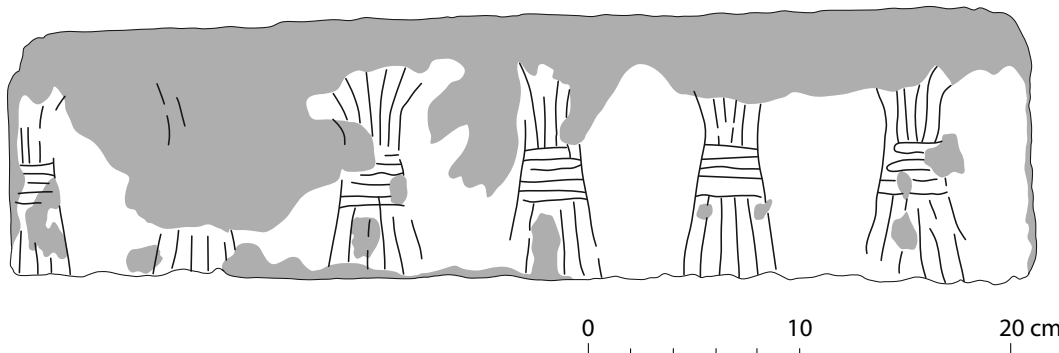


Fig. 6.3.97 Excav. No. 20/HH/1995



Fig. 6.3.98 Excav. No. 21/HH/1995

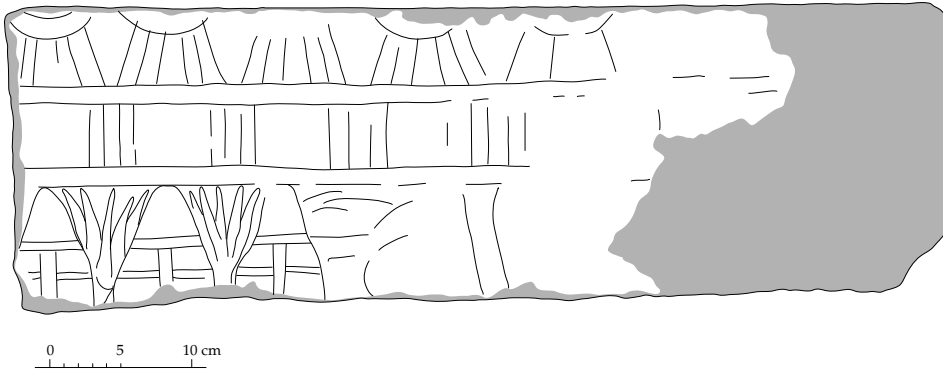


Fig. 6.3.99 Excav. No. 21/HH/1995

Excav. No. 21/HH/95 (figs. 6.3.98–99)

A limestone block with incised relief decoration of $66 \times 21 \times 23.5$ cm. It shows the remains of two registers divided by a band with the 'ladder pattern'. The lower register preserved contours of sealed jars and piled offerings. The upper register shows a *kheker*-frieze. The block was found in Open Court 2, lying on the floor in a layer of wind-blown sand.

Excav. No. 22/HH/95 (figs. 6.3.100–101)

A limestone fragment of $10 \times 50 \times 9$ cm with traces of red paint and plaster on the lower part. In its upper part it features a vessel with two handles and a flat base. It is probably a fragment from an outer false door section comprising a column with the names of seven sacred oils. It was found in Open Court 2, lying on the floor in a layer of wind-blown sand.

Excav. No. 23/HH/95 (figs. 6.3.102–103)

A limestone block with incised relief decoration of $30.6 \times 10.7 \times 16.5$ cm. It shows the remains of a *kheker*-frieze. It was found in Open Court 2, lying on the floor in a layer of wind-blown sand.

Excav. No. 25/HH/95 (figs. 6.3.104–105)

A limestone fragment measuring 13×47 cm, found in Open Court 2, lying on the floor in a layer of wind-blown sand. It preserved remains of an inscription: *s[hpt] stp[w]* 'brin[ging] of choice-joints'. It is clearly to be associated with the procession of the foreleg bearers.



Fig. 6.3.100 Excav. No. 22/HH/1995

Fig. 6.3.101 Excav. No. 22/HH/1995

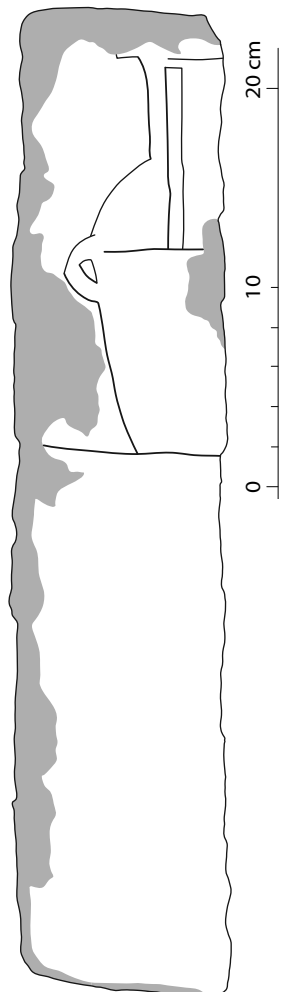




Fig. 6.3.102 Excav. No. 23/HH/1995

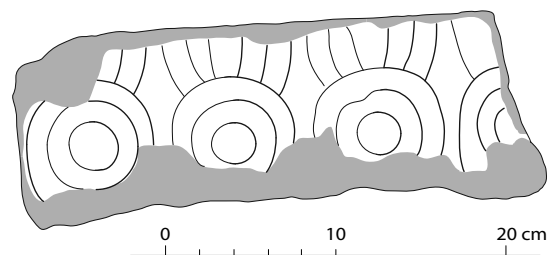


Fig. 6.3.103 Excav. No. 23/HH/1995



Fig. 6.3.104 Excav. No. 25/HH/1995

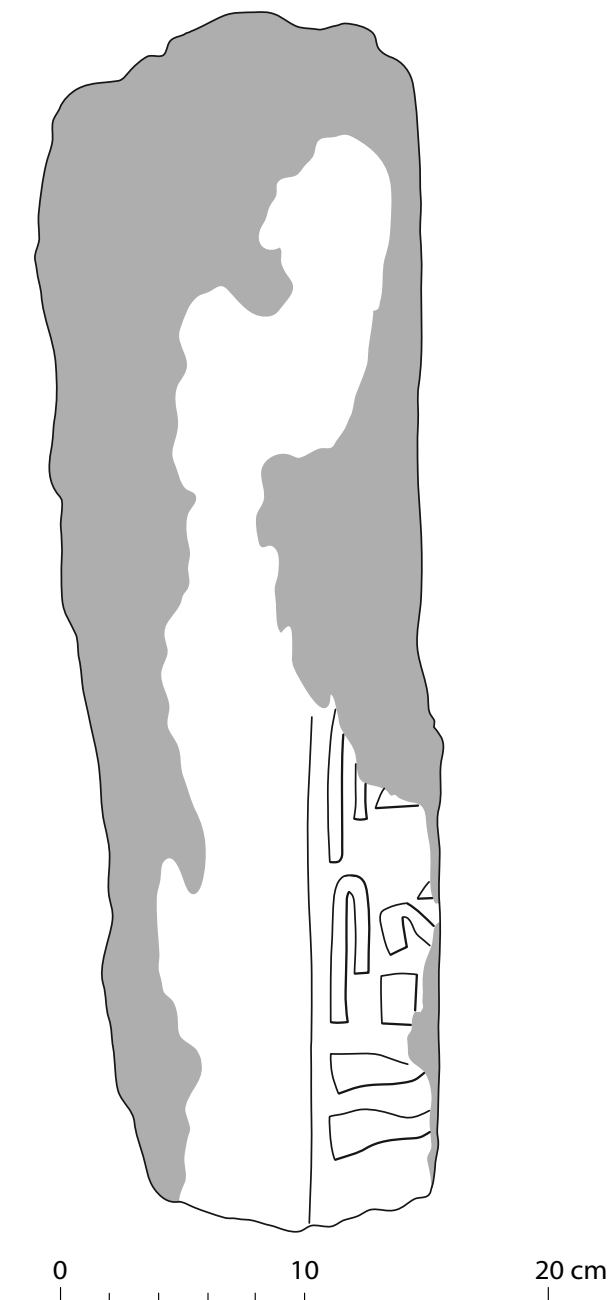


Fig. 6.3.105 Excav. No. 25/HH/1995

6.3.5 Finds from the burial chamber of Qar Junior (Burial chamber 'B')

Excav. No. 57a-d/HH/2000 (figs. 106–107)

Travertine vessel lids with angular rim, found in the western part of the burial chamber, lying directly on the floor.

Lid a: diam. 6 cm, th. 0.4 cm; lid b: diam. 6 cm, th. 0.3 cm; lid c: diam. 4.5 cm, th. 0.2 cm; lid d: diam. 7 cm, th. 0.4 cm. All of them are finely polished, with rounded edges.

Excav. No. 58/HH/2000 (fig. 6.3.108, pl. 25.1)

An obsidian vessel with a flaring neck, flat rim, wide body and pointed base, found in the western part of the burial chamber, about 5 cm above the floor, in a layer of wind-blown sand. The transition between the neck and body is emphasized by a finely incised line. Part of a 'Opening of the Mouth' set – this is the only instance when obsidian was employed as material for stone vessels production during the Old Kingdom.⁸

H. 7.5 cm, mouth diam. 3 cm, h. of the neck 3.3 cm, boring diameter 1.5 cm, depth of boring 0.5 cm.

Excav. No. 59/HH/2000 (fig. 6.3.109, pl. 29.3)

Two corroded miniature copper bowls, 2.0 cm high and max. 4.7 cm wide, found in the western part of the burial chamber, about 5 cm above the floor, in a layer of wind-blown sand, close to Excav. No. 58/HH/2000. The outer wall of the lower vessel was originally decorated with an incised hieroglyphic inscription

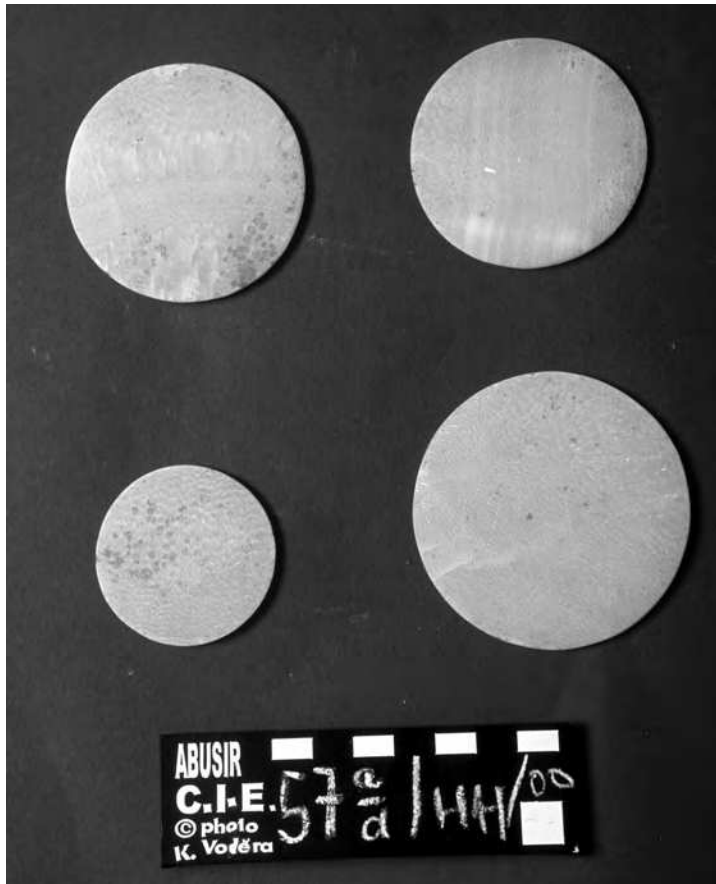


Fig. 6.3.106 Excav. No. 57/HH/1995

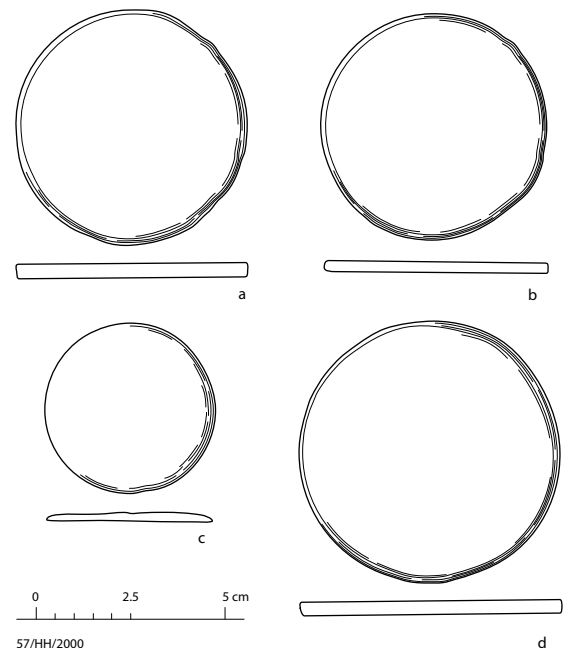


Fig. 6.3.107 Excav. No. 57/HH/1995

⁸ Cf. Aston, *Stone vessels*, 23–26, espec. 25 and fn. 121.

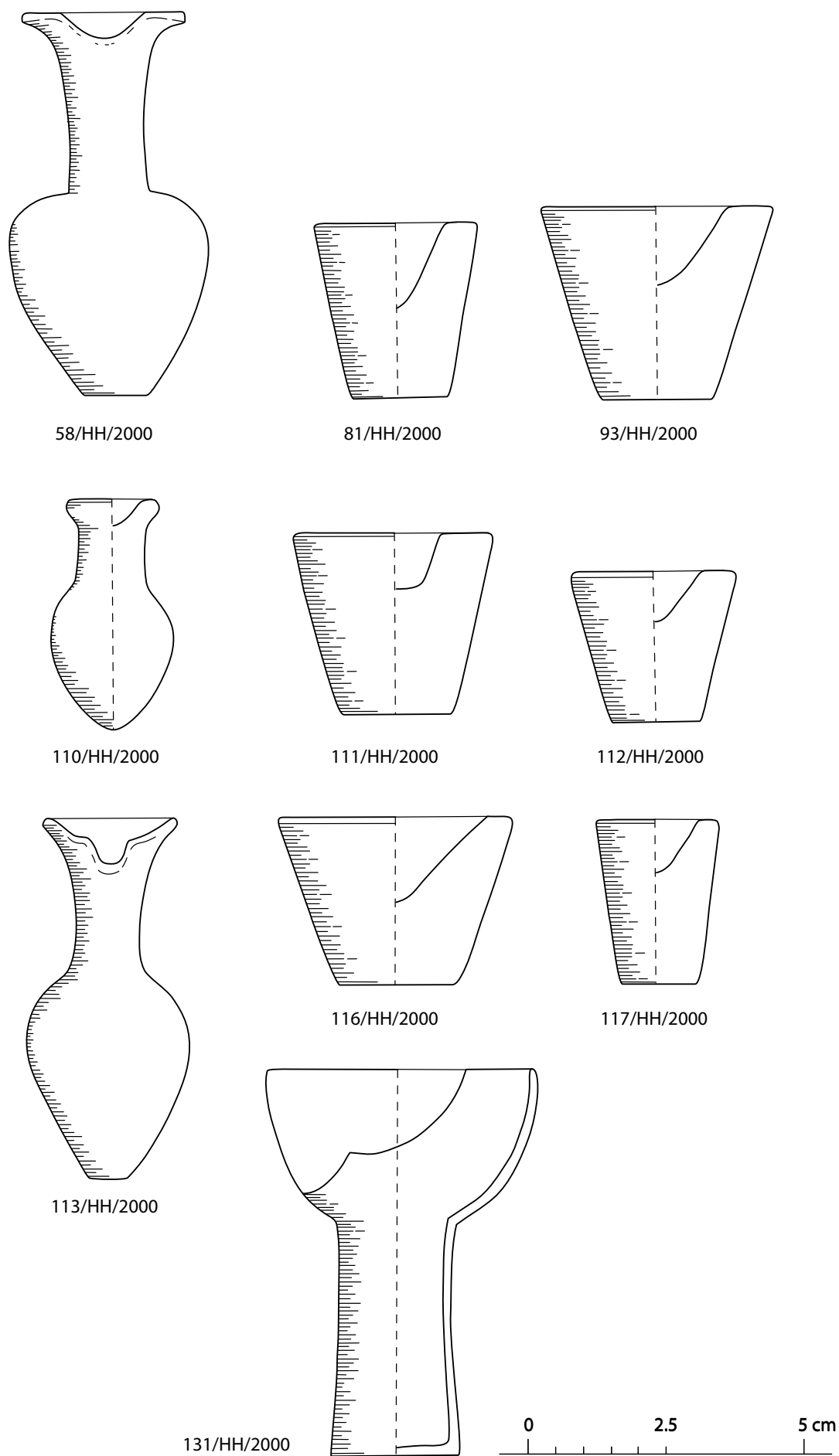
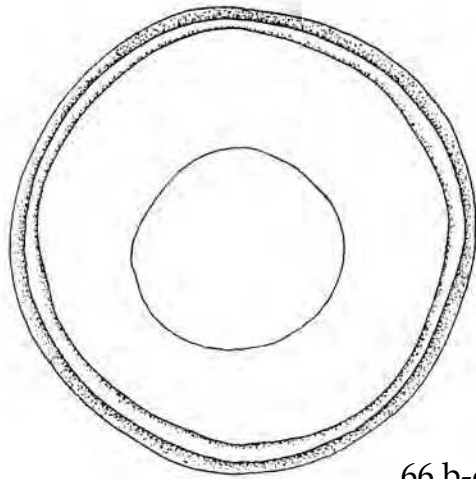
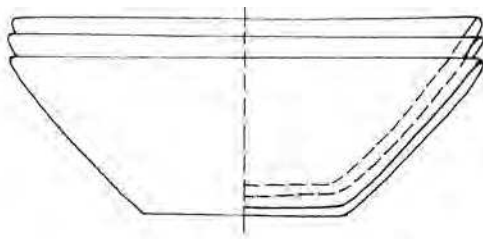
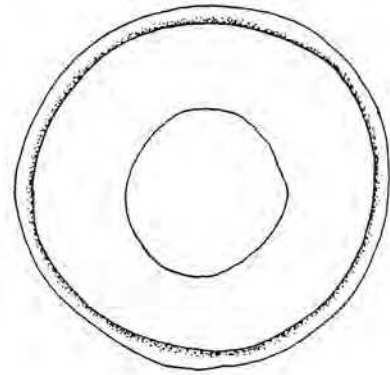
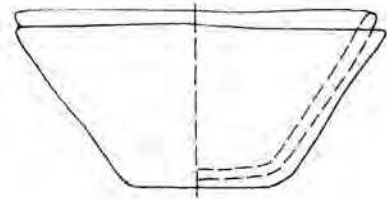


Fig. 6.3.108 Excav. Nos. 58, 81, 93, 110–113, 116, 117, 131/HH/2000



66 b-d/HH/2000



59/HH/2000

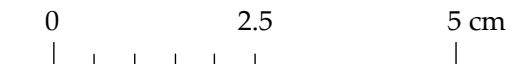


Fig. 6.3.109 Excav. No. 59/HH/2000

with the titles and the name of the owner, still partially readable: *(j)r(j) Nḥn (n) z3b, jm3ḥw, Ḳ3r* 'keeper of Nekhen of the king, well-provided, Qar'.

Excav. No. 60/HH/2000 (fig. 6.3.110)

A stone hammer made of desert quartzite pebble with a flattened working side, with traces of copper ore on it, 7.5 cm high, 5.5 cm wide and 10 cm long, found in the western part of the burial chamber, probably a tool used by the tomb robber(s).

Excav. No. 61/HH/2000 (pl. 26.1)

Limestone model of a goose found in the layer of wind-blown sand in the southern part of the chamber, together with Excav. Nos. 65, 67, 68 and 74/HH/2000, measuring 18.5 × 11.5 × 9.5 cm. Some traces of the original paint are still visible: black beak, black eyes and yellow body.⁹

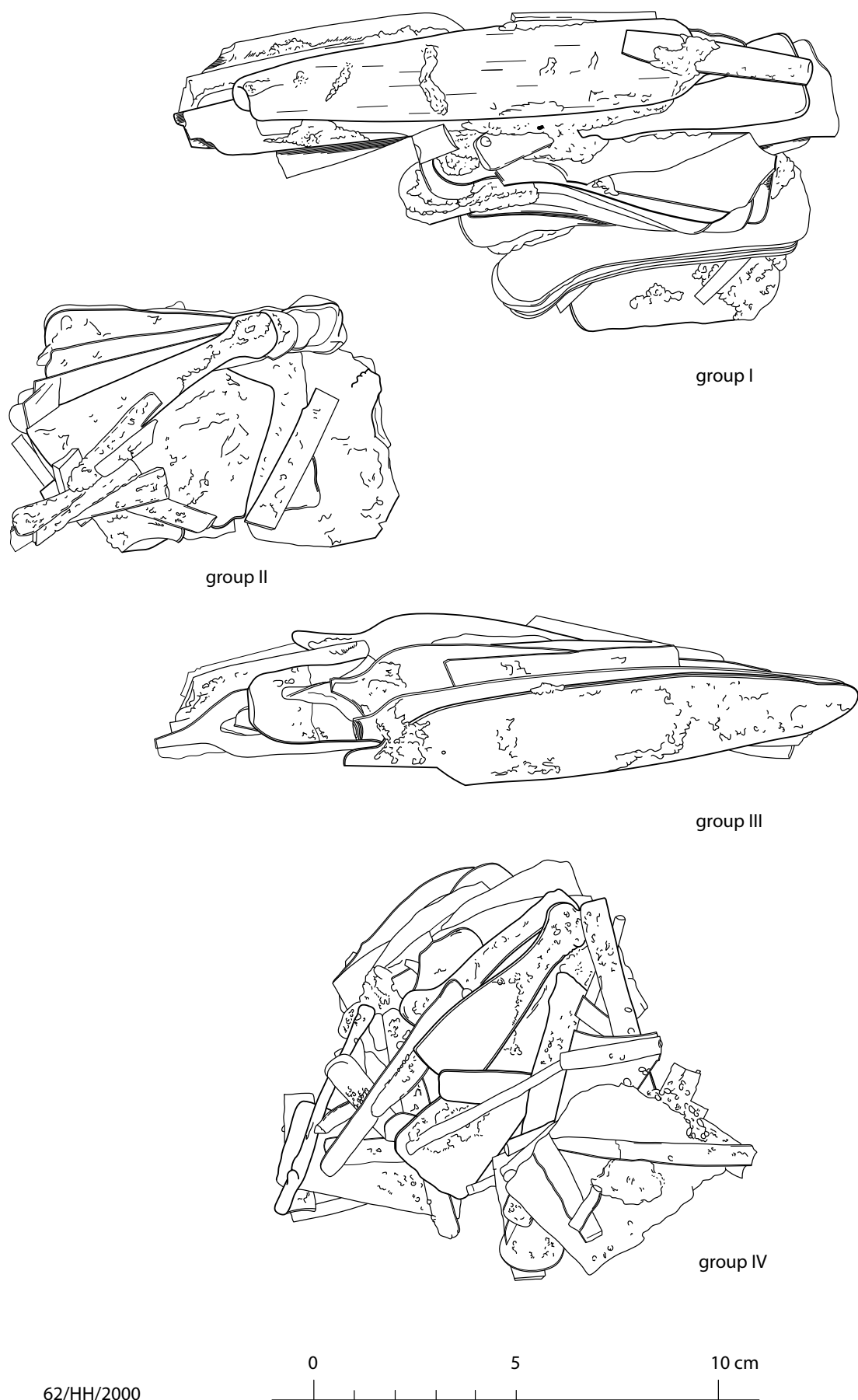
Excav. No. 62/HH/2000 (figs. 6.3.111–115, pls. 27.1–2)

Heavily corroded model tools made of copper, found in the northeastern corner of the chamber lying directly on the floor, covering an area of 0.40 × 0.40 m. The individual implements were deposited in several layers and some of them could be extracted and documented properly during later restoration (carried out in 2002–2005). From their original positions it can be inferred that they were held in a linen bag or bags, remains of which were imprinted on the surface of some of the implements. Some groups of tools were tied together by thin threads.

⁹ For similar finds see E. Brovarski, in D'Auria, Lacovara, Roehrig, eds., *Mummies & Magic*, 93, Cat. No. 25. For the same model of a goose from Abusir, pyramid field, dated to the late Fifth Dynasty see M. Verner, 'Excavations at Abusir. Seasons of 1994/95 and 1995/96', *ZÄS* 124 (1997), 75, pl. 5.3.



Fig. 6.3.110 Excav. No. 60/HH/2000



62/HH/2000

Fig. 6.3.111 Excav. No. 62, I-IV/HH/2000

During the documentation and restoration work it became evident that more than 2.5 kg of worked copper implements were stored in this place. Typologically, six different classes of implements were documented: axe-heads, flat chisels, cross-cut chisels, leaf-blade knives, necked adze blades and arrow-head chisels.¹⁰

Four large lumps with copper implements could not be separated any more during the conservation process and eventually had to be documented as a whole:

Excav. No. 62, I/HH/2000 (*fig. 6.3.111*)

Weight: 450 g, it is composed of at least 5 flat chisels, 8 leaf-blade knives, 18 necked adze blades and 2 axe heads.

Excav. No. 62, II/HH/2000 (*fig. 6.3.111*)

Weight: 430 g, it is composed of at least 6 flat chisels, 20 necked adze blades and 3 axe heads.

Excav. No. 62, III/HH/2000 (*fig. 6.3.111*)

Weight: 150 g, it is composed of at least 11 leaf-blade knives.

Excav. No. 62, IV/HH/2000 (*fig. 6.3.111*)

Weight: 300 g, it is composed of at least 9 flat chisels, 8 necked adze blades and 12 axe heads, 6 cross-cut chisels and 5 arrow-head chisels.

Categories of individual implements (*figs. 6.3.112–116*)

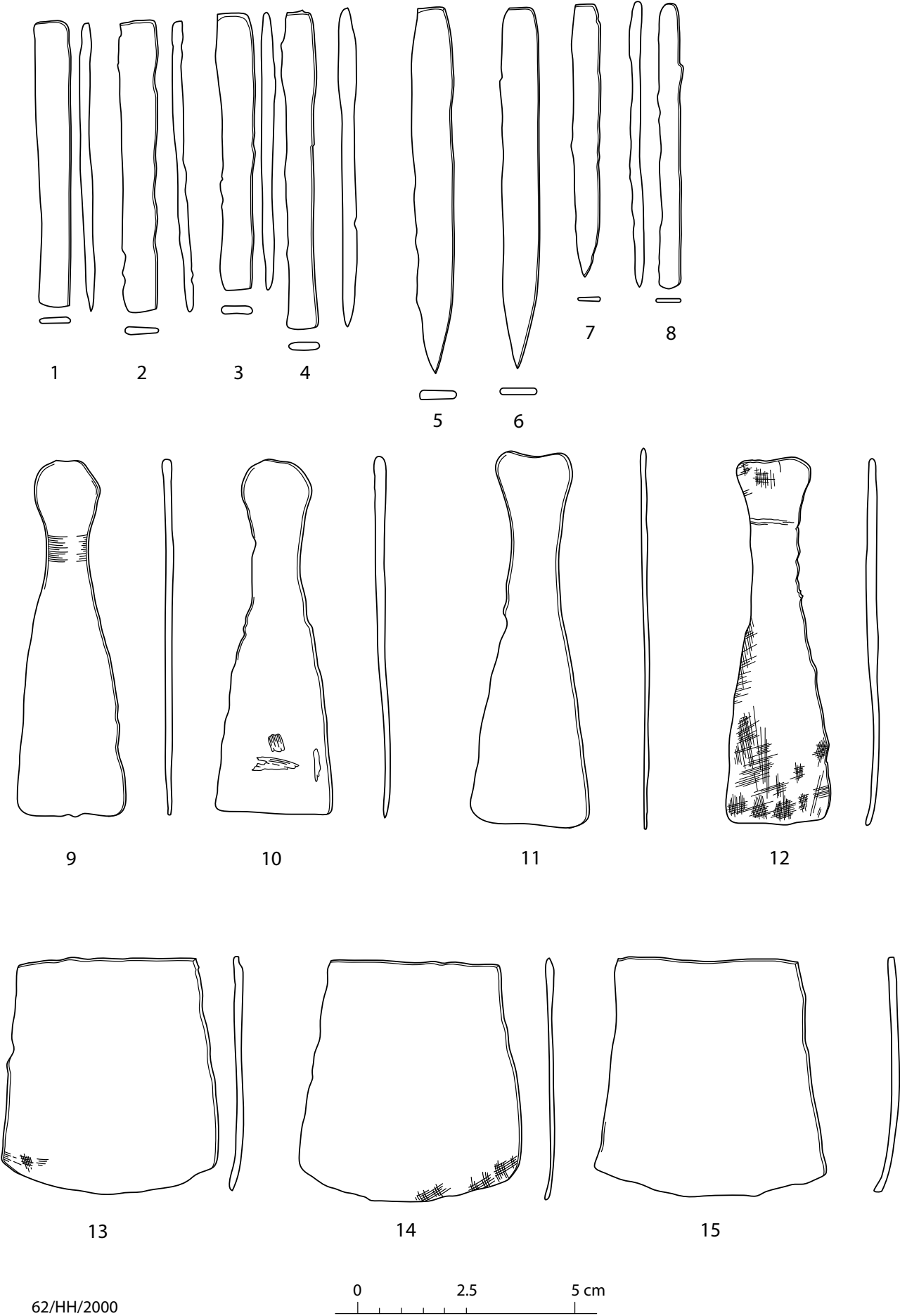
Flat chisels (length × width × thickness)

62-1/HH/2000: 6.5 × 0.7 × 0.2 cm,
 62-2/HH/2000: 6.6 × 0.8 × 0.2 cm,
 62-3/HH/2000: 6.4 × 0.6 × 0.2 cm,
 62-4/HH/2000: 7.3 × 0.5 × 0.2 cm,
 62-24/HH/2000: 6.4 × 0.4 × 0.1 cm,
 62-25/HH/2000: 6.2 × 0.8 × 0.1 cm,
 62-26/HH/2000: 6.4 × 0.8 × 0.1 cm,
 62-30/HH/2000: 7.2 × 0.7 × 0.1 cm,
 62-37/HH/2000: 5.3 × 0.9 × 0.1 cm,
 62-47a/HH/2000: 6.5 × 0.9 × 0.1 cm,
 62-50c/HH/2000: 5.8 × 0.8 × 0.1 cm,
 62-50e/HH/2000: 6.0 × 0.7 × 0.1 cm.

Cross-cut chisels

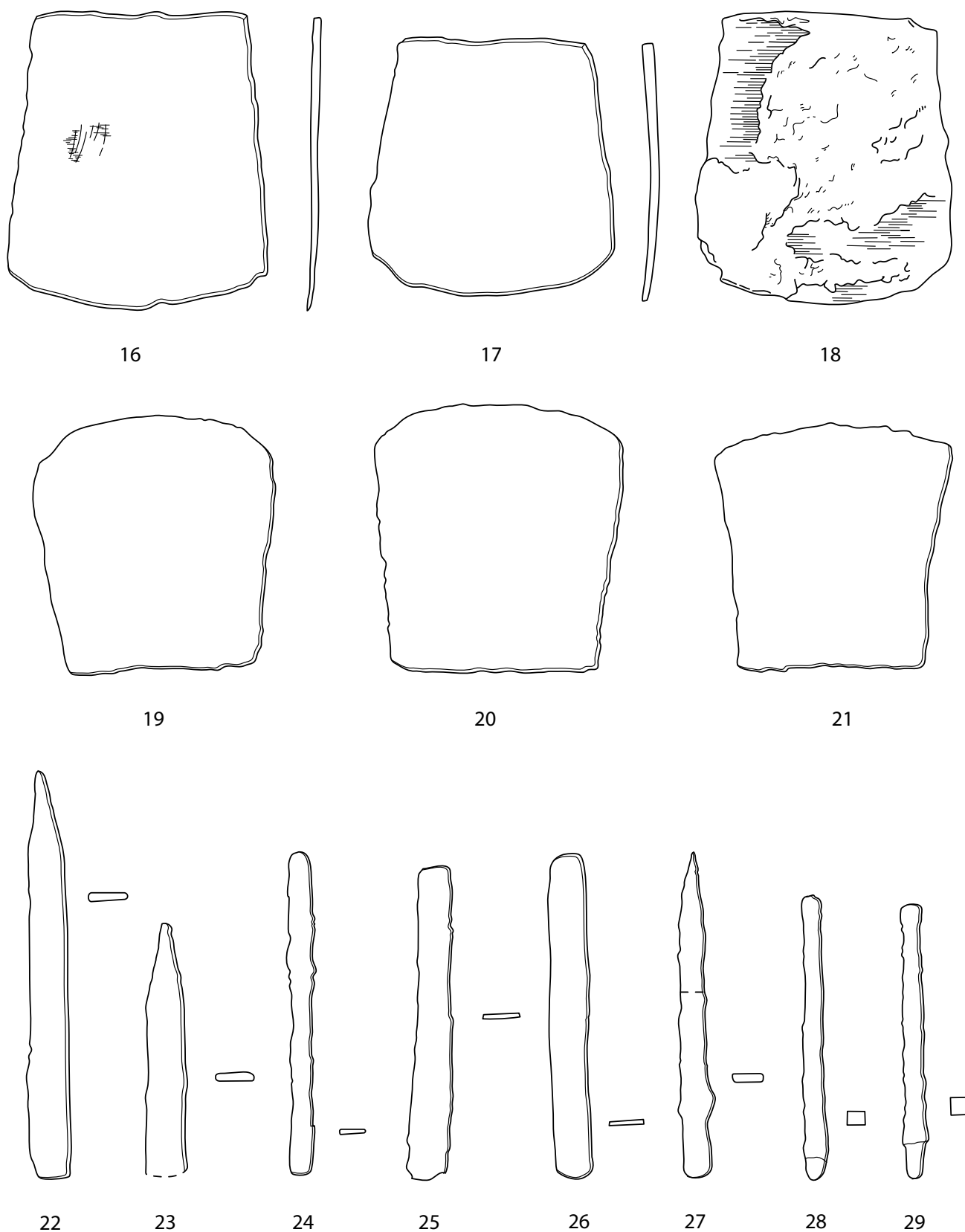
62-5/HH/2000: 6.6 × 0.5 × 0.2 cm,
 62-6/HH/2000: 8.4 × 0.9 × 0.2 cm,
 62-7/HH/2000: 6.3 × 0.5 × 0.1 cm,
 62-22/HH/2000: 8.2 × 0.8 cm,
 62-23/HH/2000: ? × 0.8 cm,
 62-27/HH/2000: 6.4 × 0.6 cm,
 62-33b/HH/2000: 5.8 × 0.4 cm,

¹⁰ For the majority of these terms cf. D. Stocks, *Experiments in Egyptian Archaeology. Stoneworking technology in Ancient Egypt* (London – New York, 2003), 25–73. Categories such as ‘leaf-blade knives’ and especially ‘axe-head chisels’ have been suggested during the course of excavation. Whether they are appropriate or not remains to be determined in the future as their proper function is uncertain.



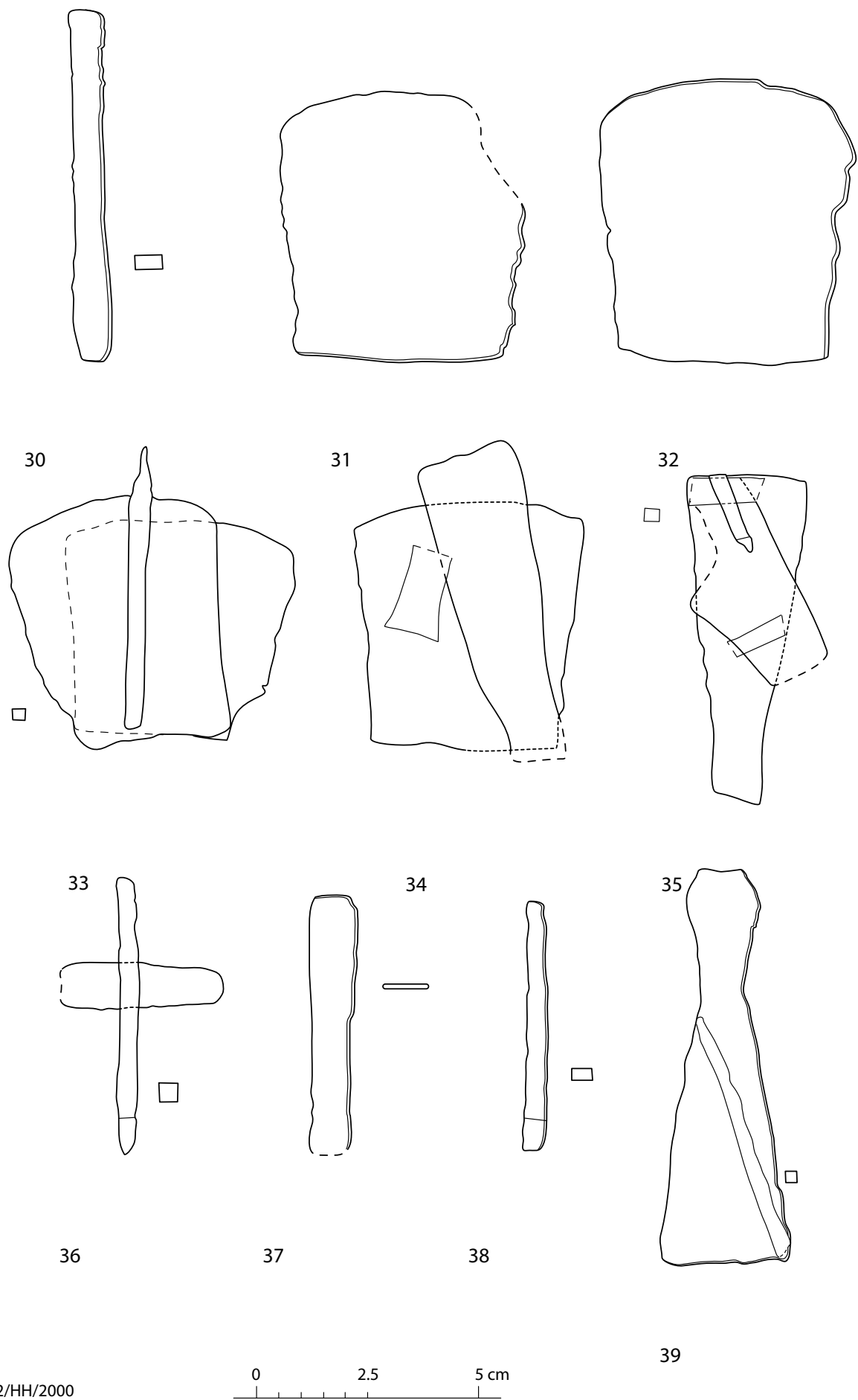
62/HH/2000

Fig. 6.3.112 Excav. No. 62, 1-15/HH/2000



62/HH/2000

Fig. 6.3.113 Excav. No. 62, 16–29/HH/2000



62/HH/2000

Fig. 6.3.114 Excav. No. 62, 30-39/HH/2000

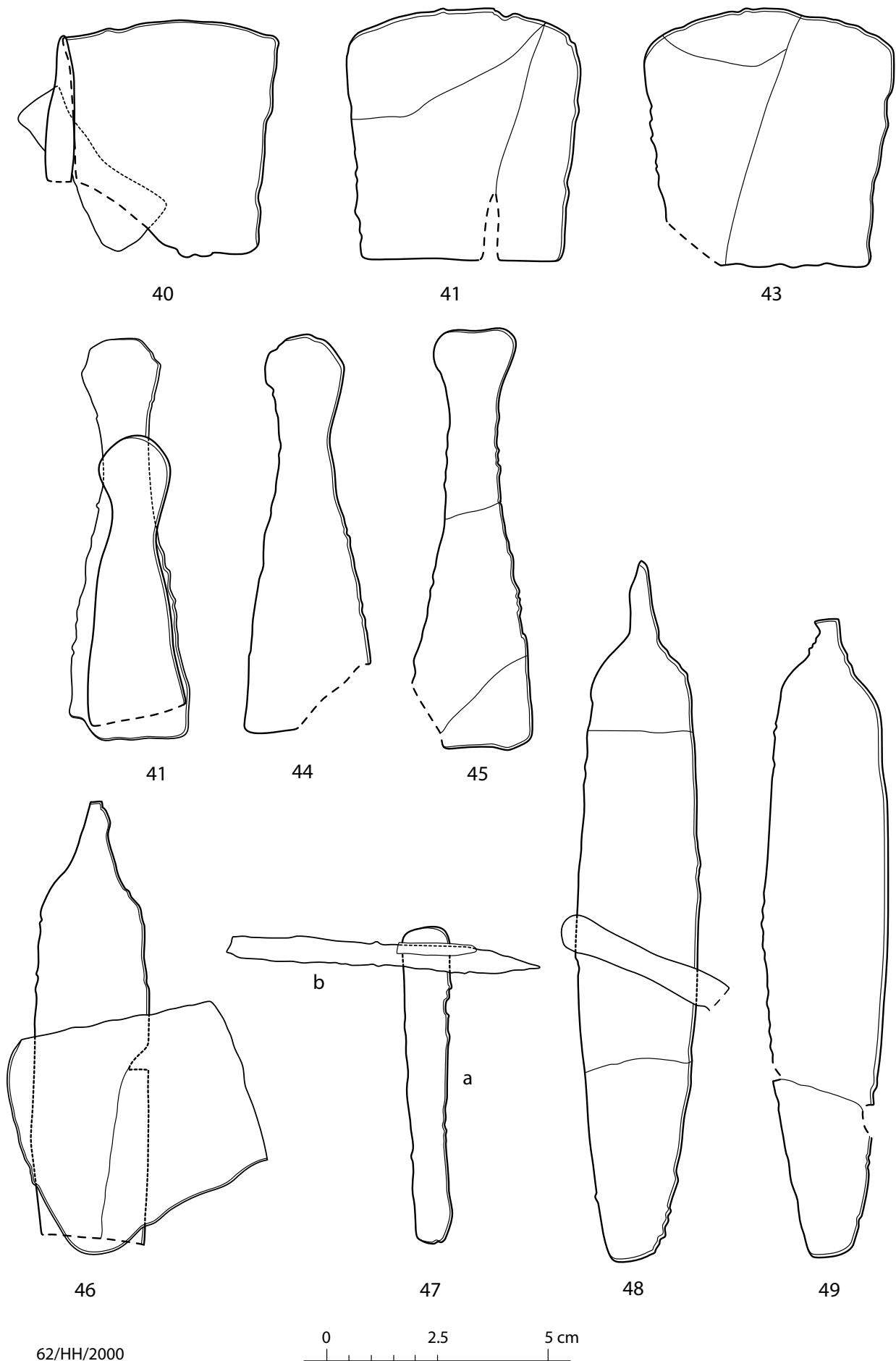


Fig. 6.3.115 Excav. No. 62, 40–49/HH/2000

62-47b/HH/2000: 6.2×0.5 cm,
62-50.HH/2000: $6.8 \times 0.4 \times 0.1$ cm.

Axe heads

62-13/HH/2000: $5.5 \times 5.7 \times 0.1$ cm,
62-14/HH/2000: $5.4 \times 5.0 \times 0.1$ cm,
62-15/HH/2000: $5.0 \times 5.7 \times 0.1$ cm,
62-16/HH/2000: $6.0 \times 5.2 \times 0.2$ cm,
62-17/HH/2000: $5.0 \times 5.0 \times 0.2$ cm,
62-18/HH/2000: $5.8 \times 5.0 \times 0.1$ cm,
62-19/HH/2000: $5.0 \times 4.8 \times 0.1$ cm,
62-20/HH/2000: $5.4 \times 5.0 \times 0.1$ cm,
62-21/HH/2000: $4.9 \times 4.8 \times 0.1$ cm,
62-31/HH/2000: $5.5 \times ? \times 0.1$ cm,
62-32/HH/2000: $5.8 \times 5.3 \times 0.1$ cm,
62-33a/HH/2000: $4.2 \times 4.8 \times 0.1$ cm,
62-34/HH/2000: $5.0 \times 4.5 \times 0.1$ cm,
62-40/HH/2000: $4.7 \times 4.7 \times 0.1$ cm,
62-42/HH/2000: $5.2 \times 4.6 \times 0.1$ cm,
62-43/HH/2000: $5.3 \times 5.2 \times 0.1$ cm,
62-46/HH/2000: $4.9 \times 4.8 \times 0.1$ cm,
62-50b/HH/2000: $5.7 \times 5.2 \times 0.1$ cm.

Leaf-blade knives

62-48/HH/2000: $14 \times 2.5 \times 0.1$ cm,
62-49/HH/2000: $14+$ (incomplete) $\times 2.5 \times 0.1$ cm,
62-51/HH/2000: $13.8 \times 2.3 \times 0.1$ cm,
62-52/HH/2000: $13.6+$ (incomplete) $\times 2.5 \times 0.1$ cm.

Arrow-head chisels

62-28/HH/2000: 5.7×0.3 cm,
62-29/HH/2000: 5.4×0.4 cm,
62-36/HH/2000: 5.6×0.4 cm,
62-38/HH/2000: 5.0×0.4 cm.

Necked adze blades

62-35/HH/2000: incomplete,
62-39/HH/2000: 6.0×0.1 cm,
62-41/HH/2000: 8.0×0.2 cm,
62-44/HH/2000: 8.0×0.1 cm,
62-45/HH/2000: 8.5×0.1 cm,
62-50/HH/2000: 5.5×0.1 cm,
62-53/HH/2000: 9.2×0.1 cm,
6254/HH/2000: 8.8×0.1 cm,
62-55/HH/2000: 8.2×0.1 cm,
62-56/HH/2000: 9×0.1 cm.

The count of individual categories of individually preserved copper implements shows that by far the most numerous were necked adze blades 9 (grand total 56), followed by axe heads (35), flat chisels (32), leaf-blade knives (23), cross-cut chisels (15) and arrow-head chisels (4). The number of identifiable tools represents 170 implements of six different tool classes. In addition to this, there were dozens of implements preserved in fragments. Arrow-head chisels were represented only by 4

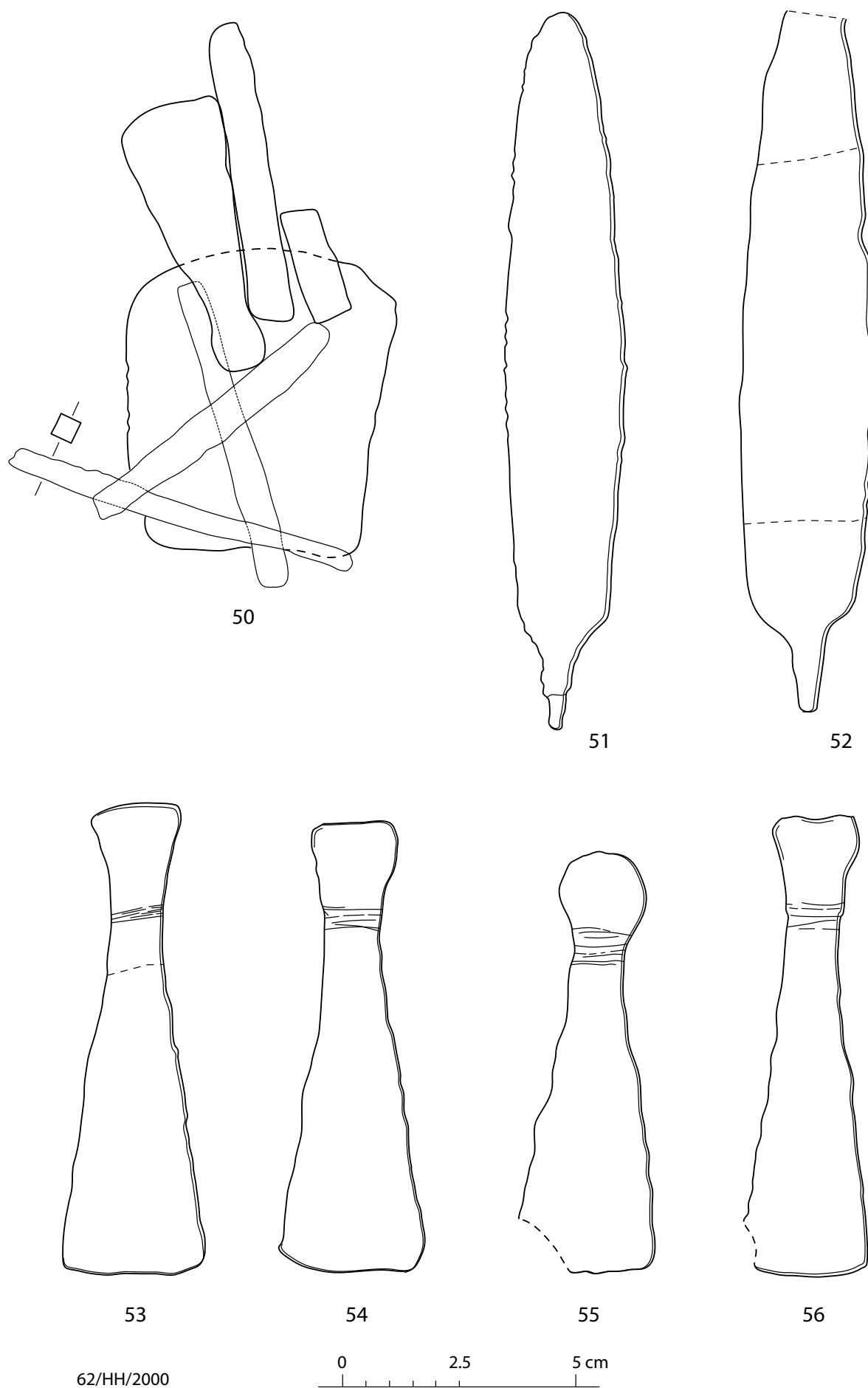


Fig. 6.3.116 Excav. No. 62, 50-56/HH/2000

complete items, at least 50 more were preserved in fragments as the arrow-head chisels tend to fragment very easily, given their fragility. This characteristic contrasts with the massive axe heads (each item weighting about 15 g) and leaf-blade knives (14 g) which were found in most cases complete. Thus the original ratio of individual classes of artefacts could have been different from the picture gained through the prism of the archaeological record. It may be estimated that the numbers for arrow-head chisels, cross-cut chisels and flat chisels, *i.e.* the artefacts most prone to fragmentation, should be at least doubled.

Excav. No. 63/HH/2000 (figs. 6.3.117–118)

A travertine lid found in the fill of the chamber, in its western part. The lid measures 6.3 cm in diam. and its thickness is 0.3 cm. The central part of one side of the lid (having a diam. of 3.8 cm) is artificially roughened.

Excav. No. 64/HH/2000 (fig. 6.3.119, pl. 28.1)

A collection of three fragments of gold pendants, found in the fill of the chamber, to the east of the burial cavity. It consists of a plate measuring 4 × 1 cm, with small eyelets, a jewel beetle pendant filled with blue paste using the cloisonné technique (2.0 × 0.5 cm) and a miniature 'bell'-shaped pendant made of thin gold sheet (2.2 cm high, with an eyelet on its top and a rounded 0.8 cm wide opening at the bottom) by the technique of coiling.¹¹ Together with it were found dozens of small fragments of gold foil.



Fig. 6.3.117 Excav. No. 63/HH/2000

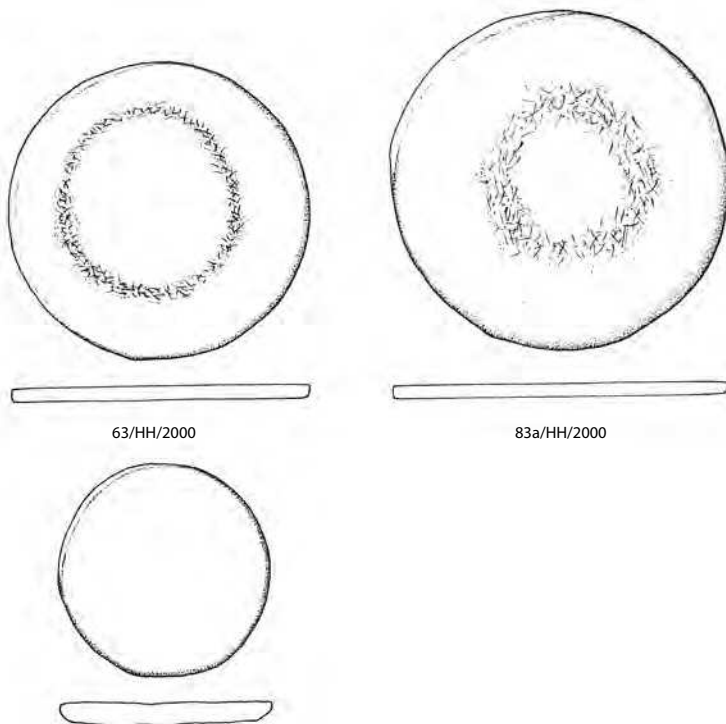
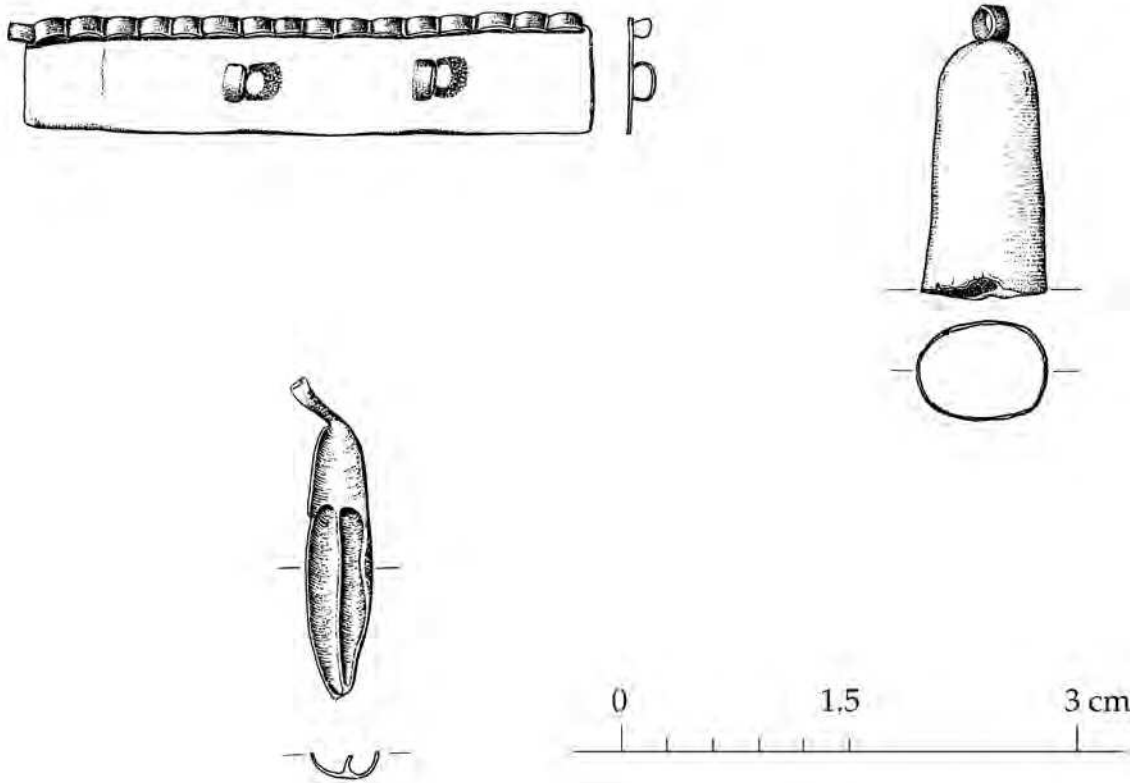


Fig. 6.3.118 Excav. Nos. 63 and 83/HH/2000

¹¹ From the Old Kingdom period, golden pendants in the shape of the jewel beetle, family Buprestidae (*Acmaeodera polira* Klug or *Steraspis squamosa* Klug) with clearly separated elytras were in fashion, see tomb of Akhtihotep: Ziegler *et al.*, *Akhtihotep*, 172–173 and fig. 53) and tomb of Nikauisesi in Saqqara: Kanawati, Abder-Raziq, *Teti Cemetery VI*, pl. 2, d and e (TNE98:21b, includes a 'bell'-shaped pendant). See also L. Keimer, 'Pendeloques en forme d'insectes faisant partie de colliers Égyptiens', *ASAE* 31 (1931), 145–186, pls. 1–7 and P. Rigault, in Arnold, ed., *Egyptian art*, 424, No. 164. For the *cloisonné* technique comp. C. Andrews, *Ancient Egyptian Jewellery* (London, 1996), 88–90.



Excav. No. 65/HH/2000 (*pl.* 26.2)

Limestone model of a goose, the same context as Excav. No. 61/HH/2000, measuring $13.0 \times 8.5 \times 7.0$ cm.

Fig. 6.3.119 Excav. No. 64/HH/2000

Excav. No. 66/HH/2000 (*figs.* 6.3.120–121, *pl.* 28.2)

A set of copper implements found in the burial chamber of Qar Junior in the fill of clean sand in the western part of the chamber. This group of artefacts was not so numerous yet the grand totals of the individual classes of copper artefacts provide an interesting counterpart to the by far larger group of Excav. No. 62/HH/2000. The count shows that the collection was composed of 11 necked adze blades, 6 arrow-head chisels, 2 leaf blade knives, 2 axe heads, 2 flat chisels and 1 cross-cut chisel.

Leaf blade knives

66-1/HH/2000: $14.0 \times 2.3 \times 0.1$ cm,

66-2/HH/2000: $13.8 \times 2.7 \times 0.1$ cm.

Flat chisels

66-4/HH/2000: $6.4 \times 0.8 \times 0.1$ cm,

66-5/HH/2000: $6.5 \times 0.8 \times 0.1$ cm.

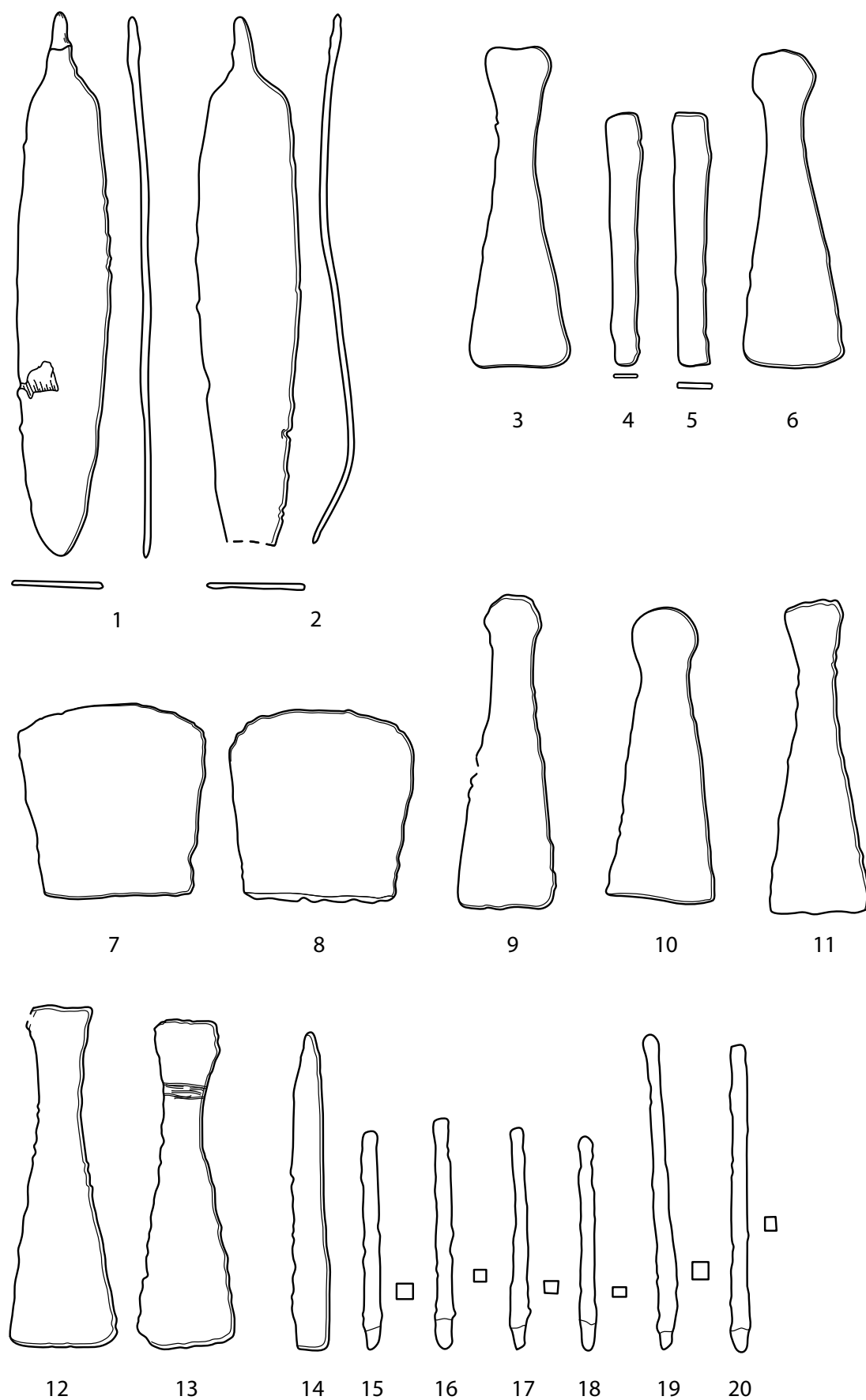
Cross-cut chisel

66-14/HH/2000: $8.1 \times 0.9 \times 0.1$ cm.

Axe heads

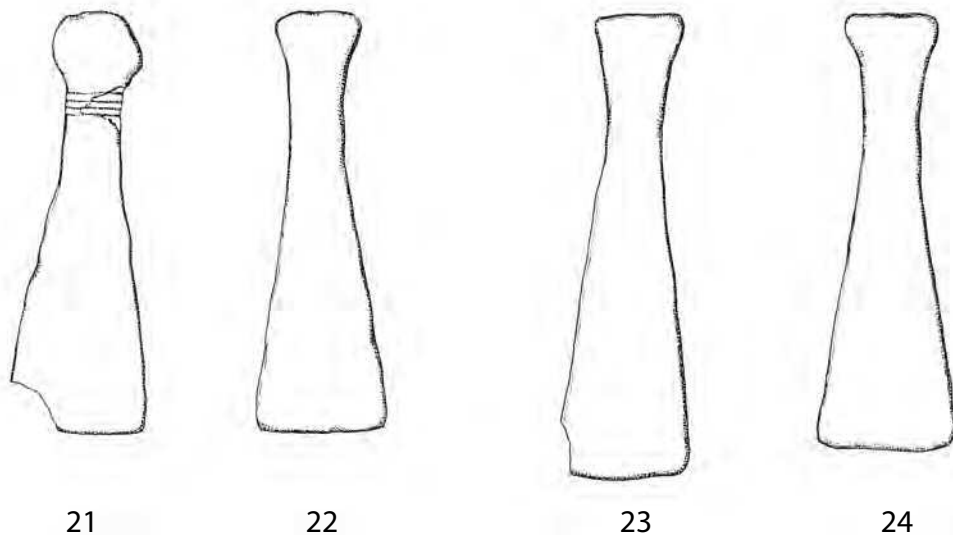
66-7/HH/2000: $5.0 \times 4.8 \times 0.1$ cm,

66-8/HH/2000: $4.8 \times 4.8 \times 0.1$ cm.



66/HH/2000

Fig. 6.3.120 Excav. No. 66, 1-20/HH/2000



66/HH/2000

0 2.5 5 cm

Arrow-head chisels

66-15/HH/2000: 5.7 × 0.4 cm,
66-16/HH/2000: 6.0 × 0.3 cm,
66-17/HH/2000: 5.8 × 0.4 cm,
66-18/HH/2000: 5.5 × 0.4 cm,
66-19/HH/2000: 8.4 × 0.4 cm,
66-20/HH/2000: 7.8 × 0.3 cm.

Fig. 6.3.121 Excav. No. 66, 21–26/HH/2000

Necked adze blades

66-3/HH/2000: 8.3 × 0.1 cm,
66-6/HH/2000: 8.2 × 0.1 cm,
66-9/HH/2000: 8.0 × 0.1 cm,
66-10/HH/2000: 7.5 × 0.1 cm,
66-11/HH/2000: 8.0 × 0.1 cm,
66-12/HH/2000: 8.8 × 0.1 cm,
66-13/HH/2000: 8.4 × 0.1 cm,
66-21/HH/2000: 8.2 × 0.1 cm,
66-22/HH/2000: 8.1 × 0.1 cm,
66-23/HH/2000: 8.9 × 0.1 cm,
66-24/HH/2000: 8.4 × 0.1 cm.

Excav. No. 66a/HH/2000 (fig. 6.3.122, pl. 29.1)

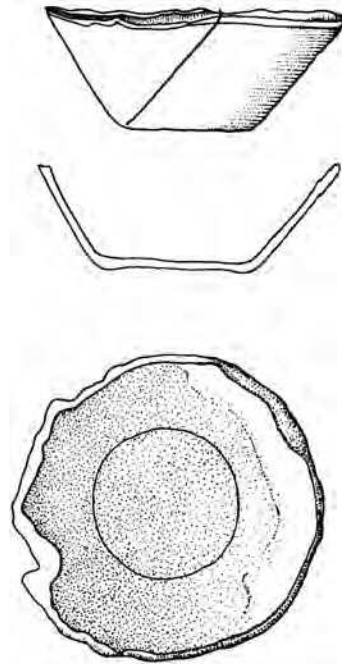
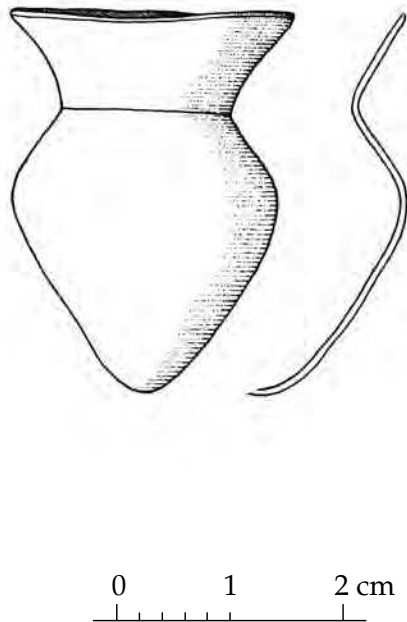
Small copper juglet with a rounded base and out-curved rim:
h. 5.2 cm, w. of the opening 14.5 cm, h. of the rim 1.8 cm.

Excav. No. 66b–d/HH/2000 (figs. 6.3.109 and 122, pl. 29.1)

Models of three copper vessels set one into another, identical (as far as it could be measured) in dimensions: flat-bottomed bowls with flaring side-walls, h. 2.0 cm, w. of the base 1.7 cm, w. of the opening 4.7 cm.

Excav. No. 67/HH/2000 (pl. 26.3)

A limestone model of a goose, from same context as Excav. No. 61/HH/2000, measuring 10.5 × 7.5 × 7.0 cm. Some traces of the original paint are still visible: black for the beak, black eyes and yellow body.



Excav. No. 68/HH/2000 (*pl. 26.4*)

A limestone model of a goose, the same context as Excav. No. 61/HH/2000, measuring 19 × 11 × 10 cm. Some traces of the original paint are still visible: black for the beak, black eyes and yellow body.

Fig. 6.3.122 Excav. Nos. 66a/HH/2000 and 93/HH/2000

Excav. No. 69/HH/2000 (*fig. 6.3.123, pl. 30*)

A meidum bowl with a rounded base and out-turned thickish rim, part of the Excav. Nos. 70–73/HH/2000 set, h. 6 cm, diam. 31 cm, the same context as Excav. No. 61/HH/2000. These five bowls were made of Nile Silt B 1 or B 2, have a well-polished surface, the exterior body below the rim was roughened by the straw whisk (or similar tool) before firing. The remaining exterior and entire interior are well polished, yet the coiling method which was used is clearly discernible. The individual coils have a 1.5 cm in thickness. It is likely that this bowl with the following four (Excav. Nos. 70–73/HH/2000) functioned as containers for the limestone models of geese (Excav. Nos. 61, 65, 67, 68 and 74/HH/2000).

Excav. No. 70/HH/2000 (*fig. 6.3.123, pl. 30*)

A Meidum bowl, h. 6.8 cm, diam. 32 cm, from the same context as Excav. No. 61/HH/2000. Nile Silt B 1, well-polished surface.

Excav. No. 71/HH/2000 (*fig. 6.3.123, pl. 30*)

A Meidum bowl, h. 6 cm, diam. 34 cm, from the same context as Excav. No. 61/HH/2000. Nile Silt B 1, well-polished surface.

Excav. No. 72/HH/2000 (*fig. 6.3.123, pl. 30*)

A Meidum bowl, h. 5.0 cm, diam. 31.5 cm, from the same context as Excav. No. 61/HH/2000. Nile Silt B 2, well-polished surface.

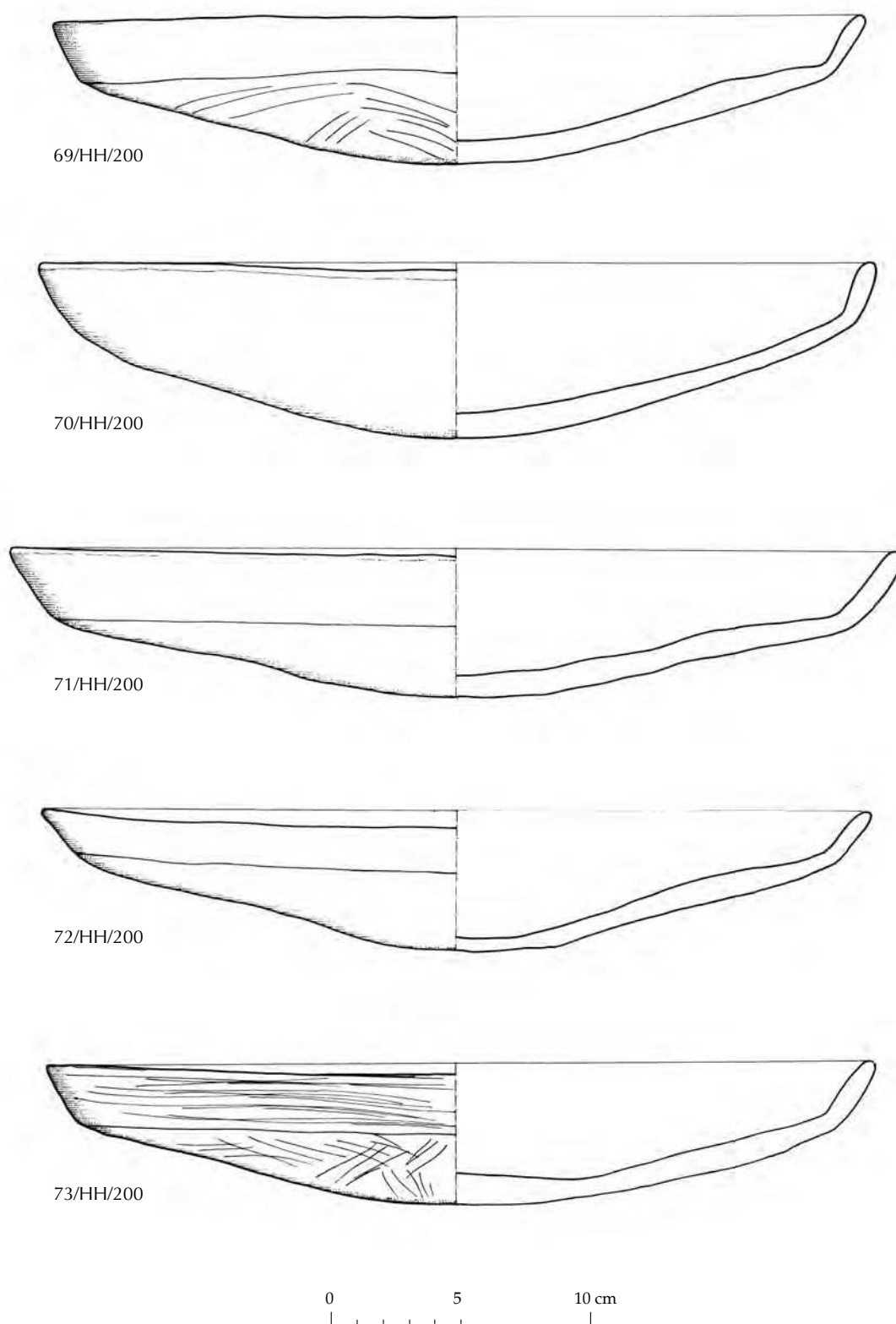


Fig. 6.3.123 Excav. Nos. 69–73/HH/2000

Excav. No. 73/HH/2000 (fig. 6.3.123, pl. 30)

A Meidum bowl, h. 5.0 cm, th. 31.5 cm, from the same context as Excav. No. 61/HH/2000. Nile Silt B 1, well-polished surface.

Excav. No. 74/HH/2000 (pl. 26.5)

A limestone model of a goose, from the same context as 61/HH/2000, measuring 16.5 × 9.5 × 6.5 cm. Some traces of the original paint are still visible: black for the beak and black eyes.

Excav. No. 76/HH/2000 (fig. 6.3.124, pl. 31.1)

A set of four copper models, some of them broken into fragments, five of them preserved: two hesy-jars and three copper bowls with flat bases, found in the same context as Excav. No. 61/HH/2000.

76-1: hesy-jar 1: diam. of the base 2.6 cm, 8.5 cm high,

76-2: hesy-jar 2: 2.3 cm, 6.8 cm,

76-3: bowl 1: diam. of the base 3.3 cm, 2 cm high, diam. of the opening 5.8 cm,

76-4: bowl 2: 3.5 cm, 2.0, 6.2 cm,

76-5: bowl 3: 3.3 cm, 2.0 cm, 6.0 cm.

Excav. No. 78/HH/2000

A set of animal bones found by the north wall of the chamber, to the west of the copper tools. The bone spread covers an area of at least 1.40 (EW) × 0.70 m (NS). There were clearly many animals offered, including birds, cattle bones and oxen ribs, (see Chapter 8).

Excav. No. 79/HH/2000 (fig. 6.3.125, pl. 31.2)

Set of several copper objects found in the burial pit, about 0.50 m above its floor. Most of them were broken into small fragments. Completely preserved were:

a) model of a hesy-jar with a flat base, 5.5 cm high with out-turned neck and flat rim,

b) a needle 10.2 cm long, with a square section of 3 × 2 mm,

c) three larger fragments of small, flat-bottomed cup (diam. of the bottom 3.6 cm), 2 cm h., with out-turned side walls,

d) fragment of a large hesy-jar - base.

Items a) and c) were originally decorated with incised hieroglyphic inscription

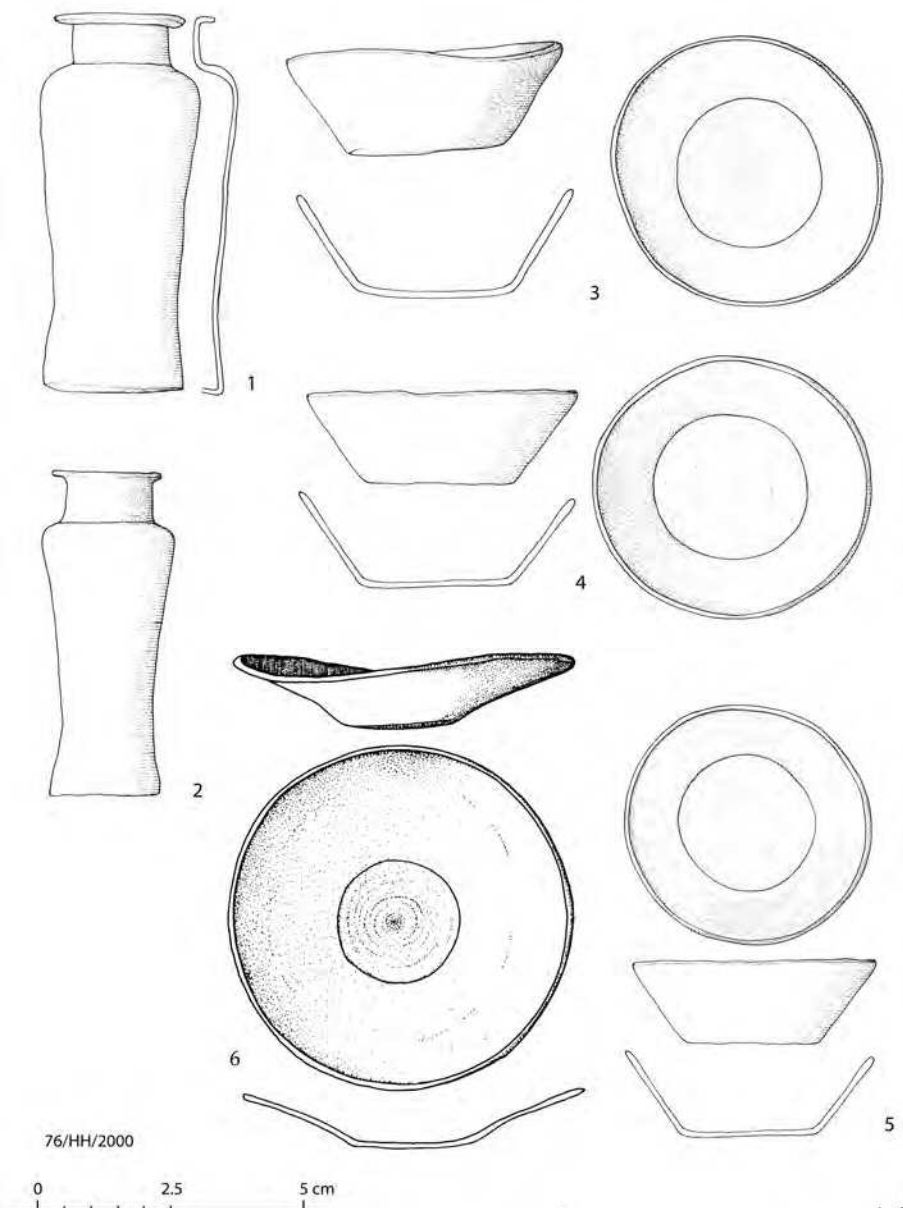
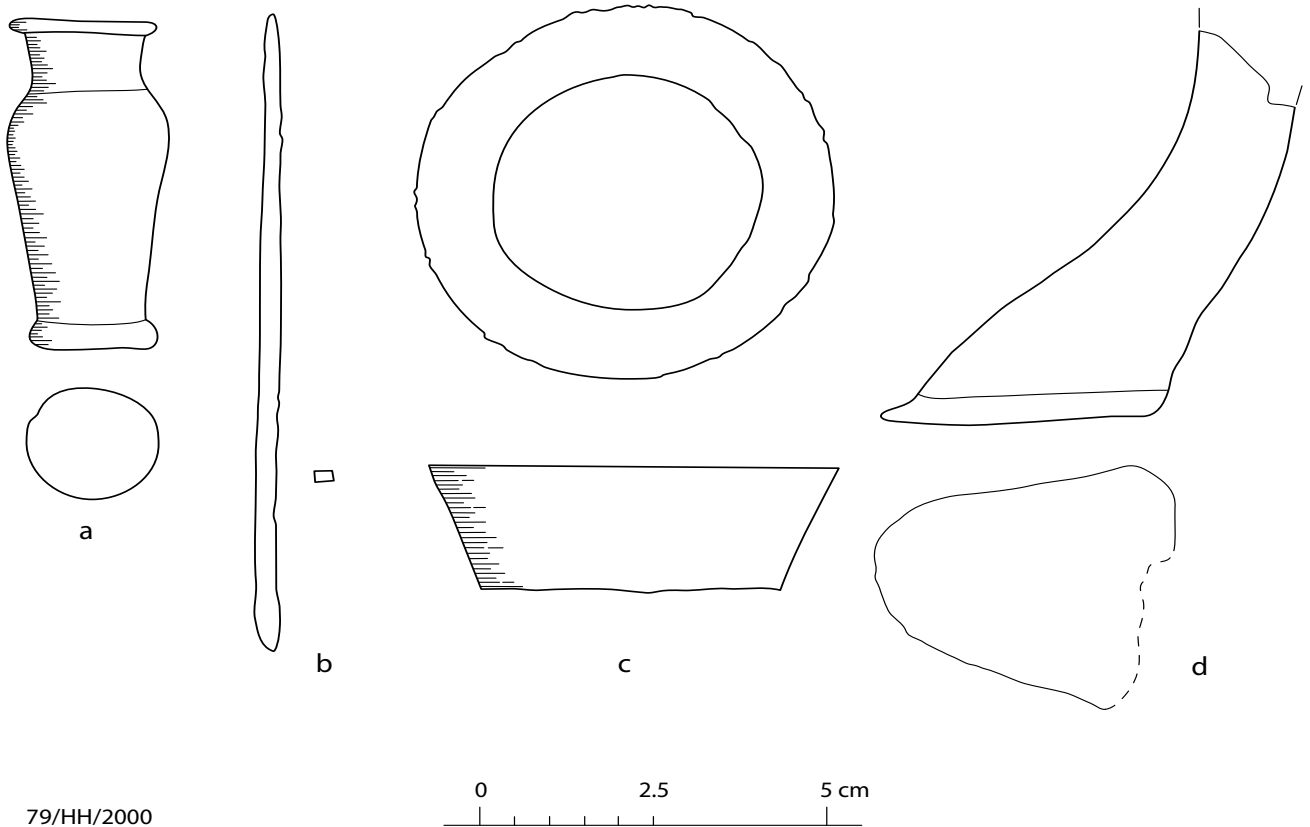


Fig. 6.3.124 Excav. No. 76/HH/2000



79/HH/2000

with the titles and the name of the owner, still partially readable: (j)r(j) Nḥn (n) z3b, ḥtmw bjtj, jm3ḥw, Ḳ3r 'keeper of Nekhen of the king, sealer of the king of Lower Egypt, well-provided, Qar'.

Fig. 6.3.125 Excav. No. 79/HH/2000

Excav. No. 81/HH/2000 (fig. 6.3.108, pl. 25.2)

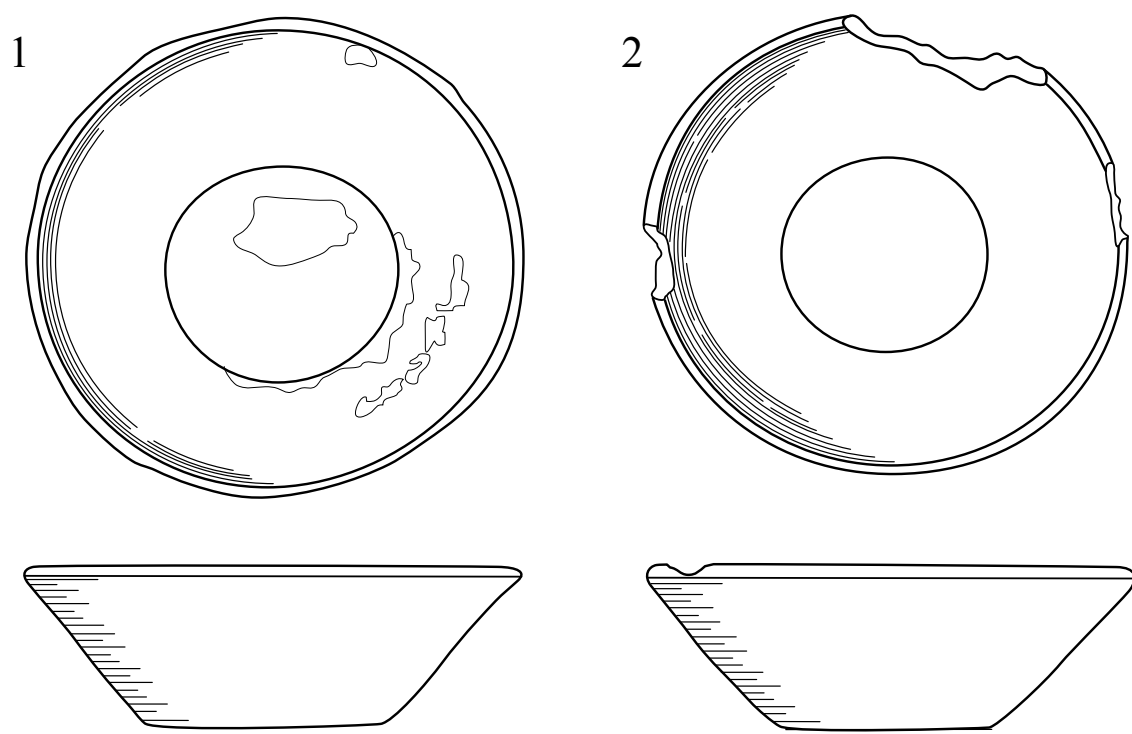
A miniature vase with flat bottom made of rock quartz, 3.3 cm high, with flat bottom of 1.8 cm and a opening of 3.1 cm. The inner cavity is 1.5 cm deep. It was found in the layer of wind blown sand in the northern part of the burial cavity, about 0.50 m above its floor. It is part of the 'Opening of the mouth' set.¹²

H. 3.3 cm, base w. 1.8 cm, opening diam. 3.1 cm, boring diam. 1.9 cm, and depth of boring 1.4 cm.

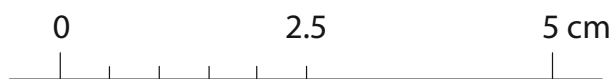


Fig. 6.3.126 Excav. No. 82/HH/2000

¹² For the examples of the *pesheskef*-sets see Martin-Pardey, *Grabbeigaben Hildesheim*, 6, 114–115; Hölzl, *Pyramiden Ägyptens*, 308–309, Cat. No. 144. For the *pesheskef* itself cf. R. van Walsem, 'The PSS-KF. An investigation of an ancient Egyptian funerary instrument', *OMRO* 59–60 (1978), 193–249.



82/HH/2000



Excav. No. 82/HH/2000 (figs. 6.3.126–127)

Two miniature copper vessels found in the burial pit, about 0.50 m above its floor.

82-1/HH/2000: base 1.8 cm, height 2.0 cm, opening 4.8 cm;

82-2/HH/2000: 1.7 cm, 1.8 cm and 4.4 cm.

Outer walls of both vessels were originally decorated with incised hieroglyphic inscriptions comprising the titles and the name of the owner, still partially readable: *(j)r(j) Nḥn (n) z3b, ḥtmw bjtj, jm3ḥw, K3r* 'keeper of Nekhen, sealer of the king of Lower Egypt, well-provided, Qar'.

Fig. 6.3.127 Excav. No. 82/HH/2000



Fig. 6.3.128 Excav. No. 83, a–b/HH/2000

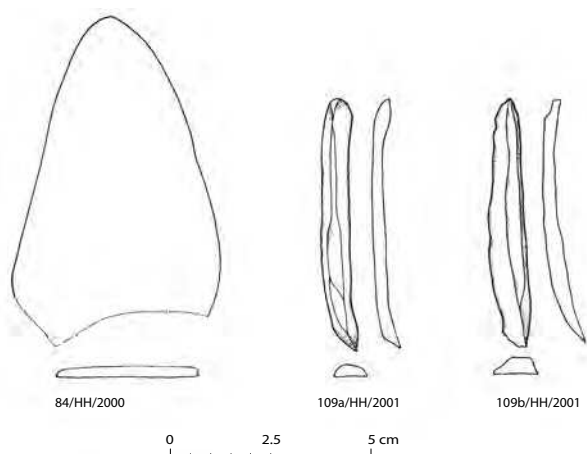


Fig. 6.3.129 Excav. No. 84/HH/2000

Excav. No. 83a, b/HH/2000 (figs. 6.3.118, 128)

Two travertine lids, found in the burial pit, about 0.50 m above its floor. The lid 83a is 7.2 cm in diam. and 0.3 cm in thickness, with the central circle roughened (diam. 3.8 cm, width 0.8 cm). The lid 83b is smaller, being only 4.5 cm in diam. and 0.4 m thick. Both lids have rounded ends.

Excav. No. 84/HH/2000 (fig. 6.3.129)

Fragment of a rhomboidal palette made of greyish schist, l. 7.5 cm, w. 5.5 cm, th. 0.5 cm, found in the burial pit, about 0.50 m above its floor.

Excav. No. 85/HH/2000 (fig. 6.3.130, pl. 31.3)

A travertine stand, part of a headrest setup, found on the floor of the burial pit. It is 12 cm high, the base has a diam. of 8 cm. The top of the stand has a diam. of 5.3 cm. Both the upper and lower surfaces are rough. The body is fluted vertically in a very delicate manner.¹³ It includes a column with hieroglyphic inscription with the titles and the name of Qar:

h̄tm(w) bjtj, smr wʿt(j), (j)r(j) Nhn (n) z3b, K3r.

‘Sealer of the king of Lower Egypt, sole companion, keeper of Nekhen of the king, Qar’.

Excav. No. 86, 1–15/HH/2000 (figs. 6.3.131–133, pls. 32–34)

Probably the most interesting and significant find from the burial chamber is, however, represented by a group of fifteen vessels deposited and found *in situ* in the southeastern corner of the room (86, 1–15/HH/2000). The vessels were almost completely preserved and most of them were still closed with intact Nile mud stoppers. Given the context, originally all of them must have been sealed. The vessels may be typologically divided into two groups. The first group consists of seven imitations of Syro-Palestinian amphorae – large, flat-bottomed jars, with or without two handles (nos. 1, 2, 3, 4, 5, 6 and 12).¹⁴

The stoppers of these six exemplars were intact and still bore readable imprints of a single cylinder seal, with finely carved

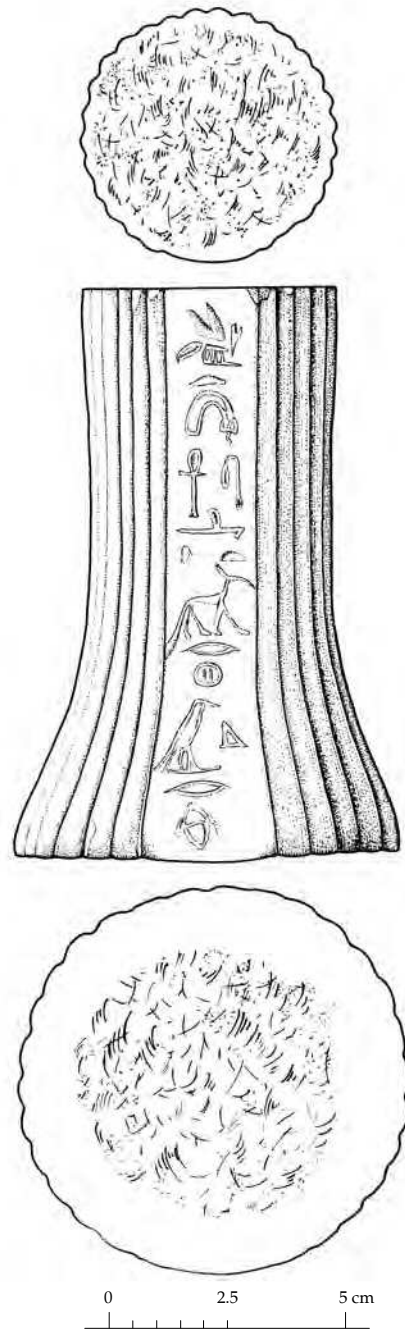
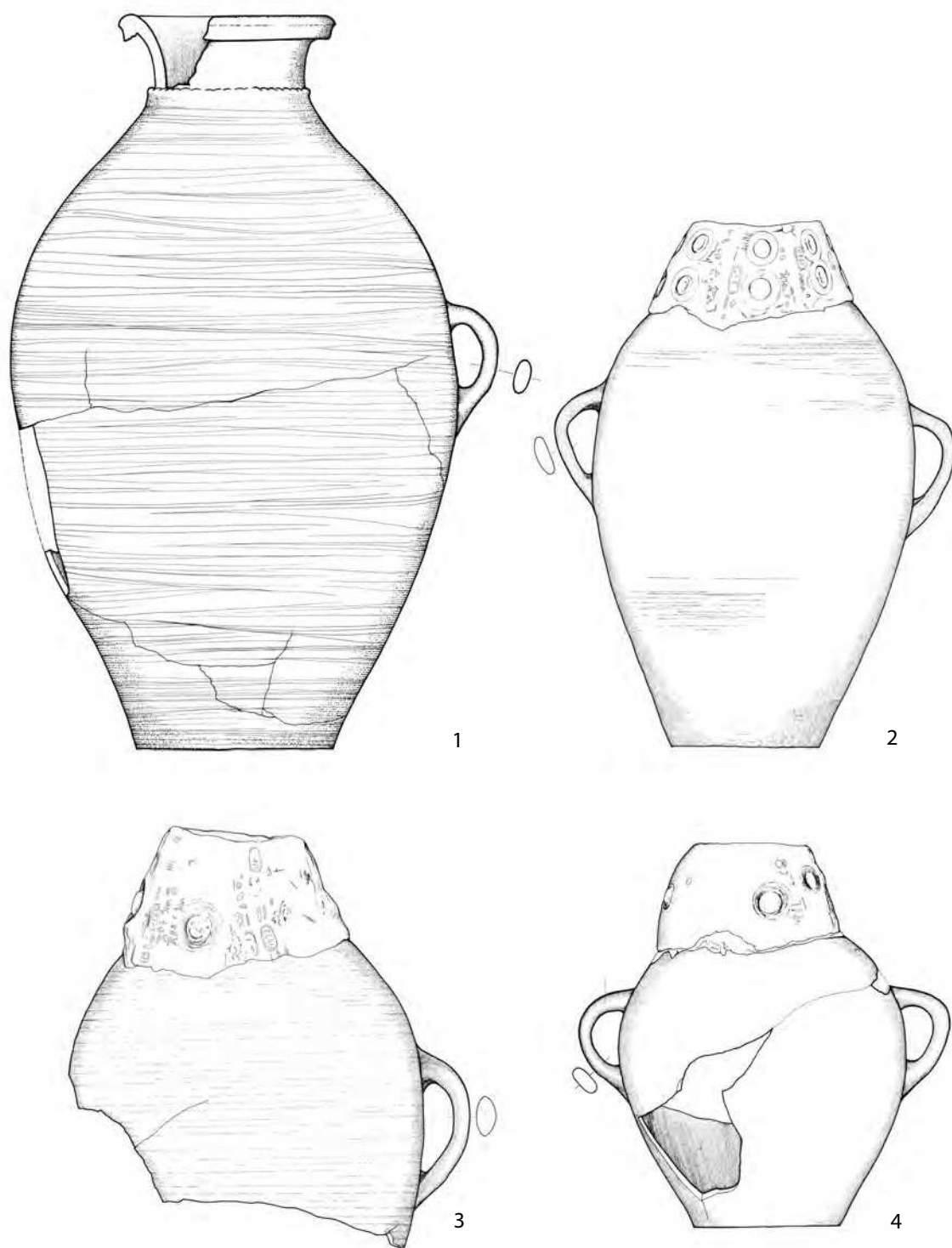


Fig. 6.3.130 Excav. No. 85/HH/2000

¹³ For parallel finds of headrest sets cf. Reisner, *Giza Necropolis I*, pl. 69g (G 4520); Hawass, *Hidden Treasures*, 19 – Tetiankhkem from Saqqara; Hölzl, ed. *Pyramiden Ägyptens*, 269, Cat. No. 86 – Babaef from Giza (G 5230); 308, Cat. No. 143 – from Western Thebes but made of wood; *Egyptian Art*, 452–453, Cat. No. 183; Martin-Pardey, *Grabbeigaben Hildesheim*, 6,1–2 (G D6), 6,3–4 (wood), 6,5–6 (wood), 6,7–8 (wood), 6,9–10 (G S80), 6,13–14 (wood), 6,15–16 (G S94/160?) or the examples from the complex of Kagemni, Firth, Gunn, *TPC II*, pl. 14.

¹⁴ For help with their interpretation I tender my thanks to Karin Sowada who treated this subject in her dissertation *Egypt in the Eastern Mediterranean During the Old Kingdom: A Re-Appraisal of the Archaeological Evidence*, Faculty of Arts dissertation, University of Sydney, 2001 (chapter 6 – ‘Imported ceramics in Egypt and their origins’). For the now accepted opinion that these vessels were locally produced imitations see already Kanawati, Hassan, *Teti Cemetery I*, 45 (TW2000:6), pl. 17 – tomb of Kaiemheset.

Comp. also D. L. Esse, *Subsistence, Trade, and social change in Early Bronze Age Palestine*, SAOC 50 (1991), 109–116; E. S. Marcus, *Maritime Trade in the southern Levant from earliest Times through the Middle Bronze IIA Period*, unpublished PhD dissertation, Oxford 1998, p. 49ff.; R. Greenberg, N. Porat, ‘A Third Millenium Levantine Pottery Production Center: Typology, Petrography, and Provenance of the Metallic Ware of Northern Israel and Adjacent Regions’, *BASOR* 301 (1996): 5–24.



86/HH/2000

0 5 10 cm

Fig. 6.3.131 Excav. Nos. 86, 1-4/HH/2000

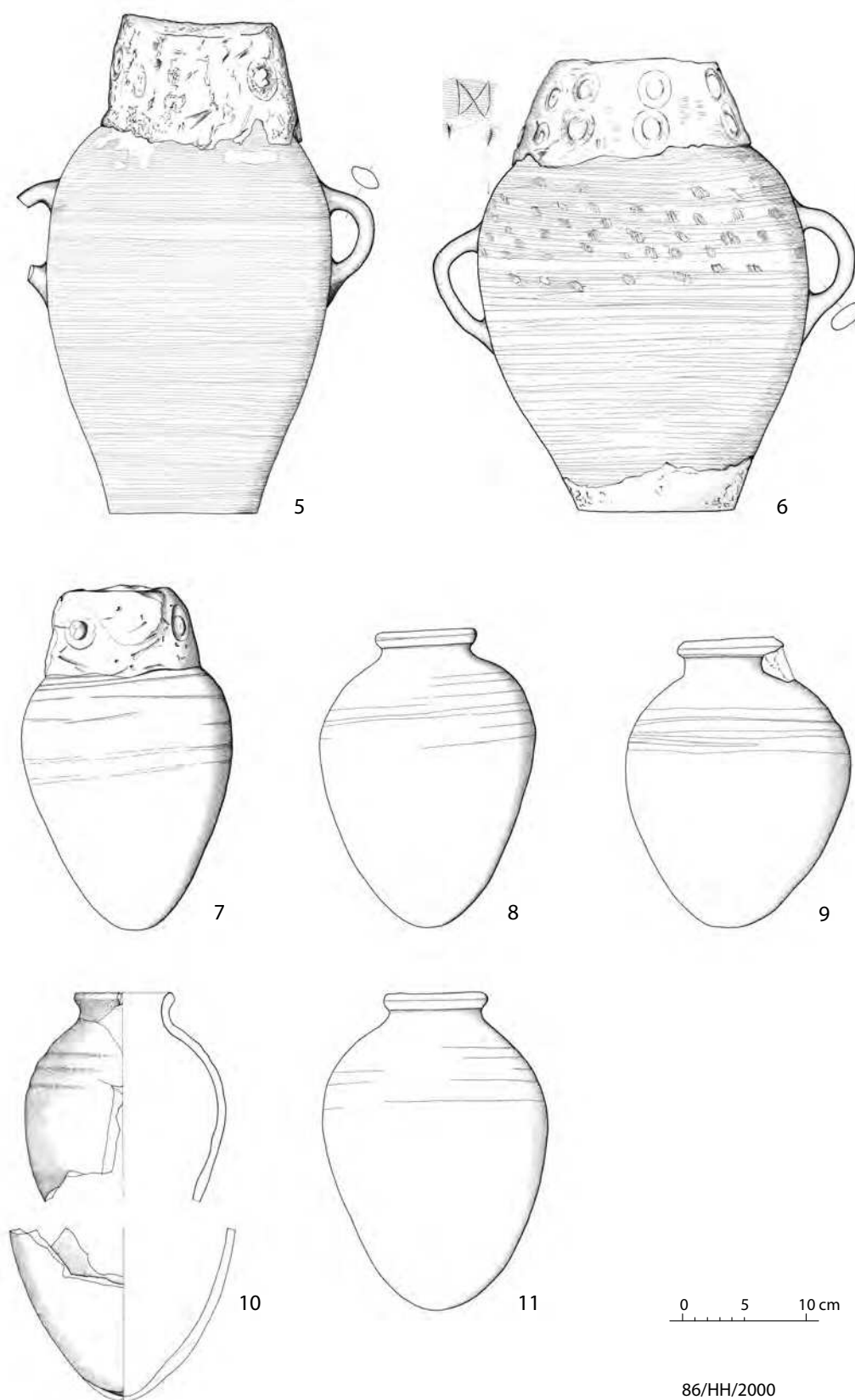


Fig. 6.3.132 Excav. Nos. 86, 5–11/HH/2000

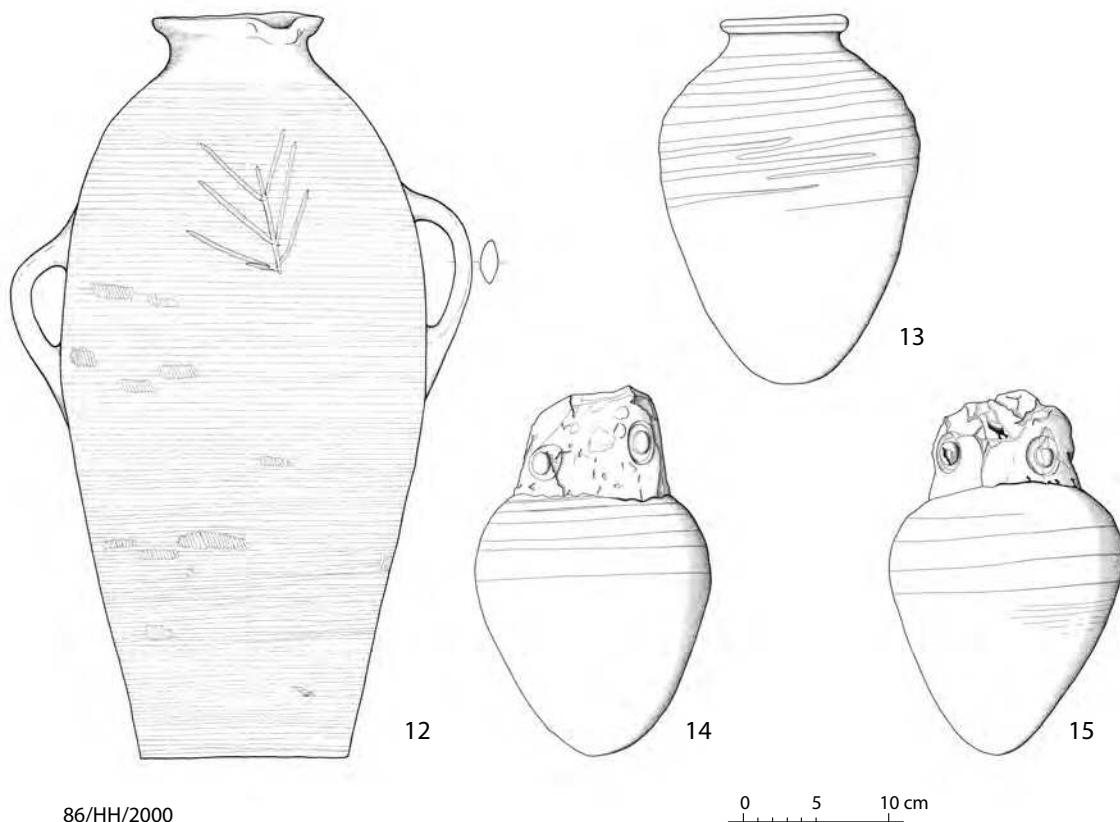


Fig. 6.3.133 Excav. Nos. 86, 12–15/HH/2000

hieroglyphic signs (figs. 6.3.134–136, pls. 32.3–5).¹⁵ The stoppers were stamped on their sides and imprinted by the seal many times from edge to edge in several directions which quite frequently resulted in a clutter of signs.¹⁶ The seal then must have been immersed in a vessel containing white colouring matter – traces of which are still easily discernible on individual signs. The original text of the seal may be tentatively reconstructed as follows:



1. *ḥm-nṯr M3ʿt* [m] *Mn-ḥḥ Nfr-k3-Rʿ, K3r;*
2. *ḥnt(j)-š* (m) *Mn-nfr Ppjj, Mrjj-Rʿ-nfr;*
3. *smr-wʿt(j), (j)r(j) Nḥn (n) z3b, ḥm-nṯr M3ʿt, K3r;*
4. [...] *(j)r(j) Nḥn (n) z3b, šps nswt, [...]*

1. 'Priest of Maat in the pyramid complex "Enduring is the life of Neferkara", Qar,

¹⁵ Compare the contemporary and almost identical find from Giza tomb shaft G 2381 A (Impy): Reisner, Smith, *Giza Necropolis II*, 54, fig. 54, pl. 52g.

¹⁶ See Williams, B., "Aspects of Sealing and Glyptic in Egypt Before the New Kingdom," in McGuire Gibson, R. D. Biggs, eds., *Seals and Sealing in the Ancient Near East*, Malibu 1977, 135–140.

2. khentiu-she (in)(the pyramid complex) "Eternal is the beauty of Pepy (I)", Meryrenefer,¹⁷
3. the sole companion, keeper of Nekhen of the king, priest of the goddess Maat, Qar,
4. [...], keeper of Nekhen of the king, noble of the king, [...].

According to the inscriptions, it may be estimated that the once applied cylinder seal of Qar Junior measured 8–9 cm in diameter and was about 6 cm long. It is interesting to observe that the inscriptions on the seal comprise, beside the names of the royal mortuary complexes, also the personal name of Qar Junior.¹⁸ The second group of nine smaller jugs with pointed bases and curved rims was also found partially sealed. In contrast to the first group, however, their stoppers bore no seal imprints. The stoppers were formed with a significantly less attention and stamped by the side wall of the seal resulting in a single row of 'button' like signs. The surface of the stoppers is strongly irregular and this prohibited their later stamping. The jugs resemble in shape and size the vessels encountered in the burial chamber of Senedjemib (Shaft 'A', see below). Several of them were found broken, and all of them – even those that were complete and sealed – were equally empty. They were made of local Nile silt.

Excav. No. 86-1/HH/2000 (*fig. 6.3.131*)

The amphora is 67 cm high, max. diam. of the body 20.5 cm, the diam. of the base 18.2 cm, sherd th. 0.6 cm and inner diam. of its opening 20 cm.

A two-handled amphora (one handle broken off) with flat base and out-turned neck with a roll rim. At place where the neck joins the body of amphora there is a plastic collar imitating rope decoration.

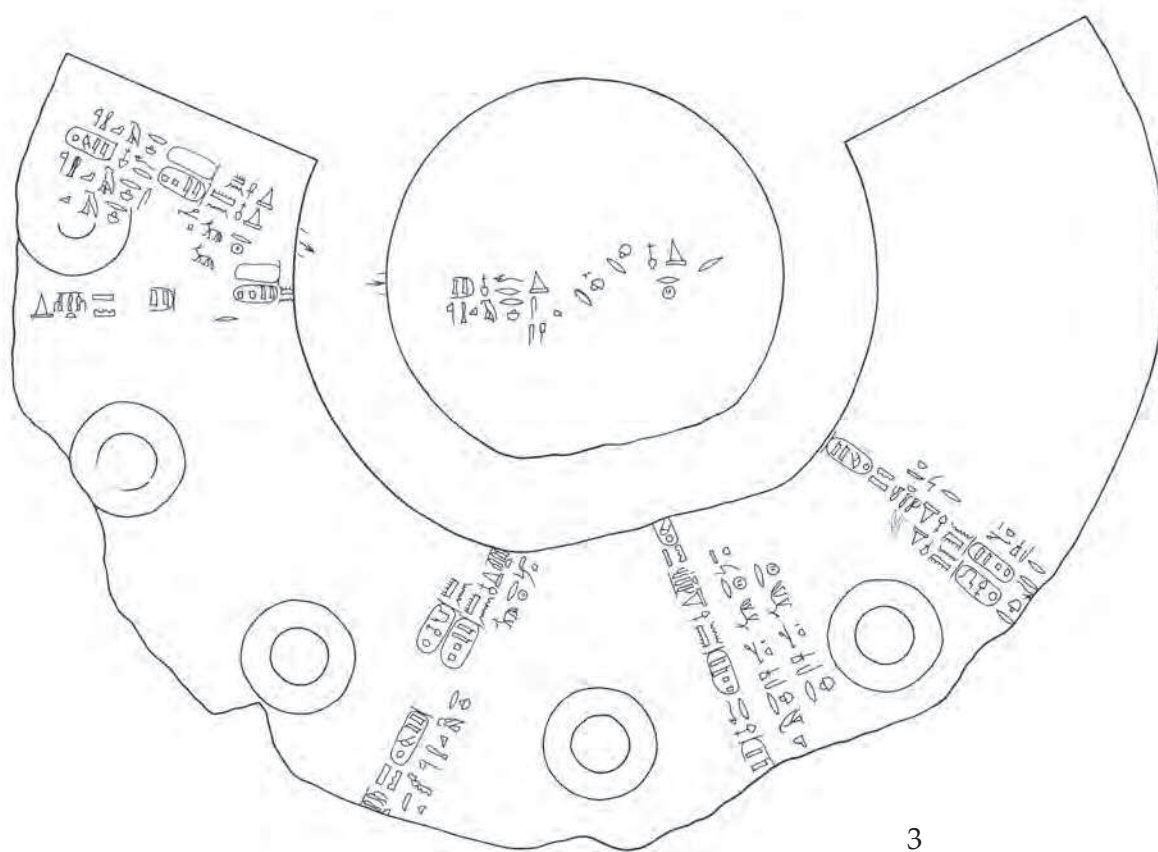
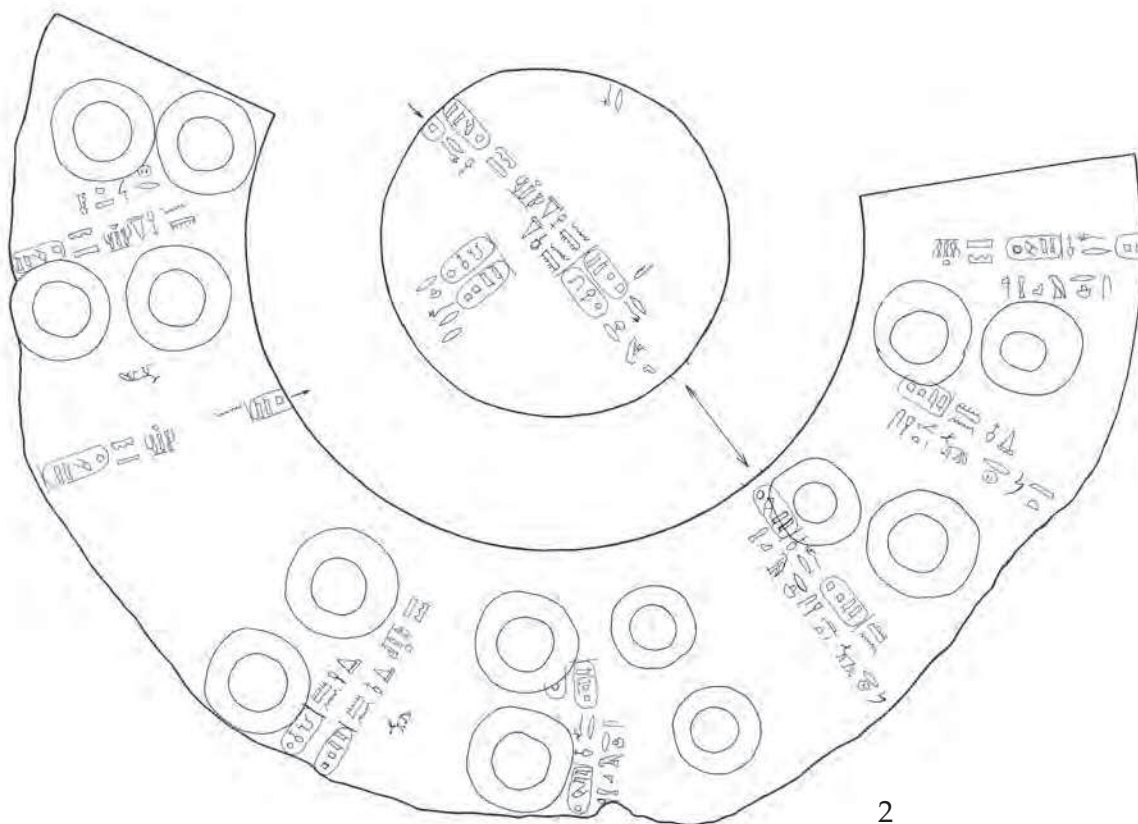
The surface of the vessel has a red-orange colour, with a partly preserved white wash (outside 2.5YR 5/8, inside 10R 5/8) and shows clear traces of the 'combing' technique typical for imported amphorae known from the Old Kingdom Egypt. Given the bad firing, the softness of the sherd and its appearance on the fracture (Nile Silt A), it must be concluded that it is Egyptian copy of foreign vessels.

This type of vessels has been classified as a 'collared rim pithoi' with a narrow neck. Re-evaluation of this type of pottery has shown that it occurs from the Chalcolithic period onwards and its geographic distribution includes Cyprus, northern Syria, Anatolia,

¹⁷ We have only indirect and very debatable evidence for the assumption that Meryrenefer is the alternative personal name of Qar Junior. During the course of excavation of the tomb complex of the vizier Qar in 1995 there were discovered two huge adjacent limestone blocks with an incised inscription featuring a similar personal name:



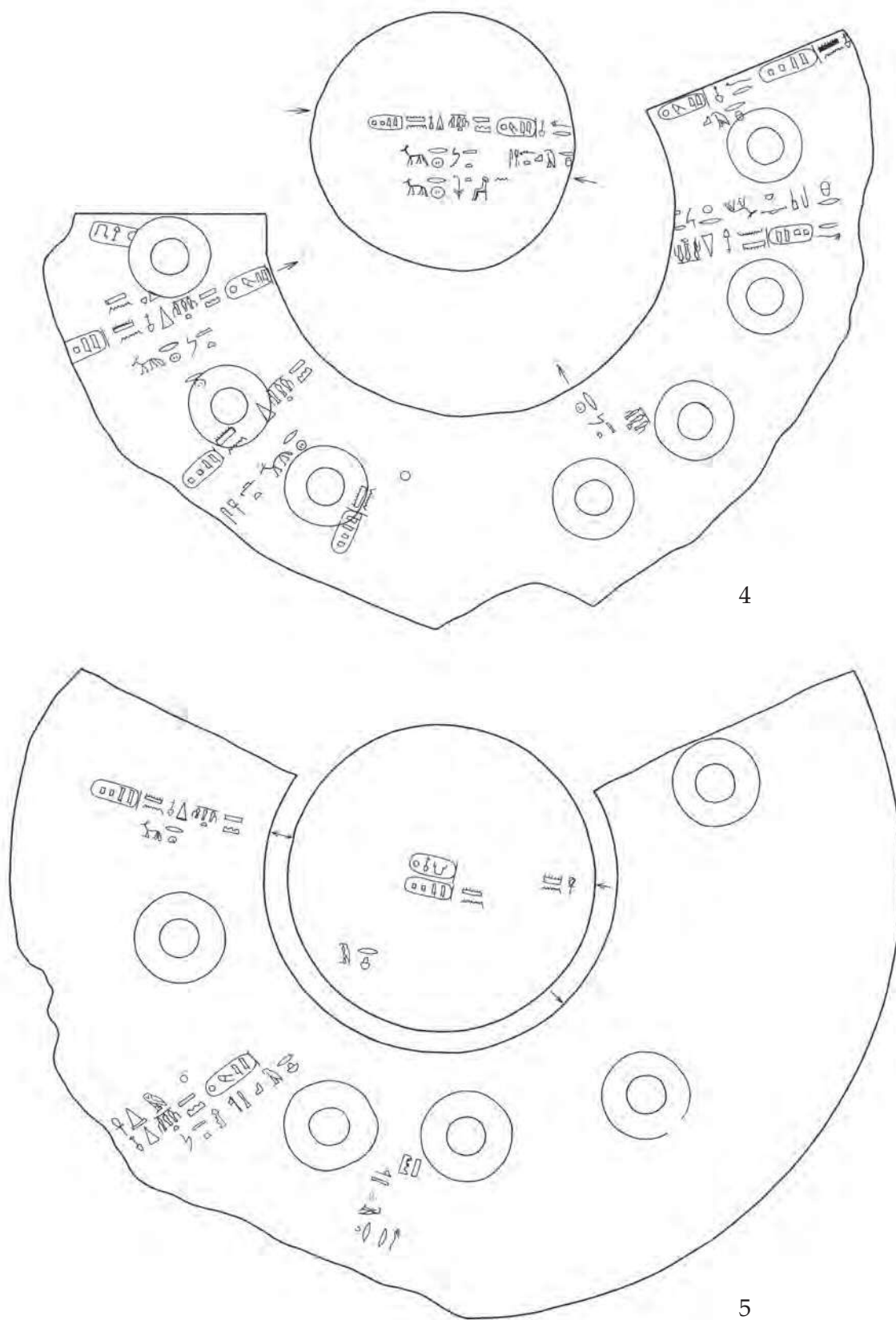
¹⁸ Possibly indicating that the jars had either been deposited during his own lifetime, or that the provisions came from his storerooms after his death and his officials sealed the burial in this way. For the non-royal seals of the Old Kingdom see Kaplony, *Rollsiegel I*, 11–19.



86/HH/2000

0 5 10 cm

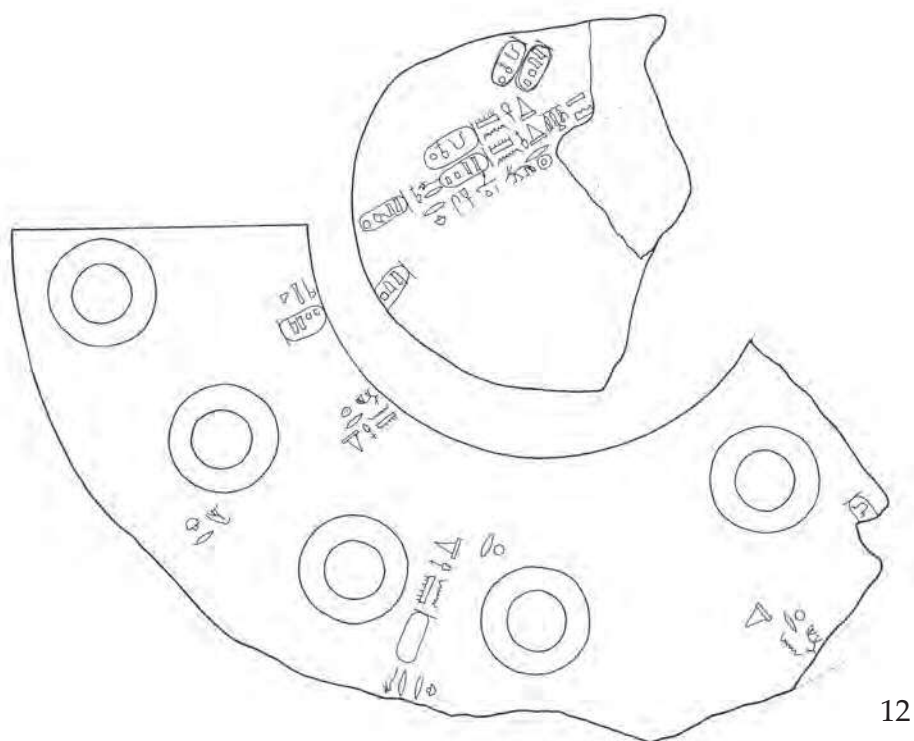
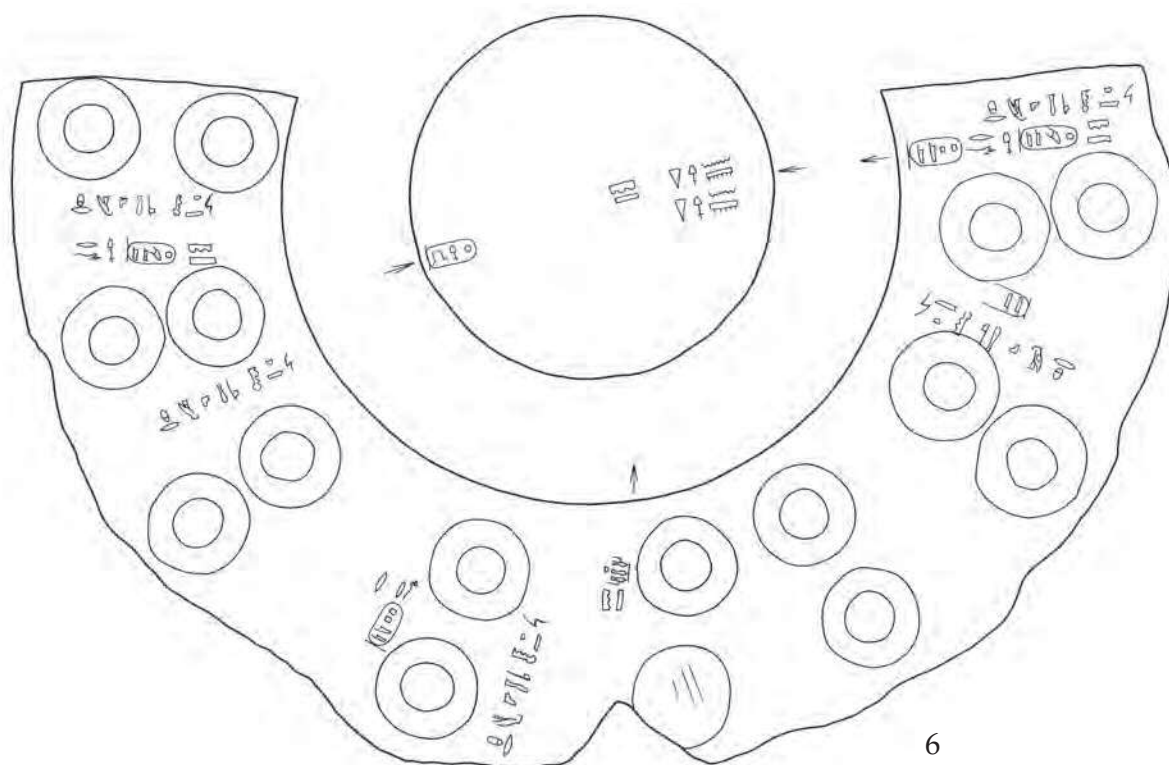
Fig. 6.3.134 Excav. Nos. 86, 2-3/HH/2000, details of the stoppers



86/HH/2000

0 5 10 cm

Fig. 6.3.135 Excav. Nos. 86, 4-5/HH/2000, details of the stoppers



86/HH/2000

0 5 10 cm

Fig. 6.3.136 Excav. Nos. 86, 6, 12/HH/2000, details of the stoppers

the middle and upper Euphrates and Israel.¹⁹ Close contemporary and typological parallels to this item have been found at several sites in Israel.²⁰ What makes the Abusir piece so unusual is the combination of the vessel type with two handles [*sic*], making its Egyptian provenance and modification even more probable.

Excav. No. 86-2/HH/2000 (*figs. 6.3.131, 134, pl. 32.1*)

Vessel 49 cm high (including the stopper); the max. diam. of the body is 30.5 cm and diam. of the base 14 cm. The max. diam. of the stopper is 19 cm, its height being 9 cm, its top is flat.

This is a flat-bottomed, amphora with two handles and a Nile mud stopper still *in situ*. Its side walls are decorated with an imprint of the side wall of a seal, the imprints being arranged in two rows (diam. 3.5 cm); it still preserves clear traces of the original seal imprint with the name and the titles of Qar Junior running vertically.

The surface of the vessel has a red-orange colour with the remains of a white wash (outside 2.5YR 5/8, inside 10R 5/8) and traces of the fine 'combing' technique. It is probably made of Nile Silt A.

Excav. No. 86-3/HH/2000 (*figs. 6.3.131, 134, pl. 32.2*)

The original height of the amphora may be estimated to be about 50 cm (including the stopper) and its max. diam. is 32 cm. The max. diam. of the stopper is 21 cm, its height being 12 cm, its top is flat. It is a flat-bottomed amphora with two handles and a Nile mud stopper still *in situ*. The lower part of the vessel was found broken into small fragments, The side walls are decorated with an imprint of the side wall of a seal, the imprints being arranged in two rows (diam. 3.5 cm). On the surface are still well-preserved traces of the original seal imprint with the name and the titles of Qar Junior running vertically.

The surface of the vessel has an orange – red colour (outside 5YR 5/8, inside 10R 6/8), but it still preserves traces of the original white wash and shows clear traces of the fine 'combing' technique. It is probably made of Nile Silt A.

Excav. No. 86-4/HH/2000 (*fig. 6.3.131, 135, pl. 32.3*)

Flat-bottomed jug with two handles and a Nile mud stopper still *in situ*. Its height is 35 cm (including the stopper), sherd th. 0.6 cm and the max. diam. of the body is 26.5 cm, the base measuring 13.5 cm. The max. diam. of the stopper is 17 cm, its height being 10 cm, its top is flat. The sides of the stopper are decorated with an imprint of the side wall of a seal (diam. 3.5 cm). On the surface are still well-preserved traces of the original white seal imprint with the name and the titles of Qar Junior running vertically.

The surface of the vessel is polished and has a greyish colour (outside Gley 1 8/104, inside 2.5YR 4/6), bad firing, fabric is Nile Silt B1.

¹⁹ E. Yannai, 'The origin and distribution of the collared-rim pithos and krater: a case of conservative pottery production in the Ancient Near East from the Fourth to the First Millennium BCE', in A. M. Maeir, P. de Miroschedji, eds., *"I Will Speak the Riddles of Ancient Times"*. *Archaeological and Historical Studies in Honour of Amihai Mazar on the Occasion of His Sixtieth Birthday*. Vol. 1 (Winona Lake, 2006), 89–112.

²⁰ *Ibid.*, 92–93, fig. 2.



Excav. No. 86-5/HH/2000 (fig. 6.3.132, 135)

Fig. 6.3.137 Excav. No. 93/HH/2000

Flat-bottomed jug with two handles and Nile mud stopper still *in situ*. The jug is 46 cm high (including the stopper), the base measures 14 cm in diam. and the max. diam. of the body is 27 cm. The surface of the vessel shows clear traces of the 'combing' technique. The max. diam. of the stopper is 19 cm, its height being 11 cm high, its top is flat. The side walls are decorated with imprints of the side wall of a seal (diam. 3.5 cm). On the surface are still well-preserved traces of the original white seal imprint with the name and the titles of Qar Junior running vertically.

The surface of the vessel has a greyish colour (outside Gley 1 8/104, inside 2.5YR 4/6), bad firing, fabric is Nile Silt B1 and shows clear traces of the fine 'combing' technique.

Excav. No. 86-6/HH/2000 (fig. 6.3.132, 136)

Flat-bottomed jug with two handles and Nile mud stopper still *in situ*. The vessel is 41 cm high (including the stopper) and

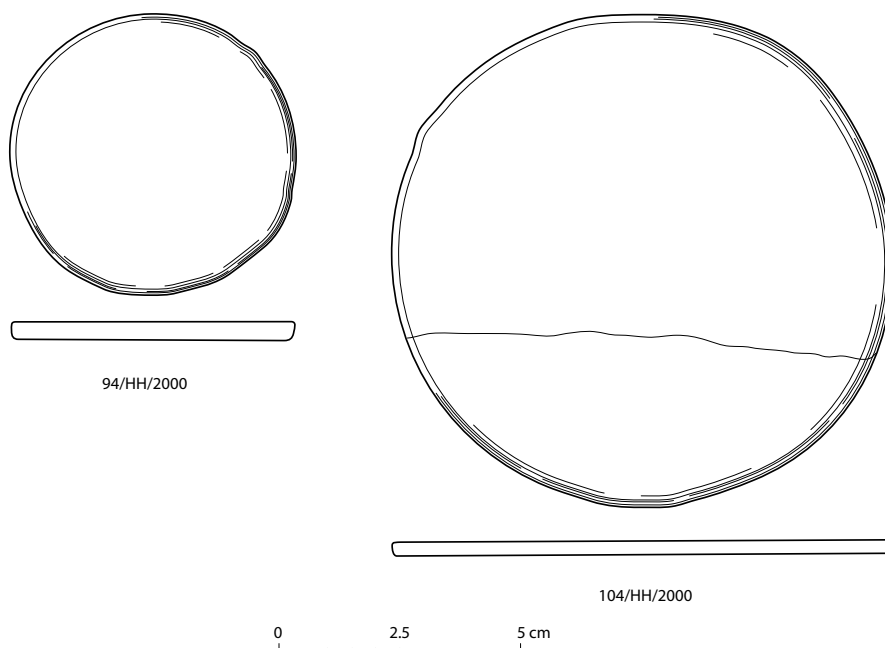
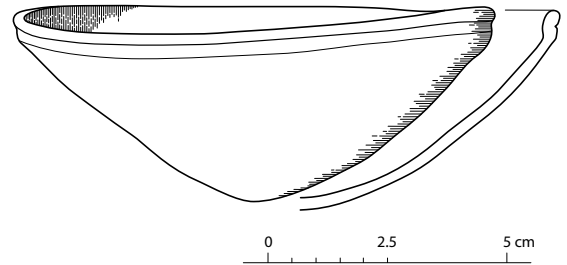


Fig. 6.3.138 Excav. Nos. 94/HH/2000 and 107/HH/2001



◄ Fig. 6.3.139 Excav. No. 38/HH/2000

▲ Fig. 6.3.140 Excav. No. 38/HH/2000

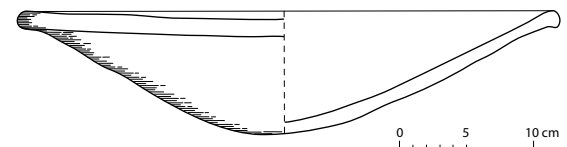
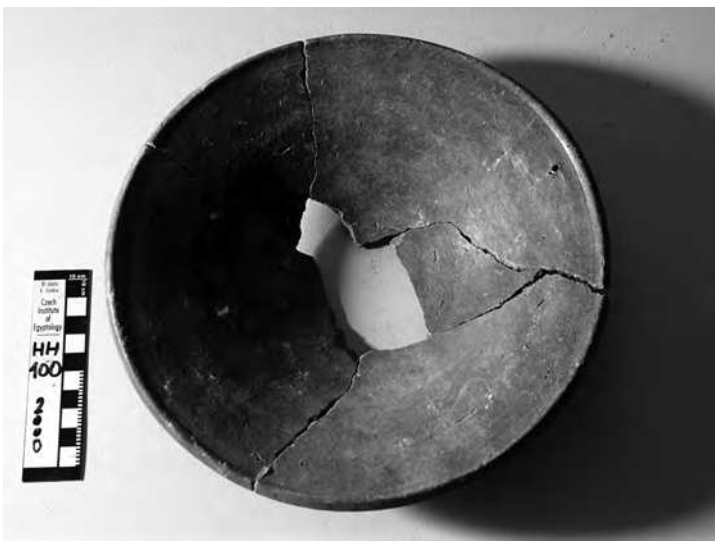
its max. diam. is 29.5 cm, the base measuring 14 cm in diam. The whole surface of the jug has been well smoothed. The max. diam. of the stopper is 21.5 cm, its height being 8.5 cm high, its top is flat. The side walls are decorated with two rows of imprints of the side wall of a seal (diam. 3.5 cm). On its surface are still discernible faint white traces of the original seal imprint with the name and the titles of Qar Junior running vertically.

The surface of the vessel has an orange – red colour (outside 5YR 5/8, inside 10R 6/8) and preserves traces of the original white wash. The surface of the vessel shows clear traces of the ‘combing’ technique. The upper body is decorated with an incised sign for labris and also has a series of fine notches. It is probably made of Nile Silt B.

Excav. No. 86-7/HH/2000 (*fig. 6.3.132, pls. 32.4, 33*)

Jug with a rounded base and mud stopper still *in situ*. The jug is 31.5 cm high (including the stopper) and its max. diam. is 19 cm. The max. diam. of the mud stopper is 14 cm, its height being 8 cm, its top is flat and the surface uneven as a result of its shaping by hand. The side wall are decorated with an imprint of the side wall of a seal (diam. 3.5 cm).

The entire surface of the jug has been well smoothed, yet the coiling is easily discernible especially on the upper part of the body. The fabric is likely Nile Silt A. The surface of the vessel is greyish-white (outside Gley 1 8/104, inside 2.5YR 4/6).



◄ Fig. 6.3.141 Excav. No. 100/HH/2001

▲ Fig. 6.3.142 Excav. No. 100/HH/2001

Excav. No. 86-8/HH/2000 (*fig. 6.3.132, pl. 33*)

Jug with a rounded base, out-turned neck and out-turned angular rim. The jug is 28.5 cm high and its max. diam. is 20.5 cm. The inner diam. of the opening is 8 cm. The surface of the jug is well smoothed, but the coils are discernible in the upper part of the body. The material is likely Nile Silt A. The surface of the vessel is greyish-white (outside Gley 1 8/104, inside 2.5YR 4/6).

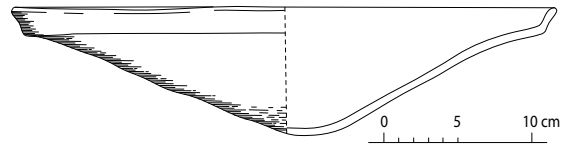


Fig. 6.3.143 Excav. No. 101/HH/2001

Excav. No. 86-9/HH/2000 (*fig. 6.3.132, pl. 34*)

Jug with a rounded base, vertical neck and out-turned angular rim. The jug is 26.5 cm high and its max. diam. is 21 cm. Inner diam. of the opening is 7.5 cm. The surface of the jug is carefully smoothed, but the coils are discernible in the upper part of the body. The material is likely to be Nile Silt A. The surface of the vessel is greyish-white (outside Gley 1 8/104, inside 2.5YR 4/6).

Excav. No. 86-10/HH/2000 (*fig. 6.3.132*)

Jug with a rounded base, out-turned neck and out-turned rounded rim. The jug was found broken into several pieces. Its estimated height is 32 cm, max. diam. of the body 18.5 cm. The inner diam. of the opening is 8 cm. The surface of the jug is carefully smoothed, the coils are discernible only its upper part. The fabric is likely to be Nile Silt A. The surface of the vessel is greyish-white (outside Gley 1 8/104, inside 2.5YR 4/6).

Excav. No. 86-11/HH/2000 (*fig. 6.3.132, pl. 34*)

Jug with a rounded base, out-turned neck and out-turned angular rim. The jug is 28.5 cm high and its max. diam. is 20.5 cm. Inner diam. of the opening is 8 cm. The surface of the jug is carefully smoothed and coils are discernible only its upper part. The fabric is likely to be Nile Silt A. The surface of the vessel is greyish-white (outside Gley 1 8/104, inside 2.5YR 4/6).

Excav. No. 86-12/HH/2000 (*fig. 6.3.133, pls. 32.5, 34*)

Flat-bottomed amphora with two handles, out-turned neck and out-turned angular rim with a small spout. The vessel is

Fig. 6.3.144 Excav. No. 102/HH/2001



53 cm high and its max. diam. is 27 cm, the base measuring 15 cm. The entire surface of the jug has been carefully smoothed. The inner diam. of the opening is 10.5 cm. The surface of the vessel shows clear traces of the 'combing' technique. The upper body is decorated with an incised, 9 cm high sign resembling Gardiner's sign M 34. The vessel also has a series of fine notches occurring in different places. The surface of the vessel has an orange – red colour (outside 5YR 5/8, inside 10R 6/8), still preserves traces of the original white wash and shows clear traces of the fine 'combing' technique.

Excav. No. 86-13/HH/2000 (*fig. 6.3.133, pl. 34*)

Jug with a rounded base, out-turned neck and out-turned angular rim. The jug is 28 cm high and its max. diam. is 20 cm. The inner diam. of the opening is 8 cm. The surface of the jug is carefully smoothed, but the coils are discernible in the upper part of the body. The fabric is likely to be Nile Silt A. The surface of the vessel is greyish-white (outside Gley 1 8/104, inside 2.5YR 4/6).

Excav. No. 86-14/HH/2000 (*fig. 6.3.133*)

Jug with a rounded base and mud stopper still *in situ*. The jug is 31.5 cm high (including the stopper) and its max. diam. is 20.5 cm. The max. diam. of the mud stopper is 14 cm, its height being 8 cm, its top is flat and the surface uneven as a result of its shaping by hand. The side walls are decorated with an imprint of the side wall of a seal (diam. 3.5 cm). The whole surface of the jug has been well smoothed yet the coiling is easily discernible, especially on the upper part of the body. The fabric is likely to be Nile Silt A. The surface of the vessel is greyish-white (outside Gley 1 8/104, inside 2.5YR 4/6).

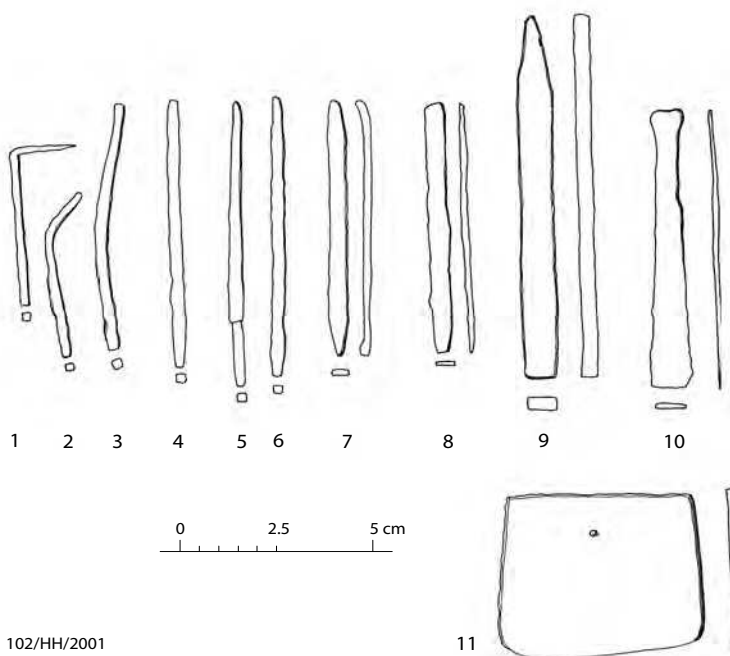


Fig. 6.3.145 Excav. No. 102/HH/2001

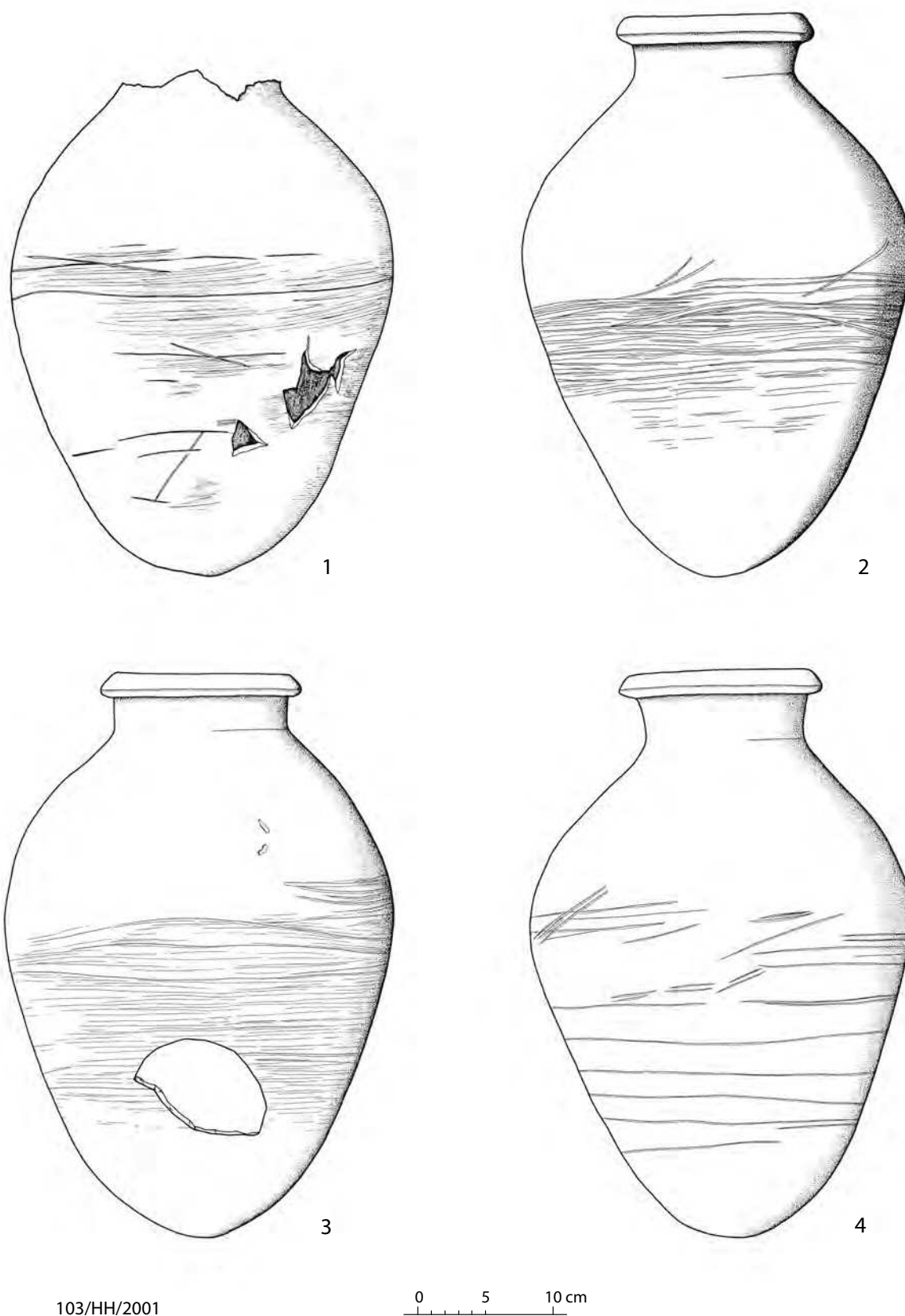
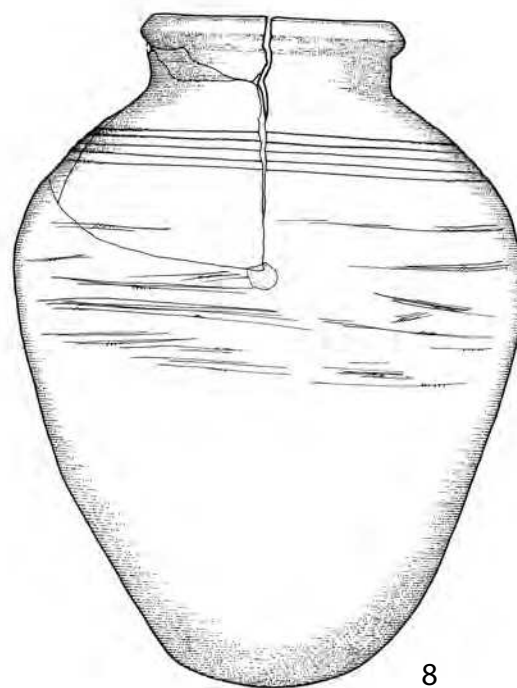
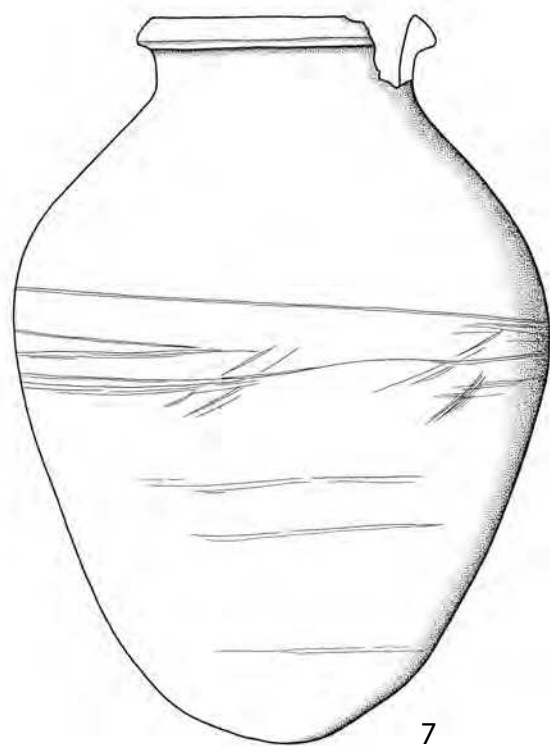
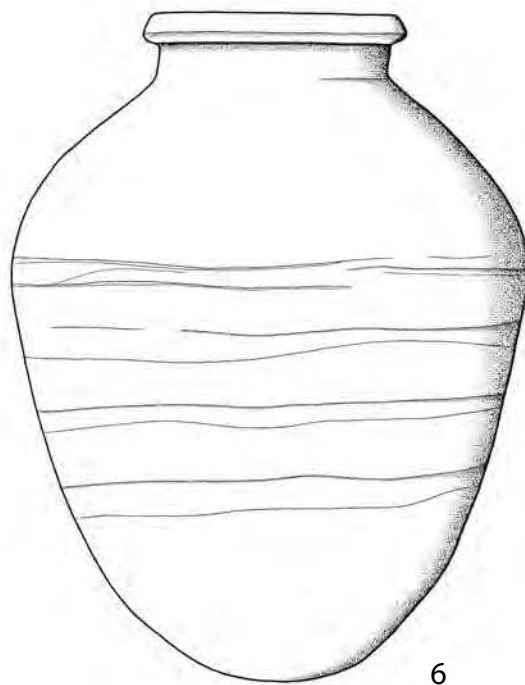
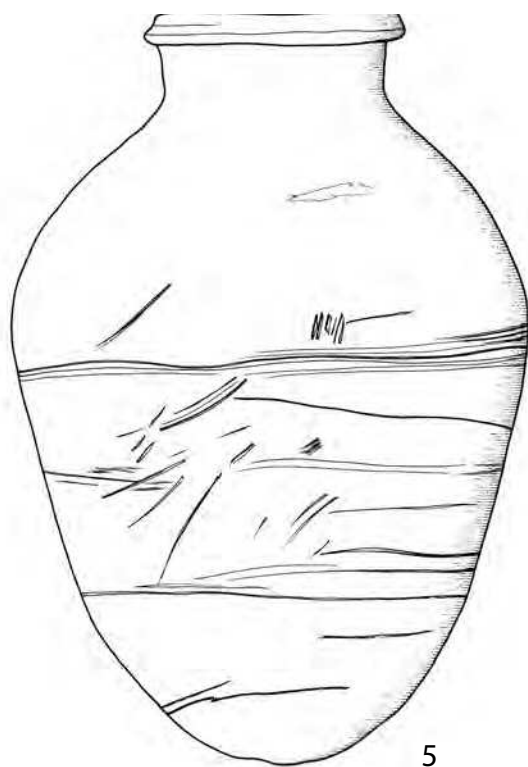


Fig. 6.3.146 Excav. No. 103, 1-4/HH/2001



103/HH/2001

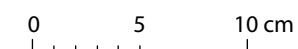


Fig. 6.3.147 Excav. No. 103, 5–8/HH/2001

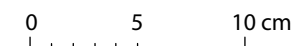
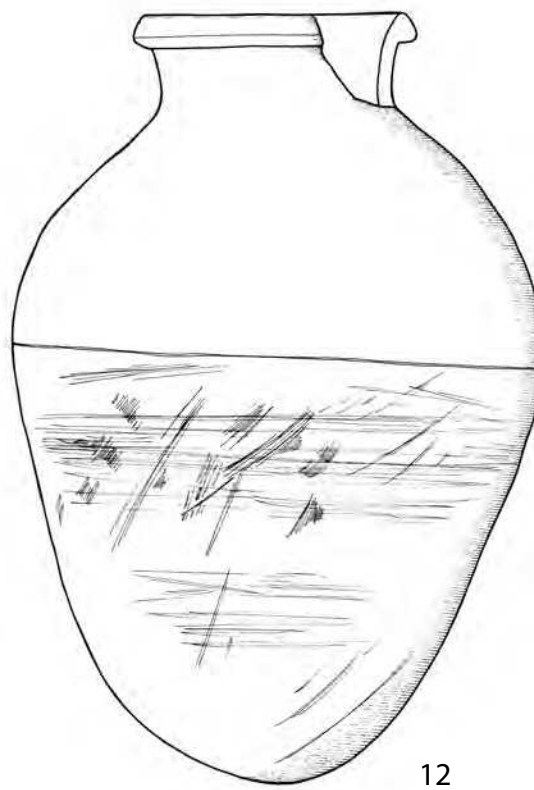
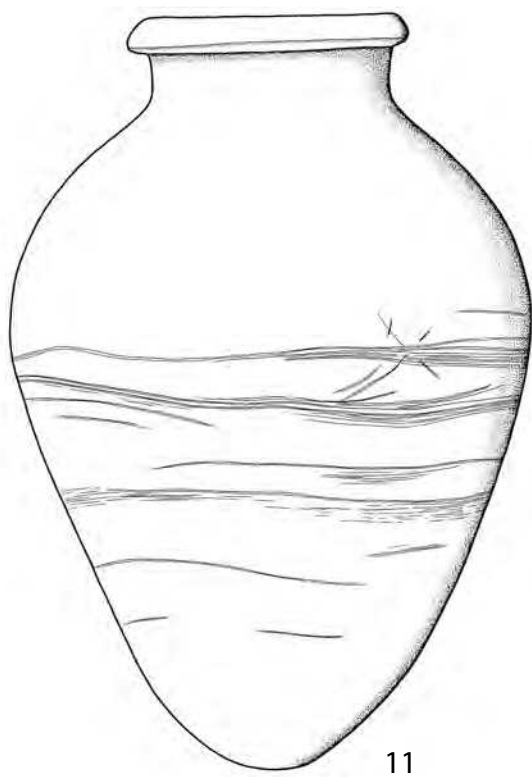
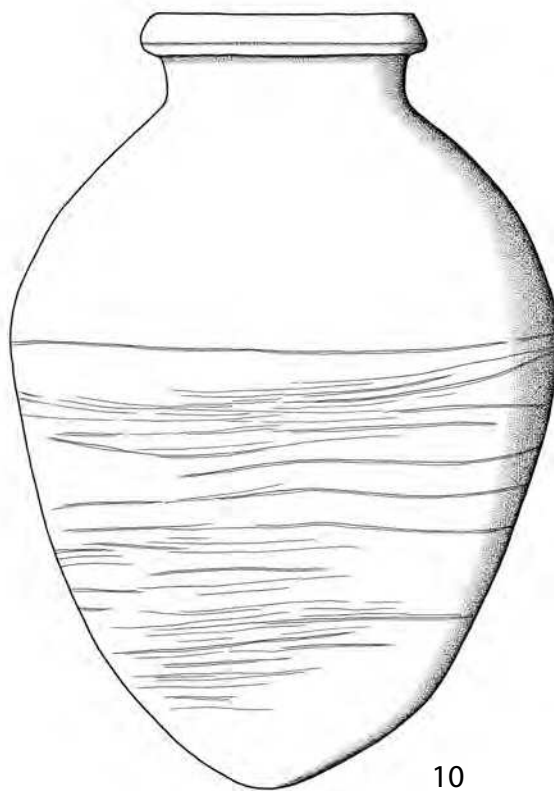


Fig. 6.3.148 Excav. No. 103, 9–12/HH/2001

Excav. No. 86-15/HH/2000 (fig. 6.3.133)

Handless jug with rounded base and a Nile mud stopper still *in situ*. The jug is 30 cm high (including the stopper) and its max. diam. is 19.5 cm. The whole surface of the jug has been well smoothed yet the coiling is still discernible especially on the upper part of the body. The max. diam. of the stopper is 12.5 cm, its height being 7.5 cm high, its top is rounded and surface uneven as a result of its shaping by hand. The side walls are decorated with an imprint of the side wall of a seal (diam. 3.5 cm). The fabric is likely Nile Silt A. The surface of the vessel is greyish-white (outside Gley 1 8/104, inside 2.5YR 4/6).

The pottery analysis favours the hypothesis that all the vessels were produced locally in Egypt unlike other examples known from contemporary tombs of the highest officials of the state known from previous historical period; mainly from the Fourth Dynasty Giza.²¹ On the other hand, they demonstrate clearly the knowledge of these containers for the highly valued imports of Syro-Palestinian wines which were used exclusively for the consumption of the elite of the day. The vessels emphatically demonstrate the ways in which the middle ranking officials of the capital could emulate the 'afterlife elite status' of the highest officials by including in their burial equipment commodities with a clear social significance.

Excav. No. 90/HH/2000 (figs. 6.3.122 and 137)

A copper, flat-bottomed cup, h. 2.3 cm, diam. of the base 2.8 cm, w. of the opening 5.8 cm, found at the bottom of the burial pit.

Excav. No. 93/HH/2000 (fig. 6.3.108, pl. 29.2)

An open cup with plain sides made of obsidian. It was found in the layer of wind blown sand in the northern part of the burial cavity. Part of the 'Opening of the Mouth' set.

H. 3.5 cm, base diameter 1.9 cm, mouth diameter 4.3 cm, boring diameter 2.6 cm, and depth of boring 1.6 cm

Excav. No. 94/HH/2000 (fig. 6.3.138)

Travertine lid with rounded rim, diam. 6 cm, th. 0.4 cm. Found to the east of the burial pit.

6.3.6 Finds from the burial chamber of Senedjemib (Burial chamber 'A')

The following artefacts were brought to light during the excavation of the shaft:

Excav. No. 38/HH/2000 (figs. 6.3.139–140)

A Meidum bowl with an upright angular rim, made of Nile Silt A, h. 8.5 cm, diam. of the opening 20 cm, discovered in the fill of Shaft A, in the layer of brownish sand, at a depth of 1.18 m below the floor of Iykai's chapel.

Most finds coming from the burial chamber of Senedjemib were originally deposited to the north of the sarcophagus, close to the entrance connecting the chamber with the entrance. This was also the only place where parts of the original burial equipment were found *in situ*.

²¹ Brovarski, *Senedjemib I*, 82–83, inv. No. 35-7-41 and pl. 57a, b and fig. 73.



Fig. 6.3.149 Excav. No. 104/HH/2001

Many more artefacts were brought to light during the clearing of the chamber, mainly from the fill of sand to the east of the robbed sarcophagus, where tomb robbers concentrated their activity when they were cutting through the eastern wall of the sarcophagus chest.

Excav. No. 100/HH/2001 (*figs. 6.3.141–142*)

A bowl made of Nile Silt B 1 with rounded base and angular rim, h. 5.0 cm, diam. 24.5 cm, very bad firing, polished inside and outside, found in the fill of the burial chamber.

Excav. No. 101/HH/2001 (*fig. 6.3.143*)

A bowl made of Nile Silt B 1 with rounded base and out-turned angular rim, h. 9.5 cm, diam. 39 cm, very bad firing, polished inside and outside, found in the fill of the burial chamber.

Excav. No. 102/HH/2001 (*figs. 6.3.144–145*)

A set of copper implements found in the fill of the burial chamber. The group consists of 11 complete and at least 5 broken implements – 3 hooks, 4 flat chisels, 2 cross-cut chisels, 1 necked adze blade and 1 axe head:

Hooks

102-1/HH/2001: 4.0 × 0.2 cm,

102-2/HH/2001: 6.0 × 0.2 cm,

102-3/HH/2001: 6.2 × 0.2 cm.

Flat chisels

102-4/HH/2001: 6.6 × 0.2 × 0.1 cm,

102-5/HH/2001: 7.0 × 0.2 × 0.1 cm,

102-6/HH/2001: 6.8 × 0.2 × 0.1 cm,

102-8/HH/2001: 6.0 × 0.5 × 0.2 cm.

Cross-cut chisels

102-7/HH/2001: 6.3 × 0.4 × 0.2 cm,

102-9/HH/2001: 8.9 × 0.7 × 0.4 cm.

Necked adze blade

102-10/HH/2001: 6.9 × 1.0 × 0.1 cm.

Axe head

102-11/HH/2001: $4.0 \times 4.8 \times 0.2$ cm.

Excav. No. 103/HH/2001

A total of twelve, necked ovoid jars piled in several layers, which started 60 cm below the top of the sarcophagus lid (Excav. No. 103, 1-12/HH/2001), to the north of the sarcophagus, in the northwest corner of the burial chamber.²² These jars were made of marl clay mixed with limestone particles and had a pale yellow-white surface with a slip of the same hue (outside Gley 1 8/N, inside 10R 4/4). All of them were filled with two-layers of carefully laid mud. The filling clearly proceeded in two stages. In stage 1, the lower third of the jug was filled with mud and left for a while to dry. It was followed by adding another layer of mud, of approximately the same thickness, carefully smoothed around the interior walls of the vessel. In some instances it was possible to inspect the fill more in detail and it seems that the two layers were divided by white, powder-like substance. Closer analysis has shown that there were no differences between the layers in terms of their composition - which is identical with Nile silt.

Excav. No. 103-1/HH/2001 (*fig. 146, pl. 35*)

Jug with a rounded base with the neck and the rim missing. The incomplete jug is 27 cm high and its max. diam. is 20.5 cm. The surface of the jug is carefully smoothed, but in its middle part the surface is granulated with irregular, roughly horizontal lines. Th. of the sherd is 1 cm.

Excav. No. 103-2/HH/2001 (*fig. 146, pl. 35*)

Jug with a rounded base, out-turned neck and out-turned angular rim. The jug is 29.5 cm high and its max. diam. is 21 cm. The inner diam. of the opening is 9 cm. The surface of the jug is carefully smoothed, but in its middle part the surface is granulated with irregular, roughly horizontal lines.

Excav. No. 103-3/HH/2001 (*fig. 146, pl. 35*)

Jug with a rounded base, vertical neck and out-turned angular rim. The jug is 29.5 cm high and its max. diam. is 21 cm. The inner diam. of the opening is 9 cm. The surface of the jug is carefully smoothed, but in its middle part the surface is granulated with irregular, roughly horizontal lines.

Excav. No. 103-4/HH/2001 (*fig. 146, pl. 35*)

Jug with a rounded base, out-turned neck and out-turned angular rim. The jug is 30 cm high and its max. diam. is 20.5 cm. The inner diam. of the opening is 9 cm. The surface of the jug is carefully smoothed, but in its lower part the surface is granulated with irregular, roughly horizontal lines.

Excav. No. 103-5/HH/2001 (*fig. 147, pl. 36*)

Jug with a rounded base, out-turned neck and out-turned angular rim. The jug is 28 cm high and its max. diam. is 19.5 cm.

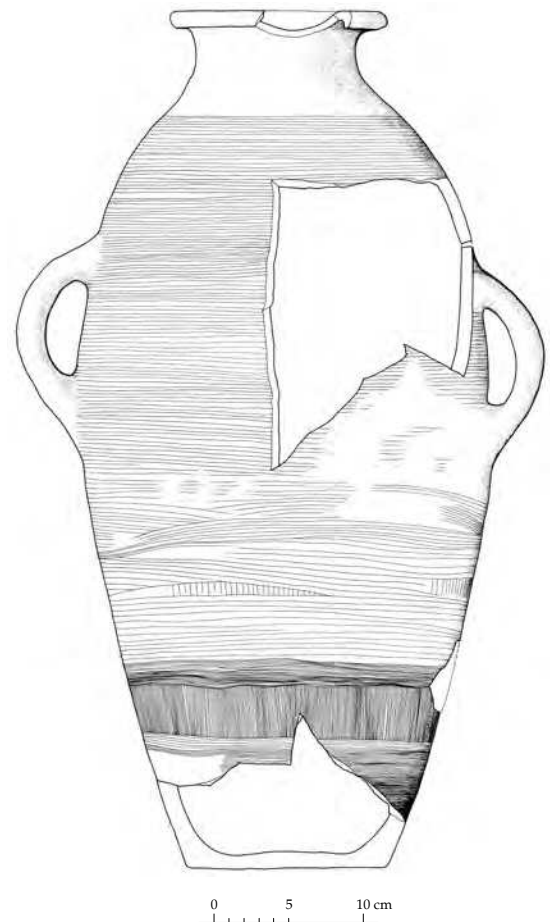


Fig. 6.3.150 Excav. No. 105/HH/2001

²² For similar finds in contemporary tombs see, for instance, Kanawati, Hassan, *Teti Cemetery I*, 28 (TNE94:102-105), pl. 10; Kanawati, *Teti Cemetery VIII*, 69 (TNE96:218) and 74 (TNE96:243), pls. 60c, 65f, 67d, 74e.



Fig. 6.3.151 Excav. No. 106/HH/20001

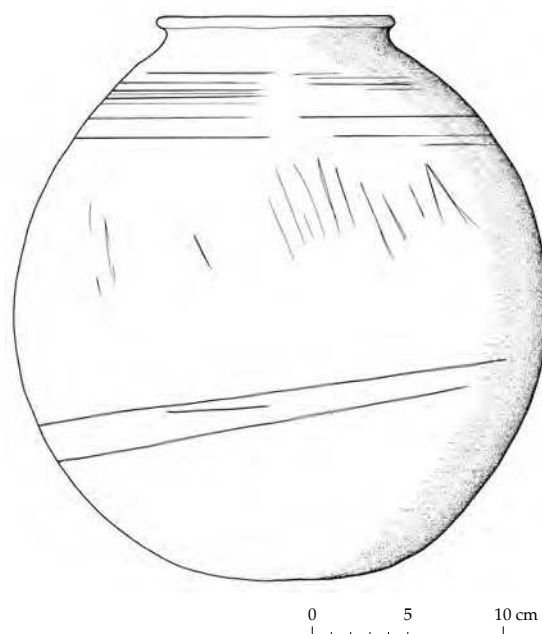


Fig. 6.3.152 Excav. No. 106/HH/20001

The inner diam. of the opening is 8.5 cm. The surface of the jug is carefully smoothed, but in its lower part the surface is granulated with irregular, roughly horizontal lines.

Excav. No. 103-6/HH/2001 (*fig. 147, pl. 36*)

Jug with a rounded base, horizontal neck and out-turned angular rim. The jug is 25 cm high and its max. diam. is 19 cm. The inner diam. of the opening is 7.5 cm. The surface of the jug is carefully smoothed.

Fig. 6.3.153 Excav. No. 108/HH/20001



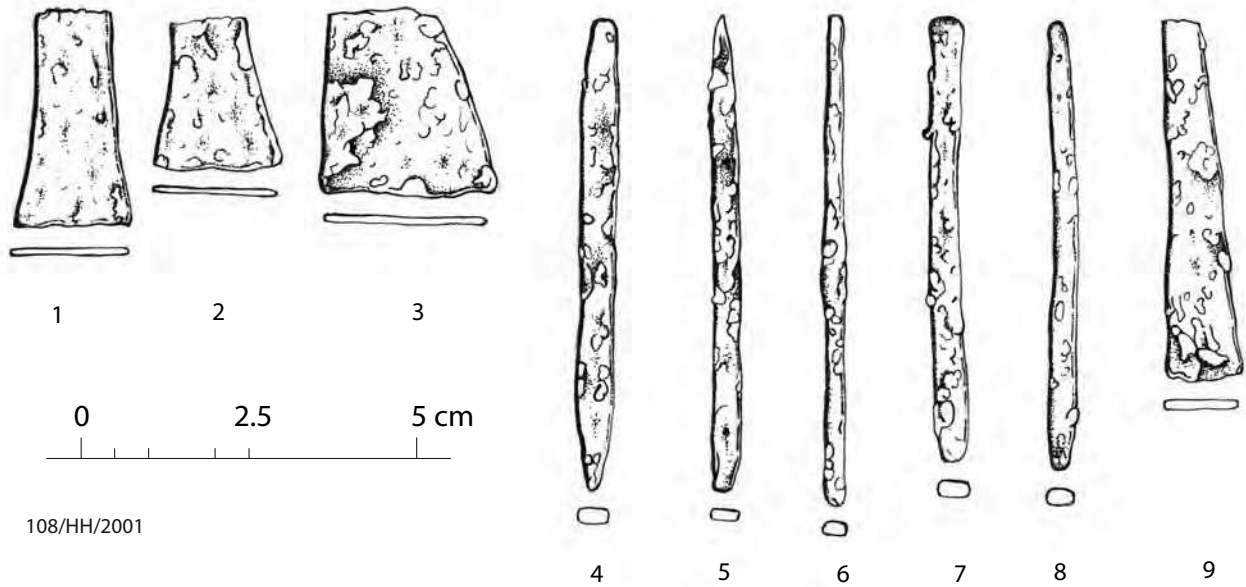


Fig. 6.3.154 Excav. No. 108/HH/2001

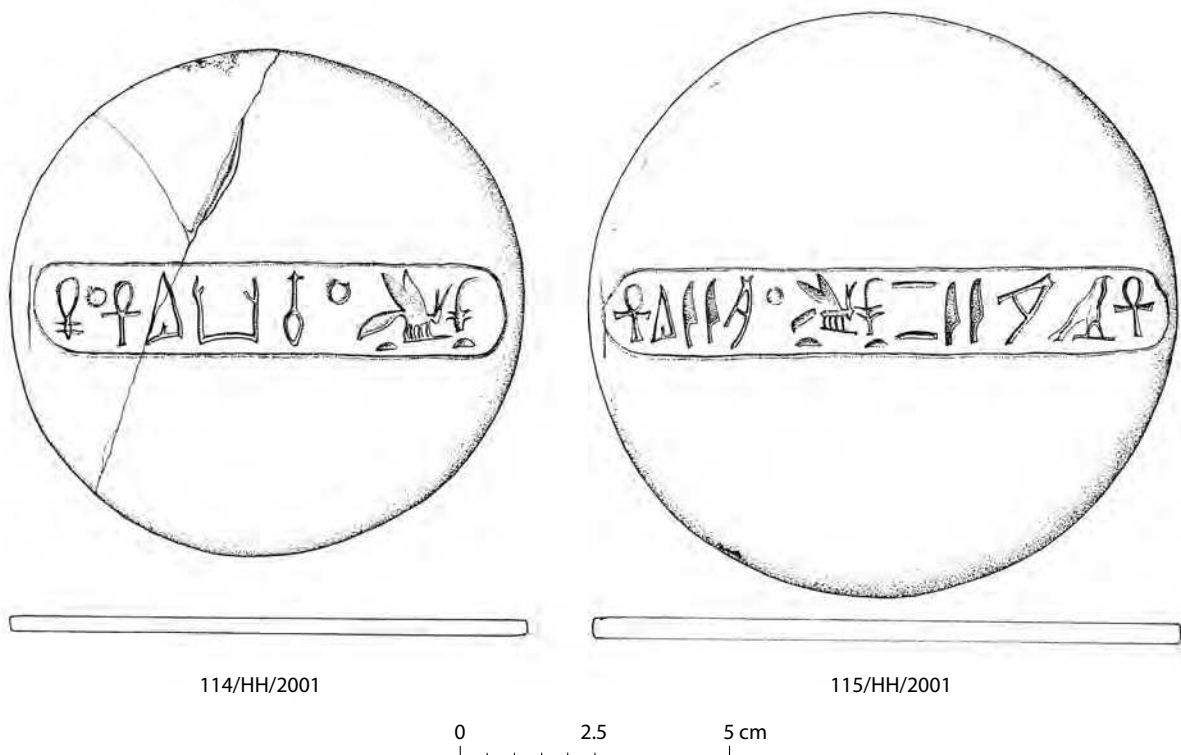
Excav. No. 103-7/HH/2001 (*fig. 147, pl. 36*)

Jug with a rounded base, out-turned neck and out-turned angular rim. The jug is 27 cm high and its max. diam. is 20.5 cm. The inner diam. of the opening is 9 cm. The surface of the jug is carefully smoothed, but in its middle part the surface is granulated with irregular, roughly horizontal lines.

Excav. No. 103-8/HH/2001 (*fig. 147, pl. 36*)

Jug with a rounded base, vertical neck and out-turned angular rim. The jug is 25 cm high and its max. diam. is 19.5 cm. The inner diam. of the opening is 9 cm. The surface of the jug is carefully smoothed, but its upper part is granulated with

Fig. 6.3.155 Excav. No. 114/HH/2001



irregular, roughly horizontal lines. Below the neck are running four fine grooves.

Excav. No. 103-9/HH/2001 (*fig. 148, pl. 37*)

Jug with a rounded base, vertical neck and angular rim. The jug is 27 cm high and its max. diam. is 20.5 cm. The inner diam. of the opening is 8.5 cm. The surface of the jug is carefully smoothed, but its surface is granulated with irregular, mostly horizontal lines. In its opening is still sitting a copper bowl (Excav. No. 104/HH/2001) which could not be removed safely despite its careful conservation treatment.

Excav. No. 103-10/HH/2001 (*fig. 148, pl. 37*)

Jug with a rounded base, out-turned neck and out-turned angular rim. The jug is 29 cm high and its max. diam. is 20.5 cm. The inner diam. of the opening is 9 cm. The surface of the jug is carefully smoothed, but its lower part is granulated with irregular, roughly horizontal lines.

Excav. No. 103-11/HH/2001 (*fig. 148*)

Jug with a rounded base, vertical neck and out-turned rounded rim. The jug is 28 cm high and its max. diam. is 19.5 cm. The inner diam. of the opening is 9 cm. The surface of the jug is carefully smoothed, but its lower part is granulated with irregular, roughly horizontal lines.

Excav. No. 103-12/HH/2001 (*fig. 148, pl. 37*)

Jug with a rounded base, out-turned neck and out-turned rounded rim. The jug is 28.5 cm high and its max. diam. is 20 cm. The inner diam. of the opening is 9 cm. The surface of the jug is carefully smoothed, but its lower part is granulated with irregular, horizontal and vertical lines.

Excav. No. 104/HH/2001 (*fig. 6.3.149, pl. 37*)

Strongly corroded copper bowl found closing the opening of vessel 103-9/HH/2001. It is 3.5 cm high and 14 cm w. across its opening. Despite our efforts, it was not possible to remove it from the vessel without risking serious damage to it.

Excav. No. 105/HH/2001 (*fig. 150, pl. 38.1*)

Flat-bottomed amphora with two handles, out-turned neck with a thickened and round-folded outside rim. The amphora is 58.5 cm high, max. diam. 29 cm, the diam. of the base is 13.5 cm and inner diam. of its opening 12.5 cm. The surface of the vessel shows clear traces of the 'combing' technique which is extremely fine in the lower quarter of the body, where also a clearly defined, 3.5 cm wide band with very fine vertical combing can be observed. The surface of the vessel has a red-orange colour, with remains of the white wash (outside 10R 5/8, Gley 1 4/5GY) and traces of the fine 'combing' technique. It is probably made of Nile Silt A.

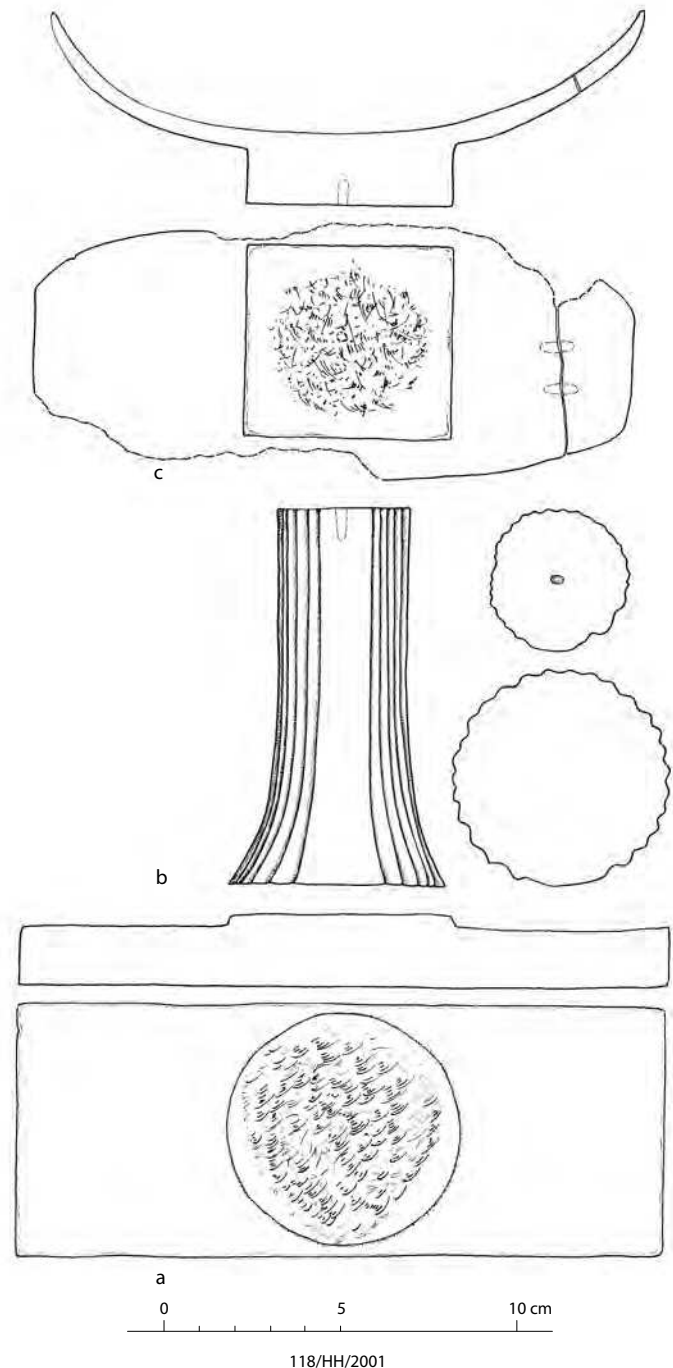


Fig. 6.3.156 Excav. No. 118/HH/2001 2/3

Excav. No. 106/HH/20001 (figs. 6.3.151–152)

Large bag-shaped jar, 29.5 cm high, max. diam. 28 cm, with a rounded base and out-turned neck and angular rim 0.5 cm high. It was found at a depth of 12 m in the fill of the shaft. It had been broken into several pieces: given the weathered sherd breaks, probably in antiquity.

The following items were found in the burial chamber, to the east of the sarcophagus, in the layer of *raksha* and sand:

Excav. No. 107/HH/2001 (figs. 6.3.138, pl. 38.2)

A travertine lid, diam. 10.5 cm, th. 0.3 cm, nicely polished and with a rounded edge.

Excav. No. 108/HH/2001 (figs. 6.3.153–154)

A set of copper implements consisting of axe heads (completely preserved items: 3), flat chisels (2), cross-cut chisels (2), arrow-head chisels (1), pin (1) and another at least 11 implements preserved in fragments.

Axe heads

108-1/HH/2001: 3.6 × 2.0 × 0.1 cm,

108-2/HH/2001: 2.6 × 2.2 × 0.1 cm,

108-3/HH/2001: 3.0 × 3.0 × 0.1 cm.

Cross-cut chisels

108-4/HH/2001: 7.8 × 0.6 × 0.2 cm,

108-5/HH/2001: 7.8 × 0.5 × 0.1 cm.

Pin

108-6/HH/2001: 8.2 × 0.3 cm.

Flat chisels

108-7/HH/2001: 7.5 × 0.5 × 0.1 cm,

108-9/HH/2001: 6.0 × 1.3 × 0.1 cm.

Arrow-head chisel

108-8/HH/2001: 7.5 × 0.5 cm.

Excav. No. 109a/HH/2001 (fig. 6.3.129)

A flint knife, l. 6.2 cm, w. 0.7 cm, th. 0.3 cm.

Excav. No. 109b/HH/2001 (fig. 6.3.129)

A flint knife, l. 6.2 cm, w. 1.0 cm, th. 0.5 cm.

Excav. No. 110/HH/2001 (fig. 6.3.108, pl. 25.3)

A miniature stone vessel with a rounded base and out-turned angular rim, made of rock quartz (crystal).²³ Discovered in the layer of wind blown sand in the northern part of the burial pit. Part of an 'Opening of the Mouth' set.

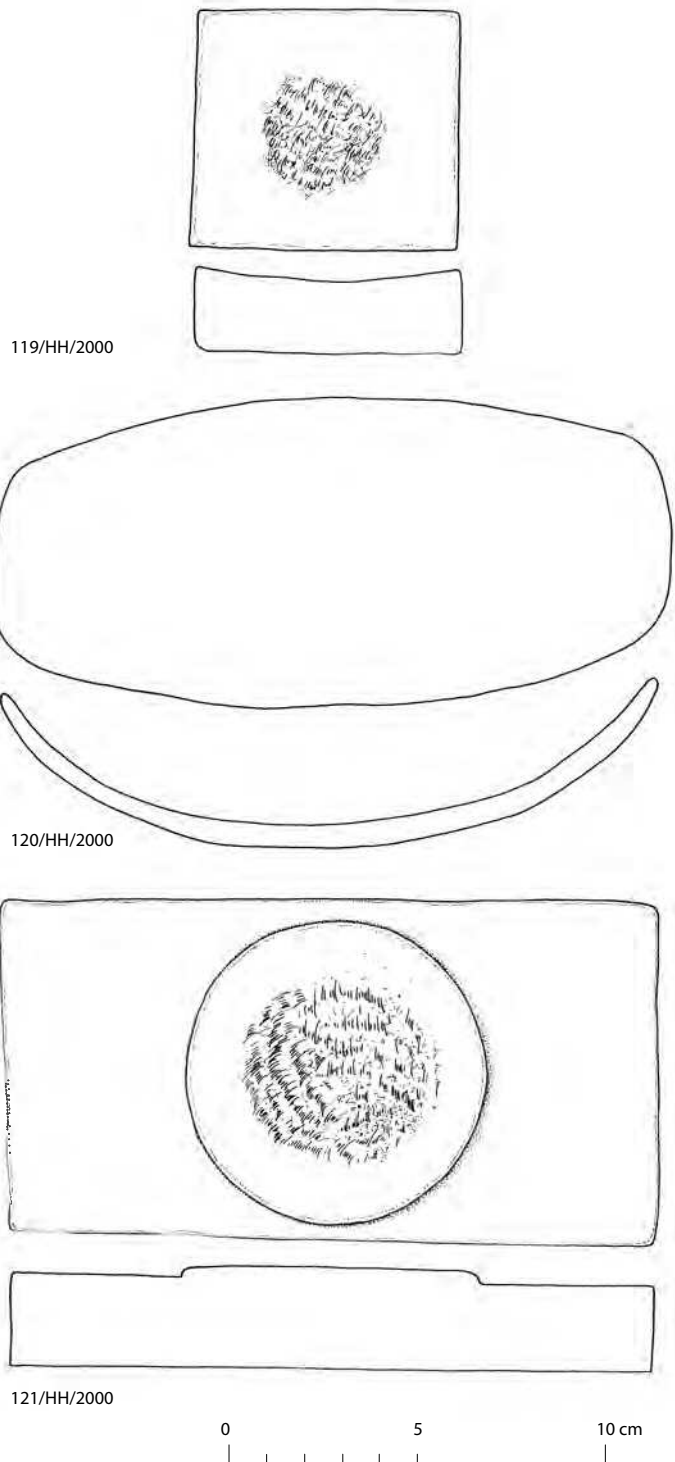


Fig. 6.3.157 Excav. Nos. 119, 120, 121/HH/2001

²³ Cf. W. Helck, 'Bergkristal', in *LdÄ I* (1975), cols. 709–710; B. G. Aston, J. A. Harrell, I. Shaw, 'Stone', in Nicholson, Shaw, eds., *Ancient Egyptian Materials*, 52.



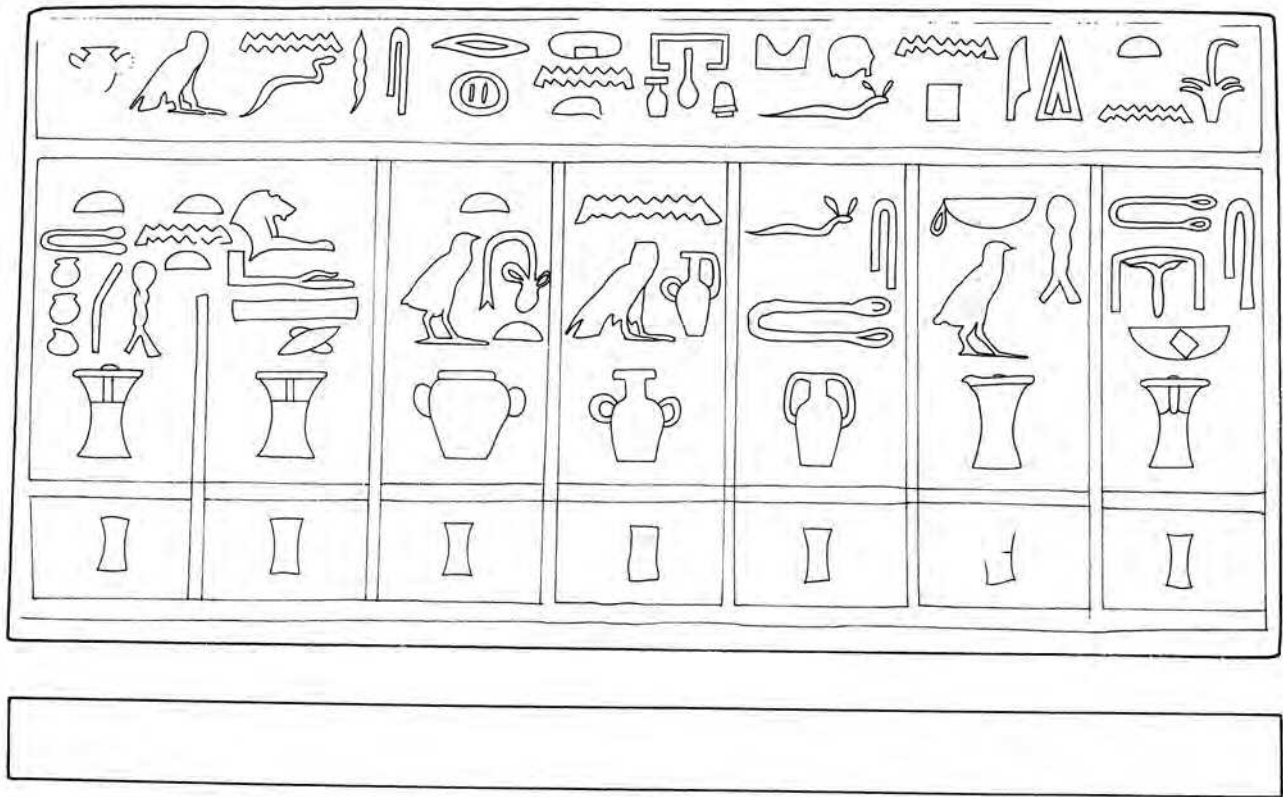
Fig. 6.3.158 Excav. No. 119/HH/2001



Fig. 6.3.159 Excav. No. 120/HH/2001



Fig. 6.3.160 Excav. No. 121/HH/2001



0 2.5 5 cm

H. 4.3 cm, opening diam. 1.7 cm, max. diam. 2.4 cm, boring diam. 0.9 cm, and depth of boring 0.5 cm.

Fig. 6.3.161 Excav. No. 122/HH/2001

Excav. No. 111/HH/2001 (fig. 6.3.108, pl. 25.4)

A wide-opened cup with plain sides and with flat base and flat rim made of obsidian. It was found in the layer of *tafl* and sand to the east of the sarcophagus. Part of an 'Opening of the Mouth' set.

H. 3.2 cm, base diam. 2.0 cm, opening diam. 3.6 cm, boring diam. 1.7 cm, and depth of boring 1 cm.

Excav. No. 112/HH/2001 (fig. 6.3.108, pl. 25.5)

An opened cup with plain sides made of basalt. It was found in the layer of *tafl* and sand to the east of the sarcophagus. Part of an 'Opening of the Mouth' set.

H. 2.7 cm, base diam. 1.6 cm, opening diam. 3 cm, drilling diam./depth 1.6 cm/0.8 cm.

Excav. No. 113/HH/2001 (fig. 6.3.108, pl. 25.6)

Miniature stone vessel with a rounded base and out-turned angular rim, made of obsidian. It was found in the layer of *tafl* and sand to the east of the sarcophagus. Part of an 'Opening of the Mouth' set.

H. 6.7 cm, opening diam. 2.4 cm, h. of the neck 2.7 cm, max. diam. 3.0 cm, drilling diam./depth 2.1/0.9 cm.

Excav. No. 114/HH/2001 (fig. 6.3.155, pl. 39.1)

A travertine vessel lid, diam. 9.8 cm, th. 0.3 cm, nicely polished and with rounded edge with an incised inscription containing in

a cartouche with the royal name of Pepy II: *nswt bjtj Nfr-k3-R^c, dj(w) ʕnh mj R^c* 'The king of U. and L. E., Neferkara, given life like Ra'.²⁴

Excav. No. 115/HH/2001 (fig. 6.3.155, pl. 39.2)

A travertine vessel lid, diam. 11.3, th. 0.4 cm, nicely polished and with rounded edge with an incised inscription containing in a cartouche with the royal name of Pepy I: *ʕnh(w) Hr Mrjj-t3wj, nswt bjtj Mrjj-R^c, dj(w)* 'Living Horus Merytawy, the king of U. and L. E., Meryra, given life'.

Excav. No. 116/HH/2001 (fig. 6.3.108, pl. 39.3)

A miniature stone vessel with flat base and flat rim, made of obsidian. It was found in the layer of *tafl* and sand to the east of the sarcophagus. Part of an 'Opening of the Mouth' set.

H. 3 cm, base diam. 2.1 cm, opening diam. 4.2 cm, drilling diam./depth 3.2 cm/1.6 cm.

Excav. No. 117/HH/2001 (fig. 6.3.108, pl. 39.4)

Miniature stone vessel with flat base and flat rim, made of rock crystal (quartz). It was found in the layer of *tafl* and sand to the east of the sarcophagus. Part of an 'Opening of the Mouth' set.

H. 3 cm, base diam. 1.4 cm, opening diam. 2.1 cm, drilling diam./depth 1.4 cm/0.9 cm.

Excav. No. 118/HH/2001 (fig. 6.3.156, pl. 40.1)

Complete set of a headrest made of black schist, consisting of a base (a), foot (b) and the proper headrest (c).

a – base: 18.5 × 7.2 × 2.2 cm, the central part on the surface is lower by some 3 mm and roughened by fine cutting,

b – foot: roughened both on the lower and upper base by fine hacking. The lower base diam. 6.1 cm, upper base diam. 4.0 cm, h. 11 cm. The body is conical, tapering towards the top and finely fluted, with a vertical band free of fluting which is about 1.5 cm wide. The upper base has a 0.9 cm deep and 0.4 cm wide hole for a peg.

c – headrest: l. 17 cm, w. 7.8 cm, h. 5.5 cm, th. 0.5 cm, its base is 5.9 × 5.9 × 1.7 cm, the base is roughened and in its centre is a peg hole similar to item b, which is 0.3 cm wide and 0.7 cm deep. The right wing was broken off and restored again we infer from the two 'repair holes'.

Excav. No. 119/HH/2001 (figs. 6.3.157–158)

Base of a headrest made of travertine, 7.7 × 6.5 × 2.2 cm, with a 3.2 cm wide circle on the upper surface roughened by fine hacking. The base is concave.

Excav. No. 120/HH/2001 (figs. 6.3.157, 159)

Travertine headrest measuring l. 18.3 cm, w. 8.3 cm, h. 4.4 cm, th. 0.7 cm.

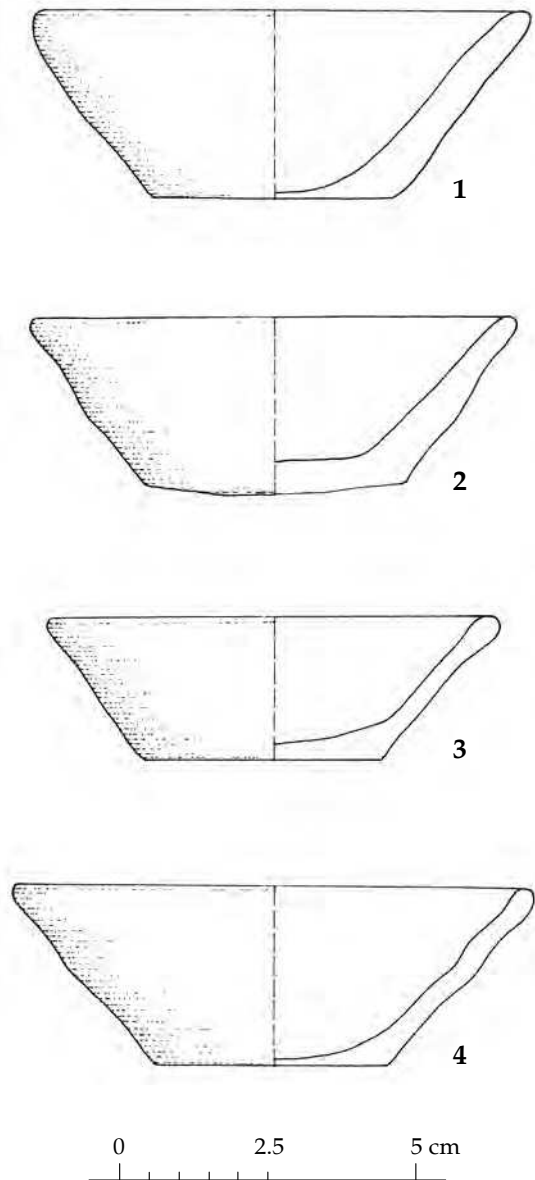
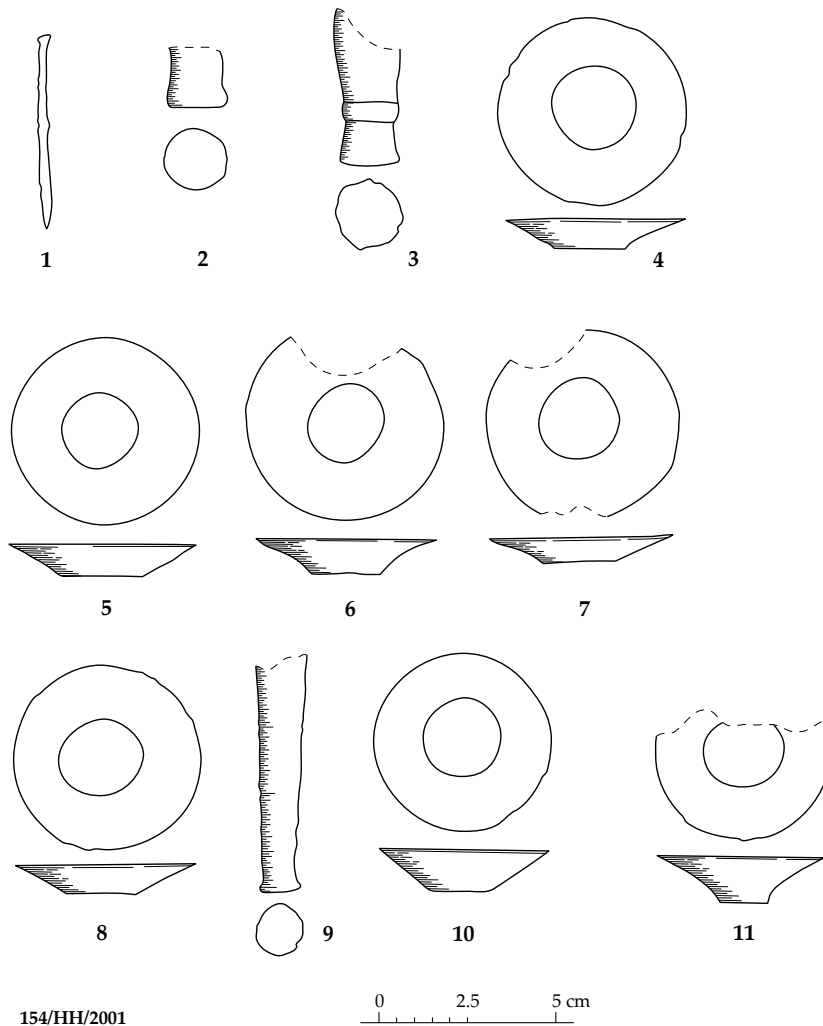


Fig. 6.3.162 Excav. No. Excav. No. 125/HH/2001

²⁴ Comp. Arnold, ed., *Egyptian Art*, 448–449, Cat. Nos. 179 and 180 or Gunn, Firth, *TPC II*, pl. 13A (CMJ 47037).

Fig. 6.3.163 Excav. No. 154/HH/2001



Excav. No. 121/HH/2001 (figs. 6.3.157, 160)

A headrest base made of travertine, $18 \times 9.4 \times 2.3$ cm. The central part on the upper surface is lower by 3 mm and, in its centre is a roughened circle of fine hacking.

Excav. No. 122/HH/2001 (fig. 6.3.161, pl. 40.2)

Seven sacred oils palette made of travertine and measuring $16.5 \times 8.4 \times 1.1$ cm.²⁵ Its upper surface is decorated with hieroglyphic inscriptions divided into one line and seven columns, reading from the right. The individual signs were made by fine cutting and originally filled with blue paint.

(*hṭp*) *dj nswt, dj Jnpw tp(j) dw.f, prt-hrw (m) t(j), hnkṯ, pzn nt (j)r(j) Nhn, Sndm-jb*

²⁵ Preliminarily published in B. Vachala, 'Salbölpaletten aus Abusir Süd', *GM* 199 (2004), 89–90; 94, fig. 1. For recent basic bibliography on this type of artefact cf. S. Tawfik, 'Die Alabasterpaletten für die sieben Salböle im Alten Reich', *GM* 30 (1978), 77–88; J. Málek, 'An ointment-slab of Sekhemankhptah', *GM* 33 (1979), 35–40; S. Tawfik, 'Die Alabasterpaletten für die sieben Salböle im Alten Reich', *GM* 30 (1978), 77–88; B. Vachala, 'Neue Salbölpaletten aus Abusir', *ZÄS* 108 (1981), 61–67; E. Pászthory, 'Die Alabasterpalette für die "Sieben Heiligen Salböle" im Alten Reich', *Antike Welt* 23, 2 (1992), 129–132; M. Rochholz, 'Zu den Paletten für die 7 Salböle', in M. Schade-Busch, ed., *Wege öffnen. Festschrift für Rolf Gundlach zum 65. Geburtstag* (Wiesbaden, 1996), 223–231; *idem*, *Schöpfung, Feindvernichtung, Regeneration. Untersuchungen zum Symbolgehalt der machtgeladenen Zahl 7 im alten Ägypten* (Wiesbaden, 2002), 170–173; Koura, *Die "7-Heiligen Öle"*, 40–44. For their up-to-date interpretation consult Bolshakov, *Old Kingdom Reliefs and Sculpture*, 231–234.

1. *st(j)-hb*, 1,
2. *hk(n)w*, 1,
3. *sft*, 1,
4. *n(j)nhm*, 1,
5. *tw^cwt*, 1,
6. *h3tt nt ʿš*, 1,
7. *h3tt nt Thnw*, 1.

‘(A boon) which the king gives, (a boon) which Anubis, Who is upon his mountain, gives, invocation offerings (consisting) of bread *t(j)*, beer and *pzn* bread (for) the keeper of Nekhen, Senedjemib.

1. ‘Oil of the feast, 1 jar,
2. mint oil, 1 jar,
3. pine oil, 1 jar,
4. Ninekhem oil, 1 jar,
5. *twawt* oil, 1 jar,
6. the best cedar oil, 1 jar,
7. the best Libyan oil, 1 jar’.

Excav. No. 125/HH/2001 (fig. 6.3.162)

Four small bowls made of Nile Silt B1. All of them have dark red – brownish, well polished surface and are poorly fired. The walls of the vessels are out-turned, with angular rims, on all of them the method of coiling clearly visible (coils of 1.5 cm in width). The vessels were finished on a wheel.

Bowl 1: base w. 4.0 cm, h. 2.9 cm, w. of the opening 8.5 cm,

Bowl 2: 4.0 cm, 2.9 cm, 7.5 cm,

Bowl 3: 4.0 cm, 3.0 cm, 8.0 cm,

Bowl 4: 4.0 cm, 3.0 cm, 8.5 cm.

Excav. No. 154/HH/2001 (fig. 163)

A set of copper vessels from the fill of the burial chamber.

154-1/HH/2001: a needle 5.7 cm long, diam. 0.3 cm,

154-2/HH/2001: foot of a vessel, diam. of the base 1.7 cm, h. 1.8 cm,

154-3/HH/2001: foot of a vessel with embossing, diam. of the base 1.8 cm, h. 4.5 cm,

154-4/HH/2001: a shallow plate, diam. of the base 1.9 cm, h. 0.9 cm, w. of the opening 5.0 cm,

154-5/HH/2001: a shallow plate, diam. of the base 2.3 cm, h. 0.9 cm, w. of the opening 5.0 cm,

154-6/HH/2001: a shallow plate, diam. of the base 1.8 cm, h. 1.0 cm, w. of the opening 5.0 cm,

154-7/HH/2001: a shallow plate, diam. of the base 1.9 cm, h. 0.7 cm, w. of the opening 5.0 cm,

154-8/HH/2001: a shallow plate, diam. of the base 2.4 cm, h. 0.9 cm, w. of the opening 5.1 cm,

154-9/HH/2001: foot of a vessel, diam. of the base 1.4 cm, h. 6.5 cm,

154-10/HH/2001: a shallow plate, diam. of the base 2.3 cm, h. 1.2 cm, w. of the opening 4.8 cm,



Fig. 6.3.164 Excav. No. 2/HH-Sh ‘C’/2002

154-11/HH/2001: a shallow plate, diam. of the base 2.3 cm, h. 1.3 cm, w. of the opening 5.0 cm.

6.3.7 Finds from Shaft 'C'

Excav. No. 2/HH-Sh 'C'/2002 (fig. 6.3.164, pl. 41.1)

A flat-bottomed amphora with two handles, out-turned neck with a thickened and round-folded outside rim. The amphora is 50 cm high, max. diam. 31 cm, the diam. of the base is 14 cm and the inner diam. of its opening is 12.5 cm. The surface of the vessel shows clear traces of the 'combing' technique with occasional series of fine notches creating horizontal lines, especially on the upper part of the body where two such lines run along the whole body. The surface of the vessel has a red-orange colour, with some remains of white wash (outside 10R 3/6, inside 2.5YR 6/8) and traces of the fine 'combing' technique. It is probably made of Nile Silt A.

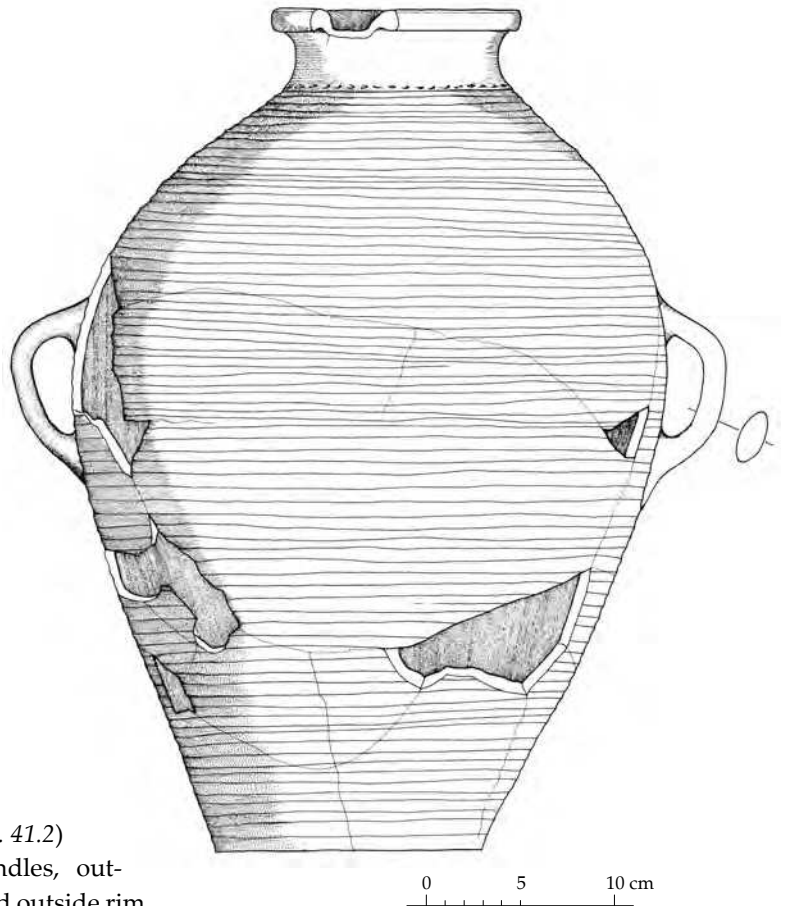


Fig. 6.3.165 Excav. No. 3/HH-Sh 'C'/2002

Excav. No. 3/HH-Sh 'C'/2002 (fig. 6.3.165, pl. 41.2)

A flat-bottomed amphora with two handles, out-turned neck with a thickened and round-folded outside rim. The amphora is 42.5 cm high; max. diam. 31 cm; the diam. of the base is 14 cm and inner diam. of its opening 11 cm. The surface of the vessel shows clear traces of a very fine coiling technique yet the whole surface is well smoothed. Below the neck runs a horizontal line of notches. The surface of the vessel has a red-orange colour with some remains of white wash (outside 10R 3/6, inside 2.5YR 6/8) and traces of the fine 'combing' technique. It is probably made of Nile Silt A.

Excav. No. 150/HH/2002 (fig. 6.3.166, pl. 42.1)

A seven sacred oils palette made of travertine and measuring 19.0 × 10.5 × 2.7 cm.²⁶ The palette was found at the bottom of Shaft 'C' and it is indeed possible that originally it belonged to Senedjemib, and had been buried in Shaft 'A'. In such a case, however, it would be quite unusual to have two different seven sacred oil plates attested for a single tomb owner. The upper surface of the table is decorated with hieroglyphic inscriptions painted in black ink and divided into one horizontal register and nine columns, reading from the left. Some signs are partially washed out, yet all inscriptions are intelligible:

(*htp*) *dj nswt mrht n htmw bjti, (j)r(j) Nhn, Sndm-jb.*

1. *st(j)-hb, 1,000,*

2. *hk(n)w, 1,000,*

3. *sft, 1,000,*

4. *n(j)nhm, 1,000,*

5. *twwt, 1,000,*

6. *h3tt nt š, 1,000,*

²⁶ Preliminarily published by Vachala, GM 199 (2004), 92–93; 94, fig. 3.

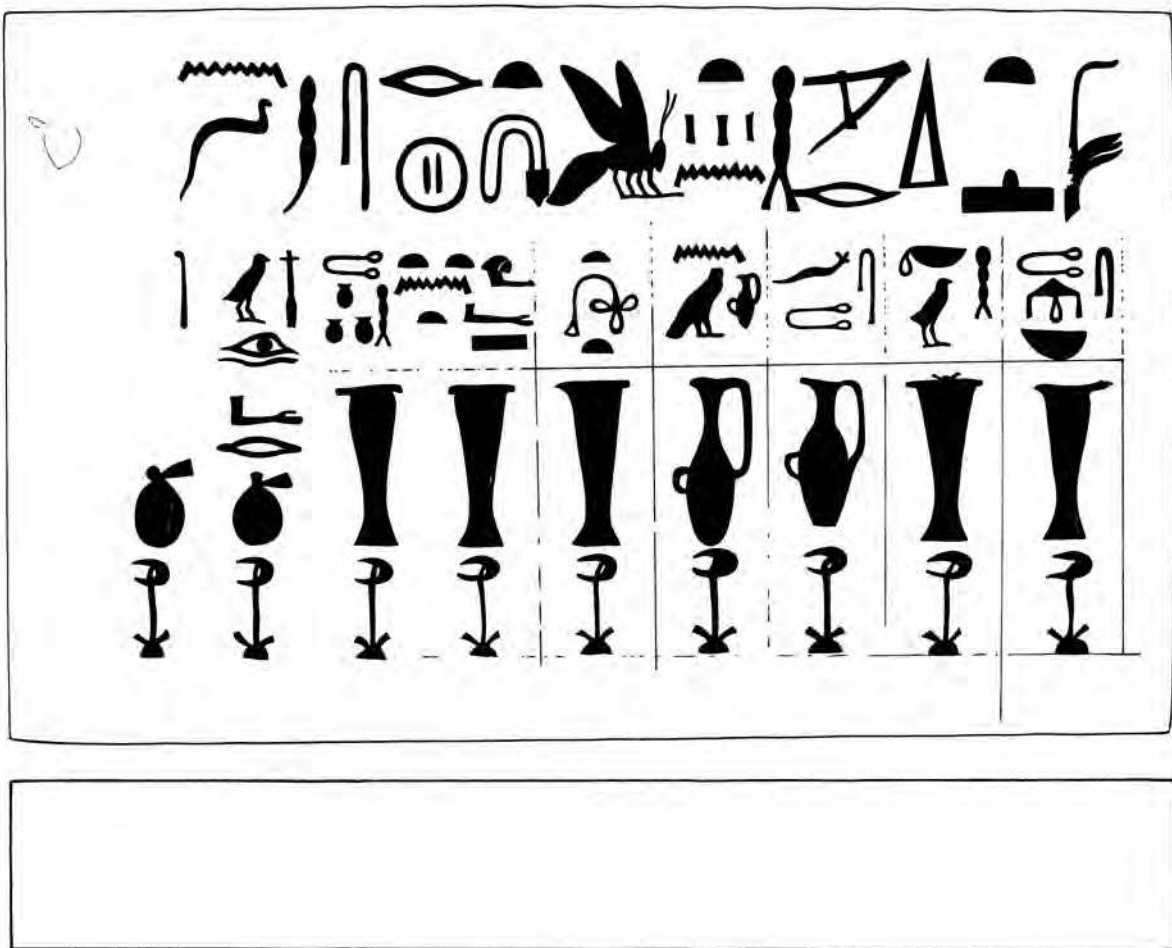


Fig. 6.3.166 Excav. No. 150/HH/2002

0 2.5 5 cm



Fig. 6.3.167 False door of Iykai *in situ*

7. *ḥ3tt nt Thnw*, 1,000,
8. *w3dw*, 1,000,
9. *msdmt*, 1,000.

'An oil offering which the king gives, for the sealer of the King of Lower Egypt, keeper of Nekhen, Senedjemib.

1. Oil of the feast, 1,000 vessels,
2. mint oil, 1,000 vessels,
3. pine oil, 1,000 jugs,
4. *ninekhem* oil, 1,000 jugs,
5. *twawt* oil, 1,000 vessels,
6. the best cedar oil, 1,000 vessels,
7. the best Libyan oil, 1,000 vessels,
8. green paint, 1,000 bags,
9. black paint, 1,000 bags.²⁷

It is interesting to note that oils 1, 2, 5–7 were determined with flat bottomed vessels with widening bodies towards the top and closed with flat lids. Oils 3 and 4 were determined with flat-bottomed jugs with long slender necks and a handle. The green and black paints were determined with a sign for a bag.

6.3.8 Decoration and finds from the chapel of Iykai

The chapel of Iykai came into being as a result of the reshaping of Open Court 2. The preserved height of the cased side walls (max. 2.20 m) indicates that the walls were devoid of decoration. The only decorated element was the false door, the lower part of which was preserved *in situ* (figs. 6.3.167, 168, pl. 42.2).

The lower part of the false door of Iykai measures 1.50 × 1.02 × 0.25 m. It is decorated with hieroglyphic inscriptions executed in sunk relief, arranged in columns symmetrically on both sides of the central niche. The signs are oriented inwards and each of three jambs contains two columns of inscription. Most of the signs bear traces of the original green paint. The lower part of the false door, 40 cm high, was reserved for five bands of dado painted in black – red – yellow (proceeding from the bottom upwards) divided by thin black lines. The inner jambs are only 18 cm wide, the remaining two jambs measure equally 20 cm. The central niche is 12 cm in width. Each jamb closes with a standing figure of Iykai, all six figures differ in details.

Starting from the central niche and proceeding to the left, we encounter Iykai dressed in a knee-long kilt with a pointed front, his right arm along the body, his left arm folded on the chest and holding sticks in both hands. He wears a tight wig and a wide collar around his neck and has armbands on his wrists. Both collar and armbands preserve original green paint. The wig is painted black and body in natural red. The following two figures are dressed in the same manner. The second one wears a long wig reaching his shoulders, hands hanging alongside his body; he is holding a short stick in his left hand. The figure on the extreme left depicts him as a lector priest with a piece of white cloth over his chest; he is leaning against a long staff. The

²⁷ On the green and black paints see Bárta, *Abusir V*, 164–165 and footnotes 160–170.

figures to the right of the central niche preserve the same colour scheme. The first figure shows Iykai standing with hands along the body, holding a piece of cloth in his left hand and wearing a tight wig. The second figure renders Iykai with his left arm alongside his body and holding piece of cloth, leaning against a long staff and wearing a long wig reaching his shoulders. The figure on the extreme right shows Iykai dressed exceptionally in a long kilt reaching mid-calf height and leaning against a long staff, wearing a tight wig. His left arm rests alongside his body.

Left part, reading from the right to the left:

1. ... *n nb.f, Jj-k3j*,
2. ... *hm-ntr M3t, Jj-k3j*,
3. ... *[j]m3hw Jj-k3j*,
4. ... *jm3h(w) Jj-k3j*,
5. ... *[jm3]hw hr Wsjr, Jj-k3j*,
6. ... *[jm3hw h]r Jnpw tp(j) dw.f, Jj-k3j*.

Fig. 6.3.168 False door of Iykai

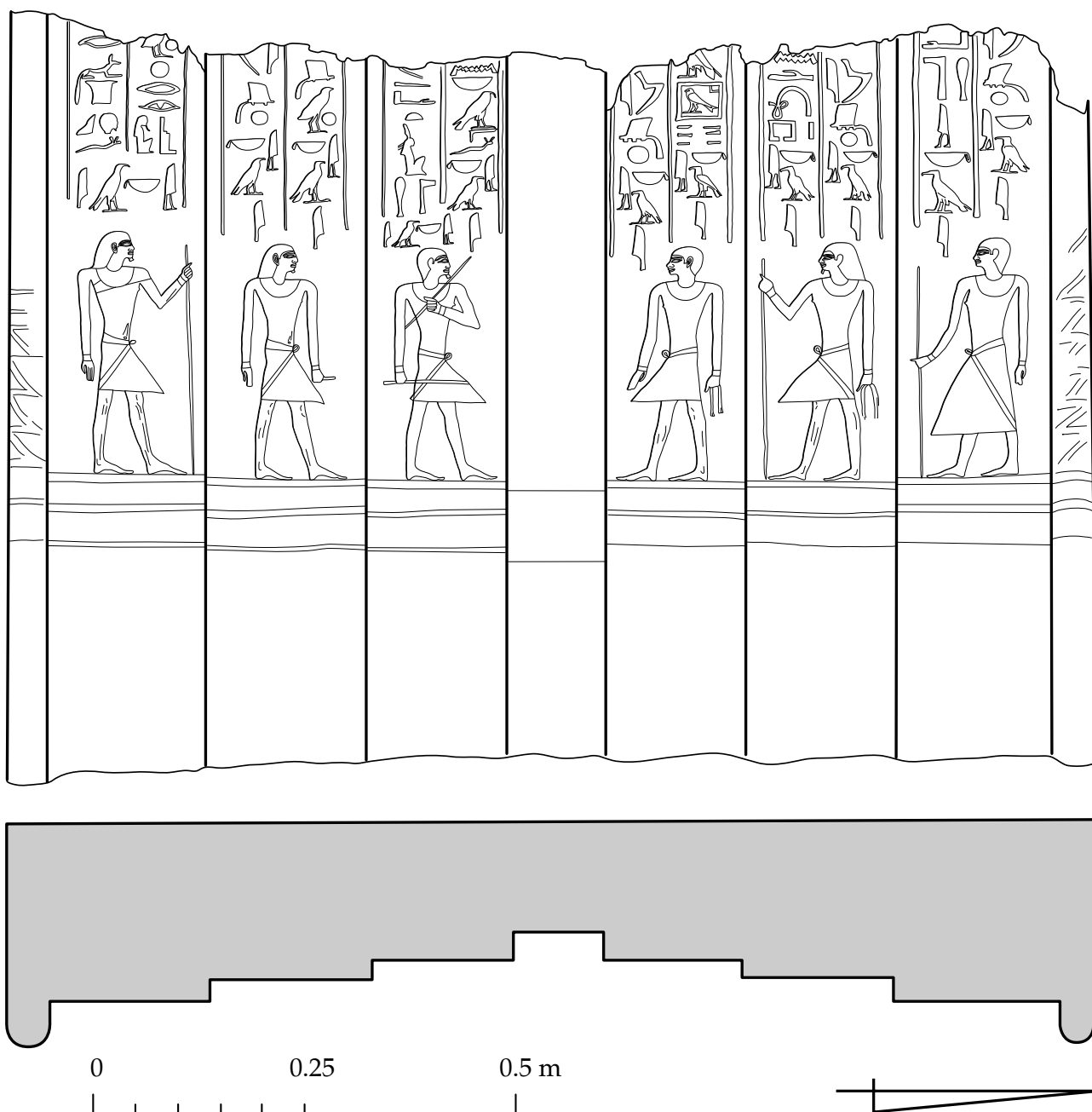




Fig. 6.3.169 Excav. No. 14/HH/1995

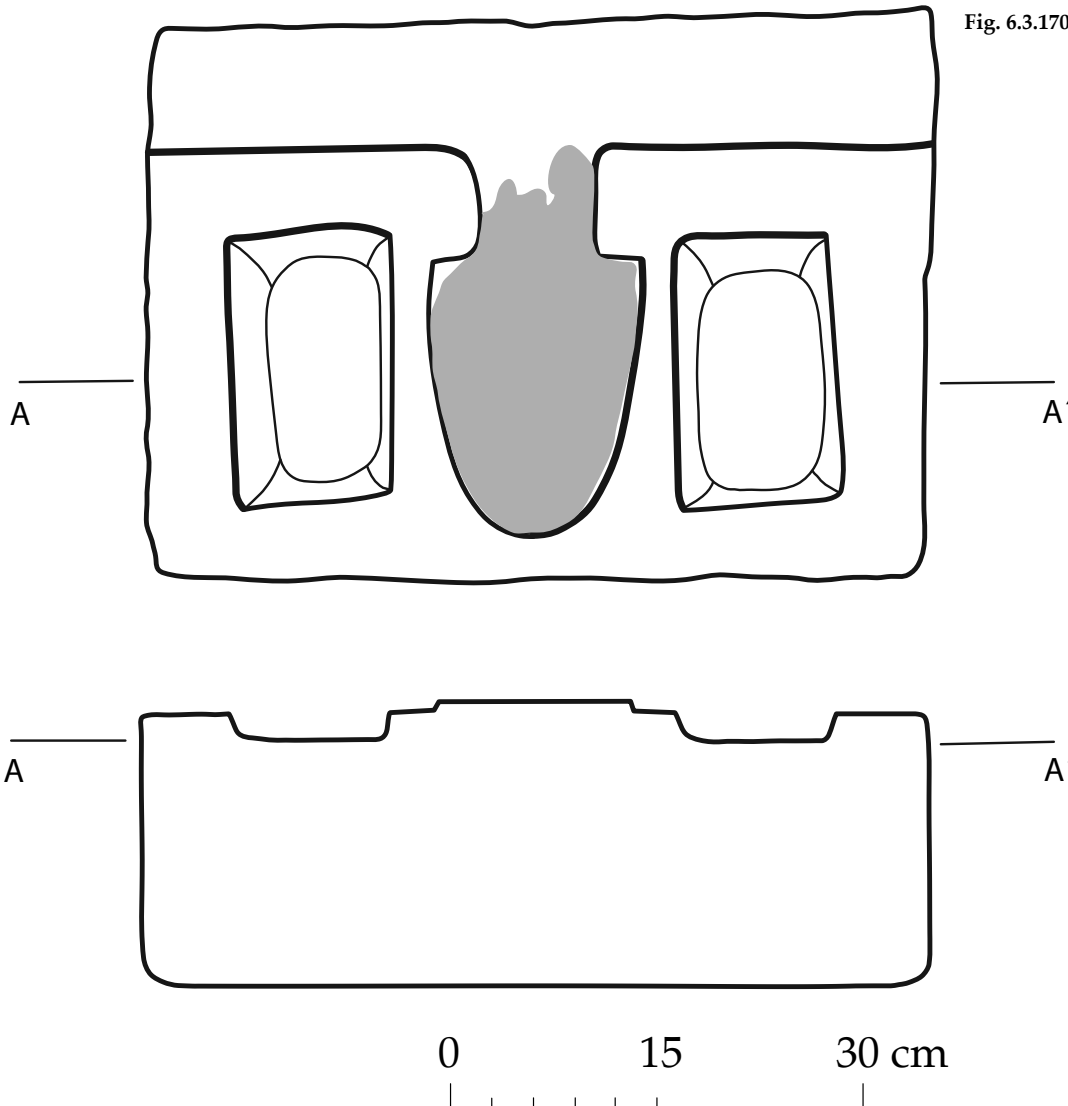


Fig. 6.3.170 Excav. No. 14/HH/1995

1. '... of his lord, Iykai,
2. ... priest of Maat, Iykai,
3. ... well-provided, Iykai,
4. ... well-provided, Iykai,
5. ... [well]-provided before Osiris, Iykai,
6. ... [well-provided] before Anubis, Who is upon his mountain, Iykai.'

Right part, reading from the left to the right

1. ... *jm³h(w) Jj-k³j*,
2. ... [*hr(j)-sšt*]³ (*n*) *hwt-wrt 6, Jj-k³j*,
3. ... [*hr(j)-sšt*] *n pr-dwt, Jj-k³j*,
4. ... *jm³h(w), Jj-k³j*,
5. ... *hm-ntr [Mrt?], Jj-k³j*,
6. ... *jm³h(w), Jj-k³j*.

1. '... well-provided, Iykai,
2. ... [privy to the secret] in the six great courts, Iykai,
3. ... [privy to the secret] of the Morning House, Iykai,
4. ... well-provided, Iykai,
5. ... priest of [Meret?] Iykai,
6. ... well-provided, Iykai.'

Excav. No. 14/HH/1995 (figs. 6.3.169–170)

A limestone offering table measuring 56.0 × 40.5 × 20.0 cm. The table was found *in situ* in front of the false door of Iykai. It consists of a raised *hetep* sign and two deep rectangular basins on either side.

PART 7

The physical remains of the Old Kingdom mastaba and lesser tombs owners – the sexual dimorphism of the Old Kingdom population

Viktor Černý

7 The physical remains of the Old Kingdom mastaba and lesser tombs owners – the sexual dimorphism of the Old Kingdom population

7.1 Introduction

This chapter has two objectives – the first is to provide a basic osteological description of the human remains which have been excavated during the 1995 and 2002 campaigns by the Czech Institute of Egyptology and the second is to analyse the osteological measurements of all Old Kingdom skeletons excavated up to date in the Abusir South necropolis to obtain an insight into the sexual dimorphism of the Old Kingdom population of Lower Egypt.¹ For this second task, comparisons were carried out with similar data obtained for the European population of the Corded Ware Culture (henceforth referred to as CWC) from the Czech Republic. The CWC population is known from the same time period as the Abusir collection (third millennium BC) but it can be expected that it reveals a rather different pattern of sexual dimorphism in the traits under study.

Particular attention has recently been paid to the understanding of sexual dimorphism of different human populations which show different degrees of development in morphological traits.² It should be noted that the sexual dimorphism of non-pelvic skeletal dimensions is *a priori* unknown, as the female versus male averages progressively evolve in time and differ also in space. Consequently, each spatially and chronologically defined population has its own sexual dimorphism in cranial length, stature *etc.* At the same time, from a population perspective, it has been shown that only pelvic structures possess an unbiased sexual dimorphism permitting the development of an ‘out-of-source’ application of discriminatory functions for sex determination.

The explanation for the strong reliability of the pelvic method for the sexual determination of archaeological populations lies in the ontogenetic formation of the pelvis, which is influenced, on the one hand, by the adaptation to biped locomotion in both sexes and on the other hand, parturition in females. Given that the pelvis has a chronologically stable sexual dimorphism (contrary to other elements of the skeleton which present a variable degree of sexual dimorphism), it is advisable for the archaeological population to use this bone as an indicator of sex (primary diagnosis) and then work out discriminant functions (DF hereafter) specific to each particular population starting from extra-pelvic data which will constitute the secondary diagnosis.³

7.2 Methods

Osteological description and anthropological assessments were focused mainly on the cranial and pelvic remains. Cranial features were analysed according to the six

¹ V. Černý, E. Strouhal, ‘Some taphonomic, demographic and pathologic aspects of the skeletons from mastaba tombs at Abusir-South’, in Bárta, *Abusir V*, 193–202.

² M. Y. Iscan, S. R. Loth, C. A. King, D. Shihai, M. Yoshino, ‘Sexual dimorphism in the humerus: a comparative analysis of Chinese, Japanese and Thais’, *Forensic Science International* 98 (1998), 17–29; G. Mall, M. Hubig, A. Buttner, J. Kuznik, R. Penning, M. Graw, ‘Sex determination and estimation of stature from the long bones of the arm’, *Forensic Science International* 117 (2001), 23–30; S. A. Asala, M. A. Bidmos, M. R. Dayal, ‘Discriminant function sexing of fragmentary femur of South African blacks’, *Forensic Science International* 145 (2004), 25–29; D. Franklin, L. Freedman, N. Milne, ‘Sexual dimorphism and discriminant function sexing in indigenous South African crania’, *Homo: Internationale Zeitschrift für die vergleichende Forschung an Menschen* 55 (2005), 213–228.

³ G.N. van Vark, ‘Eine Methode zur Geschlechtsbestimmung prähistorischer Individuen auf Grund von Skelettüberresten’, *Homo: Internationale Zeitschrift für die vergleichende Forschung an Menschen* 22 (1971), 76–83; P. Murail, J. Bruzek, J. Braga, ‘A new approach for sexual diagnosis in past populations. Practical adjustments from Van Vark’s procedure’, *International Journal of Osteoarchaeology* 9 (1999), 39–53; V. Černý, F. Houët, J. Turek, ‘Détermination du sexe par la méthode itérative et le dimorphisme sexuel du squelette post-crânien d’une population du Chalcolithique récent et du Bronze ancien de la Bohême’, *Bulletins et Mémoires de la Société d’Anthropologie de Paris* 11/3–4 (1999), 383–404.

point scale (0–5) recommendations made recently by Buikstra and Ubelaker.⁴ Pelvic structures were investigated as follows: the pubic symphysis was assessed by the ten point scale (I–X) method of Todd⁵ and the auricular surface by an eight point scale (1–8) method of Lovejoy *et al.*⁶ The lengths of long bones were measured by an osteometrical board, the breadth of the epiphyses and the diameters of the diaphyses by digital spreading callipers, according to the well-established standards of Martin and Saller.⁷ The data were subsequently used for secondary sex determination undertaken by DF analysis. Dental abrasion was recorded on first molars according to an eight point scale (1–8) based on the amount of exposed dentin.⁸

As for the primary diagnosis of the sex, we applied both metrical and morphological approaches.⁹ The metrical approach is based on the dimensions measured on the pelvis starting from well defined points and it is thus, without any doubt, more objective and also more suitable for the researchers without previous experience on sexual dimorphism of studied populations (in this case of the mastaba's owners).

As a secondary diagnosis, DF analyses have been developed starting from the non-pelvic measurements of the skeletons whose sex has been determined by the primary diagnosis. In other words, those individuals whose sex was established by different morphological methods on the pelvis, were regarded as subjects of a known sex. As noted above, the measurements of the epiphyses and diaphyses of the long bones and measurements of the skull were secured. On the whole, 37 dimensions were measured but, owing to the bad state of preservation of a great number of the skeletons, some samples were very limited and thus not suitable for DF analysis. In addition, the discriminating capacities in some variables were insignificant and thus not convenient for our purpose.

Finally, the selection of nine non-pelvic variables has been established for subsequent DF analysis. Three variables have been taken on the humerus – the breadth of the distal epiphysis (HSID4a), the maximal diameter of the diaphysis in the middle (HMXS5), and the minimal diameter of the diaphysis in the middle (HMNS6); four on the femur – the antero-posterior diameter of the diaphysis in the middle (FAPS6), the medio-lateral diameter of the diaphysis in the middle (FMLS7), the medio-lateral diameter of the diaphysis in the subtrochanteric region (FSUB9) and the antero-posterior diameter of the diaphysis in the subtrochanteric region (FSUB10); two on the tibia – the antero-posterior diameter in the plane of the foramen nutricium (TAPF8a), and the diameter in the plane of the foramen nutricium (TMLF9a).

7.3 Osteological description of the skeletons

7.3.1 Human remains from the tomb complexes of the vizier Qar and his sons and Tomb 'KK'

Excav. No. 158/GG/1995

Intact cranium of gracile construction with a slightly developed muscular development, complete obliteration of the lambdoid suture, significant closure of the

⁴ J. E. Buikstra, D. H. Ubelaker, *Standards for Data Collection from Human Skeletal Remains, Research Series, no. 44*, (Fayetteville, 1994)

⁵ T. W. McKern, T. D. Stewart, *Skeletal Age Changes in Young American Males, Analysed from the Standpoint of Identification* (Natick, 1957).

⁶ O. C. Lovejoy, 'Dental Wear in the Libben Population: Its Functional Pattern and Role in the Determination of Adult Skeletal Age and Death', *American Journal of Physical Anthropology* 68 (1985), 47–56.

⁷ R. Martin, K. Saller, *Lehrbuch der Anthropologie in Systematischer Darstellung* (Stuttgart, 1979).

⁸ B.H. Smith, 'Patterns of molar wear in hunter-gatherers and agriculturalists', *American Journal of Physical Anthropology* 63 (1984), 39–56.

⁹ F. Houët, J. Bruzek, P. Murail, 'Etablissement de nouvelles fonctions discriminantes à partir de l'os coxal applicables dans d'autres populations', *Antropologia Portuguesa* 13 (1995), 157–170; J. Bruzek, 'A method for visual determination of sex, using the human hip bone', *American Journal of Physical Anthropology* 117 (2002), 157–168.

sagittal suture and the coronal suture, a rhomboid outline of the skull, a nuchal crest of degree 0, small frontal tubers, a sharp supra-orbital margin, angular and medium high orbits, a low and middle-wide piriform aperture, a small mental eminence, a supra-orbital ridge and glabella of degree 1, an upright forehead, a small mastoid process, dental abrasion of degree 7c. A highly damaged postcranial skeleton of gracile construction with weak muscular development, the union of the epiphyses completely finished, a middle-wide sacrum, a preauricular sulcus of degree 1, a prominent auricular surface with changes of phase 6, some vertebra with marked osteophytes and long bones articulations without arthritic changes.

Conclusion: skeleton of female, more than 40 years old.

Excav. No. 159/GG/1995

An intact cranium of middle-robust construction and muscular development of medium size, all cranial sutures obliterated, a sphenoid outline of the skull, a nuchal crest of degree 1, an angular outline of the face, small frontal tubers, a supra-orbital margin of degree 1, angular and high orbits, a low and middle-wide piriform aperture, a mental eminence of degree 3, a supra-orbital margin and glabella of degree 3, a slant forehead, a mastoid process of degree 4, dental abrasion of degree 8a, 14 teeth were lost ante-mortem. An intact postcranial skeleton of gracile construction with slightly developed muscular development, fully united long bone epiphyses, a short, wide and markedly bowed sacrum, a pelvis which, as a whole, is rather wide and low, a symmetric and wide greater sciatic notch, a preauricular sulcus of degree 3, a double arc composé, a middle body of the ischium, pubic symphysis changes of phase 10, auricular surface changes of phase 8. The skeleton has well preserved both left and right pelvic bones, whose metrical assessment indicates a female sex. It is a typical case of a skeleton with male skull morphology and female type of pelvis. Owing to the general trend of masculinisation of the cranial structures within the older age categories in females, we tend to retain the female rather than the male sex for this individual.

Conclusion: skeleton of a female (?), ca. more than 60 years old.

Excav. No. 160/GG/1995

Intact cranium of middle robust construction and slight muscular development, the cranial sutures are open or with minimal closure, a pentagonoid outline, a nuchal crest of degree 1, an angular outline of the face, small frontal tubers, a sharp supra-orbital margin, angular and middle high orbits, a low and middle wide piriform aperture, a mental eminence of degree 3, a supra-orbital ridge and glabella of degree 2, a slant forehead, a middle mastoid processes, dental abrasion of phase 7b. The intact postcranial skeleton is of middle construction with moderately developed muscular development, the epiphyses are fully united, a long, narrow and middle bend sacrum, the pelvis, as a whole, is narrow and high, there is an asymmetric and middle wide greater sciatic notch, a preauricular sulcus of degree 1, a uniform arc composé, a middle wide body of ischium, pubic symphysis changes of phase 10, auricular surface changes of phase 8. The skeleton has well preserved both left and right pelvic bones, whose metrical assessment gives unequivocally male sex.

Conclusion: skeleton of a male, more than 60 years old.

Excav. No. 161/GG/1995

A heavily damaged postcranial skeleton with fully united epiphyses; the remaining fragments of pelvic bones are of relatively robust construction without a preauricular sulcus. The margin of the auricular surface does not protrude, there is a relatively robust body of the ischium. It seems that the greater sciatic notch is rather narrow and symmetric, the vertebra and other articulations are without arthritic changes.

The vertebra and fragments of the pelvis are of a dark colour with shredding layers showing a possible mummification of this individual: all other skeletal fragments are of fawn colour.

Conclusion: skeleton of male (?), more than 30 years old.

Excav. No. HH/2002 /SHAFT 'C'

A highly damaged skeleton, some parts are evidently missing, the skull and pelvis were found in insignificant fragments.

Conclusion: skeleton of an adult individual.

Excav. No. 143/HH/2004

A highly damaged robust skeleton with middle muscular development; the cranial sutures are with minimal and significant closure, the nuchal crest is of degree 4, the middle frontal tubers, a supra-orbital margin of degree 2, a supra-orbital ridge and glabella of degree 4, a slant forehead, the mastoid processes registers degree 4; there are fully united long bone epiphyses, an asymmetric and narrow greater sciatic notch, and a uniform arc for the arc composé.

Conclusion: skeleton of male (?), ca. 30–50 years old.

Excav. No. 2/JJ/2000

A highly damaged postcranial skeleton of gracile construction: the pelvis was in small fragments, but the preauricular sulcus is well marked, the pubic symphysis are very thin and narrow and the body of the ischium is also very gracile, the body of the sternum is united with the manubrium. There are extending arthritic changes on the articular surfaces of the patella, Schmorl nodes on vertebral bodies, and small arthritic changes on the upper thoracic vertebra, more marked on lower thoracic and lumbar vertebra. There are degenerative and productive changes also on the articular surface of the acetabulum.

It is not excluded that the bones of Excav. Nos. 2/JJ/2000 and 92/JJ/2000 belong to the same individual. However, it is not possible to confirm this theory on the basis of the articulations and mutual pairing. Some bones are presented several times, so it means that the mixture of minimally two individuals of female sex morphology and similar age at death can be present in this osteological material.

Conclusion: skeleton of female (?), more than 50 years old.

Excav. No. 12/JJ/2000

A highly damaged cranium of gracile construction with slight muscular development, cranial sutures still open, third molars on the mandible not yet erupted but already mineralized, and a very slight presence of *cribra orbitalia*. This highly damaged gracile postcranial skeleton was found more or less in a fragmentary state, with free epiphyses of the long bones and pelvis. The body and arch of the second cervical vertebra are not however fully united, and the right diaphysis of the humerus is 224 mm.

Conclusion: skeleton ca. 12–13 years old.

Excav. No. 22a/JJ/2000

The material consists of a highly damaged cranium of middle construction with slight muscular development, having a significant closure of the coronal and sagittal sutures and minimal closure of the lambdoid suture. There is a rhomboid outline of the skull, a nuchal crest of degree 1–2, small frontal tubers, a supra-orbital margin of degree 4, a mental eminence of degree 3, and a supra-orbital ridge and glabella of degree 1. The forehead is vaulted, with a small mastoid process. The re is dental

abrasion of phase 8, and many mandible teeth had been lost before death. It is a highly damaged postcranial skeleton (mostly in fragments) of middle construction and slight muscular development, with fully united epiphyses, a symmetric and wide greater sciatic notch, and a preauricular sulcus of degree 1. There is degenerative arthritis of distal epiphysis of right femur. A firm and dark substance is inside the skull, its fragments show a tabular structure and it seems to be an ancient resin. The skull is of dark ochre colour with remnants of mummified tissue and cloth fibre. Some remains of mummified tissue are present also on some bones of the postcranial skeleton.

Conclusion: skeleton of female (?), more than 50 years old.

Excav. No. 22b/JJ/2000

The remains consist of an intact cranium of middle robust construction and middle muscular development, the cranial sutures show open or minimal closure. There is a rhomboid outline to the skull, a nuchal crest of degree 1, small frontal tubers; the supra-orbital has a margin of degree 1, and there are angular and high orbits, a middle piriform aperture, a mental eminence of degree 1, supra-orbital ridge and glabella of degree 2. There is a slant forehead, a mastoid process of degree 3 and dental abrasion of phase 1. Both third molars on the mandible and right maxilla are not still on the level of first two molars but the *synchondrosis sphenoooccipitalis* is united. There is a highly damaged postcranial skeleton of gracile construction and slight muscular relief and the presence of *fossa olecranii*. There is a united or just unifying epiphysis of the humerus but the proximal epiphyses of femur and radius were not still united. Similarly, as in the case of Excav. No. 22a/JJ/2000, remnants of textiles and rigid resin are present in the cranium. Abundant use of this material is attested also by two vertebra completely glued together. A proximal fragment of a right tibia is not from the same individual.

Conclusion: skeleton of male (?), ca. 20–30 years old.

Excav. No. 22c/JJ/2000

Only the damaged postcranial skeleton of gracile construction with slight muscular relief is preserved. Not one epiphysis is fused. The long axes of diaphyses of the long bones measure: right humerus 252 mm, right radius 191 mm, left radius 190 mm, left ulna 211 mm, right femur 362 mm, left femur 362 mm, left tibia 302 mm. It is possible that posterior part of skull as well as the right part of the mandible recorded as 22?/JJ/2000 also belong to this individual. In that case, the age at death estimation should be a little bit advanced for one or two years to an older age, owing to the marked development of the nuchal crest. Perhaps the male sex can be surmised.

Conclusion: skeleton of immature individual, ca. 16–17 years old.

Excav. No. 30/JJ/2000

An almost intact juvenile skeleton of gracile construction with free bones of the skull, pelvis and long bone epiphyses. The vertebral bodies are with fused arches, the long axes of the diaphyses of the long bones from right side measure: femur 306 mm, humerus 223 mm, ulna 197 mm. From the teeth of permanent dentition only the first molars and second premolars are in the occlusal position.

Conclusion: skeleton of immature individual, ca. 11–12 years old.

Excav. No. 46/JJ/2000

This material includes only the left talus, a fragment of the right parietal, fragments of tibia, fibula and right first metatarsus. All bones are from an adult skeleton(s).

Conclusion: can not be undertaken on the basis of the present material.

Excav. No. 68/JJ/2000

Fragment of the left pelvis (a great part of the ilium and pubis are missing) with greater sciatic notch of a typically male morphological pattern. A fragment of one left rib and thoracic vertebra. The bones are coated by a dark organic material which can be related to the mummification process.

Conclusion: can not be undertaken on the basis of the present material.

Excav. No. 92/JJ/2000

An intact skull of gracile construction with slightly developed muscular development, significant closure of the lambdoid suture and complete obliteration of the coronal and sagittal sutures. The skull has an ovoid outline, with a nuchal crest of degree 1, there are middle frontal tubers, a supra-orbital margin of degree 2, angular and middle high orbits. There is a middle high and middle wide piriform aperture, a mental eminence of degree 4, a supra-orbital ridge and glabella of degree 2. It has an upright forehead, a mastoid process of degree 1 and dental abrasion of phase 8b. The damaged and incomplete postcranial skeleton is of gracile construction and slight muscular relief, with fully united epiphyses. Present today are only the right humerus, right ulna, left radius, left scapula, left clavicle, the manubrium of the sternum, a fragment of the sternum, the head of left humerus, some bones of the foot, seven cervical, four thoracic and one lumbar vertebrae. It is possible that the bones 2/JJ/2000 and 92/JJ/2000 belong to one skeleton. However, it can not be confirmed by the pairing method. Some bones are presented twice; it means that there is rather a mix of two individuals of female sex and similar age at death which can be present in the sample.

Conclusion: skeleton of female (?), ca. more than 50 years old.

Excav. No. 103/JJ/2000

From the skull only the middle part of the mandible is present in sample, the mental eminence is of degree 3. The highly damaged postcranial skeleton is of robust construction, with middle muscular development, fully united epiphyses, a closer greater sciatic notch with a tendency to the shape of the letter U. The pubic symphysis has traces of transverse stripping on the ventral side, but otherwise, it is highly altered (phase -8). There is dental abrasion of phase 8. The vertebrae have at the same time intact facets, only one lumbar vertebra has an indication of the degenerative-productive process, but small or middle enthesopathies are visible on the patella.

Conclusion: skeleton of male (?), ca. 30–60 years old.

Excav. No. 117/JJ/2000

Almost intact cranium of middle construction with middle developed muscular development, having significant closure of the lambdoid suture and complete obliteration of the coronal and sagittal sutures. The skull has a pentagonoid outline, a nuchal crest of degree 2, small frontal tubers, a supra-orbital margin of degree 1, angular and middle high orbits, middle high and middle wide piriform aperture. The mental eminence is of degree 1, the supra-orbital ridge and glabella of degree 2, in addition to a slant forehead. The mastoid process is of degree 4 and dental abrasion 7c. The right condylar process of the mandible has changed due to the degenerative-productive process. There is a highly damaged, middle robust postcranial skeleton with middle muscular development, fully united epiphyses. There is a relatively narrow body of the ischium, but some other fragments of the pelvis (acetabulum, pubic symphysis) reveal rather more robust structures. The skeleton is considerably porotic and brittle but recession of the spongy tissue is not (as it is visible from some fragments) very extensive. The vertebrae are without more pronounced degenerative

and productive changes, some alterations are however visible on C1 and C2 junction. The skeleton is of a light colour without traces of mummification.

Conclusion: skeleton of male (?), ca. 40–60 years old.

Excav. No. 143/JJ/2002

The damaged skull is of robust construction with middle developed muscular development, significant closure of the lambdoid suture and complete obliteration of the coronal and sagittal sutures. The skull has a birsoid outline, a nuchal crest of degree 2 and a slant forehead. The mastoid process is of degree 3 and dental abrasion of phase 6. The damaged and robust postcranial skeleton has a middle muscular development, fully united epiphyses, long, narrow and little flexed sacrum, together with an asymmetric but relatively wide greater sciatic notch. The preauricular sulcus is of degree 0, while the arc composé forms a uniform arc,. There is a middle body of the ischium, the auricular surface is of phase 7. The manubrium is united with the sternum. There is sacralisation of the fifth lumbar vertebra and osteophytic formations around the head of humerus. The bones are porotic and brittle.

Conclusion: skeleton of male (?), ca. more than 50 years old.

Excav. No. 146/JJ/2002

The remains contain an intact skull of middle construction with middle developed muscular development; the cranial sutures are with significant closure or complete obliteration. The skull has a pentagonoid outline, a nuchal crest of degree 0, no frontal tubers, angular and middle high orbits, with a low piriform aperture, a middle mental eminence, a supra-orbital ridge and glabella of degree 1 and a supra-orbital margin of degree 2. There is a slant forehead, a mastoid processes of degree 4, and dental abrasion of phase 4c. The well preserved, gracile postcranial skeleton displays a middle slight muscular development, united epiphyses, except for the ilium, and distal epiphyses of the forearm bones, where clear traces of fissures are still visible. There is a long, wide and middle flexed sacrum, the pelvis, as a whole, is high and narrow, with a greater sciatic notch of intermediate shape, a preauricular sulcus of degree 1, a double arc compose and a narrow body of the ischium. With a high degree of probability, the metrical assessments of both pelvic bones reveal the male sex.. The skeleton has well preserved both left and right pelvic bones, whose metrical assessment gives unequivocally a sex that is male.

Conclusion: skeleton of male, ca. 20–30 years old.

Tomb 'KK'

The postcranial remains do not correspond with the skull, which belongs to an older individual. The skeleton provides a well preserved, left pelvic bone, whose metrical assessment gives unequivocally a male sex.. The pubic symphysis is of degree III, the auricular surface of degree 2.

Conclusion: skeleton of male, ca. 20–30 years old.

7.3.2 Mastabas at the Lake of Abusir

Excav. No. 1/LA5/2002

A highly damaged skeleton of middle robust constitution with middle developed muscular relief, cranial sutures with significant closure (also in metopic suture), dental abrasion of phase 8, auricular surface of phase 6.

Conclusion: skeleton of male (?), ca. 50–70 years old.

Excav. No. 8/LA-5/2002, TOMB 3, SHAFT 1

A heavily damaged skeleton of middle robust construction with marked muscular development has a skull which is in fragments. The mastoid process is of degree 4, the mental eminence of degree 3. The cranial sutures on the fragments have significant closure or complete obliteration. The greater sciatic notch is narrow and highly asymmetric, and there is a wide body of ischium. The pubic symphysis is of phase X, the auricular surface of phase 8. The dental abrasion is of phase 8, with ante-mortem loss of the lower incisors. There is evidence of a fracture of the left clavicle with retraction (displacement of sternal fragment of the bone in the sense of the caudal direction because of the tension of *musculus sternocleidomastoideus*). The vertebral bodies show marked arthritic changes, particularly in the lumbar vertebra: two of them are united very probably by diffuse idiopathic skeletal hyperostosis (DISH). There are degenerative-productive lesions of foot articulations.

Conclusion: skeleton of male, ca. more than 60 years old.

Excav. No. 10/LA-5/2002, TOMB 1, SHAFT 4

The remains consist of a highly damaged skull and little better preserved postcranial remains. The supra-orbital ridge and glabella have a reading of degree 3. The skull has a slant forehead, and a mastoid process of degree 4. The cranial sutures have reached complete obliteration. The postcranial skeleton is gracile, with a narrow body of ischium, a wide and little asymmetric greater sciatic notch, a narrow pubic symphysis with marked degenerative-productive modification of the surface.

Conclusion: The skeleton is in bad state of preservation but differences in morphological traits indicate that it can be the skull of an elderly male, mixed with the postcranial remains of an elderly female. However, the skeleton 159/GG/95 has similar disproportions of cranial and postcranial features.

Excav. No. 11/LA-5/2002 (TOMB 1, SHAFT B)

A badly preserved skull (partly in insignificant fragments), cranial sutures open, dental abrasion of phase 4, supra-orbital margin of degree 0, mastoid process of degree 0. The postcranial remains reveal a very gracile construction and brittle bones.

Conclusion: skeleton of female (?), ca. 25–35 years old.

Excav. No. 12/LA-5/2002, TOMB 1, SHAFT 8

Fragments of the skeleton of perinatal age, degree of calcification of first milk molar teeth can serve as a diagnostic criterion.

Excav. No. 14/LA-5/2002, TOMB 1, SHAFT 7

A highly damaged skeleton with free epiphyses, dens axis united with the body of axis, lengths of diaphyses: humerus 210 mm, tibia 220 mm. The teeth age correspond well with the skeletal age – the roots of the first molars already calcified: only the crown for the third molar is finished.

Conclusion: skeleton of immature individual, ca. 10–11 years old.

Excav. No. 15/LA-5/2002, TOMB 1, SHAFT 5

A highly damaged skeleton, the skull in insignificant fragments: the supra-orbital margin is of degree 0, the mastoid process of degree 2. There is minimal closure of the coronal suture. The dental abrasion is of phase 5a, and there are advanced arthritic changes in four of the preserved vertebrae. It seems that some vertebrae could be

united into blocks because of the diffuse idiopathic skeletal hyperostosis (DISH). The articulation surfaces of the long bones are without arthritic changes.

Conclusion: skeleton of female (?), ca. 25–50 years old.

Excav. No. 18/LA-5/2002, TOMB 1, SHAFT 6

A highly damaged, middle gracile postcranial skeleton with slight muscular development; the skull is in fragments, the better preserved section is only the frontal bone, supra-orbital ridge and glabella of degree 1, the mastoid process of degree 1. The cranial sutures are either open or they have minimal closure. The degree of dental abrasion is more advanced on the maxilla of degree 6c. Only one fragment is preserved from the pelvis – it has a relatively well developed preauricular sulcus with indications of a wide greater sciatic notch. The preserved thoracic and cervical vertebra and articulation surfaces of the long bones and their margins are without arthritic changes. Crystals of salt are found on the surface of the bones.

Conclusion: skeleton of female (?), ca. 30–50 years old.

Excav. No. 19/LA-5/2002, TOMB 1, SHAFT 10

Some fragments of the long bone diaphyses, the scapula, ribs and proximal part of the third metacarpal, which is with united epiphysis.

Conclusion: skeleton of an adult individual.

Excav. No. 20/LA-5/2002, TOMB 1, SHAFT 1

Fragments of a gracile or even middle robust skull, dental abrasion of degree 4–5. The left pelvis has a wide and symmetric greater sciatic notch and a narrow body of the ischium, gracile and heavily damaged postcranial skeleton with slight muscular development. Some bones of the skeleton are differentiated by colour.

Conclusion: skeleton of female (?), ca. 30–45 years old.

Excav. No. 21/LA-5/2002, TOMB 1, SHAFT B

A heavily damaged gracile skeleton with slight muscular development. The cranial fragments appear with significant closure or complete obliterations. There is a small mastoid process, extensive dental abrasion. Also present is a symmetric and widely open greater sciatic notch and the preauricular sulcus is of degree 1. The auricular surface, slightly protuberant, is of phase 6–7. The body of the ischium is narrow. The vertebral bodies show the beginnings of arthritic changes on the lumbar parts. The articular surfaces of the long bones and their margins are without alterations.

Conclusion: skeleton of female (?), ca. 40–50 years old.

Excav. No. 22/LA-5/2002, TOMB 1, SHAFT 2

Fragments of human skeleton without any remains of morphologically important features of either the skull or the pelvis. The overall robusticity of the remains favour the male sex. The vertebral bodies are well defined, without arthritic changes. There is an abscess on a fragment of the mandible.

Conclusion: skeleton of adult individual, ca. 30–60 years old.

Excav. No. 23/LA-5/2002, TOMB 1, SHAFT 3

A heavily damaged gracile skeleton with slight muscular development; the skull was in fragments, but shows a small mastoid processes, significant closure on the lambdoid suture, significant closure or complete obliteration on the coronal and

sagittal sutures. The nuchal crest is of degree 1, the dental abrasion of phase 7. The pelvic bone is gracile, with a thin pubic symphysis and a wide and symmetric greater sciatic notch, protuberant auricular surface and narrow body of ischium, middle wide and slightly flexed sacrum. There is a preauricular sulcus of degree 4, and a pubic symphysis of phase VIII–IX, with an auricular surface of phase 6 or 7. The vertebrae are without arthritic changes, and the articular facets of the long bones – as well as their margins – are without alterations.

Conclusion: skeleton of female, ca. 30–50 years old.

Excav. No. 24/LA-5/2002, TOMB 1, SHAFT 8

The skull and pelvic remains are in a very bad state of preservation, so the sex determination and age at death estimation can not be undertaken with any degree of reliability.

Excav. No. 25/LA5/2002, TOMB 1, SHAFT 9

Fragments of middle robust skeleton with middle developed muscular relief. There is a low mandibular body with a mental eminence of degree 4 and dental abrasion of phase 4c. The long bones epiphyses are fully united. The pelvis is fragmentary, but the greater sciatic notch seems to be asymmetric and middle wide. There are marked enthesopathies on the patella and calcaneus, but the arthritic changes of the backbone are very slight and only on the lumbar vertebra.

Conclusion: skeleton of male (?), ca. 30–50 years old.

Excav. No. 26/LA-5/2002, TOMB 1, SHAFT 5

Fragments of a skeleton of middle robust construction, which has a significant closure of the coronal suture. The mastoid process is of degree 3–4. Two preserved vertebral bodies are without arthritic changes.

Conclusion: skeleton of more than 40 year old individual.

Excav. No. LA-5 A/2002, SHAFT 4

Highly damaged skeleton of middle robust construction with slight muscular development. The dental abrasion is of phase 7c. One of the thoracic vertebra has a completely collapsed body on the anterior part; remaining vertebra are however, without more pronounced arthritic changes. Some of them even have indications of fissures. The two radii are of different length.

Conclusion: intermingled bones of minimally two adult skeletons can be present in the sample.

Excav. No. LA-5 A/2002/TOMB 2, SHAFT 4 (DEPTH 2.30 M)

Fragments of a skull with a significant closure of the sagittal and lambdoid sutures. The postcranial skeleton is in insignificant fragments, but has rather a gracile construction.

Conclusion: skeleton of an older individual, very probably more than 50 years old.

Excav. No. LA-5 A/2003/TOMB 2, SHAFT 3

Several insignificant fragments of the skull and postcranial skeleton of robust construction with united epiphyses.

Conclusion: skeleton of an adult individual.

Excav. No. LA-5 A/2002/TOMB 2, SHAFT 5, bones from the bottom of the shaft and from the niche. Fragments of the skull and postcranial skeleton of middle robust construction with fully united epiphyses.

Conclusion: skeleton of an adult individual.

7.4 Results

T-tests for independent samples were applied to reject the variables whose male-female differences are not statistically significant. In both samples (Abusir and the CWC) and for all variables, however, highly significant differences have been found (table 7.1).

For a better appreciation of the discrimination capacity of nine selected variables, the DF for each variable was worked out and their parameters were compared. Two criteria were retained – the lambda of Wilks (this parameter varies from 0 meaning total discrimination up to 1 meaning null discrimination) and a percentage of the correct classification (the percentage of the subjects classified were in agreement with the primary diagnosis). We used in all these and subsequent analyses the probability of belonging to one or other sex (prior probability) identical for both sexes (0.5).

The discrimination abilities of the selected variables were compared in both populations – the Abusir and the CWC (table 7.2). As shown in the table, a more pronounced sexual dimorphism of the humerus and tibia variables is clearly evidenced in the CWC population. On the other hand, it seems that the femur has a bigger discrimination capacity in the Abusir population sample: only the FMLS7 is better at differentiating data in the Central European CWC sample. These results indicate the risk of unreliable sex determination when criteria from Europe are applied to ancient Egyptian material.

Then, special DF analyses for each particular skeleton were worked out according to the preserved variables in the Abusir sample. To reinforce the discriminating capacity of the DF, where possible, three variables were used and three independent

ABU	Mean F	N (F)	SD (F)	Mean M	N (M)	SD (M)	t-test	p
HSID4a	54.6	14	3.58	60.8	11	3.41	19.61	0.000
HMXS5	19.2	15	1.35	20.8	9	1.90	6.03	0.022
HMNS6	14.2	15	0.94	16.2	9	1.91	12.12	0.002
FAPS6	24.2	16	1.59	30.0	12	2.83	47.87	0.000
FMLS7	22.5	16	2.24	25.4	12	2.57	10.30	0.004
FSUB9	28.2	16	2.28	31.6	12	3.16	10.65	0.003
FSUB10	20.7	16	1.43	24.1	12	1.96	29.44	0.000
TAPF8a	28.3	14	3.12	33.8	8	4.53	11.45	0.003
TMLF9a	19.3	14	2.29	23.0	9	2.62	13.32	0.001

CWC	Mean F	N (F)	SD (F)	Mean M	N (M)	SD (M)	t-test	p
HSID4a	58.1	13	3.71	65.6	11	3.68	24.55	0.000
HMXS5	22.4	10	2.04	25.4	8	1.49	12.27	0.003
HMNS6	16.4	10	1.67	19.8	8	1.85	16.57	0.001
FAPS6	25.5	17	1.62	30.7	13	2.67	43.15	0.000
FMLS7	26.0	17	1.59	28.2	13	1.55	14.96	0.001
FSUB9	32.5	17	2.51	35.1	13	2.43	8.16	0.008
FSUB10	22.1	17	1.96	26.3	13	2.28	28.64	0.000
TAPF8a	29.4	12	2.08	33.9	10	2.16	24.57	0.000
TMLF9a	19.5	12	1.28	22.4	10	1.92	18.18	0.000

Table 7.1 T-tests for independent samples and its probabilities counted for nine selected measurements in two different populations (ABU – Abusir, CWC – Corded Ware Culture).

	ABU				CWC			
	LW	%T	%F	%M	LW	%T	%F	%M
HSID4a	0.540	80.0	78.6	81.8	0.473	83.3	76.9	90.9
HMXS5	0.785	66.7	73.3	55.6	0.566	88.9	90.0	87.5
HMNS6	0.645	75.0	80.0	66.7	0.491	83.3	80.0	87.5
FAPS6	0.352	89.3	93.8	83.3	0.394	93.3	94.1	92.3
FMLS7	0.716	71.4	75.0	66.7	0.652	73.3	70.6	76.9
FSUB9	0.709	78.6	81.3	75.0	0.774	66.7	64.7	69.2
FSUB10	0.469	82.1	81.3	83.3	0.494	86.7	82.4	92.3
TAPF8a	0.636	86.4	92.9	75.0	0.449	81.8	83.3	80.0
TMLF9a	0.620	78.3	78.6	77.8	0.524	86.4	83.3	90.0

Table 7.2 The abilities of discrimination of the nine selected variables for Abusir (ABU) and Corded Ware Culture (CWC) populations, LW – Wilks's Lambda, %T – percentage of right attribution in both sex, %F – percentage of right attribution for females, %M – percentage of right attribution for males.

analyses (composed from a different combination of variables) were undertaken. If, for example, all DF analyses provided a probability higher than 90% to be a male, the attribution of this skeleton to the male sex was taken as being reliable, *idem* for the female subjects. However, when the results were not quite clear, for example when the posterior probabilities varied between 80%–90%, the sex attribution has been taken with a question mark (M? or F?). Results of posterior probabilities with the presentation of variables used in different DF appear in *table 7.3*.

Starting from 28 skeletons with measurable long bones (only 9 skeletons have the pelvic bone in a state of possible sex determination), the 12 females and 14 males have been determined in the present sample. The probability of sex attribution is however unequivocal. Males appear to develop clearer morphological features than females. Taking together morphological assessments and DF analyses only 5 females but 10 males can be determined reliably.

7.5 Discussion

Highly different results of sexual differences when different skeletal series are used in the study can be considered as a proof of dimorphic specificities of past human populations. It seems that the sexual dimorphism of humerus and tibia measurements of ancient Egyptians from Lower Egypt was reduced to some extent particularly when compared with contemporary populations of central Europe. On the other hand, the femoral differences between males and females were probably greater in Ancient Egyptians. The differences can be interpreted in terms of the biomechanical demands on the femur under different living conditions. In spite of the fact that the results were elaborated on a rather low number of cases, the consistent dimorphic results of different variables for some or other bone indicate that systematic differences could be expected.

The question is also how many variables should be included in each DF for a specific population. Limited numbers of variables restrain the performance of DF, but it should not be forgotten that the number of determinable skeletons is also restrained when the number of variables rise as the archaeological series include frequently unsatisfactorily preserved remains.¹⁰ Therefore, we should find some specific combinations of a small number of highly dimorphic variables on well preserved parts of the skeletons delivering reliable FD in a sufficient number of skeletons. For the development of such standards a higher number of skeletons belonging to the same Egyptian population will be needed.

¹⁰ J. Dittrick, J. M. Suchey, 'Sex determination of prehistoric Central California skeletal remains using discriminant analysis of the femur and humerus', *American Journal of Physical Anthropology* 70 (1986), 3–9; G. Mall, M. Graw, K. Gehring, M. Hubig, 'Determination of sex from femora', *Forensic Science International* 113 (2000), 315–321.

skeleton	F-1DF	M-1DF	F-2DF	M-2DF	F-3DF	M-3DF	variables in first DF	variables in second DF	variables in third DF	sexDF	sexMO
158/GG/95	0.989	0.011	0.718	0.282	0.962	0.038	HSID4a, HMXS5, FSUB9	HMXS5, HMNS6, FSUB9	HSID4a, HMNS6, FSUB10	F	F
159/GG/95	0.932	0.068	0.101	0.899	0.640	0.360	HSID4a, FAPS6, TAPF8a	HMXS5, FMLS7, TMLF9a	HMNS6, FAPS6, TAPF8a	?	F?
160/GG/95	0.078	0.922	0.128	0.872	0.114	0.886	HSID4a, FAPS6, TAPF8a	HMXS5, FMLS7, TMLF9a	HMNS6, FAPS6, TAPF8a	M	M
161/GG/95	0.171	0.829					HSID4a			M?	M?
2/JJ/00	0.984	0.016	0.317	0.683	0.823	0.177	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	F?	F?
22a/JJ/00	0.998	0.002	0.231	0.769	0.246	0.754	FAPS6, FMLS7	FSUB9, FSUB10	FMLS7, FSUB9	?	F?
22b/JJ/00	0.570	0.430	0.824	0.176	0.315	0.685	HSID4a, FSUB9, TAPF8a	HMXS5, FSUB9, TAPF8a	HMNS6, FSUB10, TMLF9a	?	M?
92/JJ/00	0.641	0.359	0.514	0.486	0.454	0.546	HSID4a, HMXS5, HMNS6	HSID4a, HMXS5	HMXS5, HMNS6	?	F?
103/JJ/00	0.015	0.985	0.005	0.995	0.000	1.000	HMXS5, FMLS7, TAPF8a	HMNS6, FSUB9, TMLF9a	FAPS6, FSUB10, TAPF8a	M	M?
117/JJ/00	0.261	0.739	0.260	0.740	0.031	0.969	HSID4a, FAPS6, TAPF8a	HMXS5, FMLS7, TMLF9a	HMNS6, FAPS6, TAPF8a	M	M?
143/JJ/02	0.003	0.997	0.064	0.936	0.058	0.942	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	M	M?
146/JJ/02	0.127	0.873	0.137	0.863	0.058	0.942	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	M	M
1/LA5/02	0.000	1.000	0.041	0.959	0.001	0.999	HSID4a, FSUB9, FSUB10	FAPS6, FMLS7, TMLF9a	HSID4a, FSUB10, TAPF8a	M	M?
8/LA5/02	0.000	1.000	0.001	0.999	0.001	0.999	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	M	M
10/LA5/02	0.612	0.388	0.431	0.569	0.924	0.076	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	F?	?
11/LA5/02	0.838	0.162					HSID4a, HMXS5, HMNS6			F?	F?
15/LA5/02	0.170	0.830	0.226	0.774	0.129	0.871	HMXS5, HMNS6, FAPS6	FAPS6, FMLS7, FSUB9	FMLS7, FSUB9, FSUB10	M?	F?
18/LA5/02	0.937	0.063	0.937	0.063	0.978	0.022	HMXS5, FAPS6, TAPF8a	HMNS6, FMLS7, TMLF9a	FAPS6, FMLS7, FSUB9	F	F?
20/LA5/02	0.983	0.017	0.569	0.431	0.926	0.074	HSID4a, FAPS6, FMLS7	HMXS5, FSUB9, FSUB10	HMNS6, FAPS6, FSUB9	F	F?
21/LA5/02	0.997	0.003	0.959	0.041	0.988	0.012	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	F	F?
22/LA5/02	0.006	0.994					HSID4a, FSUB9, FSUB10			M	?
23/LA5/02	0.977	0.023	0.985	0.015	0.971	0.029	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	F	F
24/LA5/02	0.000	1.000	0.000	1.000	0.001	0.999	HSID4a, FSUB9, TAPF8a	HSID4a, FSUB10, TMLF9a	FSUB9, FSUB10	M	?
25/LA5/02	0.004	0.996	0.021	0.979	0.165	0.835	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	M	M?
26/LA5/02	0.324	0.676					TAPF8a, TMLF9a			?	?
LA5/T2/S4	0.982	0.018					HSID4a, FSUB9, FSUB10			F?	?
143/HH/04	0.002	0.998	0.000	1.000	0.023	0.977	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	M	M?
KK	0.134	0.866	0.155	0.845	0.764	0.236	HSID4a, FAPS6, TAPF8a	HMXS5, FSUB10, TMLF9a	HMNS6, FAPS6, TAPF8a	M?	M

Table 7.3 Posterior probabilities of three DF for attribution to female and male sex (F-1DF: probability to be female as evidenced by first DF, M-1DF: probability to be male as evidenced by first DF; F-2DF: probability to be female as evidenced by second DF, M-2DF: probability to be male as evidenced by second DF; F-3DF: probability to be female as evidenced by third DF, M-3DF: probability to be male as evidenced by third DF; sexDF: determination of the sex when DF were applied; sexMO: determination of the sex when morphological methods were applied)

PART 8

Funerary food offerings

Salima Ikram

8 Funerary food offerings

The excavation of the Qar's complex has yielded a rich zooarchaeological deposits. Many of these deposits are of particular interest, as they seem to come from relatively intact contexts and thus provide a rare insight into burial customs.

All the bones were collected by hand and identified on site using comparative skeletal material as well as published material. The information recorded for each bone included: taxon, element, portion, side, age where possible (based on epiphyseal fusion or tooth wear), butchery marks, work, gnawing, burn marks, erosion/weathering, gender (when possible), breakage patterns and measurements, when possible. Fragments (measuring over 1.5 cm at least) of limb bones, ribs, and vertebrae that were identifiable only by mammal size were counted. The ageing systems for bones and teeth that were used were I. Silver and A. Grant,¹ and measurements follow von den Driesch.²

Bird bones were identified as well as possible, given the constraint of a limited comparative collection. It is difficult to differentiate between many species of duck and goose as the bones vary in size depending on age and gender, thus in many cases one can only say *Anser* sp. or *Anas* sp.

8.1 Mastaba of vizier Qar (Tomb 'GG')

A shaft in area GG (Shaft 2) contained a robbed burial consisting of human and animal bones. A total of 32 specimens were examined and identified from this area, with 31 coming from cattle (*Bos taurus*) and 1 fragment of a coracoid belonging to a goose (*Anser* sp.).

Based on the number of left and right elements, it seems that portions of the hindlegs of at least two different cows were offered, together with the right forelegs of two cows, a few ribs, and perhaps the head of one animal, of which only the teeth were recovered (Table 8.1). The teeth suggest an animal of about a year in age, an estimate that is correlated by the total absence of epiphyseal fusion of the long bones and phalanges. What is unusual about these offerings is that some metapodials and phalanges from the legs are included in the assemblage. Generally funerary offerings consist of the main meat-bearing bones of the limb, with the less fleshy metapodials and particularly the phalanges rarely included.³ The presence of poultry offerings is indicated by one incomplete coracoid of a goose (*Anser* sp.); perhaps more existed originally.

¹ I. A. Silver, 'The Ageing of Domestic Animals', in D. Brothwell, E. S. Higgs, eds., *Science in Archaeology*, (London, 1963), 282–302; A. Grant, 'The Use of Tooth Wear as a Guide to the Age of Domestic Ungulates', in B. Wilson, C. Grigson, S. Payne, eds., *Ageing and Sexing Animal Bones from Archaeological Sites*, BAR British Series 109 (Oxford, 1982), 91–108.

² A. von den Driesch, *A Guide to the Measurement of Animal Bones from Archaeological Sites* (Cambridge, MA, 1973).

³ See *Choice Cuts: Meat Production in Ancient Egypt*, OLA 69 (1995), Appendix 2.

Element	Left	Right	Unknown	Total
Femur	2	2		4
Humerus		3		3
Tooth d4		1		1
Tooth m1		1		1
Tooth m2		1		1
Metacarpal			3	3
Metapodial		1		1
Phalanx 1	2	1		3
Phalanx 2		1		1
Phalanx 3	2			2
Ribs			9	9
Scapula		1		1
Ulna		1		1

Table 8.1 Cattle bones from the tomb of Qar

8.2 Senedjemib (Tomb 'HH', Shaft 'A')

A total of 40 animal bones were examined from the disturbed burial chamber of Senedjemib (Table 8.2). The types of animals included different types of poultry, cattle, and rodents. The rodents include rats (*Rattus rattus*, and maybe *Rattus norvegicus*) and mice (*Mus musculus*). These are intrusive and probably only represent three or four individuals.

The two duck bones seemed to come from a pintail duck (*Anas acuta*), and a mallard (*Anas platyrhynchos*), respectively, indicating the presence of two animals at least. The goose bones come from at least two animals: six bones come from one individual, most probably a White Fronted Goose (*Anser albifrons*), while another three bones come from another goose (*Anser* sp.).

Animal	Number of Bones	Minimum Possible Number of Individuals
Unidentified Bird	1	1
Cattle	8	1
Duck	2	2
Goose	9	2
Rodent	20	3
Total	40	

Table 8.2 Number of bones per animal type in Senedjemib's burial chamber

Only eight cattle bones came from this tomb. These were all from mature animal(s), aged 3 years or more, based on epiphysial fusion. The cattle bones included a pair of femurs and the right foreleg (scapula and humerus), as well as ribs. Quite possibly these are all from a single animal, although it is possible that the foreleg belonged to another creature.

8.3 Tomb of Qar Junior (Tomb 'HH', Shaft 'B')

The burial chamber of Qar Junior contained a collection of animal bones that come from funerary offerings. A total of 79 bones and fragments were identified from this area (Table 8.3). The bones belong to cattle and poultry, traditional components of food offerings for the dead.

The bird bones that were identified came from one unidentified duck (*Anas* sp.), at least one example of the pintail duck (*Anas acuta*), one teal (*Anas crecca*), possibly one example of a White-Fronted goose (*Anser albifrons*), a Brent goose (*Branta bernicla*), maybe a single example of a Greylag goose (*Anser anser*), and a pigeon or dove

Element	Side	Bird	Cattle	Duck	Goose	Pigeon	Teal	Grand Total
Coracoid	Left	1		1		1		3
	Right	1		1			1	3
Coracoid Total		2		2		1	1	6
Femur	Left		2	1	3		1	7
	Unknown		1			1		2
	Right		1	1	2			4
Femur Total			4	2	5	1	1	13
Headbone	Unknown	2	2					4
Headbone Total		2	2					4
Humerus	Left		1	1	2	1		5
	Unknown		1					1
	Right			1	1	1	1	4
Humerus Total			2	2	3	2	1	10
Limb bone	Unknown		1					1
Limb bone Total			1					1
Metapodial	Unknown		2					2
Patella	Left		1					1
Patella Total			1					1
Rib	Unknown		5					5
Rib Total			5					5
Scapula	Left				1			1
	Unknown		1					1
	Right		1		1			2
Scapula Total			2		2			4
Sternum	Irrelevant	7						7
Sternum Total		7						7
Synsacrum	Irrelevant	7						7
Synsacrum Total		7						7
Tibiotarsus	Unknown	5						5
	Right				1			1
Tibiotarsus Total		5			1			6
Tooth	Unknown		1					1
Tooth Total			1					1
Vertebra	Irrelevant	9						9
Vertebra Total		9						9
Windpipe	Irrelevant	3						3
Windpipe Total		3						3
Grand Total		35	20	6	11	4	3	79

Table 8.3 Species list with respective anatomical elements and their relevant sides, from Qar's Jr. burial chamber

(*Streptopelia sp.* or *Columba sp.*), making a minimum of seven birds that were offered. The mammalian bones were all from cattle, most probably a single individual who was, according to the epiphysial fusion, a little over a year in age at death.

Some of the birds retained their heads, which is not always usual in funerary offerings when the majority of examples are deprived of their heads, wing-tips, and feet. The inclusion of metapodia amongst the cattle bones is not always standard in funerary offerings,⁴ as this portion of the legs is generally severed and disposed of, or consumed and not kept as part of the funerary offerings.

A very curious faunal deposit was also found in the shaft leading to the burial chamber of Qar Junior. It was located three metres below the top of shaft. It consists of about seven centimetres of dark sandy soil containing a thick deposit of rodent bones. The disarticulated skeletons of several hundred (?) rodents are densely distributed throughout the layer. A small sample of the deposit showed that these creatures were of a variety of ages and several species. *Mus musculus*, *Rattus norvegicus*, and *Rattus*

⁴ See S. Ikram, *Choice Cuts: Meat Production in Ancient Egypt*, OLA 69 (1995), Appendix 2.

rattus were identified. Other rodents might be represented in the deposit, but did not appear in the portion that was sampled. A similar layer exists in the area of the Sixth Dynasty rock-cut chapels carved into the eastern side of Djoser's dry moat, found during the Polish Mission's October 2000 campaign.⁵ As yet, there is no explanation for the presence of this rodent rich deposit. Certainly, there are no signs of rodent gnawing on any of the bones found in the nearby shafts.

8.4 General discussion

Food is arguably the most important of all funerary offerings as without it the deceased cannot sustain himself in the afterlife. Many of the texts and much of the decoration in tombs is related to provisioning the dead for the hereafter. It seems possible that two types of offerings are found at this funerary complex at Abusir: funerary offerings interred with the dead at the time of the funeral, and offerings made to the dead in the tomb chapel and outside at festivals and anniversaries, subsequent to the interment.

Regardless of the occasion, the foodstuffs offered tend to consist of cattle and poultry. These are the ideal offerings, as can be seen from the offering lists, and indeed from victual offerings found throughout Egyptian history. However, for poorer individuals ovicaprids or even wild game might have been substituted for the more expensive cattle. It is likely that non-canonical (but consumed) animals such as the pig would not form part of the offerings interred with the dead, but rather, be a part of the occasional/seasonal offerings made by the living at anniversaries, or events when it was necessary to importune or propitiate the dead.

In addition to a predilection for cattle as offerings, there are preferences for the joints provided, both on religious and socio-economic grounds. As indicated in offering lists, the foreleg in the form of the scapula and humerus (and sometimes other portions of that limb) is the most canonical of meat offerings. Other parts of the cow are also considered important, particularly the ribs, and a part of the hindleg in the form of the femur. Despite the limited amount of meat on them (save for the cheeks), cattle heads are also given as they, more than any other portion, signify the whole creature.

The preferred age for sacrificial cattle is anywhere between 18 months and 3 years, as can be seen in other examples of funerary offerings from all periods of Egyptian history.⁶ All analysed examples from the Abusir offerings fit into that category.

Avian remains are of special interest as some scholars have suggested that it is possible to establish the season of the year depending on what types of birds were present.⁷ Certain birds (*e.g.* *Anser albifrons*) tend to be seasonal visitors due to their migratory paths. Thus, the presence or absence of certain species might indicate the time of year that the entombment took place. However, one should bear in mind that the Egyptians might have trapped these migrating fowl and kept and bred them in poultry yards that were common throughout Egyptian history,⁸ thereby providing a stable supply of these species. These migratory species that appeared in October/November and again in March/April were specially attractive to the Egyptians as they were indicative of agriculturally rich time-periods that were not only wealthy in game, but associated with regeneration: the seasons of sowing and of harvesting. As such, their inclusion in funerary situations, either represented in tomb scenes, or in the set of food offerings would be extremely logical as it would have both real and symbolic value, but cannot necessarily determine the time of the funeral.

⁵ See S. Ikram, 'Preliminary Zooarchaeological Report for West Saqqara', *PAM* 12 (2001), 128.

⁶ See 'Victual Mummies', in S. Ikram, N. Iskander, *Catalogue General of Non-Human Mummified Remains* (Cairo, 2002).

⁷ O. Goelet, 'The Migratory Geese of Meidum and Some Egyptian Words for "Migratory Bird"', *BES* 5 (1983), 41–65.

⁸ Representational evidence for this is found from the Old Kingdom onward, with a specially fine example in the mastaba of Ti at Saqqara, as well as in the mastabas of the Sixth Dynasty in the Teti cemetery. A short discussion of poultry yards can be found in Ikram, *Choice Cuts*, Chapters I.4, IV.3, and V.

PART 9

Conclusions

Miroslav Bárta

9 Conclusions

9.1 The cemetery of Qar and its place in Sixth Dynasty history¹

Prior to the discovery of the Sixth Dynasty horizon in South Abusir in 1995, several traditional areas for burials dated to the late Fifth and Sixth Dynasties were known in central Saqqara and in Abusir. The most important are the following ‘core cemeteries’ (not counting the still largely unexplored areas of South Saqqara)²: tombs north of Djoser’s enclosure wall,³ tombs east of Djoser’s enclosure wall,⁴ tombs west of Djoser’s enclosure wall,⁵ the Teti Pyramid Cemetery,⁶ tombs along the Unas Causeway,⁷ rock-cut tombs in the area of the New Kingdom tombs around the tomb of Horemheb and others,⁸ tombs in the area of the Mission du Bubasteion,⁹ tombs southeast of the pyramid complex of Neferirkara¹⁰ and rock-cut tombs in the area of Tabbet al-Guesh (this cemetery is situated in a transitional zone between Central and South Saqqara: its examination only started in 2001).¹¹

From the locations enumerated above it appears that there was a clear tendency within the Memphite cemetery for a gradual southward and westward movement.¹² The cemetery around vizier Qar thus represents an anomaly in terms of its location in the westernmost part of the South Abusir’s Central Mound. In the following paragraphs some basic features connected with these tombs are discussed and, in several cases, evidence from the tomb complex of Inti is used for comparative reasons despite the fact that his tomb complex will be dealt with in the next volume of the publications of this cemetery.

The architecture in the family cemetery founded by vizier Qar started sometime at the beginning of the Sixth Dynasty, and the internal arrangement of his tomb follows the building concept of the large family tombs of the Memphite nobles that developed during the reign of Nyuserra.¹³ From his reign onwards, increasing numbers of offices and institutions of the central administration became dominated by individual families of high officials. Their tombs are characterised by rooms with specific functions, such as east-west oriented cult chapels, large cultic courtyards, several store rooms and elaborate burial chambers, sometimes decorated.¹⁴

¹ For a preliminary and somewhat out-dated version of these conclusions cf. M. Bárta, ‘The Sixth Dynasty tombs in Abusir. Tomb complex of the vizier Qar and his family’, in Bárta, ed., *OKAA 2004*, 45–62.

² V. Dobrev, ‘A new necropolis from the Old Kingdom at South Saqqara’, in Bárta, ed., *OKAA 2004*, 127–131.

³ *PM III^F*, 448ff., and M. Baud, ‘Aux pieds de Djoser. Les mastabas entre fossé et enceinte de la partie nord du complexe funéraire’, in Berger, Mathieu, eds., *Études Lauer*, 69–87.

⁴ *PM III^F*, 575–586.

⁵ *PM III^F*, 593–612. See also the latest publication by Myśliwiec *et al.*, *Saqqara I*; idem, ‘West Saqqara. Archaeological Activities, 2003’, *PAM* 15 (2003), 111–122.

⁶ *PM III^F*, 508ff.

⁷ *PM III^F*, 614–648.

⁸ E.g. southeast of the Ramesside necropolis. Excavations were carried out by the Saqqara Inspectorate of Antiquities, led by Magdi Ghandour.

⁹ Zivie, *Les tombeaux retrouvés*, 35 – unpublished, in preparation by M. Bárta.

¹⁰ Verner, Callender, *Abusir VI*.

¹¹ Recent excavations by the IFAO and V. Dobrev, see B. Mathieu, ‘Travaux de l’Institut français d’archéologie orientale’, *BIFAO* 101 (2001), 544–545; idem, *BIFAO* 102 (2002), 524–526; idem, *BIFAO* 103 (2003), 568–571; idem, *BIFAO* 104 (2004), 661–665.

¹² Cf. L. Giddy, ‘Memphis and Saqqara during the Late Old Kingdom: Some topographical considerations’, in Berger, Clerc, Grimal, eds., *Hommage à Jean Leclant I*, 189–200.

¹³ M. Bárta, ‘Archaeological Innovations in the development of the non-royal tomb during the reign of Nyuserra’, in Jánosi, ed., *Architecture and Significance*, 105–130.

¹⁴ *Ibid.*

The burial complex of vizier Qar and his family members follows this line of development, too.¹⁵ It consists of a principal cult chapel for the tomb owner, the main burial place, plus additional shafts for other members of the family (including both male and female adults) and a small, open cult courtyard. To the north of the tomb of Qar, minor chapels were built for three of his sons: Qar Junior – his eldest son, Senedjemib and possibly also for Tjenti. Inti, another son of Qar, was the owner of a large mastaba located to the south of his father's tomb. Only Qar Senior formally attained the highest office in the state, that of a vizier. Given the fact that he had to modify his already existing tomb (which had corresponded to his originally lower status) by building a new cult chapel, his appointment was probably made late in his professional career.

What surprises us most is the contrast in the state of preservation of these individual tombs. Whereas the tomb complex of the vizier Qar and his favourite son Inti have been largely preserved – undoubtedly, the largest wave of destruction occurring to them may date to pre-modern times – the case of Qar Junior and Senedjemib is different. It is striking that despite the fact that they formed an internal part of Qar's complex, their chapels were intentionally destroyed down to their foundations, their false doors smashed into pieces, and, of course, their burial apartments thoroughly destroyed too – especially the burials themselves.

Possible examples explaining the mechanisms of such a *damnatio memoriae* may be found in the reign of Teti and Pepy I. We know that Teti's reign was not very long, approximately 11 years, and already at the beginning of his rule (despite the fact that he married Khuut and Iput, the daughters of Unas), he had to face some problems in the country which is also indicated by his Horus name, *Seheteptawy*: 'He who pacifies the Two Lands'.¹⁶ According to Kanawati, Teti also introduced a new title 'overseer of the protection of every house of the king' which emphasizes the importance given to the issue of the king's security at that time.¹⁷ This historical context may explain the fact why Qar was appointed, rather surprisingly, to the office of the vizier. His title 'true keeper of Nekhen of the king' and his duties at the Six Great Courts indicate that he was a trustworthy official to the king (*table 9.3*).¹⁸

Following the premature deaths of the eldest son of Teti, the prince Tetiankhkem, and of Teti himself, Userkara took the throne for a short period of time.¹⁹ Pepy I became a king after Userkara's reign. From Pepy's reign are known two attempts to bring his reign to an end. The first one is the well-known harem conspiracy which resulted in the abandonment of several tombs for his officials in the Unas cemetery and severe punishment of those officials. As a consequence, their names were either damaged or erased from their monuments. Later on, in the twenty-first year of his reign, another unsuccessful attempt against Pepy I is attested. This time, the officials were badly punished, their tombs destroyed and their names erased.²⁰

In Abusir, however, the thorough demolishment of the tombs of Qar Junior and Senedjemib are of a later date, sometime in the reign of Pepy II. Unfortunately, from the reign of this king no examples of *damnatio memoriae* are known so far. At the same time we cannot exclude an instance of internal strife within the family. In such a case, the cause may have been the two branches of the family trying to gain the dominance and grip of the principal administrative offices and with them associated benefits (the

¹⁵ For its preliminary publication see M. Verner, 'Excavations at Abusir. Seasons of 1994/95 and 1995/96', *ZAS* 124 (1997), 80–85; M. Bárta, V.G. Callender, 'A Family of Judges at Abusir South', *KMT* 7.2, (1996), 32–39; Bárta, Voděra, *Memories*, 24–39; M. Bárta, 'The Czech Institute's ten years of excavation at Abusir South', *KMT* 13/1 (2002), 1–11.

¹⁶ For the beginning of his reign see R. Stadelmann, 'König Teti und der Beginn der 6. Dynastie', in Berger, Clerc, Grimal, eds., *Hommages à Jean Leclant I*, 327–335.

¹⁷ Kanawati, *Conspiracies*, 183.

¹⁸ V. G. Callender, 'À propos the title of *r Nhn n z3b*', in Bárta, Krejčí, eds., *Abusir and Saqqara in the Year 2000*, 361–380.

¹⁹ For Tetiankhkem see Z. Hawass, 'Recent discoveries in the pyramid complex of Teti at Saqqara', in Bárta, Krejčí, eds., *Abusir and Saqqara in the Year 2000*, 419–422.

²⁰ Kanawati, *Conspiracies*, 185.

sons of the first wife of Qar – Qar Junior, Senedjemib and Tjenti competing with Inti, the son of the second wife of Qar; for this hypothesis see below, 9.5–9.6). In favour of such an explanation would speak the fact that Inti followed (replaced?) Qar Junior (clearly the oldest son of vizier Qar) in the office of *ḥr(j)-sš3 n wdꜥ-mdw (m) ḥwt-wrt 6*.

9.2 Architecture and finds of the vizier Qar's tomb

Initially, the tomb of vizier Qar was a more modest structure than his finished monument. It contained a north-south aligned chapel devoid of decoration and with a monolithic limestone false door embedded in the south end of the western wall (Chapel I). The false door contains only rarely attested title the 'true/real keeper of Nekhen' – *(J)r(J) Nḥn (n) z3b m3ꜥ*.

As a consequence of his newly gained rank Qar built a new, fully decorated and east-west oriented chapel with a false door containing newly acquired titles, including the one of the vizier. The division of decoration motifs within this room is relatively simple and uniform. The eastern wall, with a window, shows piles of offerings and the bottom registers depict butchering scenes. The north and south walls show processions of offering bearers and piles of offerings in the top registers. In addition, both the south and north walls also depict an offering ritual. The western ends of both long walls were reserved for the seated figure of Qar behind an offering table with his titles above his head. In front of his offering table are piles of offerings and it is interesting to note that the artists were trying to negotiate the *horror vacui* by adding blue-painted wine grapes whenever possible.

The decoration of the chapel was done rather roughly, clearly by several differently skilled artists. This fact may be observed at several places throughout the chapel, and is generally reflected in the quality of the final painting over the incised contours of the decoration scheme. On a general level it may be said that the quality of decoration decreases towards the east. The chapel decoration also provides the only hints about the family of the vizier. The lowest register on the north wall shows a procession of offering bearers where the first three are labelled as his sons, Qar Junior, Senedjemib and Tjenti, and in his inscription, Qar is labelled as the eldest son of vizier Qar. There is one more son attested in the chapel. His name is Inti, and he constructed his tomb to the south of his father's. His presence, however, reveals marks of secondary development within the family which took place during the chapel's decoration. On both the north and south walls, Inti is depicted as a focal figure making offerings to his father – despite Qar's Junior original supremacy as the eldest son of the vizier Qar. Closer inspection of the original decoration layout, however, shows that originally there were offerings depicted in the place that the figure of Inti later occupied. We can only guess at the reasons behind these modifications.

The western wall of the chapel was taken up by a monolithic limestone false door and its decoration and inscriptions were executed in a comparatively much better fashion than in the original chapel but still rather hastily made. Its shape conforms to the later Old Kingdom false door form with the cornice and torus moulding.²¹ As such, it contrasts with the original false door of Qar in the first chapel which is devoid of both of these morphologic elements.

We can only speculate why there was no wife depicted in Qar's second chapel, only his adult sons are shown. J. Swinton has suggested that, from the late Fifth Dynasty onwards, the officials were delaying construction of their tombs because quite often the officials were promoted in their offices relatively late. Following this hypothesis we could conclude that his wife (or wives) was already dead when he finished his tomb decoration and that any surviving daughters had already left his house.²²

Another interesting element in his tomb's architecture is represented by the corridor chapel comprising six cult niches corresponding with six burial shafts to the west. This

²¹ Strudwick, *Administration*, 9ff.

²² J. Swinton, 'The depiction of wives of tomb owners in the later Old Kingdom', *BACE* 14 (2003), 106–107.

chapel was clearly built for the 'minor' members of the family, except for the sons of the vizier who found their final resting places in other locations. It possibly included the burials of two wives of Qar (see below).

The burial chamber of vizier Qar is accessible by means of a descending passage starting in Open Court 1. The chamber is located exactly below Chapel II within Qar's complex and consisted of two parts. The western part, in fact a large sarcophagus recess, contained the sarcophagus. It may be assumed that the sarcophagus was prepared for Qar only after he was appointed to the office of the vizier – this results from the fact that most titles on the sarcophagus also occur on his false door in Chapel 2 (and are missing in Chapel 1, see *table 9.1*). The same may hold true for the construction of the burial chamber itself.

Undoubtedly the most unique feature of the burial chamber is its decoration. Most of the tombs with similarly decorated burial chambers are located in the Teti pyramid cemetery, and belong to the viziers Kagemni, Mereruka, Khentika-Ikheki, Ankhmahor, and Inumenu.²³ Another four published tombs are situated in the cemetery of Unas and belong to Ihy, Niankhba, Mehu, and Idut. One more tomb is located west of the Step Pyramid (Ptahhotep/Iynankh) and one remains unpublished (Kairer).

From the remains that have been left *in situ*, it can be reconstructed that the decoration comprised: two male figures dragging a sledge with large (oil) jars, a list of offerings (Type A), scene with a bed and headrest (referring most likely to the Osiris ritual), and depictions of offering items including furniture, a necklace and vessels. The burial chamber of Qar belongs to the very few known examples from Saqqara including human figures in the decoration scheme.²⁴

The tomb of vizier Qar provided a rather limited collection of artefacts which are indicative of its original equipment. In the courtyard were found some eight limestone altars used for the assembled cult of the family. The two serdabs each contained remains of a wooden (acacia wood) statue. In the case of Serdab 1, one can suggest that – given the bent arm – it must have been a seated statue.

Of the original burial equipment of the vizier's burial chamber, only a few remains have survived. Two of them – a wooden oar fragment (Excav. No. 1/GG/1995) and a beer jar miniature (Excav. No. 119/GG/1995) indicate that originally the chamber could contain servant and ship models. In addition to these items, many stone vessel fragments (Excav. No. 140/GG/1995), a limestone miniature vessel (Excav. No. 122/GG/1995) and wooden comb fragment (Excav. No. 137/GG/1995) complement the limited variety of preserved finds. The difficulty in assigning individual finds to individual tomb and chapel owners is indicated by the travertine offering table (Excav. No. 126/GG/1995) mentioning a *šps nswt* that was found in Chapel 1, but which most likely belongs to Qar Junior, who was the only person in the family with that attested title.

9.3 Architecture and finds of the tombs of Qar Junior and Senedjemib

The second generation of Qar's family, consisting of his four sons, followed tradition and built their tombs around their father's. By far the largest tomb belongs to Inti, who followed his father in the office of a judge. The archaeological situation in his tomb shows that some members of his family were buried within his tomb as well. Thus we have an almost complete record of members of three generations of the same family.

A group of three small burial installations was discovered to the north of Qar's tomb. They belonged to Qar Junior, Senedjemib and Tjenti. Two chapels were badly damaged and only some remains of their decoration preserved *in situ*, but their ground plans could be documented. They belonged to Qar Junior and Senedjemib. Their decoration and false doors were deliberately smashed into pieces in antiquity. From

²³ For the summary see Bolshakov, *Man and his Double*, 109–122 and K. Dawood, 'Animate decoration and burial chambers of private tombs during the Old Kingdom', in Pantalacci, Berger-El-Naggar, eds., *Des Néferkarê aux Montouhotep*, 117.

²⁴ *Ibid.*, 107–116, together with the tombs of Kairer (the publication has been in preparation by K. Dawood) and Inumin (Kanawati, *Teti Cemetery VIII*).

their fragments, however, we know that the false doors were decorated with a torus and moulding elements. These chapels could be approached from the Open Court of Qar. Close to them, the openings of the burial shafts leading to the burial chambers of these three officials were identified. Inside their destroyed burial chambers were found some important parts of the original burial equipment (see below).

Artefacts made of different sorts of stone were richly represented both in the burial chamber of Qar Junior and Senedjemib. In the burial chamber of Qar Junior were brought to light the following groups of stone artefacts: 7 travertine lids (Excav. Nos. 57a–d, 63, 83 a–b/HH/2000), 5 limestone goose models (Excav. Nos. 61, 65, 67, 68 and 74/HH/2000), 2 obsidian vessels (Excav. Nos. 58, 93/HH/2000), 1 rock quartz vessel (Excav. No. 81/HH/2000), 1 schist palette (Excav. No. 84/HH/2000), 1 travertine headrest base (Excav. No. 85/HH/2000) and 1 travertine offering table (Excav. No. 94/HH/2000) whose association with the original burial equipment is doubtful.

In the case of Senedjemib were found: 3 travertine lids (Excav. Nos. 107a, 114, 115/HH/2001), 3 obsidian vessels (Excav. Nos. 111, 113 and 116/HH/2001), 2 rock quartz (crystal) vessels (Excav. Nos. 110, 117/HH/2001), a basalt vessel (Excav. No. 112/HH/2001), a complete headrest set made of black schist (Excav. No. 118/HH/2001), two travertine headrest bases (Excav. Nos. 119 and 121/HH/2001), a travertine headrest top (Excav. No. 120/HH/2001) and a travertine seven sacred oils palette (Excav. No. 122/HH/2001).²⁵ Thus it seems that Senedjemib's burial equipment originally comprised at least three headrest sets and it was likely that there were two sacred oil palettes (see below finds from Shaft 'C').

Large sets of copper implements of different forms were discovered in the burial chambers of Qar Junior and Senedjemib. It is not only the classes and number of individual implements that are of interest here. The copper tools weigh several kilograms in total and their number amounts to more than two hundred (*tables 6.1 and 6.2*).²⁶

The count of individual categories with individually preserved copper implements shows that in the burial chamber of Qar Junior the most numerous were the necked adze blades (67), followed by axe heads (37), flat chisels (34), leaf-blade knives (25), cross-cut chisels (16), arrow-head chisels (10 plus at least 50 preserved in fragments²⁷) and needles (3). The number of completely preserved implements reached 192 of seven different tool classes. In addition, from the same chamber originate 14 miniature copper vessels. Additionally, a large quantity of implements was preserved in fragments (arrow-head chisels tend to fragment very easily given their fragility); the state of this group contrasts with the remains of the massive axe heads (each item weighing about 15 g) and leaf-blade knives (14 g) which were found in most cases complete. Given the different tendency towards fragmentation and the high number of indeterminate copper fragments, it may be estimated that the numbers for arrow-head chisels, cross-cut chisels and flat chisels, *i.e.* the artefacts most prone to fragmentation, should be at least doubled.

The burial chamber of Senedjemib comprised a much lower number of implements: flat chisels (6), axe heads (4) and cross-cut chisels (4), hooks (3), pin (1), arrow-head chisel (1) and necked adze blade (1) accompanied by 12 small copper vessels.

Given the dimensions of individual items, it may be concluded that all classes of copper implements were designed as model tools of real instruments that were perhaps used during their tomb construction and decoration. This results from a comparison made between those real finds used in ancient Egypt.²⁸

²⁵ Cf. Firth, Gunn, *TPC II*, pl. 15A.

²⁶ To these must be added large groups of the same implements from the burial chambers of Inti and Pepyankh Inti which will be treated in the next volume dealing with the tomb of Inti.

²⁷ Based on the count of the preserved points.

²⁸ Compare, for instance, copper tools discovered in the room with the burial equipment of Hetephe-res (I) in Giza, Reisner, Smith, *Giza Necropolis II*, 20, figs. 36–37 and pl. 30 or Arnold, ed., *Egyptian Art*, 282, 74A,B – chisels 12.2–13 cm long. For the copper tools interpretation as models of the tomb builders' instruments see K. Messiha, H. Messiha, 'A new concept about the implements found in the excavations at Giza', *ASAE* 64 (1964), 209–225.

Tools class/ Excav. No.	62/HH/2000	66/HH/2000	66a-d/H/2000	76/HH/2000	79/HH/2000	82/HH/2000	Total
Flat chisels	32	2					34
Cross-cut chisels	15	1					16
Axe heads	35	2					37
Leaf-blade knives	23	2					25
Arrow-head chisels	4	6					10
Necked adze blades	56	11					67
Needles/pins					1	2	3
Vessels			4	5	3	2	14

Table 9.1 Finds of copper implements from the burial chamber of Qar Junior

Tools class/ Excav. No.	102/HH/2001	104/HH/2001	108/HH/2001	154/HH/2001	Total
Flat chisels	4		2		6
Cross-cut chisels	2		2		4
Axe heads	1		3		4
Arrow-head chisels			1		1
Necked adze blades	1				1
Needles/pins			1		1
Hooks	3				3
Vessels		1		11	12

Table 9.2 Finds of copper implements from the burial chamber of Senedjemib

The grand total of tools from the burial chambers of Qar Junior and Senedjemib shows that there were found at least 212 copper tools and 26 copper vessels. The copper model tools seem to form one important part of the Sixth Dynasty tomb equipment as can be seen in many examples from other contemporary tombs in Abusir and Saqqara. Noteworthy are also the findspot circumstances. In virtually all cases of copper finds it was possible to observe that individual categories of tools were either bound by a thin linen thread around the neck (flat chisels, groups of five–six)²⁹ or placed originally in a linen bag cloth of which could be observed on the tools surface.

The major issue of the copper ore origin still remains to be solved. It has been known that Old Kingdom copper ore could originate from either the Eastern Desert or the Sinai. More recent discoveries in the Wadi Faynan, Jordan, have brought to light by far the largest metallurgical complex known from the third millennium B.C. in the entire Near East. Moreover, a typological comparison of some of the implements found in Abusir and Wadi Faynan has shown that they bear significant formal resemblances.³⁰ In this case, the corollary research seems to favour the explanation that during this period the copper was imported to Egypt precisely from this area. This should not be so surprising, as there is evidence of copper ore being imported into Egypt by the Bedouins during the First Intermediate Period.³¹ To prove this, however, it will be necessary to analyze some tiny fragments of our Abusir finds and compare them with the Jordanian evidence. This is impossible at present.³²

²⁹ Comp. *ibid.*, 214, fig. 6.

³⁰ For the discovery of the EB metallurgy in the area compare T.E. Levy, *et al.*, 'Early Bronze Age metallurgy: a newly discovered copper manufactory in southern Jordan', *Antiquity* 76 (292, June 2002), 425–437, Bárta, in Bárta, ed., *OKAA 2004*, 62, fig. 12.

³¹ M. Haiman, 'Early Bronze Age IV Settlement Pattern of the Negev and Sinai Deserts: View from Small Marginal Temporary Sites', *BASOR* 303 (1996), 1–32.

³² In this connection it is not without interest that the latest examination of the copper finds from EB I-EB II city of Arad has shown convincingly that the copper artefacts here were made of Wadi Faynan and not Sinai copper ore as one would rather expect. This may again indicate the importance of the Wadi Faynan district and the rather large impact made by this centre during this particular period. See A. Hauptmann, F. Begemann, S. Schmitt-Strecker, 'Copper Objects from Arad: Their Composition and Provenance', *BASOR* 314 (1999), 1–17 and A. Hauptmann, *The Archaeometallurgy of Copper. Evidence from Faynan, Jordan. Natural Science in Archaeology* (Heidelberg, Berlin 2007).

In the burial chamber of Qar Junior, seven jars belonging to the Syro-Palestinian Combed/Metallic ware style were discovered. Based on the analysis of their typology, matrix, bad firing and some erroneous elements in their body building (Excav. No. 86-1/HH/2000), it results that they were locally made imitations of the original foreign ware which had a high socially assigned value which was deemed necessary to be imitated in the afterlife. The imported vessels signal one vital change with regard to the status of their owners. In contrast to Fourth Dynasty Giza, where similar finds are connected only with the highest officials of the state, at this period it is the middle ranking officials who have the right and the means to acquire commodities of this kind. What remains the same is their prevalent association with male tomb owners. From the burial chamber of Senedjemib originates a different piece of evidence relating to pottery offerings. A set of twelve jugs was found at the northwest corner of the sarcophagus (Excav. No. 103, 1–12/HH/2001). The jugs had pointed bases and thickened curved rims. These jugs were found unsealed though not empty. All of them contained two carefully laid layers of black Nile mud that filled almost half of their volume. This was a fairly common feature, known from prehistoric examples that, on a magical level, made this part of the funerary equipment appear full.

In contrast to the above two burial chambers, Shaft 'C' yielded two examples of flat-bottomed amphorae imitating Syro-Palestinian examples (Excav. Nos. 2 and 3/HH-Sh 'C'/2002) and a travertine seven sacred oils palette (Excav. No. 150/HH/2002) with the name of Senedjemib. Taking into account the fact that there were found human remains at the bottom of the shaft (these remains most likely belonging to Tjenti, whose burial installation was for some reason not finished) it might be suggested that they belonged to his limited burial equipment, perhaps provided by Senedjemib.

Logically, only a few personal items could be found. Only from the burial chamber of Qar Junior originate three golden pendants which were part of some jewelry placed on the mummy (Excav. No. 64/HH/2000). From the burial chambers of both Qar Junior and Senedjemib originate several headrests. All of these tombs were the target for tomb robbers in antiquity for which only personal items of the deceased made of precious materials were of interest. They were placed inside the sarcophagi along with the deceased and as a consequence all the mummies were destroyed. On the other hand, due to these circumstances it was possible to document substantial parts of the remaining burial equipment which were of no value for the ancient tomb robbers.³³

9.4 Titles of the tomb owners

When dealing with the social status of the tomb owners, there are several avenues of inquiry that may be pursued. To start with, the enumeration of individual titles of each person buried in the cemetery provides interesting material for the tracing of their careers. Most of these people held the title of a judge and the majority of their titles associated these men with the central administration in Memphis and with the royal mortuary complexes (*table 9.3*). Their principal duties are indicated by the title of 'judge of Nekhen of the king', attested already on the first false door of Qar. Moreover, the title was also held by Qar Junior, Senedjemib and Inti. This seems to be the principal office that was delegated within the family from generation to generation. The modification of the title, namely 'the true judge of the king' was held by the vizier Qar. The addition of the word 'm3' may be understood as a special sign of trust put in him by the central administration.

Given the available Old Kingdom evidence, it is surprising to have such a high concentration of 'judge' titles in one limited cemetery area. A recent study by V.G. Callender shows convincingly that, in addition to nineteen Old Kingdom holders of the title, at least another seven have been revealed over the past few years in South Abusir – some of the title holders were not members of the family and are therefore

³³ Bárta, *Life and death*, 277–279.

not included in this study.³⁴ This figure represents more than one third of the pre-1995 corpus. Thus it seems justified to claim that at South Abusir, professionally and personally, a very specific group of persons with both personal and professional ties, serving at the royal court, was emerging.³⁵ This is significant evidence for the history of the title, whose holders were most frequently buried in Abusir and Saqqara cemeteries, close to their office in Mennofer.³⁶

Titles/Officials	Qar	Qar Junior	Senedjemib	Tjenti	Inti
<i>jwn Knmwt</i>	X (2)				
<i>[(j)m(j)-r] wp(w)t htpw</i>			X		
<i>(j)m(j)-r hwt-wrt</i>	X (2, bc)				
<i>(j)m(j)-r hwt-wrt 6</i>	X (2)				
<i>j)m(j)-ht hm(w)-ntr (m) Mn-nfr Ppjj</i>			X		
<i>(j)m(j)-ht [hmw-ntr (m) Nfr-swt] Wnjs</i>			X		
<i>(j)m(j)-ht hm(w)-ntr Dd-swt Ttj</i>	X (2)				X
<i>(j)m(j)-ht hntj(w)-š hm(w)-ntr Dd-swt Ttj</i>					X
<i>(j)r(j) Nhn</i>			X		
<i>(j)r(j) Nhn (n) z3b</i>	X (1, 2, bc)	X	X		X
<i>(j)r(j) Nhn (n) z3b m3^c</i>	X(1, 2, bc)				
<i>wd-mdw m hwt-wrt 6</i>					X
<i>ḥd-mr (n) z3b</i>	X (1, 2, bc)				
<i>mdw rhjt</i>	X (2)				
<i>n(j) nst hntt</i>	X (2, bc)				
<i>h3tj-^c</i>		X (?)	X (?)		
<i>hm-ntr M3^ct</i>		X			
<i>hm-ntr M3^ct m Mn-^cnḥ Nfr-k3-r^c</i>		X			
<i>hm-ntr (m) [Nfr]-swt Wnjs</i>	X (2)				
<i>hnt(j)-š (m) Mn-nfr Ppjj</i>		X			
<i>hnt(j)-š (m) Dd-swt Ttj</i>					X
<i>hr(j)-sšt3</i>	X (2)				X
<i>hr(j)-sšt3 (n) jst ḥb3t Hr</i>					X
<i>hr(j)-sšt3 n wd^c-mdw</i>			X		
<i>hr(j)-sšt3 n wd^c-mdw n hwt-wrt</i>	X (1, 2, bc)				
<i>hr(j)-sšt3 n wd^c-mdw (m) hwt-wrt 6</i>		X			X
<i>hr(j)-sšt3 n hwt-wrt</i>	X (2)				
<i>hr(j)-tp N[hb]</i>			X		
<i>htm(w) bjtt</i>		X	X		
<i>smr-w^ctj</i>		X	X		
<i>smsw h(3j)t</i>			X		
<i>smsw h(3j)t (n) z3b</i>					X
<i>zš (n) z3b</i>				X	
<i>šps nswt</i>		X			
<i>t3jtt t3tj (n) z3b</i>	X (2)				
<i>tp(j)-hrt nswt</i>	X (2, bc)				

Table 9.3 List of titles attested in the family of the vizier Qar (1 – original chapel of Qar, 2 – vizierial chapel of Qar, bc – burial chamber of the vizier Qar)

³⁴ Callender, in Bárta, Krejčí, eds., *Abusir and Saqqara in the year 2000*, 361–380 and *idem*, ‘Another group of officials entitled *r Nhn n z3b* in South Abusir’, *GM* 197 (2003), 21–29.

³⁵ Compare, for instance, Weeks, *Giza Mastabas* 5.

³⁶ Compare Table II compiled by Callender, in Bárta, Krejčí, eds., *Abusir and Saqqara in the year 2000*, 376–380.

The founder of the family, Qar (who was later appointed to the office of the vizier) originally held only four administrative titles – as indicated by his Chapel 1 false door: *(j)r(j) Nhn (n) z3b*, *(j)r(j) Nhn (n) z3b m3ʕ*, *ʕd-mr (n) z3b*, *hr(j)-sšt3 n wdʕ-mdw n hwt-wrt*. All of them may be associated with the central administration in the Residence. Later on, however, he was promoted to the office of the vizier and beside this title, his new titles included also the following ones: *jwn Knmwt*, *(j)m(j)-r hwt-wrt*, *(j)m(j)-r hwt-wrt 6*, *(j)m(j)-ht hm(w)-ntr Dd-swt Ttj*, *mdw rhjt*, *n(j) nst hntt*, *hm-ntr (m) [Nfr-swt Wnjs]*, *hr(j)-sšt3*, *hr(j)-sšt3 n hwt-wrt*, *tp(j)-hrt nswt*. Most of them only emphasize his close connection with the jurisdiction.³⁷

Despite the fact that Qar was appointed to the office of the vizier, his remaining titles cast serious doubts on his proper status in the central administration of the time. Only a brief comparison of his titles with those associated with the Sixth Dynasty viziers shows clearly that there is a profound difference in terms of his status between him and the ‘true’ viziers. A brief summary of titles of some twenty known viziers of the Sixth Dynasty (down to the middle of the reign of Pepy II) shows that they held 294 titles. Table 9.4 comprises a list of the most frequently attested titles for Sixth Dynasty viziers. When compared with Table 9.3, showing the titles attested for the vizier Qar, marked differences emerge. Vizier Qar, despite his topmost office, does not have any of the standard titles associated with typical viziers of the Sixth Dynasty. Among his more prestigious titles one may mention the title of *tp(j)-hrt nswt*, attested by the Sixth Dynasty viziers nine times, and *jwn Knmwt*, attested seven times. His remaining titles are much less diagnostic of his status and in general indicate a lower ranking status – except for the title of *(j)m(j)-r hwt-wrt* and *(j)m(j)-r hwt-wrt 6*. The fact that he received the title of *(j)m(j)-r hwt-wrt* only when he was appointed to the office of the vizier also indicates that under normal circumstances he was not a person who was considered to become a vizier in the future.³⁸ One would also expect some scribal titles to occur but, with the singular exception of Tjenti who was *zš (n) z3b*, none of the family members appears to have had one.

	Title	Frequency
1	<i>h3tj-ʕ</i>	16
2	<i>smr-wʕtj (n jt.f)</i>	15
3	<i>(j)r(j)-pʕt</i>	12
4	<i>(j)m(j)-r prwj-hd</i>	11
5	<i>(j)m(j)-r k3t nb(t) nt nswt</i>	11
6	<i>hrj-hb hrj-tp (n jt.f)</i>	11
7	<i>(j)m(j)-r jzwj hkr nswt</i>	10
8	<i>(j)m(j)-r zš(w) ʕ-nswt</i>	10
9	<i>(j)m(j)-r šnwtj</i>	10
10	<i>hr(j)-hb (n jt.f)</i>	10
11	<i>sm</i>	10
12	<i>jm3-ʕ</i>	9
13	<i>hrp šndjt nbt</i>	9
14	<i>htmw btj</i>	9
15	<i>tp(j)-hrt nswt (pr-ʕ3)</i>	9
16	<i>(j)m(j)-r wʕbtj</i>	8
17	<i>(j)m(j)-r hwt-wrt 6</i>	8
18	<i>hr(j)-sšt3 n wdʕ-mdw nbt (nt nswt)</i>	8
19	<i>hr(j)-sšt n pr-dw3t</i>	8
20	<i>shd hm(w)-ntr Dd-swt Ttj</i>	8

Table 9.4 List of the most frequently attested titles of the Sixth Dynasty viziers. Only viziers down to the middle reign of Pepy II were included (based mainly on data collected by Strudwick, *Administration*, and later publications)

³⁷ Helck, *Beamten Titel*, 68–77; Strudwick, *Administration*, 178–181.

³⁸ Comp. Strudwick, *Administration*, 186–188.

Qar's vizieral title should be therefore understood only as an honorary one, indicating that he was charged with vizieral duties for the domain of justice – the Great Hall and Six Great Halls of the vizier.³⁹ As a consequence of this promotion, he enjoyed revenues from the mortuary temples of the kings Unas and Teti which was a privilege only bestowed on the highest officials and members of the royal family.

Quite interesting also is a closer look at the titles of his dependants. On the walls of his Chapel 2 are specified, beside his four sons, ten offering bearers accompanied by their names and titles. Only two of them, however, Irenptah (No. 1) and Id (No. 3) belonged by their titles to the central administration of the Residence, six of these were in the rank of *hm(w)-k3* priests probably associated with the cult in the tomb (Nos. 2, 4–8) and only two of them (Nos. 9–10) can be associated with the service in the royal mortuary temple(s).

As for his sons, the sources are quite limited, mainly because of the utter destruction of the monuments of Qar Junior and Senedjemib and the entirely missing monument of Tjenti. About Qar Junior we know that he had a wife named Iput (named after Pepy I's mother), and a son Senedjemib (IIa). No relatives of Senedjemib have been attested. In the case of Inti, we are fortunate to know that he had a wife, named Merut, and three sons: the two eldest sons (implying two different mothers, or else twins), Ankhemtjenet and Senedjemib (IIb), and Sefekhu (for the whole family see *fig. 9.1*).

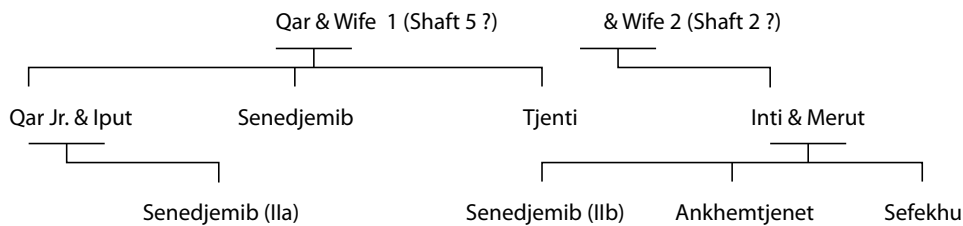


Fig. 9.1 Three generations of the vizier's Qar family

The title 'elder of the (juridical) court' associated with two out of the four sons of vizier Qar (Senedjemib and Inti) and two out of three sons of Inti (Ankhemtjenet and Senedjemib IIb) is also indicative of the common policy of early designation of high officials' sons in the lesser legal offices.⁴⁰ The title was an indication of their later expected promotion into the office of their fathers. Other titles, although not so fascinating, are at least indicative of the subsequent bureaucratic development within the family. Thus the identical title of Qar Junior and Inti, *hr(j)-s3t3 n wd^c-mdw (m) hwt-wrt 6*, shows that they followed in the footsteps of their father, who was *(j)m(j)-r hwt-wrt 6*. Similarly, Inti became *(j)m(j)-ht hm(w)-ntr Dd-swt-Ttj*, precisely as his father had been before him.

Interestingly, the sons of Qar were also involved in several royal mortuary cults: Qar Junior in the complex of Pepy I and II, Senedjemib in the complex of Unas, and Inti in the complex of Teti. Surprising is the occurrence of the title *h3tj-^c*, which is attested just once and which belonged most likely to Qar Junior (Excav. No. 51/GG/1995).

Close to Niche 3 (with its associated Shaft 4) in the tomb of vizier Qar was found on the wall an black-ink inscription containing the title 'keeper of Nekhen of the king' which shows that its owner was a male, most likely also a member of the family. His relationship to the vizier Qar is, however, difficult to establish. Based on the architectural characteristics of his shaft and chamber I would think that he was member of the second generation of the family who could not reach a higher position in the administration (due, perhaps, to his premature death – his anthropological data are missing because of his devastated burial chamber).

³⁹ For this particular feature of the Sixth Dynasty administration see Helck, *Beamtentitel*, 136–142 and E. Martin-Pardey, 'Die Verwaltung im Alten Reich, Grenzen und Möglichkeiten von Untersuchungen zu diesem Thema', *BiOr* 46, No. 5/6 (1989), espec. 546–552.

⁴⁰ Compare, for instance, M. Bárta, 'The Mastaba of Ptahshepses Junior II at Abusir', *Ä&L* X (2000), 59 for the family of the vizier Ptahshepses.

In the case of Iykai we may suppose, due both to one of his titles and the fact that he incorporated his offering place into the previously existing cult installation that he was in some way related to the family, being, perhaps, even a son of Qar Junior or Senedjemib. His title *hm-ntr M3r't* was also held by Qar Junior. The remaining three titles have survived incomplete but they clearly refer to similar titles attested within the family and Iykai's association with the Residence and the legal aspects of administration as results from his titles '[privy to the secret] of the six great courts' and '[privy to the secret] of the Morning House'. He was probably also a priest of Meret.

There were twenty-four dependants (ten anonymous) attested on the blocks originating from the respective chapels of Qar Junior and Senedjemib. Contrary to the case with the vizier Qar, profane titles prevailed: four overseers of the house (Nos. 5, 8, 13 and 14), two nobles of the king and overseers of the storehouse of the royal ka (Nos. 14 and 24), three officials associated with scribal offices (Nos. 7, 9 and 22), two [master of the largesse] (of) the king (Nos. 14 and 19), one inspector of the law [court] *sr(w)*-officials (?) (No. 3) and one overseer of cloth distribution (No. 6). Out of nine priestly titles were two senior lector priests (Nos. 2 and 15), four lector priests (Nos. 11, 16, 17, 20) and three *hm(w)-k3* priests' of different ranks (a simple priest, an inspector and an overseer, Nos. 21, 6 and 1). Two men had no title attested/preserved.

Interesting evidence is provided by a scene with offering bearers from the chapel of Senedjemib (Excav. No. 45etc./GG/1995). There, two of the offering bearers (No. 24 and 14) Kane...nen and Sesi are labeled as 'his brother'. The interpretation of this affiliation is not clear but from the context it is very unlikely that these two persons would have been another two, otherwise unattested brothers of Senedjemib (and therefore also of Qar Junior, Tjenti and Inti).

9.5 Architectural comparison

List A, size of the cult chapels in tomb complexes of Qar and his family:

Chapel 1 of the vizier Qar: $7.80 \times 2.25/2.46$ m, h. 5.00 m;

Chapel 2 of the vizier Qar: 4.86×1.73 m, h. 3.47 m;

Corridor chapel: 13.63×0.88 m, h. 4.20 m;

Qar Junior: 3.65×1.85 m, h. uncertain;

Senedjemib: 3.05×2.00 m, h. uncertain;

Inti: 2.12×1.68 m, h. 2.24 m.

List B, size of the open courts in tomb complexes of Qar and his family:

Vizier Qar: 10.80 (NS) $\times$ 3.80 (W)– 4.00 (E) m;

Inti: 3.10 (west wall)/ 3.40 (east wall) $\times$ 3.30 m;

Iykai's courtyard 3.25×4.60 m (Stage III), his relationship uncertain.

List C, shaft depths in tomb complexes of Qar and his family:

Tomb of the vizier Qar: burial chamber accessible by a descending corridor, limestone sarcophagus;

Shaft 2: 10.20 m, limestone sarcophagus;

Shaft 3: 8.00 m, never used;

Shaft 4: 11.00 m, uncertain;

Shaft 5: 13.30 m, limestone sarcophagus;

Shaft 6: 13.80 m, limestone sarcophagus;

Shaft 7: 9.00 m, mummification storage;

Qar Junior: 16.00 m, coffin pit;

Senedjemib: 15.90 m, limestone sarcophagus;

Shaft 'C' (Tjenti?): 14.50 m, uncertain;

Inti: 21.90 m, limestone sarcophagus.

List D, size of the burial chambers in tomb complexes of Qar and his family and their volume

Vizier Qar: eastern part: 5.15×2.68 m, western part: 3.83×2.92 m, h. 3.07 m, approx. 76.70 cu. m.;

Shaft 2: 3.00×2.02 m, h. 1.80 m, approx. 10.90 cu. m.;

Shaft 4: $2.90 \times 1.40 \times 1.50$ m, approx. 6.09 cu. m.;

Shaft 5: $4.00 \times 2.00 \times 1.80$ m, approx. 14.40 cu. m.;

Shaft 6: $4.95 \times 3.00 \times 1.90$ m, approx. 28.22 cu. m.;

Qar Junior: eastern part: 5.20×1.80 m, western part: 3.95×1.90 m, h. 1.56 m, approx. 26.30 cu. m.;

Senedjemib: 4.10×2.60 m, h. 2.10 m, approx. 22.40 cu. m.;

Inti: eastern part: 5.00×2.40 m, western part: 3.70×3.00 m, h. 2.30 m, approx. 53.10 cu. m.

List E, sarcophagi found in tomb complexes of Qar and his family and their size

Vizier Qar: chest $3.10 \times 1.50 \times 1.42$ m, lid $2.98 \times 1.40 \times 0.58$ m;

Shaft 2: chest $2.50 \times 1.05 \times 0.80$ m, lid $2.00 \times 0.90 \times 0.35$ m;

Shaft 5: chest $2.50 \times 1.05 \times 0.80$ m, lid $2.50 \times 1.00 \times 0.35$ m;

Shaft 6: chest $2.70 \times 1.15 \times 1.15$ m, lid $2.60 \times 1.05 \times 0.40$ m;

Senedjemib: chest $3.10 \times 1.50 \times 1.35$ m, lid $3.24 \times 1.46 \times 0.50$ m;

Inti: chest $3.15 \times 1.70 \times 1.20$ m, lid $3.20 \times 1.60 \times 0.62$ m.

Analysis of individual features of architectural nature and of the sarcophagi (lists A–E) enables us to differentiate the individual members of the family in terms of their status as well. The tomb of vizier Qar comprised two big chapels which are by far the largest cult places among the family members. Qar Junior and Senedjemib follow as being the second largest, whereas Inti, who was only the fourth in size, had a chapel that was combined with an open courtyard (List A and B).

There is a clear stratification recognizable in the design, typology, equipment and size of the individual burial apartments within the cemetery.⁴¹ At the top is the vizier Qar, whose burial chamber was the only one accessible via a descending corridor. The walls of his chamber were decorated with painted decoration which makes his social status even more exclusive. The size of his burial chamber was almost 77 cu. m. Next in terms of size is the burial chamber of Inti, which is a bit smaller but which, in ground plan, is almost an exact copy of Qar's burial chamber yet with a much lower height.

The burial chambers of Inti, Qar Junior, Senedjemib and Tjenti were also accessed by the deepest shafts (in this order). They are followed by a group of male and female members of the family buried to the west of the corridor chapel in the complex of vizier Qar. The deepest was Shaft 6, followed by Shaft 5, Shaft 4 and then Shaft 2 (List C). The calculation of the volume of the individual burial chambers gives the similar results: vizier Qar, Inti, Qar Junior, Senedjemib, and then the burials in shafts: Shaft 6, Shaft 5, Shaft 2 and Shaft 4 (List D). The sizes of the limestone sarcophagi are another good indication of the different social status provided by the inhabitants of this cemetery (List E). The largest sarcophagi are associated with vizier Qar, his sons Senedjemib and Inti. Rather atypically, Qar Junior built himself a coffin pit.

It may be summarized that the social status of individual tomb/burial chambers owners was clearly reflected by the size of the cult chapels, the size and presence of the open courts, shaft depths, the size of the burial chambers and the sarcophagi. Most of the features indicate clearly that, following vizier Qar, the most successful member of the family was Inti, who had the deepest shaft, and who owned the second largest burial chamber after his father – not only very closely resembling the chamber of his

⁴¹ For more see Bárta, *Abusir V* and *idem*, 'Sociology of the Minor Cemeteries during the Old Kingdom. A View from Abusir South', *ArOr* 70, No. 3 (Prague, 2002), 291–300.

father, but also having a sarcophagus comparable with those of his father and brother Senedjemib. He was followed in rank by Qar Junior, Senedjemib and Tjenti. There is also a clear differentiation within the tomb of the vizier Qar. Qar had by far the largest sarcophagus and was followed by a man buried in Shaft 6 (given his second person status in the tomb perhaps his father?), an older woman in Shaft 5 and a woman in Shaft 2 at the end. Exactly the same order results from the cubic areas of their respective burial chambers and from the depths of individual shafts.

9.6 Anthropology

List of the anthropological material of the family of Qar:

Tomb of the vizier Qar:

Vizier Qar, Excav. No. 161/GG/1995, male, 30 years plus;
 Shaft 2, Excav. No. 158/GG/1995, female, 40 years plus;
 Shaft 5, Excav. No. 159/GG/1995, female (?), 60 years plus;
 Shaft 6, Excav. No. 160/GG/1995, male, 60 years plus.

Senedjemib:

Shaft 'A', Excav. No. 143/HH/2004, male (?), 30–50 years old.

Tjenti (?):

Shaft 'C', Excav. No. 75/HH/2000, an adult individual.

Tomb of Inti:

Shaft 'A', Inti-Pepyankh, Excav. No. 146/JJ/2000, male, 20–30 years;
 Shaft 'B', Senedjemib IIB?, Excav. No. 117/JJ/2000, male (?), 40–60 years;
 Shaft 'C', Ankhemtenenet, Excav. No. 143/JJ/2000, male, 50 years plus;
 Shaft 'J', Inti, Excav. No. 103/JJ/2000, male (?), 30–60 years.

Despite the poor preservation and later damage, some very interesting conclusions have emerged from the results of the anthropological examination. The anthropological material identified so far spans a period of three generations. Within the complex of vizier Qar, six individuals, two males, two females and two uncertain (given the archaeological context, however, they are most likely one male and one female), were discovered, although only one male and one female burial were found *in situ* (Excav. Nos. 159 and 160/GG/95, Shaft 5 and 6). Given the age of the two individuals buried in Shaft 5 and 6 and similar characteristics of their burial installations (*List C–E*) it is likely that they were parents of the vizier Qar. In the complex of Inti, the principal burials consisted of two certain and two possible male burials.

The burial of Qar Junior was badly destroyed, as was the burial of Tjenti, and the slightly better preserved burial of Senedjemib shows that he died at an age of about 30–50.

Inti, son of Qar, died at an age of about 30–60 years. The anonymous burial in Shaft 'B' (belonging to an otherwise unidentified person – probably Senedjemib IIB) comprised the much destroyed burial of a male of about 40–60 years with a death mask still placed on the face. The burial of Ankhemtenenet showed that this person died at the age of about 50. Most burials were poorly preserved. From what could be recorded during the excavation it seems clear that the corpses received minimal treatment. In most cases the bodies were wrapped in linen bandages, in one case there is the attestation of a death mask. No extensive use of resin can be confirmed.

9.7 Summary

The tomb complex of the vizier Qar and his family members spans a substantial part of Sixth Dynasty history. Typologically their tombs follow a trend which was initiated in the reign of Nyuserra when high officials of the state started to build for themselves larger complexes with differentiated room functions and with an emphasis on decoration as a major means of social status and power display. Similarly, their burial chambers equipment features a large variety of artefacts that were, in most cases, manufactured exclusively for the afterlife needs of their respective owners. The funerary equipment thus amply demonstrates the social standing of its owner. Sometimes, we may observe a tendency towards the ‘upgrading’ of tomb owner’s status by including imitations of high prestige objects such as copies of foreign wine amphorae. This is an interesting behavioral pattern which may be linked with the parallel situation within the state where rank and social standing became very dynamic categories and able individuals and families could considerably improve their social position and economic situation, as well as increasing independence within the central administration.⁴²

The burial equipment may be divided into three substantial groups: personal belongings such as jewellery and headrest sets, cult items corresponding with chapel decoration and utilised for the cult perpetuation such as wine amphorae, ovoid jugs, miniature travertine vessels, seven sacred oils palettes, small stone vessels of the Opening of the Mouth sets, or animal offerings. The final, third group is represented by copper implements that may be related to some craftsmen activities including tomb building and decoration. The funerary equipment, together with specific architectural features of each individual burial installation, was thus expressing the character of the persons buried, their social status, role within the family and also the current social situation within the society and state.⁴³

At the same time, an occupational history of the Central Mound in Abusir South lasting for several centuries deserves attention, as it is only one of a few areas in Abusir and Saqqara where the construction of tombs lasted for so long.⁴⁴ It started probably at least as early as at the end of the Second Dynasty and continued to the end of the Sixth Dynasty.⁴⁵ In the case of the vizier’s Qar family, there are clear indications of both their family members and their professional ties. Moreover, personalities buried around their tombs bore similar titles relating to the central administration and thus were creating a kind of political micro-landscape in the area.⁴⁶ Much more complicated is the question of what remaining tomb owners from the late Second – Fifth Dynasty have in common. This will be answered, hopefully, in the future.

Very difficult, unfortunately, is the question of the precise dating of the individual monuments. There are general features that place the tombs into the late Fifth – Sixth Dynasty environment – the layout of the tombs, east-west oriented cult chapels, the burial chamber of the vizier Qar accessible via a descending corridor, the open court for the cult of the family members.⁴⁷ Based on the titles of vizier Qar, it may be suggested that his career must be dated first to the reign of Unas and, later, to King Teti, during whose reign he became appointed to the office of vizier. Much of the

⁴² For the most part of the Old Kingdom the tomb and the burial equipment variability corresponded with the attained social status of the tomb’s owner; comp. L. R. Binford, ‘Mortuary practices: their study and their potential’, in J. A. Brown, ed., *Approaches to the social dimensions of mortuary practices. Memoirs of the Society for American Archaeology* No. 25, *American Antiquity* 36,3, Part 2 (1971), 6–29.

⁴³ Compare S. J. Seidlmayer, ‘Die Ikonographie des Todes’, in Willems, ed., *Social aspects of funerary culture*, 205–252 for the interpretation of the Elephantine burials.

⁴⁴ See much shorter occupations in North Saqqara, Abusir – pyramid field, Unas Cemetery, Teti Pyramid Cemetery or South Saqqara etc.

⁴⁵ Second Dynasty: Tomb ‘MM’ excavated in 2006, unpublished.

⁴⁶ See J. E. Richards, ‘Conceptual Landscape in the Egyptian Nile Valley’, in W. Ashmore, A. B. Knapp, eds., *Archaeologies of Landscape* (Oxford, 1999), 83–100.

⁴⁷ M. Bárta, in János, ed., *Structure and Significance*, 105–130; M. Fitzenreiter, ‘Grabdekoration und die Interpretation funerarer Rituale im Alten Reich’, in Willems, ed., *Social aspects of funerary culture*, 110–111.

recent discussion has been focused on the dating of the decorated burial chambers containing human figures, A. Bolshakov dating them to the end of the Sixth Dynasty, whereas N. Kanawati dates them to the reign of the last king of the Fifth Dynasty.⁴⁸ The example of vizier Qar shows clearly that the burial chamber was decorated only after the placement of the sarcophagus containing most of Qar's Chapel 2 titles into position, *i.e.* during the reign of Teti. Thus Kanawati's outline of development starting with burial chambers containing human figures seems a more feasible horizon of time in which to place this aspect of tomb decoration.⁴⁹

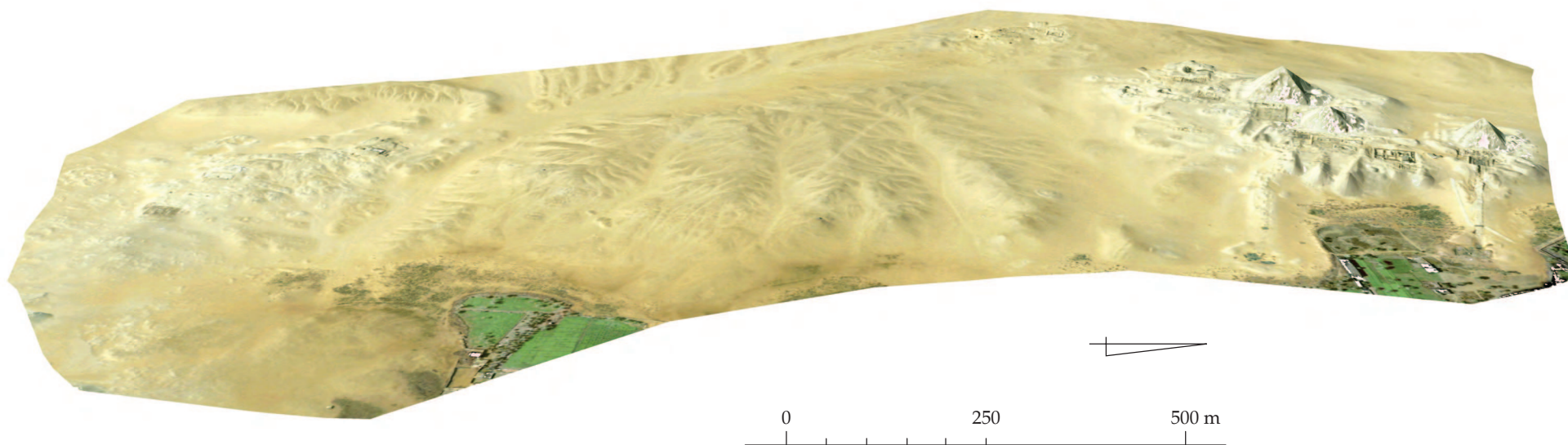
All these indications put the peak of vizier Qar's career into the reign of Teti. Bearing in mind his title of *(j)r(j) Nhn (n) z3b m3r* it is very likely that he experienced similar career promotion as the famous Weni and some other court officials of the early and subsequently the late Sixth Dynasty, who leap-frogged into the higher echelons of the bureaucracy in the always troubled times of the uneasy political situation connected with Teti's rule and later. The vizier Qar may have equally been involved in some delicate courtly affairs during the reign of Teti such as the investigation in which Weni took part.⁵⁰

In the case of his sons, Qar Junior and Senedjemib, we have clear proof for the conclusion that they lived into the reign of Pepy II, as indicated by the artefacts bearing the names of Pepy I and Pepy II in the burial chamber of Senedjemib (Excav. Nos. 114 and 115/HH/2001) and on the sealing from the burial chamber of Qar Junior (Excav. No. 86/HH/2000).

⁴⁸ Bolshakov, *Man and His Double*, 119–120; Kanawati, *Tombs at Giza I*, 18–21.

⁴⁹ For the latest summary of the decorated chambers see Dawood, in Pantalacci, Berger-El-Naggar, eds., *Des Néferkarê aux Montouhotep*.

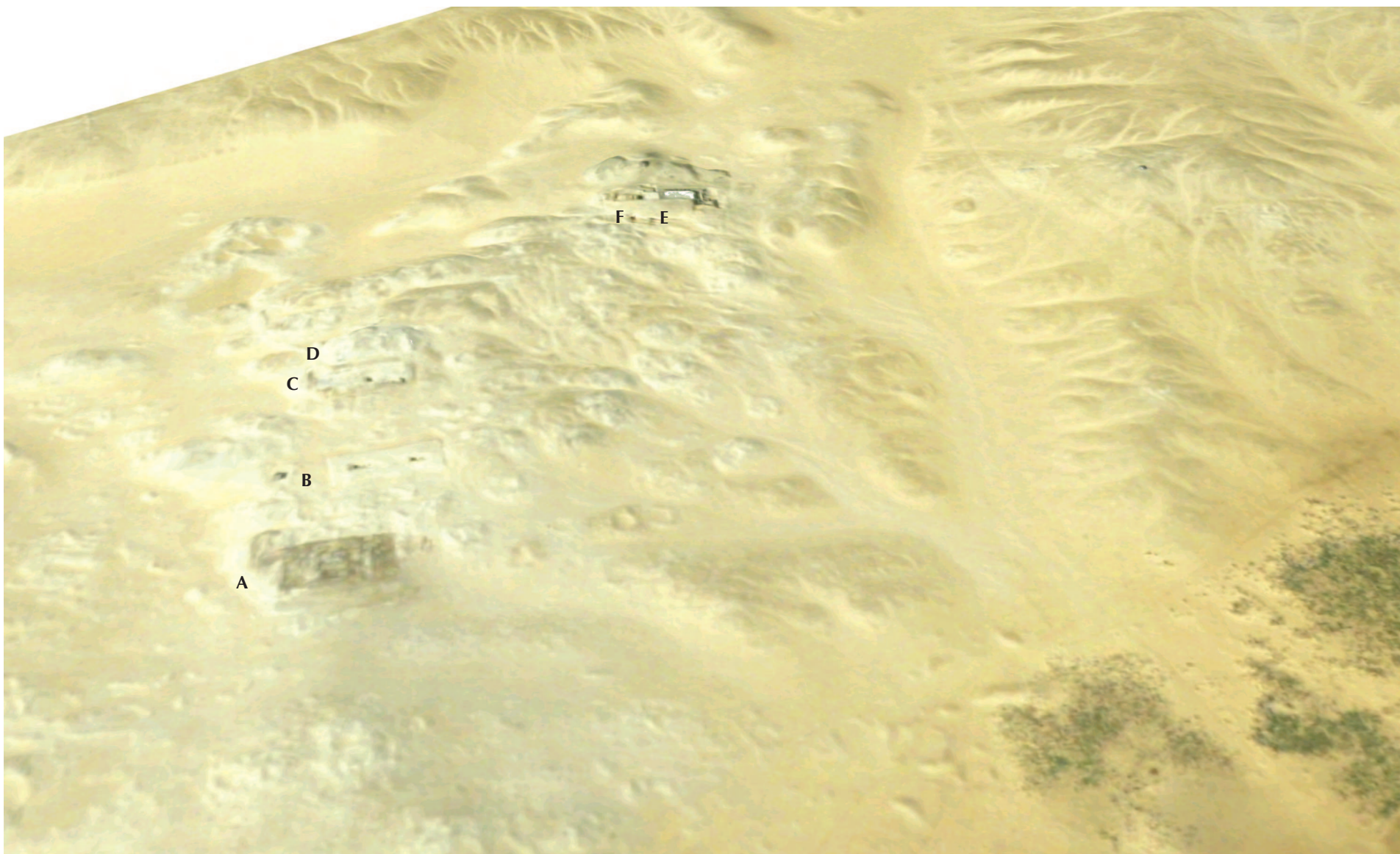
⁵⁰ For details see Callender, in Bárta, Krejčí, eds., *Abusir and Saqqara in the Year 2000*, 371–374.



Pl. 1 3D satellite model of the Abusir necropolis

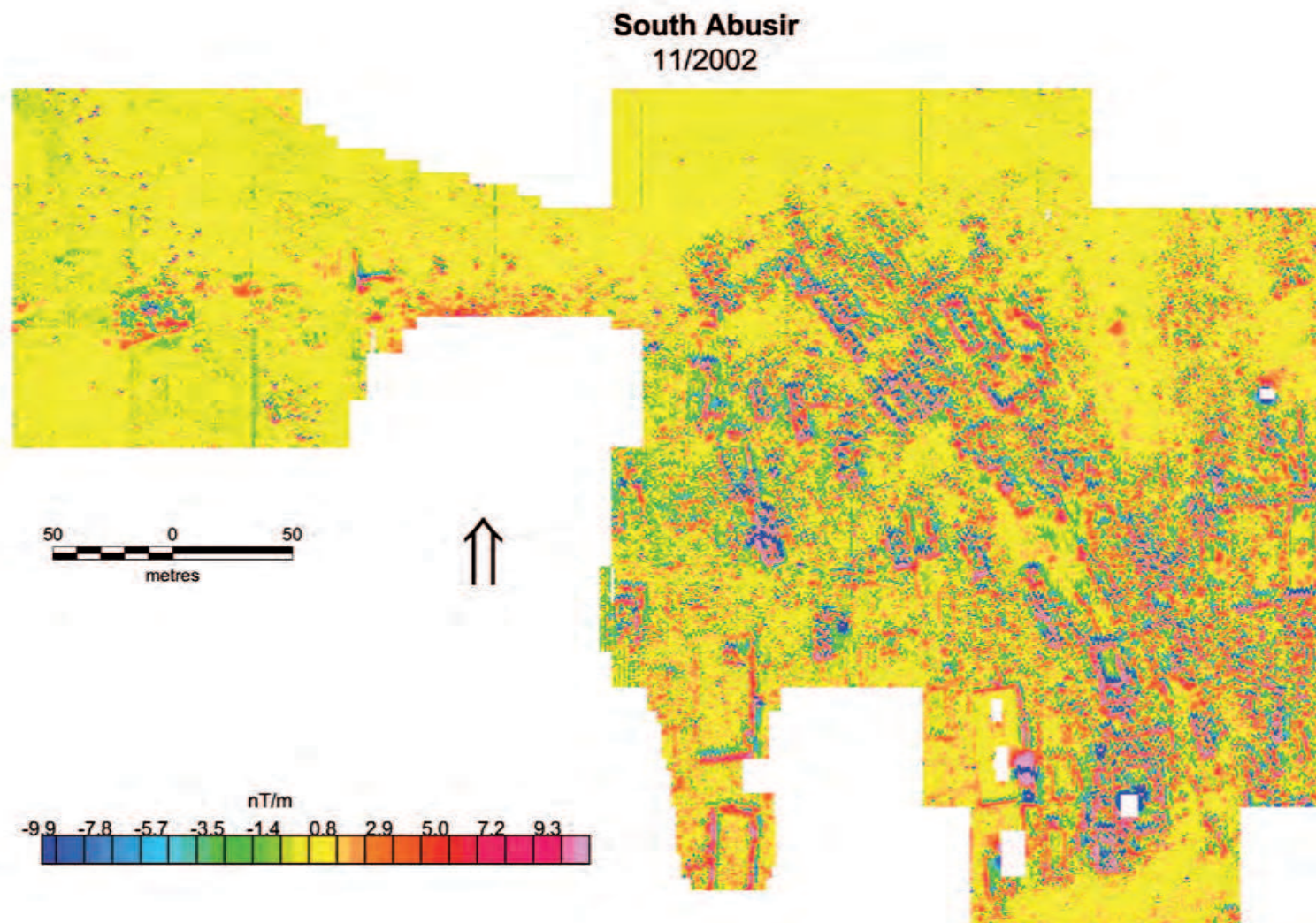


Pl. 2 Satellite image of the Abusir necropolis

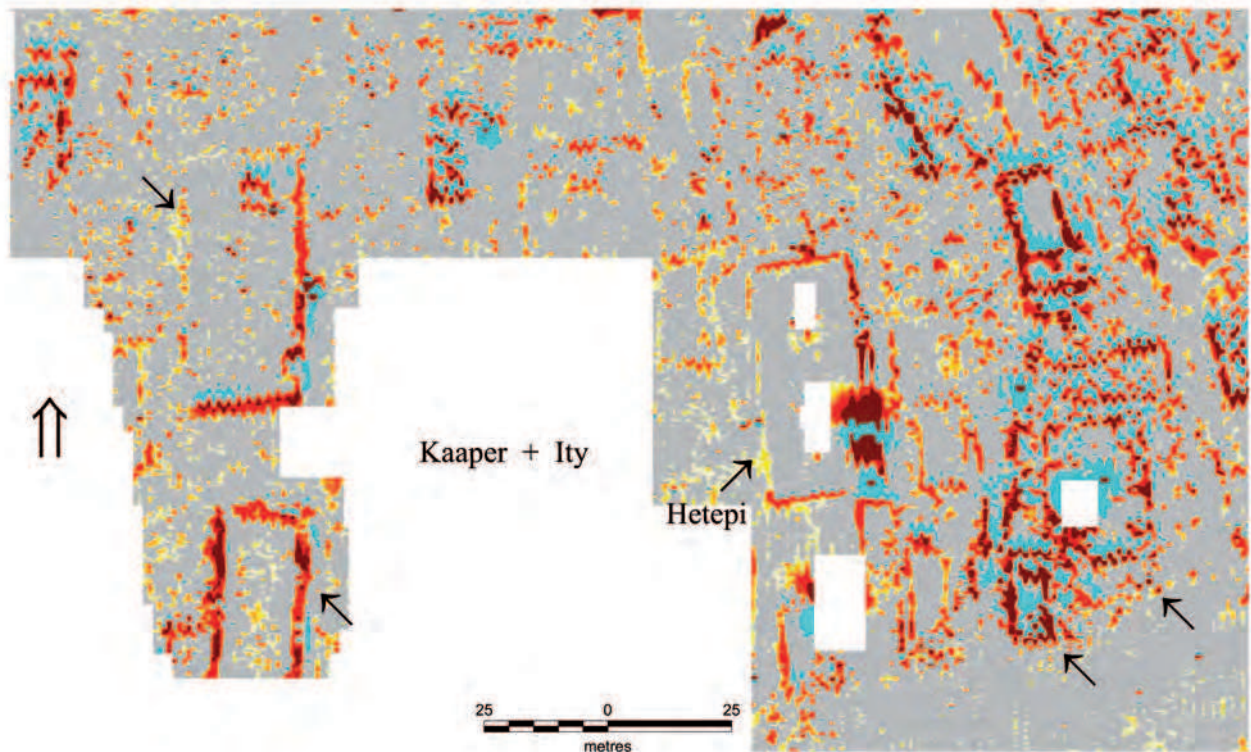


Pl. 3 3D satellite model of Abusir South, detail of the Central Mound (A – a Third Dynasty tomb, anonymous, B – tomb of Hetepi, C – tomb of Ity, D – tomb of Kaaper, E – Fifth Dynasty tomb, anonymous, F – tomb complex of Qar and his sons)

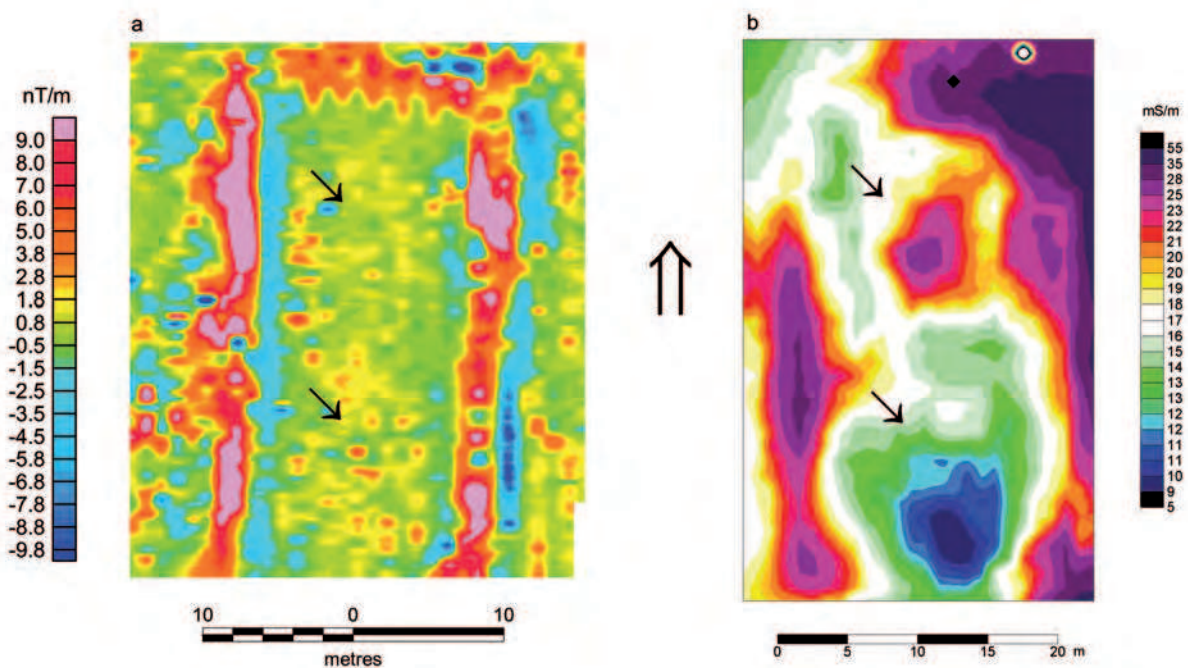




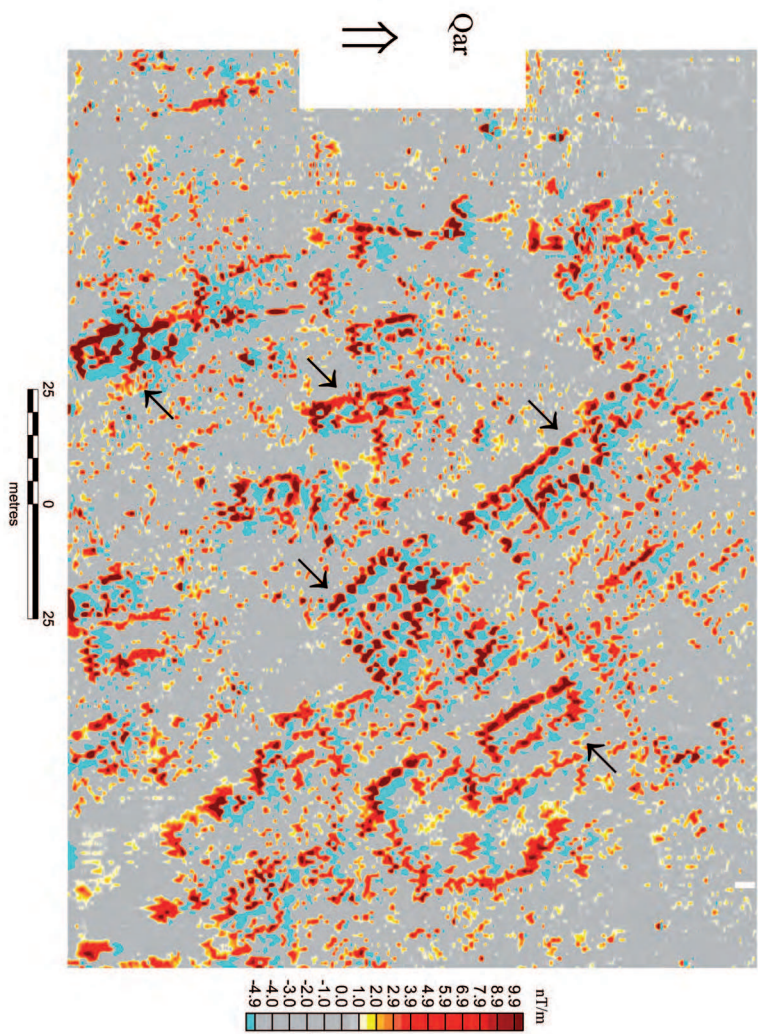
Pl. 4 Overall magnetogram of the Central Mound of Abusir South (ca 11.5 ha)



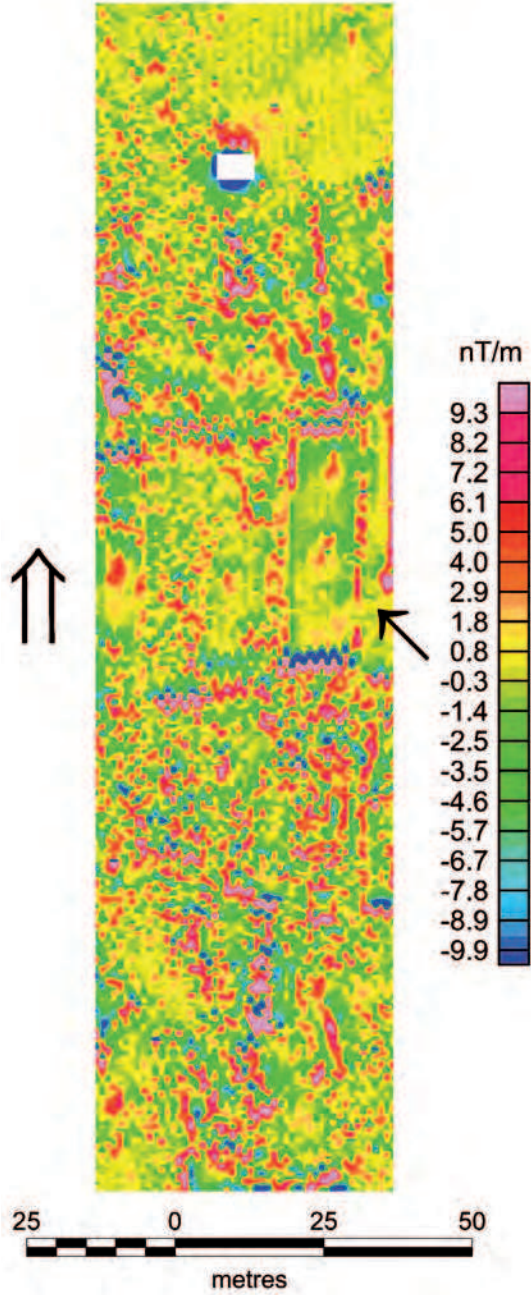
Pl. 5a Identification of some of the largest north-south oriented tombs without internal segmentation located to the east and west of the tombs of Kaaper, Ity and Hetepi (ca 2.6 ha)



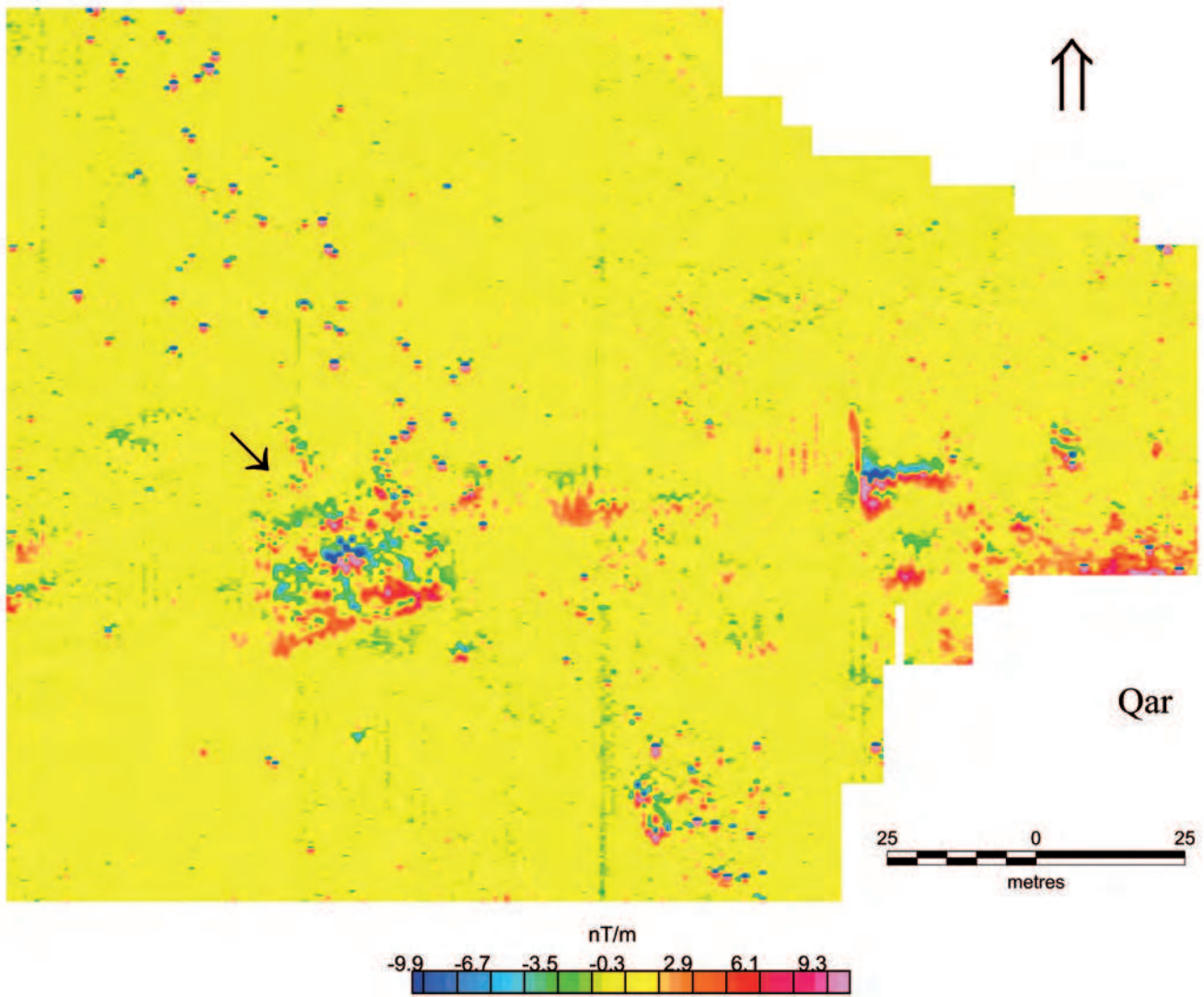
Pl. 5b Two north-south oriented rectangular tombs identified by magnetometric survey (a) and localisation of two places with different materials inside of one tomb verified by additional electromagnetic conductivity measurement (b) (ca $2 \times 25 \times 35$ m)



Pl. 6a Identification of smaller rectangular tombs oriented northwest-southeast and several small, strongly magnetic tombs (ca 3 ha)



Pl. 6b Identification of larger, north-south oriented tombs with high magnetic anomalies inside (ca 1 ha)



Pl. 6c Identification of a single rectangular feature in the valley to the northwest of the tomb of Qar (ca 2.4 ha)



Pl. 7a Burial chamber of Qar



Pl. 7b Burial chamber of Qar

Pl. 8a Excav. No. 33/GG/1995



Pl. 8b Excav. No. 156/GG/1995



Pl. 9 False door of Qar in Chapel 1



Pl. 10 Entrance of Chapel 2 of Qar, east wall



Pl. 11 Entrance of Chapel 2 of Qar, west wall



Pl. 12 Chapel 2 of Qar, east wall



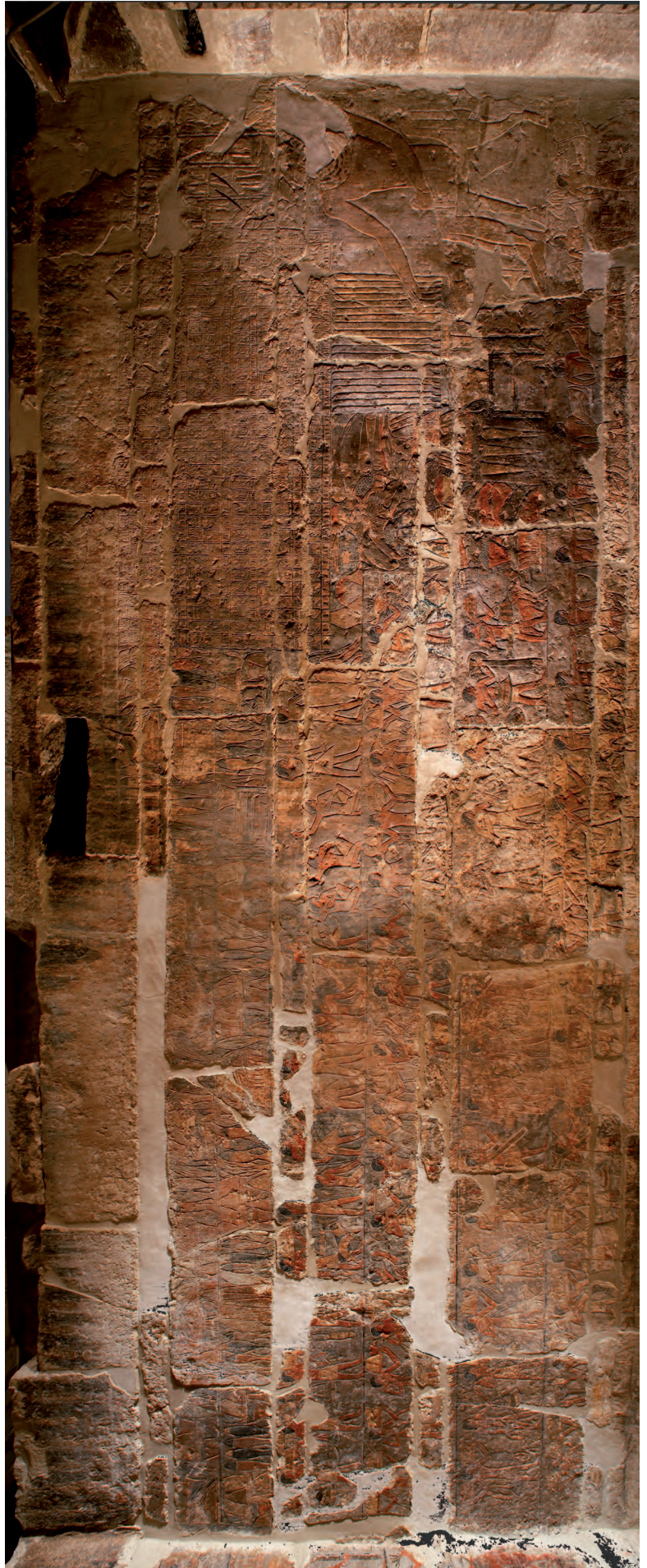
Pl. 13 Chapel 2 of Qar, north wall



Pl. 14 Chapel 2 of Qar, north wall, detail of the offering scene



◀ Pl. 15 Chapel 2 of Qar, north wall,
detail of the offering scene



Pl. 16 Chapel 2 of Qar, south wall



Pl. 17 Chapel 2 of Qar, south wall, detail of the offering scene



Pl. 18 Chapel 2 of Qar, south wall, a row of officiating priests



Pl. 19 False door of Qar in Chapel 2



- Pl. 20.1 Burial chamber of Qar, Wall 1, Fragment 1
- Pl. 20.2 Burial chamber of Qar, Wall 2, Fragment 2 and 3
- Pl. 20.3 Burial chamber of Qar, Wall 3, Fragment 4
- Pl. 20.4 Burial chamber of Qar, Wall 3, Fragment 5



Pl. 21.1 Burial chamber of Qar, Wall 4, Fragment 6



Pl. 21.2 Burial chamber of Qar, Wall 4, Fragment 7



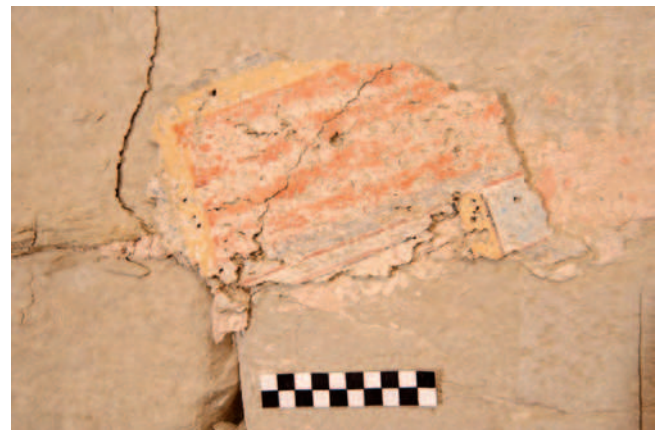
Pl. 21.3 Burial chamber of Qar, Wall 5, Fragment 10



Pl. 21.4 Burial chamber of Qar, Wall 5, Fragment



Pl. 21.5 Burial chamber of Qar, Wall 5, Fragment 12



Pl. 21.6 Burial chamber of Qar, Wall 6, Fragment 14

Pl. 22.1 Burial chamber of Qar,
north wall of the burial niche



Pl. 22.2 Burial chamber of Qar, Wall 7,
Fragment 15

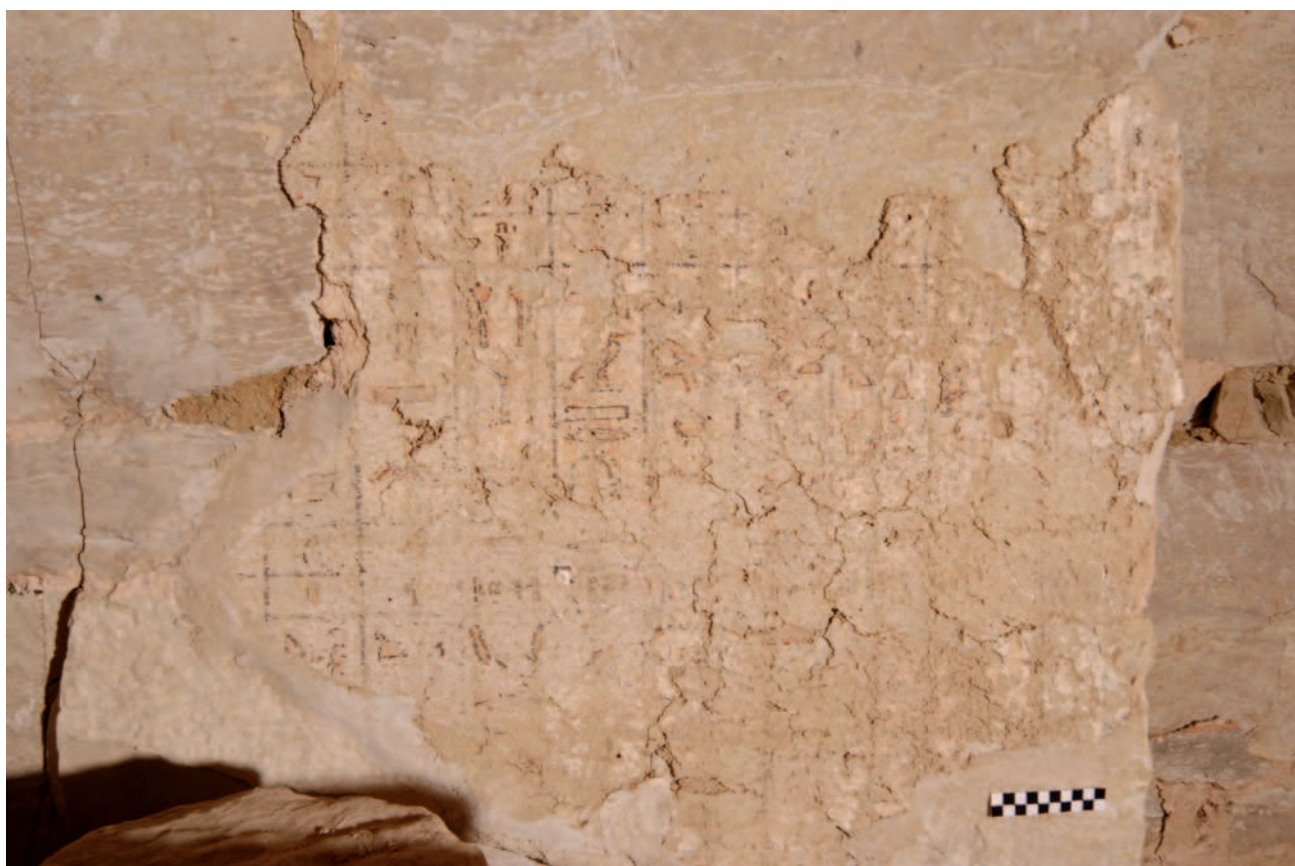


Pl. 22.3 Burial chamber of Qar, Wall 7,
Fragment 16





Pl. 23.1 Burial chamber of Qar, Wall 7, Fragment 17



Pl. 23.2 Burial chamber of Qar, Wall 7, Fragment 18



Pl. 24.1 Excav. No. 25etc./GG/1995, reconstruction of Qar's Junior offering scene



Pl. 24.2 Excav. No. 45aetc./GG/1995



- Pl. 25.1 Excav. No. 58/HH/2000
- Pl. 25.2 Excav. No. 81/HH/2000
- Pl. 25.3 Excav. No. 110/HH/2001
- Pl. 25.4 Excav. No. 111/HH/2001
- Pl. 25.5 Excav. No. 112/HH/2001
- Pl. 25.6 Excav. No. 113/HH/2001





- Pl. 26.1 Excav. No. 61/HH/2000
- Pl. 26.2 Excav. No. 65/HH/2000
- Pl. 26.3 Excav. No. 67/HH/2000
- Pl. 26.4 Excav. No. 68/HH/2000
- Pl. 26.5 Excav. No. 74/HH/2000



Pl. 27.1 Excav. No. 62/HH/2000



Pl. 27.2 Excav. No. 62/HH/2000



Pl. 28.1 Excav. No. 64/HH/2000



Pl. 28.2 Excav. No. 66/HH/2000



Pl. 29.1 Excav. No. 66, a-d/HH/2000



Pl. 29.2 Excav. No. 93/HH/2000



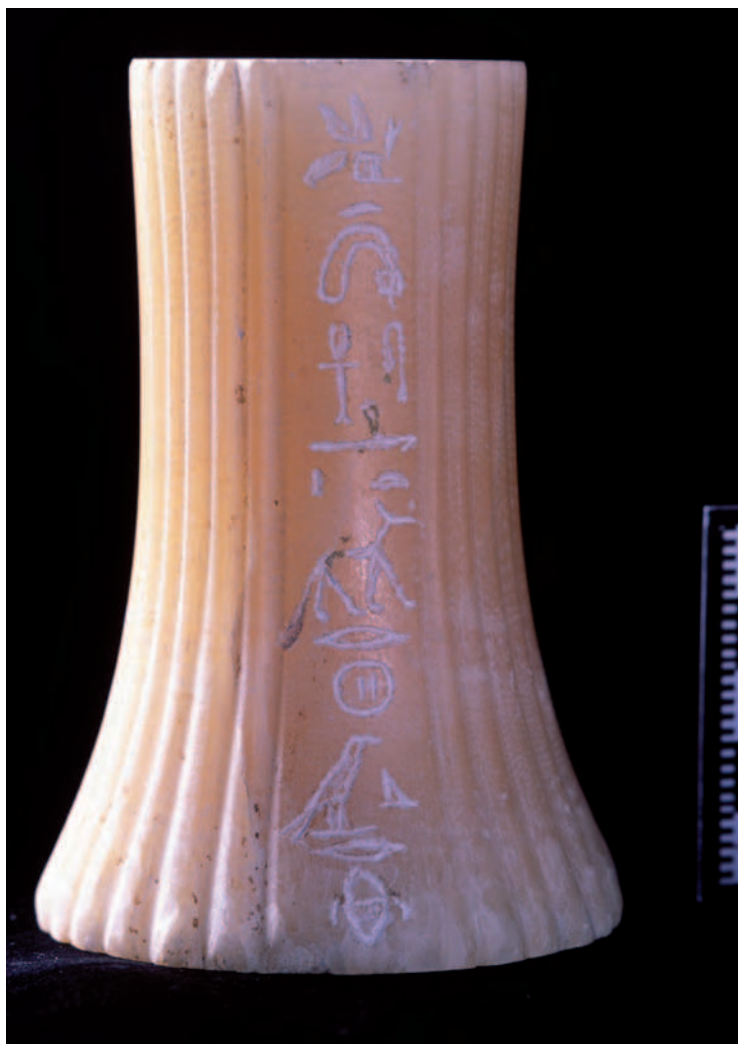
Pl. 29.3 Excav. No. 59/HH/2000



Pl. 30 Excav. Nos. 69-73/HH/2000



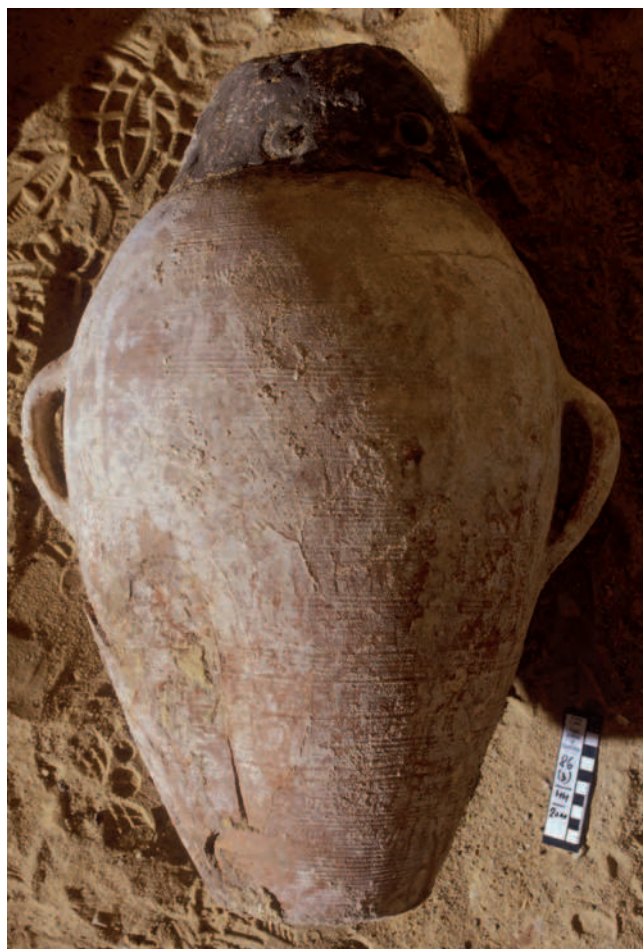
Pl. 31.1 Excav. No. 76/HH/2000



Pl. 31.3 Excav. No. 85/HH/2000



Pl. 31.2 Excav. No. 79/HH/2000



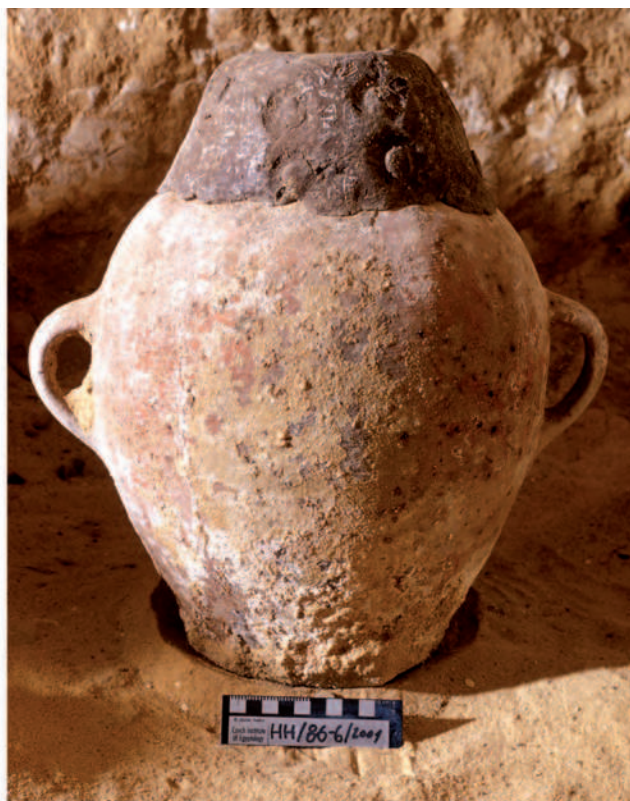
Pl. 32.1 Excav. No. 86, 2/HH/2001

Pl. 32.2 Excav. No. 86, 3/HH/2001

Pl. 32.3 Excav. No. 86, 4/HH/2001, detail of the stopper

Pl. 32.4 Excav. No. 86, 7/HH/2001, detail of the stopper

Pl. 32.5 Excav. No. 86, 12/HH/2001, detail of the stopper



Pl. 33 Excav. Nos. 86, 5–8/HH/2001



Pl. 34 Excav. Nos. 86, 9, 11–13/HH/2001



Pl. 35 Excav. No. 103, 1–4/HH/2001



Pl. 36 Excav. No. 103, 5–8/HH/2001

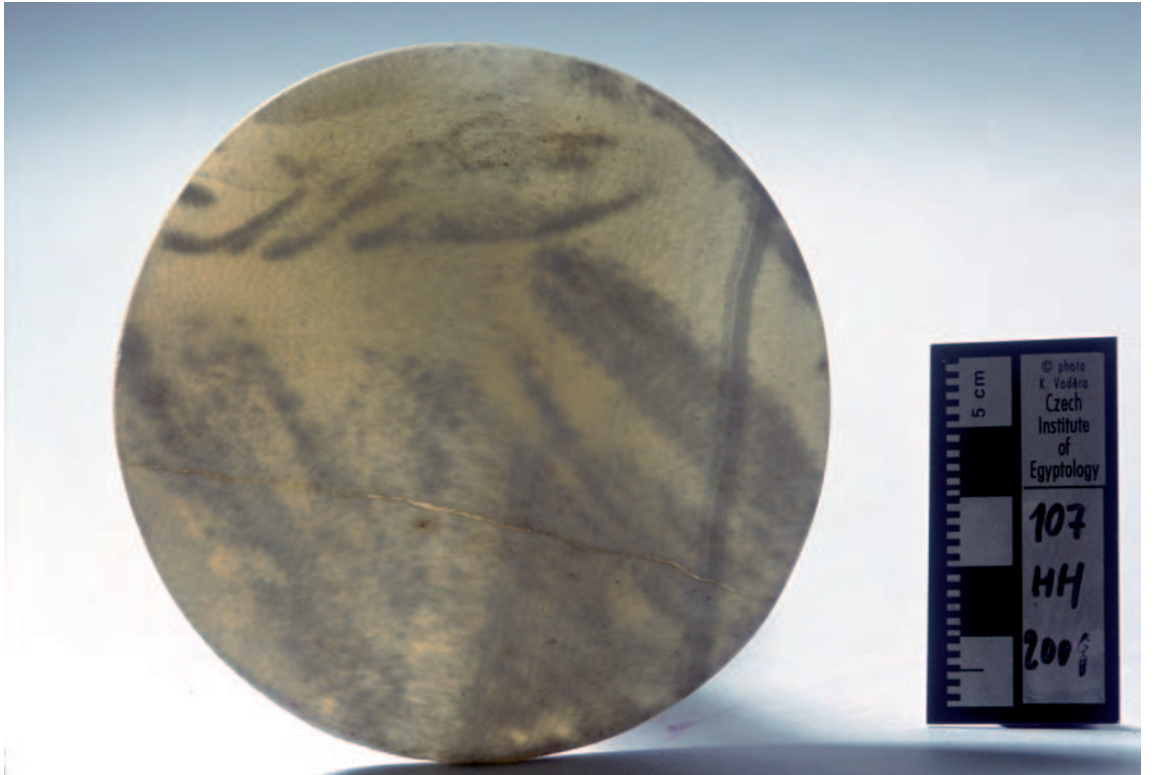


Pl. 37 Excav. No. 103, 9-10, 12/HH/2001

Pl. 38.1 Excav. No. 105/HH/2001



Pl. 38.2 Excav. No. 107/HH/2001





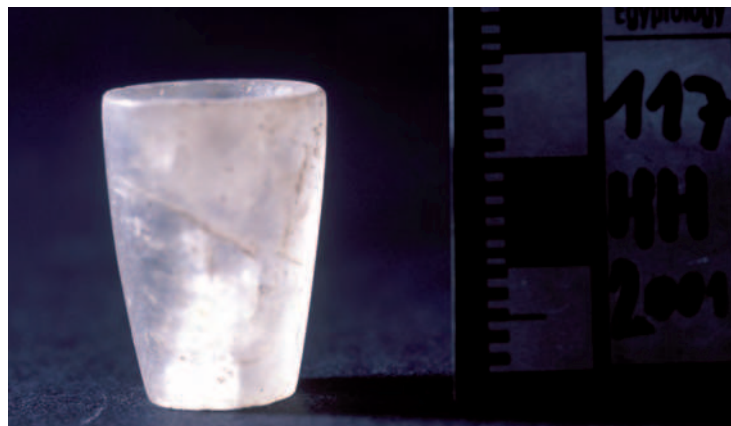
Pl. 39.1 Excav. No. 114/HH/2001



Pl. 39.2 Excav. No. 115/HH/2001



Pl. 39. 3 Excav. No. 116/HH/2001



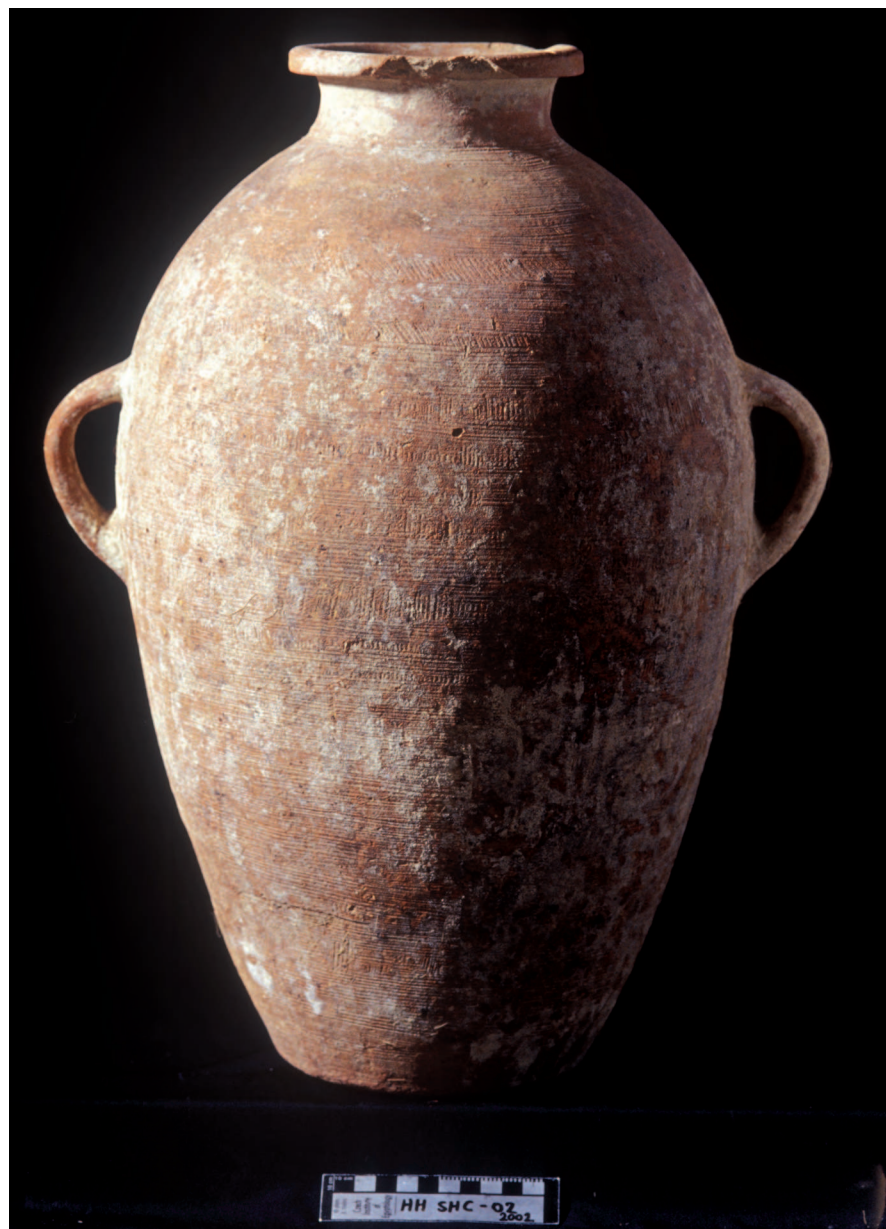
Pl. 39. 4 Excav. No. 117/HH/2001



Pl. 40.1 Excav. No. 118/HH/2001



Pl. 40.2 Excav. No. 122/HH/2001



▲ Pl. 41.1 Excav. No. 3/HH-Sh 'C'/2001

◄ Pl. 41.2 Excav. No. 103-6/HH/2001



Pl. 42 False door
of Iykai



Pl. 43 Excav. No. 150/HH/2002

Indexes

1. Sites

Abu Rawash 11, 38;
 Abusir xvii, 3–7, 11–16, 19–26, 29–31, 35–7, 39, 40, 57, 68, 70, 105, 114, 119, 163, 251, 279, 285, 289, 290, 298, 301, 302, 306–8, 314;
 Abusir South/South Abusir xvii, 3–7, 12, 14, 20, 22–6, 29, 35, 37, 39, 40, 70, 119, 279, 301, 307, 308, 314, 319, 320;
 Abusir Wadi 14–6;
 Asyut 11, 38;
 Dahshur 7, 29, 38;
 Eastern Desert 13, 14, 306;
 Fayum 12;
 Giza 38, 142, 243, 246, 259, 305, 307;
 Lake of Abusir xvii, 3, 4, 6, 14–6, 25, 26, 29, 30, 31, 40, 57, 285;
 Maadi 14, 38,
 Memphis 55, 308;
 Saqqara xvii, 4–7, 11–16, 19, 20, 38, 61, 69, 97, 105, 114, 116, 117, 135, 175, 234, 243, 298, 301, 304, 306, 308, 314;
 Saqqara ,Central 116, 301;
 Saqqara, South 301, 314;
 Saqqara, North 12, 14, 314;
 Tabbet al-Guesh 301;
 Wadi Faynan 306.

2. Kings and queens

Djoser 5, 6, 298, 301;
 Hetepheres (I) 305;
 Horemheb 301;
 Idut 68, 97, 114, 304;
 Iput 302;
 Khentkawes (II) 105;
 Khuit 302;
 Menkauhor 5;
 Nebet 105;
 Neferirkara 301;
 Nyusera 68, 157, 301, 314;
 Pepy I 147, 148, 151, 157, 189, 191, 268, 302, 310, 315;
 Pepy II 151, 268, 302, 309, 315;
 Teti 51, 53, 97, 101, 103, 107, 114, 121, 192, 207, 298, 301, 302, 304, 310, 314, 315;
 Unas 52, 96, 97, 103, 114, 149, 152, 193, 301, 302, 310, 314;
 Userkara 302.

3. Individuals

Akhethotep 105;
 Ankhmahor 114, 304;
 Babaef 243,
 Fetekti 3–5;

Gegi 4;
 Hetepi 3–7, 23, 24, 319, 321;
 Hetepi (cemetery of Fetekti in Abusir South) 5, 70;
 Id 54, 102, 310;
 Idu (1) 150, 182;
 Idu (2) 150, 183;
 Ihy (Saqqara) 97, 114, 304;
 Ihy (Abusir South) 213;
 Ini 150, 187;
 Intef 150, 185;
 Inti (1) 150, 185;
 [I]nti (2) 150, 197;
 Inti (3) 150, 198;
 Inumenu 114, 304;
 Inumin 96, 117, 304;
 Ipi 150, 182, 212;
 Irenptah (1) 54, 108, 310;
 Irenptah (2) 54, 108;
 Iri 150, 197;
 Ity 3–7, 23, 24, 319, 321;
 Iymery 150, 202;
 Iynefert 105;
 Kaaper 3, 4, 6, 7, 23, 24, 319, 321;
 Kagemni 105, 106, 114, 243, 304;
 Kai 69;
 Kaiemtjenenet 133;
 Kairer 114, 117, 304;
 Khai 151, 202;
 Khentika-Ikhekihi 105, 114, 304;
 Khu(i)khnum 54, 100;
 Mehu 114, 304;
 Mereri 105;
 Mereruka 96, 105, 114, 304;
 Merytet 105;
 Niankhba 114, 304;
 Niankhra 142;
 Nikauisesi 234;
 Ptahenukai 69;
 Ptahhotep (Giza) 142;
 Ptahhotep/Iynankh 114, 304;
 Rahotep 4, 70;
 Sekhemka 105;
 Senedjemib (1) 151, 197;
 Senedj[emib] (2) 151, 201;
 Sesi 151, 198, 311;
 Setju 54, 108;
 Setka 142;
 Tetiankhkem 243, 302;
 Ti 69, 298;
 Tjuai 126;
 Usernetjer 105;
 Weni 315.

4. Family of Qar

Ankhemtjenenet 310, 313;
 Inti xvii, 3, 4, 23, 31, 39, 41, 53, 55–7, 68, 100, 101, 107,
 153, 163, 301–5, 307, 308, 310–13;
 Inti Pepyankh 305, 313;
 Iput (wife of Qar Junior) 148, 181, 182, 302, 310;
 Iykai (?) xvii, 55, 59, 152–7, 159, 160, 164, 166, 167, 175,
 259, 272–4, 276, 311, 359;
 Merut (wife of Inti) 310;
 Qar (vizier) xvii, 3–7, 19, 25, 31, 36–8, 41, 51, 53–7, 60,
 67–70, 72, 75–9, 87–91, 93, 94, 96, 97, 100–3, 106, 107,
 109–17, 119, 123, 127, 128, 130, 131, 134, 135, 147, 148,
 153, 154, 177, 247, 280, 295, 301–4, 307–15;
 Qar Junior xvii, 3, 4, 53, 55, 57, 59, 61, 147, 148, 150, 153–
 60, 164, 167–70, 175–7, 184, 198, 206, 207, 223, 235,
 247, 251–3, 296, 297, 302–7, 310–3, 315;
 Sefekhu 310;
 Senedjemib xvii, 3, 4, 53, 55, 57, 59, 102, 148, 150, 153–62,
 164, 171–3, 175, 183, 184, 187, 189, 192–8, 206, 207,
 247, 259, 270, 271, 273, 296, 302–8, 310, 311–13, 315;
 Senedjemib (IIa) 310;
 Senedjemib (IIb) 310;
 Tjenti xvii, 4, 53, 107, 153, 167, 302–4, 307–13.

5. Gods

Anubis 52, 89, 90, 97, 109, 111, 112, 123, 126, 152, 191,
 270, 276;
 Great God 53, 89, 90, 97, 103, 109, 111, 112, 149, 189;
 Maat 147, 152, 177, 246, 247, 275, 276, 308, 311;
 Meret 152, 276, 311;
 Osiris 52, 53, 89, 90, 97, 109, 111, 112, 119, 120, 123, 152,
 276, 304;
 Tjenenet 132, 148, 177.

6. Titles

jwn Knmwt 51, 111, 308, 309;
jm3-^c 309;
(j)m(j)-r jzwj hkr nswt 309;
(j)m(j)-r w^cbtj 309;
(j)m(j)-r wp(w)t htpw 149, 308;
(j)m(j)-r pr 126, 150, 151, 197, 201, 204;
(j)m(j)-r pr-šn^c k3-nswt 151, 198;
(j)m(j)-r prwj-ḥd 309;
(j)m(j)-r hwt-wrt 51, 97, 111, 113, 308, 309;
(j)m(j)-r hwt-wrt 6 51, 109, 308, 309, 310;
(j)m(j)-r ḥm(w)-k3 150, 202;
(j)m(j)-r k3t nb(t) nt nswt 309;
(j)m(j)-r sšr 150, 198;
(j)m(j)-r šnwtj 309;
(j)m(j)-r zš(w) ^c-nswt 309;
(j)m(j)-ḥt ḥm(w)-ntr 54;
(j)m(j)-ḥt ḥm(w)-ntr (m) Mn-nfr Ppjj 191;
(j)m(j)-ḥt [ḥmw-ntr (m) Nfr-swt] Wnjs 149, 308;

(j)m(j)-ḥt ḥm(w)-ntr Dd-swt Tj 51, 53, 97, 101, 103, 107,
 309, 310;
(j)m(j) ḥt ḥm(w)-k3 54, 108;
(j)m(j)-ḥt ḥntj(w)-š ḥm(w)-ntr Dd-swt Tj 308;
(j)r(j)-p^ct 309;
(j)r(j) md3t (n) z3b 54, 108;
(j)r(j) Nḥn 269, 271, 308;
(j)r(j) Nḥn (n) z3b 51, 89, 90, 97, 107, 109, 111–4, 147, 149,
 177, 189, 192, 225, 241–3, 246, 308, 309;
(j)r(j) Nḥn (n) z3b m3^c 51, 87, 97, 109, 111, 127, 303, 308,
 309, 315;
(j)r(j) sšr pr-^c3 54, 102;
^c*d-mr (n) z3b* 51, 111, 113, 123, 308, 309;
wd-mdw m ḥwt-wrt 6 308;
mdw rhjt 51, 111, 113, 308, 309;
n(j) nst ḥntt 52, 111, 113, 308, 309;
^h*3tj-^c* 148, 206, 308, 309, 310;
ḥm-ntr M3^ct 147, 152, 177, 274, 308, 311;
ḥm-ntr M3^ct m Mn-^cnḥ Nfr-k3-r^c 147, 246, 308;
ḥm-ntr [Mrt?] 152, 276;
ḥm-ntr (m) [Nfr]-swt Wnjs 52, 97, 103, 308, 309;
ḥm-k3 54, 99, 102, 108, 151, 215;
^h*nt(j)-š (m) Mn-nfr Ppjj* 147, 246, 308;
^h*nt(j)-š Dd-swt Tj* 308;
^h*hr(j) wdb (n) z3b* 151, 204;
^h*hr(j)-sšt3* 52, 109, 189, 308, 309,
^h*hr(j)-sšt3 (n) jst ^cb3t Hr* 308;
^h*hr(j)-sšt3 n wd^c-mdw* 149, 177, 189, 308,
^h*hr(j)-sšt3 n wd^c-mdw nbt (nt nswt)* 309;
^h*hr(j)-sšt3 n wd^c-mdw n ḥwt-wrt* 52, 111, 308, 309;
^h*hr(j)-sšt3 n wd^c-mdw (m) ḥwt-wrt 6* 147, 177, 303, 308, 310;
^h*hr(j)-sšt3 n pr-dw3t* 152, 276;
^h*hr(j)-sšt3 n ḥwt-wrt* 52, 111, 308, 309;
^h*hr(j) sšt3 (n) ḥwt-wrt 6* 52, 152, 276;
^h*hr(j)-tp N[hb]* 149, 308;
^h*hrp šndjt nbt* 309;
^h*htm(w) btj* 147–9, 206, 207, 243, 308;
^h*hr(j)-ḥb* 54, 99, 150, 151, 201, 202, 204, 207;
^h*hr(j)-ḥb (n jt.f)* 309;
^h*hrj-ḥb hrj-tp (n jt.f)* 309;
^h*hr(j)-ḥb smsw* 151, 182, 201;
sm 309;
smr-w^ctj 148, 206, 207, 308, 309;
smsw h(3j)t 53, 101, 102, 107, 149, 308;
smsw h(3j)t (n) z3b 308;
^h*ḥd ḥm(w)-ntr* 54, 309;
^h*ḥd ḥm(w)-ntr Dd-swt Tj* 309;
^h*ḥd ḥm(w)-k3* 54, 102, 150, 198;
^h*ḥd srw* 150;
^h*ḥd sr(w) k[nb]t* 150, 187;
^h*ḥd zš(w) ^c(w) (nw) nswt* 150, 182;
^h*sps nswt* 135, 148, 151, 152, 198, 246, 304, 308;
^h*[z]š pr-md3t* 152, 202;
^h*zš ḥm(w)-k3 (n) z3b* 54, 100;
^h*zš (n) z3b* 53, 102, 308, 309;

t3jtj Btj (n) *z3b* 52, 109, 308;
tp(j)-hrt *nswt* 52, 109, 111, 113, 123, 308, 309.

7. Epithets

jm3hw 52, 89, 97, 132, 135, 149, 152, 189, 191, 192, 225,
 241, 242, 274, 276;
jm3hw hr Jnpw 52;
jm3hw hr Jnpw, tp(j)-dw.f 152, 274;
jm3hw hr Jnpw, tp(j)-dw.f nb t3-dsr 52, 90, 111;
jm3hw hr Wsjr 89, 90, 112, 123;
[jm3hw h]r Wsjr, nb Ddw 52, 97;
jm3hw hr Wsjr, hnt(j) Ddwt 52, 109, 111;
jm3h(w) hr nb.f 126;
jm3hw hr ntr 3 52, 97, 109, 111, 112, 149, 189;
jm3hw hr ntr 3, Nb-jmnt 52, 89, 90;
jm3hw hr ntrw 132;
jm3hw hr Hnt(j)-Tnnt 148, 177;
jm3hw hr Tnnt m swt.s nbt 132;
jm3hwt 148, 182;
mrt.f nt st-jb.f 148, 182;
sn.f 151, 152, 198;
snfrt 148, 182;
z3.f 53, 102, 149, 206;
z3.f mrj.f 53, 107;
z3.f smsw mrj.f 153, 102.

8. Fauna (Latin terms)

Acomys 38–40, 48;
Anas sp. 295, 296;
Anas acuta 296;
Anser albifrons 296, 298;
Anas crecca 296;
Anas platyrhynchos 296;
Anser sp. 295, 296;
Anura 38;
Arvicanthus niloticus 38–40, 48;
Asellia Trident 38;
Bos taurus 295;
Branta bernicla 296;
Bufo 38;
Carolia placunoides 15;
Crocidura sp. 38, 40;
Crocidura suaveolens 38, 40;
Dermestes frischii 37;
Jaculus jaculus 38, 40, 48;
Labidura riparia 37, 46;
Mus musculus 296, 297;
Nesokia indica 38, 40, 48;
Otonycteris hemprichii 38;
Pecten benedictus 15;
Pipistrellus kuhlii 38;
Poecilus pharao 38;
Praomys fumatus 38, 40;
Prionotheca coronata 38, 47;

Rattus norvegicus 296, 297;
Rattus rattus 296–298;
Scarites 37, 46, 47;
Sclerum orientale 38, 47;
Streptopelia sp. 297;
Suncus etruscus 38–40;
Suncus murinus 38, 40, 48;
Taphozous nudiventris 38;
Thilodrias contactus 37.

9. Flora (Latin terms)

Alisma plantago-aquatica 32–34;
Anchusa aegyptiaca 32, 34, 35;
Anthemis cf. *pseudocotula* 32, 34, 35;
Arundo donax 32–34;
Asteraceae 33;
Boraginaceae 33–35;
Brassicaceae 37;
Bromus 32, 34, 35;
Carex 32–34, 42;
Cerealina 32;
Elatine 32–34, 42;
Compositae 37;
Cynodon dactylon 32, 34, 42;
Cyperaceae 33, 37;
Cyperus 32–34;
Daucaceae 33;
Eleocharis cf. *palustris* 32–35, 43;
Fabaceae 33;
Ficus carica 31, 32;
Ficus cf. *siccomorus* 31;
Geranium 32, 34;
Gramineae 37;
Hordeum vulgare 31, 36, 43;
Hordeum vulgare subsp. *vulgare* 31;
Hordeum vulgare subsp. *Coeleste* 31;
Chenopodiaceae 37;
Chenopodium murale 32, 34, 35, 42;
Lathyrus hirsutus 32, 34;
Lemna cf. *gibba* 32–34, 43;
Lens culinaris 31, 32;
Linum 32, 33, 43;
Linum usitatissimum 32, 33, 43, 46;
Lolium temulentum 32, 34, 35, 44;
Malva cf. *parviflora* 32, 34, 35, 46;
Medicago polymorpha 32, 34, 44;
Medicago sp. 32, 35, 44;
Palmae 37;
Phalaris paradoxa 32, 34, 35, 44, 46;
Pisum 31, 32, 44;
Plantago 32–35, 45;
Poaceae 33;
Polygonum persicaria 37;
Polygonum 32, 34–37;

Portulaca oleracea 32–35;
Potamogeton 32–34;
Reseda sp. 33–35;
Rumex dentatus 33–35, 45;
Scorpiurus muricata 32, 34, 35, 42;
Trifolium dasyurum 33–35;
Trifolium 33, 34;
Triticum dicoccon 31, 32, 36, 45;
Triticum 36, 37;
 Verbenaceae 33;
Vicia 32 – 34, 36, 37, 44;
Vitis vinifera 31, 32;
Zizyphus spina-christi 31, 32.

10. Egyptian terms

jnjt rd ritual 98;
wesekh-collar 96, 103, 111, 116, 214;
m33 ḥd 92;
nwd 91;
rn jw3 91, 92;
ghs 91;
khaker-frieze 93, 96, 105, 116, 200, 216, 218, 219, 220, 221;
kheryp-sceptre 87, 112;
z3t-mw 99, 106.

11. Varia

Addax antelope 91;
 basalt 165, 267, 305;
 Combed/metallic ware 307;
 Copper implements
 arrow-head chisel 227, 232, 234, 235, 237, 265, 305, 306;
 axe head 164, 227, 232, 234, 235, 260, 261, 265, 305, 306;
 cross-cut chisel 134, 164, 227, 232, 234, 235, 260, 265, 305, 306;
 flat chisel 227, 235, 260, 265, 306;
 leaf-blade knife 227, 232, 234, 305, 306;
 necked adze blade 164, 227, 232, 235, 237, 260, 305, 306;
 needle/pin 240, 270, 305, 306;
 vessel 163–5, 223, 237, 240, 242, 259, 264, 270, 305, 306;
 Dorcas gazelle 91, 99, 100, 107;
 Goose model(s) 163, 164, 225, 235, 237, 238, 240, 305;
 granite (red) 67, 72, 78, 109, 144, 158, 196;
 headrest 116, 124, 127, 163, 165, 243, 206, 268, 269, 304, 305, 307, 314;
 ibex 91, 92, 102, 107, 108;
 long-horn ox 92;
 Nile Silt 24, 238, 240, 247, 251–5, 259, 260, 261, 264, 270, 271;
 obsidian 163, 165, 223, 259, 267, 268, 305;
 ‘Opening of the Mouth’ set 223, 241, 259, 265, 267, 268, 314;

oryx 92, 101, 107, 108, 219;
 quartz 13, 14, 163, 165, 241, 265, 268, 305;
 schist (black) 165, 243, 268, 305;
 serdab 5, 57, 61, 68, 69, 70, 71, 78, 135, 137, 138, 304;
 seven sacred oils palette 165, 269, 271, 305, 307, 314;
 statue 61, 69, 78, 119, 137, 138, 144, 304;
 Tethys 11, 12;
 travertine 97, 109, 128–31, 134–6, 142, 163, 165, 223, 234, 243, 259, 265, 267–9, 271, 305, 307, 314.

12. Tombs

Giza
 G 20 142;
 G 2381 A/Impy 246;
 G 5230, Babaef 243;
 G IIS 142;
 G VIIIS 142;
 Seshemnefer IV 142;
 Setka/Ptahhotep 142;

Saqqara
 Kai (D 19/1) 69;
 Nikauisesi 234;
 Ptahenukai 69;
 Ranefererefankh 69;
 Ti (D 22) 69;

Abusir South
 Tomb MM 3, 6, 7, 131, 314;
 Tomb KK 3, 6, 7, 56, 57, 86, 157, 165, 280, 285.

Abusir XIII
Abusir South 2
Tomb Complex of the Vizier Qar, His Sons Qar Junior and Senedjemib, and Iykai

Prof. Mgr. Miroslav Bárta, Dr.

RNDr. Aleš Bezděk, Mgr. Viktor Černý, Dr., Prof. Dr. Salima Ikram, Mgr. Petr Kočár, RNDr. Roman Křivánek,
Mgr. Martina Kujanová, Mgr. Petr Pokorný, Ph.D., Eng. Colin Reader, Mgr. Zdenka Šůvová, Mgr. Petra Vlčková

Vydala:
Vlasta Zara Meduna
Rymaně 1065
Mníšek pod Brdy

Kniha vychází s finanční podporou MŠMT, grant MSM-0021620826

Jazyková redakce: Vivienne G. Callenderová, Kateřina Honskusová, Eric Reid

Na obálce byla použita fotografie Kamila Voděry

Ilustrace: Miroslav Bárta, Vladimír Brůna, Filip Coppens, Dušan Magdolen, Jolana Malátková, Lucie Vařeková, Petra
Vlčková, Luděk Wellner

Fotografie: Archiv Českého egyptologického ústavu FF UK, Miroslav Bárta, Martin Frouz, Kamil Voděra, Milan Zemina

Vydání 1., Praha 2009
Tisk a vazba PB Tisk Příbram
ISBN 978-80-87025-21-5