

A necklace made of orange and dark brown beads with a large red tusk pendant. The necklace is composed of many small, round, orange beads interspersed with smaller, dark brown beads. A large, polished, red tusk-shaped pendant hangs from the center. The necklace is displayed against a light, textured background.

BEADS

from Excavations
at Qustul, Adindan, Serra East,
Dorginarti, Ballana, and Kalabsha

A-Group, Post-A-Group, C-Group, N-Type, P-Type, Pan Grave,
Kerma, Middle Kingdom, and New Kingdom

Joanna Then-Obłuska

ORIENTAL INSTITUTE NUBIAN EXPEDITION XI
THE ORIENTAL INSTITUTE OF THE UNIVERSITY OF CHICAGO

*BEADS FROM EXCAVATIONS AT QUSTUL, ADINDAN,
SERRA EAST, DORGINARTI, BALLANA, AND KALABSHA*

A-GROUP, POST-A-GROUP, C-GROUP, N-TYPE, P-TYPE, PAN GRAVE,
KERMA, MIDDLE KINGDOM, AND NEW KINGDOM

CAMPAGNE INTERNATIONALE POUR LA SAUVEGARDE
DES MONUMENTS DE LA NUBIE

THE UNIVERSITY OF CHICAGO
ORIENTAL INSTITUTE NUBIAN EXPEDITION
VOLUME XI

*BEADS FROM EXCAVATIONS AT QUSTUL, ADINDAN,
SERRA EAST, DORGINARTI, BALLANA, AND KALABSHA*

PART 1

A-GROUP, POST-A-GROUP, C-GROUP, N-TYPE, P-TYPE, PAN GRAVE,
KERMA, MIDDLE KINGDOM, AND NEW KINGDOM

by

JOANNA THEN-OBLUSKA

THE ORIENTAL INSTITUTE OF THE UNIVERSITY OF CHICAGO

Library of Congress Control Number: 2022942851

ISBN: 978-1-61491-077-0

The Oriental Institute, Chicago

© 2022 by The University of Chicago. All rights reserved.

Published 2022. Printed in the United States of America.

Series Editors

Charissa Johnson, Steven Townshend, and Andrew Baumann

with the assistance of

Connie Gundry Tappy

Cover Illustration

Carnelian and garnet beads and pendants from Qustul tomb L 17 (OIM E23663D)

Late A-Group (Naqada III)

See pages 33–34

Cover Design

James M. Slate

Layout

PerfecType, Nashville, TN

The paper used in this publication meets the minimum requirements of
American National Standard for Information Services—Permanence of Paper
for Printed Library Materials, ANSI Z39.48-1992. ∞

For my parents, Danuta and Stanisław

Table of Contents

<i>List of Figures</i>	ix
<i>List of Tables</i>	xi
<i>List of Abbreviations</i>	xiii
<i>Bibliography</i>	xv
<i>Acknowledgments</i>	xxvii
<i>Introduction</i>	xxix
1. Classification Criteria	1
1.1. Introduction to Typology	1
1.2. Introduction to the Catalog Entries	3
2. Early Nubian Period Cultures	5
2.1. The A-Group Bead Story	5
2.1.1. Corpus of OINE A-Group and Post-A-Group Beads and Pendants	9
Sites and Chronology	9
Materials and Techniques	10
Beadwork	23
The Bead Owners	23
Catalog	24
3. Middle Nubian Period Cultures	63
3.1. The C-Group Bead Story	64
3.1.1. Corpus of OINE C-Group Beads and Pendants	68
Sites and Chronology	68
Materials and Techniques	68
Beadwork	78
The Bead Owners	79
Catalog	80
3.1.2. Corpus of OINE C-Group N-Type Beads and Pendants	192
Sites and Chronology	192
Materials and Techniques	192
Beadwork	194
The Bead Owners	194
Catalog	195
3.1.3. Corpus of OINE C-Group P-Type Beads and Pendants	213
Sites and Chronology	213
Materials and Techniques	213
Beadwork	214
The Bead Owners	216
Catalog	217
3.2. The Pan Grave Bead Story	229
3.2.1. Corpus of OINE Pan Grave Beads and Pendants	231
Sites and Chronology	231
Materials and Techniques	232
Beadwork	235
The Bead Owners	236
Catalog	237

3.3. Kerma	260
3.3.1. Corpus of OINE Kerma Beads.	260
Catalog	261
3.4. Middle Kingdom.	262
3.4.1. Corpus of OINE Middle Kingdom Beads.	262
Catalog	263
4. New Kingdom	265
4.1. The New Kingdom Bead Story	265
4.1.1. Corpus of OINE New Kingdom Beads and Pendants.	270
Sites and Chronology	270
Materials and Techniques.	271
Beadwork	283
The Bead Owners	283
Catalog	284
5. Synoptic and Concordance Tables	327
5.1. Synoptic Tables.	328
5.2. Concordance of the OIM, Catalog, and OINE Find Numbers.	340
5.3. Concordance of the Catalog, OIM, and OINE Find Numbers.	351

List of Figures

1. Map of Nubia and Egypt with localities mentioned in the text	xxx
2. Bead and pendant terminology	2
3. Beads and pendants. Stone beads: a (5.2), b (18.1), c (5.3), d (9.6), e (5.6), f (7), g (9.9), h (9.15), i (9.14), j (9.4), k (18.16), l (5.4), m–p (18.14–15), q (9.3), r (5.5); faience beads: s–t (18.5), u (18.10), v (18.11)	11
4. Close-ups of the red surface of a faience miniature vessel and section showing a white core and blue traces, Qustul L 2–28; OIM E24061	21
5. Close-ups of the blue glaze of a faience miniature vessel and section showing the white core, Qustul L 5–4; OIM E24062	22
6. Wooden figure of a Nubian woman, Met 26.3.231	66
7. Wooden figure of a Nubian woman, Met 26.3.232	67
8. Nubian mercenaries from the Eleventh Dynasty tomb of Prince Mesehti at Asyut (ca. 2135–1994 BC), JE CG257	68
9. Nubians in the painted relief on the east wall of the hypostyle hall in the temple of Thutmose III at Deir el-Bahari	69
10. Beads and pendants: a (130.1), b (168.7), c (269), d (51.1)	70
11. Beads and pendants: a (97.3), b (89.7), c–d (105), e (267.4), f (89.2), g (267.1), h (74), i (267.2), j (182.2), k (66.1)	70
12. Beads and pendants: a (218), b (34 [^]), c (244.4), d–f (35 [^]), g–i (39.2 [^]), j (244.5), k (211.2), l (211.1)	71
13. Excavation sheet of tomb P-B 73 (258–259)	215
14. Wooden figure of a girl with a Bes amulet, Durham University EG4007	268
15. Nubians in tribute scene in the tomb of Rekhmire, Met 31.6.40 (fascimile)	269
16. Nubians in tribute scene in the tomb of Rekhmire, Met 30.4.81 (fascimile)	270
17. Nubian envoys depicted in the tomb of Sebekhotep, British Museum EA921	271
18. Nubian envoys depicted in the tomb of Sebekhotep, British Museum EA922	272
19. Nubian representative depicted in the tomb of Qenamun, Met 30.4.69	273
20. Beads and pendants: a (298.8), b (299.3), c (324.5), d (305.2), e (326.2), f (317.1), g (311), h (298.3), i (316.1), j (324.4), k (298.6), l (299.2), m (317.4), n (298.2), o (298.5), p (312), q (297.3), r (297.4), s (327.1, 10), t (306) u (310.3), v (302), w (299.4), x (334), y (333.1–4), z (331), aa (332), bb (309), cc (325), dd (329), ee (319.2, 4), ff (303), gg (307), hh (319.3a), ii (315.4–5), jj (316.2), kk (303.5), ll (304.2), mm (349.2), nn (343), oo (304.1)	274

List of Tables

1.	Chronology of Egypt, Lower Nubia, and Upper Nubia	xxxi
2.	Overview of cultural units and associated catalog numbers.	xxxi
3.	Dating of Early Nubian objects according to OINE III, IV, and X.	10
4.	Overview of types in A-Group and Post-A-Group culture	12
5.	Dating of C-Group objects according to OINE V and X	69
6.	Overview of types from C-Group graves.	72
7.	Overview of types from N-Type graves.	193
8.	Overview of types from P-Type graves	214
9.	Overview of types from Pan Grave graves	233
10.	Dating of New Kingdom objects according to OINE VI and X.	271
11.	Overview of types from New Kingdom graves.	275
12.	Synoptic tables	
	A. A-Group (1–9, 11–14, 16–26).	328
	B. A-Group (27–31, 32 [^] , 34 [^] –35 [^] , 37 [^] –39 [^] , 41, 43–44), Post-A-Group (40, 45–49), C-Group (50–59).	329
	C. C-Group (60–71, 73–78, 80–91).	330
	D. C-Group (93–122)	331
	E. C-Group (123–142, 144–154)	332
	F. C-Group (155–184).	333
	G. C-Group (185–206, 208–215).	334
	H. C-Group (217–229), N-Type (230–235, 237–238, 240–248).	335
	I. N-Type (249, 251–254), P-Type (256–265), Pan Grave (266–275, 277–279, 282–283).	336
	J. Pan Grave (284, 286–293), Kerma (294), Middle Kingdom (295–296), New Kingdom (297–313, 315)	337
	K. New Kingdom (316–322, 324–335, 337–340, 342–348)	338
	L. New Kingdom (349–352, 354, 356–359)	339
13.	Concordance of the OIM, catalog, and OINE find numbers	340
14.	Concordance of the catalog, OIM, and OINE find numbers	351

List of Abbreviations

MUSEUMS

BM	British Museum, London (www.britishmuseum.org)
BrMu	Brooklyn Museum, New York (www.brooklynmuseum.org and personal observation)
JE	Egyptian Museum, Cairo (personal observation)
<i>JdE</i>	Cairo Museum, <i>Journal d'Entrée</i>
MAN	Museo Arqueológico Nacional, Madrid (personal observation)
Met	Metropolitan Museum of Art, New York (www.met.org)
MFA	Museum of Fine Arts, Boston (www.mfa.org)
OIM	Oriental Institute Museum, Chicago (personal observation)
Penn	University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia (www.penn.museum.org)
SNM	Sudan National Museum, Khartoum (personal observation)
UC	Petrie Museum of Egyptian Archaeology, University College London, London (www.ucl.ac.uk/culture/petrie-museum)

BIBLIOGRAPHIC

CRIPEL	Cahiers de recherches de l'Institut de papyrologie et d'égyptologie de Lille, Lille
FIFAO	Fouilles de l'Institut français d'archéologie orientale du Caire, Cairo
<i>JARCE</i>	<i>Journal of the American Research Center in Egypt</i> , Cairo
OINE II	Herbert Rieke, <i>Ausgrabungen von Khor-Dehmit bis Bet el-Wali</i> . Oriental Institute Nubian Expedition 2. Chicago: University of Chicago Press, 1967
OINE III	Bruce Beyer Williams, <i>Excavations between Abu Simbel and the Sudan Frontier</i> . Part 1: <i>The A-Group Royal Cemetery at Qustul: Cemetery L</i> . Oriental Institute Nubian Expedition 3. Chicago: Oriental Institute of the University of Chicago, 1986
OINE IV	Bruce Beyer Williams, <i>Excavations between Abu Simbel and the Sudan Frontier</i> . Parts 2, 3, and 4: <i>Neolithic, A-Group, and Post-A-Group Remains from Cemeteries W, V, S, Q, T, and a Cave East of Cemetery K</i> . Oriental Institute Nubian Expedition 4. Chicago: Oriental Institute of the University of Chicago, 1989
OINE V	Bruce Williams, <i>Excavations between Abu Simbel and the Sudan Frontier</i> . Part 5: <i>C-Group, Pan Grave, and Kerma Remains at Adindan Cemeteries T, K, U, and J</i> . Oriental Institute Nubian Expedition 5. Chicago: Oriental Institute of the University of Chicago, 1983
OINE VI	Bruce Beyer Williams, <i>Excavations between Abu Simbel and the Sudan Frontier</i> . Part 6: <i>New Kingdom Remains from Cemeteries R, V, S, and W at Qustul and Cemetery K at Adindan</i> . Oriental Institute Nubian Expedition 6. Chicago: Oriental Institute of the University of Chicago, 1992
OINE VII	Bruce Beyer Williams, <i>Excavations between Abu Simbel and the Sudan Frontier</i> . Part 7: <i>Twenty-Fifth Dynasty and Napatan Remains at Qustul: Cemeteries W and V</i> . Oriental Institute Nubian Expedition 7. Chicago: Oriental Institute of the University of Chicago, 1990
OINE VIII	Bruce Beyer Williams, <i>Excavations between Abu Simbel and the Sudan Frontier</i> . Part 8: <i>Meroitic Remains from Qustul Cemetery Q, Ballana Cemetery B, and a Ballana Settlement</i> . Oriental Institute Nubian Expedition 8. Chicago: Oriental Institute of the University of Chicago, 1991
OINE IX	Bruce Beyer Williams, <i>Excavations between Abu Simbel and the Sudan Frontier</i> . Part 9: <i>Noubadian X-Group Remains from Royal Complexes in Cemeteries Q and 219 and Private Cemeteries Q, R, V, W, B, J, and M at Qustul and Ballana</i> . Oriental institute Nubian Expedition 9. Chicago: Oriental Institute of the University of Chicago, 1991
OINE X	Bruce Beyer Williams, <i>Excavations at Serra East</i> . Parts 1–5: <i>A-Group, C-Group, Pan Grave, New Kingdom, and X-Group Remains from Cemeteries A–G and Rock Shelters</i> . Oriental Institute Nubian Expedition 10. Chicago: Oriental Institute of the University of Chicago, 1993
SJE	Scandinavian Joint Expedition to Sudanese Nubia

GENERAL

B	bead
ca.	circa
cat.	catalog
cm	centimeter(s)
D	diameter
g	gram(s)
H	height
HD	hole diameter
km	kilometer(s)
L	length
m	meter(s)
max.	maximum
min.	minimum
mm	millimeter(s)
n(n).	note(s)
no(s).	number(s)
P	pendant
p(p).	page(s)
pl(s).	plate(s)
pt(s).	part(s)
S	spacer
sp.	species
Th	thickness
vol(s).	volume(s)
W	width

Bibliography

- Abdelsalam, Mohamed G., Robert J. Stern, Peter Copeland, Elfadil M. Elfaki, Bushra Elhur, and Fathelrahman M. Ibrahim
1998 "The Neoproterozoic Keraf Suture in NE Sudan: Sinistral Transpression along the Eastern Margin of West Gondwana." *Journal of Geology* 106, no. 2: 133–48. <https://doi.org/10.1086/516012>.
- Addison, Frank
1949 *The Wellcome Excavations in the Sudan*. Vol. 1, *Jebel Moya*. Oxford: Oxford University Press.
- Almagro, Martín, Francisco Presedo, and Manuel Pellicer
1963 "Preliminary Report on the Spanish Excavations in the Sudan, 1961–62." *Kush* 11: 175–95.
- Almagro, Martín, Eduardo Ripoll, and Luis Monreal
1964 *Las necrópolis de Masmás, Alto Egipto (campaña de 1963)*. Memorias de la Misión arqueológica española en Nubia (Egipto y Sudán) 3. Madrid: Ministerio de asuntos exteriores. Dirección general de relaciones culturales/Ministerio de educación nacional/Dirección general de bellas artes.
- Altenmüller, Hartwig
1983a "Das Grab der Königin Tausret im Tal der Könige von Theben." *Studien zur Altägyptischen Kultur* 10: 1–24.
1983b "Rolle und Bedeutung des Grabes der Königin Tausret im Königsgräbertal von Theben." *Bulletin de la Société d'Égyptologie, Genève* 8: 3–11.
- Andrews, Carol A. R.
1981 *Catalogue of Egyptian Antiquities in the British Museum*. Vol. 6, *Jewellery*. Pt. 1, *From the Earliest Times to the Seventeenth Dynasty*. London: British Museum Press.
1990 *Ancient Egyptian Jewelry*. New York: H. N. Abrams.
1994 *Amulets of Ancient Egypt*. Austin: University of Texas Press.
- Arnold, Dorothea, Lyn Green, and James Allen
1999 *The Royal Women of Amarna: Images of Beauty from Ancient Egypt*. New York: Metropolitan Museum of Art.
- Arveiller-Dulong, Véronique, and Marie-Dominique Nenna
2011 *Les verres antiques du Musée du Louvre*. Vol. 3, *Parures, instruments et éléments d'incrustation*. Paris: Somogy.
- Aston, Barbara G., James A. Harrell, and Ian Shaw
2000 "Stone." In *Ancient Egyptian Materials and Technology*, edited by Paul T. Nicholson and Ian Shaw, 5–77. Cambridge: Cambridge University Press.
- Bajnóczi, Bernadett, Gabriella Schöll-Barna, Nándor Kalicz, Zsuzsanna Siklósi, George H. Hourmouziadis, Fotis Ifantidis, Aikaterini Kyparissi-Apostolika, Maria Pappa, Rena Veropoulidou, and Christina Ziota
2013 "Tracing the Source of Late Neolithic Spondylus Shell Ornaments by Stable Isotope Geochemistry and Cathodoluminescence Microscopy." *Journal of Archaeological Science* 40, no. 2: 874–82. <https://doi.org/10.1016/j.jas.2012.09.022>.
- Bar-Yosef Mayer, Daniella E.
2002 "The Shells of the Nawamis in Southern Sinai." In *Archaeozoology of the Near East V: Proceedings of the Fifth International Symposium on the Archaeozoology of Southwestern Asia and Adjacent Areas*, edited by Hijlke Buitenhuis, Alice Mathea Choyke, M. Mashkour, and A. H. Al-Shiyab, 166–80. Groningen: ARC.
- Bard, Kathryn A., and Rodolfo Fattovich
2011 "The Middle Kingdom Red Sea Harbor at Mersa/Wadi Gawasis." *JARCE* 47: 105–29.
- Bates, Oric, and Dows Dunham
1927 "Excavations at Gammai." In *Varia Africana IV*, edited by Earnest A. Hooton and Natica I. Bates, 1–121. Harvard African Studies 8. Cambridge, MA: Peabody Museum of Harvard University.
- Beck, Horace C.
1928 "Classification and Nomenclature of Beads and Pendants." *Archaeologia* 77: 1–76.
- Berlev, Oleg D., and Svetlana I. Hodjash
1998 *Catalogue of the Monuments of Ancient Egypt from the Museums of the Russian Federation, Ukraine, Bielorrussia, Caucasus, Middle Asia and the Baltic States*. Orbis Biblicus et Orientalis, Series Archaeologica 17. Fribourg: University Press/Göttingen: Vandenhoeck & Ruprecht.
- Berman, Lawrence M.
1999 *Catalogue of Egyptian Art: The Cleveland Museum of Art*. Cleveland: Cleveland Museum of Art.

- Bianchi, Robert S.
2013 "The Treasure of Harageh." *JARCE* 49: 19–31.
- Bietak, Manfred
1966 *Ausgrabungen in Sayala-Nubien 1961–1965: Denkmäler der C-Gruppe und der Pan-Gräber-Kultur*. Berichte des Österreichischen Nationalkomitees der UNESCO-Aktion für die Rettung der Nubischen Altertümer 3. Wien: Böhlau.
1968 *Studien zur Chronologie der nubischen C-Gruppe: Ein Beitrag zur Frühgeschichte Unter-nubiens zwischen 2200 und 1550 vor Chr.* Berichte des Österreichischen Nationalkomitees der UNESCO-Aktion für die Rettung der Nubischen Altertümer 5. Wien: Böhlau.
- Bietak, Manfred, and Reinhold Engelmayr
1963 *Eine frühdynastische Abri-Siedlung mit Felsbildern aus Sayala-Nubien*. Berichte des Österreichischen Nationalkomitees der UNESCO-Aktion für die Rettung der Nubischen Altertümer 2. Wien: Böhlau.
- Binder, Susanne
2008 *The Gold of Honour in New Kingdom Egypt*. Australian Centre for Egyptology Studies 8. Oxford: Aris & Phillips.
- Bleiberg, Edward
2008 *To Live Forever: Egyptian Treasures from the Brooklyn Museum*. Brooklyn/London: Brooklyn Museum in association with D. Giles.
- Bobrowski, Przemysław, Maciej Jórdeczka, Agnieszka Krzyżaniak, and Małgorzata Mrozek-Wysocka
2011 "Personal Adornments." In *Kadero: The Lech Krzyżaniak Excavations in the Sudan*, edited by Marek Chłodnicki, Michał Kobusiewicz, and Karla Kroeper, 335–45. Studies in African Archaeology 10. Poznań: Muzeum Archeologiczne w Poznaniu.
- Bongioanni, Alessandro, and Maria S. Croce, eds.
2003 *The Treasures of Ancient Egypt from the Egyptian Museum in Cairo*. New York: Rizzoli.
- Bonnet, Charles, ed.
1990 *Kerma, royaume de Nubie*. Genève: Mission archéologique de l'Université de Genève au Soudan.
- Bourriau, Janine
1991 "Relations between Egypt and Kerma during the Middle and the New Kingdoms." In *Egypt and Africa: Nubia from Prehistory to Islam*, edited by William V. Davies, 129–44. London: British Museum Press.
- Brand, Peter J.
2006 "The Shebyu-Collar in the New Kingdom: Part I." *Journal of the Society for the Study of Egyptian Antiquities* 33: 17–42.
- Braun, Eliot
2011 "Early Interaction between Peoples of the Nile Valley and the Southern Levant." In *Before the Pyramids: The Origins of Egyptian Civilization*, edited by Emily Teeter, 105–22. Chicago: Oriental Institute of the University of Chicago.
- Brunton, Guy
1927 *Qau and Badari I*. Publications of the Egyptian Research Account and British School of Archaeology in Egypt 44. London: British School of Archaeology in Egypt.
1928 *Qau and Badari II*. Publications of the Egyptian Research Account and British School of Archaeology in Egypt 45. London: British School of Archaeology in Egypt.
1930 *Qau and Badari III*. Publications of the Egyptian Research Account and British School of Archaeology in Egypt 50. London: British School of Archaeology in Egypt.
1937 *Mostagedda and the Tasian Culture: British Museum Expedition to Middle Egypt, Years 1/2*. London: Quaritch.
1948 *Matmar*. London: Quaritch.
- Brunton, Guy, and Reginald Engelbach
1927 *Gurob*. London: British School of Archaeology in Egypt.
- Capel, Anne K., and Glenn Markoe, eds.
1996 *Mistress of the House, Mistress of Heaven: Women in Ancient Egypt*. New York: Hudson Hills in association with Cincinnati Art Museum.
- Carroll, Scott T.
1988 "Wrestling in Ancient Nubia." *Journal of Sport History* 15, no. 2: 121–37.
- Castiglioni, Angelo, and Alfredo Castiglioni
2004 "Gold in the Eastern Desert." In *Sudan: Ancient Treasures: An Exhibition of Recent Discoveries from the Sudan National Museum*, edited by Derek A. Welsby and Julie R. Anderson, 122–31. London: British Museum Press.
- Chaix, Louis
1982 "Seconde note sur la faune de Kerma (Soudan): Campagnes 1981 et 1982." *Genava N.S.* 30: 67–70.
- Chovanec, Zuzana, Shlomo Bunimovitz, and Zvi Lederman
2015 "Is There Opium Here? Analysis of Cypriot Base Ring Juglets from Tel Beth-Shemesh, Israel." *Mediterranean Archaeology and Archaeometry* 15, no. 2: 175–89.
- Ciałowicz, Krzysztof M.
2011 "The Predynastic/Early Dynastic Period at Tell el-Farkha." In *Before the Pyramids: The Origins of Egyptian Civilization*, edited by

- Emily Teeter, 55–64. Chicago: Oriental Institute of the University of Chicago.
- Çınardalı-Karaaslan, Nazlı
2012 “The East Mediterranean Late Bronze Age Glass Trade within the Context of the Panaz-tepe Finds.” *Oxford Journal of Archaeology* 31, no. 2: 121–41.
- Cooney, John D.
1976 *Catalogue of Egyptian Antiquities in the British Museum*. Vol. 4, *Glass*. London: British Museum Press.
- Darnell, John C., and Colleen Manassa
2007 *Tutankhamun’s Armies: Battle and Conquest during Ancient Egypt’s Late 18th Dynasty*. Hoboken, NJ: Wiley & Sons.
- Daszkiewicz, Małgorzata, and Miriam Lahitte
2013 “Possibilities and Limitations of Using pXRF for Analysis of Ancient Beads—an Example from Gala Abu Ahmed, Sudan.” In *Archäometrie und Denkmalpflege 2013: Jahrestagung an der Bauhaus-Universität Weimar*, 25–28. September 2013, edited by Andreas Hauptmann, Oliver Mecking, and Michael Prange, 269–73. Metalla 6. Bochum: Deutsches Bergbau-Museum Bochum.
- Davies, Nina de G., and Alan H. Gardiner
1926 *The Tomb of Huy, Viceroy of Nubia in the Reign of Tutankhamun* (No. 40). London: Egypt Exploration Society.
- Davies, Norman de G.
1943 *The Tomb of Rekh-Mi-Rē’ at Thebes*. Publications of the Metropolitan Museum of Art Egyptian Expedition 11. New York: Plantin Press.
- Delattre, Hélène
2014 “The Pre-Kerma Site of Sedeinga.” In *Abstracts of Papers Presented at the 13th International Conference for Nubian Studies*, edited by Matthieu Honegger, 41–42. Neuchâtel: Université de Neuchâtel Presse.
- Dolińska, Monika
2014 “Temple of Tuthmosis III at Deir el-Bahari, Seasons 2010–2011.” *Polish Archaeology in the Mediterranean* 23, no. 1: 211–20.
- Doxey, Denise M.
1997 “[Cat. No.] 61.” In *Searching for Ancient Egypt: Art, Architecture, and Artifacts from the University of Pennsylvania Museum of Archaeology and Anthropology*, edited by David P. Silverman, 202. Dallas: Dallas Museum of Art.
- Dubiel, Ulrike
2008 *Amulette, Siegel und Perlen: Studien zu Typologie und Tragesitte im Alten und Mittleren Reich*. Orbis Biblicus et Orientalis 229. Fribourg: Academic Press.
- Dubin, Lois Sherr
2009 *The History of Beads: From 100,000 B.C. to the Present*. Rev. ed. New York: Abrams.
- Dunham, Dows
1982 *Excavations at Kerma: Part VI*. Boston: Museum of Fine Arts.
- Dunham, Dows, and Josef M. A. Janssen
1960 *Second Cataract Forts: Excavated by George Andrew Reisner*. Boston: Museum of Fine Arts.
- Dziobek, Eberhard, and Mahmud Abdel Rasziq
1990 *Das Grab des Sobekhotep: Theben Nr. 63*. Archäologische Veröffentlichungen 71. Mainz: von Zabern.
- Eggebrecht, Arne
1993 *Pelizaeus-Museum Hildesheim: Die Ägyptische Sammlung*. Zaberns Bildbände zur Archäologie 12. Mainz: von Zabern.
- El-Baghdadi, Salem G.
2003 “Proto- and Early Dynastic Necropolis of Minshat Ezzat, Dakahlia Province, Northeast Delta.” *Archéo-Nil* 13: 143–52.
- Emberling, Geoff
2012 “Archaeological Salvage in the Fourth Cataract, Northern Sudan (1991–2008).” In *Ancient Nubia: African Kingdoms on the Nile*, edited by Marjorie M. Fisher, Peter Lacovara, Salima Ikram, and Sue D’Auria, 71–77. Cairo: American University in Cairo Press.
- Emery, Walter B., and Laurence P. Kirwan
1935 *The Excavations and Survey between Wadi es-Sebua and Adindan, 1929–1931*. 2 vols. Cairo: Government Press.
- 1938 *The Royal Tombs of Ballana and Qustul*. Cairo: Government Press.
- Eremin, Katherine, Elizabeth Goring, Bill Manley, and Caroline Cartwright
2000 “A 17th Dynasty Egyptian Queen in Edinburgh?” *Kmt: A Modern Journal of Ancient Egypt* 11, no. 3: 32–40.
- Ferrero, Nora
2004 “[Cat. No.] 60 Hair Slides.” In *Sudan: Ancient Treasures: An Exhibition of Recent Discoveries from the Sudan National Museum*, edited by Derek A. Welsby and Julie R. Anderson, 85. London: British Museum Press.
- Firth, Cecil M.
1912 *The Archaeological Survey of Nubia: Report for 1908–1909*. 2 vols. Cairo: Government Press.
- 1915 *The Archaeological Survey of Nubia: Report for 1909–1910*. Cairo: Government Press.

- 1927 *The Archaeological Survey of Nubia: Report for 1910–1911*. Cairo: Government Press.
- Fisher, Marjorie M., Peter Lacovara, Salima Ikram, and Sue D'Auria, eds.
2012 *Ancient Nubia: African Kingdoms on the Nile*. Cairo: American University in Cairo Press.
- Francis, Peter, Jr.
2002 *Asia's Maritime Bead Trade: 300 B.C. to the Present*. Honolulu: University of Hawai'i Press.
- Freed, Rita E.
1982 *Egypt's Golden Age: The Art of Living in the New Kingdom, 1558–1085 B.C.* Boston: Museum of Fine Arts.
- Friedman, Florence D.
1998 *Gifts of the Nile: Ancient Egyptian Faience*. London: Thames & Hudson.
- Friedman, Renée F.
2001 "Excavating in the Nubian Cemeteries." *Nekhen News* 13: 22–25.
2004 "The Nubian Cemetery at Hierakonpolis, Egypt—Results of the 2003 Season: Excavation of the C-Group Cemetery HK27C." *Sudan and Nubia* 8: 47–52.
2007 "Return to the C-Group: Excavations in the Nubian Cemetery." *Nekhen News* 19: 19–22.
- Gatto, Maria C.
2005 "Nubians in Egypt: Survey in the Aswan-Kom Ombo Region." *Sudan and Nubia* 9: 72–75.
2006 "The Nubian A-Group: A Reassessment." *Archéo-Nil* 16: 61–76.
2007 "Je voudrais te montrer un truc': A Short Note on a Possible A-Group Related Cemetery at the Sixth Cataract of the Nile (Sudan)." In *Mélanges offerts à Francis Geus*, edited by Brigitte Gratien, 115–19. CRIPEL 26. Villeneuve-d'Ascq: Université Charles-de-Gaulle—Lille III.
2014 "Peripatetic Nomads along the Nile: Unfolding the Nubian Pan-Grave Culture of the Second Intermediate Period." *Journal of Ancient Egyptian Interconnections* 6, no. 1: 11–28.
- Gatto, Maria C., and Mauro Cremaschi
2006 "Report of the 2006 Field Season." Accessed June 2016. <http://www.disci.unibo.it/it/ricerca/archeologia/missioni-archeologiche/missioni-archeologiche-allestero/aswan-kom-ombo-egitto/report-missioni-akap/report-2006>.
- Gatto, Maria C., Morgan De Dapper, Rainer Gerisch, Elizabeth Hart, Stan Hendrickx, Tomasz Herbich, Hannah Joris, et al.
2009 "Predynastic Settlement and Cemeteries at Nag El-Qarmila, Kubbaniya." *Archéo-Nil* 19: 186–206.
- Gatto, Maria C., and Serena Giuliani
2007 "Nubians in Upper Egypt: Results of the Survey in the Aswan-Kom Ombo Region (2005–2006)." In *Mélanges offerts à Francis Geus*, edited by Brigitte Gratien, 121–30. CRIPEL 26. Villeneuve-d'Ascq: Université Charles-de-Gaulle—Lille III.
- Gensheimer, Thomas R.
1984 "The Role of Shell in Mesopotamia: Evidence for Trade Exchange with Oman and the Indus Valley." *Paléorient* 10, no. 1: 65–73.
- Gerharz, Rudolf
1994 *Jebel Moya*. Meroitica 14. Berlin: Akademie Verlag.
- Germond, Philippe
2005 *The Symbolic World of Egyptian Amulets: From the Jacques-Édouard Berger Collection*. Milan: 5Continents.
- Gestoso Singer, Graciela N.
2009 "Queen Ahhotep and the 'Golden Fly.'" *Cahiers Caribéens d'Égyptologie* 12: 75–88.
- Geus, Francis
2011–12 "Saï 2003–2004." In *Fouilles sur l'île de Saï (Soudan) 2005–2010*, edited by Florence Doyen and Didier Devauchelle, 151–72. CRIPEL 29. Villeneuve-d'Ascq: Université Charles-de-Gaulle—Lille III.
- Golden, Jonathan
2002 "The Origins of the Metals Trade in the Eastern Mediterranean: Social Organization of Production in the Early Copper Industries." In *Egypt and the Levant: Interrelations from the 4th through the Early 3rd Millennium BCE*, edited by Edwin C. M. van den Brink and Thomas E. Levy, 225–38. London: Leicester University Press.
- Goldstein, Sidney M.
1979 *Pre-Roman and Early Roman Glass in the Corning Museum of Glass*. Corning, NY: Corning Museum of Glass.
- Gorelick, Leonard, and A. John Gwinnett
1983 "Ancient Egyptian Stone-Drilling: An Experimental Perspective on a Scholarly Disagreement." *Expedition* 25, no. 3: 40–47.
- Goulding, Eileen
2013 *What Did the Poor Take with Them? An Investigation into Ancient Egyptian Eighteenth and Nineteenth Dynasty Grave Assemblages of the Non-Elite from Qau, Badari, Matmar and Gurob*. London: Golden House.
- Grajetzki, Wolfram
2013 "Body Chains in Middle Kingdom Egypt." *Göttinger Miszellen* 237: 21–24.

- Gratien, Brigitte
1986 *Saï I: La necropole Kerma*. Paris: Éditions du Centre national de la recherche scientifique.
- Griffith, Francis Ll.
1921 "Oxford Excavations in Nubia." *Liverpool Annals of Archaeology and Anthropology* 8: 1–18, 65–104.
1923 "Oxford Excavations in Nubia: The Cemetery of Sanam." *Liverpool Annals of Archaeology and Anthropology* 10: 73–171.
- Gwinnett, A. John, and Leonard Gorelick
1993 "Beads, Scarabs, and Amulets: Methods of Manufacture in Ancient Egypt." *JARCE* 30: 125–32.
- Haddow, Scott D.
2014 "Excavations in the Cemetery: Site KRG3." *Sudan and Nubia* 18: 138–47.
- Hafsaas, Henriette
2006 *Cattle Pastoralists in a Multicultural Setting: The C-Group People in Lower Nubia 2500–1500 BCE*. Bergen: Bergen University Press/Ramallah: Birzeit University Press.
- Harrell, James A.
2010 "Archaeological Geology of Hosh El-Guruf, Fourth Nile Cataract, Sudan." *Gdańsk Archaeological Museum African Reports* 7: 71–84.
2012 "Gemstones." In *UCLA Encyclopedia of Egyptology*, edited by Willeke Wendrich. Accessed June 2014. <http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz002czx1r>.
- Hayes, William C.
1978 *The Scepter of Egypt: A Background for the Study of the Egyptian Antiquities in The Metropolitan Museum of Art*. Vol. 1, *From the Earliest Times to the End of the Middle Kingdom*. New York: Metropolitan Museum of Art.
- Herrmann, Christian
2003 *Die ägyptischen Amulette der Sammlungen BIBEL+ORIENT der Universität Freiburg, Schweiz: Anthropomorphe Gestalten und Tiere*. Orbis Biblicus et Orientalis, Series Archaeologica 22. Fribourg: Academic Press/Göttingen: Vandenhoeck & Ruprecht.
- Herrmann, Christian, and Thomas Staubli
2010 *1001 Amulett: Altägyptischer Zauber, monotheisierte Talismane, säkulare Magie*. Freiburg: Bibel+Orient Museum/Stuttgart: Katholisches Bibelwerk.
- Hewes, Gordon W.
1966 "Prehistoric Investigations on the West Bank in the Batn el Hagar by the University of Colorado Nubian Expedition." *Kush* 14: 25–43.
- Hikade, Thomas
2004 "Urban Development at Hierakonpolis and the Stone Industry of Square 10N5W." In *Egypt at Its Origins: Studies in Memory of Barbara Adams; Proceedings of the International Conference "Origin of the State: Predynastic and Early Dynastic Egypt," Krakow, 28 August–1 September 2002*, edited by Stan Hendrickx, Renée F. Friedman, Krzysztof M. Ciałowicz, and Marek Chłodnicki, 181–97. *Orientalia Lovaniensia Analecta* 138. Leuven/Dudley, MA: Peeters.
- Hofmann, Inge
1967 *Die Kulturen des Niltals von Aswan bis Sennar: Vom Mesolithikum bis zum Ende der christlichen Epoche*. Hamburg: Cram, de Gruyter.
- Honegger, Matthieu
2004a "El-Barga." In *Sudan: Ancient Treasures; An Exhibition of Recent Discoveries from the Sudan National Museum*, edited by Derek A. Welsby and Julie R. Anderson, 31–34. London: British Museum Press.
2004b "The Pre-Kerma: A Cultural Group from Upper Nubia prior to the Kerma Civilization." *Sudan and Nubia* 8: 38–46.
2004c "The Pre-Kerma Period." In *Sudan: Ancient Treasures; An Exhibition of Recent Discoveries from the Sudan National Museum*, edited by Derek A. Welsby and Julie R. Anderson, 61–69. London: British Museum Press.
2014 *Aux origines des pharaons noirs: 10.000 ans d'archéologie en Nubie*. Hauterive: Laténium et Fondation Kerma.
- Horn, Maarten
2014 "A Badarian–Naqadian Cognitive Link? A Possible Insight on the Basis of a Badarian Hippopotamus-Shaped Pendant from Egypt." In *Beyond Ornamentation: Jewelry as an Aspect of Material Culture in the Ancient Near East*, edited by Amir Golani and Zuzanna Wygnańska, 41–70. Polish Archaeology in the Mediterranean 23/2. Warsaw: Polish Center of Mediterranean Archaeology, University of Warsaw.
- Inizan, Marie-Louise
2000 "Importations de cornalines et agates de l'Indus en Mésopotamie: Le cas de Suse et Tello." In *Cornaline de l'Inde: Des pratiques techniques de Cambay aux techno-systèmes de l'Indus*, edited by Valentine Roux, 473–501. *Archéologie expérimentale et ethnographie des techniques* 5. Paris: Éditions de la Maison des sciences de l'homme.

- James, Thomas G. H.
2000 *Tutankhamun: The Eternal Splendor of the Boy Pharaoh*. Cairo: American University in Cairo Press.
- Junker, Hermann
1919 *Bericht über die Grabungen der Akademie der Wissenschaften in Wien auf den Friedhöfen von El-Kubanieh, Winter, 1910–1911*. Vol. 1, Sud. Wien: Hölder.
1920 *Bericht über die Grabungen der Akademie der Wissenschaften in Wien auf den Friedhöfen von El-Kubanieh, Winter, 1910–1911*. Vol. 2, Nord. Wien: Hölder.
1925 *Bericht über die Grabungen der Akademie der Wissenschaften in Wien auf den Friedhöfen von Ermenne (Nubien), Winter, 1911–1912*. Wien: A. Hölder.
- Kaczmarczyk, Alexander, and Robert E. M. Hedges
1983 *Ancient Egyptian Faience: An Analytical Survey of Egyptian Faience from Predynastic to Roman Times*. Warminster: Aris & Phillips.
- Kaczmarczyk, Alexander, and Pamela B. Vandiver
2008 "Faience Production in Egypt." In *Production Technology of Faience and Related Early Vitreous Materials*, by Michael S. Tite and Andrew J. Shortland, 57–92. Oxford University School of Archaeology Monographs 72. Oxford: Oxford University School of Archaeology.
- Kennedy, Kenneth A. R., and Gregory L. Possehl
2012 "Were There Commercial Communications between Prehistoric Harappans and African Populations?" *Advances in Anthropology* 2, no. 4: 720–26.
- Kenoyer, Jonathan M.
2003 "Stone Beads and Pendant Making Techniques." In *A Bead Timeline: A Resource for Identification, Classification and Dating*, vol. 1, *Prehistory to 1200 CE*, by James W. Lankton, 14–19. Washington, DC: Bead Society of Greater Washington.
- Kenoyer, Jonathan M., and Massimo Vidale
1992 "A New Look at Stone Drills of the Indus Valley Tradition." In *Materials Issues in Art and Archaeology III: Symposium Held April 27–May 1, 1992, San Francisco, California, U.S.A.*, edited by Pamela B. Vandiver, James R. Druzik, George S. Wheeler, and Ian C. Freestone, 495–518. Materials Research Society Symposia Proceedings 267. Pittsburgh: Materials Research Society.
- Klemm, Dietrich D., Rosemarie Klemm, and Andreas Murr
2002 "Ancient Gold Mining in the Eastern Desert of Egypt and the Nubian Desert of Sudan." In *Egypt and Nubia: Gifts of the Desert*, edited by Renée F. Friedman, 215–31. London: British Museum Press.
- Klemm, Rosemarie, and Dietrich Klemm
2013 *Gold and Gold Mining in Ancient Egypt and Nubia: Geoarchaeology of the Ancient Gold Mining Sites in the Egyptian and Sudanese Eastern Deserts*. Berlin/Heidelberg: Springer.
- Kobusiewicz, Michał, Jacek Kabaciński, Romuald Schild, Joel D. Irish, Maria C. Gatto, and Fred Wendorf
2010 *Gebel Ramlah: Final Neolithic Cemeteries from the Western Desert of Egypt*. Poznań: Institute of Archaeology and Ethnology, Polish Academy of Sciences.
- Kobusiewicz, Michał, Jacek Kabaciński, Romuald Schild, Joel D. Irish, and Fred Wendorf
2009 "Burial Practices of the Final Neolithic Pastoralists at Gebel Ramlah, Western Desert of Egypt." *British Museum Studies in Ancient Egypt and Sudan* 13: 147–74.
- Krzyżaniak, Agnieszka
2011 "Neolithic Cemetery." In *Kadero: The Lech Krzyżaniak Excavations in the Sudan*, edited by Marek Chłodnicki, Michał Kobusiewicz, and Karla Kroeper, 57–198. Studies in African Archaeology 10. Poznań: Muzeum Archeologiczne w Poznaniu.
- Kurzwaska, Aldona
2010 "Mollusc Shells at Gebel Ramlah." In *Gebel Ramlah: Final Neolithic Cemeteries from the Western Desert of Egypt*, by Michał Kobusiewicz, Jacek Kabaciński, Romuald Schild, Joel D. Irish, Maria C. Gatto, and Fred Wendorf, 227–38. Poznań: Institute of Archaeology and Ethnology, Polish Academy of Sciences.
- Lacovara, Peter
1987 "The Internal Chronology of Kerma." *Beiträge zur Sudanforschung* 2: 51–74.
1997 "Egypt and Nubia during the Second Intermediate Period." In *The Hyksos: New Historical and Archaeological Perspectives*, edited by Eliezer D. Oren, 69–86. University Museum Monographs 96. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
2001 "[Cat. No.] 119A." In *The Collector's Eye: Masterpieces of Egyptian Art from the Thalassic Collection, Ltd., Courtesy Theodore and Aristeia Halkedis*, edited by Peter Lacovara, Betsy T. Trope, and Sue H. D'Auria, 168. Atlanta: Michael C. Carlos Museum, Emory University.
- Lahitte, Miriam
2013 "Gala Abu Ahmed: Perlen und Fragmente aus Straußeneischale." *Antike Sudan* 24: 75–103.

- Lange, Mathias
 2003 "Settlement Sites of the A-Group from the Laqiya-Region (Eastern Sahara, Northwest Sudan)." In *Cultural Markers in the Later Prehistory of Northeastern Africa and Recent Research*, edited by Lech Krzyżaniak, Karla Kroeper, and Michał Kobusiewicz, 105–27. Studies in African Archaeology 8. Poznań: Poznań Archaeological Museum.
- 2006 *Wadi Shaw—Wadi Sahal: Studien zur holozänen Besiedlung der Laqiya-Region (Nord-sudan)*. Köln: Heinrich-Barth-Institut.
- Lankton, James W.
 2003 *A Bead Timeline: A Resource for Identification, Classification and Dating*. Vol. 1, *Prehistory to 1200 CE*. Washington, DC: Bead Society of Greater Washington.
- Lebedev, Maksim
 2018 "Exploiting the Southern Lands: Ancient Egyptian Quarrying, Mining, and Trade Missions to Nubia and Punt during the Old Kingdom." In *Nubian Archaeology in the XXIst Century*, edited by Matthieu Honegger, 277–92. *Orientalia Lovaniensia Analecta* 273. Leuven/Paris/Bristol, CT: Peeters.
- Lepsius, Carl R.
 1849–56 *Denkmaeler aus Aegypten und Aethiopien: Nach den Zeichnungen der von seiner Majestaet dem Koenige von Preussen Friedrich Wilhelm IV nach diesen Ländern gesendeten und in den Jahren 1842–1845 ausgeführten wissenschaftlichen Expedition auf Befehl seiner Majestaet*. Berlin: Nicolaische Buchhandlung.
- Lilyquist, Christine
 2004 *The Tomb of Three Foreign Wives of Tuthmosis III*. New Haven: Yale University Press.
- Lilyquist, Christine, and Robert H. Brill
 1993 *Studies in Early Egyptian Glass*. New York: Metropolitan Museum of Art.
- Liszka, Kate
 2014 "Egyptians and Nubians at Wadi El-Hudi: Perspectives on Multicultural Interactions from Recent Archaeological Survey." In *Abstracts of Papers Presented at the 13th International Conference for Nubian Studies*, edited by Matthieu Honegger, 44–45. Neuchâtel: Université de Neuchâtel Presse.
- 2015 "Are the Bearers of the Pan-Grave Archaeological Culture Identical to the Madjay-People in the Egyptian Textual Record?" *Journal of Ancient Egyptian Interconnections* 7, no. 2: 42–60.
- Longa, Anna
 2011 "Neolithic Beakers from North-Eastern Africa." *Sudan and Nubia* 15: 13–17.
- Manassa, Colleen
 2009 "Preliminary Report for the 2008–2009 Season of the Mo'alla Survey Project." *JARCE* 45: 57–77.
- Manley, Bill, Katherine Eremin, Andrew Shortland, and Caroline Wilkinson
 2002 "The Facial Reconstruction of an Ancient Egyptian Queen." *Journal of Audiovisual Media in Medicine* 25, no. 4: 155–59.
- Markowitz, Yvonne J., and Denise M. Doxey
 2014 *Jewels of Ancient Nubia*. Boston: Museum of Fine Arts Publications.
- McGovern, Patrick E.
 1985 *Late Bronze Palestinian Pendants: Innovation in a Cosmopolitan Age*. Sheffield: JSOT Press.
- Meurer, Georg
 1996 *Nubier in Ägypten bis zum Beginn des Neuen Reiches: Zur Bedeutung der Stele Berlin 14753*. Abhandlungen des Deutschen Archäologischen Instituts Kairo, Ägyptologische Reihe 13. Berlin: Achet-Verlag.
- Meyer, Carol, Joan M. Todd, and Curt W. Beck
 1991 "From Zanzibar to Zagros: A Copal Pendant from Eshnunna." *Journal of Near Eastern Studies* 50, no. 4: 289–98.
- Minault-Gout, Anne, and Florence Thill
 2012 *Saï II: Le cimetière des tombes hypogées du Nouvel Empire, SAC5*. FIFAO 69. Cairo: Institut français d'archéologie orientale.
- Morris, Ellen F.
 2011 "Paddle Dolls and Performance in Ancient Egypt." *JARCE* 47: 71–103.
- Muir, Arthur H., Jr., and Renée F. Friedman
 2011 "Analysis of Predynastic Ostrich Eggshells from Hierakonpolis and Beyond." In *Egypt at Its Origins 3: Proceedings of the Third International Conference "Origin of the State: Predynastic and Early Dynastic Egypt," London, 27th July–1st August 2008*, edited by Renée F. Friedman and Peter N. Fiske, 571–93. *Orientalia Lovaniensia Analecta* 205. Leuven: Peeters.
- Müller-Winkler, Claudia
 1987 *Die ägyptischen Objekt-Amulette: Mit Publikation der Sammlung des Biblischen Instituts der Universität Freiburg Schweiz, ehemals Sammlung Fouad S. Matouk*. Orbis Biblicus et Orientalis, Series Archaeologica 5. Freiburg: Universitätsverlag / Göttingen: Vandenhoeck & Ruprecht.
- Mumford, Gregory
 2012 "Ras Budran and the Old Kingdom Trade in Red Sea Shells and Other Exotica." *British*

- Museum Studies in Ancient Egypt and Sudan* 18: 107–45.
- Nakai, Izumi, Kriengkamo Tantrakarn, Norihiro Kato, Nozomu Kawai, Akiko Nishisaka, and Sakuji Yoshimura
 2009 “XRF Analysis of 16th Century BC Transparent Glass Beads Excavated from a Hillside in Northwest Saqqara, Egypt.” In *Annales du 17^e Congrès de l’Association Internationale pour l’Histoire du Verre*, edited by Koen Janssens, Patrick Degryse, Peter Cosyns, Joost Caen, and Luc Van’t dack, 27–31. Antwerp: University Press Antwerp.
- Näser, Claudia
 2012 “Nomads at the Nile: Towards an Archaeology of Interaction.” In *The History of the Peoples of the Eastern Desert*, edited by Hans Barnard and Kim Duistermaat, 80–89. Los Angeles: Cotsen Institute of Archaeology Press.
- Needler, Winifred
 1984 *Predynastic and Archaic Egypt in the Brooklyn Museum*. New York: Brooklyn Museum.
- Nordström, Hans-Åke
 1972a *Neolithic and A-Group Sites*. Vol. 1, *Text*. SJE 3.1. Copenhagen/Stockholm: Munksgaard.
 1972b *Neolithic and A-Group Sites*. Vol. 2, *Plates*. SJE 3.2. Copenhagen/Stockholm: Munksgaard.
 2014 *The West Bank Survey from Faras to Gemai*. Vol. 1, *Sites of Early Nubian, Middle Nubian and Pharaonic Age*. BAR International Series 2650. Oxford: Archaeopress.
- O’Connor, David
 1993 *Ancient Nubia: Egypt’s Rival in Africa*. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
 2015 “An Expanding Worldview: Conquest, Colonization, and Coexistence.” In *Ancient Egypt Transformed: The Middle Kingdom*, edited by Adela Oppenheim, Dorothea Arnold, Dieter Arnold, and Kei Yamamoto, 160–79. New York: Metropolitan Museum of Art.
- Oppenheim, Adela, Dorothea Arnold, Dieter Arnold, and Kei Yamamoto, eds.
 2015 *Ancient Egypt Transformed: The Middle Kingdom*. New York: Metropolitan Museum of Art.
- Patch, Diana C.
 2005 “[Cat. Nos.] 124b, 126b.” In *Hatshepsut: From Queen to Pharaoh*, edited by Catharine H. Roehrig, Renée Dreyfus, and Cathleen A. Keller, 206–7. New York: Metropolitan Museum of Art.
- Pelegrin, Jacques
 2000 “Technique et méthodes de taille pratiquées à Cambay.” In *Cornaline de l’Inde: Des pratiques techniques de Cambay aux techno-systèmes de l’Indus*, edited by Valentine Roux, 53–94. Archéologie expérimentale et ethnographie des techniques 5. Paris: Éditions de la Maison des sciences de l’homme.
- Pemler, Doris
 2014 “Looking for Nubians in Egypt: Taking a Look at the Iconographic Evidence from the 1st Intermediate Period and Middle Kingdom.” In *The Fourth Cataract and Beyond: Proceedings of the 12th International Conference for Nubian Studies*, edited by Julie R. Anderson and Derek A. Welsby, 443–49. British Museum Publications on Egypt and Sudan 1. Leuven: Peeters.
- Petrie, William M. F.
 1894 *Tell El Amarna*. London: Methuen.
 1901 *The Royal Tombs of the First Dynasty II*. London: Paul, Trench, Trübner.
 1907 *Gizeh and Rifeh*. London: British School of Archaeology in Egypt.
 1914 *Amulets*. London: Constable.
- Piotrovsky, Boris B.
 1967 “The Early Dynastic Settlement of Khor-Daoud and Wadi Allaki: The Ancient Route to the Gold Mines.” In *Fouilles en Nubie (1961–1963)*, 127–40. Cairo: Organisme général des imprimeries gouvernementales.
- Pöllath, Nadja
 2008 “Tools, Ornaments and Bucrania: The Animal Remains.” In *A Neolithic Cemetery in the Northern Dongola Reach: Excavations at Site R12*, edited by Sandro Salvatori and Donatella Usai, 59–77. BAR International Series 1814. Oxford: Archaeopress.
- Quirke, Stephen, and A. Jeffrey Spencer, eds.
 1992 *The British Museum Book of Ancient Egypt*. New York: Thames & Hudson.
- Randall-MacIver, David, and Charles L. Woolley
 1911 *Eckley B. Coxe Junior Expedition to Nubia*. Vol. 8, *Buhen: Plates*. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
- Ratnagar, Shereen
 2004 *Trading Encounters: From the Euphrates to the Indus in the Bronze Age*. Oxford: Oxford University Press.
- Reese, David S.
 1991 “The Trade of Indo-Pacific Shells into the Mediterranean Basin and Europe.” *Oxford Journal of Archaeology* 10, no. 2: 159–96.
- Rehren, Thilo
 2014 “Glass Production and Consumption between Egypt, Mesopotamia and the Aegean.” In *Contextualising Grave Inventories in the*

- Ancient Near East*, edited by Peter Pfälzner, Herbert Niehr, Ernst Pernicka, Sarah Lange, and Tina Köster, 217–23. Qatna Studien Supplementa 3. Wiesbaden: Harrassowitz.
- Rehren, Thilo, and Edgar Pusch
2005 “Late Bronze Age Egyptian Glass Production at Qantir-Piramesses.” *Science* 308: 1756–59.
- Reinold, Jacques
2000 *Archéologie au Soudan: Les civilisations de Nubie*. Paris: Éditions Errance.
- Reisner, George A.
1910 *The Archaeological Survey of Nubia: Report for 1907–1908*. Vol. 1, *Archaeological Report*. Cairo: National Printing Department.
1923 *Excavations at Kerma: Parts IV–V*. Harvard African Studies 6. Cambridge: Peabody Museum of Harvard University.
- Rigault, Patricia
1999 “[Cat. Nos.] 201–204, 209.” In *Egyptian Art in the Age of the Pyramids*, 480–86. New York: Metropolitan Museum of Art.
- Roy, Jane
2011 *The Politics of Trade: Egypt and Lower Nubia in the 4th Millennium BC*. Leiden/Boston: Brill.
- Rusmore-Villaume, Mary L.
2008 *Seashells of the Egyptian Red Sea: The Illustrated Handbook*. Cairo: American University in Cairo Press.
- Rzeuska, Teodozja I.
2010 “Zigzag, Triangle and Fish Fin: On the Relations of Egypt and C-Group during the Middle Kingdom.” In *Between the Cataracts: Proceedings of the 11th Conference for Nubian Studies, Warsaw University, 27 August–2 September 2006*, vol. 2.1, *Session Papers*, edited by Włodzimierz Godlewski and Adam Łajtar, 397–419. PAM Supplement Series 2.2/1. Warsaw: Warsaw University Press.
- Saad, Zaki Y.
1969 *The Excavations at Helwan: Art and Civilization in the First and Second Egyptian Dynasties*. Norman: University of Oklahoma Press.
- Salvatori, Sandro, and Donatella Usai
2008 “Bright and Colourful: The Jewellery of R12.” In *A Neolithic Cemetery in the Northern Dongola Reach: Excavations at Site R12*, edited by Sandro Salvatori and Donatella Usai, 21–31. BAR International Series 1814. Oxford: Archaeopress.
- Sanders, Maissa
2001 “Adornment, circa 1700 BC.” *Nekhen News* 13: 25–26.
- Säve-Söderbergh, Torgny
1989a *Middle Nubian Sites*. Vol. 1, *Text*. SJE 4.1. Partille: Åström.
1989b *Middle Nubian Sites*. Vol. 2, *Plates*. SJE 4.2. Partille: Åström.
- Säve-Söderbergh, Torgny, and Lana Troy
1991 *New Kingdom Pharaonic Sites: The Finds and the Sites*. Vol. 3, *Lists and Plates*. SJE 5.3. Partille: Åström.
- Scalf, Foy
2012 “Birds in Creation Myths.” In *Between Heaven and Earth: Birds in Ancient Egypt*, edited by Rozenn Bailleul-LeSuer, 131–34. Oriental Institute Museum Publications 35. Chicago: Oriental Institute of the University of Chicago.
- Seele, Keith C.
1974 “University of Chicago Oriental Institute Nubian Expedition: Excavations between Abu Simbel and the Sudan Border, Preliminary Report.” *Journal of Near Eastern Studies* 33, no. 1: 1–43.
- Séfériadès, Michel L.
2010 “Spondylus and Long-Distance Trade in Prehistoric Europe.” In *The Lost World of Old Europe: The Danube Valley, 5000–3500 BC*, edited by David W. Anthony and Jennifer Chi, 178–91. Princeton: Princeton University Press.
- Serpico, M.
2000 “Resins, Amber and Bitumen.” In *Ancient Egyptian Materials and Technology*, edited by Paul T. Nicholson and Ian Shaw, 430–74. Cambridge: Cambridge University Press.
- Shaw, Ian
2006 “Mining and Frontier Reinforcement: Studies of Turquoise and Amethyst Mining Settlements as Fortified Outposts.” Paper presented at the conference “Walls of the Ruler: Fortifications, Police Beats, and Military Checkpoints in Ancient Egypt,” Swansea University, Swansea, Wales, May 22–25.
2012 *Ancient Egyptian Technology and Innovation: Transformations in Pharaonic Material Culture*. London: Bloomsbury.
- Shaw, Ian, and Robert Jameson
1993 “Amethyst Mining in the Eastern Desert: A Preliminary Survey at Wadi El-Hudi.” *Journal of Egyptian Archaeology* 79: 81–97.
- Smirniou, Melina, and Thilo Rehren
2011 “Direct Evidence of Primary Glass Production in Late Bronze Age Amarna, Egypt.” *Archaeometry* 53, no. 1: 58–80.

- Smith, Harry S.
1962 *Preliminary Reports of the Egypt Exploration Society's Nubian Survey*. Cairo: Government Press.
- Smith, Stuart T.
1998 "Nubia and Egypt: Interaction, Acculturation, and Secondary State Formation from the Third to First Millennium B.C." In *Studies in Culture Contact: Interaction, Culture Change, and Archaeology*, edited by James G. Cusick, 256–87. Carbondale: Southern Illinois University, Center for Archaeological Investigations.
2007 "Kirwan Memorial Lecture: Death at Tombo: Pyramids, Iron and the Rise of the Napatan Dynasty." *Sudan and Nubia* 11: 2–14.
- Souza, Aaron de
2013 "The Egyptianisation of the Pan-Grave Culture: A New Look at an Old Idea." *Bulletin of the Australian Centre for Egyptology* 24: 109–26.
- Spaer, Maud
2001 *Ancient Glass in the Israel Museum: Beads and Other Small Objects*. Jerusalem: Israel Museum.
- Spencer, Alan J.
1980 *Catalogue of Egyptian Antiquities in the British Museum*. Vol. 5, *Early Dynastic Objects*. London: British Museum Press.
- Steffensen, Uffe
2007 "The Ritual Use of Mortuary Pottery in Ancient Nubia: Some Interpretational Thoughts on the Rituals and Symbolism behind the Mortuary Ceramics of the Ancient Nubian C-Group." *Archéo-Nil* 17: 133–52.
- Stein, Gil J.
2002 "Colonies without Colonialism: A Trade Diaspora Model of Fourth Millennium B.C. Mesopotamian Enclaves in Anatolia." In *The Archaeology of Colonialism*, edited by Claire Lyons and John Papadopoulos, 27–64. Los Angeles: Getty Research Institute.
- Steindorff, Georg
1935 *Aniba I*. Mission archéologique de Nubie 1929–1934. Glückstadt: Augustin.
1937 *Aniba II*. Mission archéologique de Nubie 1929–1934. Glückstadt: Augustin.
- Stevenson, Alice
2012a "The A-Group Cemetery at Tunqala West." *Journal of Egyptian Archaeology* 98, no. 1: 225–47.
2012b "Social Complexity Set in Stone? The A-Group Site of Afyeh." *Sudan and Nubia* 16: 13–19.
- Tait, Hugh
2006 *7000 Years of Jewellery*. 3rd ed. London: British Museum Press.
- Tassie, Geoffrey J.
2003 "Identifying the Practice of Tattooing in Ancient Egypt and Nubia." *Papers from the Institute of Archaeology* 14: 85–101.
- Then-Obluska, Joanna
2014 "The Code of the Hidden Beads: From the Kerma to the Islamic Period according to the Fourth Cataract Material from the Gdańsk Archaeological Museum Expedition Excavations." In *The Fourth Cataract and Beyond: Proceedings of the 12th International Conference for Nubian Studies*, edited by Julie R. Anderson and Derek A. Welsby, 1069–90. British Museum Publications on Egypt and Sudan 1. Leuven: Peeters.
in press "Beads and Pendants." In *The Second Cataract Fortress of Dorginarti*, edited by Lisa A. Heidorn. Oriental Institute Nubian Expedition 12. Chicago: Oriental Institute of the University of Chicago.
- Tite, Michael S., and Andrew J. Shortland
2008 *Production Technology of Faience and Related Early Vitreous Materials*. Oxford University School of Archaeology Monographs 72. Oxford: Oxford University School of Archaeology.
- Troalen, Lore G., Jim Tate, and Maria F. Guerra
2014 "Goldwork in Ancient Egypt: Workshop Practices at Qurneh in the 2nd Intermediate Period." *Journal of Archaeological Science* 50: 219–26.
- Valloggia, Michel
1986 *Balat I: Le mastaba de Medou-Nefer*. 2 vols. Publications de l'Institut français d'archéologie orientale du Caire 31. Cairo: Institut français d'archéologie orientale.
- Varberg, Jeanette, Bernard Gratuze, and Flemming Kaul
2015 "Between Egypt, Mesopotamia and Scandinavia: Late Bronze Age Glass Beads Found in Denmark." *Journal of Archaeological Science* 54: 168–81. <https://doi.org/10.1016/j.jas.2014.11.036>.
- Varberg, Jeanette, Flemming Kaul, and Bernard Gratuze
2014 "Danish Bronze Age Glass Beads Traced to Egypt." Accessed June 2016. <http://science.nordic.com/danish-bronze-age-glass-beads-traced-egypt>.
- Vercoutter, Jean
1970 *Mirgissa I*. FIFAO 80. Paris: Geuthner.
- Vercoutter, Jean, ed.
1975 *Mirgissa II: Les nécropoles*. Paris: Geuthner.

- Vila, André
 1980 *La nécropole de Missiminia*. Vol. 1, *Les sépultures napatéennes*. Archaeological Survey of the Nile Valley, South of Dal Cataract (Sudanese Nubia) 12. Paris: Éditions du Centre national de la recherche scientifique.
- 1987 *Le cimetière kermaïque d'Ukma Ouest: La prospection archéologique de la vallée du Nil en Nubie soudanaise*. Paris: Éditions du Centre national de la recherche scientifique.
- Vincentelli, Irene
 2006 *Hillat El-Arab: The Joint Sudanese-Italian Expedition in the Napatian Region, Sudan*. Oxford: Archaeopress.
- Wainwright, Gerald A.
 1920 *Balabish*. Egypt Exploration Fund Excavation Memoir 37. London: Allen & Unwin.
- Walton, Marc S., Andrew Shortland, Sara Kirk, and Patrick Degryse
 2009 "Evidence for the Trade of Mesopotamian and Egyptian Glass to Mycenaean Greece." *Journal of Archaeological Science* 36, no. 7: 1496–503.
- Welsby, Derek A.
 2001 *Life on the Desert Edge: Seven Thousand Years of Settlement in the Northern Dongola Reach, Sudan*. BAR International Series 980. Oxford: Archaeopress.
- Welsby, Derek A., and Julie R. Anderson, eds.
 2004 *Sudan: Ancient Treasures; An Exhibition of Recent Discoveries from the Sudan National Museum*. London: British Museum Press.
- Wendorf, Fred, and Romuald Schild
 1980 *Prehistory of the Eastern Sahara*. New York: Academic Press.
- Wengrow, David
 2006 *The Archaeology of Early Egypt: Social Transformations in North-East Africa, 10,000 to 2650 bc*. Cambridge World Archaeology Series. Cambridge: Cambridge University Press.
- Wengrow, David, Michael Dee, Sarah Foster, Alice Stevenson, and Christopher B. Ramsey
 2014 "Cultural Convergence in the Neolithic of the Nile Valley: A Prehistoric Perspective on Egypt's Place in Africa." *Antiquity* 88: 95–111.
- Weschenfelder, Jens, and Gareth Rees
 2014 "Preliminary Report of the First Field Season of the Kerma Cemetery MOG034 on Mograt Island, Sudan." *Antike Sudan* 25: 145–54.
- Whiteman, Arthur J.
 1971 *The Geology of the Sudan Republic*. Oxford: Clarendon.
- Wilkinson, Alix
 1971 *Ancient Egyptian Jewellery*. London: Methuen.
- Wilkinson, Charles K.
 1983 *Egyptian Wall Paintings: The Metropolitan Museum of Art's Collection of Facsimiles*. New York: Metropolitan Museum of Art.
- Williams, Bruce B.
 1976 "The Date of Senebtisi at Lisht and the Chronology of Major Groups and Deposits of the Middle Kingdom." *Serapis* 3: 41–55.
- 2011 "Relations between Egypt and Nubia in the Naqada Period." In *Before the Pyramids: The Origins of Egyptian Civilization*, edited by Emily Teeter, 83–92. Oriental Institute Museum Publications 33. Chicago: Oriental Institute of the University of Chicago.
- 2013 "Three Rulers in Nubia and the Early Middle Kingdom in Egypt." *Journal of Near Eastern Studies* 72, no. 1: 1–10.
- Xia, Nai
 2014 *Ancient Egyptian Beads*. Heidelberg: Springer.
- Yoshimura, Sakuji, and Nozomu Kawai
 2007 "An Intact Multiple Burial in North-West Saqqara." *Egyptian Archaeology* 30: 3–5.
- Zerboni, Andrea, Pietro Vignola, Donatella Usai, Sandro Salvatori, James A. Harrell, and Abdelrahman Ali Mohamed
 2014 "Neolithic Green-Stone Beads from R12 Necropolis (Central Sudan): Sourcing Area and Archaeological Implication." Poster presented at the 13th International Conference for Nubian Studies, Université de Neuchâtel, Switzerland, September 1–6.

Acknowledgments

I would like to thank the former directors of the Oriental Institute Museum (OIM), Prof. Gil Stein and Prof. Chris Woods, and the editors and chief publishers of the Oriental Institute Nubian Expedition (OINE) series, Dr. Bruce B. Williams and Dr. Lisa A. Heidorn, for their permission to study the Nubian bead collection and for making the study of the beads possible.

I am indebted to Dr. Bruce B. Williams (OINE editor), Ms. Helen McDonald (OIM registrar), Ms. Susan R. Allison (OIM associate registrar), and John Larson (former OIM archivist) for the time they took to prepare materials and to help me during my work.

For their help with my inquiries about beads in their museum collections, excavation assemblages, or individual research, I am grateful to the following people: Dr. Alice Stevenson (Petrie Museum of Egyptian Archaeology, University College London), Dr. María Carmen Pérez Die and Dr. Esther Pons Mellado (Museo Arqueológico Nacional, Madrid), Dr. Renée Friedman

(Hierakonpolis), Jens Weschenfelder (Mograt Island), and Dr. Hélène Delattre (Pre-Kerma period).

My special gratitude goes to Dr. Bruce B. Williams and Dr. Artur Obłuski for their help in collecting relevant literature and their great support during all my work. I am always grateful to Dr. Daniella Bar-Yosef, Dr. Alfredo Carannante, Dr. Alessandra Giumlia-Mair, and Dr. Carol Meyer for their help in the identification of materials. Any mistakes are my responsibility.

Some museum illustrations in the volume (Met 30.4.69, BM EA 921, EA922) were obtained thanks to a grant from the Centre for Research on Ancient Civilizations at the University of Warsaw.

Finally, I would like to express my special thanks to Dr. Lisa A. Heidorn for editing all my work, and Dr. Andrew J. Baumann for guiding this volume through production.

Joanna Then-Obłuska

Introduction

This book presents a comprehensive corpus of beads and pendants from Lower Nubia found during the Oriental Institute Nubian Expedition (OINE) and stored in the Oriental Institute Museum (OIM) at the University of Chicago. The collection of beads and pendants comes from excavations undertaken between 1960 and 1968 at the Lower Nubian sites of Qustul, Adindan, Serra East, Dorginarti, Ballana, and Kalabsha (fig. 1). The majority of beads were registered and published in volumes II–X of the OINE series, but not in detail or in color. The main objective of the present work has been to create a vast, illustrated catalog of Lower Nubian beads and pendants as a contribution to the history of beads in Nubia. The classification criteria in bead and pendant typology, as well as an introduction to the catalog entries, are offered in chapter 1.

The collection has been divided chronologically into the main periods of Nubian history and then according to cultural units, beginning with the A-Group and ending with modern times. The present volume—the first of two volumes—comprises beads from Early and Middle Nubian as well as New Kingdom sites.¹ The Early Nubian section includes beads from the A-Group sites (Qustul, Adindan, Serra East) and Post-A-Group sites (Serra East and Adindan). The C-Group (Adindan, Serra East), including C-Group N-Type (Serra East) and C-Group P-Type (Serra East) graves,² Pan Grave (Adindan, Serra East), Kerma (Adindan), and Middle Kingdom (Serra East), comprises the Middle Nubian period cultural groups. Egyptian New Kingdom tombs (Qustul, Adindan, Serra East) are treated separately. Whereas discussions of the cultural units and their chronology are found in the archaeological reports (OINE III–VI, X), a general chronological overview is provided in table 1. Table 2 gives an outline of the cultural units and associated catalog numbers.

The discussion of each cultural unit begins with background information and develops into a fascinating story of the most characteristic types that form part of that group's identity, although the types and materials often cross chronological and regional borders. The story is also one of jewelry fashions and the involved wealth and long-distance contacts of Lower Nubia,

which lay at the crossroads of ancient routes in this part of the world. As bead studies reveal, the trade routes did not only run up and down the Nile River—for, with access to Eastern and Western Desert routes, the Nubians were also able to reach the Red Sea coast and the Saharan sands. Very often the Nubians proved to be skilled beadmakers and craftsmen, as the traces of stone bead-making workshops indicate. The Lower Nubians shared some bead types with their royal counterparts in Egypt during the period encompassed by the A-Group, but they also appeared to be the inspiration for new socio-cultural symbols in Northeast Africa, such as the gold fly ornament. With time, however, the Lower Nubians developed indigenous styles best reflected in C-Group leather beadwork. Lower Nubia, while being part of a geographically larger cultural unit that included the Pan Grave culture in the Eastern Desert and Egypt, was its own region, where a traditional bead material such as ostrich eggshell was used instead of the white faience that characterized Pan Grave leather beadwork in Egypt. Nubian bead types, their manufacturing techniques, and their materials are likewise preserved in some C-Group and Pan Grave tombs during the period of the New Kingdom, although at this time Lower Nubia was under the influence of Egyptian occupiers.

More specialized information on bead types, ordered by the materials from which they were made, is given in the second section of each cultural category presented in the corpus of OINE beads. This information is preceded by an overview of the sites and a detailed chronology of the tombs from which the beads were recovered. Next are given an outline of the preserved beadwork and an anthropological analysis of the skeletal materials of the tomb owners, together with references to parallels known from relevant literature and museum research by the author. An illustrated catalog is provided at the end of each cultural unit or phase.

The volume concludes with illustrated synoptic and concordance tables that allow the user to switch between catalog, OIM, and OINE find numbers. This work has been inspired by publications on ancient beads authored by Carol A. R. Andrews, Maud Spaer, Peter Francis Jr., Lois Sherr Dubin, and Véronique Arveiller-Dulong and Marie-Dominique Nenna.³

1 A subsequent volume will contain beads and pendants of Napatán, Meroitic, post-Meroitic (Noubadian X-Group and Blemmyes/Kalabsha culture), Christian, Islamic, and modern date.

2 The P-Type and N-Type graves from Serra East are described in chapter 3 and follow the terminology established in OINE X, 37.

3 Andrews 1981; Spaer 2001; Francis 2002; Dubin 2009; Arveiller-Dulong and Nenna 2011.



Figure 1. Map of Nubia and Egypt with localities mentioned in the text (drawing by Sz. Maślak)

Table 1. Chronology of Egypt, Lower Nubia, and Upper Nubia, adapted from OINE V, Welsby and Anderson 2004, Fisher et al. 2012, Gatto 2006, and Dr. Bruce B. Williams (personal communication)

Date (BC)	Egypt	Lower Nubia	Upper Nubia	Period
ca. 3800–3400	Naqada IC–IID	Early A-Group	Neolithic and Pre-Kerma	Early Nubian
ca. 3400–3200	Naqada IID–IIIA	Middle/Classic A-Group		
ca. 3200–2900	Naqada IIIA–beginning of First Dynasty	Late/Terminal A-Group		
ca. 3050–2685	Archaic/Early Dynastic period (First and Second Dynasties)	Post-A-Group		
ca. 2685–2150	Old Kingdom (Third through Sixth Dynasties)	C-Group IA	Early Kerma	Middle Nubian
ca. 2150–2008	First Intermediate Period (Seventh through first half of Eleventh Dynasties)			
ca. 2008–1685	Middle Kingdom (second half of Eleventh through Thirteenth Dynasties/Pan Grave	C-Group IB C-Group IIA/Pan Grave	Middle Kerma	
ca. 1685–1550	Second Intermediate Period (Fourteenth through Seventeenth Dynasties/Pan Grave	C-Group IIB/Pan Grave/ Kerma	Classic Kerma	
ca. 1550–1077	New Kingdom (Eighteenth through Twentieth Dynasties)	C-Group III/Pan Grave/ Kerma Egyptian occupation	Egyptian occupation	Egyptian occupation

Table 2. Overview of cultural units and associated catalog numbers

Cultural unit	Catalog number(s)
A-Group	1–39, 41–44
Post-A-Group	40, 45–49
C-Group	50–73, 75–110, 112–173, 176–229
C-Group or Pan Grave	74, 111, 174, 175
C-Group tombs of N-Type	230–255
C-Group tombs of P-Type	256–265
Pan Grave	266–293
Kerma	294
Middle Kingdom	295–296
New Kingdom	297–359

1

Classification Criteria

This chapter offers an introduction to the typology of beads and pendants as presented in this volume and an explanation of the catalog entries.

1.1. INTRODUCTION TO TYPOLOGY

Beads (centrally perforated objects) and pendants (off-center perforated objects or those with attached loop) are described according to type as defined through material, technique of production, shape, size, and color.

Materials are arranged starting with organic, then inorganic (stone, metal), and finally man-made (faience/glazed composition, glass) types. Organics comprise materials of floral (seed, wood, resin) and faunal origin. The latter are divided according to materials of terrestrial (e.g., ostrich eggshell, bone) and aquatic (i.e., mollusk shell) provenance. The species of marine mollusk is given according to M. L. Rusmore-Villaume⁴ unless otherwise stated. Carnelian is here defined as a red to yellowish- or orange-red semiprecious form of the silica mineral chalcedony quartz. Its physical properties are those of quartz.⁵

Techniques of the manufacture of organics and stones follow the works of J. M. Kenoyer,⁶ and details are provided in relevant sections. Techniques for the manufacture of glass beads are given according to M. Spaer.⁷ Whereas faience (glazed composition) is shaped while cold and subsequently fired, glass is mostly worked in its hot, viscous state.⁸

The **morphological description** of beads and pendants is classified according to the terms used by H. C. Beck,⁹ even if some of them are not accurate (e.g., “lotus seed-vessel” and “pomegranate” pendants). To name the parameters crucial for the description of a bead’s shape, the following terms are usually used: *side*, *edge*, and *end*, with the latter referring to the surface around the opening of the hole (fig. 2A). *Apex*, *base*, *end* (surface around the opening of the hole), and *side* are used in defining the shape of pendants (fig. 2B).

Since Beck’s classification of shape is exceptionally detailed, a simplified version can be adapted for the given collection since only rounded beads are present in it (fig. 2C). The regular, rounded beads are usually described as *cylinder*, *barrel*, *oblate*, *globe/sphere*, *ellipsoid*, *cone*, and *bicone*. Cylinder beads feature straight, parallel sides. A true barrel bead has rounded sides and flat ends. In oblate beads, the entire length of the bead, always smaller than the diameter, has a smoothly rounded profile. Globular or spherical beads are round, with their length roughly equaling their diameter. Ellipsoids are elongated spheres. They have a rounded profile with a length greater than their diameter. Cones have a flat, round or oval base and a top that narrows until it forms a point. Bicones can be described as two symmetrical cones with a common base. Conical and biconical beads may have truncated tops. Spacer beads have more than one perforation, although not all were used for spacing strings of beads. Toggle or bilobate beads are elongated in shape and often have a central narrowing and perforation placed in the middle of their longer axis. Segmented beads were made by rolling a long faience core tube on an open mold with grooved or crenellated surfaces. Segmented tubes were then cut or snapped at their intervals to

⁴ Rusmore-Villaume 2008.

⁵ Aston, Harrell, and Shaw 2000, 26–27.

⁶ E.g., Kenoyer 2003.

⁷ Spaer 2001.

⁸ Ibid., 308, 310.

⁹ Beck 1928.

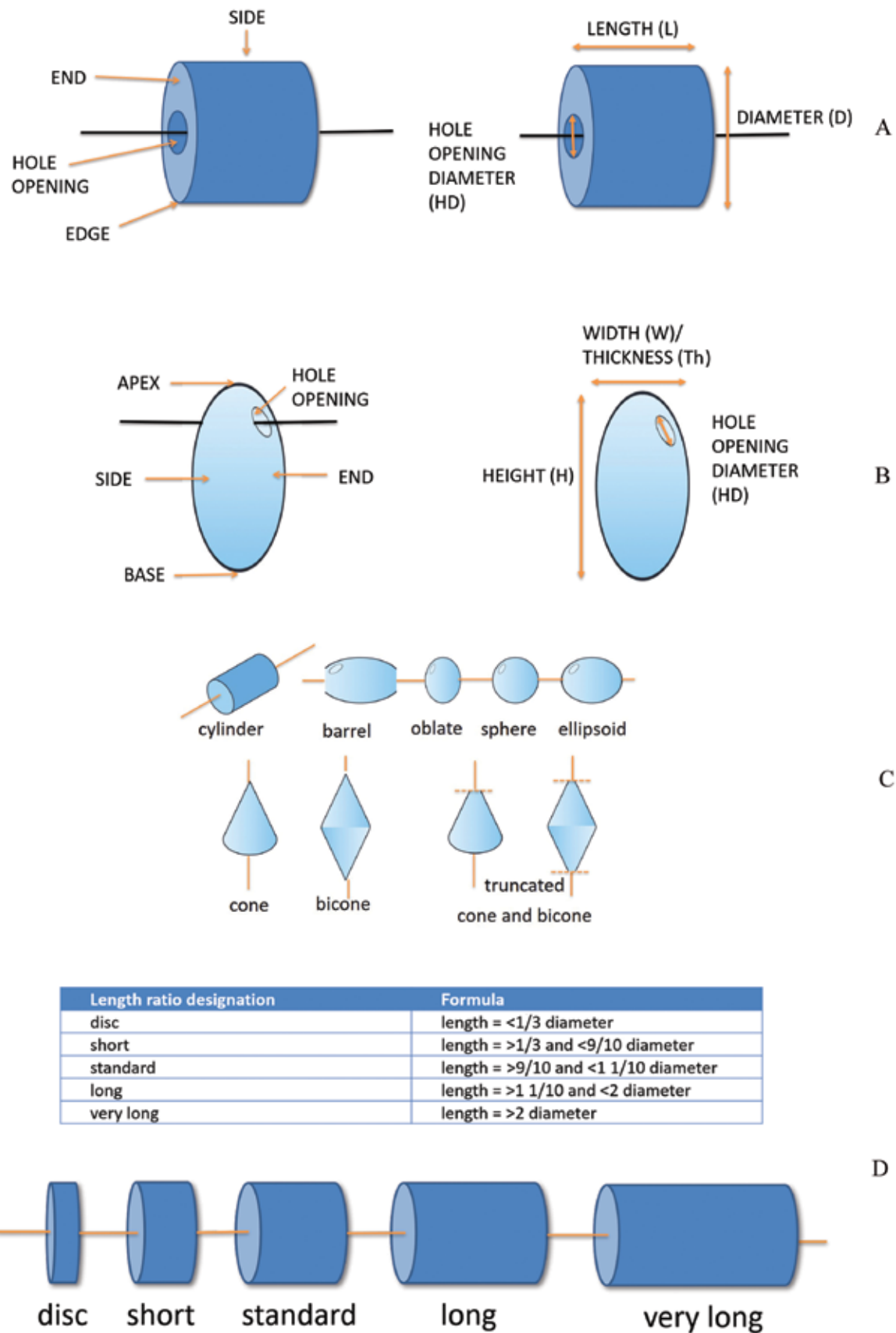


Figure 2. Bead and pendant terminology

produce single- or multiple-segment beads. Some of the more regular and outstanding shapes are illustrated in figures adapted from volumes III, V, VI, and X of the Oriental Institute Nubian Expedition (OINE) series (fig. 3 in chapter 2, figs. 10–12 in chapter 3, fig. 20 in chapter 4).

Length ratio indicates the relationship between the length and diameter of a given bead (fig. 2D). The following categories are adapted from Beck's system. A bead's length may be described as *disc* (less than one-third of its diameter), *short* (more than one-third but less than nine-tenths of its diameter), *standard* (equal or almost equal to its diameter), *long* (more than one and one-tenth of but less than twice its diameter), or *very long* (more than twice its diameter).

Following the classification, the basic geometrical shape of the bead can be combined with its length. Additionally, disc cylinder or short cylinder beads with large perforations are described as *ring* beads, and long cylinder beads with large hole openings are described as *tubular* beads. Very thin disc beads are sometimes called *wafer* beads.

Based on the given measurements (in millimeters), the **size** of beads of the same material, shape, and manufacturing technique is proportionally estimated as *tiny*, *small*, *large*, or *very large*. A number of measurements (D = diameter, L = length, HD = hole opening diameter) are given for each bead type (fig. 2A). Other measurements (Th = thickness, W = width, H = height, HD = hole opening diameter) are given for pendants (fig. 2B) or spacers. While width is the maximum distance between the two perforated ends of a pendant, thickness gives the maximum distance between two sides of a pendant. In the case of perforated mollusk shells, the length is the maximum dimension of the specimen.

When classifying a glass bead, its **color** is one of its most distinguishing features. Generic color names appear of practical value in the literature. The present study makes use of four degrees of diaphaneity:

transparent, *translucent*, *semitranslucent*, and *opaque*. Transparent glass allows the light to pass through so that the objects behind it can be clearly seen. Translucent glass permits the light to pass through but diffuses it so that the objects on its other side are not clearly visible. Opaque glass prevents light from traveling through the material. Semitranslucent glass represents the level of transparency between translucent and opaque, whereby a light beam glows through most of the bead or at its edges.

1.2. INTRODUCTION TO THE CATALOG ENTRIES

The catalog presents the beads and pendants found at cemeteries L, R, V, S, and W at Qustul; cemeteries T, U, and K at Adindan; and cemeteries A, B, C, D, F, and G at Serra East. In each cultural unit, the catalog heading provides the site and cemetery name, followed by a grave number and then the find number as published in the OINE series. Wherever possible, each catalog entry gives the find context, the form of beadwork (bead, necklace, armlet, bracelet, leatherwork, etc.), and, if possible, the sex and age identification of the owner of the tomb in which the item was found. The Oriental Institute Museum (OIM) number is given at the end of the heading.

The detailed chronology appears before the description of the numbered bead and pendant types making up an object, such as a necklace or bracelet. This detail includes the material, technique of manufacture, shape, color, and number of elements making up the object. Each object is illustrated in color, and each bead type is indicated in the illustrations according to its catalog number. Some finds were unavailable, and all relevant objects *non vidi* from the Nubian expedition are marked with an asterisk (*). Objects have modern stringing and arrangement unless stated otherwise. Wherever possible, a bibliography from the OINE series is given for each object.

2

Early Nubian Period Cultures

2.1. THE A-GROUP BEAD STORY

The A-Group was a cultural complex dating to about 3800–2900 BC and located between the First and Second Cataracts of the Nile.¹⁰ Its traces can be found as far as the Sixth Cataract,¹¹ the Western Desert,¹² and the Eastern Desert.¹³ Materials and bead styles discernible in the A-Group assemblage can be found as far as the Mediterranean and Red Sea coasts and even beyond. The presence of short- and long-distance imports in Lower Nubia may have resulted from exchange at bartering sites, where Nubian beads were trade items. Trade diasporas were a phenomenon at the end of the fourth millennium,¹⁴ and places of bartering have been proposed for the Lower Nubian A-Group site at Khor Daud at the mouth of the Wadi Allaqi¹⁵ and possibly also at Afyeh.¹⁶ Of 578 storage pits excavated at Khor Daud, 71 pits contained various objects, including personal ornaments such as “clay” beads and bracelets, a palette pendant probably of siltstone, and an ostrich eggshell.¹⁷ The geographical placement of the site would have allowed for trade participation by both settled communities along the Nile Valley and mobile desert dwellers.¹⁸ Nevertheless, it was burial sites that provided the best evidence of short- and long-distance contacts in Northeast Africa during the A-Group period.

Throughout the Nile Valley and into the neighboring deserts, burial customs became remarkably uniform in the fifth millennium BC,¹⁹ and personal ornamentation formed the largest single category of grave goods in this period, regardless of the age or sex of the deceased person.²⁰ This feature continued into the fourth millennium BC, the time of the birth of many civilizations in the ancient Near East,²¹ and social complexity can also be observed in Nubian A-Group cemeteries. Some of the bodily adornments, once associated with hunter-gatherer and mobile pastoral communities, continued into the third millennium.

One example is the **bag-shaped** motif that had a particularly long tradition in Northeast Africa and was present as early as the Neolithic period. Bag-shaped forms were executed in pottery vessels (where they are called *tulip* or *caliciform-shaped* beakers), in rock art,²² and in bodily adornments. A ceramic bag-shaped pendant a few centimeters long was found at the chest of an individual in a Nabta Playa burial in the Western Desert dating to the Final Neolithic period.²³ It bears incised decoration, and its rim has two holes designed for threading.²⁴ The Predynastic and A-Group carnelian bag-shaped pendants are most probably ancestors of the abovementioned motif and, as such, would belong to a long-standing tradition once associated with mobile pastoral societies (7, 9.9, 15, 23.2). Similarly, carnelian beads and bag-shaped pendants were

10 Stevenson 2012a; Stevenson 2012b; Roy 2011; Gatto 2006.

11 Gatto 2007.

12 Needler 1984 (for A-Group graves found at Hierakonpolis, Egypt); Lange 2003; Lange 2006.

13 Gatto 2005.

14 Stein 2002, 36; Ratnagar 2004, 10.

15 Nordström 1972a, 26; Roy 2011, 288.

16 Stevenson 2012b, 18.

17 Piotrovsky 1967, 129–30.

18 Roy 2011, 308.

19 Wengrow et al. 2014, 105, and references therein.

20 Kobusiewicz et al. 2010.

21 Wengrow 2006.

22 Longa 2011, 13–17, and references therein.

23 Ibid.

24 Wendorf and Schild 1980, 161–65, fig. 3.109.

found in an Early Kerma period grave at Saï Island.²⁵ They would all indicate a continuity of form, with or without their makers' awareness of its primary symbolism. Remarkably, a Middle Kingdom tomb at MESAID, Egypt, contained specimens comparable to these Predynastic, Early Dynastic, and A-Group beads and pendants.²⁶ The specimens, however, may have been reused from an earlier Naqada III tomb.²⁷

Bilobate forms belonged to another long-lasting phenomenon in bodily adornment. Stone bilobate or toggle beads found at A-Group (5.3) and contemporary sites²⁸ are said to be peculiar to the Predynastic period.²⁹ Similarly to pointed pendants (9.4, 14), they bear many affinities to stone nose and lip plugs known since the Mesolithic and Neolithic periods in Northeast Africa.³⁰ Nevertheless, the presence of marine mollusk shell plugs, hooks,³¹ beads, and pendants (11) in tomb L 17 at Qustul's royal cemetery remains incomparable in its quantity in Northeast Africa. Clearly, the esteemed person buried there had a special association with the Red Sea region.

The incense trade in antiquity belongs to one of the most fascinating subjects in the archaeology and history of the region,³² and an incense burner has become the most recognized and discussed feature of the royal A-Group cemetery at Qustul.³³ Next to the censers from the cemetery, two remnants of incense were preserved. Bag-shaped resin pendants corresponded exactly to their typical stone counterparts (1.1–2). **Resins** used as a material for beads have been recorded

at other A-Group³⁴ and Naqada period sites.³⁵ Later, incense was mentioned as an exchange commodity in the inscription of Harkhuf in his tomb at Qubbet el-Hawa on the west bank of the Nile at Aswan. Nubian involvement in incense procurement continued through millennia.³⁶

Mollusk shell and pierced mollusk shell ornaments were common features in Europe, Palestine, Egypt, Mesopotamia, Iran, Pakistan, and India in the fourth and third millennia BC,³⁷ and a long-distance **mollusk shell** trade is attested since the Epipaleolithic period.³⁸ The identification of species and their provenance is essential for the interpretation of exchange systems and the social role of shell ornaments. For example, *Nassarius gibbosulus* comes from the Mediterranean Sea (4.3, 11.10), and its use, together with the Red Sea species, provides excellent evidence for the direct or indirect long-distance connections of A-Group societies. The variety of Red Sea mollusk shell species in tombs of Late A-Group date at Qustul is comparable with that at other A-Group and Naqada sites.³⁹ The widespread distribution of these ornaments suggests a very strong connection between the Red Sea coast and distant inland sites in the Nile Valley beginning as early as the fifth millennium BC.⁴⁰ Perforated mollusk shells of the species *Polinices* (8, 11.1, 4, 13.1)⁴¹ may also have been in special demand at that time. *Polinices* sp. has been recognized in Badarian beadwork,⁴² in the Naqada period,⁴³ and in graves of the Early Kerma

25 For long, orange carnelian barrel beads and a bag-shaped pendant, see Gratien 1986, 369, fig. 72d, 285/HXIIIe; Reinold 2000, 139, fig. 98.

26 For a string of beads with pendants and amulets of the Predynastic type from MESAID tomb 955 [M/955], excavated by the Harvard University Museum of Fine Arts Expedition in 1913 and ascribed to the Middle Kingdom, see MFA 13.3738.

27 Dr. Bruce B. Williams (personal communication).

28 For an A-Group parallel from Faras, cemetery 3, grave 31, see BM EA51181 (Brunton 1927, 16, pl. 17, 73, M2); bilobate beads found in the tomb of Djer at Abydos were made of gold, amethyst, or dark brown limestone. According to Petrie (1901, 19, pl. 1), they are not perforated and have a double ridge around the middle, with a deep groove in between for the hair thread (see Wilkinson 1971, fig. 11; Bongioanni and Croce 2003, 343).

29 Xia 2014, 84.

30 E.g., Honegger 2004a, 33, cat. no. 16; Honegger 2004b.

31 OINE III, pls. 49–54.

32 E.g., Meyer, Todd, and Beck 1991.

33 E.g., OINE III; Roy 2011.

34 Junker 1919, 103; for other resin finds, see Firth 1912, 188–89; OINE IV, 39; for general information on resin in ancient Egypt, see Serpico 2000; Harrell 2012.

35 Andrews 1981, cat. nos. 80 (Naqada I), 126 (Naqada II).

36 Roy 2011, 251–53.

37 Bar-Yosef Mayer 2002 for Sinai marine shell adornments; Mumford 2012 for Predynastic and Early Dynastic Red Sea shells in Egypt, and references therein; Séfériadès 2010; Bajnóczi et al. 2013 for *Spondylus* trade in Neolithic Europe; Gensheimer 1984, 67, for Mesopotamia and Indus Valley seashell trade.

38 E.g., Reese 1991 for the Red Sea and other perforated shells found in the Mediterranean Basin and Europe; Gensheimer 1984 for Mesopotamian maritime trade with Oman and the Indus Valley civilization; Braun 2011, 105, for Nile shells found in the Southern Levant.

39 Junker 1919, 98–101, fig. 56; for the occurrence of seashell pendants in Egypt in Naqada II–III, see Met 99.4.53.

40 Pöllath 2008, 72, and references therein.

41 Rusmore-Villaume 2008, 72, who describes the shell as “always pure white with a lovely silky feel when you hold it in your hand.”

42 Andrews 1981, cat. nos. 3–6 (anklets), 53, 67, 70.

43 Ibid., cat. nos. 94, 98, for *Natica* (= *Polinices*) in Naqada I and II beadwork.

period.⁴⁴ Interestingly, *Polinices* sp. shells in the Oriental Institute Nubian Expedition (OINE) assemblage and dated to the A-Group were used to form girdles (8, 11.1, 4), and a long girdle of thirty-nine *Polinices* sp. shells has been found in a child's burial at the cemetery on Mograt Island, between the Fourth and Fifth Cataracts.⁴⁵

Shells worked into disc beads are commonly found at many grave sites in southern Mesopotamia, throughout the Iranian plateau, and as far east as Mehrgarh, Pakistan.⁴⁶ By the end of the fourth and the beginning of the third millennia, the extensive use of marine mollusk shell in both natural and highly worked forms can be observed in western Asia.⁴⁷ Worked mollusk shell beads and pendants have been recorded at Badarian,⁴⁸ Naqada II, and Naqada III sites in Egypt.⁴⁹ Whereas simply pierced marine mollusk shells were recovered at Neolithic sites in Nubia,⁵⁰ they were found worked into short barrel beads and elongated pendants at Gebel Ramlah in the Final Neolithic period.⁵¹ Artifacts found in A-Group contexts at Qustul constitute the largest collection of beads and pendants made from *Lambis truncata sabea* in Northeast Africa at the turn of the fourth to the third millennium BC (1.3, 4.2, 6, 9.1, 11.2, 3, 16, 17, 14.4). Their large quantity would indicate unrestricted access to the Red Sea coast and Eastern Desert, the latter of whose resources included ostrich eggshell.

While **ostrich eggshell** beads are well known from Mesolithic and Neolithic sites,⁵² they are nevertheless absent from A-Group burials excavated at Qustul. The

same observation has been made for contemporary Egyptian Predynastic⁵³ and Early Dynastic bead assemblages.⁵⁴ To judge from eggshells found at A-Group nonburial sites⁵⁵ and from depictions of large birds (ostriches) in rock art⁵⁶ and on pottery vessels,⁵⁷ ostriches were fairly common at the time.⁵⁸ Some ostrich eggshell beads were recorded at A-Group nonburial sites such as Nag el-Qarmila.⁵⁹ While the custom of placing decorated or plain ostrich eggs in A-Group burials is well known, and while ostrich eggshell containers and fragments,⁶⁰ as well as ostrich feather fans, were also noticed in grave inventories,⁶¹ ostrich eggshell beads have been rarely recorded as finds in graves. Although ostrich eggshell has been said to be a common bead material in A-Group assemblages,⁶² this assessment is an overestimate.⁶³ That is, beads of marine mollusk shell could have been incorrectly identified as made

2011, fig. 349; Kobusiewicz et al. 2009, fig. 16; Honegger 2014, 38.

53 Muir and Friedman 2011, 584–88.

54 Xia 2014, 84.

55 For ostrich eggshell fragments at nonburial sites, see Hewes 1966, 42; Piotrovsky 1967, 129–30; Nordström 1972a. For decorated ostrich eggshells found in Neolithic caves at Seyala and Adindan, see Bietak and Engelmayer 1963, 11–13, 23, 25; OINE IV, 3–12, fig. 1, pls. 8–11.

56 For the depiction of ostriches in rock art, see Gatto et al. 2009, 160.

57 For the depiction of an ostrich on pottery, see, e.g., Firth 1912, 192; Firth 1915, 50, fig. 22, pl. 27a, 2; Firth 1927, 208, grave 1; Junker 1919, 81–82, fig. 44:43; OINE III, pls. 9d, 84.

58 For the meaning of ostrich eggs in Predynastic Egypt, see Muir and Friedman 2011, and in Dynastic Egypt, see Scalf 2012, 131–32.

59 Gatto et al. 2009, 191.

60 For an overview of Nubian graves with ostrich eggs and their fragments, see Hofmann 1967, 98, and references therein; Muir and Friedman 2011, 584, n. 3.

61 For ostrich feather fans, see Reisner 1910, 190–97; Nordström 1972a, 188.

62 Nordström 1972a, 20, 123–24 (types A1 and A2: Th 1.5–2.0, D 0.25–10.0).

63 Junker 1919, 101; Griffith 1921, 10—the “ostrich eggshell disk” is mentioned in reference to grave 111, but there is no further information given on that grave; Nordström 1972b, pl. 52; Nordström 1972a, 124—as **type A2** with “central hole relatively large,” ostrich eggshell beads are mentioned in the following A-Group contexts: 292/1:7 “about 100 beads of ostrich egg-shell, ring-shaped, type A2, D: 0.6–1.0 [cm],” 292/13:1 “three ring-shaped of egg-shell, one un-finished, type A2, D: 0.5 [cm],” and 277/51:1 “Beads, disc-shaped, of ostrich egg-shell, type A2. Irregular contours,” and as **type A1** in 277/59:3 “14 disc-shaped of egg-shell, type A1. D 0.4–0.5 [cm].” For ostrich eggshell beads at Nag el-Qarmila cemeteries WK 14 and WK 22, see Gatto et al. 2009, 191–92: “other artefacts were recorded on the surface and in the deposit, including several ostrich eggshell beads, incised fragments of ostrich egg-shells.” For two

44 Dunham 1982, pls. 18a, 41c; cf. the Middle Nubian chapter.

45 Weschenfelder and Rees 2014, 151–52, fig. 9, a grave dated to the Late Neolithic—i.e., the end of the fourth and beginning of the third millennia BC.

46 Gensheimer 1984.

47 Dubin 2009, 366–67, cat. nos. 209–11, 215–18, 220, 225–27; Tait 2006, 28, fig. 19, a necklace with shell beads from a grave of the Jemdat Nasr period (ca. 3000 BC) at Ur.

48 Andrews 1981, cat. no. 29.

49 Ibid., cat. no. 122, pl. 17—Hu, Naqada II; Needler 1984, cat. nos. 234, 236 (= BrMu 09.889.302, 304—Abu Zaidan, Naqada III); Xia 2014, 84. Almost all are exhibited in the Egyptian Museum in Cairo. The disc and short cylinder shell beads made of marine mollusk shells are from sites dated to the fourth millennium BC (JE 71543A, 71549A,C, 71540B, 71548C, 71538B, 71546A).

50 Honneger 2014, 39—El-Barga; Salvatori and Usai 2008, 21, pls. 11.20, 16.13, 16.16, 16.36—site R 12 in the northern Dongola reach; Krzyżaniak 2011, fig. 335—Kadero; Kurawska 2010.

51 Kurawska 2010, fig. 6.7 (described as marine shell beads), contra Kobusiewicz et al. 2009, fig. 16 (described as ostrich eggshell beads), for two different identifications of the same disc beads from the fourth millennium BC.

52 E.g., Welsby and Anderson 2004, cat. nos. 12, 19; Salvatori and Usai 2008, 21–22, pls. 16.6, 16.13, 16.21, 16.28; Krzyżaniak

of ostrich eggshell or ivory.⁶⁴ In some cases they are described generally as made of “shell.”⁶⁵

At the Egyptian workers’ cemetery HK43 of Naqada IIB–IIC date at Hierakonpolis, ostrich eggshell beads were infrequent finds.⁶⁶ According to A. H. Muir and R. F. Friedman,⁶⁷ the limited occurrence of ostrich eggshell at Predynastic sites could be associated with the state formation process, when access to desert supplies may have been restricted to resources for the elites. A potential find of ostrich eggshell beads at the Lower Egyptian Predynastic to Early Dynastic site at Tell el-Farkha⁶⁸ would support this hypothesis and offer another example for a long-distance exchange connection along the Nile. Nevertheless, ostrich eggshell beads are lacking from elite graves at cemetery L at Qustul, where elaborate personal adornments should have been a prerogative. What is more, A-Group assemblages were rich in adornments made of mollusk shell species of Red Sea origin, access to which was through the Eastern Desert. There must be another reason, probably cultural, for the limited presence of ostrich eggshell beads at A-Group and Predynastic sites. While these societies gave up old-fashioned beads in favor of those of more attractive materials, such as faience, farther south ostrich eggshell beads were found at Neolithic sites⁶⁹ and also at Pre-Kerma sites, where workshops producing ostrich eggshell beads have been recorded.⁷⁰ What is more, ostrich eggshell beads were excavated in a contemporary grave farther upstream, on Mograt Island.⁷¹

Amazonite, microcline feldspar, is one of the most characteristic materials used in the manufacture of beads and plugs at Mesolithic⁷² and Neolithic sites in

Nubia.⁷³ Amazonite was quarried in the Red Sea Hills in Egypt in the Mesolithic and Neolithic periods (Wadi Higelig and Gebel Migif) or in the Tibesti Mountains in the central Sahara.⁷⁴ Sources for most of the raw materials used in A-Group stone bead manufacturing are placed in the Nile Valley and the Nubian Desert. In Sudan, carnelian, agate, and chalcedony occur in the gravels of the Atbara River, and they are common in the Khasm el-Girba region.⁷⁵ Carnelian occurs mainly in the form of rounded, polished pebbles and cobbles in the Fourth Cataract region.⁷⁶ Gebel el-Asr, northwest of Abu Simbel, has yielded carnelian near the gneiss quarries, although it is uncertain whether these quarries were exploited in the Predynastic period.⁷⁷ While garnets are found in many parts of Egypt, the Aswan region, and particularly the Eastern Desert,⁷⁸ garnet kyanite gneiss can be found at Duweishat in northern Sudan⁷⁹ and in the Bayuda Desert.⁸⁰ Quartz crystal was recorded from the Nubian Desert.⁸¹ So the stone material sourced for bead production by the A-Group culture was not distant.

According to W. Needler, beads of **semiprecious stones**, including garnet, are generally dated no earlier than the Naqada II period.⁸² The occurrence of truncated ends in carnelian and garnet beads in A-Group contexts is consistent with First Dynasty finds from Egypt.⁸³

While Egyptians are said to imitate blue-green turquoise and lapis lazuli stones in their faience objects,⁸⁴

ostrich eggshell lozenge plaques with central perforation, see Junker 1919, 14, P 151.

64 Nordström 1972b, pl. 194, lower left: 292/1:7.

65 Nordström 2014, table 11; Junker 1919, 101; for the difficulty of distinguishing ostrich eggshell from other shell, limestone, and steatite beads, and for the limited numbers of ostrich eggshell beads in Predynastic Egypt, see Muir and Friedman 2011, 571–93, and references therein. For the difficulty of distinguishing the material of bead manufacture, see *ibid.*, 571–93, and references therein; for later Kerma, see Reisner 1923, 94.

66 <http://interactive.archaeology.org/hierakonpolis/field09/3.html>.

67 Muir and Friedman 2011.

68 Ciałowicz 2011, 61, 70.

69 Honegger 2004a, 34; Honegger 2014, 39.

70 Geus 2011–12, 156–Sai; Delattre 2014, 41–Sedeinga.

71 Weschenfelder and Rees 2014, 151–52, fig. 9.

72 Salvatori and Usai 2008, 22.

73 Hofmann 1967, 23, 31; Bobrowski et al. 2011, 337–Kadero; Honegger 2014, 36–38–El-Barga; Welsby and Anderson 2004, cat. no. 28–Kadruka.

74 A source in central Sudan has been excluded by geochemical analyses performed on amazonite beads found at the Neolithic site R 12 in the northern Dongola reach; see Zerboni et al. 2014.

75 Whiteman 1971, 258.

76 Harrell 2010, 72–73.

77 Aston, Harrell, and Shaw 2000, 27.

78 *Ibid.*, 32.

79 Klemm and Klemm 2013, 32.

80 Abdelsalam et al. 1998, 137.

81 *Ibid.*, 140.

82 Needler 1984, 308; however, for semiprecious stone beads before Naqada II, see Andrews 1981, cat. nos. 60–61, 81, 83–84 for carnelian, cat. no. 60 for turquoise, cat. no. 83 for lapis lazuli.

83 Petrie 1901. According to Dr. Bruce B. Williams (personal communication), the bead bracelets published by Petrie were earlier, redeposited as loot by a tomb robber and never recovered. For a necklace with bag-shaped pendants and others from a First Dynasty site at Helwan excavated by Z. Saad in 1942 and 1945, see Saad 1969, pls. 77–82 (= JE 87515), with a color illustration in Bongioanni and Croce 2003, 32.

84 Kaczmarczyk and Vandiver 2008, 57.

amazonite was usually the favored material for these objects in Lower Nubia, although it is absent from the sites in the OINE collection. Although lapis lazuli,⁸⁵ probably from Afghanistan, and turquoise⁸⁶ from Sinai are found in both Predynastic Egyptian and some A-Group graves, they too are absent from the Qustul cemetery. A glazed composition, commonly known as **faience**, was a new material that appeared in Egypt in the fourth millennium BC and appeared soon after in Lower Nubia. While glazed stones (14.3) were known previously, the earliest example of Egyptian faience is probably a bird-shaped pendant dated to the Naqada I period.⁸⁷ Nubian faience beads are similar to Egyptian ones, and although there is no reason to reject the possibility of local production,⁸⁸ the technology used in their production is typically seen as imported from Egypt.⁸⁹ Still, some unglazed faience objects and beads found in Lower Nubia may represent unfinished beads from a local workshop (14.2, 16.8–9). Whether their glaze is simply weathered away remains uncertain.

Although limited, Egyptian exploitation of resources in the Predynastic and Early Dynastic periods was expanded across the Eastern Desert. While sources of many metals are placed in the Nubian Desert,⁹⁰ no gold mining during the Predynastic or Early Dynastic period has been located so far.⁹¹ Whereas evidence for metalworking is not known in Nubia at the end of the fourth millennium BC,⁹² there is evidence for such in Upper Egypt at Abydos.⁹³ Nevertheless, a gold necklace of long cylinder beads and a gold **fly pendant** was found in one of the A-Group tombs at Qustul (L 17), and the pendant constitutes the oldest representation of the fly symbol that was later associated with both high-ranking Egyptians and Nubians (10.1).⁹⁴ The gold fly, as similarly with later Egyptian falcons, flies, and lions, was associated with prestige, authority, and power.⁹⁵ Thus, it is clear that motifs and objects used for personal adornment during the A-Group period began to reflect a highly stratified society. What is

more, the presence of prestigious items and emblems of power in Nubian graves was the result of reciprocal exchange between Egyptian and Nubian elites.⁹⁶ Taking into consideration the continuity of the fly symbol in Nubian iconography⁹⁷ and its earliest appearance at Qustul, Nubia has been suggested as the place of origin for fly amulets.⁹⁸ Kerma ivory fly pendants later became a characteristic feature of Nubians represented in New Kingdom wall paintings. The association of the fly symbol with Nubia continued until the post-Meroitic period.⁹⁹

2.1.1. CORPUS OF OINE A-GROUP AND POST-A-GROUP BEADS AND PENDANTS

Sites and Chronology

A-Group bead and pendant adornments from the collection of the Oriental Institute Museum (OIM) were uncovered at the burial sites of Qustul (cemeteries L, S, W, and V), Serra East (cemetery B), and Adindan (cemetery T).

Bead and pendant adornments were found in fourteen graves of cemetery L at Qustul (1–22), in five graves of cemetery W (24–25, 26, 27–28), in one grave of cemetery V (30–31), and in one deposit pit of cemetery S (23), as well as at Serra East in six graves of cemetery B (32–39) and at Adindan in four graves of cemetery T (41–44).

Beads and pendants were also found in two Post-A-Group graves at Adindan (40, 45–49).

A detailed chronology of Early Nubian tombs given according to OINE III, IV, X, and other references is presented below and in table 3.

Chronology at Qustul

With a few exceptions, cemetery L at Qustul is generally dated to the Late A-Group (Naqada IIIA) (1–20, 22). However, grave L 2 is dated to Naqada IIIB, and grave L 29 is of Early A-Group, or Naqada IIC, date (21).¹⁰⁰

One of the four Late A-Group deposit pits in cemetery S contained three pendants (23). Cemetery V comprises only Late A-Group tombs (30, 31), while cemetery W's tomb W 11 was assigned as Transitional to Late A-Group in date (24), W 19 and W 22 are

85 E.g., Reisner 1910, 25, 128, 159; Firth 1915, 69, 80, 150; Firth 1912, 111, 141, 150; Firth 1927, 222; Junker 1919, 102.

86 Junker 1919, 102; Firth 1927, 208.

87 Kaczmarczyk and Hedges 1983, A71.

88 OINE III, 115, 120.

89 Roy 2011, 282.

90 Klemm and Klemm 2013.

91 Klemm, Klemm, and Murr 2002, fig. 1; Klemm and Klemm 2013.

92 Honegger 2004c, 63.

93 Golden 2002, 235.

94 Cf. the section on metal below.

95 Roy 2011, 281.

96 Ibid., 309.

97 Cf. the chapter on the New Kingdom.

98 Gestoso Singer 2009, 79, with references.

99 Cf. the chapter on the New Kingdom.

100 OINE III, 167, 177.

Table 3. Dating of Early Nubian objects according to OINE III, IV, and X

Phase	Dating	Catalog number(s)
Early A-Group	Naqada IIC	21
Early/Middle A-Group	Naqada IIC–D	42
Middle A-Group		44
Middle/Late A-Group	Naqada IIIA–C	41
Transitional to Late A-Group		24
Late A-Group	Naqada IIIA	1–20, 22–23, 25–27, 30–31
A-Group		28
“Possibly A-Group”		26
A-Group or possibly C-Group		43, 32 [^] –39 [^]
Post-A-Group	Early Dynastic, Old Kingdom	40, 45–49

Late A-Group (25, 27¹⁰¹), and W 29 was called simply A-Group (28). Tomb W 20, “possibly A-Group,”¹⁰² contained very regular faience ring beads, which are, however, of New Kingdom type (26).¹⁰³

Only one tomb at Qustul, L 29, is assigned to the Early A-Group. The earlier dating is not reflected, however, in its two carnelian beads, which are consistent with Late A-Group types (21).

Chronology at Serra East

A cluster of graves at cemetery B at Serra East recalls examples from northern Sudan, and their assignment to the A-Group was based on the bodies’ orientation, the pottery, and the beads.¹⁰⁴ Due to the lack of other diagnostic finds that would support a later dating of the graves under consideration, all the relevant objects from Serra East are marked here and below with a caret (^) symbol (32[^]–39[^]).

¹⁰¹ Based on the presence of a wavy-handled jar, the grave W 22 has been lately dated to the Early A-Group (Naqada IIC–D) by Roy 2011, 159, n. 118. But the form of the jar from W 22 is instead dated to Naqada IIIA (Bruce B. Williams and Anna Wodzińska, personal communication).

¹⁰² OINE IV, 73.

¹⁰³ The tomb, however, lacks other diagnostic finds that would support a later New Kingdom dating.

¹⁰⁴ OINE X, 1, citing Nordström 1972a, 145–55; Nordström 1972b, pls. 65, 70.

Chronology at Adindan

At Adindan’s cemetery T, tomb T 113 was dated to the Early/Middle A-Group (Naqada IIC–D)¹⁰⁵ (42), tomb T 247 to the Middle A-Group (44), tomb T 75 to the Middle/Late A-Group (Naqada IIIA–C)¹⁰⁶ (41), and tomb T 243 to the A-Group or possibly C-Group (43).

The presence of Early Dynastic and Old Kingdom objects at cemetery T at Adindan allowed tombs T 35 and T 155 to be classified as Post-A-Group in date (40, 45–49).¹⁰⁷

Materials and Techniques

A-Group beads and pendants were made of organic (resin, mollusk shell, bone), inorganic (metal, stone), and man-made (glazed stone, faience/glazed composition) materials. Presented below, they are divided into types according to their technique of manufacture, shape, size, and color. Shapes of beads and pendants and their perforations are illustrated in figure 3 and in figure 12 in chapter 3. An overview of bead and pendant types is given in table 4.

¹⁰⁵ Roy 2011, 164, n. 122—broad form of W-ware of Naqada IIC–D date.

¹⁰⁶ Ibid.

¹⁰⁷ OINE IV, 122.

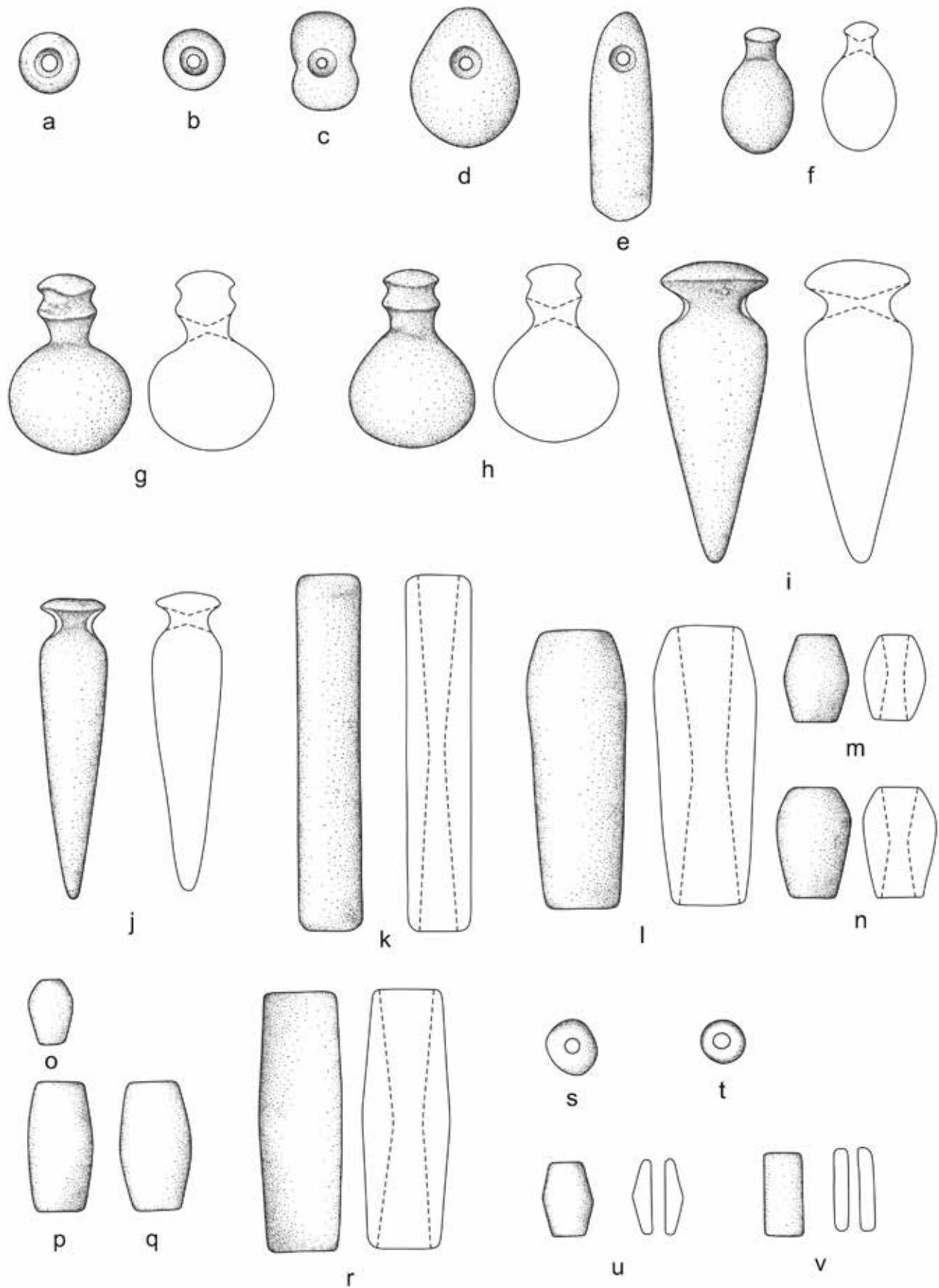


Figure 3. Beads and pendants. Stone beads: a (5.2), b (18.1), c (5.3), d (9.6), e (5.6), f (7), g (9.9), h (9.15), i (9.14), j (9.4), k (18.16), l (5.4), m–p (18.14–15), q (9.3), r (5.5); faience beads: s–t (18.5), u (18.10), v (18.11). Scale: 2:1 (adapted from OINE III, pl. 56)

Table 4. Overview of types in A-Group and Post-A-Group culture

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s) of A-Group types	Catalog number(s) of Post-A-Group types	Figure number
Resin	P	Teardrop with rounded base			1.1		
		Bag-shaped			1.2		
Marine mollusk shell	P	<i>Conus taeniatus</i> apex removed			11.11		
		<i>Oliva</i> sp. apex removed			11.12		
		<i>Strombus fasciatus</i> body whorl perforated			16.1		
		<i>Fusinus</i> sp. body whorl perforated			11.13		
		<i>Polinices mammilla</i> body whorl perforated			8, 11.1, 4, 13.1		
		<i>Nerita</i> sp. body whorl perforated			33		
		<i>Nassarius gibbosulus</i> body whorl perforated			4.3, 11.10		
		<i>Cypraea annulus</i> body perforated			11.5		
		<i>Cypraea annulus</i> dorsal part removed			11.6, 30, 31		
		<i>Nassarius</i> sp. sliced body			11.8		
		Round plaque			11.7		
		Trapezoid plaque			11.9, 20–23		
		Elongated			11.15		
	B	Short barrel of <i>Lambis truncata</i>	Tiny		1.3		
		Short and standard barrel/oblate/sphere <i>Lambis truncata</i>	Large		4.2, 6, 9.1, 11.2, 16–17, 14.4		
	P	Long grooved pendant with tapered base			11.3		
Freshwater shell	P	Trapezoid			39.1^		
Ostrich eggshell	B	Square plaque			36^		
		Disc and short cylinder				45.1, 46.1, 47.1, 48, 49.1	
Bone	B	Very long cylinder			14.5		
					14.1, 35^		Fig. 12d–f
		Standard to long cylinder and barrel			39.2^		Fig. 12h–i

Table 4. Overview of types in A-Group and Post-A-Group culture (*continued*)

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s) of A-Group types	Catalog number(s) of Post-A-Group types	Figure number
Carnelian	B	Short barrel, truncated bicone, and cylinder	Small		4.1, 5.2, 9.5, 7, 10, 13.2–3, 16.4, 18.13, 21.1, 25.1, 29.3–4		Fig. 3a
		Short barrel	Large		11.8		
		Long and very long barrel			5.7, 9.3, 8, 12–13, 13.4, 18.14, 21.2		Fig. 3o–q
		Long and very long bicone			5.5, 18.15, 22		Fig. 3m, r
		Long and very long truncated pear-shaped			5.4, 12.1, 16.3		Fig. 3l, n
		Long and very long cylinder			18.16, 25		Fig. 3k
		Bilobate			5.3		Fig. 3c
	P	Flattened teardrop with rounded base			23.1		
		Bag-shaped			23.2		
		Bag-shaped pendant with globular body and double-segmented neck			9.9, 15		Fig. 3g–h
Bag-shaped long pendant with tapered base				9.4, 14		Fig. 3i–j	
Round flattened bead-pendant				34^		Fig. 12b	
Garnet	B	Short barrel, short truncated bicone, and short cylinder			5.1, 9.2, 11, 16.5, 18.1, 19.3, 25.2, 29.5		Fig. 3b
Rock crystal	B	Short barrel, truncated bicone, and cylinder			17.1, 18.2		
	P	Teardrop with rounded base			9.6		Fig. 3d
Quartz	B	Short barrel	Small		29.2		
		Short, standard, and long barrel	Large		24, 27.1, 29.1		
Agate	B	Disc and short barrel, short truncated bicone, and short cylinder	Large		18.17, 19.6, 27.2–3		
		Disc barrel	Small		38.1^		
Steatite	B	Short barrel			27.8		
		Square tabular			3.1–2		
Fine conglomerate	B	Short barrel, short truncated bicone, and short cylinder			27.4–5		

(continued)

Table 4. Overview of types in A-Group and Post-A-Group culture (*continued*)

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s) of A-Group types	Catalog number(s) of Post-A-Group types	Figure number
Chalcedony	B	Disc teardrop with rounded base			27.6		
	P	Bag-shaped pendant			7		Fig. 3f
		Long flat teardrop pendant			5.6		Fig. 3e
Diorite	B	Irregular short bicone			44.1		
Pebble	P				16.2		
Gold	B	Long barrel			17.2		
		Long bicone			5.8		
		Very long cylinder			20		
		Long barrel/cylinder			1.4, 10.2		
	P	Fly			10.1		
Clay	B	Very long cylinder			16.6		
		Barrel			16.7		
Glazed steatite	B	Lenticular teardrop			27.7		
		Short ring			14.3		
Faience	B	Disc cylinder		White glaze	26.1		
				Blue glaze	25.2		
		Short cylinder	Small	Blue-green glaze	19.11–12		
			Large	Green	32.2^		
				Blue glaze		40	
		Short and standard cylinder and oblate		Whitish core	16.9, 18.4, 19, 27		
				Whitish core and green glaze	18.23, 19.4		
				Whitish core and reddish-brown to black glaze	18.9, 12, 22, 28, 19.2		
				Grayish glaze		45.3, 46.4	

Table 4. Overview of types in A-Group and Post-A-Group culture (*continued*)

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s) of A-Group types	Catalog number(s) of Post-A-Group types	Figure number
				Greenish, blackish	43		
		Standard cylinder		Whitish glaze	2.2		
		Long cylinder		White glaze	18.3, 7, 19.7		
				Brown glaze	18.11, 19.10		Fig. 3v
				Cream core and bluish glaze	38.4 [^]		
				Blue-green glaze		46.2	
				Black glaze		46.5	
		Disc to short barrel		Blue-green glaze	18.26, 25.4, 28, 44.2		
				Blue glaze	32.1 [^] , 37 [^] , 38.2 [^]		
				Black glaze	38.3 [^]		
		Short barrel		Green, blue glaze	25.3, 29.6		
				White core and greenish glaze	18.5, 44.3		Fig. 3s–t
				Black glaze		46.3, 7	
				Gritty core and green-blue glaze		49.2	
		Long barrel/bicone		Brownish core	18.10		Fig. 3u
		Pear-shaped		White core and glaze	18.6, 18, 19.8		
		Disc bicone and barrel		Green glaze		45.2, 46.6, 47.2	

(continued)

Table 4. Overview of types in A-Group and Post-A-Group culture (*continued*)

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s) of A-Group types	Catalog number(s) of Post-A-Group types	Figure number
		Long bicone		White core and glaze	19.9		
		Oblate		Whitish core and blue-green glaze	16.8, 18.20, 19.1		
				Whitish core and red/brown glaze	18.21, 19.13		
			Large	White core and blue glaze	27.10, 41		
				White core and glaze	2.1		
		Oblate beads flattened on one side		Gray gritty core with white inclusions	1.5		
				Blue glaze	14.2		
		Crenelated short cylinder		White or gray core and blue glaze	27.9		

Resin

Resin pendants from the OINE assemblage are analogous to the shapes of carnelian examples¹⁰⁸ and include a teardrop shape with rounded base (1.1) and bag-shaped pendants (1.2).

Marine Mollusk Shells

With the exception of *Nassarius gibbosulus*, which is from the Mediterranean Sea, all seashells used for bodily adornment are of Red Sea origin. In the OINE assemblage these items were found as simply

perforated marine mollusk shells, shell fragments cut into pendants, or beads shaped into barrels.

Perforated marine mollusk shells

Many body whorls of seashells were found simply perforated; otherwise, their apex or dorsal part was removed by abrading or they were sliced. In the case of some *Conus* sp., their apexes were removed. The following seashell species were identified: *Conus taeniatulus* with apex removed (11.11);¹⁰⁹ *Conomurex fasciatus* (11.14); a *Strombus fasciatus* shell¹¹⁰ pendant with the

¹⁰⁸ Cf. cat. nos. 7, 23.1–2.

¹⁰⁹ Junker 1919, fig. 56:6; Nordström 1972a, 125; Needler 1984, cat. no. 234, for *Conus* sp.—Abu Zaidan, Naqada III.

¹¹⁰ Junker 1919, fig. 56:5.

body whorl perforated (16.1); *Fusinus* sp. (11.13);¹¹¹ a *Cypraea annulus* shell¹¹² with the dorsal part perforated (11.5) or removed (11.6, 30, 31); an *Oliva* sp. shell pendant with its apex removed¹¹³ (11.12); and a *Polinices mammilla*¹¹⁴ shell pendant with the body whorl perforated (8, 11.1, 4, 13.1).¹¹⁵ In the A-Group OINE collection, all marine mollusk shell pendants that were previously identified as *Nerita* sp.¹¹⁶ are actually *Polinices mammilla* (*tumidus*) shell. Exceptions may be two *Nerita* sp. pendants from Serra East cemetery B that were not available for reexamination (33[^]).¹¹⁷

Of special consideration are the *Nassarius gibbosulus* mollusk shells from the Mediterranean Sea, with the body whorl perforated for suspension (4.3, 11.10).

Sliced marine mollusk shells

Nassarius sp. shells were found sliced, resulting in a natural hole for the bead (11.8).¹¹⁸

Pendants of marine mollusk shell fragments

Pendants of another group are in the form of worked shell fragments—either round (11.7) or trapezoidal plaques (11.9, 20–23), as well as an elongated worked pendant (11.15).

Marine mollusk shell beads and a grooved pendant

The most distinctive Late A-Group category comprises objects cut out of *Lambis truncata*.¹¹⁹ They may have been made from the waste fragments of the shell used for bangles. They were made from the thicker parts of the columella and drilled from both ends.¹²⁰

Tiny, short barrels with greenish tint, probably the result of being deposited near a copper object,¹²¹ were also made of seashell (D 3.0, L 1.3–1.9, HD 0.9) (1.3). Larger shell beads were shaped into short and standard barrel, oblate, and spherical shapes (D 5.3–18.4, L 2.3–17.8, HD 2.0–5.4) (4.2, 6, 9.1, 11.2, 16, 17, 14.4).¹²²

A grooved, long, segmented pendant with tapered base (Th 6.3, W 12.7, H 57.2) (11.3) was most probably also made of *Lambis truncata* shell.¹²³

Freshwater Shell

A trapezoidal plaque pendant was cut from a freshwater mollusk shell (39.1[^]).

Ostrich Eggshell

There are definitely no ostrich eggshell beads in the OIM A-Group collection. The unique ostrich eggshell square bead fragment (36[^]) was tentatively assigned to the A-Group period,¹²⁴ but it could be of Middle Nubian date (cf. below, e.g., 51.1).

In contrast to the A-Group, the majority of Post-A-Group beads were made of ostrich eggshell. Ostrich eggshell discs and short cylinders were drilled from both ends, resulting in an hourglass or nearly parallel perforation shape. The shapes are very regular, and their sides and ends are refined (D 3.1–6.6, L 0.8–2.0, HD 0.8–1.5) (45.1, 46.1, 47.1, 48, 49.1).

Bone

A very long, perforated cylinder, of material that looks consistent with diagenetically altered bone, is in the A-Group collection (D 12.0 × 10.5, L 31.6, HD 2.9) (14.5).¹²⁵

111 Needler 1984, cat. no. 238, pl. 54—El ‘Adaima, Predynastic(?).

112 Griffith 1921, 15, illustrated in Spencer 1980, cat. no. 557, pl. 59; for other examples of the use of cowries in the A-Group, see Hofmann 1967, 98–99, 120, and references therein; Nordström 1972a, 125; Needler 1984, cat. no. 236, for cowries from Egypt—Abu Zaidan, Naqada III.

113 Junker 1919, fig. 56:7.

114 Otherwise called *P. tumidus* or *Natica*; for Badarian beadwork using *Natica* shells, see Andrews 1981, cat. nos. 3–6, 53, 67, 70.

115 For the use of *Polinices* in the A-Group, see Junker 1919, fig. 56:I; Steindorff 1935, pl. 78:NN1; Nordström 1972a, 125.

116 OINE III.

117 *Non vidi*. But for *Nerita* in the A-Group, see Junker 1919, 98; Nordström 1972a, 125.

118 Firth 1912, pl. 37:8; for online images, see MFA 13.3535—Sheikh Farag SF 2, Predynastic period, before 2960 bc and misidentified as “cowrie”; UC 43214—Abydos, First Dynasty.

119 “Muschelsubstanz” in Junker 1919, 101; Hofmann 1967, 91.

120 Bar-Yosef Mayer 2002, 169.

121 According to W. Needler (1984, 308), the shell beads from Predynastic Egypt were once brightly colored.

122 For the occurrence of marine shell shaped into beads in the A-Group and Naqada periods, see Reisner 1910, pl. 68a:2; Firth 1912, 128, 193; Firth 1915, 46; Junker 1919, 100; Griffith 1921, 15, cat. no. 556—left anklet from grave 31 at Faras (= Spencer 1980, cat. no. 556, pl. 61, and Andrews 1981, cat. no. 151, pl. 18); Emery and Kirwan 1935, 352, 353, 460, 463; Nordström 1972b, pl. 194:292/1:1—probably misidentified as “beads of ivory, ostrich eggshell”; Needler 1984, cat. nos. 234, 236—“marine shell” beads in the Naqada III at Abu Zaidan; Met 99.4.6—Abadiya, cemetery R, Naqada II–III; Stevenson 2012b, 14—Afyeh “shell beads.”

123 Firth 1912, pl. 37:6; Nordström 1972b, pls. 53A:195:1—called “pendants of ivory.”

124 OINE X, 5, 15.

125 Dr. Mindy Pitre (personal communication).

Bone beads were also made of long, cream or brownish tubes of animal metacarpals or metatarsals. However, only one white, very long tube (D 6.6, L 16.3, HD 3.5) (14.1) comes from an A-Group grave. Very long, cylindrical, cream-colored bone beads are consistent with later Middle Nubian period finds, and two sizes can be distinguished:¹²⁶ a larger (D 11.3–18.6) (35^[^]) and a smaller (D 6.1–8.5) (39.2^[^]) variety.¹²⁷

Stone

Many diverse stones were used for A-Group beads and pendants; they range from carnelian, garnet, rock crystal, agate, white quartz, chalcedony, and steatite to a fine conglomerate stone. Stone beadworking is evident at some A-Group sites and would confirm local production. Two carnelian-working sites were discovered on the west bank of the Nile near Ballana and consisted in part of a thick layer of charcoal ash debris (between 0.5 and 1 m deep).¹²⁸ Transformation through heating is indispensable for carnelian bead production in order to chip and polish the microfibrinous stones and achieve an orange and red coloration.¹²⁹ A-Group sherds, flint flake knives and worked points (otherwise called microdrills), carnelian beads, and borers, as well as grindstones and pounders, were recorded at the surface of the site near Ballana.¹³⁰ What is more, rough fragments of carnelian cobble and worked fragments were preserved from one of the Qustul tombs, L 24 (18.24). While larger beads are produced from one cobble, small or medium beads are made from a few thick cobbles' flakes or blanks.¹³¹

Beads in the OINE assemblage were found perforated in a few ways according to their length. Some **disc** to **short barrels** were simply pecked. Others were possibly first pecked to provide a slight indentation,

which would allow placing a drill into position. Next, using tapered¹³² or tapered cylindrical stone drills with an abrasive (quartz or emery) and a vehicle, possibly olive oil,¹³³ the barrels were drilled from both ends, thus leaving an hourglass-shaped perforation. It seems that their sides were shaped subsequently. Depending on the angle at which they were worked against some surface, straight, convex, or conical-shaped sides were achieved. Two ribbed limestone boards found in Qustul graves L 23–40 and L 24–9, which were interpreted as game boards, could have served for the final shaping of beads.¹³⁴ One of them measures 8.5 × 11 cm and has a series of eight transverse grooves and two holes at one end. The other has sixteen transverse grooves. Ribbed boards used for shaping beads have been recorded in Sudan from the Neolithic period.¹³⁵ Grooved stones that may have been used as bead grinders have also been recorded in Naqada tombs from Egypt.¹³⁶

Long and very long **cylinders**, **barrels**, **bicones**, and **pear-shaped** beads, as well as **bag-shaped pendants**, have hourglass or double, almost parallel, perforations. Shorter forms were perforated from both ends, probably using stone tapered cylindrical drills.¹³⁷ Long holes may also have been drilled using copper or tubular metal drills. By about 3000 BC, corundum abrasive was used in the perforation of hard stone beads.¹³⁸

Due to a broad variety of A-Group stone objects, the following bead and pendant types were distinguished according to material, shape, and size.

Carnelian beads

Among **short carnelian beads** are smaller **barrels**, **truncated bicones**, and **cylinders**¹³⁹ (D 2.9–6.0, L 1.1–3.6,

126 Nordström 1972a, 124, 212, type B1 from Halfa Degheim, 277/66:7, pl. 52:B1, beads of triangular section L 22.0, D 6.0–10.0 found at the skull of a child, probably a newborn infant(?), in a very fragmentary condition between the debris and the feet of the adult burial.

127 For standard to long bone beads associated with fifteen *Nerita* sp. shells, a single faience bead, and a carnelian pendant from cairn tumulus tomb 190 of a juvenile burial at Kurgus, see Haddow 2014, 142, pl. 3; for bone beads in C-Group graves, see the chapter on Middle Nubian beads.

128 Smith 1962, 27, 30, fig. 6.

129 Inizan 2000, 474.

130 Smith 1962, 27, 30, fig. 6. Vast quantities of microdrills were found in the ceremonial center at HK29A at Hierakonpolis, where they were especially numerous in the deposits over the floor of the oval courtyard; see <http://interactive.archaeology.org/hierakonpolis/field09/3.html>.

131 Pelegrin 2000, 53.

132 Tapered drills used for soft stones, shell, ivory, and wood are known worldwide since the Neolithic period and up through the Iron Age (about 1200 BC); see Kenoyer 2003, 17.

133 Tapered cylindrical drills were used for softer stones and short, hard stone beads; they are known from western Asia and the Indus Valley from the Copper-Bronze Age (about 5500 BC) up to the beginning of the Iron Age; see Kenoyer 2003, 17; Hikade 2004, 190; Gwinnett and Gorelick 1993, 123–27; for olive oil used in drilling beads, see Gorelick and Gwinnett 1983, 47.

134 OINE III, 130–31, table 39, pls. 66–67.

135 Salvatori and Usai 2008.

136 Xia 2014, 28.

137 Constricted cylindrical drills made of ernestite are known only from the Indus Valley in the Classic Harappan period (2600–1900 BC) and were used in drilling very long, slender beads of hard stone; for constricted cylindrical drills and the material they were made of in India, see Kenoyer and Vidale 1992; Kenoyer 2003, 17.

138 Kenoyer 2003, 17.

139 Firth 1912, pl. 55:1, 4, 5; Firth 1915, pl. 28c:15, 16; Firth 1927, pl. 22a:12–14; Nordström 1972a, 125, pls. 52D and 194:277/1:24;

HD 0.8–2.3) (4.1, 5.2, 9.5, 7, 10, 13.2, 3, 16.4, 18.13, 21.1, 25.1, 29.3, 4). The larger short barrel bead measures 12.0 mm in diameter, 7.3 mm in length, and from 1.8 to 7.2 mm in hole diameter (11.18).

Long and very long beads include barrels¹⁴⁰ (D 4.5–7.7, L 5.7–15.2, HD 1.3–2.9) (5.7, 9.3, 8, 12, 13, 13.4, 18.14, 21.2), bicones (D 6.9–8.7, L 13.5–23.8, HD 2.2–3.9) (5.5, 18.15, 22), truncated pear-shaped beads¹⁴¹ (D 6.6–9.1, L 10.8–26.4, HD 2.3–3.3) (5.4, 12.1, 16.3), and cylinder beads¹⁴² (D 6.8–6.9, L 33.5, HD 2.7–3.3) (18.16, 25).

Two carnelian bilobate (toggle) beads are unique at Qustul cemetery and were found in tomb L 11 (5.3).¹⁴³

Carnelian pendants

The following types can be distinguished among carnelian pendants: **flattened teardrop** with rounded base¹⁴⁴ (23.1), **bag-shaped**¹⁴⁵ (23.2), bag-shaped with globular body and **double-segmented neck**¹⁴⁶ (9.9, 15), and a long, bag-shaped pendant with **tapered base**¹⁴⁷ (9.4, 14).

Outstanding in shape and color is a dark red, round, flattened **bead pendant** (34[^]).

Griffith 1921, 15, illustrated in Andrews 1981, cat. no. 158, pl. 18; Andrews 1990, cat. no. 31—Abydos, Naqada II; Spencer 1980, 55—BM EA51178; for other examples of Early Dynastic carnelian beads, see Spencer 1980, 76, and references therein. For online illustrations of museum objects, see MFA 24.1822, 24.2547, 24.2550, 24.1823.1–34—Kafr Ghattati, near Giza; MFA 13.3742—Masaid, Naqada I–III; Met 99.4.4—Abadiya, cemetery H, tomb H129, Naqada III; Met 99.4.2—Abadiya, cemetery B.

140 MFA 13.3742—Masaid, Naqada I–III; Nordström 2014, 45, object 42:17.

141 Met 99.4.4—Abadiya, cemetery H, tomb H129, Naqada III; Met 99.4.2—Abadiya, cemetery B, Naqada I–II.

142 Firth 1927, pl. 22a:11.

143 Brunton 1927, pl. 17, 73, M2; for illustrations of carnelian and ivory toggle beads from Faras, see Spencer 1980, cat. no. 553, pl. 60; Andrews 1981, cat. no. 156, pl. 5.

144 Firth 1912, pl. 55:3; Firth 1915, pl. 28c:9; Nordström 1972b, pl. 194:292/1:7.

145 Reisner 1910, pl. 70a:3–6; Firth 1915, pl. 28c:5; Junker 1919, fig. 58:19; Griffith 1921, pl. 4:6—Faras; Nordström 1972b, pl. 53:B4, 194:292/1:7; for a First Dynasty illustration from Helwan, see Bongioanni and Croce 2003, 32; for the similar shapes of *nw*-vase pendant amulets ascribed to the Middle Kingdom, see Andrews 1981, 95, appendix T, with references given there; MFA 13.3636—Sheikh Farag, ascribed to the Middle Kingdom; for one of the first bag-shaped pendant forms, see Wendorf and Schild 1980, 161–65, fig. 3.109. The latter is an exceptional pottery pendant in the shape of a tulip beaker; a few centimeters long, it bears an incised decoration and two holes in the rim designed for threading—from Nabta Playa.

146 Reisner 1910, pl. 70a:1.

147 Andrews 1994, fig. 96c (alabaster)—Early Dynastic; for shorter examples, see Andrews 1981, 37, cat. no. 162, pl. 18, with references given there; for a necklace with carnelian pointed pendants ascribed to the Middle Kingdom, see MFA 13.3738.

Garnet beads

Garnet beads consist in short barrels, short truncated bicones, and short cylindrical shapes¹⁴⁸ (D 2.4–4.9, L 1.1–2.4, HD 1.4–2.2) (5.1, 9.2, 11, 16.5, 18.1, 19.3, 25.2, 29.5).

Rock-crystal beads and pendant

Rock crystal was found shaped into short barrels, truncated bicones, and cylinder beads (D 4.1–4.5, L 1.7–2.0, HD 1.7–1.8) (17.1, 18.2), and as a pendant in the shape of a teardrop with rounded base (9.6).

*Quartz beads*¹⁴⁹

White quartz was shaped into small, short barrels (D 3.3, L 2.1, HD 1.3) (29.2) or larger short, standard, and long barrels (D 7.3–10.7, L 3.0–6.8, HD 2.4–4.6) (24, 27.1, 29.1).¹⁵⁰

Agate beads

Agate or carnelian, both opaque and translucent, was shaped into discs and short barrels, short truncated bicones, and short cylinders (D 4.6–10.3, L 1.8–4.3, HD 1.8–4.1) (18.17, 19.6, 27.2, 3).

One translucent disc barrel is smaller in size (D 3.0, L 0.8, HD 0.7) (38.1[^]).

Steatite beads

Short barrels of black steatite range from 6.4 to 7.2 mm in diameter and 2.6 to 2.9 mm in length, with a 3.0 mm hole diameter (27.8). Black (3.2) and cream (3.1) **square tabular** beads of steatite are unique shapes.

Fine conglomerate beads

A fine conglomerate stone was shaped into larger-sized short barrel beads, short truncated bicones, and short cylinders (D 7.1–8.7, L 2.7–4.4, HD ca. 3.0) (27.4–5).

Chalcedony beads and pendants

Among chalcedony types, the following shapes are distinguished: a **disc teardrop** with rounded base (27.6),

148 Firth 1912, 138, pl. 55:1, 2, 6; Firth 1927, 215, pl. 22a:12, 13; Junker 1919, 101; for an illustration of garnet examples from Faras, see Andrews 1981, cat. no. 158, pl. 18; Nordström 1972b, pl. 194:332/23:2, described as “beads of dark red carnelian”; for a Naqada II diadem made of garnet, carnelian, turquoise, and gold beads from a female burial at Abydos, see BM 37532; for other examples of Early Dynastic garnet beads, see Spencer 1980, 76, with references therein. For online illustrations of museum objects, see Met 99.4.4—Abadiya, cemetery H, tomb H129, Naqada III; Met 99.4.2—Abadiya, cemetery B.

149 Nordström 1972b, pl. 194:277/13:1—described as “beads of a hard white mineral.”

150 Nordström 1972a, 125, type C; Nordström 1972b, pl. 52:C.

a **bag-shaped** pendant¹⁵¹ (7), and a long, flat **teardrop** pendant¹⁵² (5.6).

Diorite beads

An **irregular short bicone of diorite** has an hour-glass-shaped perforation (D 11.4–12.7, L 5.1). It has a 3.7 mm diameter hole opening and a 0.9 mm inner hole diameter (44.1).

Pebble pendant

A white and brown pebble pendant¹⁵³ fragment (16.2) was perforated from both ends (Th 5.5, W 16.1).

Metal

Many gold sheets were found folded into long beads. These are long barrels¹⁵⁴ (17.2) and a long bicone¹⁵⁵ (5.8), as well as a very long cylinder (20).¹⁵⁶ The latter has the ends bent inside. Smaller, long tubular beads of gold sheet (1.4) were folded, leaving a gap in the seam. Similar to the latter are small tubular beads made of folded gold sheet (10.2) from Qustul, together with an exceptional amulet in the form of a fly, also made of gold sheet (10.1).¹⁵⁷

The fly has flat, undecorated wings attached to the protruding back. The back was made of gold sheet folded into a tube, with a tube hole at the top of the fly's head. Next, the tube was shaped into the fly's body, which was subsequently attached to a flat sheet base that was cut to form fishtail wings. The transverse hole for stringing was then made through the head part of the protruding back. In general, the fly's shape is similar to a stone fly from A-Group Kubaniyeh.¹⁵⁸ A fly with slightly unfolded wings made of steatite comes from the Protodynastic period,¹⁵⁹ and examples made of black stone are known from the A-Group¹⁶⁰ and Naqada II period.¹⁶¹ The Qustul fly's shape resembles

a fly from el-Asasif, Thebes, ascribed to the Second Intermediate Period or early New Kingdom.¹⁶²

Fly amulets made of gold sheet are not known before the Second Intermediate Period.¹⁶³ In Egypt gold flies were associated with military honors, possibly for one's bravery in persistently attacking the enemy.¹⁶⁴ Three fly ornaments were also found in the tomb of Queen Ahhotep,¹⁶⁵ and more of them were found in the tomb of Queen Tawosret,¹⁶⁶ as well as in the fifteenth-century BC tomb of three foreign wives of Thutmose III.¹⁶⁷ Still, the abovementioned A-Group object is the oldest gold fly specimen known from Northeast Africa.

Clay

One clay/pottery bead is a red, very long cylinder core¹⁶⁸ (D 2.8, L 14.5, HD 0.7) (16.6), and another is a red barrel (16.7).

Glazed Steatite

There are two preserved examples of stone objects with traces of glaze. These are an Early A-Group, dark gray **lenticular teardrop** with traces of green glaze (27.7) and a Late A-Group **ring** bead that is white with traces of blue glaze (14.3).

*Faience*¹⁶⁹

Among the faience beads, the white, blue/green, and red/brown glazes dominate. The blue and dark red to brown color of faience cores and glazes of beads can

fig. 13; for lapis flies from the Mesopotamian city of Tello (ca. 2600–2350 BC), see Inizan 2000, pl. 9:1.

¹⁶² Met 26.7.1378, ascribed to the Second Intermediate Period–early New Kingdom.

¹⁶³ For example, gold falcon, lion, and fly amulets come from Buhen; see Randall-MacIver and Woolley 1911, pl. 89 (= Penn E10898B); Andrews 1990, 181, cat. no. 167; Andrews 1994, 62; Met 2012.237.1; BM 65279; MFA 27.917–Semna.

¹⁶⁴ Binder 2008.

¹⁶⁵ Gestoso Singer 2009. These ornaments were given to Ahhotep after her active participation in the war against the Hyksos.

¹⁶⁶ Altenmüller 1983a, 3–11; Altenmüller 1983b, 1–24; Gestoso Singer 2009, 83.

¹⁶⁷ Lilyquist 2004.

¹⁶⁸ A glaze may have been weathered off, but otherwise they are made of dull red pottery; see Andrews 1981, 35, cat. no. 155.

¹⁶⁹ For A-Group faience beads in Nubia, see Hofmann 1967, 96, and references therein; Nordström 1972a, 125; Nordström 1972b, pl. 52; for the occurrence of Early Dynastic faience beads, see Spencer 1980, 75, and references therein.

¹⁵¹ Nordström 1972b, pl. 194:292/11:3; Nordström 2014, 45, object 42:13, pl. 12d, carnelian and faience.

¹⁵² Nordström 1972b, pl. 194:292/1:7, of carnelian. For the closest parallel shape among published pendants, cf. Andrews 1981, cat. no. 203, pl. 5.

¹⁵³ Andrews 1981, cat. no. 162, pl. 18—Abydos, grave 1725, First Dynasty; Reisner 1910, pl. 70a:10; Horn 2014, fig. 4—Abusir el-Melek, grave 8f2, Naqada IID–IIIB.

¹⁵⁴ *Non vidi*.

¹⁵⁵ *Non vidi*.

¹⁵⁶ Junker 1919, 103.

¹⁵⁷ OINE III, 306, pl. 110a, b.

¹⁵⁸ Junker 1919, 106, fig. 58:10, 12.

¹⁵⁹ Brunton 1927, pl. 17, 36P6.

¹⁶⁰ Junker 1919, 106, fig. 58:10, 12.

¹⁶¹ Andrews 1994, 62; for Early Dynastic stone flies from Minshat Ezzat in the northeast Delta, see El-Baghdadi 2003, 149,

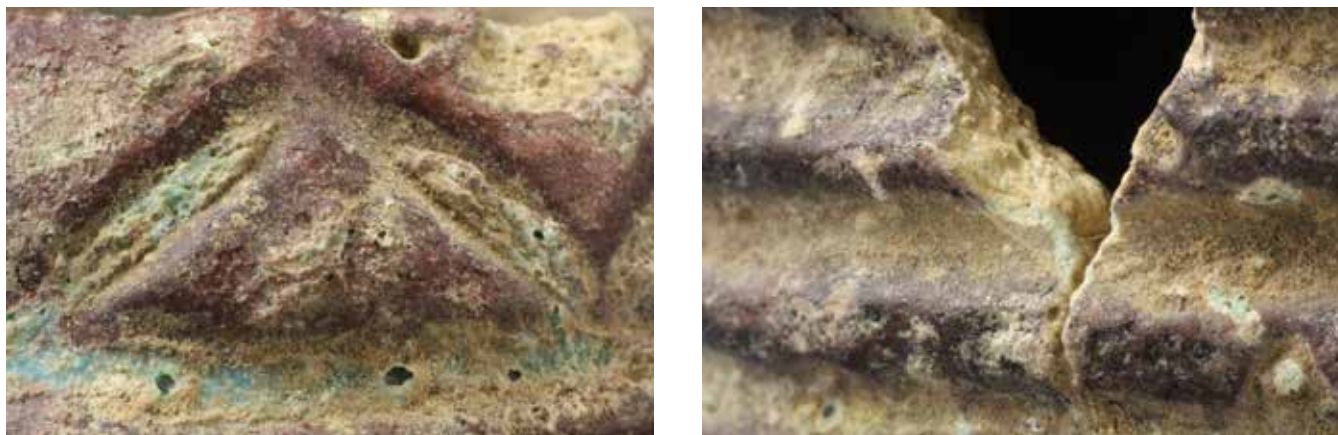


Figure 4. Close-ups of the red surface of a faience miniature vessel and section showing a white core and blue traces, Qustul L 2–28; OIM E24061

also be observed in miniature vessels, with Egyptian parallels, from A-Group Qustul cemetery L (figs. 4, 5).¹⁷⁰ Blue and green glazes were colored by copper. Black/purple/red/brown faience could have been colored by iron, manganese, or copper. However, many early red beads were created due to the accidental, secondary deoxidization of copper (18.21). The brownish, reddish, and grayish color of faience glaze could be the result of weathering or the post-treatment of blue glaze at a higher temperature.¹⁷¹ With the many deposits indicating fire that were noted at the site of Qustul and evidenced in objects from tombs L 1 and L 2 (1.5, 2.2), the latter case is more probable.

In Early A-Group contexts were found crenelated short cylinders of white or gray core and applied blue glaze of exceptional quality and shape (27).

Middle and Late A-Group faience beads are of white, blue and red, and brown color. Their fine cores were usually shaped into tubes, which could be segmented into beads of disc, standard, and very long lengths. Their sides may be parallel (cylinders), convex (barrel and pear-shaped beads), or conical (biconical beads). They are characterized by fine to coarse, usually whitish, cores. Flattened beads have an exceptional fracture, showing gritty cores with white, quartzite(?) inclusions (1.5, 14.2). Two red beads are quite remarkable (16.6–7). Their glaze may be washed out, but otherwise they could be made of dull red pottery (see above under “clay”).¹⁷²

All A-Group faience objects presented below are divided according to shape (cylindrical, barrel,

pear-shaped, biconical, oblate, and crenelated) and subsequently by length (disc, short, standard, and long), size (small to large), and color of core and glaze (white, blue/green, red, and brown).

Faience disc cylinder beads

Faience disc cylinders are of very regular shape and have white cores and traces of white glaze (D 2.9–3.4, L 0.6–1.0, HD 1.2) (26.1) or blue glaze (D 2.3–4.3, L 0.6–1.2, HD 1.0–2.4) (26.2).

Faience short and standard cylinder beads

Short cylinders have white cores and traces of blue to green glaze (D 2.9–3.9, L 1.4–1.9, HD 1.1) (19.11, 12).

Larger short cylinders are of green color (D 7.3, L 1.9–3.0, HD 1.5) (32.2[^]).

Faience short cylinder beads are of greenish/blackish/greenish-to-blackish color (D 2.3, L 1.2, HD 1.1) (43). Short and standard cylinders and oblates can have whitish cores (D 3.3–6.4, L 2.4–4.2, HD 0.9–1.7) (16.9, 18.4, 19, 27), a whitish core with traces of green glaze (D 3.2–4.2, L 1.7–4.0, HD 1.0) (18.23, 19.4), or a reddish/reddish-brown to black glaze (D 2.9–4.6, L 1.5–2.9, HD 1.0–1.3) (18.9, 12, 22, 28, 19.2). One standard cylinder with a whitish glaze is slightly larger (D 4.1, L 3.2, HD 1.0) (2.2).

Faience long and very long cylinder beads

Long faience cylinders can have white glaze (D 3.2–3.8, L 4.1–6.7, HD 0.8–0.9) (18.3, 7, 19.7) or one of brown color¹⁷³ (D 2.9–4.0, L 3.8–6.5, HD 0.7–0.8) (18.11, 19.10).

One long cylinder has a cream core and traces of bluish glaze (D 3.2, L 7.7, HD 1.3) (38.4[^]).

170 OINE III, pl. 61; for a color photo, see Williams 2011, fig. 9.3; for Early Dynastic faience miniature vessel parallels, see UC 13256; UC 27598—Hierakonpolis; UC 45055.

171 Tite and Shortland 2008, 77; Dr. Kyoko Yamahana (personal communication).

172 Andrews 1981, 35, cat. no. 155.

173 For a string of green and brown glazed composition long cylinder beads from Abydos, First Dynasty, see Spencer 1980, cat. no. 541, pl. 60.



Figure 5. Close-ups of the blue glaze of a faience miniature vessel and section showing the white core, Qustul L 5-4; OIM E24062

Faience disc to short barrel beads

Faience disc to short barrels have a blue-green glaze (D 3.0–5.4, L 1.4–2.3, HD 0.9–2.1) (18.26, 25.4, 28, 44.2). Larger short barrels are of green or blue color (D 4.4–5.2, L 2.9–3.5, HD 1.0–1.5) (25.3, 29.6), or they have a white core and greenish glaze (D 4.0–4.8, L 2.8–3.6, HD 0.7–1.3) (18.5, 44.3).

Slightly smaller disc to short barrels with blue glaze (D 2.3–4.1, L 1.2–2.4, HD 1.0–1.5) (32.1[^], 37[^], 38.2[^]) and disc to short barrels with traces of black glaze (D 2.1–2.9, L 0.9–1.4, HD 1.2) (38.3[^]) would rather suit the Middle Nubian faience bead assemblages.

Faience long barrel beads

Faience long barrel beads can be of brownish color¹⁷⁴ (D 3.7–4.1, L 5.0–6.4, HD 1.1) (18.10) and have a red core (D 5.0, L 6.3, HD 1.0) (16.7).¹⁷⁵

Faience pear-shaped beads

Faience pear-shaped beads have a white core and glaze (D 4.9–5.4, L 5.0–5.8, HD 1.2–1.7) (18.6, 18, 19.8).

Faience biconical beads

Long faience bicones have a white core and glaze (D 3.9 or 4.3, L 5.9 or 6.6) (19.9).

Faience oblate beads

Faience oblates can have a whitish core and traces of blue or green glaze (D 4.0–6.4, L 2.9–3.8, HD 0.9–1.0) (16.8, 18.20, 19.1) or a whitish core and traces of red/brown glaze (D 4.3–5.3, L 2.7–3.5, HD 1.0) (18.21, 19.13). Larger faience oblates have a white core and

blue glaze (D 7.4–8.5, L 5.6–6.2, HD 1.6–1.8) (27.10, 41) or a white core and glaze (D 9.5, L 6.6, HD 1.5) (2.1).

Faience oblate beads flattened on one side

Faience oblates, flattened on one side (D 6.2–10.8 × 4.2–5.3, L 6.7–7.3, HD 0.9), have gray gritty cores with white inclusions and traces of a dark glaze (1.5)¹⁷⁶ or blue glaze (14.2).

Faience crenelated beads

Crenelated faience short cylinders have very fine white or gray cores that are glazed blue (D 7.3–11.2, L 3.4–4.1, HD 1.8) (27.9). They have from four to five petals.¹⁷⁷

The glazes of **Post-A-Group** faience beads, on the other hand, are green, blue, and black. They usually have short to very long cylinder, bicone, and barrel shapes.

Faience short to very long cylinder beads

Short faience cylinders are blue glazed (D 5.6 × 5.1, L 2.4, HD 0.9) (40), while short to standard faience cylinders have grayish glaze (D 3.7–4.4, L 2.5–4.1, HD 0.7–1.3) (45.3, 46.4). Very long cylinders have either blue-green glaze (D 4.8, L min. 18.7, HD 1.8) (46.2) or black glaze (D 4.2, L 20.8, HD 1.3) (46.5).

Faience disc to short bicone and barrel beads

Faience disc bicone and barrel beads are covered with green glaze (D 3.8–4.0, L 1.1–1.7, HD 0.9–1.2) (45.2, 46.6, 47.2), and short barrels have a black glaze (D 4.0–6.2, L 2.9–4.6, HD 0.9–1.4) (46.3, 7) or show a gritty core with traces of green-blue glaze (D 8.8, L 3.5, HD 1.2) (49.2).

174 For an anklet of green and dark gray glazed composition barrel, cylinder, and spheroid beads from Faras, see Griffith 1921, 13 (= Spencer 1980, cat. no. 555, pl. 60; Andrews 1981, cat. no. 150, pl. 18).

175 A glaze may be washed out; otherwise they are made of dull red pottery—Andrews 1981, 35, cat. no. 155.

176 These examples were probably overburned in a fire.

177 The four-petal shapes may be the “cruciform transverse section” example found at the A-Group and C-Group site of Gezira Dabarosa. But the bead was considered “probably of C-Group origin”; see Nordström 2014, 46, object 51:1.

Beadwork

In most cases, A-Group beads were uncovered dispersed in the fill of a chamber or grave shaft, and no traces of stringing were preserved. Nevertheless, a string of mollusk shell beads forming a **necklace**¹⁷⁸ was found (9.1) and possibly also **girdles**¹⁷⁹ that were made from perforated *Polinices mammilla* (8, 11.1, 4).¹⁸⁰ Other bead assemblages were recorded as a **bracelet**¹⁸¹ (39.2[^]) and an **anklet**¹⁸² (35[^]), both made from bone beads.

The Post-A-Group burial of T 155, at Adindan, includes ostrich eggshell and faience bead **armlets** in three loops around the right arm (45) and left arm (49), a **necklace** (46), and **anklets** of beads in three loops around both the right leg (48, of ostrich eggshell) and the left leg (47, of ostrich eggshell and faience).

The Bead Owners

Beads and pendants were found associated with individuals of all ages and both sexes. They were found with adults (2, 32[^]–35[^], 37[^]–39[^])—both female¹⁸³ (25)

and possibly male¹⁸⁴ (15, 16)—with children¹⁸⁵ (28, 44), and with an infant¹⁸⁶ (26). In some cases, beads were found in a grave shared by a mature female and a child (41) or by a mature female and male (7).

Due to restricted anthropological data, intentionality in the choice of objects according to color and type among A-Group individuals can be approached only tentatively. Red carnelian, purple garnet, white marine mollusk shells and faience beads, and blue faience beads seem to dominate in the A-Group palette. A string of hundreds of tiny blue beads was uncovered in a child's grave (28), while hundreds of purple garnet beads were associated with an adult female burial (25).¹⁸⁷ A variety of seashells, white pebble pendants, and other beads were picked up from a grave that belonged to an adult, possibly a male individual (15, 16). A bag-shaped pendant made of transparent red chalcidony was found in a grave shared by a mature female and a male (7).¹⁸⁸

In two **Post-A-Group** graves, an adult female was buried with eggshell beads. The overwhelming quantity of ostrich eggshell beads and anklets made of ostrich eggshell in female graves makes the Post-A-Group assemblage more consistent with C-Group or even Pan Grave burials. In addition, black faience became more common in Egypt in the Old Kingdom (2649–2030 BC).¹⁸⁹ Black short barrel (46.3, 7)¹⁹⁰ and long cylinder (46.5)¹⁹¹ faience beads can be compared with types known from Pan Grave graves.

178 For A-Group necklaces made of beads in diverse materials, see Hofmann 1967, 91, and references therein; cf. nn. 183, 185.

179 For A-Group girdles, see Hofmann 1967, 92–93, and references therein.

180 For a girdle made from *Polinices* found on Mograt Island, see Weschenfelder and Rees 2014, 151–52, fig. 9.

181 For A-Group bead bracelets, see Hofmann 1967, 91, described as “Perlenketten finden sich jedoch auch an Handgelenken,” with the references given there; for a leather thong string of *Natica melanistoma* (= *Polinices* sp.) shells on the skeleton's right wrist, on a leather thong found with an A-Group male burial, see Firth 1912, 193, grave 686.7; cf. nn. 183, 185, 186.

182 For A-Group anklets, see Hofmann 1967, 91–92—“Perlenketten finden sich jedoch auch an Fußknöcheln,” “einer Kette geschmückt”—and references therein; cf. n. 183.

183 For a necklace of ring faience and disc shell beads in a double row, found with an adult female, see Nordström 1972a, 170–71, 187/2:12; for a necklace of ivory and seashell pendants found with an adult female, see *ibid.*, 182, 352/53b:5a–d; for a necklace of carnelian, rock crystal, chalcidony, and faience beads found with an adult female, see *ibid.*, 191, 277/1:24; for a necklace of gold beads found with an adult female, see *ibid.*, 202, 277/34BI:13; for shell, carnelian, faience, and mollusk shell beads found at the pelvis of an adult female, see *ibid.*, 187/2:13; for carnelian and faience beads found around the left wrist of an adult female, see *ibid.*, 195, 277/16B:9; for faience, carnelian, and shell beads scattered over the right hand, see *ibid.*, 202, 277/34BI:14; for faience, carnelian, and other stone beads found around the left ankle of a female, see *ibid.*, 202, 277/34BI:12; for ostrich eggshell beads found in the grave of an adult female, see *ibid.*, 208, 277/51:1; for stone and bone drop pendants in an adult female grave, see *ibid.*, 209, 277/52:1.

184 For ring-shaped beads of a white, hard rock mineral found around the right forearm in an adult male burial, see Nordström 1972a, 194, 277/13:1.

185 For faience beads in a child burial, see *ibid.*, 153, 292/5:1; for faience, stone, shell, and *Natica* pendants in a child burial, see *ibid.*, 176–77, 332/24:2, 3; for a necklace of faience, ivory, and hard rock beads, see *ibid.*, 194, 227/11:1; for an ivory bead at the left hand, see *ibid.*, 277/1:2; for a white, hard rock mineral bead found at the legs of a child, see *ibid.*, 205, 277/40:4; for a tubular bone bead found at the skull of a child, see *ibid.*, 212, 277/66:7; for hundreds of tiny blue faience beads found in later Kerma infants' burials, see Then-Obluska 2014.

186 For eggshell disc beads found at the wrists of a newborn child, see Nordström 1972a, 210, 277/59:3.

187 For a diadem of garnet, carnelian, turquoise, and gold beads found in an adult female burial of the Naqada II period at Abydos, see Andrews 1990, 43, cat. no. 31 (= BM 37532).

188 For bag-shaped pendants associated with adult skeletons, see Nordström 1972a, 152, 292/1:7a; 153, 292/11:3.

189 Kaczmarczyk and Vandiver 2008, 59.

190 Cf. the chapter on the Middle Nubian period and cat. no. 292.2, 11.

191 Brunton 1937, 115 (= Andrews 1981, cat. no. 596; BM EA63193).

Catalog



1

Qustul L 1–11a–d: Beads and pendants from burial chamber and fill (no body recorded); OIM E44499, OIM E44500

Late A-Group (Naqada III)

OIM E44499

1. Resin, drilled from both ends, teardrop pendant, black and reddish (1 and 1 broken), Th 7.4 × 6.1, H 11.0; 13.0, HD 1.7

2. Resin, drilled from both ends, bag-shaped pendant, black and reddish (1 and 1 broken), Th 8.4 × 7.3, H 13.0, HD 1.4

Bibliography: OINE III, 198, fig. 60h



OIM E44500

3. *Lambis truncata* shell, cut, drilled from both ends, short barrel, whitish, greenish tinged (54), D 3.0, L 1.3–1.9, HD 0.9

4. Gold sheet, folded, long tubular (3), D 1.6, L 3.5, HD 0.8

5. Faience, barrel flattened on one side, bluish glaze (10), D 6.2 × 4.2, L 6.7, HD 0.9

Bibliography: OINE III, 198, fig. 60g, i



2

Qustul L 2—11: Beads from fill of chamber (A—adult female, B—adult, ca. 50 years old, skull only);

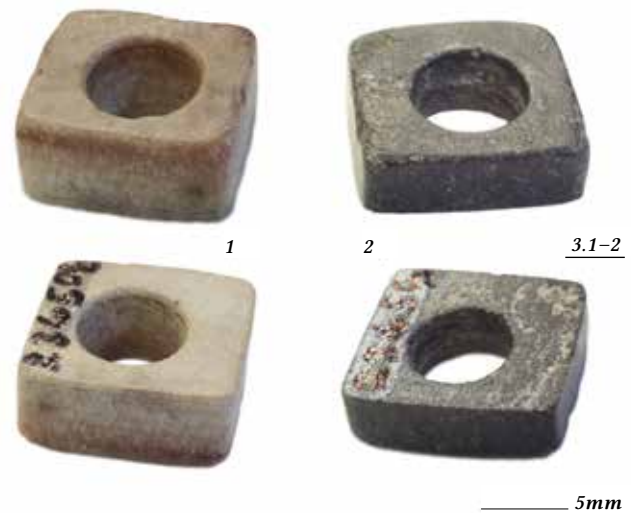
OIM E24866

Late A-Group (Naqada III)

1. Faience, oblate, white core and glaze (1), D 9.5, L 6.6, HD 1.5

2. Faience, short cylinder, greenish glaze (1), D 4.1, L 3.2, HD 1.0

Bibliography: OINE III, 204



3

Qustul L 5—5: Beads from chamber (intrusive burial noted); OIM E23650A–B

A-Group

OIM E23650A

1. Microcrystalline limestone, short cuboid, cream (1), Th 14.0 × 12.4, L 6.6, HD 6.8

OIM E23650B

2. Steatite, short cuboid, black (1), Th 14.0 × 12.8, L 4.8, HD 6.8

Bibliography: OINE III, 228



4

Qustul L 8—3a–b: Beads from shaft near blocking (intrusive burial recorded); OIM E23548B–C, E

Late A-Group (Naqada III)

OIM E23548B

1. Carnelian, short barrel, drilled from both ends, red (2), D 4.0; 5.2, L 2.2; 2.8, HD 2.3–1.1–2.3

OIM E23548C

2. *Lambis* sp. shell, cut, barrel, whitish (1), D 9.5, L 8.2, HD 3.0

OIM E23548E

3. *Nassa* shell, body whorl perforated, whitish (1 broken), L 9.2 × 6.4

Bibliography: OINE III, 236, fig. 87b



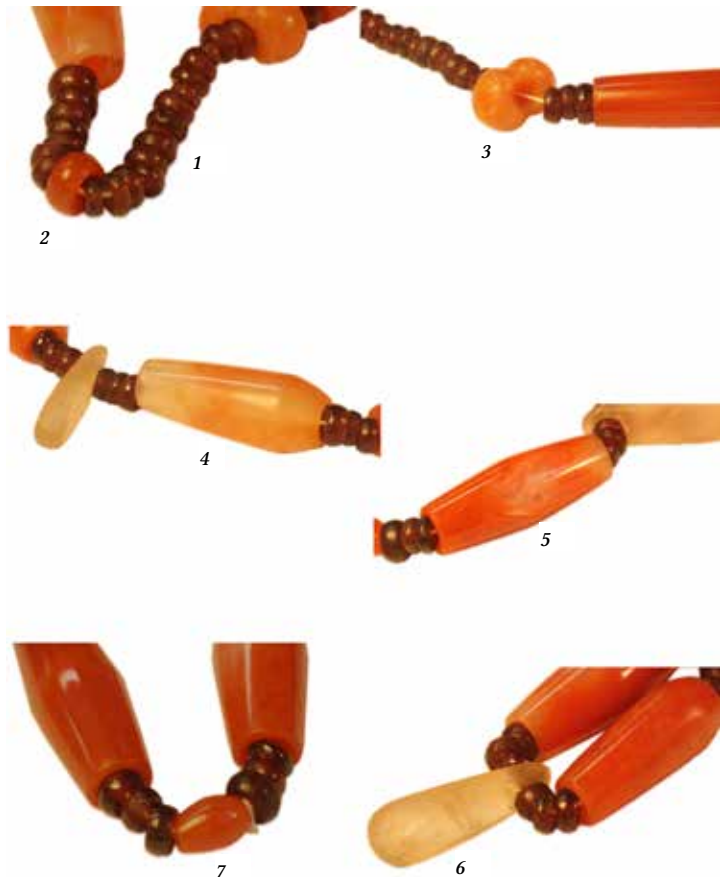


5.1-7

5

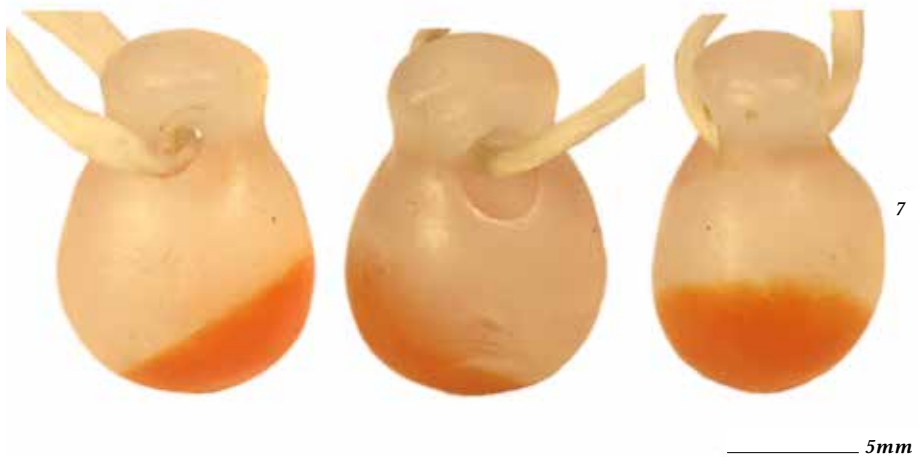
Qustul L 11-8a-b, 11a-f: Beads from fill of chamber (no body recorded); OIM E23720
Late A-Group (Naqada III)

1. Garnet, perforated from both ends, short barrel/truncated bicone, purple (104), D 2.4-4.9, L 1.1-2.2, HD 1.8-1.0-1.8
 2. Carnelian, perforated from both ends, short barrel, red (6), D 5.3-6.0, L 2.6-2.9, HD 2.0-1.3-2.0
 3. Carnelian, drilled from both ends, bilobate, light red to colorless (2), Th 10.2 × 6.9, L 4.7; 5.0, HD 3.3-1.2-3.3
 4. Carnelian, drilled from both ends, long pear-shaped, light red to colorless (9), D 6.6-9.1, L 16.1-26.4, HD 2.8-3.3—double parallel
 5. Carnelian, very long bicone, light red to colorless (2), D 8.6; 8.7, L 23.3; 23.8, HD 3.9—double parallel
 6. Chalcedony, drilled from both ends, long teardrop pendant, transparent (4), Th 4.3-7.1, W 5.8-8.0, H 16.2-19.7, HD 2.9-0.8-2.9
 7. Carnelian, drilled from both ends, very long barrel, red (1), D 3.0, L 9.0, HD 1.1-2.4
 8. Gold sheet, very long bicone (2), D ca. 10.0, L ca. 25.0 (B 1375A; Cairo JdE 89995)—*non vidi*
- Bibliography: OINE III, 269, 272, fig. 111c, pls. 56a, c, e, l, r, 110c





6
 Qustul L 13—3: Beads (no body recorded); OIM E31188
 Late A-Group (Naqada III)
Lambis truncata shell, barrel, whitish (2), D 7.7; 8.8, L 4.1; 5.3, HD 2.9
 Bibliography: OINE III, 291



7
 Qustul L 15—25: Bag-shaped pendant from body of A or B? (A—mature female, B—mature male); OIM E23664
 Late A-Group (Naqada III)
 Chalcedony, drilled from both ends, bag-shaped pendant, orange/translucent (1),
 Th 8.1 × 7.4, H 11.6, HD 1.8–1.0–1.8
 Bibliography: OINE III, 299–303, fig. 129c, pl. 56f



8

8

Qustul L 17—2: Shells possibly from a girdle (no body recorded);

OIM E23672B

Late A-Group (Naqada III)

Polinices sp. shells, perforated just below apex, whitish (22—many broken),

Th 7.6–14.5, W 11.2–21.0, L 14.0–23.7, HD 2.2–4.7

Bibliography: OINE III, 304, pl. 55e



9

Qustul L 17–10–11a: Shell bead necklace and stone beads; OIM E23663, OIM E23663A–D
Late A-Group (Naqada III)
OIM E23663

1. *Lambis truncata* shell, short and standard barrel (40),
D 12.0–18.4, L 6.3–17.8, HD 3.9–4.3—double parallel,
some hourglass







9 (continued)

OIM E23663B

5. Carnelian, short barrel, truncated bicone, cylinder, yellow to red (ca. 169), D 3.4–4.5, L 1.8–1.9, HD 2.1–1.0–2.1—hourglass

6. Rock crystal, teardrop pendants (3), Th 8.7 × 9.3–9.5–9.9, H 12.0–12.6, HD 3.1–1.0–3.1—hourglass

9.5-6



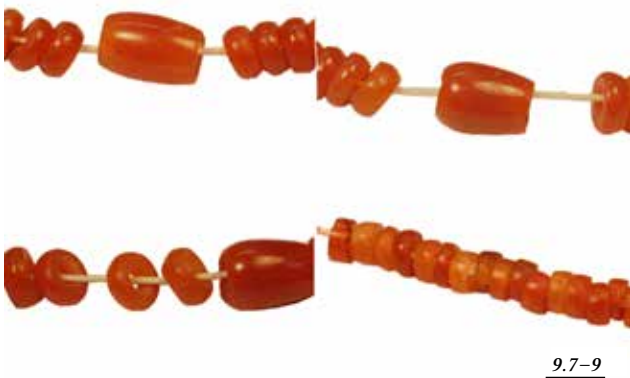
9 (continued)

OIM E23663C

7. Carnelian, drilled from both ends, short barrel and cylinder, light red (282), D 2.9-4.5, L 1.1-1.8, HD 0.6-0.8

8. Carnelian, drilled from both ends, long barrel, light red (2), D 4.9, L 7.2, HD 2.3

9. Carnelian, drilled from both ends, pendant with globular body and double-segmented neck, red (1), Th 12.2 × 12.0, H 16.9, HD 2.6





9 (continued)

OIM E23663D

10. Carnelian, short barrel (274), D 3.7–4.5, L 1.7–1.9, HD 1.8–1.1–1.8—hourglass

11. Garnet, short barrel (46), D 3.8–4.3, L 1.9–2.2, HD 1.4–1.0–1.4—hourglass

12. Carnelian, long barrel (2), D 6.0; 6.1, L 8.4; 9.5, HD 2.4–ca. 1.0–2.4—hourglass

13. Carnelian, long barrel/bicone (2), D 6.7, L 12.0; 12.2, HD 2.9–ca. 1.0–2.9—double parallel

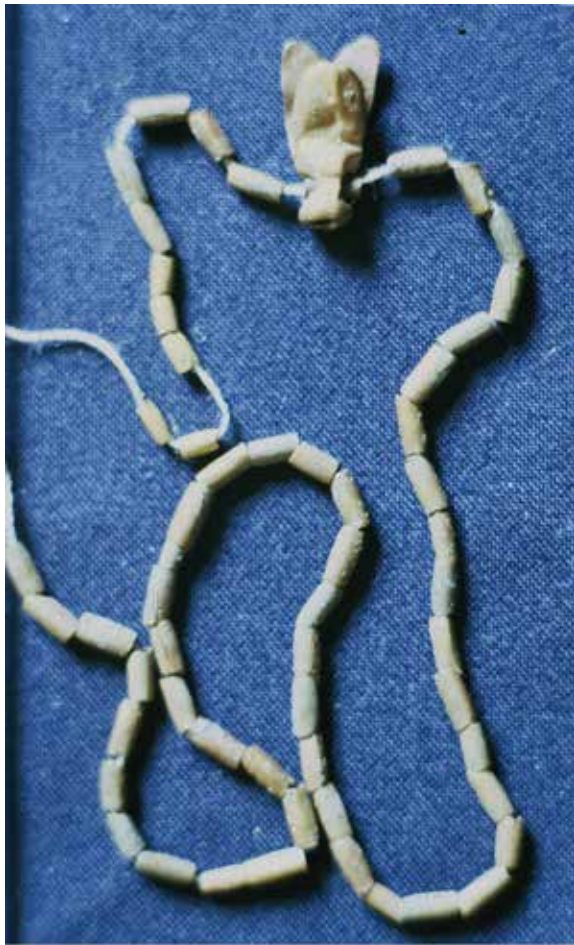
14. Carnelian, long bag-shaped pendant with tapered base (1), body: Th 9.9 × 10.1, H 27.9, HD 2.8–ca. 1.2–2.8—hourglass; head: D 9.6 × 9.8

15. Carnelian, pendant with globular body and double-segmented neck, (2), Th 11.7; 12.0, H 16.4; 17.0, HD 2.4–1.0–2.4

Bibliography: OINE III, 304–6, fig.133e, pls. 56d, g–j, q, 57a, e, 58b



9 (continued)



10mm



10mm



10mm

10*

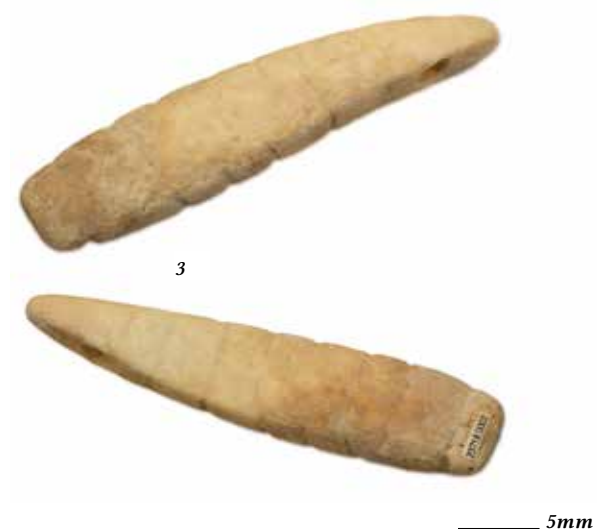
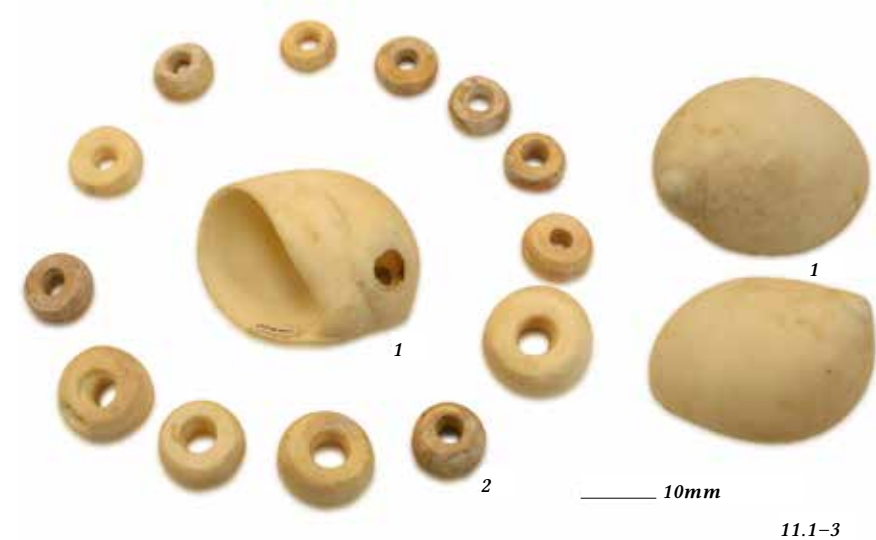
Qustul L 17–11b: Gold fly and beads B 1314/Cairo JdE 89993—*non vidi*

Late A-Group (Naqada III)

1. Gold fly (1), Th ca. 4.0 × 6.0

2. Gold sheet, folded, long cylinder/barrel (56), D ca. 1.5, L ca. 3.5—assessment based on published photo in OINE III, pl. 110 and photos by B. B. Williams (courtesy of the Egyptian Museum in Cairo)

Bibliography: Seele 1974, 33; OINE III, 306, pl. 110a, b



11

Qustul L 17–14g, 28: Pile of shell ornaments
“near the pelvis of the body as girdle or
belt”; OIM E23718, OIM E23718A–B, E,
OIM E24155A–P

Late A-Group (Naqada III)

OIM E23718

1. *Polinices* sp. shell, white (1), Th 16.0,
W 23.5, L 29.3, HD 3.9

2. *Lambis truncata* shell beads, short barrel,
white (13), D 8.6–14.2, L 3.4–9.6, HD 3.0–5.4
3. Marine mollusk shell pendant, long, axe-
shaped with nine grooves (1), Th 6.3, W 12.7,
H 57.2

4. *Polinices* sp. shell, white (25), Th 5.9–15.2,
W 8.4–22.6, L 9.4–31.4, HD ca. 2.7—body
whorl perforated



11 (continued)

OIM E23718A-B

5. *Cypraea annulus* shell, perforated (2), Th 10.7, W 15.8, L 21.7, HD ca. 4.0

6. *Cypraea annulus* shell, dorsal part removed (1), Th 6.6, W 15.6, L 23.1, HD 16.3 × 10.8

7. Marine mollusk shell, round plaques (4), D 16.0–17.7, H 4.3, HD 2.0

8. *Nassa* sp. shell, sliced (2)

9. Marine mollusk shell, trapezoid fragment, drilled from one end (1), Th 2.6, H 25.5, W 16.4, HD 3.7–1.0

10. *Nassa* sp. shell, body whorl cut (1, broken), Th 8.4, W 10.0, L 12.4, HD ca. 3.7

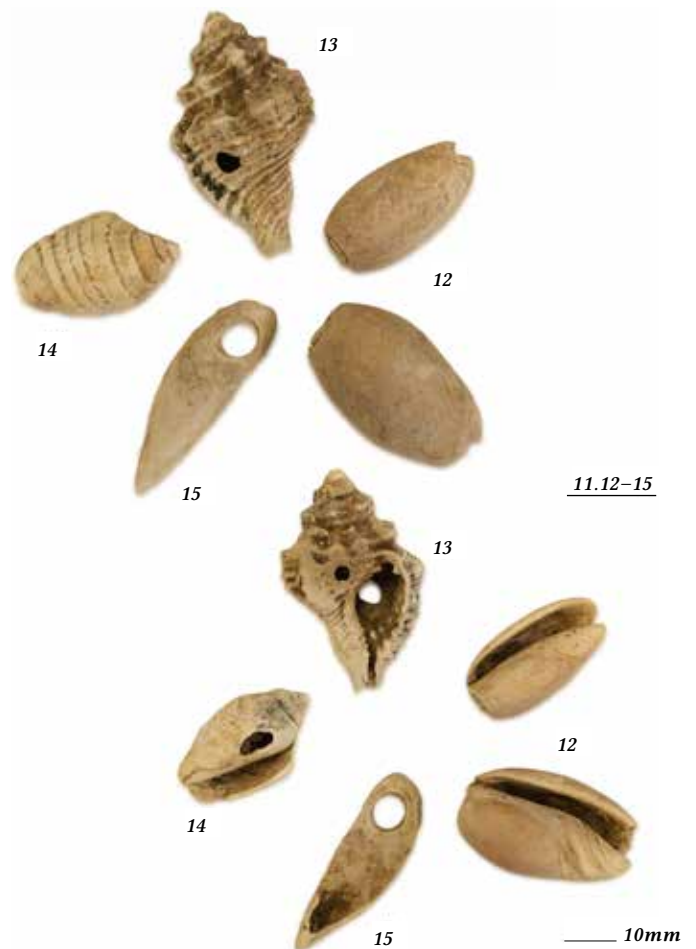
11. *Conus taeniatus* shell, apex removed (1), Th 8.5, W 9.9, L 13.0, HD 2.2

12. *Oliva* shell (2), Th 12.1; 16.2, W 15.9; 21.0, L 30.4; 34.4, HD 3.7; 2.9

13. *Fusinus* sp. shell (1), Th 22.8, W 27.0, L 44.4, HD 3.5

14. *Conomurex fasciatus* shell (1), Th 13.9, W 18.5, L 30.6, HD 6.5 × 3.5

15. Marine mollusk shell pendant (1), Th 6.7, W 13.2, H 40.8, HD 6.5





11.16

11 (continued)

OIM E23718A

16. *Lambis truncata*
shell, barrel and
short cylinder (260),
D 5.3–14.1, L 2.3–9.5,
HD 2.0–3.5



17

11 (continued)

OIM E23718E

17. *Lambis truncata* shell, barrel and short
cylinder (8), D 6.7–13.6, L 3.3–9.8, HD ca. 2.1

18. Carnelian, drilled from both ends, barrel,
red (1), D 12.0, L 7.3, HD 7.2–1.8–7.2—hourglass

19. Carnelian, disc cylinder, red (1), D 3.6, L 1.8,
HD 1.5–0.9–1.5—hourglass

11.17–19

_____ 5mm



18

19

_____ 5mm



20



21

11.20–22, 24

22



24

10mm



11.23

10mm

**11 (continued)**

OIM E24155A

20. Marine mollusk shell fragment pendant, perforated from both ends (1), W 17.8, L 34.0, Th 4.2, HD 4.9–2.9 (4.370 g)

OIM E24155B

21. Marine mollusk shell fragment pendant, perforated from both ends (1), W 33.0, L 51.6, Th 5.0, HD 4.2–2.0–4.2 (12.341 g)

OIM E24155C

22. Marine mollusk shell fragments, perforated from both ends (1), W 51.0, L 55.0, Th 8.4, HD 7.4–2.8 (22.733 g)

OIM E24155D–O

23. Marine mollusk shell fragments, perforated from both ends (12), W 19.2–41.2, L 35.5–56.5, Th 1.3–5.0, HD 5.7–2.5

OIM E24155P

24. *Conus* sp. shell, cone perforated, second perforation at spire accidental (1), D 12.3, L 19.7, HD 1.7

Bibliography: OINE III, 306, fig. 134m, n, pl. 55a, b, c



12.1

10mm

12

Qustul L 19—11: Beads from fill of chamber (no body recorded); OIM E31564

Late A-Group (Naqada III)

1. Carnelian, drilled from both ends, very long pear-shaped, red/orange (1), D 8.3 × 8.5, L 23.8, HD 2.5—double parallel

2. Shell—*non vidi*

Bibliography: OINE III, 313–14



13

Qustul L 19—19a–c: Beads and pendants from fill of chamber; OIM E31205

A-Group, Late A-Group (Naqada III)

1. *Polinices* sp. shell, perforation on the last whorl of the spire, whitish (1), Th 10.7, L 15.3 × 19.5, HD 4.2 × 3.0

2. Carnelian, drilled from both ends, short barrel, orange (4), D 4.9, L 2.7–3.0, HD 2.3–0.8–2.3

3. Carnelian, drilled from both ends, short barrel, orange (1), D 5.9, L 3.4, HD 2.5–1.2–2.5

4. Carnelian, drilled from both ends, very long barrel, red (1), D 6.8, L 15.2, HD 2.7

Bibliography: OINE III, 313–14, fig. 141c, e

14

Qustul L 19 or L 11(?): OIM E31565A, D, E
A-Group, Late A-Group (Naqada III)

OIM E31565A

1. Bone, very long tubular whitish (1),
D 6.6, L 16.3, HD 3.5

OIM E31565E

2. Faience, tabular, traces of glaze(?) (1),
D 10.8 × 5.3, L 7.3, HD 0.93. Steatite, short ring, whitish core, traces
of blue glaze (0.5), D 7.8, L 4.4, HD 1.34. *Lambis* sp. shell, barrel, white (0.5),
D 11.1, L 10.5, HD 2.3

OIM E31565D

5. Bone, very long cylinder, brown (1),
D 12.0 × 10.5, L 31.6, HD 2.9

Bibliography: —

15*

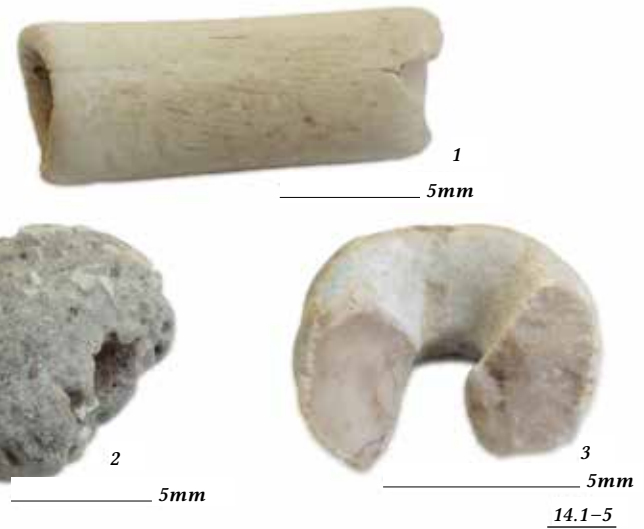
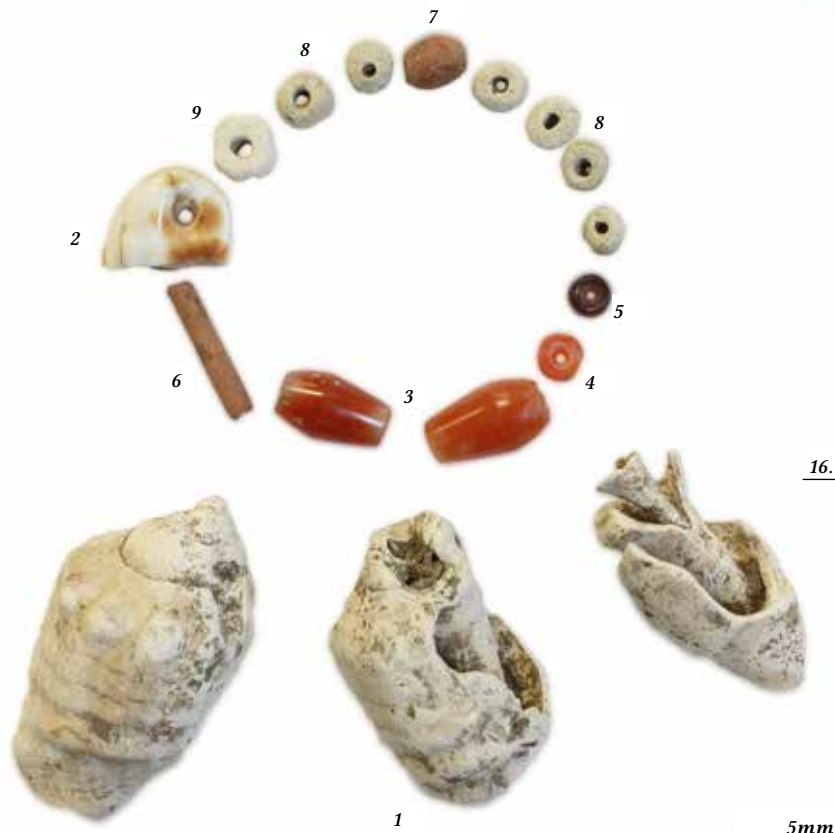
Qustul L 22—3: Shell and beads at blocking
in trench (adult, possibly male), sample—
non vidi

A-Group, Late A-Group (Naqada III)

1. Shell beads

2. Shell

Bibliography: OINE III, 334



16

Qustul L 22—16a-g: Beads and
pendants at blocking in trench (adult,
possibly male); OIM E31360

A-Group, Late A-Group (Naqada III)

1. *Strombus faciatu*s shell, body whorl
cut (3—broken, eroded), Th 21.2 ×
15.0, L 34.1, HD 5.5 × 3.7—perforation
might be accidental2. Pebble, drilled from both ends,
irregular pendant (1—fragment),
Th 5.5, W 13.1, HD 2.1—1.1—2.13. Carnelian, drilled from both ends,
long pear-shaped, orange/red (2),
D 6.7; 7.0, L 10.8; 11.7, HD 2.3; 2.54. Carnelian, perforated from both
ends, short barrel, red (1), D 4.8, L 2.2,
HD 1.7—1.0—1.75. Garnet, perforated from both ends,
short barrel, purple (1), D 4.3, L 2.4,
HD 2.2—1.0—2.2

16.1-9

5mm

16 (*continued*)

6. Clay, very long cylinder, red core (1), D 2.8, L 14.5, HD 0.7

7. Clay, long barrel, red core (1), D 5.0, L 6.3, HD 1.0

8. Faience, oblate, whitish core, traces of greenish glaze (6), D 4.0–6.4, L 2.9–3.6, HD 0.9

9. Faience, short cylinder, whitish core (1—broken), D 6.4, L 3.4, HD 0.9

Bibliography: OINE III, 334, fig. 154g

17

Qustul L 23–31a–c: Beads from fill of chamber (no body recorded); OIM E30433 A-Group, Late A-Group (Naqada III)

1. Rock crystal, drilled from both ends, short barrel, transparent (2), D 4.1; 4.5, L 1.7; 1.8, HD 1.7–0.9–1.7

2. Gold sheet, long barrel (1 and fragments), D ca. 5.0, L 9.0—B 1375b (Cairo *JdE* 89995)—crushed gold cylinder or bicone—*non vidi*

Bibliography: OINE III, 344, fig. 160h, pl. 110d





18

Qustul L 24—8a—k, 20, 29: Beads from fill of chamber (no body recorded); OIM E23730A—D, N—P, S—T
A-Group, Late A-Group (Naqada III)

OIM E23730A

1. Garnet, perforated from both ends, short barrel, purple (91), D 3.0–3.9, L 1.5–2.0, HD 1.5–0.8–1.5
2. Rock crystal, drilled from both ends, short barrel, transparent (2), D 4.4; 4.3, L 2.0; 1.8, HD 1.8–0.8–1.8
3. Faience, long cylinder white core and glaze (17), D 3.2–3.7, L 4.5–6.6, HD 0.8
4. Faience, short cylinder, white core and glaze (3—one broken), D 3.3–3.4, L 2.4, HD 1.3



18 (continued)

OIM E23730B

5. Faience, short barrel, white core, traces of greenish glaze (69), D ca. 4.0–4.7, L 2.8, HD 0.7

6. Faience, pear-shaped, white core and glaze (2), D 5.2, L 5.5, HD 1.7

7. Faience, long cylinder, white core and glaze (39), D 2.9–3.8, L 4.1–6.7, HD 0.9

8. Faience, long barrel, white core and glaze (20), D 3.7–4.5, L 4.8–5.9, HD 1.0

9. Faience, short cylinder, brownish core, traces of reddish to black glaze (103), D 4.3, L 1.8–3.2, HD 1.3

10. Faience, long barrel, brownish core, traces of brown glaze (7), D 3.7–4.1, L 5.0–6.4, HD 1.1

11. Faience, long cylinder, brownish core, traces of brown glaze (12), D 2.9–3.2, L 4.3–6.5, HD 0.7

12. Faience, short cylinder, brownish core, traces of brown glaze (1), D 3.4, L 1.5, HD 1.3



18 (continued)

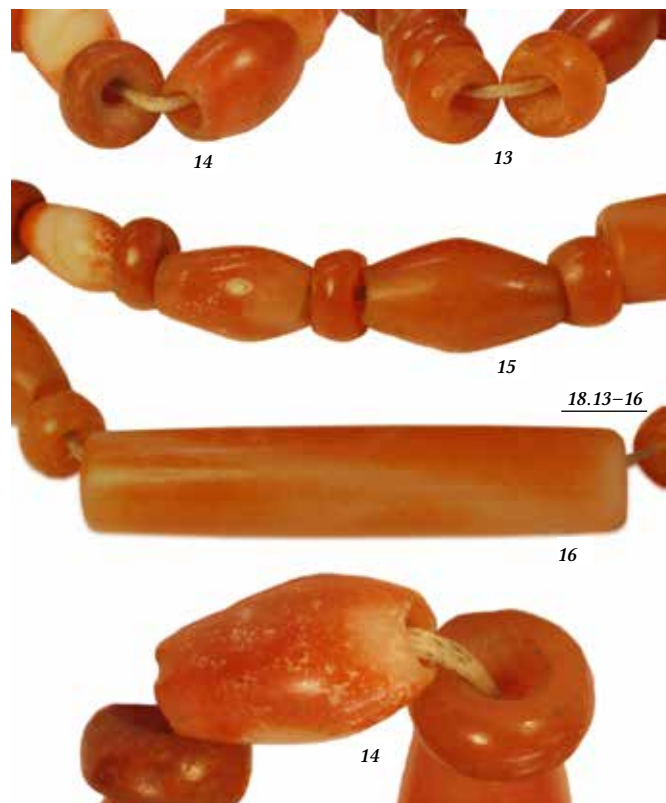
OIM E23730C

13. Carnelian, perforated from both ends, short barrel, red/orange to white (295), D 3.0–5.9, L 1.2–3.6, HD ca. 2.0–1.0–2.0

14. Carnelian, drilled from both ends, long barrel/pear-shaped, red/orange to white (8), D 5.0–7.7, L 7.5–13.5, HD 1.5–2.4—double parallel

15. Carnelian, drilled from both ends, long bicone, red/orange to white (1), D 7.5, L 13.5, HD 1.5–2.4—double parallel

16. Agate/carnelian, drilled from both ends, very long cylinder, orange to white (1), D 6.8, L 33.5, HD 3.3—double parallel



18.17–23**18 (continued)**

OIM E23730D

17. Carnelian, perforated from both ends, short barrel, orange to white (1), D 4.9, L 2.9, HD 1.8–0.8–1.8

18. Faience, pear-shaped, white core and glaze (1), D 5.2, L 5.0, HD 1.3

19. Faience, hexagonal short cylinder, white core and glaze (.5), D 6.4, L 4.2, HD 1.7

20. Faience, oblate, white core, traces of greenish and bluish glaze (3), D 4.8–5.3, L 3.1–3.8, HD 1.0

21. Faience, oblate, reddish core and glaze (3), D 4.6–5.3, L 2.7–3.5, HD 1.0

22. Faience, short cylinder, blackish core and glaze (2), D 4.1–4.4, L 3.3, HD 1.0

23. Faience, short cylinder, whitish core, traces of blue glaze (2), D 3.3–3.8, L 2.2, HD 1.1

Tooth fragments

OIM E23730N

24a. Carnelian cobble chip (1)

OIM E23730O

24b. Carnelian, worked fragment, orange (1–broken), Th 9.6 × 15.8 × 3.6

OIM E23730P

25. Carnelian, long cylinder, red (1–broken), D 6.9, L 12.5 (preserved), HD 2.7–double parallel



24a

18.24–25

24b



25



18.26–29

18 (*continued*)

OIM E23730S

26. Faience, ring, blue (2–fragments),
D 3.4; 3.8, L 1.6, HD 0.9

27. Faience, short cylinder, white
(1–fragment), D ca. 3.6, L 2.5, HD —
OIM E23730T

28. Faience, standard cylinder,
brownish (1), D 4.0, L 3.3, HD 1.1

29. Glass, drawn, opaque yellow
fragment—Meroitic object

Bibliography: OINE III, 357–58,
fig. 171c, 1, pls. 56b, k, m–p, s–v, 58a,
67b–d, f, g

19

Qustul L 24–20: Beads from fill of
chamber; OIM E31550A–E

A-Group, Late A-Group (Naqada III)

OIM E31550A

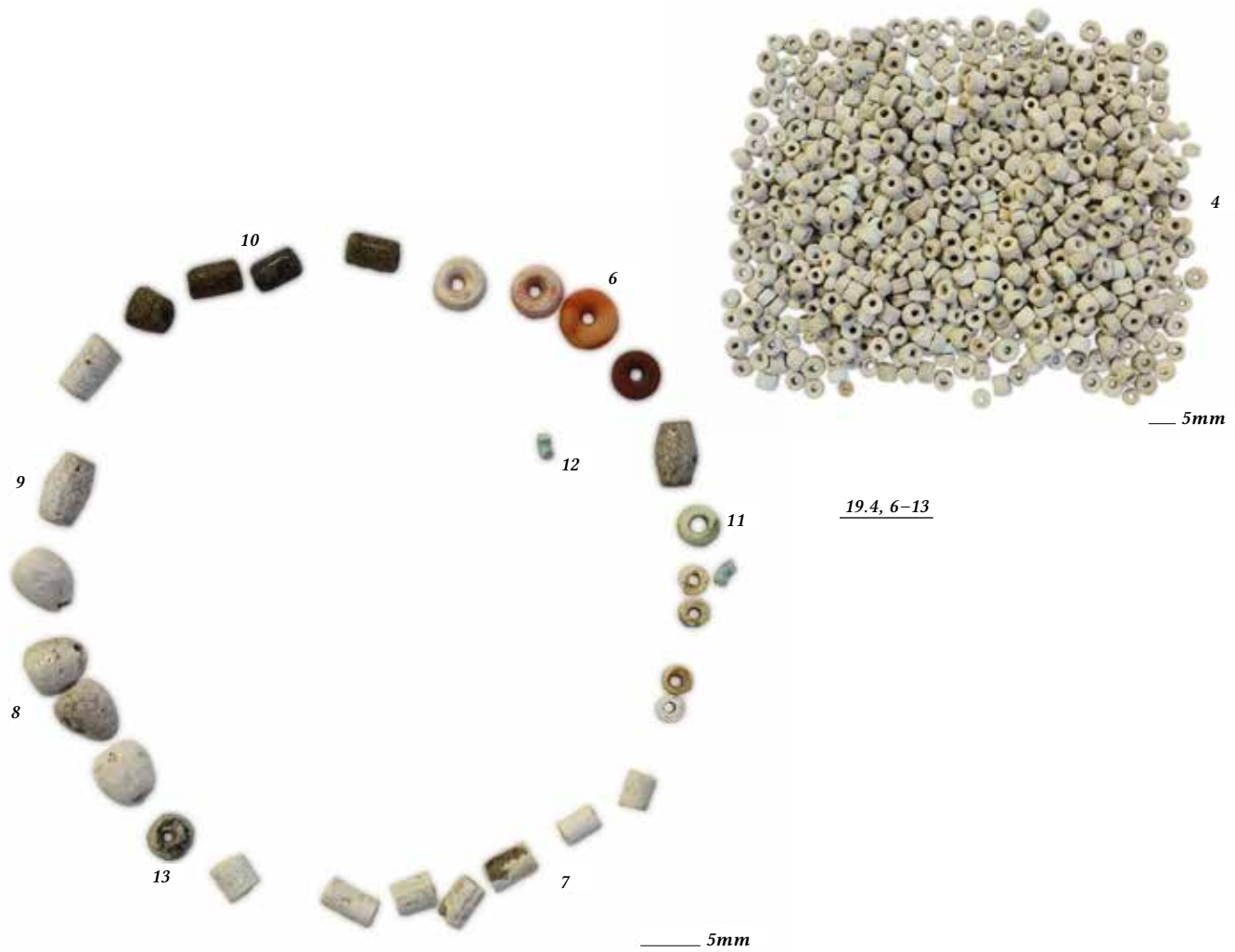
1. Faience, oblate, whitish and grayish
cores, traces of green and blue glaze (251),
D 4.1–5.7, L 2.4–3.9, HD 1.0–1.1

OIM E31550B

2. Faience, short and standard oblate,
brownish core, brownish/blackish glaze
(52), D 2.9–4.6, L 1.5–2.9, HD 1.0–1.3

3. Garnet, perforated from both ends,
short barrel, dark purple (1), D 3.4, L 1.9,
HD 1.7–0.9–1.7





19 (continued)

OIM E31550C

4. Faience, disc to standard cylinder, whitish cores, traces of green glaze (733), D 3.2–4.2, L 1.7–4.0, HD 1.0
OIM E31550D

5. Dozens of tiny whitish faience fragments

OIM E31550E (continuation of cat. no. 18, OIM 23730)

6. Agate/carnelian, drilled from both ends, short barrel, whitish orange, orange, dark red (4), D 4.6–5.6, L 2.1–2.6, HD 2.1–1.0–2.1

7. Faience, standard and long cylinder, white core and glaze (12), D 2.5–3.5, L 1.8–5.7, HD 0.9

8. Faience, pear-shaped, white core and glaze (4), D 4.9–5.4, L 5.6–5.8, HD 1.2

9. Faience, long bicone, brownish and white core and glaze with whitish cover (2), D 3.9; 4.3, L 5.9; 6.6

10. Faience, long cylinder, brown core and glaze (4), D 3.0–4.0, L 3.8–5.0, HD 0.8

11. Faience, short cylinder, white core, traces of greenish glaze (1), D 3.9, L 1.9, HD 1.1

12. Faience, short cylinder, white core, traces of bluish glaze (2—fragments), D 2.9, L 1.4

13. Faience, oblate, grayish (1), D 4.3, L 2.9, HD 1.0

Bibliography: OINE III, 359





20

Qustul L 24—50: Bead from fill of chamber; OIM E23731
A-Group, Late A-Group (Naqada III)
Gold sheet, very long cylinder (1), D 6.8, L 32.7, HD 5.3
Bibliography: OINE III, 363, pl. 58c



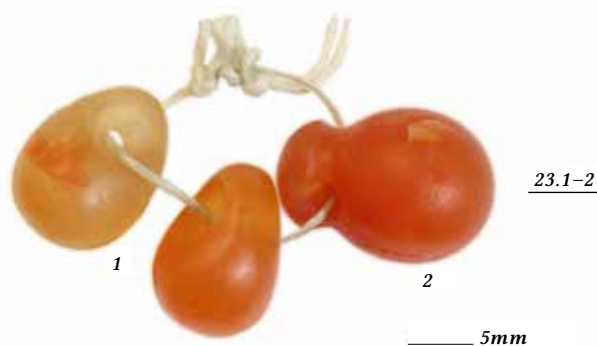
21

Qustul L 29(?): Bead; OIM E31560
A-Group, Early A-Group
1. Carnelian, perforated from both ends, short barrel, red (1), D 5.0, L 2.9, HD 2.2–1.4–2.2
2. Carnelian, drilled from both ends, long barrel, red (1), D 4.5, L 5.7, HD 1.3—double parallel
Bibliography: —



22

Qustul L 33—1, 4: Bead from fill of chamber (animal, bovine bone); OIM E30431C
A-Group, Late A-Group (Naqada III)
Carnelian, drilled from both ends, long barrel/bicone, red (1), D 6.9, L 15.5, HD 2.2
Bibliography: OINE III, 386, fig. 189d



23

Qustul S 1—1: Pendants from A-Group deposit pit; OIM E21380
A-Group, Late A-Group (Naqada III)
1. Carnelian/chalcedony, drilled from both ends, teardrop, orange to transparent (2), Th 10.1 × 8.7, L 13.5, HD 4.8–1.0–5.2
2. Carnelian, drilled from both ends, bag-shaped, light red (1), Th 11.5 × 11.3, L 16.2, HD 2.1–1.0–2.1
Bibliography: OINE IV, 38, table 14; 99



24

Qustul W 11–23: Bead in shaft (no body recorded);
OIM E23867

A-Group, Transition to Late A-Group

Quartz, short barrel, white (59), D 7.3–8.8, L 3.0–4.4,
HD 3.1–2.4

Bibliography: OINE IV, 38, table 14; 63, fig. 27h, pl. 37m



24

— 5mm



25.1–4

— 5mm

25

Qustul W 19–9: Beads from shaft (adult female); OIM E23501

A-Group, Late A-Group (Naqada III)

1. Carnelian, perforated from both ends, short barrel, light red (24), D 3.2–4.7, L 1.4–2.8,
HD 1.9–1.0–1.9

2. Garnet, perforated from both ends, short barrel, purple (322), D 3.0–4.0, L 1.7–2.3,
HD 1.7–0.9–1.7

3. Faience, short barrel, light green (45), D 4.4–5.2, L 3.5, HD 1.5

4. Faience, disc cylinder, blue and green (9), D 3.6, L 1.4, HD 1.3

Bibliography: OINE IV, 38, table 14; 70, fig. 34d, pls. 37k–l, 37o, 41e



26

Qustul W 20—1: Beads from shaft (infant, less than one year old); OIM E23860
 “Possibly A-Group,” here dated to the New Kingdom

1. Faience, disc cylinder, whitish core, traces of glaze (117), D 2.9–3.4, L 0.6–1.0, HD 1.2

2. Faience, disc cylinder, blue glaze (6), D 2.3–4.3, L 0.6–1.2, HD 1.0–2.4

Bibliography: OINE IV, 38, table 14; 73, pl. 41a



27

Qustul W 22-2: Beads from shaft (probably a child);
OIM E23863

A-Group, Late A-Group (Naqada IIC-D)

1. Quartz, short barrel, white (1), D 9.0, L 6.8, HD 4.6
 2. Agate, perforated from both ends, disc barrel, translucent red to dark red (2), D 9.3; 10.3, L 4.3, HD 4.1-2.1-4.1
 3. Agate, perforated from both ends, disc barrel, salmon with red bands (36), D 6.1-10.0, L 1.8-3.5, HD 2.2-1.0-2.2
 4. Black-spotted greenish to brownish stone (fine conglomerate), perforated from both ends, disc barrel (5), D 7.1-8.7, L 2.7-4.4, HD 2.9-1.7-2.9
 5. Brown/reddish stone, perforated from both ends, disc barrel (1), D 7.8, L 2.9, HD 3.0-1.6-3.0
 6. Chalcedony, perforated from both ends, flat teardrop, transparent (1), H 9.9, Th 4.0, HD 2.5-1.5-2.5
 7. Steatite, lenticular teardrop (1), D 9.7 × 7.3, L 2.3, HD 2.1-1.0-2.1
 8. Black stone, short barrel, cylinder perforation (3), D 6.4-7.2, L 2.6-2.9, HD 3.0
 9. Faience, short cylinder and short bicone, four and five petalled, crenelated, white core, blue glaze (12), D 7.3-11.2, L 3.4-4.1, HD 1.8
 10. Faience, oblate, white core, blue glaze (2), D 7.7; 8.5, L 6.2; 5.8, HD 1.8
- Bibliography: OINE IV, 38, table 14; 74, fig. 37d, pl. 41b





28

Qustul W 29—1: Beads from shaft (three- to six-year-old child); OIM E23859

A-Group

Faience, ring and short barrel, light blue/light green (504), D 3.0–5.4, L 1.4–2.3, HD 0.9

Bibliography: OINE IV, 38, table 14; 79, pl. 41d

29

Qustul V 59 (Q2081): Beads (no body recorded); OIM E21834

A-Group

1. Quartz, short barrel, white (1), D 10.7, L 4.7, HD 3.2

2. Quartz, short cylinder (1), D 3.2, L 2.1, HD 1.3

3. Carnelian, perforated from both ends, short cylinder, red (3), D 3.7–4.1, L 1.8–2.2, HD 2.4–1.3–2.4

4. Carnelian, perforated from both ends, short barrel, red (19), D 3.3–4.7, L 1.3–2.0, HD 1.0–1.2

5. Garnet, perforated from both ends, short barrel, purple (11), D 2.9–4.6, L 1.5, HD 1.1

6. Faience, short barrel, traces of green glaze (2), D 4.7, L 2.9; 3.1, HD 1.0

Bibliography: —





30

10mm

30

Qustul V 67—1: Cowrie shell from shaft (no A-Group body or bodies); OIM E21886
A-Group, Late A-Group (Naqada III), later reused *Cypraea annulus* shell, body with dorsal part abraded, whitish (4), W 15.3–18.1, Th 6.0–7.6, L 22.5–26.4, HD ca. 12.2 × 16.9–13.7 × 18.9
Bibliography: OINE IV, 38, table 14; 93, fig. 53e–h



31

10mm

31

Qustul V 67—5: Cowrie shell from shaft; OIM E21887
A-Group, Late A-Group (Naqada III), later reused *Cypraea annulus* shell, dorsal part removed, white (5.5), W 16.0–18.1, L 21.2–25.1, Th 6.4, HD 11.2 × 16.1–14.8 × 21.0
Bibliography: OINE IV, 38, table 14; 93



2

32.1–2

1

32^

Serra East B 88—1: Beads (adult); OIM E19741
A-Group

1. Faience, short cylinder, blue-green glaze (16), D 3.1–4.1, L 1.3–2.4, HD 1.5

2. Faience, disc cylinder, blue-green glaze (3), D 7.3, L 1.9–3.0, HD 1.5

Bibliography: OINE X, 5, 8

33^*

Serra East B 94—1: Shells (adult)—*non vidi*

A-Group

“Two pierced *Nerita* shells” (2)

Bibliography: OINE X, 9



34[^]

Serra East B 100A—5: Pendant (adult); OIM E19747

A-Group

Carnelian, perforated from both ends, dark red (1), D 16.2 × 17.0, L 7.6, HD 5.8–1.5–5.8

Bibliography: OINE X, 5, 11, fig. 3b

35[^]

Serra East B 107B—10: Anklet found with body B, on left ankle (B—adult, wrapped in reed matting and leather); OIM E19758

A-Group

Bone, very long tubular, cream (3—2 in fragments), D 14.3 × 11.3; 18.6 × 16.0; 16.8, L 45.6; 63.4; 37.9, HD 9.0 × 12.0; 14.4 × 11.6

Bibliography: OINE X, 5, 15, fig. 10

36^{^*}

Serra East B 107B—11: Bead fragment; OIM E19758—*non vidi*

A-Group

Ostrich eggshell, square with bored hole

Bibliography: OINE X, 5, 15

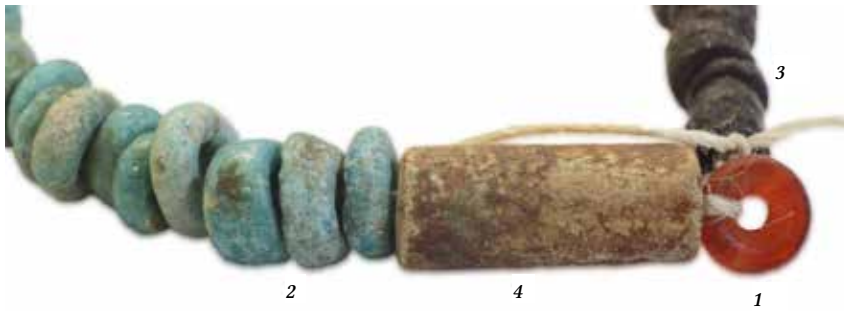
37[^]

Serra East B 108—3: Bead (adult); OIM E35624

A-Group

Faience, barrel, turquoise (1), D 5.1, L 3.4, HD 1.4

Bibliography: OINE X, 5, 15



38.1-4



38^

Serra East B 123-2, 1-S-181B: Beads (adult); OIM E19770

A-Group

1. Carnelian, perforated from both ends, disc barrel (1), D 3.0, L 0.8, HD 0.7

2. Faience, disc and short barrel, blue glaze (17), D 2.3-3.6, L 1.2-1.9, HD 1.0

3. Faience, disc and short barrel, brownish core, black glaze (40), D 2.1-2.9, L 0.9-1.4, HD 1.2

4. Faience, long cylinder, whitish core, traces of blue glaze (1), D 3.2, L 7.7, HD 1.3

Bibliography: OINE X, 5, 20



39.1-2

39^

Serra East B 128A-5: Bracelet of bone cylinder beads; shell pendant; "two pierced *Nerita* shells" (adult; wrapped in leather and matting); OIM E19776

A-Group

1. Shell (freshwater) pendant, triangular, whitish (1), Th 2.6, L 22.0 × 31.0, HD 1.3

2. Bone, standard and long barrel, slightly flattened, cream (8, and 2 in fragments), D 6.1-8.5, L 5.4-20.1, HD 5.4 × 4.8

3. "Two pierced *Nerita* shells"—*non vidi*

Bibliography: OINE X, 5, 20, fig. 12b



**40**

Adindan T 35—3: Bead (adult female); OIM E30363

Post-A-Group

Faience, short cylinder, blue (1), D 5.6 × 5.1, L 2.4, HD 0.9

Bibliography: OINE IV, 128, fig. 70b

41

Adindan T 75—2: Beads from shaft (A—mature female, B—6.5- to 7.5-year-old child); OIM E30359

Middle/Late A-Group (Naqada IIIA–C)

Faience, globular, green glaze (2), D 7.4; 7.9, L 5.6, HD 1.6

Bibliography: OINE IV, 38, table 14; 113, fig. 67d, pl. 37i

42*

Adindan T 113—4: Sample—*non vidi*

Early/Middle A-Group (Naqada IIC–D)

Bibliography: OINE IV, 38, table 14; 113

43

Adindan T 243—1: Beads from shaft (6.5- to 7.5-year-old child); OIM E30361

A-Group or possibly later, C-Group

Faience, short cylinder, blue-green (15), D 2.3, L 1.2, HD 1.1

Preserved fragments of original stringing

Bibliography: OINE IV, 38, table 14; 116, fig. 69d, pl. 37d



44

Adindan T 247—1a-c: Beads from shaft
(6.5-year-old child); OIM E30362

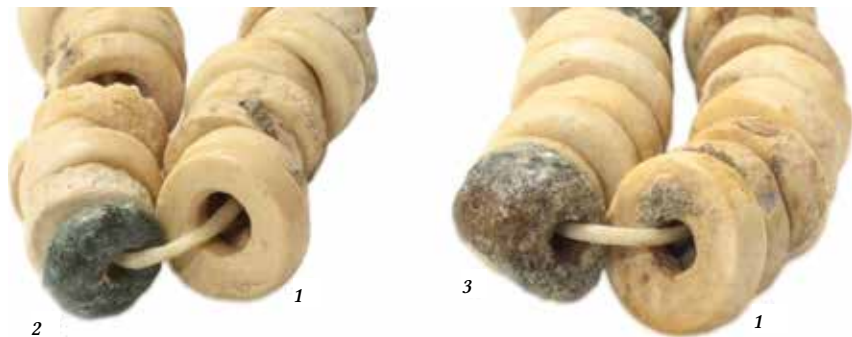
Middle A-Group

1. Diorite, drilled from both ends,
irregular short bicone, black and
white (1), D 11.36 × 12.66, L 5.1,
HD 3.7–0.9–3.7

2. Faience, short barrel, green glaze (3),
D 3.9, L 2.1, HD 2.1

3. Faience, barrel, traces of light green
glaze (1), D 4.8, L 3.6, HD 1.3

Bibliography: OINE IV, 117



45

Adindan T 155—10a-c: Bead bracelet
in three loops around right arm (adult
female); OIM E23380

Post-A-Group

1. Ostrich eggshell, disc and short
cylinder (276), D 3.1–6.2, L 0.9–2.0,
HD ca. 1.2

2. Faience, disc bicone/barrel, blue/
green (21), D 4.0, L 1.7, HD 0.9

3. Faience, short and standard cylinder,
grayish (4), D 4.1, L 3.2–4.0, HD 0.7

Bibliography: OINE IV, 128, fig. 71k,
pl. 52a





46

Adindan T 155—11a-e: Necklace of beads (adult female); OIM E23381

Post-A-Group

1. Ostrich eggshell, disc cylinder (91), D 3.6–6.5, L 0.8–1.8, HD 1.5
2. Faience, very long tubular, blue/green (1—broken), D 4.8, L 18.7, HD 1.8
3. Faience short barrel, black (36), D 5.4–6.2, L 2.9–4.6, HD 1.4
4. Faience, standard cylinder, grayish (22), D 3.7–4.4, L 2.5–4.1, HD 1.3
5. Faience, long cylinder, black (1—broken in two), D 4.2, L 8.0; 12.8, HD 1.3
6. Faience, disc barrel, blue/green (19), D 3.8, L 1.5, HD 1.2
7. Faience, barrel, black (1), D 4.0, L 3.3, HD 0.9

Bibliography: OINE IV, 128–29, fig. 71m, pl. 52c



47.1-2

47

Adindan T 155—12a-b: Anklet of beads on left leg (adult female); OIM E23382

Post-A-Group

1. Ostrich eggshell, disc and short cylinder (196), D 3.5–6.6, L 1.2–1.8, HD 1.2–1.3

2. Faience, disc barrel, blue (3), D 3.9, L 1.1–1.5, HD 1.0

Bibliography: OINE IV, 128–31, fig. 71o, pl. 52b



48

Adindan T 155—13a: Anklet of beads in three loops on right leg (adult female); OIM E23384
Post-A-Group

Ostrich eggshell, disc cylinder (242), D 4.3–6.6, L 1.1–2.0, HD 1.5

Bibliography: OINE IV, 128–29, fig. 71l, pl. 52e



49

Adindan T 155—14a-b: Bracelet of beads in three loops around left arm (adult female); OIM E23383
Post-A-Group

1. Ostrich eggshell, short cylinder (183), D 3.4–4.6, L 1.4–1.9, HD 0.8—hourglass

2. Faience, short barrel, dark gray core, traces of blue-green glaze (1), D 8.8, L 3.5, HD 1.2

Bibliography: OINE IV, 128–31, fig. 71n, pl. 52d

3

Middle Nubian Period Cultures

After a four- to five-hundred-year break, Nubian cultures flourished again in the territory between the First and Second Cataracts (ca. 2500–1500 BC). While the Kerma culture is the largest and most notable of all the Middle Nubian period groups and its sites are numerous between the Second and Fourth Cataracts,¹⁹² it is the C-Group¹⁹³ and Pan Grave¹⁹⁴ cemeteries that prevailed in territory neighboring Egypt (i.e., Lower Nubia) and in Egypt itself. At the dawn of the Egyptian Old Kingdom, the goods available south of Egypt—including livestock, leather, slaves, mineral resources, and exotic products—were reasons for Egyptian expeditions by land and water.¹⁹⁵ At the end of the third millennium, Egypt conquered Lower Nubia and built a chain of fortresses in the region. Documentary and archaeological evidence attests an exploitation of natural resources, including the “gold of Wawat” from the Wadi Allaqi and Wadi Gabgaba, and the “gold of Kush” from between the Second and Third Cataracts.¹⁹⁶ After about 1750 BC, Egyptian control over Lower Nubia broke down until about 1550 BC, when Nubia was reconquered.

It happens that individuals from three cultures—C-Group, Pan Grave, and Kerma—have been found buried at the same sites. At one point in time, New Kingdom tombs in Lower Nubia were contemporary with some late C-Group tumuli. Moreover, besides many traces of the presence of Nubian mercenaries in Egypt,¹⁹⁷ two C-Group cemeteries were recorded north

of the First Cataract at Wadi Kubanieh,¹⁹⁸ and in Upper Egypt at Hierakonpolis HK27C.¹⁹⁹ The occurrence of Middle Nubian pottery at the Middle Kingdom Red Sea harbor at Mersa/Wadi Gawasis, from which seafaring expeditions to Punt were launched, suggests that people from Nubia, including those in the Eastern Desert, were involved in trade.²⁰⁰

Although minor regional differences between Nubian bead assemblages in Egypt and Lower Nubia can be discerned,²⁰¹ in general the Middle Nubian cultures preserved their own styles while gathering inspiration from diverse influences. Such influences came from Egypt to the north (including the Mediterranean sphere), from Kerma to the south, and from cultures inhabiting both Nubian deserts. These deserts, rich in organics, minerals, and metals, provided the materials used in the manufacture of beads.

In the Oriental Institute Nubian Expedition (OINE) assemblages, the Middle Nubian period comprises objects from tombs assigned to the C-Group (50–73, 75–110, 112–173, 176–229) and to the C-Group or Pan Grave (74#, 111#, 130#, 174#, 175#) traditions. Catalog numbers of objects found in the contexts ascribed to “C-Group or Pan Grave” are marked here and elsewhere with a hashtag (#). C-Group tombs of N-Type (230–255) and P-Type (256–265) are treated separately (in sections 3.1.2 and 3.1.3), for they stand out from other C-Group types but are still part of the cultural environment of the age. Adornments from clearly defined Pan Grave (266–293), Kerma (294), and Middle

192 Gratien 1986; Lacovara 1987; Lacovara 1997; Emberling 2012.

193 Bietak 1968; Säve-Söderbergh 1989a, 1989b; OINE X; Friedman 2004; Friedman 2007.

194 Bietak 1966; Gatto 2014.

195 Bard and Fattovich 2011.

196 Hafsaas 2006, 121–22.

197 E.g., O'Connor 2015.

198 Bietak 1968, 37; Junker 1919; Junker 1920.

199 Friedman 2001.

200 Bard and Fattovich 2011, 127.

201 Dr. Renée F. Friedman (personal communication).

Kingdom tombs (295–296) are also discussed below (in sections 3.2, 3.3, and 3.4, respectively).

3.1. THE C-GROUP BEAD STORY

The use of ostrich eggshell in bead manufacture was common in Lower Nubia during the Middle Nubian period. **Lozenge-shaped plaque pendants** cut from ostrich eggshell became a diagnostic C-Group type (51.1, 205.1),²⁰² and the diamond motif became a characteristic element of Nubian style.²⁰³ While C-Group anklets were made mainly of ostrich eggshell beads,²⁰⁴ the Kerma anklets were made of faience.²⁰⁵ Ostrich eggshell discs or short cylinders were commonly found at C-Group and Kerma sites, but they definitely dominated the Pan Grave assemblages. Remarkably, the unrestricted access to neighboring deserts can be measured by the large quantities of ostrich eggshell beads in Middle Nubian repertoires. They may also reflect the engagement of Nubians in mining activities in the deserts. According to inscriptions dating to Mentuhotep IV (Eleventh Dynasty), Egyptian expeditions brought all the people of Wawat and Ta-Seti (Nubia) to establish the amethyst mines in the Wadi el-Hudi, in the Eastern Desert. Recently, a Middle Nubian presence, including Pan Grave people, has been archaeologically documented in this mining area.²⁰⁶ With the abandonment of Buhen, the presence of amethyst mining and **diorite** quarries at Gebel Al-Asr in the Western Desert, and the arrival of the C-Group in the region, the Egyptian territorial domination of Lower Nubia changed to one of interaction through intensive trade, secured by sporadic Egyptian military campaigns.²⁰⁷

Although millet in India is said to come from Africa, and although a cranium and two bronze figures found at contemporary Harappan period sites have been identified as possibly Nubian females,²⁰⁸ potential Indus Valley imports—such as very long, biconical, carnelian beads characteristic of the Classic Harappan period²⁰⁹—are missing from Lower Nubia. Instead,

short beads of diorite (57.3, 65.6, 80.1, 93, 94.2, 102.2, 104.1, 107.2–5, 118.1, 121.3, 132.1, 133.1, 176.3, 200.2, 205.2, 207, 208, 214.1, 215.2, 217.2, 220.2, 224.4) and carnelian (56.1, 58.1–2, 71.2, 83.1, 84.1, 88.1, 90.2, 96.2, 97.1–2, 103, 107.6, 118.2, 121.2, 125.1, 127.1, 131.1–2, 148.6, 156.2, 168.1–2, 176.2, 177.3, 177.12, 189.1, 192.2, 193.1–2, 194.1, 195.2, 198.1, 200.3, 203.1, 210.3, 213.1, 214.2) dominate the C-Group stone bead assemblages, and workshops found near Ballana and Faras are evidence of local stone bead production in Lower Nubia.

New bead types in Lower Nubia include **metal** sheets wrapped over ceramic cores (53.3, 54.4, 66.2, 71.3, 74#, 129.4). Gold, silver, and other metal discs and short cylinders—cast or made from turned-up strips—make up the most characteristic necklaces in Lower Nubia (58.4, 66.1, 68.3, 121.5, 154.1, 164.5, 178, 182.1–2, 200.4, 205.3, 213.2). **Metal rings** made from rolled or turned-up strips with nonsoldered ends are also elements of Kerma jewelry.²¹⁰ In Egypt these simple tiny rings can be traced far into the past, as they appear with garnet, carnelian, and turquoise beads in a Naqada II diadem.²¹¹ Short, folded, cylindrical gold beads appear in a Fourth Dynasty necklace,²¹² as well as in a bracelet made of diverse materials²¹³ and a necklace with amulets,²¹⁴ both dated to the Sixth Dynasty. Later they appear in necklaces found in Second Intermediate Period contexts at Buhen²¹⁵ and in Second Intermediate Period to early New Kingdom contexts at el-Asasif, Thebes.²¹⁶ Folded metal beads were used in the stone and metal bracelets and necklaces of the princesses Khnumit and Neferuptah during the reigns of Amenemhat II and Amenemhat III,²¹⁷ as well as in those of Princess Sathathor during the reign of Senuseret III.²¹⁸ In the Thirteenth Dynasty, they can be observed in a collar necklace belonging to Princess Nubhotep.²¹⁹ Together

202 Emery and Kirwan 1935, fig. 486:40; Säve-Söderbergh 1989a, fig. 40:A, third from left; Säve-Söderbergh 1989b, pl. 47:G, m; MAN 1980.91.519a—Argin 6–B–26, T 131 (personal observation).

203 Cf. below.

204 Cf. below on C-Group beadwork.

205 Reisner 1923, 97, for anklets from Kerma.

206 Liszka 2014.

207 Lebedev 2018, 44.

208 Kennedy and Possehl 2012.

209 Kenoyer 2003.

210 Reisner 1923, 101, 109–11; for photos of folded, short cylinder beads from Reisner's excavations at Kerma, see MFA 20.1669, 20.1740, 20.1741, 14.1576; see also Vercoutter 1970, pls. 28–29, type A5, for metal rings with no soldered ends from Mirgissa.

211 Andrews 1990, 43, cat. no. 31.

212 Ibid., 86, cat. no. 62a.

213 Bongioanni and Croce 2003, 344.

214 Brunton 1937, 99; Andrews 1981, 44, cat. no. 237, pl. 19; for a close-up color illustration, see Rigault 1999, 482, cat. no. 204—Mostagedda, tomb 785.

215 Doxey 1997, 202, cat. no. 61—Buhen, tomb K 45.

216 Met 26.7.1378.

217 Bongioanni and Croce 2003, 356–60, 389; Andrews 1990, cat. no. 161; Randall-MacIver and Wooley 1911, pl. 89 (= Penn E10898B—Buhen).

218 Bongioanni and Croce 2003, 357.

219 Ibid., 386.

with lapis lazuli, carnelian, and turquoise beads, they were threaded on gold wires in an Eighteenth Dynasty bracelet from the burial of Queen Ahhotep, mother of Ahmose, the king who recaptured the Second Cataract forts.²²⁰ Collars and girdles of metal rings made of folded strips,²²¹ also found as loose elements,²²² have been assigned, more or less securely, to the burials of the foreign wives of Thutmose III.

In Lower Nubia and in Nubian-affiliated burials in Egypt, simple, short to long metal rings were found threaded into nearly identical necklaces for adult female individuals (66, 178). Gold rings (178, 182.1–2) were strung tightly on a thick cord, thus forming a flexible torque, found around the neck of Muyet, a five-year-old girl who was a royal lady of Mentuhotep II and who was buried with the “King’s Favorite Ornaments” at Deir el-Bahri just before 2000 BC.²²³ Among the other funerary remains were her necklaces of silver beads²²⁴ (58.4) and carnelian disc beads, the latter of which were very common in Middle Nubian beadwork (198).²²⁵ Interestingly, both Mentuhotep II and his Ornaments have been considered Nubian.²²⁶ A collar of gold disc cylinders was found in a late Seventeenth Dynasty female burial in Dra‘ Abu el-Naga, Qurna.²²⁷ The gold and other items buried with this woman have also been linked to Nubia.²²⁸

Among a few types of amulets, the electrum ibis and the faience wrestlers represent the earliest phase of the C-Group in Lower Nubia. The ibis amulet belongs to the most outstanding metal objects (209) in terms of craft, and the subject, style, and technique can be traced in a gold parallel from Naga el-Deir at the end of the Old Kingdom.²²⁹ Similar specimens were also found at other Egyptian sites—for example, in a Sixth Dynasty tomb at Balat in the Western Desert oasis of Dakhla²³⁰ and in Ninth and Eighth Dynasty

contexts at Mostagedda,²³¹ Matmar,²³² and Qau.²³³ Gold amulets made with the same technique but in the shape of a hare and a standing dog were dated to the Sixth Dynasty.²³⁴

Other figurative faience pendants represent **wrestlers** (212). Wrestling enjoyed prominence in ancient Nubia and Egypt, and some wrestlers in wall scenes have been identified as Nubians due to their darker skin color.²³⁵ Another wrestler pendant was found at Aniba.²³⁶ Amulet figures, also called twins²³⁷ or lovers,²³⁸ are similar to ones found in Egyptian graves dating to the Sixth Dynasty.²³⁹

Small **blue and black faience** beads dominated C-Group bead assemblages. They were the most common materials used in C-Group leather beadwork. While the large ivory and gold fly pendant was a symbol of high rank in Kerma culture,²⁴⁰ **multiple geometric lozenge and zigzag patterns** executed with tiny faience, ostrich eggshell, and carnelian beads on leather became a sign of the Middle Nubian cultures in Nubia and Egypt. Moreover, diamond and zigzag motifs characterize C-Group incised pottery,²⁴¹ Nubian-inspired Egyptian pottery,²⁴² etched or incised leatherwork,²⁴³ and the abovementioned leather beadwork.²⁴⁴ Lozenges appear within figures incised on C-Group pottery, and women’s skirts on the incised pottery were covered with squares as well as vertical or horizontal stripes.²⁴⁵ Such motifs are also discerned in ritual art and tattoos. Zigzag and diamond patterns are impressed and incised as tattoo decorations on C-Group clay female figurines,²⁴⁶ while zigzag tattoos along the

220 Andrews 1990, 152, cat. no. 133; Bongioanni and Croce 2003, 363—reign of Ahmose, ca. 1540 BC.

221 Lilyquist 2004, figs. 162–64, 167–68.

222 Ibid., figs. 216, 218.

223 Hayes 1978, 229, fig. 144; Andrews 1990, 117, cat. no. 97 (= Met 22.3.322).

224 Met 22.3.324.

225 Met 22.3.323, 324.

226 Meurer 1996; Williams 2013.

227 Andrews 1990, 23, cat. no. 14.

228 Eremin et al. 2000; Manley et al. 2002; Lilyquist 2004, 137, n. 1; Troalen, Tate, and Guerra 2014.

229 Rigault 1999, 486, cat. no. 209—end of the Old Kingdom; height ca. 1.5 cm (= Phoebe Apperson Hearst Museum of Anthropology, University of California at Berkeley 6–22885).

230 Valloggia 1986, vol. 1, fig. 14:921; vol. 2, pl. 65:921.

231 Brunton 1937, pl. 57, tomb 1873; tombs 542, 563, 1913, gold; tomb 637, electrum (= Andrews 1981, cat. no. 331, copper).

232 Brunton 1948, 47, nos. 70, 92, pl. 32, gold leaf that has been left smooth (= Rigault 1999, 480–81, cat. no. 201).

233 Brunton 1928, 12, pl. 97, 47.

234 Rigault 1999, 481, cat. nos. 202–3; Germond 2005, cat. no. 12.

235 Carroll 1988; Pémier 2014, 447, and references therein.

236 Steindorff 1935, pl. 75:17.

237 Brunton 1928, pl. 99:74G2, Fifth Dynasty; Brunton 1937, pl. 56:3.T6 (10019), Sixth Dynasty.

238 Dubiel 2008, pls. 1: type 1ce, 18:15.

239 Brunton 1937, pl. 56:3.T6 (10019), Sixth Dynasty.

240 Cf. the chapter on the New Kingdom.

241 Steindorff 1935, pls. 33–50.

242 Rzeuska 2010.

243 Hierakonpolis HK27C—<http://www.hierakonpolis-online.org/index.php/explore-the-nubian-cemeteries/hk27c-c-group>.

244 Steindorff 1935, pls. 24–25 (N 234—child’s grave, N 487); cf. an example in a P-Type tomb (259) below.

245 Emery and Kirwan 1935, pl. 24:23.

246 OINE V, pls. 102C, 103A–B; Steindorff 1935, pls. 71–72.



Figure 6. Wooden figure of a Nubian woman, courtesy of the Metropolitan Museum of Art, New York, Met 26.3.231, front and back

rib cage of an older woman and tattoos on the hands and pelvis area were recorded in one Hierakonpolis C-Group burial.²⁴⁷ The early excavators regularly reported that the tattoos on the human remains resembled the patterns found on figurines from C-Group graves.²⁴⁸

Interestingly, geometric motifs had a long tradition in Egyptian art and craft. They are also associated with Nubians.²⁴⁹ Lozenge and zigzag patterns can be traced back in Egyptian art as early as the time of Narmer, and the ruler on the Narmer Palette wears a diamond-patterned belt. A beaded gold belt was found in the tomb of Prince Ptahshepses, “son of the king” (a king who is not identified). The belt was found between the bandages of the mummy in a sarcophagus in the valley temple of Unas in Saqqara and probably dates to the Sixth Dynasty (2323–2152 BC).²⁵⁰ It is composed of a thin band of gold onto which carnelian and other beads in many colors were fixed to form a geometric

pattern of diamonds and triangles. Faience beads form black diamonds on a belt with a green background²⁵¹ that was part of a garment of Senebtisi and found in his Lisht tomb, dating to the Thirteenth Dynasty.²⁵²

A colorful lozenge pattern also appears on a painted wooden statue of an offering bearer. The inscription on the base referred to him as “the Black.”²⁵³ It was found in the tomb of a high dignitary, Niankhpepi, from the reign of Pepy I (2289–2255 BC). The bearer holds a container painted in a lozenge pattern. While the Nubian character of the painted offering bearer seems to be unquestionable in view of his black coloration, the affiliation of diamond-patterned beaded belts and baskets or containers remains an open question.

A few painted wooden statues of Nubian women come from Eleventh Dynasty Theban tombs. The figures wear kilts decorated with zigzag patterns in the belt zone (fig. 6)²⁵⁴ or with a pattern of squares that fills

247 Hierakonpolis 27, tomb 9; Steffensen 2007; Friedman 2004.

248 Tassie 2003, 89–90, and references therein.

249 E.g., Steffensen 2007.

250 Bongioanni and Croce 2003, 344.

251 Oppenheim et al. 2015, cat. no. 177.

252 Williams 1976.

253 Bongioanni and Croce 2003, 57.

254 Hayes 1978, 220, fig. 136—Thebes, Deir el-Bahri, tomb MMA 511, ca. 2030–1981 BC (= Met 26.3.231; see Oppenheim et al. 2015, cat. no. 109).

all of what was most probably a leather kilt (fig. 7).²⁵⁵ A bowl from Aswan displays a hunter with a bow, and he too wears a skirt decorated with a lozenge pattern.²⁵⁶ Painted wooden figures of Nubian archers came from the Eleventh Dynasty tomb of Prince Mesehti at Asyut (ca. 2135–1994 BC) (fig. 8).²⁵⁷ They wear cream and red kilts with a central flap or sash, most probably made of leather.²⁵⁸ Some red kilts were decorated with black-bordered green and blue lozenges. The belts or waistbands and red sashes were fastened on both red and white kilts. While the waistbands were finished with many blue, white, and red stripes, red sashes were decorated with lozenges. Blue-painted necklaces and anklets, most probably representing strings of faience beads, can be discerned on the figures of the first and last rows of the archers.

Geometric motifs are characteristic features of late Old Kingdom and Middle Kingdom paddle dolls, female faience figurines, some female representations in wall paintings, and the traces of tattoos on bodies from tombs. All have been associated with dancers of Hathor.²⁵⁹ For example, red, black, and cream quadrangular or triangular designs in the waist, and sometimes breast, zone decorate some of the wooden paddle figurines of females found in the Middle Kingdom tombs at Thebes (end of the Eleventh Dynasty, ca. 2050–1991 BC).²⁶⁰ Dated to the Twelfth Dynasty, faience female fecundity figures, considered to be Egyptian, have skirts decorated with brown-painted lozenge patterns.²⁶¹ The most famous tattooed bodies from Egypt are the Eleventh Dynasty Deir el-Bahari mummies of the King's Favorite Ornaments, mentioned above, and the mummies of so-called Hathoric dancers with lozenge-patterned tattoos.²⁶² One of the King's Favorite Ornaments wore a necklace of metal rings, and together with the other royal Ornaments of Mentuhotep II, she is considered to be Nubian, as mentioned above.²⁶³ Similarly, female faience figurines



Figure 7. Wooden figure of a Nubian woman, courtesy of the Metropolitan Museum of Art, New York, Met 26.3.232

found in Egypt have on their legs a painted tattoo of lozenges.²⁶⁴ The occurrence of geometric bodily decoration in Nubia and at the Theban court may be associated with women who performed in rites at the Hathor temple and, more specifically, with Nubian dancers.²⁶⁵

The lozenge and zigzag patterns survived in the diverse representation of Nubian enemies in New Kingdom art. In the New Kingdom tomb of Rekhmire, hounds from Nubia are depicted, and, surprisingly, a female dog wears a collar decorated with cream and red squares.²⁶⁶ In the decorative elements of Tutankhamun's tomb, Nubians wear colorful kilts and necklaces in the triumphal scene painted on the wooden chest,²⁶⁷ as do bound Nubian captives on the gilded interior of Tutankhamun's chariot.²⁶⁸ New Kingdom wall paintings and faience tiles from the royal palace of Ramesses III at Medinet Habu show Nubian captives with kilts and sashes decorated with zigzag and colorful lozenge patterns.²⁶⁹ Nubians are dressed in the same way in the scene of Amenhotep III and Queen Tiye enthroned in

255 Met 26.3.232—Thebes, Deir el-Bahri, tomb MMA 511, Eleventh Dynasty, ca. 2030–1981 BC.

256 Steindorff 1935, pls. 71–72 (= Pemler 2014, 444, pl. 1; Oppenheim et al. 2015, cat. no. 108).

257 E.g., Bongioanni and Croce 2003, 458–59 (= Oppenheim et al. 2015, fig. 77).

258 Cf. examples in the chapter on the Pan Grave culture.

259 Morris 2011, figs. 3–10.

260 Ibid.; Bongioanni and Croce 2003, 520; Met 31.3.35a, b; Met 15.10.90; Met 31.3.37a, b; Met 27.3.52a; Met 31.3.43; BM E6459.

261 Friedman 1998, 104, 203, cat. no. 64—Twelfth Dynasty.

262 Tassie 2003, 90–91.

263 Morris 2011, 77, n. 46. The title “Royal Ornament” was attested for all the women except Muiet, who was only three to five years old.

264 Grajetzki 2013, 24—late Middle Kingdom (= JE 47710); Paris, Musée du Louvre E 10942.

265 Morris 2011, 81.

266 Met 30.4.82—Thebes, ca. 1479–1425 BC.

267 James 2000, 36–37.

268 Ibid., 272–73.

269 JE 28922.



Figure 8. Nubian mercenaries from the Eleventh Dynasty tomb of Prince Mesehti at Asyut (ca. 2135–1994 BC), courtesy of the Grand Egyptian Museum, Giza, JE CG257 (photo by G. Hebda)

a kiosk in the Theban tomb of Anen.²⁷⁰ Nubians in wall paintings in the tombs of Seti I²⁷¹ and Ramesses III²⁷² are belted with red sashes or flaps decorated with lozenges.

Last but not least, in the painted relief on the east wall of the hypostyle hall of the temple of Thutmose III at Deir el-Bahri,²⁷³ a boat is decorated with a scene of a Nubian enemy who wears a fly pendant. Oarsmen on another boat have kilts decorated in a lozenge pattern of C-Group style (fig. 9).

3.1.1. CORPUS OF OINE C-GROUP BEADS AND PENDANTS

Sites and Chronology

C-Group burial sites in the Oriental Institute excavations included cemeteries T, U, and K at Adindan (cat.

nos. 50–183) and cemetery B at Serra East (cat. nos. 184–229). They are arranged according to the tomb numbers given by the excavators.

A detailed chronology of Middle Nubian tombs given according to OINE V and X and other works²⁷⁴ is presented in table 5. In the Oriental Institute Museum (OIM) collection, there are no bead adornments recorded from graves contemporary with the Egyptian Second Intermediate Period and Classic Kerma period (1700–1600 BC). Beads appeared again in burials dated to the Eighteenth Dynasty (1550–1291 BC).

Materials and Techniques

The shapes of beads and pendants from Adindan are illustrated in figures 10–11, and those from Serra East are shown in figure 12. An overview of bead and pendant types is given in table 6.

Materials and tools for beadmaking and beadwork found in C-Group contexts included ostrich eggshell fragments and flint and quartz tools, respectively.²⁷⁵

²⁷⁰ Wilkinson 1983 (= Met 33.8.8, facsimile).

²⁷¹ Lepsius 1849–56, pl. 136ab, as in KV 17 tomb of Seti I chamber F.

²⁷² Tomb KV 11.

²⁷³ Dolińska 2014, fig. 4A; cf. the discussion in the chapter on the New Kingdom.

²⁷⁴ Säve-Söderbergh 1989a, 7.

²⁷⁵ OINE X, 106, fig. 57a.



Figure 9. Nubians in the painted relief on the east wall of the hypostyle hall of the temple of Thutmose III at Deir el-Bahari, courtesy of the Polish Centre of Mediterranean Archaeology, University of Warsaw (photo by Z. Doliński)

Table 5. Dating of C-Group objects according to OINE V and X

Phase	Dating	Catalog number(s)
IB	ca. 2000–1900 BC, late Eleventh and early Twelfth Dynasties	93, 109, 196, 199, 203, 217
IB/IIA	This phase was created for tombs demonstrating burial customs consistent with a IB or IIA date	56, 84, 96–97, 99, 103–105, 108–109, 115, 117–119, ²⁷⁶ 122, 128, 137, 145, 147(?), 155, 156(?)
Early IIA	ca. 1850 BC, mid-Twelfth Dynasty	52, 127, 160
Late IIA	ca. 1750 BC, Thirteenth Dynasty	63, 86, 121, 135
IIA unspecified		60, 62, 73, 75, 79–81, 83, 87, 94, 102, 110–111#, 124–125, 126(?), 131–134, 154, 157–158, 166–168, 184–185, 187–188, 189(?), 191–192, 195, 213
Late IIA/B		65–66
IIA or Late III		91
IIB	ca. 1700–1600 BC, Second Intermediate Period	No bead adornments were found in tombs assigned to this phase
Early III	ca. 1550 BC, Eighteenth Dynasty	53–55, 67, 70–71, 77, 101, 106, 120, 123, 177–183
III unspecified		50–51, 58–59, 61, 64, 74#, 78, 85, 88, 89(?), 95, 100, 107, 112–114, 116, 130#, 136, 138–143, 145–146, 148–149, 151–153, 159, 161–162, 164(?), 165, 169, 171, 174#–175#

²⁷⁶ 119 is a Meroitic object.

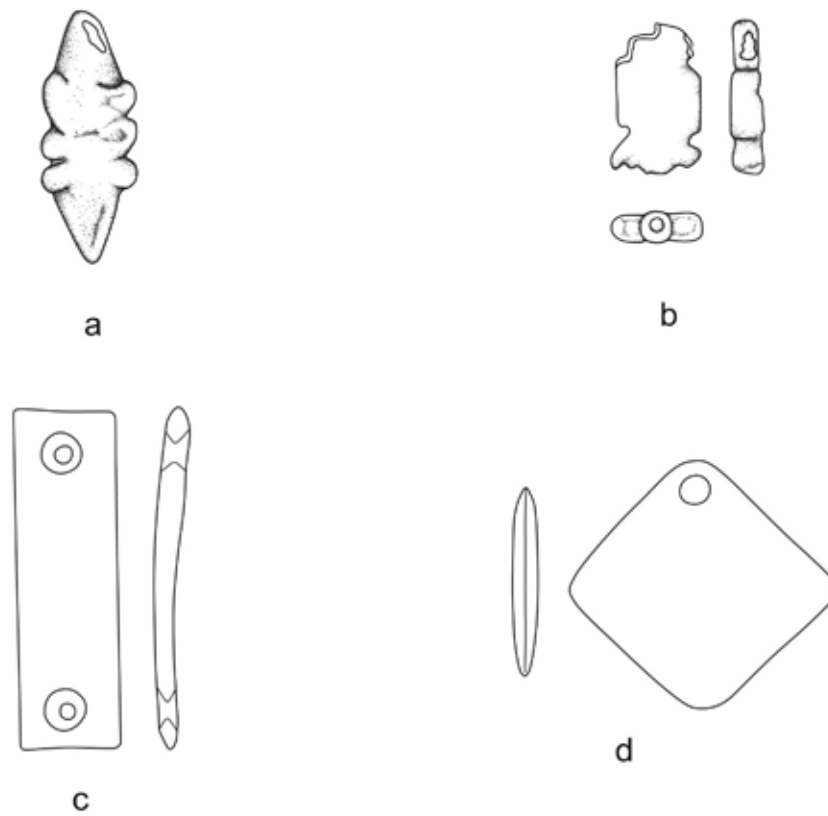


Figure 10. Beads and pendants: a (130.1), b (168.7), c (269), d (51.1).
Scales: (a-c) 2:1, (d) 1:1 (adapted from OINE V, pl. 115)

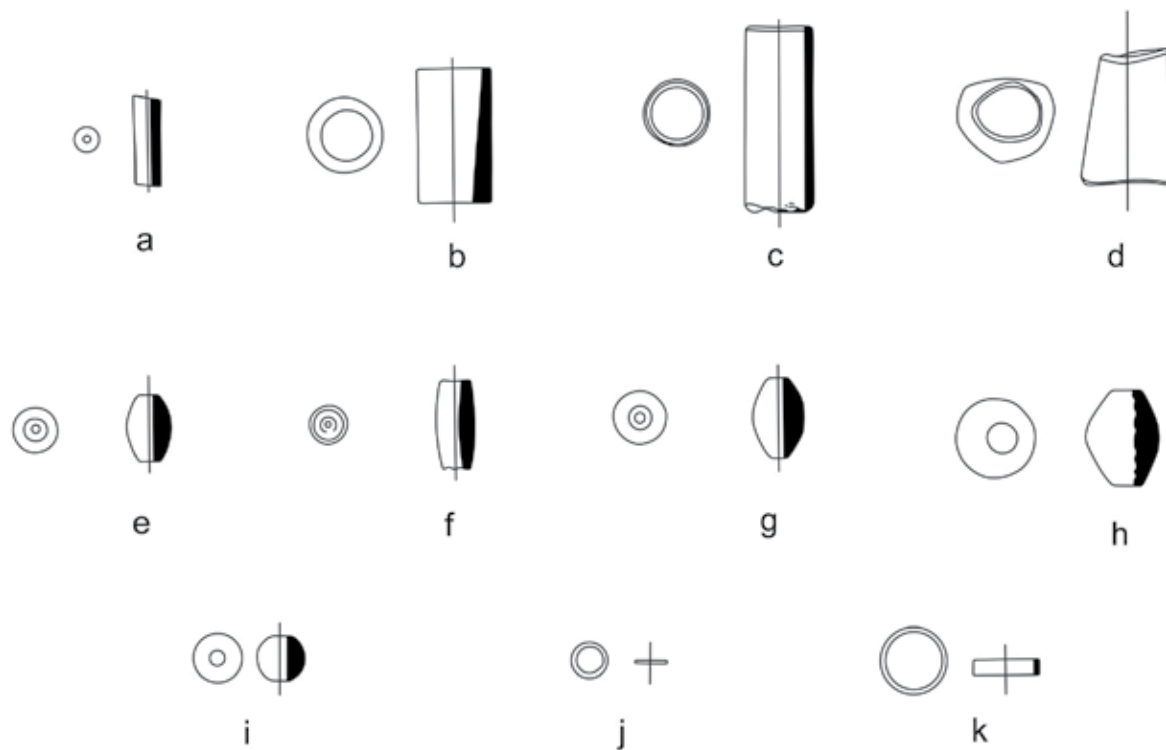


Figure 11. Beads and pendants: a (97.3), b (89.7), c-d (105), e (267.4), f (89.2), g (267.1), h (74),
i (267.2), j (182.2), k (66.1). Scales: (a-d, i-j) 1:1, (e-h, k) 2:1 (adapted from OINE V, pl. 116)

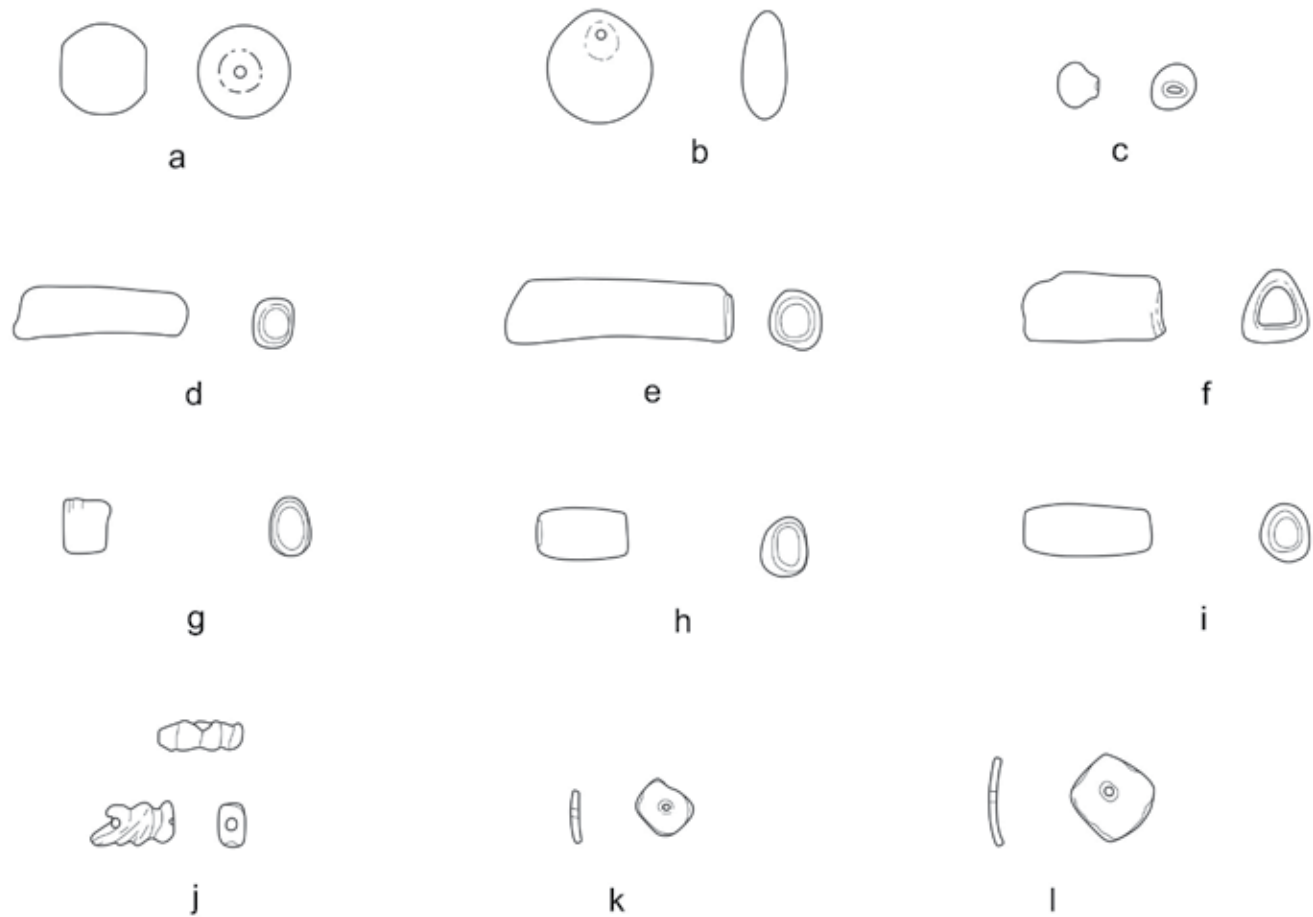


Figure 12. Beads and pendants: a (218), b (34[^]), c (244.4), d–f (35[^]), g–i (39.2[^]), j (244.5), k (211.2), l (211.1). Scales: (a–c, g–j) 1:1, (d–f, k–l) 1:2 (adapted from OINE X, fig. 14)

Marine Mollusk Shell

Cypraea annulus shells have their dorsal parts removed (59, 126.3–4).²⁷⁷ Both *Nerita* (188, 195.1, 224.1)²⁷⁸ and *Polinices* sp. (135, 138.1–2)²⁷⁹ shells have perforation on the last whorl of the spire, as can also be observed in those from Early Kerma graves.²⁸⁰ A *Conus* sp. shell has the apex removed and a worked area around the opening of the hole (148.1).²⁸¹ A mollusk shell plaque broken at its perforation was probably a pendant fragment (210.1).

²⁷⁷ Steindorff 1935, pl. 29d.

²⁷⁸ Ibid., pl. 27d; MAN 1980/91/305.8 (ANX F–T.41, Argin W)—although this example might be Pan Grave in date, it was ascribed to the C-Group culture (Almagro, Presedo, and Pellicer 1963); for fourteen exceptional *Nerita* shells in silver mounts, found with a woman in the Middle Kingdom (nineteenth century BC) tomb 142 at Harageh, see Bianchi 2013, 26, fig. 3.

²⁷⁹ For a *Polinices* shell, called a *Natica* shell, in a Mostagedda Pan Grave tomb, see Brunton 1937, 126 (= Andrews 1981, cat. nos. 636, 668, 673–74); for a few *mamma* shells (= *Polinices*) at Kerma, see Reisner 1923, 319; Chaix 1982, 68, fig. 5.

²⁸⁰ Dunham 1982, pls. 18a, 41c.

²⁸¹ Junker 1919, 184; Junker 1920, 88; Junker 1925, pl. III.100.

One short barrel bead was cut of *Conus* sp. seashell (57.1).

Nacre

Nacre is also known as mother-of-pearl and is derived from the inner layer of mollusk shells. It was most probably nacre of a *Pinctada* sp. shell that was shaped into a crescent plaque pendant (70). Other nacre pendants were made from (mostly broken) keyhole-shaped lobed hair slides (167, 173), the hair slide being a well-known C-Group adornment.²⁸² Similarly to their ovoid equivalents from Kerma,²⁸³ C-Group lobed hair rings come from archaeological contexts dated to phases IIA and IIA/B (ca. 1850–1700 BC).

²⁸² Steindorff 1935, pl. 32:20–23; Reisner 1910, pl. 70.b.8, 15; Firth 1912, pl. 39.b.2; Säve-Söderbergh 1989b, pl. 48.1.a–e; for a drawing of a hair ornament, see Steindorff 1935, 63, fig. 14; OIM E19581.

²⁸³ Ferrero 2004, made of mother-of-pearl. Kerma ovoid hair slides were not worn during the Classic Kerma period; see Welsby 2001, cat. nos. 293, 295, for perforated ovoid hair slides.

Table 6. Overview of types from C-Group graves

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
Marine mollusk shell	P?	<i>Cypraea annulus</i> dorsal part removed			59, 126.3–4	
	P	<i>Nerita</i> sp.			188.1, 195.1, 224.1	
		<i>Polinices</i> sp.			135, 138.1–2	
		<i>Conus</i> sp. apex removed			148.1	
		Plaque fragment			210.1	
Nacre	B	Short barrel of <i>Conus</i> sp.			57.1	
	P	Crescent plaque			70	
		Perforated keyhole-shaped lobed hair slides/ornaments			167, 173	
Ostrich eggshell	B	Disc and short cylinder			E.g., 50.1–2, 52.1, 53.1, 4	
		Angular disc			211.1–2	Fig. 12k–l
		Lozenge-shaped plaque			51.1, 205.1	Fig. 10d
Bone	B	Short cylinder			117.2	
		Long tube		White	75, 81, 117.1, 3	
				Brown	99, 105	Fig. 11c–d
		Long tube with angular section			200.1	
Carnelian	B	Disc and short barrel, truncated bicone, and cylinder	Very small		121.2, 131.1, 156.2, 176.2, 177.3, 12, 193.2, 213.1	
			Small		56.1, 58.1–2, 71.2, 84.1, 88.1, 94.1, 96.2, 97.1–2, 103, 107.6, 118.2, 125.1, 127.1, 131.2, 148.6, 168.1–2, 189.1, 193.1, 195.2, 198.1, 200.3, 203.1, 214.2	
			Large		83.1, 90.2, 192.2, 194.1, 210.3	
	P	Long barrel			89.2, 168.3	Fig. 11f
		Globular			218	Fig. 12a
		Teardrop with truncated top and tapered base			71.1	
		Bag-shaped pendant with flattened neck and rounded base			57.5	
Garnet	B	Standard barrel			58.3	

Table 6. Overview of types from C-Group graves (*continued*)

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
Diorite	B	Disc and short barrel and short cylinder	Tiny		65.6, 80.1, 94.2, 102.2, 107.5, 118.1, 121.3, 132.1, 133.1, 176.3, 200.2, 205.2, 207, 208, 214.1, 215.2, 217.2, 220.2, 224.4	
		Short oblate	Small		57.3, 107.2–4	
			Large		93, 104.1	
	P	Teardrop with pointed base and top			148.4	
		Teardrop with pointed base and rounded top			148.5	
Unidentified stone	B	Tabular			224.1–2	
Gold	B	Disc and short cylinder/ring			121.5, 182.2, 205.3, 213.2	Fig. 11j
Silver	B	Disc and short cylinder/ring			66.1, 178, 182.1	Fig. 11k
Copper	B	Disc and short cylinder/ring			154.1, 200.4	
Other metal	B	Disc and short cylinder/ring			58.4, 68.3, 164.5	
		Long barrel			69.2, 98.2	
Electrum	P	Ibis			209	
Metal over ceramic core	B	Long bicone			66.2, 129.4	
Silver over ceramic core	B	Long barrel			53.3, 54.4, 71.3	
		Long bicone			74#	Fig. 11h
Glazed steatite	B	Long barrel			57.4, 168.4	
		Unidentified amulet			71.4	
Faience	B	Irregular disc and short cylinder		White core and blue and green glaze	50.3, 52.2, 53.5, 55.2, 65.1, 7, 76, 77.2, 86.1, 88.3, 89.3, 90.4, 102.4, 104.2, 109, 112.1, 113, 114, 117.4, 118.3, 120.2, 121.4, 129.1, 3	
			Small	Brown core and black glaze	65.3, 80.3–4, 88.2, 94.5, 96.3, 102.3, 127.2, 129.2, 144	
			Large		51.3, 53.2, 8, 55.2, 56.2, 62.2, 85.2, 90.3	
		Long cylinder		Blue	89.7, 97.3	Fig. 11a, b

(continued)

Table 6. Overview of types from C-Group graves (*continued*)

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
		Ring/oblate		Thick blue, dark blue, green, and black glaze	E.g., 51.2, 52.3, 53.7, 60.1–2, 62.1, 63, 65.2, 67.3, 68.2, 4, 69.3, 76, 78, 80.2, 82.3, 83.2, 84.2, 85.3, 87, 88.4, 89.4, 6, 90.4, 91.2–3, 94.3–4, 97.4, 98.3–4, 106, 107.7, 110, 111.2#, 112.2, 114, 115, 116, 120.1, 122.2, 124, 125.2, 128.3–4, 6, 141	
		Disc barrel			112.1, 192.3, 196.3	
		Short barrel			89.3	
		Standard barrel		Red	86.2	
		Long bicone			220.5	
		Spherical		Blue	82.2, 130.2#, 176.8, 195.3	
		Simplified crocodile			130.1#	Fig. 10a
		Melon			71.7	
		Astragal			71.5	
		<i>Wedjat</i>			71.6	
	P	Wrestlers			212	
	B	Unidentified amulet			168.7	Fig. 10b
	B	Oblate and spherical		Blue- green	163	
Glass	B	Oblate and spherical		Yellow	163	
				Purple	163	

Ostrich Eggshell

Ostrich eggshell beads were not found in phase IB tombs at cemeteries T, K, and U and occurred rarely in phase IIA, but they became common in Late IIA and extremely common in phase III.²⁸⁴ They were drilled from both ends. In contrast to Pan Grave ostrich eggshell beads, they are characterized by large hole openings with an hourglass, and often an almost parallel, shape. In most cases they were roughly shaped. Their sides were smoothed, probably while strung, resulting in a uniform or graduated shape and diameter.

For functional reasons, ostrich eggshell beads in the shape of short cylinders were associated with

leather garments, while larger disc cylinders were simply threaded, as can be observed in the example from the grave of a senile female at Adindan (53.1, 53.6).

The three general types of these beads are distinguished according to shape. **Disc cylinders** measure about 4.0–5.4 mm in diameter and 1.5 mm in length (e.g., 50.1, 52.1, 53.1); smaller **disc and short cylinders** measure 3–4 mm in diameter and 1–2 mm in length (50.2, 53.4). **Lozenge-shaped plaque** pendants were simply cut from ostrich eggshell and their edges smoothed (51.1, 205.1).²⁸⁵

²⁸⁴ OINE V, 8.

²⁸⁵ Emery and Kirwan 1935, fig. 486:40; Säve-Söderbergh 1989a, fig. 40.A, third from left; Säve-Söderbergh 1989b, pl. 47.G.m; MAN 1980.91.519a—Argin 6–B–26, T 131.

Bone

Beads in this category were made of white bone or brown finger bones. **Short cylinder** (117.2) and **long tubular beads** (75, 81, 117.1, 3) were made of white bone.²⁸⁶ Brown animal finger bones appear as long tubular beads (99, 105).²⁸⁷

A brown bone bead, much smaller in diameter and angular in section, appears to be made of a bird's bone (200.1).²⁸⁸

Stone

While fragments of diverse material debris and tools that may have been used in beadmaking were found at many C-Group habitation sites,²⁸⁹ the local production of stone beads in the C-Group is more firmly supported by stoneworking sites on the west bank near Ballana.²⁹⁰ They contained C-Group sherds in addition to quartz and carnelian points. The drills were made of bladelets that were modified into tapered cylindrical drills. These tools were used for the softer stones and short beads made from harder stones.²⁹¹ A bead-maker's tool kit with a small carnelian borer and bone beads was also found at a C-Group settlement on the west bank at Faras.²⁹²

Truncated disc beads, standard barrels, and bicones were drilled from both ends with tapered drills, resulting in a perforation with an hourglass shape, known already from A-Group and Naqada assemblages. As in the A-Group, the ends of the beads were unpolished, but the beads' sides were polished, perhaps after the beads were strung. Such beads are common in both Kerma and other C-Group assemblages. They are also found in contemporary Egypt. Interestingly, bronze drill points and a stick of emery were found at Kerma and were undoubtedly used for bead production.²⁹³

In one case, a larger carnelian standard barrel bead bears traces of saw marks next to one of the hole openings (187.1). Its perforation has a double parallel shape

and strongly recalls the technique of perforation used for stone beads from the Meroitic period.²⁹⁴

Carnelian

In contrast to the perfectly polished short barrel beads in the A-Group period, C-Group red beads were made from the more translucent carnelian and agate. **Truncated disc and standard beads** had their sides shaped into barrels, bicones, and cylinders, and the shapes of their sides probably depended on the angle at which they were polished while strung together.²⁹⁵ According to diameter, the following groups can be distinguished: **very small** (D 2.1–3.0) (121.2, 131.1, 156.2, 176.2, 177.3, 12, 193.2, 213.1), **small** (D 3.2–5.8) (56.1, 58.1–2, 71.2, 84.1, 88.1, 96.2, 97.1–2, 103, 107.6, 118.2, 125.1, 127.1, 131.2, 148.6, 168.1–2, 189.1, 193.1, 195.2, 198.1, 200.3, 203.1, 214.2),²⁹⁶ and **large** (D 6.7–8.0) (83.1, 90.2, 192.2, 194.1, 210.3). The very small and small beads were often found used in leather beadwork. The other forms are **long barrels** (89.2, 168.3) and **globular beads** (218).²⁹⁷

Two shapes can be noted among pendants: a **tear-drop** with truncated top and pointed base (71.1) and a **bag-shaped** pendant with flattened neck and rounded base²⁹⁸ (57.5).

Garnet

A single garnet standard barrel bead is large in size (ca. 7 mm in diameter [58.3]) and larger than the majority of stone beads found in C-Group contexts.²⁹⁹

Diorite

Diorite beads include tiny disc and short barrels and short cylinders (D 2.2–3.2) (65.6, 80.1, 94.2, 102.2, 107.5, 118.1, 121.3, 132.1, 133.1, 176.3, 200.2, 205.2, 207, 208, 214.1, 215.2, 217.2, 220.2, 224.4).³⁰⁰ Some of these beads were used in leather beadwork (65) but also in a necklace (133). There are also small, short barrel and oblate

286 Bonnet 1990, cat. no. 200, D 3.5, L 15—Kerma, Middle Kerma.

287 Emery and Kirwan 1935, figs. 483:10, 484:15, 18; Säve-Söderbergh 1989a, fig. 29:B.

288 JE 65299 = 10999—Aniba.

289 Hafsaas 2006, 50–60.

290 Smith 1962, 30–35; Hafsaas 2006, 97.

291 Kenoyer 2003, 17, fig. 3a.

292 Hafsaas 2006, 57.

293 Reisner 1923, 93.

294 Then-Obłuska 2014.

295 Firth 1912, pl. 56, no. 5; Friedman 2007.

296 Vercoutter 1970, pls. 28–29, type B12—Mirgissa.

297 Ibid., pls. 28–29, type B9—Mirgissa; Met 22.3.321—tomb of Muyet, reign of Mentuhotep II.

298 Firth 1927, pl. 22a.1, described as “gray and white stone.”

299 Vercoutter 1970, pls. 28–29, type B7—Mirgissa; MAN 1980/91/338—Argin T.89; for a wristlet made of short garnet barrel beads in tomb 46 at HK27C, Eleventh to Twelfth Dynasty, see Friedman 2007, 22.

300 Firth 1912, pl. 56, no. 6; Andrews 1981, cat. nos. 377 and 378, pl. 27, mottled pink and black syenite from Faras, cemetery 2, grave 238 (= Griffith 1921, 75); see also Steindorff 1935 (= JE 65264 = 10956).

beads in diorite (D 4.2–7.9, L 2.0–4.3) (57.3, 107.2–4),³⁰¹ as well as large examples (D 11.8–13.2) (93, 104.1).³⁰²

Two elongated teardrop pendants are in the collection. One has a pointed base (148.4) and the other a rounded top (148.5).³⁰³

Stone

Three objects probably of stone are more or less tabular with central perforations (224.1–2). A similar bead has been recorded in an N-Type tomb.³⁰⁴

Metal³⁰⁵

Small rings, in the shape of **disc cylinders and short cylinders**, constitute the most common form among metal beads. In the OINE collection, metal rings made of gold³⁰⁶ (121.5, 182.2, 205.3, 213.2), silver³⁰⁷ (66.1, 178, 182.1), copper (154.1, 200.4), and other types of metal (58.4, 68.3, 164.5) were found. Some objects were found in contexts dated to phases IIA (213.2, 154.1), Late IIA (121.5), or Late IIA/B (66.1), and others are dated to Early III (178, 182.1–2).

The beads' diameter usually remains consistent across a given bead type. Disc cylinders seem to have been made by casting. The shape of the rings was made in fresh clay, for example with a thin tube, and the molten metal was cast in the hollow. These are dated to phase Early III, about 1550 BC (178, 182.1–2).³⁰⁸ Other beads may also belong to this group (66.1). **Short cylinders** were also made of solid metal strips that were bent around until their ends touched or overlapped (121.5, 154.1, 164.5, 200.4, 213.2).³⁰⁹

301 Vercoutter 1970, pls. 28–29, type B1–Mirgissa; MAN 1980.91.332–Argin, 6–B–26, T.84; Steindorff 1935, pl. O.c (= JE 65252 = 10968); JE 65251 = 10969; Reisner 1923, 113, “white speckled granite” beads (D 5–9 mm) found with three individuals in tombs at Kerma.

302 Emery and Kirwan 1935, fig. 489:91; Steindorff 1935, pl. O.c; for the examples from Kerma, see Gratien 1986, fig. 40–Sai; Reinold 2000, 98–Sai, Early Kerma; Bonnet 1990, cat. no. 101–Kerma, Early Kerma; Steindorff 1935 (= JE 65250 = 10970).

303 Steindorff 1935, pl. 27a, b.

304 Cf. below cat. no. 243.3.

305 Hafsaas 2006, appendix 3 for the table with jewelry from Aniba, including metal beads.

306 Steindorff 1935, 125–92, pl. 28d–h (= JE 11003 = JE 65275/1–8); JE 10958 = 65278; JE 11005 = 65273; JE 10985 = 65292; MFA 50.30111–Aniba, object no. 255; Firth 1912, pl. 56.3 (electrum); Säve-Söderbergh 1989b, pl. 50.2.

307 Säve-Söderbergh 1989b, pl. 50.3.

308 MAN 1980.91.305.24; 1980.91.308 (ANX36).

309 MAN 1980.91.433b–Argin tomb 123; UC 38913–Rifeh, Middle Kingdom; MFA 50.4091–Aniba; MFA 20.1741–Kerma, tomb K 1600C.

Metal leaf strips were also turned up into short cylinders with slightly rounded sides and the ends abutted or overlapped (58.4, 205.3). They were found in C-Group contexts dated to phase II.

To another category belong the **long barrel-shaped** beads from Adindan. Two beads were made from folded metal sheet (98.2, phase IIA/B). In another case, a strip of long metal leaf was found coiled into a bead (69.2, perhaps of phase Early III).

The **ibis** amulet is made from electrum leaf (209); the body was cut from the metal strip and left without detail, and the legs were then added. The ibis is striding across a bracket (sacred perch) that consists of a curved metal rod. On the bird's back are traces of a suspension loop, now broken off but probably in the form of a ring.³¹⁰

Metal over Ceramic Core

Some metal beads seem to have been made by wrapping metal sheet over a ceramic core, which was previously folded around a rod. These types of beads come from Adindan. This technique is especially discernible in the case of nine bicones from phase Late IIA/B (66.2), and the largest examples in the category are two **long biconical** beads of the same date (129.4). Where the metal has worn away, it is possible to see a core over which the metal sheet was hammered (D 7.1–7.4, L 11.3, HD 2.4).

Cores wrapped in silver sheet made up some small **long barrels** in phase Early III (D 2.8–3.4, L 3.6–4.2, HD 1.0–1.5) (53.3, 54.4, 71.3).³¹¹

Another type is represented by ten **biconical** beads of metal sheet that were much thicker than the other examples (D 4.8–5.5, L 6.4–8.3, HD 1.6) (74#). The beads consist of traces of metal wrapping that are preserved in the form of darker spots left on the ceramic cores, as seen in the beads listed above. The beads were found in phase III C-Group or Pan Grave contexts.

Glazed Steatite

Blue-glazed steatite beads had the form of **long barrels** (D 2.9–3.8, L 3.5–4.7) (57.4, 168.4) and an unidentified form of amulet (71.4).

310 Dubiel 2008, pl. 3; for parallels, cf. nn. 229–33.

311 Junker 1920, fig. 10.77.16.h.4.

Faience

The most characteristic feature of C-Group beads and beadwork are the tiny faience beads. The shapes and appearance of all beads depend on the length to which the core tubes were cut, their diameter, and the core quality, firing, and glazing process. They usually measure up to 4 mm in diameter, and two subtypes can be differentiated.

The first subtype includes blue- and green-glazed beads, generally in the shape of irregular disc or short cylinders with fine white cores³¹² (50.3, 52.2, 53.5, 55.2, 65.1, 7, 76, 77.2, 86.1, 88.3, 89.3, 90.4, 102.4, 104.2, 109, 112.1, 113, 114, 117.4, 118.3, 120.2, 121.4, 129.1, 3), or black-glazed beads with brown cores³¹³ that measure either about 2–3 mm in diameter (65.3, 80.3–4, 88.2, 94.5, 96.3, 102.3, 127.2, 129.2, 144) or about 4–5 mm in diameter (51.3, 53.2, 8, 55.2, 56.2, 62.2, 85.2, 90.3). Beads with a clear border between the core and glaze were glazed with an application method that kept the two clearly separated.

The second subtype includes beads usually with oblate sides and a thick layer of very glossy blue, dark blue, green, or black glaze. Their cores are almost indiscernible.³¹⁴ They are usually of a short oblate shape and measure about 2–4 mm in diameter (51.2, 52.3, 53.7, 60.1–2, 62.1, 63, 65.2, 67.3, 68.2, 4, 69.3, 76, 78, 80.2, 82.3, 83.2, 84.2, 85.3, 87, 88.4, 89.4, 6, 90.4, 91.2–3, 94.3–4, 97.4, 98.3–4, 106, 107.7, 110, 111.2#, 112.2, 114, 115, 116, 120.1, 122.2, 124, 125.2, 128.3–4, 6, 141). The very small, glossy beads were perhaps glazed using an efflorescence method.

Both types have already been recognized from Egyptian³¹⁵ and Kerma period graves and also in contexts from the Fourth Cataract region.³¹⁶ Nevertheless, tiny glossy faience beads are not recorded from the Serra East C-Group assemblages, including the N-Type and P-Type graves (cf. sections 3.1.2 and 3.1.3). This absence would suggest that these beads are later in Lower Nubia than in Egypt or the Fourth Cataract region, as observed with the Adindan burials.

Very regular, thin, disc barrel beads (D 3.4–5.5, L 0.7–1.1, HD 1.2–1.4) (112.1, 192.3, 196.3) are easily distinguished from the abovementioned types. The latter two examples (192.3, 196.3) were probably part of leather beadwork.

A few larger beads in the form of a red faience standard barrel (86.2), large blue globular beads (82.2, 130.2#, 176.8, 195.3),³¹⁷ short barrels (89.3), long blue cylinders (89.7, 97.3), and long blue-glazed bicones (220.5) represent outstanding types in the undecorated faience category because of their coloration and shape.

Among the decorated faience objects is an amulet that looks like a flattened form of a **simplified crocodile** (130.1#). A parallel comes from the New Kingdom Hathor sanctuary at Mirgissa.³¹⁸ A similarly shaped specimen was found in a C-Group grave at Abka.³¹⁹ Other forms represented are a **melon** (71.7), **astragal**³²⁰ (71.5), **wedjat** (71.6), **wrestlers** (212),³²¹ and an unidentified form of amulet (168.7).

Glass

Wound-glass beads

Although catalog number 163 was found in the C-Group cemetery K at Adindan, the excavation register (OIM E23070) describes it as “50–70 blue glass, bone, and carnelian beads” from tomb K 45 and assigns to it a post-New Kingdom date.³²² The object consists of some multiple segmented black faience beads and many translucent dark blue, semitranslucent blue, and opaque yellow beads. The glass beads are made with a winding technique and measure 3.7–6.6 mm in diameter. Translucent and semitranslucent wound-glass oblate and globular beads are known from New Kingdom assemblages (324, 326), but they also recall wound-glass examples from Dorginarti and dated to the Egyptian Third Intermediate Period.³²³

Drawn-glass beads

Another later example is a cut fragment of a blue drawn-glass tube (80.4), which could be medieval and therefore intrusive.

312 Firth 1912, pl. 56, no. 9.

313 Ibid., pl. 56, no. 8.

314 Friedman 1998, cat. nos. 65, 172—Twelfth Dynasty.

315 E.g., MFA 13.3537—from Sheikh Farag, Egypt, SF 18.1913.

316 Then-Obluska 2014.

317 Steindorff 1935, pl. 30b; JE 1509 = 10953; for large blue globular faience beads at Kerma, cf. cat. no. 294.2.

318 Vercoutter 1970, 344, cat. no. 71.

319 Säve-Söderbergh 1989a, 242; Säve-Söderbergh 1989b, pl. 46: F, c—site 270/53:2.

320 Junker 1920, fig. 10.78.16.h2, third from right—Kubanieh Nord; Dr. René F. Friedman (personal communication)—Hierakonpolis, HK27C, G 2, T 23; Brunton 1928, pl. 99:73A6—knucklebone.

321 For parallels, cf. nn. 236–39.

322 OINE V, 212.

323 Then-Obluska, in press.

Beadwork

Leather Beadwork

The most characteristic Middle Nubian beadwork in Lower Nubia consisted in thousands of faience beads, somewhat fewer ostrich eggshell beads, and sometimes red carnelian beads stitched onto leather.³²⁴ The leather fragments with stitched beads in the OINE collection show diverse types of beadwork. In some cases, two thongs are threaded through the hole of every bead, creating a system that appears like an alternating brick pattern (53). Lozenge-shaped patterns of beads are preserved in only a few cases.³²⁵ Bordered by a single row of ostrich eggshell beads, a lozenge pattern of blue faience beads was set into a blue faience background (68, 128, 177.5–6).³²⁶ Faience beads either fill the leather surface or are sewn in one row on the edge of a leather garment (78, 110). Some beads, from the waist area of a garment, may have been attached to the drawstring of a skirt and are visible through openings in the leather (110). They could have been fastened to the edge of the leather.

Unfortunately, Middle Nubian leather beadwork is mostly preserved in the form of dispersed beads and leather fragments (63, 65, 68, 78, 106[?], 110, 128, 129, 136, 141, 177, 184, 189, 190, 192, 196, 199, 200, 259, 260, 264). These items consist in the remains of thongs for bead embroidery and broken leather pieces, and some thong fragments come from sewing beads together with a single thread. The beads are attached at their ends and arranged slightly diagonally in one or more lines. The combination of bead materials consists of faience (63, 78, 87, 129, 141, 198, 199) or ostrich eggshell and faience beads (53, 128, 177, 184, 190, 196). More colorful compositions include beads made of carnelian and faience (189, 192); bone, diorite, carnelian,

copper, and faience (200); ostrich eggshell, diorite, and faience (65); ostrich eggshell, metal, and faience (68); and, finally, copper and faience (110). Although object 164 has been ascribed to the C-Group, the more than twenty-four hundred ostrich eggshell beads and associated leather fragments would rather indicate a Pan Grave background for this assemblage.³²⁷

C-Group beads were not only sewn onto leather garments and accessories but also used in necklaces, armlets, anklets, and wristlets.³²⁸ Original stringing was preserved in the form of straight leather thongs (205.5) and fiber thread fragments (54.4, 55, 66, 71.3, 73, 77, 84.2, 89.8, 91, 152, 156, 164.6, 176.7).

Necklaces

Necklaces were composed not only of beads made of faience (140), carnelian (198), silver (66, 178), and diorite and faience (133) but also of carnelian, garnet, and silver (58). Interestingly, in contrast to other types of C-Group beadwork (leatherwork, bracelets, anklets, girdles), no ostrich eggshell beads were included in necklaces.

Wristlets/Bracelets

Bracelets were found composed of perforated *Polinices* shells (135, 138); ostrich eggshell beads (159); a combination of *Nerita* shell, carnelian, and faience beads (195); and a combination of ostrich eggshell, silver, and faience beads (54).

Anklets

Anklets were found composed mainly of ostrich eggshell beads along with some faience beads (55, 77, 91, 134, 179). In two cases, anklets were made solely of ostrich eggshell beads (142, 159).

Girdles

Cowrie shells (59), as well as a combination of *Nerita* shell, ostrich eggshell, and faience beads (188), were found in accessories in the location of the waist.

324 For many types of beadwork, bead pot nets, and leather and cloth beadwork recorded at Kerma, see Reisner 1923, 94–106; for C-Group leather beadwork, see Steindorff 1935.

325 For one case of a leather skirt that preserved a beaded lozenge pattern at Kerma, see Reisner 1923, 102.

326 For two Kerma examples of a lozenge pattern of faience and shell beads on leather skirts, see Reisner 1923, 102—K 5611:A, lot (b); Emery and Kirwan 1935, 285—cemetery 195/52:2, showing a fragment of a bead belt in a child burial with ostrich eggshell and blue faience beads sewn in a diamond pattern on leather; Griffith 1921, 75, pls. 11.1, 11.c, 12.1, 14.2/54, showing a set of lozenges of white and blue borders with red and black centers and bordered by two rows of white beads on a blue background, found sewn into a girdle of the child in grave 54 at Faras; for a more sophisticated bead pattern, cf. P-Type cat. no. 259; see also Friedman 2001 for white, blue, and dark blue faience beads arranged in a lozenge pattern on a leather bag found at the Pan Grave cemetery, HK47, at Hierakonpolis.

327 Cf. the Pan Grave items, cat. nos. 268, 270, 272, 277–79, 282, 284.

328 For beaded sashes at Hierakonpolis in the C-Group cemetery of HK27C, see Friedman 2007, 21.

The Bead Owners

In many cases, individuals were anthropologically identified by age and sex. Although the overwhelming majority of beads were found dispersed in grave shafts, or beadwork was not recorded, the items can nevertheless be identified as associated with individuals of a given age and sex based on the available data.

Infants

Two exceptional bracelets made of *Polinices* shells belong to individuals of this age group (135, 138). Leather beadwork was found with a five- to six-year-old child and was composed of ostrich eggshell and faience beads (128). Like contemporary Kerma examples known from the Fourth Cataract region,³²⁹ large quantities of very small faience rings were found with infant burials (60, 114, 166). In one case, amulets were buried with an infant (71).

Juveniles

A bracelet of *Nerita* sp. shell, carnelian, and faience beads, along with other bead objects, was found with a juvenile of unidentified sex (195).

Females

A juvenile female was found with some leather faience beadwork (63, 129). Another female individual was adorned with a necklace made from carnelian, garnet, and silver beads (58) and with a girdle made from twenty cowrie shells (59).³³⁰

Twenty cowrie shells were also found in another burial of an adult female (126),³³¹ and three more adult

females were found with anklets of ostrich eggshell beads or ostrich eggshell and faience beads (134, 142, 179) and with necklaces variously made of silver, diorite, and faience beads (133, 140, 178). Remains of leather beadwork were found with one adult female (141) and with two others (65, 199). Anklets were made from ostrich eggshell (142) or ostrich eggshell and faience beads (91, 134, 142, 179). In two cases, necklaces were made from metal rings (66, 178).³³² In one case, a single bracelet of ostrich eggshell was found (142).

Also, a senile female was found with an anklet (55), a bracelet (54),³³³ and leather beadwork (53). An ostrich eggshell and faience anklet was recorded with a female individual in the same age category (77).

Males

A juvenile male was found with leather beadwork in his grave. Ostrich eggshell, faience, and single-metal beads were sewn in a lozenge pattern on leather (68). Similar leather beadwork was associated with an adult (87) and a few mature males (78, 110, 177).

Summary

Leather beadwork was found with individuals of all age categories and with both males and females. Shell girdles were found with juvenile females only. Anklets belonged to adult and senile females. Interestingly, with the exception of one male individual (182),³³⁴ metal beads, whether short cylinders or bicones and barrels, were usually found with females (54, 58, 66, 74#, 178, 180). Faience amulets and mollusk shell bracelets were usually associated with infants. The wrestler or twin amulets constitute exceptional examples of figural amulets and were found with an adult of unspecified sex (212).

³²⁹ Then-Obluska 2014.

³³⁰ For a belt of gold cowries belonging to Princess Sathathor and Queen Uret, see Bongioanni and Croce 2003, 346, 352; for a stone carving of a girl with a cowrie girdle, see Andrews 1990, 173, cat. no. 156; for faience female figures with painted cowrie girdles, dated to the Middle Kingdom, see Grajetzki 2013, 24, and Paris Musée du Louvre, E 10942; for statues of women with cowrie girdles, see Andrews 1981, 94; for a wooden statue of a woman with a cowrie girdle from the Twelfth or Thirteenth Dynasty, see MFA 00.607.

³³¹ Bianchi 2013, 25–31, fig. 2, and references therein for Middle Kingdom necklaces and girdles made of metal cowrie shells.

³³² Firth 1912, vol. 1, 179—cemetery 87, grave 106, object G 3; vol. 2, pl. 56, 3, for a necklace of gold beads buried with a female skeleton.

³³³ For 546 faience beads still wrapped around the wrist of the senile female in tomb 36 at Hierakonpolis HK27C, see Friedman 2007, 22.

³³⁴ Metal beads were found associated with male individuals in two anthropologically identified examples from Aniba; see Steindorff 1935, N 222, N 352; Hafsaas 2006, 150.

Catalog



50

Adindan T 3—3a—c: Beads from shaft, uncertain location (mature male); OIM E21428 (labeled OIM E21425, which belongs instead to Q446 of X-Group date)

C-Group, phase III

1. Ostrich eggshell, drilled from one end, disc cylinder, grayish (1), D 5.4, L 1.5, HD 2.4
2. Ostrich eggshell, short cylinder, drilled from one end (23), D 3.2–3.6, L 1.1–1.9, HD 0.6–1.7
3. Faience, disc and short cylinder, blue and green (100), D 3.0, L 0.8–1.7, HD 1.0

Bibliography: OINE V, 127



51

Adindan T 4B—6a-b: Pendant and beads from shaft with burial B (no body recorded);

OIM E21568B

C-Group, phase III

1. Ostrich eggshell, rhomboidal plaque pendant, yellow (1), L 18.9 × 17.9, Th 1.9, HD 1.8

2. Faience, short oblate, blue (1), D 2.4, L 1.0, HD 0.7

3. Faience, short barrel, black, some bluish or grayish traces (82), D 3.7–4.0, L 0.9–1.5, HD 1.2

Bibliography: OINE V, 128, pl. 115L

52

Adindan T 5—3: Beads from debris in shaft (mature/senile); OIM E21535

C-Group, phase Early IIA

1. Ostrich eggshell, disc cylinder (13), D 5.6–6.3, L 1.4, HD 1.3

2. Faience, short cylinder, light green/blue (3), D 3.5–4.4, L 1.7–2.1, HD 1.3

3. Faience, ring, blue (1), D 2.6, L 0.9, HD 1.0

Bibliography: OINE V, 128





53

Adindan T 8—1a-b, 5a-b: Lozenge-shaped pattern of beads on body and in debris in shaft (senile female);

OIM E21536

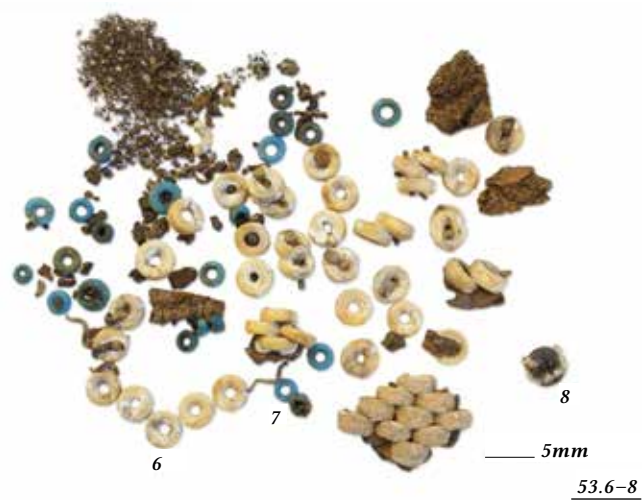
C-Group, phase Early III

From debris:

1. Ostrich eggshell, drilled from one end, disc cylinder (1), D 5.4, L 1.3, HD 3.6–1.0–3.6
2. Faience, disc cylinder, black (13), D 4.2–5.2, L 1.5–2.0, HD 1.2
3. Silver sheet over ceramic core, barrel, dark gray (2—1 broken), D 2.8, L 3.6, HD 1.0

From possible lozenge-shaped pattern:

4. Ostrich eggshell, drilled from one end, short cylinder (90), D 3.8–4.4, L 1.2–1.7, HD 1.9–1.0
5. Faience, short cylinder, blue (295), D 2.3–4.5, L 0.9–2.1, L 1.0–1.9





53 (continued)

From lozenge pattern:

6. Ostrich eggshell, short cylinder (50), D 3.9–4.2, L 1.8, HD 1.0

7. Faience, ring, blue (ca. 20), D 2.8–3.0, L 1.2–1.9, HD 1.2

8. Faience, disc cylinder, black (1), D 4.0, L 1.5, HD 1.2

Bibliography: OINE V, 129

54

Adindan T 8–2: Bracelet, small silver barrels in shaft and on body (senile female); OIM E21516

C-Group, phase Early III

1. Ostrich eggshell, drilled from one end, disc cylinder (3), D 4.2, L 1.6, HD 1.0

2. Ostrich eggshell, drilled from one end, disc cylinder (2), D 5.7, L 1.8, HD 1.5

3. Ostrich eggshell, drilled from one end, disc cylinder (1), D 7.4, L 1.8, HD 2.7

4. Silver sheet folded, standard barrel, dark gray (15), D 3.0, L 3.0–3.8, HD 1.1–1.2

5. Faience, disc cylinder, blue (56), D 2.3–2.9, L 0.7–1.1, HD 0.7–0.8

6. Faience, disc and short cylinder, green and blue (88), D 2.9–3.7, L 1.0–1.9, HD 0.7–0.9

Bibliography: OINE V, 129, pl. 117F





55

Adindan T 8—3a-b: Anklet in shaft
and on body (senile female);

OIM E21514

C-Group, phase Early III

1. Ostrich eggshell, drilled from one
end, short and disc cylinder (145),
D 3.9, L 1.2–2.2, HD 1.4–1.0

2. Faience, disc cylinder, black
and blue (28), D 3.3–4.4, L 1.3–1.8,
HD 1.2

Bibliography: OINE V, 129

56

Adindan T 10—1a-b: Beads
from shaft (no body recorded);

OIM E21534

C-Group, phase IB/IIA

1. Carnelian, drilled from both
ends, short barrel, red (6), D 4.4–4.9,
L 1.9–3.0, HD 2.6–0.7–2.6

2. Faience, short cylinder, black (89),
D 3.5, L 0.9–1.7, HD 1.5

Bibliography: OINE V, 129

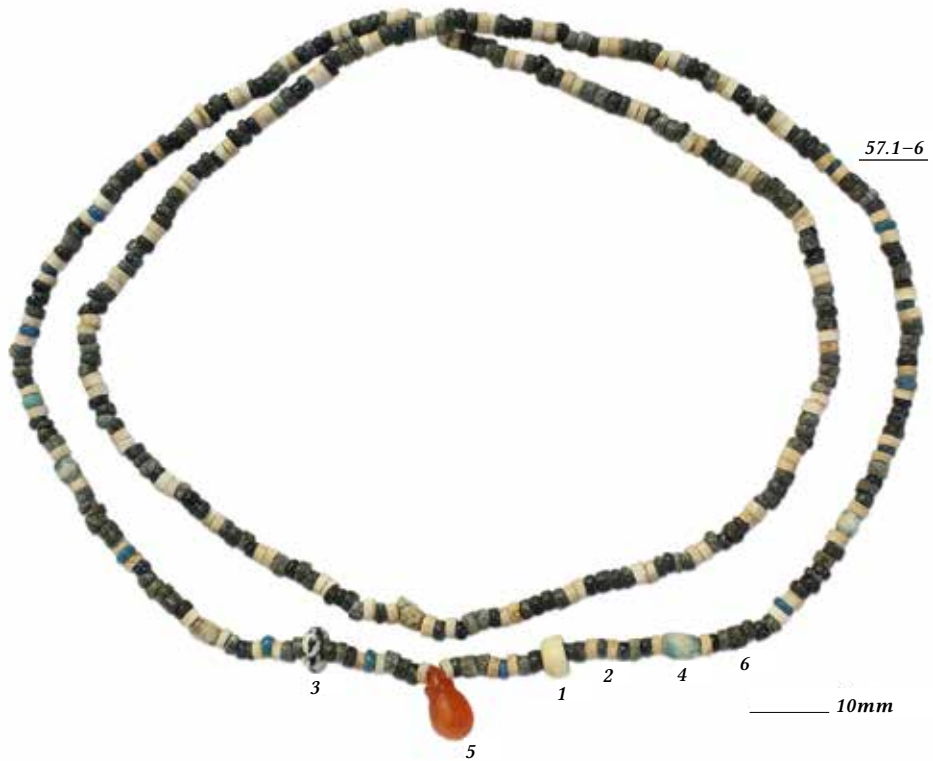


57

Adindan T 11—1a-g: Beads from shaft (child); OIM E21532
C-Group?

1. *Conus* sp. shell (1), D 5.2, L 3.2, HD 2.4
2. Ostrich eggshell, disc and short cylinder (129), D 2.9, L 1.6, HD 1.1—hourglass
3. Diorite, short barrel, white and black (1), D 5.8, L 2.4, HD 2.4—1.2—2.4—hourglass
4. Steatite, long barrel, light-blue glaze (5), D 3.3, L 3.5, HD 0.8
5. Carnelian, bag-shaped pendant, red/orange (1), Th 6.0, L 10.0, HD 1.2—traces of drilling tool next to largest hole opening
6. Faience, disc and short cylinder, dark and light blue, black (280), D 2.9, L 1.1–1.8, HD 0.8

Bibliography: OINE IV, 117



58

Adindan T 12B—1a-c: Part of necklace, beads from shaft (juvenile female, less than 15 years old); OIM E21518
C-Group, phase III

1. Carnelian, drilled from both ends, disc barrel, red (2), D 4.2, L 1.9, HD 1.9–0.9–1.9—hourglass
2. Carnelian, drilled from both ends, truncated barrel (3), D 3.8, L 2.6–3.3, HD 2.4–0.7–2.4—hourglass
3. Garnet, standard truncated barrel (1), D 6.0
4. Metal (silver?), folded, short cylinder (156), D 3.0–3.4, L 1.2–1.4, HD 2.1

Bibliography: OINE V, 130





59

59

Adindan T 12B—2: Girdle of 20 cowrie shells in shaft and on body (juvenile female, less than 15 years old); OIM E21509A

C-Group, phase III

Cypraea annulus shell, dorsal part removed, white (20), W 13.6–17.8, H 5.1–6.2, L 18.6 × 24.3, HD 9.6 × 13.3–17.2 × 12.6

Bibliography: OINE V, 130, pl. 118C

60

Adindan T 32—2: Beads from shaft (infant, 2–3 years old); OIM E23302A, C

C-Group, phase IIA

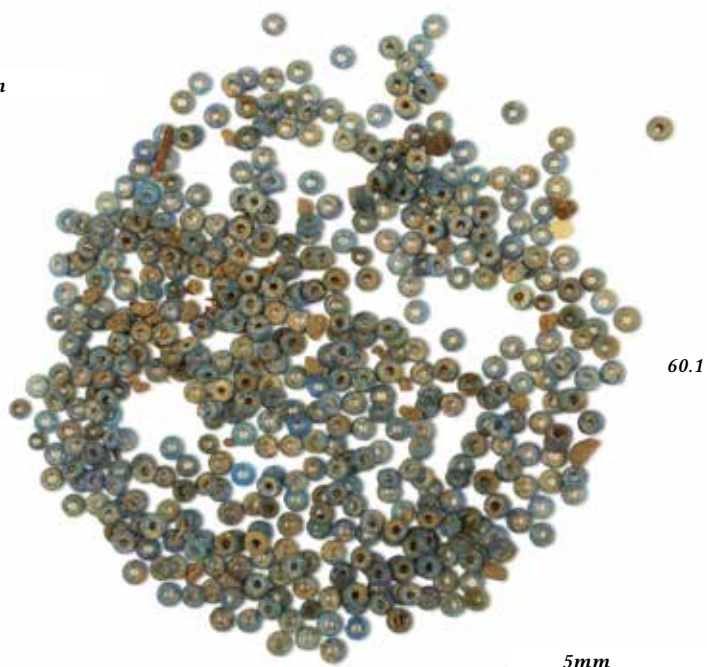
OIM E23302A

1. Faience, disc cylinder, blue (ca. 469), D 2.6, L 0.9, HD 0.7–1.1

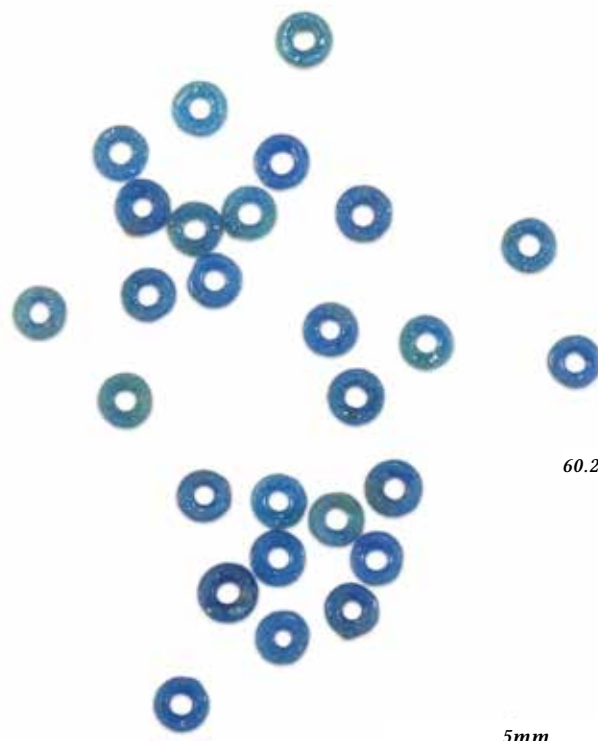
OIM E23302C

2. Faience, disc cylinder, blue (27), D 2.6, L 0.7, HD 1.5

Bibliography: OINE V, 130



60.1



60.2



61

Adindan T 33—1: Beads in debris of tomb (adult female); OIM E23300

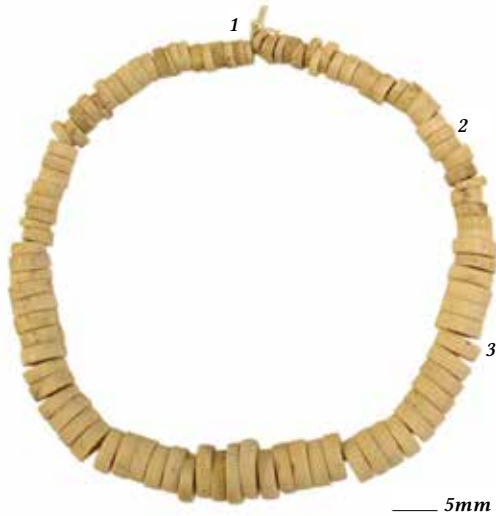
C-Group, phase III

1. Ostrich eggshell, drilled from both ends, disc and short cylinder (56), D 3.7, L 1.0–1.9, HD 2.5–1.0–2.5

2. Ostrich eggshell, drilled from both ends, disc and short cylinder (42), D 5.5, L 1.5–2.0, HD 2.9–1.5–2.1

3. Ostrich eggshell, drilled from both ends, disc and short cylinder (2), D 7.1, L 1.6, HD 1.6–1.1–1.6

Bibliography: OINE V, 130–31



61.1–3



62

Adindan T 39—5: Beads from shaft (adult female); OIM E23360

C-Group, phase IIA

1. Faience, ring, disc and short cylinder, blue (7), D 2.6–3.5, L 0.7–2.2, HD 0.9–1.6

2. Faience, ring, disc and short cylinder, black, a few bluish (193), D 3.2, L 0.7–1.3, HD 0.9

Bibliography: OINE V, 133



62.1–2



63

63

Adindan T 40—7: Beads, some sewn on leather near head (juvenile female, ca. 14 years old);

OIM E23359

C-Group, phase Late IIA

Faience, disc and short cylinder, ring, blue and green (544), D 2.3–3.1, L 0.6–1.9, HD 0.9

Bibliography: OINE V, 133



63



64

Adindan T 43—1: Beads from shaft (mature male);

OIM E30088

C-Group, phase III

Ostrich eggshell, disc (2—sample), D 8.0; 9.7, L 1.7; 1.8, HD 1.5; 1.9

Bibliography: OINE V, 134, pl. 116D



64

5mm



65

Adindan T 46—1b—d: Leather garment with beads near hips, or near body in shaft (adult female); OIM E23305A—D C-Group, phase Late IIA/B
OIM E23305A

1. Faience, short to standard cylinder, blue, dark blue, black (288), D 2.1–3.1, L 1.1–2.6, HD 1.0–1.4

OIM E23305B

2. Faience, ring, disc and short cylinder, blue (ca. 501), D 2.2–3.0, L 0.9–2.2, HD 1.0–1.1

OIM E23305C

3. Faience, short cylinder, black, dark blue (518), D 2.4–2.9, L 0.9–2.4, HD 0.8–1.3

4. Faience, short cylinder, green (24), D 2.4–3.2, L 0.7–1.8, HD 0.8–1.0





65.5-7

65 (continued)

OIM E23305D

5. Ostrich eggshell, drilled from one end, short cylinder, whitish (212), D 3.0, L 0.7–1.9, HD 1.1

6. Diorite, drilled from one end, short cylinder, white and black (1), D 2.3, L 1.0, HD 0.7

7. Faience, short cylinder, blue (211), D 2.2–3.2, L 0.8–2.1, HD 1.3

Bibliography: OINE V, 134–35

66

Adindan T 46–3a–b: Beads from neck (adult female); OIM E23357
C-Group, phase Late IIA/B

1. Silver, folded strip, disc cylinder (ca. 100 and many fragments), D 4.4, L 1.1, HD 3.4

2. Silver sheet over possible ceramic core, bicone (9), D 6.3–6.8, L 6.5–8.8, HD 2.0

Bibliography: OINE V, 134–35, pls. 116W, 117E, G



66.1-2

10mm



1



2



67 (cf. cat. no. 72)

Adindan T 52—2a-c: Beads from shaft near neck (adult female?) (beads from T 52 were mixed with those from T 61); OIM E30096 C-Group, phase Early III

1. Ostrich eggshell, short cylinder (2), D 2.6, L 1.5, HD 1.0

2. Ostrich eggshell, short cylinder (1), D 4.1, L 1.6, HD 1.0

3. Faience, ring, short cylinder, blue (18), D 2.5–3.3, L 1.0–2.3, HD 0.8–1.4

Bibliography: OINE V, 136–37



68

Adindan T 54—1: Beads in lozenge-shaped pattern (from leather?) from shaft, at southwest end (juvenile male, ca. 17.5–18.5 years old); OIM E23200 C-Group, phase Early(?) III

1. Ostrich eggshell, disc cylinder (246), D 3.2–3.4, L 1.0–1.6, HD 0.9—elements of lozenge pattern

2. Faience, ring, blue and greenish (585), D 2.8–3.5, L 1.0–1.2, HD ca. 1.2—elements of lozenge pattern

3. Metal folded sheet, short cylinder (1), D 2.7, L 1.1, HD 2.0

4. Faience, disc and short cylinder, blue and greenish, blackish (ca. 583), D 2.4–3.0, L 1.0–2.0, HD ca. 1.1

Bibliography: OINE V, 137, pl. 106B





69

Adindan T 55—1a-c: Beads from shaft (no body recorded); OIM E23201

C-Group, phase Early(?) III

1. Ostrich eggshell, disc cylinder (6), D 3.9, L 1.8, HD 1.1

2. Metal sheet, barrel, dark gray (1), D 2.8, L 3.9, HD 1.0

3. Faience, ring, blue and green (44), D 2.0–2.9, L 0.7, HD 0.8

Bibliography: OINE V, 137

70

Adindan T 56—1: Pendant from shaft (adult male); OIM E23203

C-Group, phase Early III

Nacre, drilled from both sides, crescent (1), Th 3.7,

W 21.8, H 92.5, HD 2.5

Bibliography: OINE V, 138, pl. 115E





71

Adindan T 60—1a–d: Beads from shaft (infant, ca. 2 years old); OIM E23207

C-Group, phase Early III

1. Carnelian, teardrop pendant with truncated top, red (1), D 4.7 × 4.0, L 9.9, HD 2.4–0.9–2.4—hourglass
2. Carnelian, disc barrel, red (2), D 4.5; 4.6, L 2.1; 1.5, HD 1.5; 1.0—hourglass
3. Copper, barrel, dark gray (1), D 3.4, L 4.2, HD 1.5
4. Glazed steatite, blue (1), D 7.2 × 2.8, Th 3.3, HD 1.1
5. Faience amulet, blue (1), Th 2.0 × 4.8, L 8.2, HD 1.3
6. Faience, *wedjat* amulet, blue (1), D 5.0 × 2.9, L 5.8, HD 1.0
7. Faience, carinated barrel, blue (1), D 4.2, L 3.9, HD 1.0

Bibliography: OINE V, 138

72 (cf. cat. no. 67)

Adindan T 61—2: Beads from shaft (mature female); OIM E30096

C-Group, phase Early(?) III

Beads from T 52 and T 61 were mixed together (cf. cat. no. 67)

Bibliography: OINE V, 139

73

Adindan T 65—1: Beads, strung(?), in grave (child, ca. 4 years old); OIM E23206

C-Group, phase IIA/B

1. Ostrich eggshell, short cylinder (34), D 3.3, L 1.8, HD 0.9—some on string fragment
2. Ostrich eggshell, disc cylinder (3), D 6.2, L 1.4, HD 2.0

Bibliography: OINE V, 140





75

74#

Adindan T 66—1: Beads from shaft (adult female); OIM E23204

C-Group, phase III or Pan Grave

Silver sheet, long biconical (10), D 4.8–5.5, L 6.4–8.3, HD 1.6

Bibliography: OINE V, 140, pl. 116S

75

Adindan T 68—3, 5: Bead and looped band of fibers serving as core of necklace in shaft (adult male); OIM E30100, OIM E30101—band

C-Group, phase IIA

Bone, drilled from both ends, long tubular, whitish (1), D 7.9 × 7.7, L 19.9, HD 4.2

Bibliography: OINE V, 140, pl. 107A

76

Adindan T 71—1: Beads from grave (adult male); OIM E23227

C-Group, phase Early(?) III

Faience, ring, short cylinder, blue and green (46), D 2.8–3.8, L 1.3, HD 1.0

Bibliography: OINE V, 141





77

Adindan T 72—4a—b, 6 (6—*non vidi*): Bead anklet, with stringing, in shaft under legs of body (senile female); OIM E23228 (field register ascribes OIM E23228 to T 82)

C-Group, phase Early III

1. Ostrich eggshell, disc cylinder (ca. 120), D 3.1–4.1, L 0.8–1.4, HD 1.0–1.4

2. Faience, disc cylinder (32), D 3.4–4.4, L 1.2, HD 1.7

Bibliography: OINE V, 141–42, pls. 116A, 117C



78

Adindan T 76: From dark leather garment with stitching and beads from shaft (mature male); OIM E23062

C-Group, phase III

Faience, ring, blue (a few dozen), D 2.3, L 1.3, HD 1.1

Bibliography: OINE V, 142, pl. 106A (mistakenly noted in publication as pl. 106D)



78



79 (cf. cat. no. 80)

Adindan T 84—2: Bead in debris in grave (child, 6.5 years old); OIM E30111

C-Group, phase IIA

Very large bead—see cat. 80.4

Bibliography: OINE V, 144

80

Adindan T 84—4a-c: Beads from shaft (child, 6.5 years old); OIM E30111

C-Group, phase IIA

1. Diorite, short cylinder, drilled from both ends (1), D 2.6, L 1.0, HD 0.7

2. Faience, ring, short cylinder, blue (21), D 1.8–3.8, L 0.7–1.2, HD 0.6–1.1

3. Faience, short cylinder, black (7), D 2.0–3.2, L 1.1–1.2, HD 0.9–1.2

4. Glass, drawn, short cylinder, semitranslucent blue (1), D 6.8, L 5.7, HD 1.8—most probably a large medieval cane bead

Bibliography: OINE V, 144

81

Adindan T 88—4: Bead in shaft (adult); OIM E30114

C-Group, phase IIA

Bone, drilled from both ends, long barrel (1), D 9.1, L 14.4, HD 4.2

Bibliography: OINE V, 144–45





82

Adindan T 89—3a—c: Beads from shaft (adult male?);
OIM E30118

C-Group, phase Early(?) III

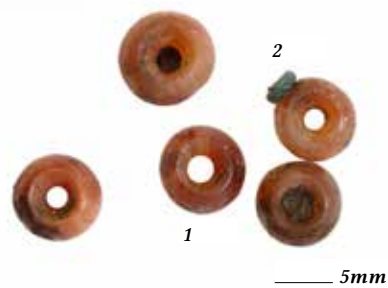
1. Ostrich eggshell, disc cylinder (1), D 4.7, L 1.6, HD 2.1

2. Faience, barrel, blue (1), D 5.7, L 4.7, HD 1.4

3. Faience, ring, disc cylinder, blue (13), D 3.8, L 1.3–1.6,
HD 1.2

4. Faience, disc cylinder, blue (9), D 2.8–3.0, L 0.8–1.1,
HD 1.0

Bibliography: OINE V, 145



83.1–2

83

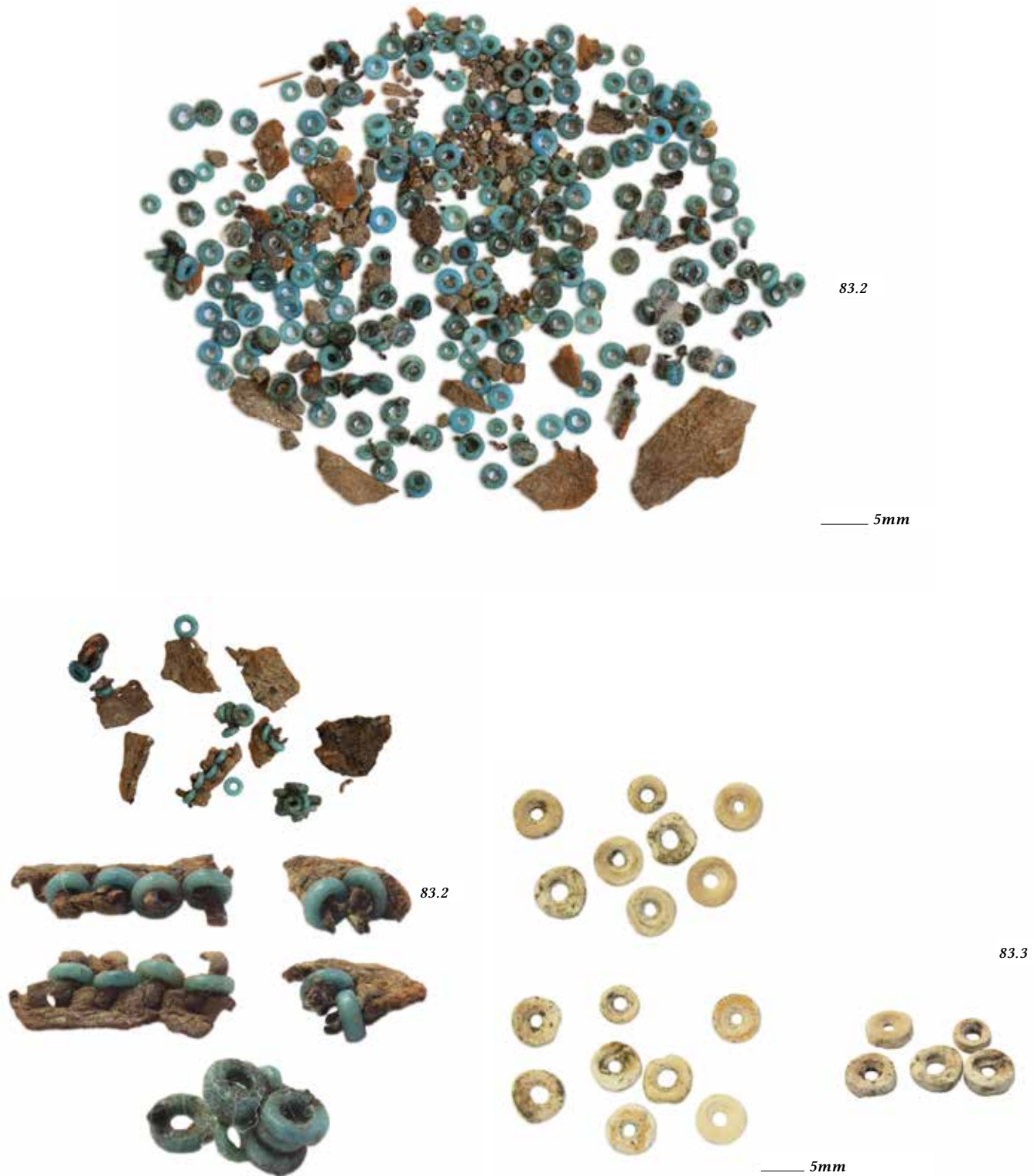
Adindan T 93—3: Beads from shaft (adult male);
OIM E23231A–B

C-Group, phase IIA

OIM E23231A

1. Carnelian, drilled from both ends, short barrel (5),
D 6.8–8.0, L 4.6–6.6, HD 3.8–1.5–3.8





83 (continued)

2. Faience, ring, disc cylinder, blue (242), D 2.2–3.2, L 0.7–1.3, HD 0.9–1.2

OIM E23231B

3. Ostrich eggshell, drilled from both ends, short cylinder (8), D 4.2–5.7, L 1.4–1.8, HD 0.8–1.1

Bibliography: OINE V, 146–47



84

Adindan T 98—2a-b: Beads, with stringing, in shaft (no body recorded); OIM E23233

C-Group, phase IB/IIA

1. Carnelian, drilled from both ends, short barrel, red (13), D 4.7–5.0, L 1.9, HD 0.9

2. Faience, ring, blue (54), D 2.1–3.0, L 1.0–1.3

Bibliography: OINE V, 148, pls. 116I, 117B

85

Adindan T 101—6a-b: Beads, with stringing, in shaft (mature female); OIM E23292A–B

C-Group, phase III

OIM E23292A

1. Ostrich eggshell, disc cylinder (43), D 3.9–5.5, HD 1.3

2. Faience, disc, black (4), D 4.4, L 0.7–1.5, HD 1.8

OIM E23292B

3. Faience, ring, disc and short cylinder, blue and green (63), D 2.3–3.0, L 0.6–1.1, HD 0.9–1.2

Bibliography: OINE V, 149





86

Adindan T 104—5a-b: Beads from shaft
(adult male); OIM E23291

C-Group, phase Late IIA

1. Faience, short cylinder, blue and
greenish (127), D 3.6–4.9, L 2.0–2.6,
HD 1.3

2. Faience, barrel, reddish (1), D 5.2, L 5.4,
HD 1.3

Bibliography: OINE V, 150

87

Adindan T 106—5: Fur with beads from
shaft (adult male); OIM E30132

C-Group, phase IIA

Faience, disc ring, blue (89), D 2.4, L 0.6,
HD 0.7

Bibliography: OINE V, 150



88

Adindan T 107—4a-c: Beads from shaft
(juvenile female, ca. 15 years old);

OIM E23234

C-Group, phase III

1. Carnelian, drilled from both ends (2),
D 5.7; 4.5, L 1.6; 1.8, HD 2.4–0.8–1.7

2. Faience, short cylinder, black (164),
D 2.8, L 1.1–1.3, HD 0.9

3. Faience, short cylinder, greenish/
bluish (43), D 2.8, L 1.1–1.3, HD 0.9

4. Faience, ring, disc cylinder, blue (1),
D 2.1, L 0.8, HD 0.8

Bibliography: OINE V, 151



89.1-3

89

Adindan T 115—1a-e: Beads “under head of burial” according to registration number OIM E23293 and noted as at “pelvis of burial” according to registration number P1010275; burial record sheet missing, so location of beads unknown; OIM E23295

C-Group, phase III?

OIM E23293

1. Ostrich eggshell, disc cylinder (48), D 3.8–5.0, L 1.1–1.7, HD 0.7–2.4

2. Carnelian, drilled from both ends, long barrel, red (1), D 6.9, L 12.5, HD 3.3

3. Faience, disc, blue (29), D 3.6–4.4, L 0.8–1.8, HD 1.0



89 (continued)

4. Faience, ring, blue (36), D 2.4–2.8, L 0.7, HD 0.8

5. Faience, short cylinder, green (48), D 1.8, L 0.7–1.2, HD 0.7

6. Faience, ring, short cylinder, green (1), D 2.6, L 1.7, HD 1.0

7. Faience, long cylinder, blue (1), D 10.2 × 10.8, L 18.3, HD 4.5; 6.1

OIM E23295

8. Ostrich eggshell (849), D 4.1–5.3, L 1.3–1.8, HD 1.6–2.4

9. Faience, short cylinder, blue and green (64), D 1.8–4.3, L 0.6–1.4, HD 0.5–0.8

10. Faience, oblate (1), D 21.5, L 15.0, HD 6.4

Bibliography: OINE V, 152–53, pl. 116M, Q



**90**

Adindan T 117: From bottom of shaft (younger infant); OIM E23288

C-Group, phase Early III

1. Ostrich eggshell, drilled from both ends, short cylinder (24), D 4.0–4.5, L 1.3–1.4, HD 1.4

2. Carnelian, drilled from both ends, red (2), D 5.9; 6.9, L 3.7; 3.6, HD 4.1–1.0–3.7; 3.8–1.4–3.6—hourglass

3. Faience, short cylinder, black (15), D 4.6–5.4, L 1.6–3.3, HD 1.2

4. Faience, ring, short cylinder, blue and green (29), D 2.6–3.5, L 1.0–2.1, HD 0.9

Bibliography: OINE V, 153

**91**

Adindan T 121–1a–b: Beads, with stringing, in shaft (adult female); OIM E23285

C-Group, phase III (IIA or Late III)

1. Ostrich eggshell (100–1 in halves), D 3.4–4.0, L 1.2–1.8, HD 1.1–1.4

2. Faience, ring, blue (3), D 1.7–1.8, L 0.6–1.0, D 0.5

3. Faience, ring, blue (1), D 2.9, L 1.5, HD 0.8

Bibliography: OINE V, 154



93

92*

Adindan T 122—3: Looped band of fibers that served as core for metal ring-bead necklace, bound with leather, in shaft (no body recorded); OIM E23276—*non vidi*
C-Group, phase IIA/B
Bibliography: OINE V, 93, 154, pl. 117H

93

Adindan T 131—3: Bead in debris in shaft (mature female?); OIM E30140
C-Group, phase IB
Diorite, drilled from both ends, white and black (1), D 12.6, L 5.2, HD 7.0–3.0–7.0
Bibliography: OINE V, 155–56

94

Adindan T 134—6a–c, 7: Beads in debris in shaft (probably adult male); OIM E23356 (T 134–7 is Cairo *JdE* 89990, B 1002, 64 gold rings in fiber core)

C-Group, phase IIA

1. Carnelian, drilled from both ends, disc barrel, red (116), D 4.6–5.4, L 1.2–2.2, HD 2.4–1.0–1.4

2. Diorite, drilled from both ends, disc to short barrel, white and black (27), D 2.2, L 0.8–1.1, HD 0.5

3. Faience, ring, disc to short cylinder, blue (50), D 2.5, L 0.6–1.1, HD 0.6

4. Faience, ring, disc to short cylinder, blue (30), D 3.0–3.7, L 0.8–1.1, HD 0.8

5. Faience, short cylinder, black (1), D 2.8, L 1.2, HD 0.7

Bibliography: OINE V, 156



94.1–5

5mm



1

94.1–4



1

3

2



95

Adindan T 135—2: Beads from shaft (adult female); OIM E30154

C-Group, phase III

Ostrich eggshell, drilled from both ends, short cylinder, cream (35), D 3.5–4.8,

L 0.5–1.7, HD 0.9

Bibliography: OINE V, 156–57

95

5mm



96

Adindan T 136—1: Beads from shaft near surface (adult male); OIM E23297

C-Group, phase IB/IIA

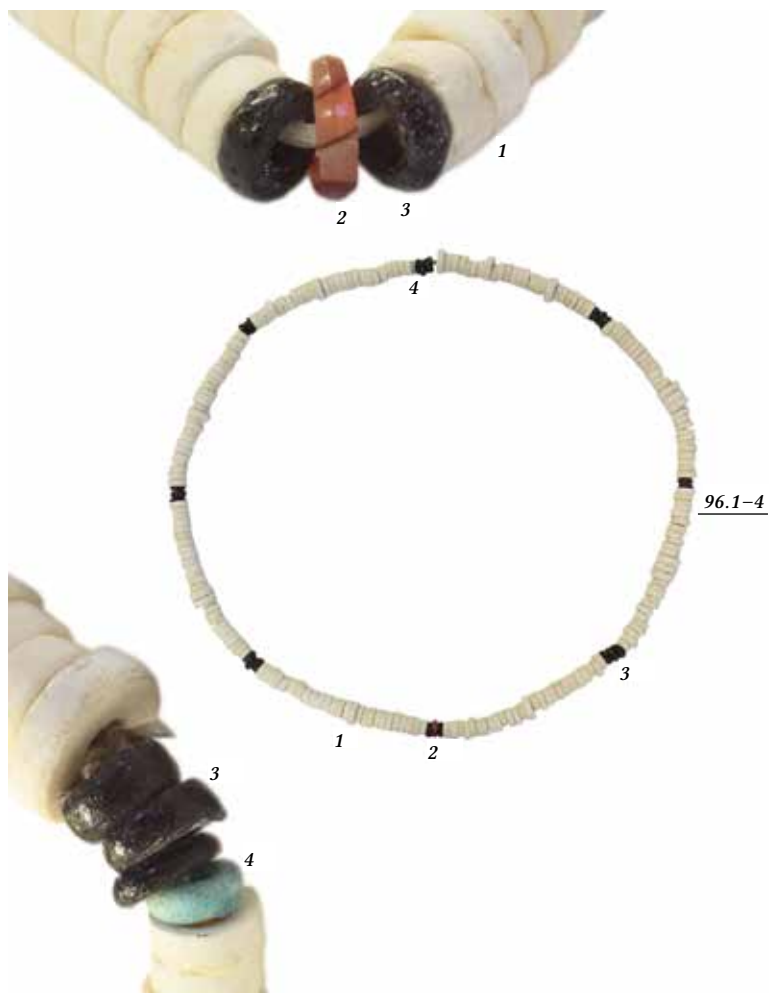
1. Ostrich eggshell, drilled from one end, short cylinder, white (208), D 3.4–5.5, L 1.6–1.9, HD 1.1

2. Carnelian drilled from both ends, disc barrel, red (1), D 3.9, L 1.2, HD 0.9

3. Faience, disc ring, black (22), D 3.4–3.8, L 1.1–1.5, HD 2.0

4. Faience, disc, blue (1), D 3.0, L 1.4, HD 0.8

Bibliography: OINE V, 157



96.1–4

97

Adindan T 141—2a-d: Beads from shaft (infant, less than 1 year old); OIM E23375

C-Group, phase IB/IIA

1. Carnelian, disc barrel, red (1),

D 3.4, L 0.9, HD 1.7–0.6–1.0

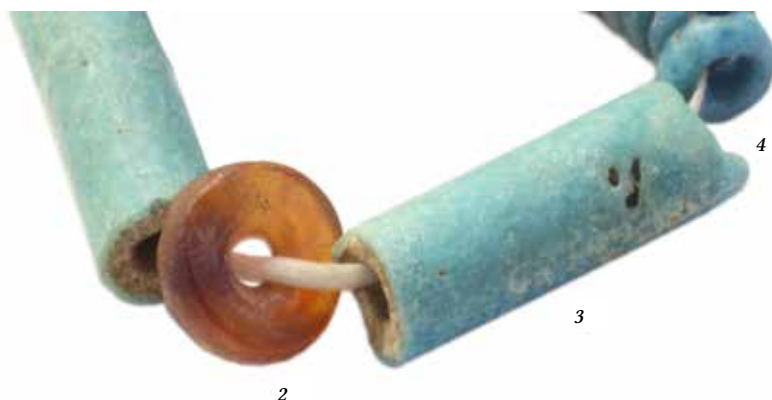
2. Carnelian, disc barrel, red (1),

D 4.9, L 1.5, HD 1.7–0.8–1.9

3. Faience, long cylinder, whitish core, light blue glaze (1—broken in halves), D 3.5, L 10.6–14.2, HD 0.9

4. Faience, ring, disc cylinder, blue (19), D 3.0, L 0.5–1.4, HD 1.2

Bibliography: OINE V, 158, pl. 116L



97.1–4



98.1–4



98

Adindan T 147—4a-c: Beads on bottom of shaft near body (adult female); OIM E23368
C-Group, phase IIA/B

1. Ostrich eggshell, disc cylinder (1), D 3.3, L 1.2, HD 1.4

2. Metal sheet, barrel (2), D 2.4 × 1.6, L 2.6, HD 0.8

3. Faience, ring, disc and short cylinder, blue (10), D 2.9, L 0.9–1.8, HD 0.8

4. Faience, ring, disc and short cylinder, blue (25), D 2.2, L 0.5–1.1, HD 0.7

Bibliography: OINE V, 160

99

Adindan T 148—2: Beads from shaft (adult male);

OIM E30162A–D

C-Group, phase IB/IIA

Bone, long tubular, cream and brownish (4), D 8.8×7.2 ;
 8.5×7.7 ; 9.0×8.6 ; 9.7×8.6 , L 21.7; 20.7; 19.9; 10.6,

HD $4.5\text{--}6.4 \times 3.5$

Bibliography: OINE V, 160

100

Adindan T 150—1: Beads from shaft (adult female);

OIM E30164

C-Group, phase III

Ostrich eggshell, drilled from both ends, disc cylinder
 (20), D $5.5\text{--}6.1$, L $1.5\text{--}1.7$, HD 2.0

Bibliography: OINE V, 160–61

101

Adindan T 151—1: Beads from shaft (adult female);

OIM E30163

C-Group, phase Early III

Ostrich eggshell, disc cylinder (8), D $6.8\text{--}7.3$, L $1.5\text{--}1.8$,
 HD 2.6

Bibliography: OINE V, 161



99



100

5mm



101

5mm

**102**

Adindan T 154—2a-d: Beads, uncertain location, probably from shaft (no body recorded); OIM E23372
C-Group, phase IIA

1. Ostrich eggshell, disc cylinder (1), D 3.9, L 1.4, HD 1.6
2. Diorite, disc cylinder, white and black (24), D 2.5, L 1.1, HD 0.9–0.6–0.9
3. Faience, short cylinder, black (15), D 3.8, L 2.3, HD 1.5
4. Faience, short cylinder, light blue/green (195), D 3.8, L 1.5–2.2, HD 1.2

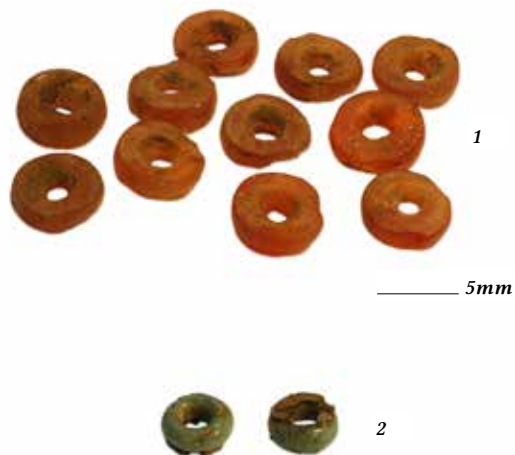
Bibliography: OINE V, 162

103

Adindan T 156—1a-b: Beads from shaft (adult, probably female); OIM E30166
C-Group, phase IB/IIA

1. Carnelian, drilled from both ends, disc truncated barrel, red (11), D 5.8, L 1.7, HD 1.4
2. Faience, short cylinder, blue/green (1), D 3.5

Bibliography: OINE V, 162



**104**

Adindan T 160—2a—b: Beads from shaft (adult male); OIM E23376

C-Group, phase IB/IIA

1. Diorite, short barrel and oblate, white and black (5), D 11.8–13.2, L 4.8–7.7, HD 7.7–2.4–7.7

2. Faience, short cylinder, blue (1), D 6.8 × 7.3, L 3.7, HD 2.6

Bibliography: OINE V, 164, pl. 116K



105

10mm

105

Adindan T 163—1: Bead from grave (juvenile, possibly female, ca. 12 years old); OIM E23370

C-Group, phase IB/IIA

Bone, long tubular (11), D 9.3 × 10.4–14.6 × 12.0, L 18.6–26.0, HD 4.7–10.4

Bibliography: OINE V, 165, pl. 116N–O



106

106

Adindan T 165—2: Beads from possible leather garment in shaft (younger child, 7.5–8.5 years old); OIM E30168

C-Group, phase Early III

Faience, ring, blue and green (6), D 2.8,

L 1.2, HD 1.3

Bibliography: OINE V, 165–66



107.1–7

107

Adindan T 166—4a–f: Beads from shaft (adult female); OIM E23373

C-Group, phase III

1. Ostrich eggshell, drilled from both ends (1), D 5.6, L 1.7, HD 2.4

2. Diorite, drilled from both ends, short barrel (7), D 4.2, L 2.0, HD 2.3–1.0–2.3

3. Diorite, drilled from both ends, short barrel (2), D 7.9; 7.3, L 4.3; 3.6, HD 3.8–1.3–3.8

4. Diorite, drilled from both ends, short barrel (3), D 5.6–6.1, L 2.1–3.3, HD 2.9–1.3–2.9

5. Diorite, drilled from both ends, short barrel (3), D 3.2, L 1.5, HD 1.3–1.0–1.3

6. Carnelian, drilled from both ends, short barrel (1), D 5.4, L 2.5, HD 2.1–0.8–1.8

7. Faience, ring, short cylinder, blue, green (40), D 2.8–3.7, L 1.2–1.7, HD 0.7

Bibliography: OINE V, 166, pl. 116J



107.1–7



108

108

Adindan T 169—2: Beads with stringing, in grave (adult female); OIM E23391
C-Group, phase IB/IIA
Ostrich eggshell, disc cylinder (246), D 5.4–6.8, L 1.3–1.7, HD 2.0
Bibliography: OINE V, 166–67, pl. 116C

10mm

109

Adindan T 171—3: Beads from shaft (adult male); OIM E23400
C-Group, phase IB
Faience, short cylinder, light blue, some greenish (270), D 3.6, L 1.6–2.4, HD 1.0–1.2
Bibliography: OINE V, 168



109



5mm



110.2-3



110

Adindan T 176—1: Beads sewn to leather in lozenge-shaped pattern, in shaft (mature male); OIM E23362

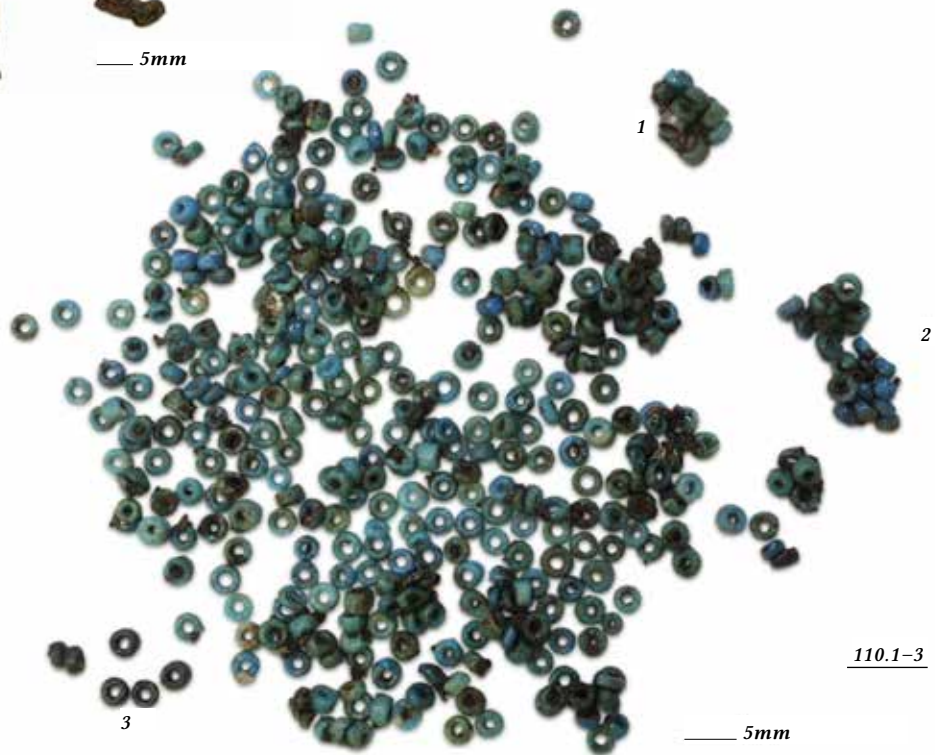
C-Group, phase IIA

1. Copper alloy, folded sheet, short cylinder (1), D 2.6, L 1.1, HD 2.4

2. Faience, disc to short cylinder, blue (ca. 585), D 2.5–3.2, L 1.1–2.1, HD 1.1–1.2

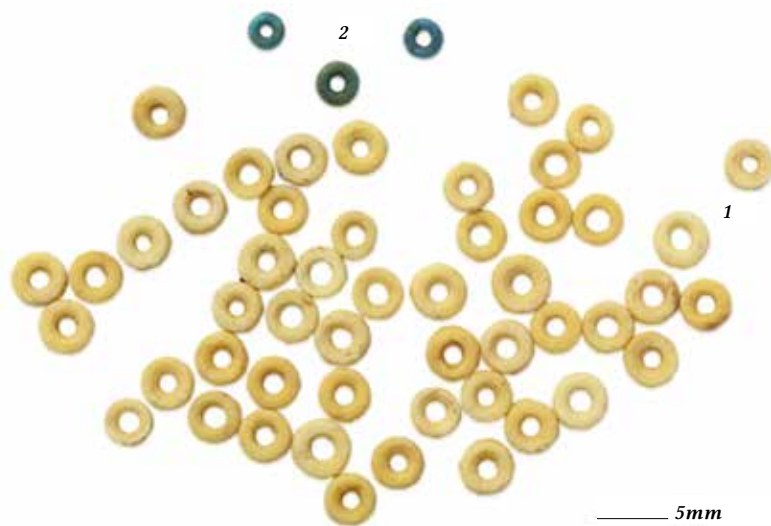
3. Faience, ring, disc cylinder, black (ca. 19), D 2.8, L 1.2–1.8, HD 1.2

Bibliography: OINE V, 168–69, pl. 106D



110.1-3



**111#**

Adindan T 177—2: Beads from shaft (adult, possibly male, and an unidentified individual);

OIM E23296B

C-Group, phase IIA or Pan Grave

1. Ostrich eggshell, drilled from both ends, disc cylinder (50),

D 3.0–3.9, L 1.4, HD 1.5–1.0–1.5

2. Faience, ring, disc cylinder, blue (3), D 2.4–2.9, L 1.1, HD 0.9

Bibliography: OINE V, 170

111.1–2

**112**

Adindan T 182A—2a–b: Beads from shaft (mature female); OIM E23388

C-Group, phase III

1. Faience, disc barrel, green (8),

D 5.5, L 1.1, HD 1.4

2. Faience, ring, disc to short cylinder, green, blue (170), D 3.7,

L 1.1–2.6, HD ca. 2.3

Bibliography: OINE V, 171

112.1–2





113



114

113

Adindan T 183—1: Beads from shaft (senile female); OIM E30177

C-Group, phase III

Faience, short cylinder, light blue and green (7), D 3.7, L 2.6, HD 1.9

Bibliography: OINE V, 171

114

Adindan T 184—1: Beads from shaft (infant, 2.5–3 years old); OIM E23390

C-Group, phase III

Faience, ring, disc and short cylinder, green and blue (301), D 2.6–4.2, L 1.3–2.6, HD 0.8–1.6

Bibliography: OINE V, 171



115

5mm

**115**

Adindan T 187—1: Beads from shaft (adult female); OIM E23389
C-Group, phase IB/IIA
Faience, ring, short cylinder, greenish, blue (149), D 4.2, L 1.6–2.0, HD 1.3
Bibliography: OINE V, 172, pl. 116G

116

Adindan T 192—1: Beads from shaft (young adult); OIM E30179
C-Group, phase III
Faience, ring, short cylinder, blue and green (42), D 2.6–3.5, L 2.1, HD 0.9–1.5
Bibliography: OINE V, 173



116

5mm



117

Adindan T 194—1a-d: Beads from shaft (no body recorded); OIM E23392

C-Group, phase IB/IIA

1. Bone, standard to long tubular (12),

D 6.8 × 5.8–9.5 × 8.3, L 6.7–17.6, HD 3.6

2. Bone, tooth(?), short cylinder (1), D 8.1,

L 3.4, HD 2.7

3. Bone, tooth(?), long tubular (1), D 4.8, L 6.0,

HD 1.9

4. Faience, disc cylinder, blue (1), D 3.1, L 2.1,

HD 1.1

Bibliography: OINE V, 173

118

Adindan T 195—2a-c: Beads from shaft (mature male); OIM E23398

C-Group, phase IB/IIA

1. Diorite, short cylinder, white and black (2),

D 2.4, L 1.1, HD 1.0–0.6—hourglass

2. Carnelian, drilled from both ends,

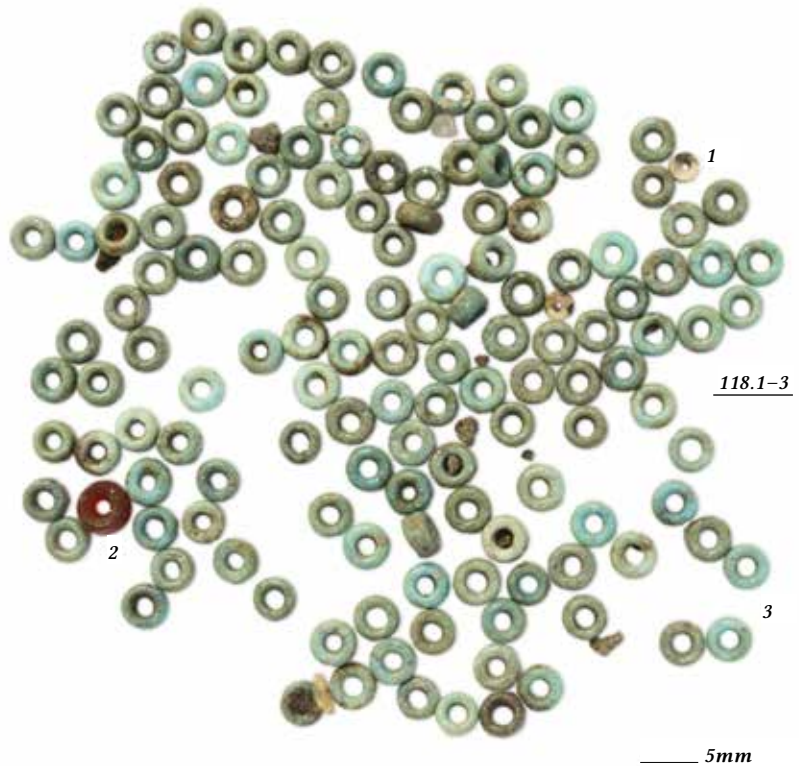
standard barrel, red (1), D 4.4, L 3.0,

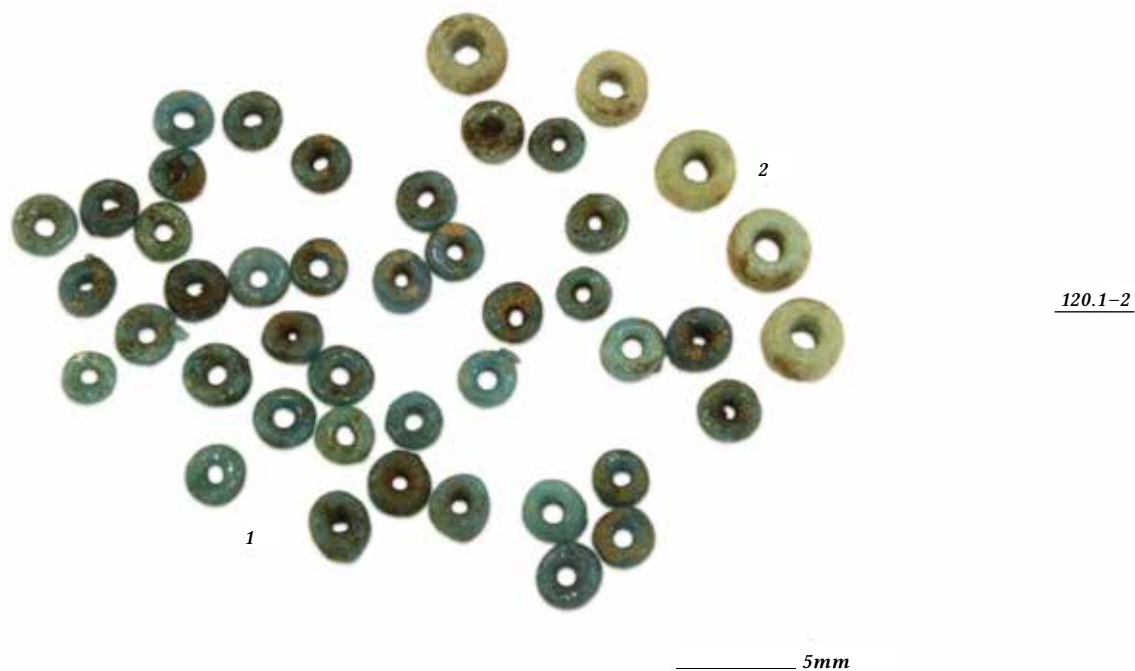
HD 2.7–1.3–2.7—hourglass

3. Faience, short cylinder, light blue (142),

D 3.7, L 2.1, HD 1.4

Bibliography: OINE V, 174



**119**

Adindan T 195—4a-b: Meroitic beads with stringing, found north of superstructure, displaced in plundering; OIM E23543

C-Group, phase IB/IIA and Meroitic

1. Faience, short cylinder, blue (31), D 2.9–3.7, L 1.4–2.5, HD 0.5

2. Gold-in-glass, drawn single-segment, barrel (1), D 5.1, L 4.6, HD 1.2

Bibliography: OINE V, 174, pl. 117A

120

Adindan T 201—1a-b: Beads from shaft (mature female); OIM E30183

C-Group, phase Early III

1. Faience, ring, disc cylinder, blue and green (39), D 2.6, L 1.0, HD 0.8

2. Faience, disc cylinder, light green (5), D 3.2, L 1.9, HD 1.1

Bibliography: OINE V, 175

**121**

Adindan T 205—7a-d: Beads from bottom of shaft (probably mature male); OIM E23419, OIM E23420
C-Group, phase Late IIA

1. Ostrich eggshell, drilled from one end, short cylinder, white (1), D 4.3, L 1.3, HD 2.3
2. Carnelian, drilled from both ends, short cylinder, red (209), D 2.9–3.0, L 0.9–1.2, HD 1.3–0.7–1.3
3. Diorite, drilled from both ends, short cylinder, white and black (173), D 2.7, L 0.9–1.4, HD 1.0–0.7–1.0
4. Faience, disc short cylinder blue and green glaze (488), D 3.0–3.6, L 1.1–2.9, HD 1.6

Bibliography: OINE V, 176



121.1-4



121 (*continued*)
 OIM E23420 (B-1066)
 5. Gold sheet, folded, short
 cylinder (68), D 2.7–5.3,
 L 1.1–1.8, HD 1.3–3.2



_____ 5mm

121.5



_____ 5mm



1

122.1–2

_____ 5mm

122

Adindan T 213–3a–b: Beads
 with stringing, in grave (child,
 2.5–3 years old); OIM E23399
 C-Group, phase IB/IIA
 1. Ostrich eggshell, disc cylinder
 (247), D 4.6–6.0, L 0.8–1.9,
 HD 2.0
 2. Faience, ring, blue (8),
 D 2.5–3.7, L 1.3–2.0, HD 1.1
 Bibliography: OINE V, 178,
 pl. 116B



2

_____ 5mm

**123**

Adindan T 214—3a-c: Beads from shaft and debris above (adult female); OIM E23401

C-Group, phase Early III

1. Ostrich eggshell, drilled from both ends, disc cylinder (28), D 4.4–7.4, L 0.9–2.0, HD 2.1

2. Faience, short cylinder, blue and green (29), D 2.7–3.6, L 1.5–2.2, HD 0.8

Bibliography: OINE V, 178

124

Adindan T 215—2: Beads from body (adult male); OIM E30199

C-Group, phase IIA

Faience, ring, short cylinder, blue and green (14), D 2.0–3.0, L 1.6, HD 1.1

Bibliography: OINE V, 178–79





125.1-4

125

Adindan T 217-3a-c: Beads from shaft (mature male); OIM E23402

C-Group, phase IIA

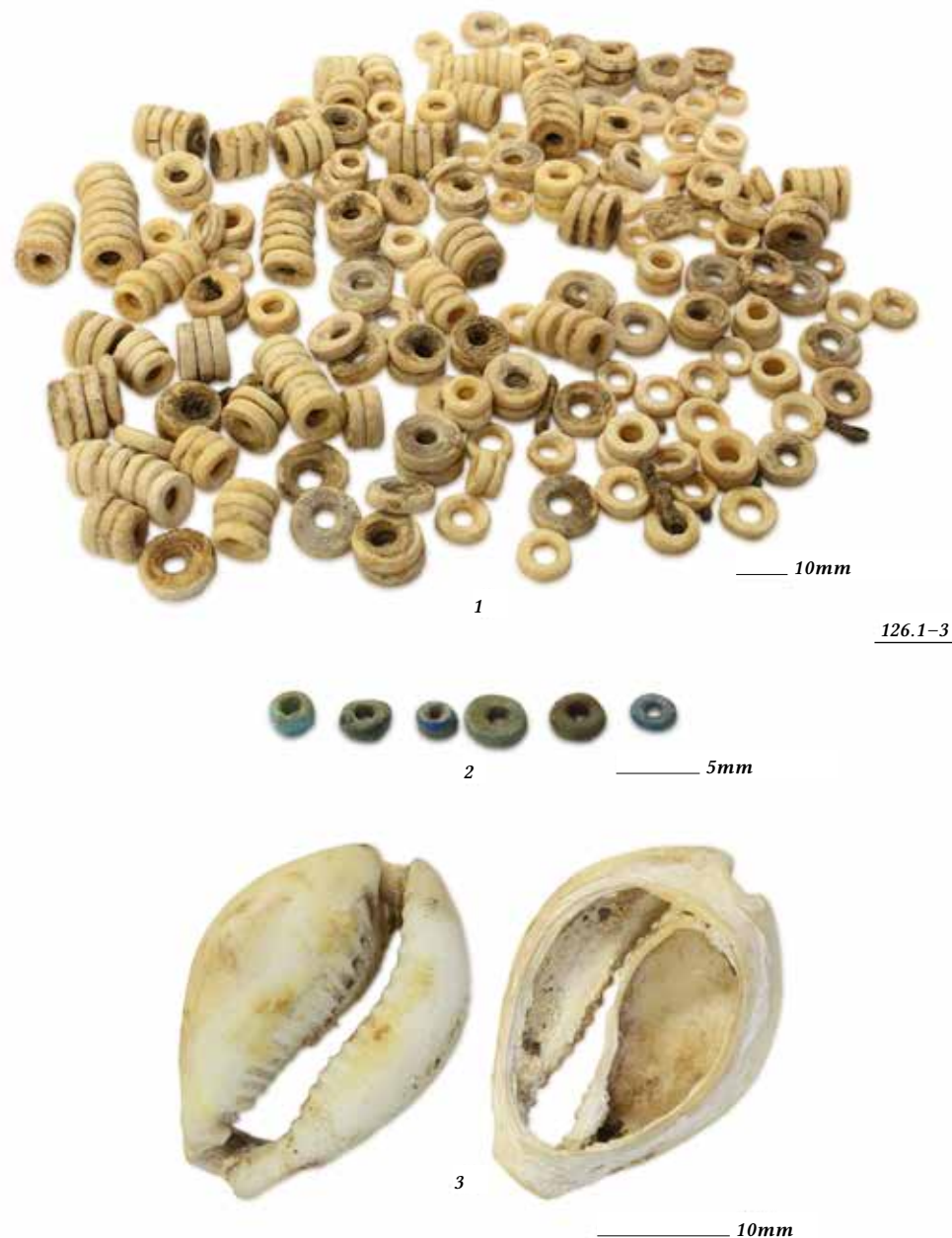
1. Carnelian, drilled from both ends, short barrel, red (13), D 3.7-4.2, L 1.4-1.8, HD 2.2-0.8-2.2

2. Faience, ring, short cylinder, blue (146), D 3.4, L 1.3, HD 1.0-2.2

3. Faience, disc cylinder, blue (1), D 4.3, L 1.6, HD 1.0

4. Faience, disc cylinder, light green (1), D 3.5, L 1.8, HD 1.7

Bibliography: OINE V, 179



126

Adindan T 221—1a-c: Ostrich eggshell beads, with stringing, from shaft (adult female); OIM E23403A-C

C-Group, phase IIA?

OIM E23403A

1. Ostrich eggshell, short cylinder (ca. 290), D 4.9–7.7, L 1.4–1.8, HD 1.9–2.1

2. Faience, disc, blue (6), D 2.5–3.7, L 0.7–1.6, HD 1.1

OIM E23403B

3. *Cypraea annulus* shell, dorsal part removed, whitish (1), Th 10.4, W 22.5, L 31.8, HD 21.4 × 16.5



126 (continued)

OIM E23403C

4. *Cypraea annulus* shell, dorsal part removed, whitish (19), W 16.4–23.2, Th 7.0–9.9, L 25.7–32.0, HD ca. 24.7 × 18.0

Bibliography: OINE V, 181, pl. 118D



127

Adindan T 223—4a-b: Beads from grave (mature female); OIM E23414

C-Group, phase Early IIA

1. Carnelian, disc cylinder, light red to dark red (9), D 4.2–5.8, L 1.1–2.1, HD 1.0

2. Faience, short cylinder, black (116), D 2.8, L 1.1–1.2, HD 0.9

Bibliography: OINE V, 181



1

— 5mm



3

— 5mm

128.1, 3

128.4



128

Adindan T 224—2a-b: Most beads from leather garment in shaft (child, ca. 5–6 years old);

OIM E23405A–D

C-Group, phase IB/IIA

OIM E23405B

1. Ostrich eggshell, drilled from both ends, disc cylinder (240), D 4.9–6.7, L 1.1–1.7, HD 1.7–1.9

2. Faience rings, blue (2), D 2.8, L 1.2, HD 0.8–1.1—*not illustrated*

OIM E23405C

3. Faience, ring, blue (50) and black (7) rings, D 2.5–3.1, L 1.0–2.1, HD ca. 1.0

OIM E23405D

4. Faience, blue rings, some sewn together (28), D 2.9, L 1.6, HD 1.0

**128 (continued)**

OIM E23405A

5. Ostrich eggshell, disc cylinder, white (16), D ca. 3.0, L 1.4, HD 0.9

6. Faience, blue rings (53), D ca. 3.0

Bibliography: OINE V, 182–83, pl. 106C

128.5–6**129**

Adindan T 225–2a–c: Blue glass-like beads in pattern on leather in shaft and debris (juvenile female, ca. 15–16 years old);

OIM E23406A–C

C-Group, phase IIA/B

OIM E23406A

1. Faience, short cylinder, light green (123), D 2.6–3.9, L 1.5–2.4, HD 1.0–1.7—unknown pattern on leather

2. Faience, short cylinder, blackish (30), D 2.3–3.2, L 1.1–1.7, HD 1.0—unknown pattern on leather

129.1–2



129 (*continued*)

3. Faience, ring, blue/turquoise (347), D 2.2–4.1, L 0.8–1.8, HD 0.9–2.1—unknown pattern on leather

OIM E23406B

4. Metal sheet over possible ceramic core, bicone (2), D 7.1; 7.4, L 11.3, HD 2.4

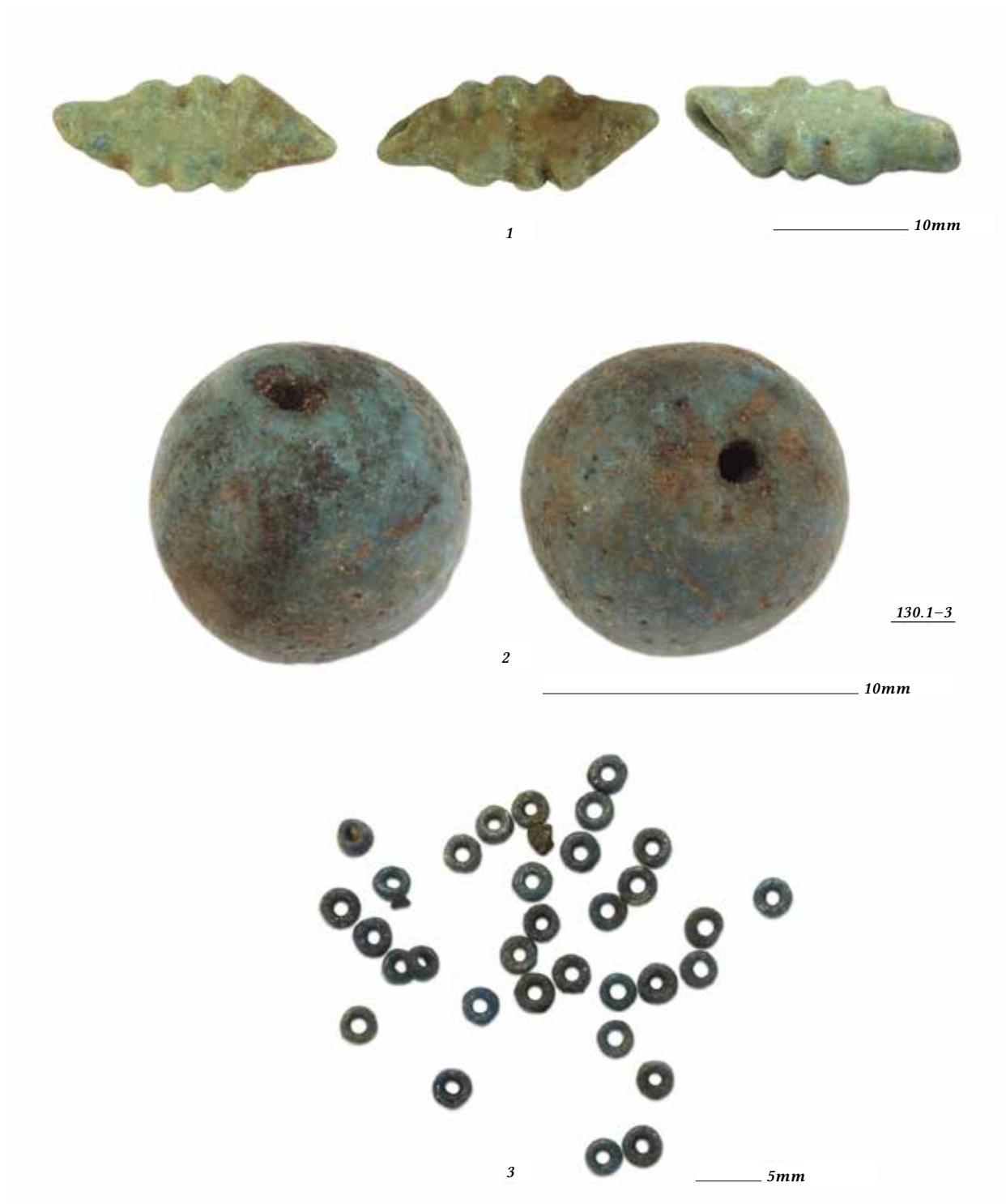
5. Faience, disc cylinder, turquoise (1), D 2.6, L 1.4, HD 1.0

OIM E23406C

6. Ostrich eggshell, some drilled from both ends, short cylinder (83), D 2.6–3.9, L 1.0–1.9, HD 0.7–1.5

Bibliography: OINE V, 183–84



**130#**

Adindan T 229—1–3: Beads from shaft (no body recorded); OIM E30213A–C
Pan Grave or C-Group, phase III

OIM E30213A

1. Faience, amulet, green (1), D 7.2 × 3.4, L 17.3, HD 3.4 × 1.6; 2.4 × 1.5

OIM E30213B

2. Faience, globular, blue (1), D 10.4, L 9.6, HD 1.5

OIM E30213C

3. Faience, short cylinder, blue (32), D 2.9, L 1.4, HD 1.4

Bibliography: OINE V, 184–85, pl. 115F



131

Adindan T 234—3a-d: Beads from shaft (child, 3-4 years old); OIM E23416

C-Group, phase IIA

1. Carnelian, drilled from both ends, disc cylinder (4), D 2.9-3.1, L 0.8, HD 0.6
2. Carnelian, drilled from both ends, disc cylinder (1), D 4.5, L 1.3, HD 1.9-0.7-1.9
3. Faience, disc and short cylinder, blue (116), D 2.6-3.5, L 0.7-1.5, HD 0.8
4. Faience, disc and short cylinder, dark blue and black (171), D 2.5, L 0.9-1.3, HD 1.2

Bibliography: OINE V, 187



132

Adindan T 236: Beads from shaft (juvenile, probably female, less than 19 years old); OIM E23409
C-Group, phase IIA

1. Diorite, drilled from both ends, white and black (1), D 2.5, L 1.1, HD 1.2-0.6-1.2
2. Faience, disc and short cylinder, black (22), D 2.5-3.5, L 1.1-2.8, HD 0.8-0.9
3. Faience, disc and short cylinder, blue/green (169), D 2.2-3.1, L 0.9-1.9, HD 0.9-1.2

Bibliography: OINE V, 188



133

Adindan T 239-4a-b: Necklace made of diorite and green to blue glass-like beads, with stringing, in shaft (adult female); OIM E23418

C-Group, phase IIA

1. Diorite, drilled from both ends, short cylinder, white and black (228), D 2.5-2.8, L 0.9-1.3, HD 0.6-0.9—hourglass

2. Faience, disc and short cylinder, blue (6), D 2.4-4.8, L 0.8-1.9, HD 0.6-1.9

3. Faience, short cylinder, black (1), D 3.0, L 1.5, HD 0.8

Bibliography: OINE V, 189





134

Adindan T 239—5a-b: Anklet made of one ostrich eggshell bead and black glass-like beads, with stringing, from left ankle, in shaft (adult female); OIM E23417

C-Group, phase IIA

1. Ostrich eggshell, disc cylinder (1), D 6.3, L 1.6, HD 2.0

2. Faience, short cylinder, black (ca. 140), D 3.0, L 1.4–1.7, HD 1.2

3. Faience, short cylinder, light green (1), D 3.2, L 1.6, HD 1.2

Bibliography: OINE V, 189

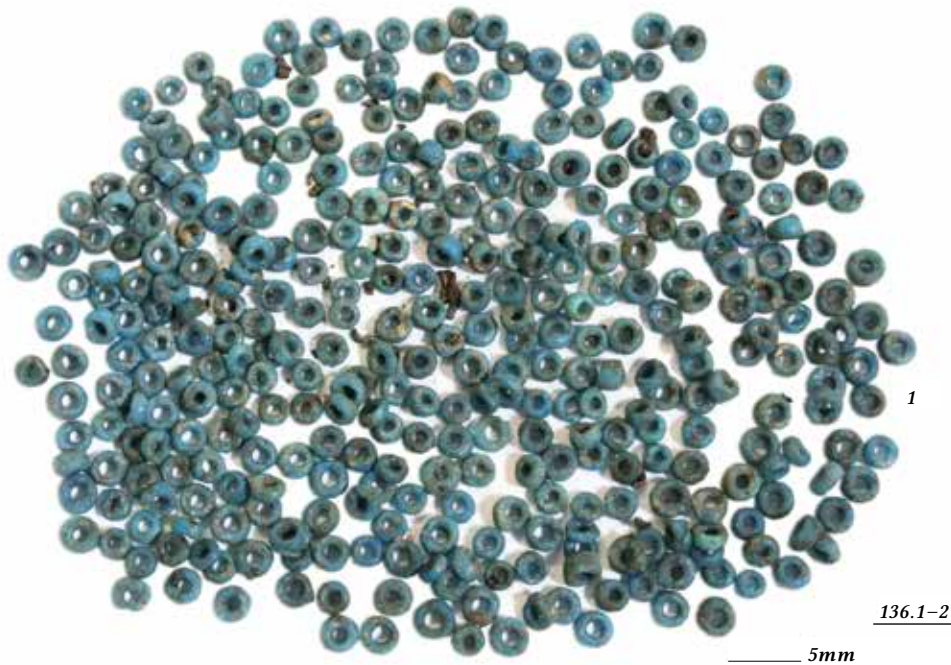
135

Adindan T 246—4: Bracelet(?) from shaft (child, ca. 6 years old); OIM E24145B

C-Group, phase Late IIA (cuts T 211)

Polinices shells, perforated below spire, white (17), Th 11.3–17.5, W 15.2–25.2, L 19.9–31.3, HD 4.6 × 3.6

Bibliography: OINE V, 192, pl. 118B (19 shells on plate)



136.1

136

Adindan T 249-1: Leather garment with stitching and beads in shaft (mature, probably male);

OIM E23412

C-Group, phase III

1. Faience, disc and short cylinder, blue (368), D 2.5-2.9, L 1.0-1.7, HD 0.9-1.2

2. Faience, disc and short cylinder, black (71), D 2.9, L 1.2-1.8, HD 1.1

Bibliography: OINE V, 192



137

Adindan T 253—1a-b: Beads from shaft (adult female);
OIM E23421

C-Group, phase IB/IIA

1. Faience, disc cylinder, black (4), D 5.0–5.5, L 0.9–1.9, HD 1.4

2. Faience, disc and short cylinder, black (3), D 3.1–3.4, L 1.2–1.7, HD 0.9

3. Faience, disc and short cylinder, light green and blue (68), D 3.1–4.3, L 0.8–2.5, HD 0.6–0.8

4. Faience, disc cylinder, blue (6), D 4.9, L 1.7–1.9, HD 1.5

Bibliography: OINE V, 193

138

Adindan T 255—1a: Bracelet in shaft (child, ca. 6.5–7.5 years old); OIM E24154, OIM E30233

C-Group, phase III

OIM E24154

1. *Polinices* shells, perforated below spire, white (17), Th 11.3–17.5, W 15.2–25.2, L 19.9–31.3, HD 4.6 × 3.6
OIM E30233

2. *Polinices* shell, body perforated, white (1—broken), W 17.5, L 22.3, H 14.1, HD 4.2 × 3.1

Bibliography: OINE V, 193, pl. 118A (13 shells on plate)





139, 140

5mm

139

Adindan T 263—2: Ostrich eggshell beads near head (adult female); OIM E23537B

C-Group, phase III

Ostrich eggshell, short cylinder (38),

D 3.1–3.5, L 1.2–1.8, HD 1.1

Bibliography: OINE V, 195

140

Adindan T 263—2, 3: Necklace on body (adult female); OIM E23537B

C-Group, phase III

Faience, short barrel, blue (36), D 2.5–2.8,

L 1.1–1.7, HD 1.5

Bibliography: OINE V, 195



141.1

5mm

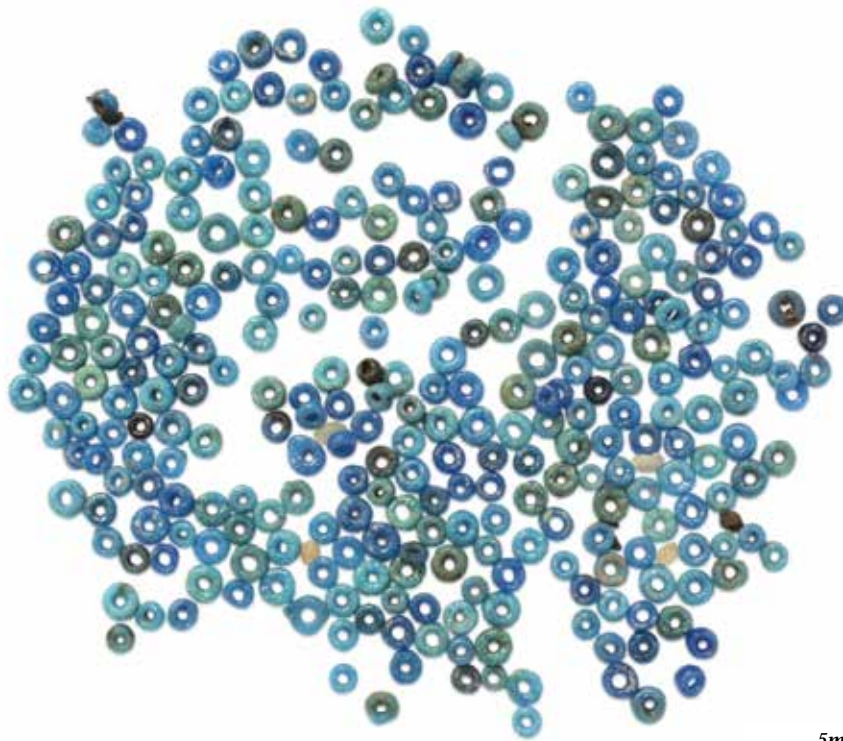
141

Adindan T 263—6b: Beads from leather garment at pelvis (adult female); OIM E23537A, OIM E30241

C-Group, phase III

OIM E23537A

1. Faience, ring, blue (1,069), D 3.7–3.9, L 1.2–2.1, HD 1.2



141 (*continued*)

OIM E30241

2. Faience, ring, blue and green
(312), D ca. 2.9, L 1.4–1.6,
HD 0.9–1.4

Bibliography: OINE V, 195 (leather
garment OIM E23541)

141.2

5mm



142

5mm

142

Adindan T 263—7: Anklet of ostrich eggshell beads on body (adult female); OIM E23537B

C-Group, phase III

Ostrich eggshell, short cylinder (116), D 3.0–3.5, L 1.2, HD 0.9

Bibliography: OINE V, 195

**143***

Adindan T 263—4: Looped band of fibers that served as core for metal ring-bead necklace, on body (adult female); OIM E30240—*non vidi*

C-Group, phase III

Bibliography: OINE V, 195

144

Adindan T 268—4: Beads from shaft (adult female); OIM E30243

C-Group, phase IB/II

1. Faience, short cylinder, black (295), D 2.9, L 1.4, HD 1.4

2. Faience, short cylinder, blue (1), D 2.5, L 0.9, HD 1.1

Bibliography: OINE V, 196

145

Adindan T 271—1: Beads from shaft (senile female); OIM E23533—sample

C-Group, phase III

1. Faience, short cylinder, blue (25), D 3.2, L 1.3–1.6, HD 1.1

2. Faience, short cylinder, light blue and greenish (30), D 2.9–3.9, L 1.2–2.2, HD 1.3

3. Faience, short cylinder, black (1), D 5.4 × 4.6, L 1.7, HD 1.7—*not illustrated*

Bibliography: OINE V, 196–97



146

146

Adindan T 277—1: Beads from shaft (adult female);
OIM E23900
C-Group, phase III
Faience, short cylinder, blue and green (375), D 2.6–3.0,
L 1.1, HD 0.6–0.8
Bibliography: OINE V, 198

147

Adindan T 279—1b: Beads from shaft or debris (child,
5.5–6 years old); OIM E30251
C-Group, phase IB/IIA, if not, phase III
Faience, short cylinder, blue (2), D 3.8; 3.7, L 1.8; 1.6,
HD 1.4
Bibliography: OINE V, 198



147

5mm



148

Adindan T 280—1a-d: Beads from shaft (child, ca. 7.5 years old); OIM E23901
C-Group, phase III

1. *Conus* sp. shell (6), Th 3.6–4.7, L 5.8–7.4, HD 1.0–1.4

2. Ostrich eggshell, disc cylinder (29), D 6.2–6.6, L 1.5–1.8, HD 2.6

3. Ostrich eggshell, plaque (2), W 17.0 × 12.1, Th 1.96; W 8.4 × 5.5, Th 2.0



148.4-7



148 (continued)

4. Diorite, drilled from both ends, elongated drop pendants with pointed base and top, black and white (1), Th 6.6 × 4.4, H 24.7, HD 3.1–1.5–3.1

5. Diorite, drilled from both ends, elongated drop pendants with pointed base and top, black and white (1), Th 5.4 × 3.9, H 14.8, HD 3.3–1.1–3.3

6. Carnelian, drilled from both ends, short truncated barrel, red (2), D 5.8; 5.7, L 4.0; 4.6, HD 2.1–1.0–2.1

7. Faience, disc barrel, blue (10), D 3.5–4.0, L 1.3–1.8, HD 0.9

8. Bone(?), fragment (1), W 16.8 × 9.4, Th 0.8—*not illustrated*

Bibliography: OINE V, 198–99

149.1-2

149

Adindan T 281—1: Beads in grave (adult female); OIM E30252

C-Group, phase III

1. Faience, short cylinder, blue (6), D 3.5, L 1.4, HD 1.4

2. Faience, short cylinder, light green (7—sample), D 3.7–5.0, L 2.0, HD 1.7–2.4

Bibliography: OINE V, 199



150

150

Adindan T 285—1: Beads from shaft (adult, probably female); OIM E30253

C-Group, phase IIA/B

Faience, short cylinder, blue and green (20—sample), D 2.9–4.0, L 1.9, HD 1.6

Bibliography: OINE V, 199–200

151

Adindan T 288—1a–b: Beads from shaft (juvenile female, ca. 18 years old); OIM E23902

C-Group, phase III

Faience, short cylinder, turquoise, bluish, greenish (336), D 3.7–3.9, L 1.2–2.1, HD 1.2

Bibliography: OINE V, 200



151



152

Adindan T 289—2a-b: Beads from shaft (adult female); OIM E23903
C-Group, phase III

1. Ostrich eggshell, disc (ca. 290),
D 5.7–7.1, L 0.8–1.7, HD 2.2–2.3

2. Faience, disc and short cylinder
(23), D 3.2–4.5, L 1.4–3.0, HD 0.8–2.1
Bibliography: OINE V, 200



153

Adindan T 294—1a-c: Beads from shaft (adult female); OIM E23905A
C-Group, phase III

Faience, disc and short cylinder,
blue and green (76), D 2.4–4.6,
L 0.8–2.9, HD 1.0–1.2

Bibliography: OINE V, 201





154

Adindan K 25—3a—b: Beads from shaft (no body recorded); OIM E23068

C-Group, phase IIA

1. Copper, folded (1), D 4.1 × 3.6, L 1.2, HD 1.8

2. Faience, disc cylinder, blue (ca. 300), D 2.8, L 0.6–1.0, HD 0.7

Bibliography: OINE V, 206



155

Adindan K 26: Beads from shaft (adult female); OIM E22982

C-Group, phase IB/IIA

1. Ostrich eggshell, disc cylinder (190), D 6.0–7.7, L 1.1–1.7, HD 2.8

2. Faience, short cylinder, blue (5), D 3.2, L 1.1, HD 1.0

Bibliography: OINE V, 206



156

Adindan K 28—1a-b: Beads from shaft (no body recorded); OIM E23069

C-Group, phase IB/IIA or IIA/B

1. Ostrich eggshell, disc and short cylinder (19), D 2.6–3.4, L 1.3–1.8, HD 1.0–1.3

2. Carnelian, drilled from both ends, disc cylinder, red (1), D 2.3, L 0.8, HD 0.7

3. Faience, disc and short cylinder, blue and green (34), D 3.2–3.5, L 0.9–2.3, HD 1.2

4. Faience, disc and short cylinder, blue and green (157), D 2.2–3.2, L 0.8–2.3, HD 0.7–0.9

Bibliography: OINE V, 207





157

Adindan K 32—8: Beads from shaft (infant, ca. 1 year old); OIM E23147

C-Group, phase IIA

1. Faience, short cylinder, black (9), D 2.8, L 1.1–2.0, HD 0.8

2. Faience, short cylinder, blue and green (59), D 3.2–3.4, L 0.8–1.8, HD 1.0

Bibliography: OINE V, 207–8

158

Adindan K 34—5: Beads from shaft (no body recorded); OIM E30259

C-Group, phase IIA

Faience, barrel, blue and black (22), D 3.1–3.2, L 1.9, HD 1.1–1.4

Bibliography: OINE V, 209



159

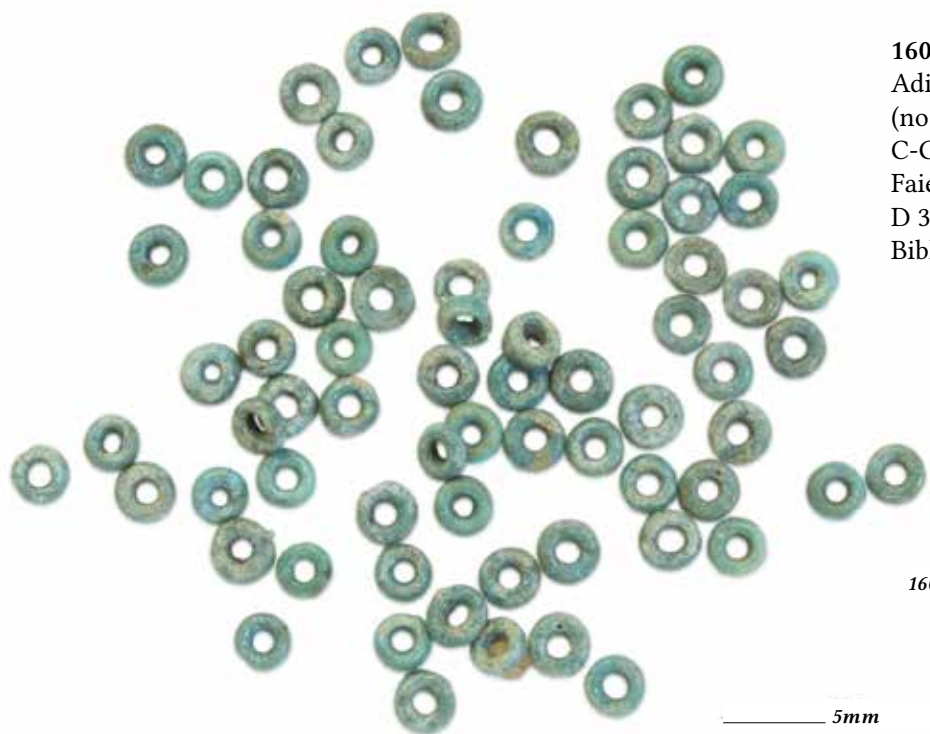
Adindan K 40—2: Bead bracelet at left hand, in shaft (adult female); OIM E23073

C-Group, phase III

Ostrich eggshell, disc cylinder (12), D 4.1–6.4, L 1.1–1.9, HD 1.1–2.1

Bibliography: OINE V, 210

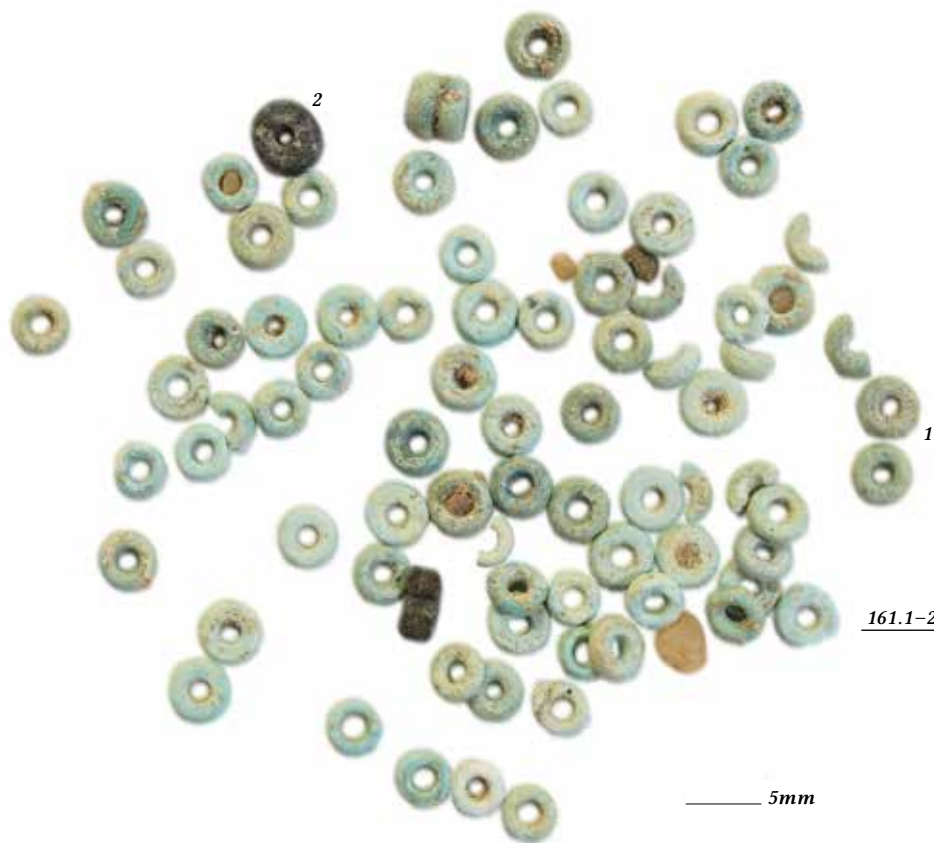


**160**

Adindan K 41—4: Beads from shaft
(no body recorded); OIM E23072
C-Group, phase Early IIA
Faience, short cylinder, blue (72),
D 3.0, L 1.7, HD 0.8
Bibliography: OINE V, 210

160

5mm

**161**

Adindan K 43B—4a—b: Beads
from shaft (no body recorded);
OIM E23071
C-Group, phase III
1. Faience, short cylinder, light
blue (70 and 9 fragments), D 3.9,
L 1.0–2.0, HD 1.1
2. Faience, short cylinder, black
(1.5), D 4.4, L 1.9, HD 1.0
Bibliography: OINE V, 211–12

161.1–2

5mm



162

Adindan K 44—3: Beads from shaft (adult female); OIM E23067

C-Group, phase III

Ostrich eggshell, drilled from both ends, irregular disc, many squares
(146 and 4 broken), D 3.7–5.8, L 1.1–1.9, HD 1.0–2.1

Bibliography: OINE V, 212

**163**

Adindan K 45: Beads from shaft (no body recorded); OIM E23070

Post-New Kingdom

1. Glass, wound, short oblate, blue (30), D 4.6–6.6, L 3.0–5.1, HD 2.1

2. Glass, wound, short oblate, translucent dark blue (7), D 3.7–4.3, L 2.5–3.8, HD 1.6

3. Glass, wound, short oblate, translucent purple (11), D 5.0–5.5, L 2.5–4.4, HD 1.7

4. Glass, wound, short oblate and globular, opaque yellow (3), D 4.6–5.8, L 4.2–5.0, HD 1.9

5. Glass, ring, blue (1), D 3.2, L 1.3, HD 1.4

6. Faience, short cylinder, some segmented, black (11 segments), D 3.3–3.6, L 1.7, HD 1.1

Bibliography: OINE V, 212; excavation register describes OIM E23070 as “50–70 blue glass, bone, and carnelian beads” and assigns it to K 45



163.1–3, 6





164

Adindan K 47—1a-b: Beads, “some still strung,” from shaft (adult female); OIM E23065
C-Group, phase III(?) or Pan Grave

1. Ostrich eggshell, disc and short cylinder (ca. 2,427), D 4.2–6.5, L 1.8–1.9, HD 1.8
2. Ostrich eggshell, disc, roughly cut (1), D 9.3, L 1.95, HD 2.3
3. Glass, wound, short barrel, translucent purple (1), D 3.5, L 2.0, HD 1.0
4. Glass, wound, globular, translucent purple (1), D 3.7, L 3.1, HD 1.3
5. Metal sheet, folded, short cylinder (1), D 2.7, L 1.1, HD 2.4
6. Faience, short cylinder, blue (42), D 2.4–2.8, L 0.8–2.2, HD 0.7

Bibliography: OINE V, 212

**165**

Adindan K 49—1: Beads from shaft, some near head (juvenile female, 18–19 years old); OIM E23066
C-Group, phase III
Ostrich eggshell, disc cylinder (59),
D 3.9–6.1, L 1.2–1.9, HD 1.1–1.7—
conical and hourglass
Bibliography: OINE V, 212–13

165



166

166

Adindan K 56—4: Beads from shaft (infant, ca. 2–3 years old); OIM E23075
C-Group, phase IIA
Faience, short cylinder, blue and green (146), D 2.2–2.9, L 1.3, HD 1.0
Bibliography: OINE V, 214



167

167

Adindan K 62—5: Pendant, made from broken lobed hair slide, in shaft (juvenile, ca. 16 years old);

OIM E23145

C-Group, phase IIA

Shell, broken, unfinished hair slide, lobed, repair perforation (1), W 22.5, Th 2.5, L 50.3, HD 1.1

Bibliography: OINE V, 217

168

Adindan K 63—7a-g: Beads from shaft (mature);

OIM E23153

C-Group, phase IIA

1. Carnelian, drilled from both ends, short barrel, red (2), D 3.8; 4.0, L 1.4; 1.6, HD 1.8–0.9–1.8

2. Carnelian, drilled from both ends, standard barrel, red (1), D 5.4, L 4.0, HD 3.0–1.0–3.0

3. Carnelian, drilled from both ends, long barrel, red (1), D 6.4, L 10.1, HD 2.7—double parallel

4. Steatite, drilled from both ends, long barrel, blue glaze (6), D 2.9–3.8, L 3.5–4.7, HD 1.2

5. Faience, short to standard cylinder, black (220), D 2.6–3.2, L 0.9–1.9, HD 1.1

6. Faience, short cylinder, blue (5), D 2.5–3.0, L 1.1–1.4, HD 1.0

7. Faience, amulet, blue (1), D 5.8 × 2.2, L 9.7, HD 1.0

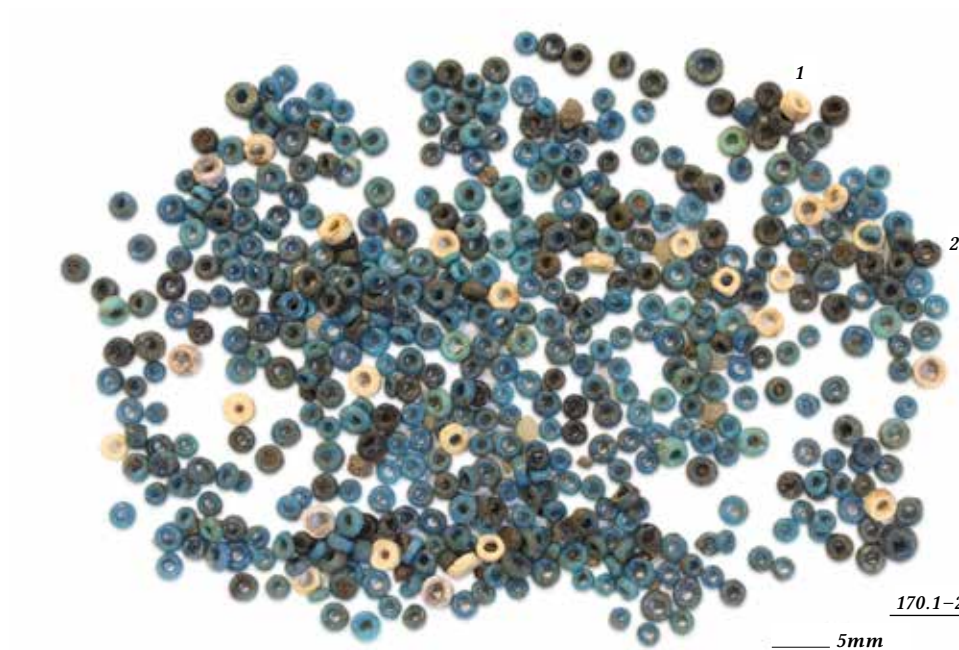
Bibliography: OINE V, 218, pl. 115G

168.1–7



169

Adindan K 66: Beads from shaft
(no body recorded); OIM E23076
C-Group, phase III
Ostrich eggshell, drilled from
both ends, short cylinder (116),
D 4.1–5.1, L 1.4–2.0, HD 1.4
Bibliography: OINE V, 219



170

Adindan K 69–2a–b: Beads from shaft (no body recorded); OIM E23144
C-Group, phase IIA/B
1. Ostrich eggshell, short cylinder (28), D 2.7–3.1, L 0.9–1.5, HD 0.8
2. Faience, short cylinder, blue and green (466), D 2.9, L 1.4–1.9, HD 1.0
Bibliography: OINE V, 220



171.1-2



171

Adindan K 75—1: Beads from shaft (adult male);

OIM E23150

C-Group, phase III

1. Ostrich eggshell, drilled from both ends (28),

D 4.6–5.9, L 1.5–1.7, HD 1.2

2. Faience core, short cylinder, dark gray (1),

D 4.9 × 5.7, L 3.3, HD 1.5 × 0.7

Bibliography: OINE V, 222



172

Adindan K 76—2: Beads from shaft (mature);

OIM E23149

C-Group, phase IIA/B

Faience, short cylinder, black (156), D 2.5–2.8,

L 0.9–2.3, HD 1.0

Bibliography: OINE V, 223



172



173

173

Adindan K 78: Shell from shaft (no body recorded); OIM E23155

C-Group, phase IIA/B

Shell, part of hair ring/slide with two perforations (1), W 9.7, Th 2.2, L 34.5, HD 2.0

Bibliography: OINE V, 223



174.1-3

1

3

2

5mm

174#

Adindan K 89-1a-c: Strung beads (no body recorded); OIM E23157

C-Group, phase III or Pan Grave

1. Ostrich eggshell, disc cylinder (16), D 3.8-5.0, L 1.6-2.1, HD 0.7-1.2

2. Faience, disc cylinder, blue (5), D 1.9-3.1, L 1.2-0.8, HD 0.7-1.1

3. Faience, disc cylinder, black (1), D 4.0, L 1.5, HD 1.5

Bibliography: OINE V, 225

175#

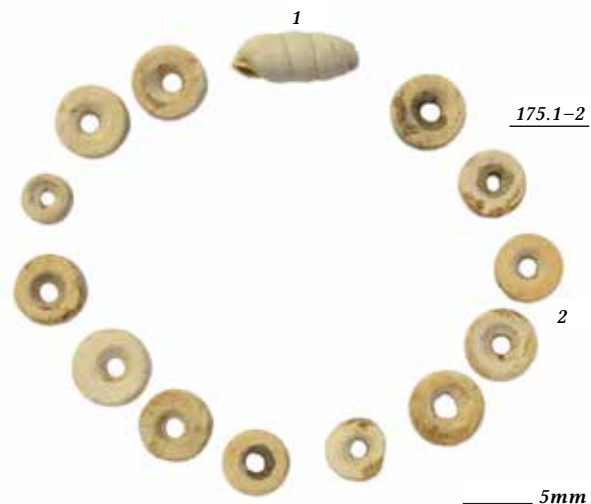
Adindan K 91-3: Beads from shaft (no body recorded); OIM E30274

C-Group, phase III or Pan Grave

1. River snail shell, apex removed (unintentional), white (1), D 3.8, L 9.2, HD 1.0

2. Ostrich eggshell, drilled from both ends, ends not polished, short cylinder (13), D 3.7-5.9, L 1.7-2.1, HD 0.9

Bibliography: OINE V, 226



175.1-2

2

5mm



176.1-3

176

Adindan K: Beads from cemetery surface probably mixed with beads from OIM E23228

1. Ostrich eggshell, disc cylinder (26), D 3.1-4.0, L 0.6-1.3, HD 1.2-1.5
2. Carnelian, disc barrel, red (44), D 2.7, L 0.8-1.1, HD 0.7
3. Diorite, short cylinder, white and black (12), D 2.3-2.6, L 1.1-1.3, HD 0.7



7 — 5mm

176.6-8

6

— 5mm



8

— 5mm

176 (continued)

4. Faience, disc barrel, blackish (10), D 3.0–3.9, L 1.2–1.6, HD 1.0–1.2—*not illustrated*

5. Faience, disc cylinder, bluish (6), D 3.3–3.8, L 0.8, HD 1.2—*not illustrated*

6. Faience, disc barrel, bluish (10), D 2.9–3.4, L 0.6–1.3, HD 0.9

7. Faience, disc rings, blue (137), D 2.4–3.0, L 0.6–1.1, HD 0.9

8. Faience, globular, whitish core, traces of blue glaze (2), D 9.8; 10.5, L 9.2; 9.9, HD 1.4

Bibliography: OINE V, pl. 116V (noted as pl. 116U in publication)



177

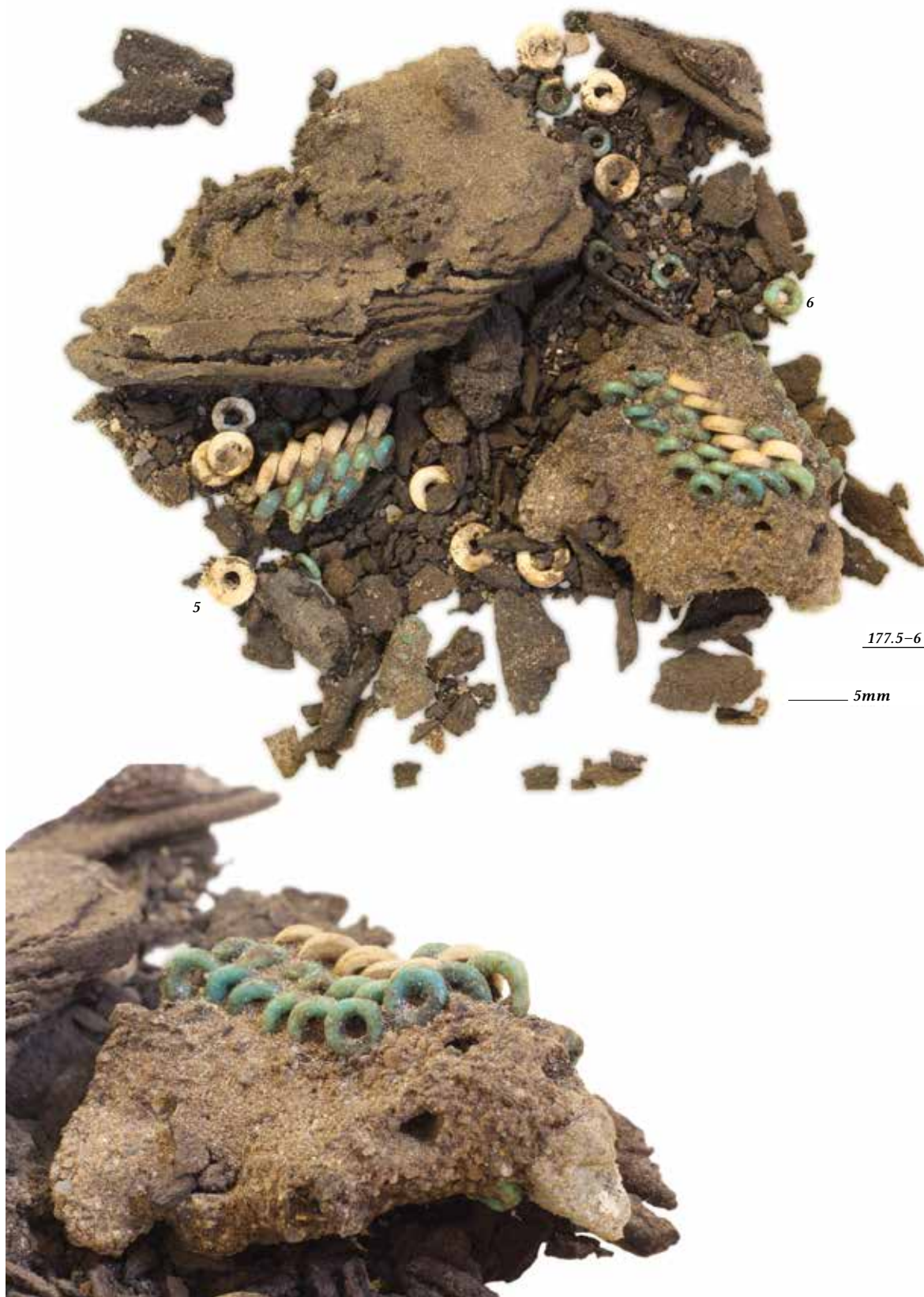
Adindan U 1—5a—b, 10: Beads from leather garment, some in lozenge-shaped pattern, at hips and in shaft with burial (mature male); OIM E21512A—F

C-Group, phase Early III

OIM E21512A

1. Ostrich eggshell, drilled from both ends, short cylinder, white (76), D 3.3–4.1, L 1.0–1.7, HD 2.2–1.0–2.2
2. Ostrich eggshell, drilled from both ends, short cylinder, white (16), D 2.9, L 1.1–1.4, HD 1.5–0.8–1.5
3. Carnelian, short cylinder, drilled from both ends, red (63), D 2.3–2.7, L 0.9–1.3, HD 1.2–0.6–1.2
4. Faience, “doughnut,” blue and green glaze (804), D 2.5–3.7, L 0.6–1.9, HD 0.7–1.1

Bibliography: OINE V, 231

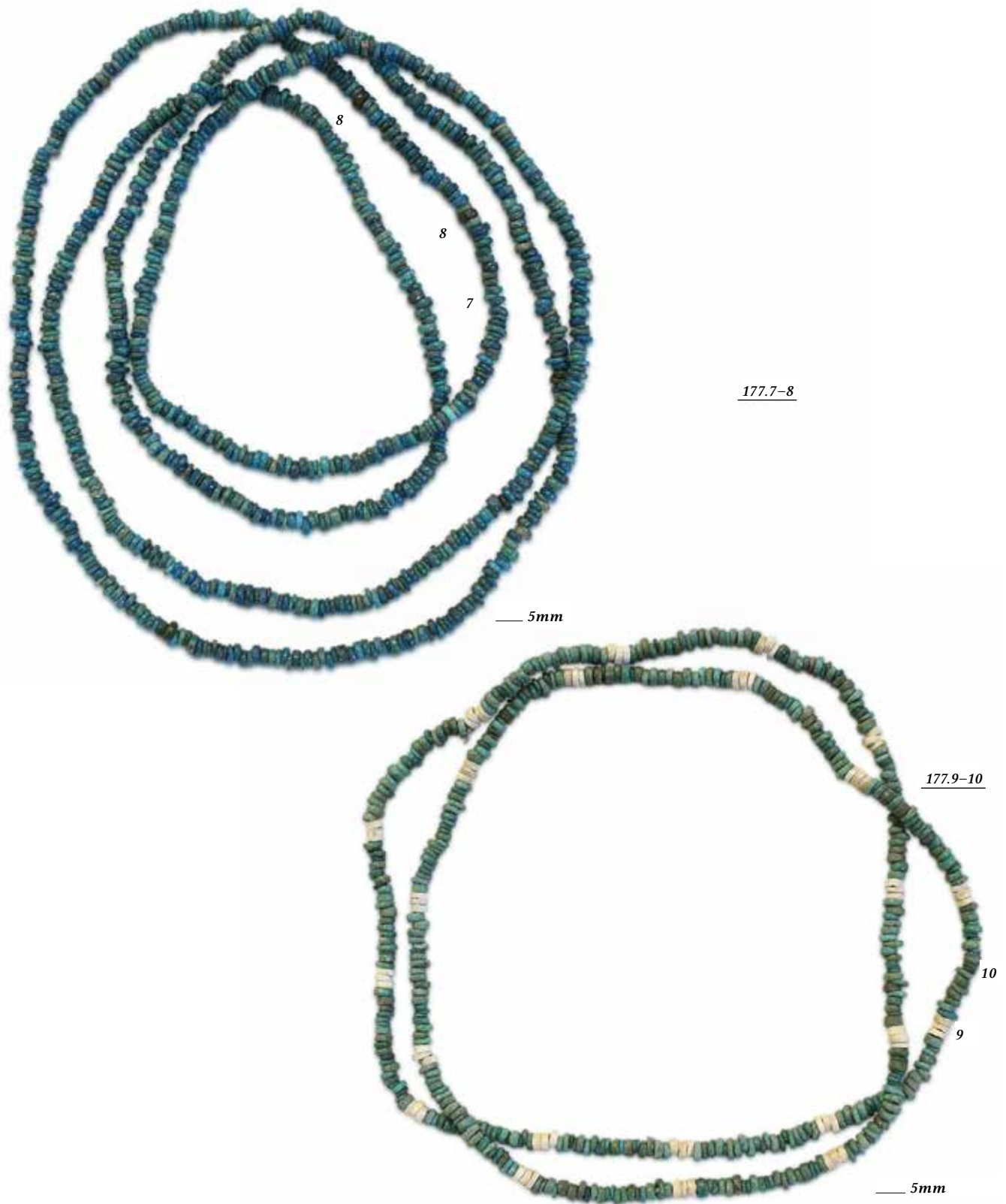


177 (*continued*)

OIM E21512B—leather garment

5. Ostrich eggshell, drilled from one or both end(s), whitish (22), D 3.6–4.5,
L 1.1–1.7, HD 1.0

6. Faience, “doughnut,” blue and green glaze (42), D 2.9–3.4, L 1.0–1.5, HD 1.0–1.3



177 (continued)

OIM E21512C

7. Faience, "doughnut," blue glaze (953), D 2.6–3.7, L 0.7–1.7, HD 0.7–1.1

8. Faience, short cylinder, black glaze (2), D 3.4, L 1.5, HD 1.1

OIM E21512D

9. Ostrich eggshell, drilled from one or both end(s), short cylinder, white (69), D 3.1–3.8, L 1.1–1.4, HD 1.1

10. Faience, disc and short "doughnut," green glaze (419), D 2.5–3.4, L 0.8–2.0, HD 0.7–2.0



177 (continued)

OIM E21512E

11. Ostrich eggshell, drilled from one or both end(s), short cylinder, whitish (52), D 3.1–3.6, L 1.1–1.5, HD 2.0–0.9

12. Carnelian, drilled from both ends, short cylinder, red (129), D 2.1–2.8, L 1.0–1.5, HD 1.2–0.7–1.2

13. Faience, short barrel, green glaze (12), D 2.7–3.3, L 1.0–1.7, HD 1.1

14. Faience, short cylinder, black glaze (1), D 3.5, L 1.5, HD 1.1

OIM E21512F

15. Ostrich eggshell, drilled from one or both end(s), short cylinder, whitish (ca. 1,550), D 3.4–4.5, L 1.1–1.6, HD 2.2–1.2

16. Quartz(?), drilled from one end, spherical, opaque white (1), D 11.8, L 11.7, HD 2.6; 1.6



178

5mm

178

Adindan U 2—6: Necklace made of silver rings, on
body (young adult female); OIM E21515

C-Group, phase Early III

Silver, cast disc cylinder (556), D 5.7, L 0.6, HD 4.7

Bibliography: OINE V, 234



178



179

Adindan U 2—8a—b: Anklet made of ostrich eggshell beads and faience tubular bead, on body (young adult female); OIM E21519 C-Group, phase Early III

1. Ostrich eggshell, disc cylinder (161), D 3.6–3.9, L 1.0–1.4, HD 0.9
2. Faience, long tubular bead, blue (1), D 4.5 × 5.1, L 17.4, HD 1.3

Bibliography: OINE V, 234



180

Adindan U 2—9: Anklet from shaft, in fill (young adult female); OIM E21537A–C C-Group, phase Early III

1. Ostrich eggshell, disc cylinder, whitish (179), D 3.7, L 1.2, HD 1.5

OIM 21537C

2. Faience, disc cylinder, blue (83), D 2.6–3.9, L 0.8–2.0, HD 0.8

OIM 21537A

3. About 108 silver “solid rings of exceptional quality” probably a part of OIM E21515—*non vidi*

Bibliography: OINE V, 234



181

— 5mm

181

Adindan U 3—4a: Beads, ostrich eggshell, with stringing, in shaft (mature male); OIM E21539A

C-Group, phase Early III

Ostrich eggshell, drilled from one end, short cylinder (ca. 570—9 on original string), D 3.2–4.2, L 1.1–1.6, HD 1.2

Bibliography: OINE V, 234, pls. 116V, 117D

182

Adindan U 3—4b: Metal beads from grave (mature male); OIM E21539B

C-Group, phase Early III

1. Silver, cast disc cylinder (7), D 5.9, L 0.5, HD 4.6

2. Gold, cast disc cylinder (14), D 4.6, L 0.3, HD 3.8

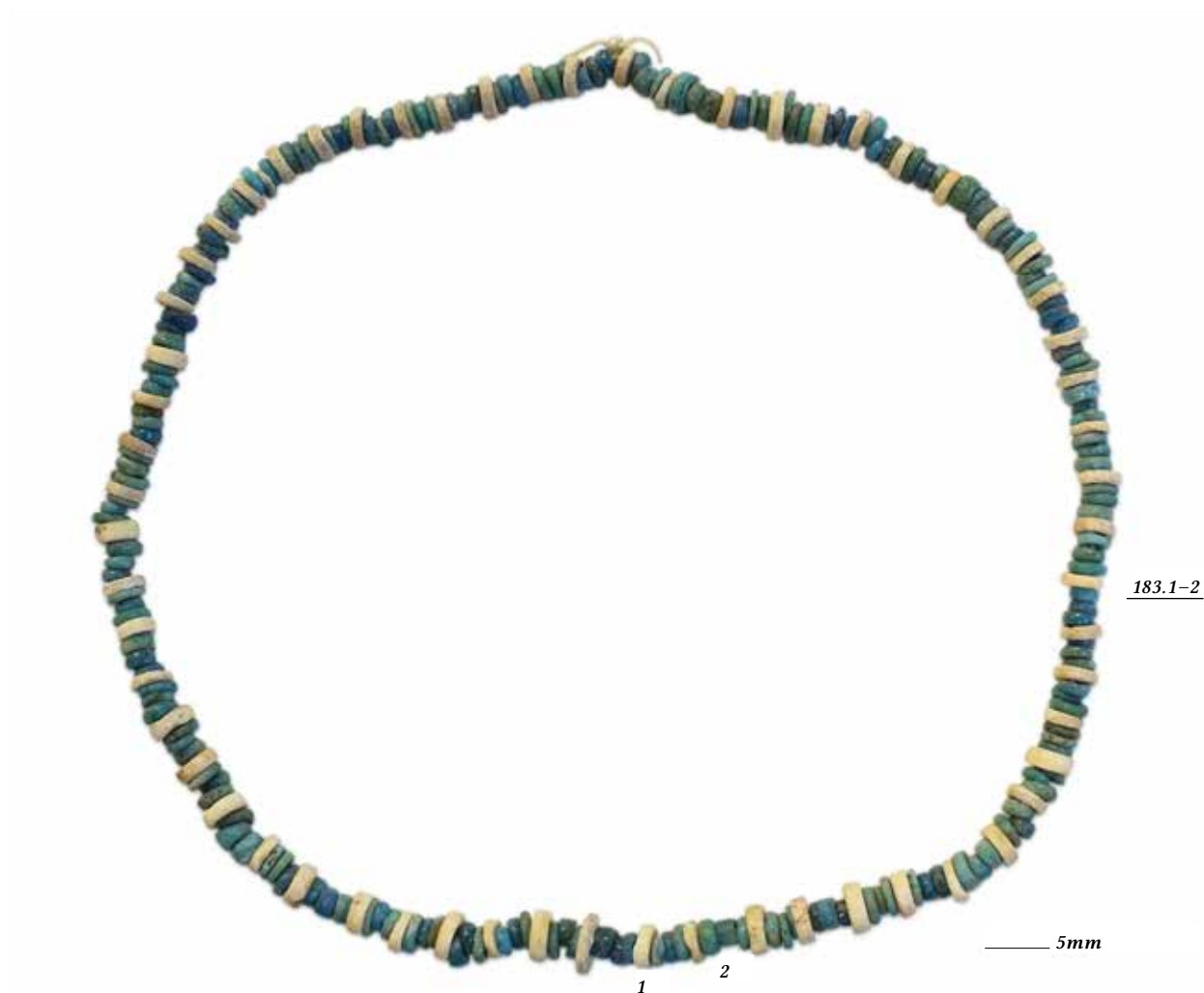
Bibliography: OINE V, 234, pls. 116V, 117D

182.1–2

— 5mm

1

2

**183**

Adindan U 4—2a—b: Beads from shaft (senile male); OIM E21533

C-Group, phase Early III

1. Ostrich eggshell, disc cylinder (62), D 3.5–5.4, L 0.8–1.6, HD 1.1–1.9

2. Faience, short cylinder (182), D 3.0–3.7, L 0.9–2.1, HD ca. 1.0

Bibliography: OINE V, 234

184

Serra East B 2—4: Beads on leather from shaft (adult); OIM E19644

C-Group, phase IIA

1. Ostrich eggshell, drilled from both ends, disc cylinder (135), D 4.3–5.0, L 1.2–1.5, HD 2.6–1.4–2.6

2. Faience, disc and short cylinder, turquoise (400), D 2.5–4.7, L 0.9–3.8, HD 1.0

Bibliography: OINE X, 67



185

185

Serra East B 3—5: Beads from shaft (adult); OIM E19646
C-Group, phase IIA
Faience, short cylinder, brown and black (132), D 2.4–3.0,
L 1.2–2.0, HD 0.7
Bibliography: OINE X, 69

186

Serra East B 5—4: Beads from shaft (no body recorded);
OIM E19649, OIM E19650
C-Group
OIM E19649
1. Ostrich eggshell, short cylinder, whitish (2), D 3.2,
L 1.6, HD 0.9
2. Faience, short cylinder, blue, green (472), D 2.5–2.9,
L 0.8–1.6, HD 1.0
OIM E19650
3. Marine mollusk shell fragments of hair rings(?)
(3 objects—in fragments), W 26.0, Th 1.7, HD 5.9—*not
illustrated*
Bibliography: OINE X, 70, fig. 20a

186.1–2



187

Serra East B 7—6: Beads from shaft (adult);

OIM E19571

C-Group, phase IIA

1. Carnelian, short barrel, red (1), D 6.6, L 3.9, HD 1.2; 1.4

2. Faience, short cylinder, black (152), D 2.9, L 0.9–1.5, HD 1.0

3. Faience, short cylinder, turquoise (5), D 3.5, L 0.8–1.7, HD 1.0

Bibliography: OINE X, 71–72

188

Serra East B 8—3: Beads at pelvis (adult); OIM E19651

C-Group, phase IIA

1. *Nerita* sp. shell, perforation on the last whorl of the spire, whitish (1), Th 13.1 × 9.5, L 15.5, HD 3.1 × 1.9

2. Ostrich eggshell, disc cylinder (1), D 6.7, L 1.3, HD 1.7

3. Faience, disc cylinder irregular, blue (1), D 7.0 × 7.6, L 2.4, HD 2.0

Bibliography: OINE X, 72–73, fig. 22b



189.1-2



189

Serra East B 9—6: Beads on leather in shaft (adult);

OIM E19656

C-Group, phase IIA?

1. Carnelian, drilled from both ends, short barrel, red (1),

D 4.5, L 2.2, HD 2.7–1.1–2.7

2. Faience, short cylinder, green, brown (73), D 2.5–2.8,

L 1.0–1.3, HD 1.0

Bibliography: OINE X, 74

190

Serra East B 10—6: Beads with leather in shaft (adult);

OIM E19662

C-Group

1. Ostrich eggshell, drilled from both ends, disc (2),

D 5.5, L 1.4, HD 1.9

2. Faience, short barrel, bluish and brownish (89), D 2.7,

L 1.0–1.5, HD 0.8

Bibliography: OINE X, 74



190.1-2



191

Serra East B 11—5: Beads from shaft (adult);
OIM E19663

C-Group, phase IIA

Faience, disc and short cylinder, dark gray
core, traces of blackish glaze (105), D 2.5–3.5,
L 0.9–1.3, HD 1.3

Bibliography: OINE X, 75–76



192.1–5

**192**

Serra East B 12—7: Beads from leather at
pelvis, in shaft (adult); OIM E19667

C-Group, phase IIA

1. Wood, drilled from both ends, barrel,
dark brown (1), D 7.7, L 7.3, HD 2.0

2. Carnelian, drilled from both ends,
short barrel, orange (1), D 6.7, L 3.7,
HD 4.0–1.4–4.0

3. Faience, disc, whitish core with green,
traces of blue glaze (ca. 295.5), D 3.4–3.6,
L 0.8, HD 1.1

4. Faience, short cylinder, dark blue, blue
glaze (ca. 88), D 2.8, L 0.8–1.4, HD 0.7

5. Faience, short cylinder, black glaze
(ca. 10), D 2.5, L 1.9, HD 1.0

Bibliography: OINE X, 76–77, fig. 26b

193

Serra East B 17—3: Beads from shaft (adult);
OIM E19669

C-Group

1. Carnelian, drilled from both ends, short barrel, red (14), D 3.8–4.2, L 1.4–1.9, HD 1.2
2. Carnelian, drilled from both ends, short barrel, red (4), D 2.6, L 0.8, HD 0.4
3. Faience, disc and short cylinder, greenish (11), D 2.1–2.4, L 0.9–1.0, HD 0.9

Bibliography: OINE X, 80

**194**

Serra East B 19—4: Beads from shaft (no body recorded); OIM E19672

C-Group

1. Carnelian, drilled from both ends, short barrel, red (11), D 6.3, L 1.7–2.5, HD 2.4–1.3–2.4
2. Faience, short barrel, greenish and blackish (70), D 2.4–3.1, L 1.0–1.4, HD 1.1

Bibliography: OINE X, 82

**195**

Serra East B 22—3: Beads in bracelet in shaft (juvenile); OIM E19673

C-Group, phase IIA

1. *Nerita* sp. shell, perforation on the last whorl of the spire, white (1), W 15.1 × 18.9 × 11.4, HD 3.7

2. Carnelian, drilled from both ends, disc barrel, red (3), D 4.4–5.4, L 1.4–2.4, HD 1.8–0.8–1.8

3. Faience, spherical, blue (3), D 10.2, L 9.7–10.4, HD 1.1

4. Faience, disc and standard cylinder, black (195), D 2.8–3.4, L 0.8–1.6, HD 1.1

5. Faience, disc and short cylinder, blue and green (64), D 2.5–2.7, L 0.9–1.3, HD 0.8

Bibliography: OINE X, 83–84

195.1–5



196.1–3

— 5mm

196

Serra East B 29—3: Beads on leather at pelvis, in shaft (adult); OIM E19674

C-Group, phase IB

1. Ostrich eggshell, short cylinder (1)

2. Faience, short cylinder, black (154), D 3.0–3.3, L 1.2–1.6, HD 1.1

3. Faience, disc barrel, turquoise (140), D 3.5–3.7, L 0.7, HD 1.2

Bibliography: OINE X, 85, fig. 36b





197



197

Serra East B 30—3: Beads from shaft (no body recorded); OIM E19675

C-Group

Faience, short cylinder, dark gray/blackish (49),
D 2.6–4.0, L 0.9–1.7, HD 1.4

Bibliography: OINE X, 85–86

198

Serra East B 31—2a–b: Carnelian bead necklace
and beads from pelvis, in burial (adult);

OIM E19677

C-Group

1. Carnelian, disc barrel, red/orange (109),
D 3.2–3.6, L 0.7–1.4, HD 0.7

2. Faience, short cylinder, turquoise (2), D 3.0,
L 1.6, HD 0.9

Bibliography: OINE X, 86

198.1–2

**199**

Serra East B 32—3: Beads from leather, near knees, from burial (adult female); OIM E19679 C-Group, phase IB

1. Faience, disc and short cylinder, turquoise and blackish (113), D 3.4–4.3, L 0.7–1.6, HD 0.9–1.2
2. Faience, disc, blackish (1), D 5.4, L 1.3, HD 1.8
3. Faience, disc, turquoise (1), D 3.7, L 2.4, HD 1.4

Bibliography: OINE X, 87



199.1–3

**200**

Serra East B 36—2: Beads on leather at waist, with burial (adult); OIM E19680 C-Group

1. Bone, long cylinder, brown (1), D 3.5 × 2.6, L 16.3, HD 1.2
2. Diorite, drilled from both ends, short truncated barrel, black and white (46), D 2.9, L 1.3–1.6, HD 1.1
3. Carnelian, drilled from both ends, short truncated barrel, red (2), D 4.0; 4.2, L 2.0; 2.1, HD 1.0
4. Copper alloy, folded sheet strips, short cylinder (96), D 3.0, L 1.2, HD 1.3
5. Faience, disc cylinder, gray, bluish (57), D 2.8, L 0.9–1.2, HD 1.2
6. Faience, short cylinder (1), D 3.6, L 1.5, HD 1.3

Bibliography: OINE X, 89



200.1–6

201.1-2**201**

Serra East B 37—5: Beads from unspecified location, probably burial (adult); OIM E19681

C-Group

1. Ostrich eggshell, disc cylinder (3), D 4.0–5.5, L 1.5–1.6, HD 2.2

2. Faience, short cylinder, blue (33), D 3.3–3.8, L 1.1–1.9, HD 1.4

Bibliography: OINE X, 89

**202**

Serra East B 41—1: Beads from shaft (adult); OIM E19685

C-Group

1. Faience, short cylinder, turquoise (21), D 3.1–4.3, L 1.0–1.8, HD 1.1

2. Faience, disc cylinder, turquoise (23), D 2.5, L 0.7, HD 0.7

3. Faience, disc cylinder, black (2), D 3.0, L 1.4; 2.1, HD 1.0

Bibliography: OINE X, 91

202.1-3



203

Serra East B 42—6: Beads from uncertain location, probably from shaft with burial (adult);
OIM E19687

C-Group, phase IB

1. Carnelian, drilled from both ends, disc barrel, red (137), D 4.0–4.5, L 0.8–1.5,
HD 1.7–0.9–1.7

2. Faience, short cylinder, black (34), D 2.8, L 1.1, HD 1.1

3. Faience, short cylinder, blue and turquoise (32), D 2.5–4.0, L 1.0–2.5, HD 1.4

4. Faience, disc barrel, brown core (1), D 4.1, L 1.2, HD 1.5

Bibliography: OINE X, 91–92



204



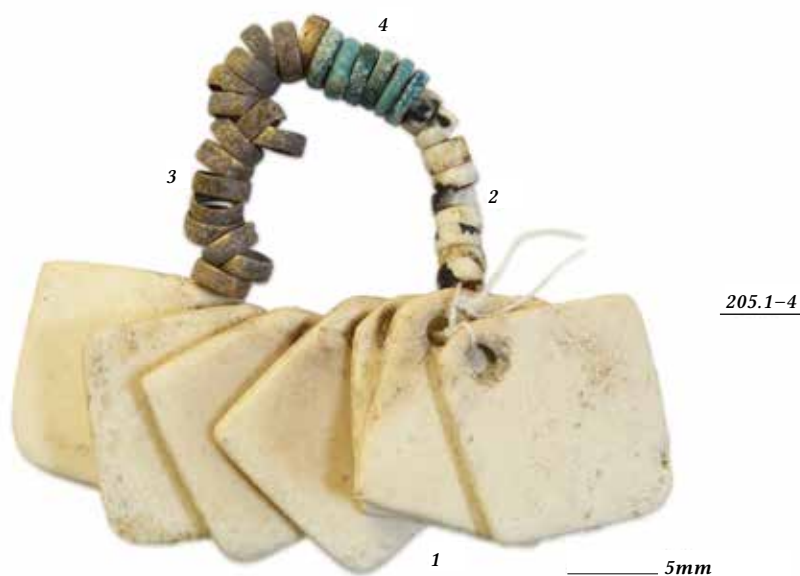
5mm

204

Serra East B 43—1: Beads from superstructure (no body recorded); OIM E19688
C-Group

Faience, short cylinder, blue and turquoise (347), D 2.9–3.9, L 1.8–2.7, HD 0.9–1.4

Bibliography: OINE X, 92



205

Serra East B 43—2, 43—7: Beads
from shaft (no body recorded);

OIM E19689A—B

C-Group

OIM E19689A

1. Ostrich eggshell, drilled from both
ends, square plaques, whitish (7),
Th 1.5–1.8, L 12.5 × 12.5, HD 1.1

2. Diorite, drilled from both ends, short
cylinder, white and black (9), D 2.6,
L 1.2–1.3, HD 1.2–0.6–1.2

3. Gold, folded sheet, short cylinder
(16), D 3.4, L 1.2, HD 2.5

4. Faience, disc cylinder, whitish core,
blue, turquoise glaze (6), D 3.6, L 1.1,
HD 1.0

OIM E19689B

5. Brown fibers wrapped in narrow
leather thong fragments, “probably
string for gold rings” (19 fragments),
D 1.9–3.8, L 3.7–11.8

Bibliography: OINE X, 92





206.1-2

206

Serra East B 44—3: Beads from shaft (adult);
OIM E19691

C-Group

1. Ostrich eggshell, drilled from both ends (16), D 4.6,
L 1.2, HD 1.5

2. Faience, short cylinder, black (124), D 3.5–5.7,
L 1.1–2.3, HD 1.0–1.6

Bibliography: OINE X, 92



206.1-2

**207***

Serra East B 45—5: Bead from shaft (no body recorded), sample—*non vidi*

C-Group

Diorite, disc (1), D 3.0, L 1.5

Bibliography: OINE X, 94

208

Serra East B 46—1: Beads from shaft (juvenile); OIM E19692

C-Group

Diorite, drilled from both ends, short barrel, white and black (121), D 2.6–2.7, L 1.1–1.3, HD 0.6

Bibliography: OINE X, 95, fig. 47

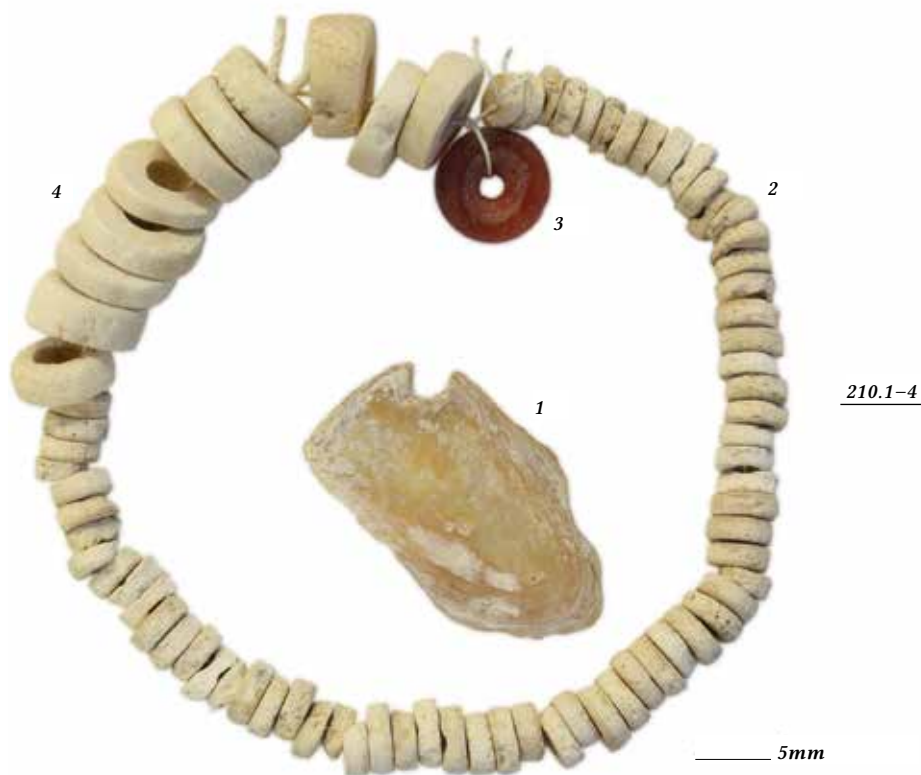
**209**

Serra East B 47—2: Ibis amulet
from shaft (adult); OIM E19693

C-Group

Electrum ibis (1) Th 1.6, L 12.6,
H 11.0; base: L 7.0, W 2.7

Bibliography: OINE X, 96, fig. 48c,
pl. 33b

**210**

Serra East B 48—1: Beads from grave (juvenile); OIM E19695

C-Group

1. Marine mollusk shell fragment, pierced (1), W 24.0 × 13.6, Th 0.2, HD 1.9

2. Ostrich eggshell, drilled from both ends (67), D 4.1–4.5, L 1.6–1.8, HD 3.1

3. Carnelian, drilled from both ends, short truncated barrel, red (1), D 8.4, L 3.4, HD 4.6–1.5–4.5—hourglass

4. Faience, short cylinder, white core (11), D 7.3–8.9, L 2.0–4.6, HD 3.1

Bibliography: OINE X, 96

211.1-2

212

211

Serra East B 49—6b, 8: Beads (and bone needle) from shaft (adult); OIM E19697
C-Group

1. Ostrich eggshell, drilled from both ends, slightly squared disc (1), D 20.3–19.4,
L 2.0, HD 2.0

2. Ostrich eggshell, rectangular disc (1), D 14.2–11.4, L 2.0, HD 2.4
OIM E19699

Bibliography: OINE X, 97–98, fig. 49a–b

212

Serra East B 49—7: Amulet (two wrestlers/twins) from shaft (adult); OIM E19698
C-Group

Faience, amulet, spacer(?), traces of greenish glaze (1), W 10.2, H 13.3, Th 4.4,
HD 4.1; 3.1

Bibliography: OINE X, 97–98, fig. 49c, pl. 33a



213

Serra East B 51—4: Beads from shaft (adult); OIM E19701

C-Group, phase IIA

1. Carnelian, drilled from both ends, short truncated barrel (1), D 2.4, L 1.1, HD 0.6

2. Gold, folded, short cylinder (2), D 2.6, L 0.9, HD 1.5

3. Faience, short cylinder, black (45), D 3.2–4.6, L 1.1–2.1, HD 1.3–1.6

4. Faience, short cylinder, light green (1), D 3.4, L 1.6, HD 0.8

5. Faience, short cylinder, black (7), D 2.4, L 0.8–1.0, HD 0.8

Bibliography: OINE X, 98



214

Serra East B 52—1: Beads found associated with grave (adult); OIM E19702

C-Group

1. Diorite, drilled from both ends, short cylinder, white and black (170), D 2.4–2.5, L 0.9, HD 0.8—hourglass

2. Carnelian, drilled from both ends, short truncated barrel (1), D 3.5, L 1.5, HD 2.4–0.8–2.4—hourglass

3. Faience, short cylinder, blue (2), D 3.8, L 1.2–1.7, HD 1.4

4. Faience, short cylinder, black (126), D 2.7, L 1.1, HD 0.8

Bibliography: OINE X, 99



215.1-3

215

Serra East B 53—3: Beads from shaft (adult); OIM E19703

C-Group

1. Ostrich eggshell, disc cylinder (1), D 5.9, L 1.5, HD 1.7

2. Diorite, drilled from both ends, short cylinder, black and white (7), D 2.4, L 0.8, HD 0.8—hourglass

3. Faience, short cylinder, green (21), D 3.6, L 1.5, HD 1.4

Bibliography: OINE X, 99

216*

Serra East B 54—1: Beads associated with grave (juvenile), sample—*non vidi*

C-Group

Bibliography: OINE X, 100



217

Serra East B 55—2: Beads from shaft (adult);

OIM E19704

C-Group, phase IB

1. Diorite, drilled from both ends, disc and short cylinder, white and black (6), D 2.4, L 1.1–1.4, HD 1.2–0.7–1.2—hourglass

2. Faience, disc and short cylinder, blue (4), D 2.9–3.9, L 0.9–1.9, HD 1.4

3. Faience, disc and short cylinder, gray, blackish, greenish, yellowish (163), D 2.3–2.8, L 0.9–1.1, HD 0.8

Bibliography: OINE X, 100



218

Serra East B 56B—2: Beads from shaft (adult); OIM E19706

C-Group

Carnelian, drilled from both ends, barrel, red/orange (1), D 13.1, L 11.7, HD 5.4–1.5–5.4—hourglass

Bibliography: OINE X, 100, fig. 52b

**219**

Serra East B 59—2: Beads associated with grave (adult); OIM E19708

C-Group

1. Ostrich eggshell, drilled from both ends, disc (8), D 4.4, L 0.8–1.8, HD 1.9–0.9–1.9

2. Faience, disc, black (21), D 4.2, L 0.5–1.5, HD 1.2

Bibliography: OINE X, 101

**220**

Serra East B 60—1: Beads associated with grave (adult); OIM E19709

C-Group

1. Ostrich eggshell, drilled from one end, short cylinder (1), D 5.3, L 1.4, HD 3.0–1.9

2. Diorite, drilled from both ends, short cylinder, white and black (2), D 1.9, L 0.8, HD 0.4—hourglass

3. Faience, disc and short cylinder, gray, black, green (13), D 2.5–2.8, L 0.7–0.9, HD 0.8

4. Faience, short cylinder, turquoise (18), D 3.4–3.9, L 1.3–2.3, HD 1.5

5. Faience, long barrel, turquoise (18), D 2.3–2.5, L 3.4–4.8, HD 0.6

Bibliography: OINE X, 101



221

5mm

221

Serra East B 62—1: Beads associated with grave (adult);

OIM E19711

C-Group

Faience, short cylinder, blue/green/blackish (92),

D 3.4–4.1, L 0.9–1.8, HD 1.2

Bibliography: OINE X, 101

222

Serra East B 63—1: Beads associated with grave (adult);

OIM E19712

C-Group

Faience, short cylinder, blue/green/blackish (9), D 2.8,

L 1.1, HD 1.3

Bibliography: OINE X, 101



222

5mm



223

Serra East B 81—3: Beads associated with grave (adult); OIM E19734
C-Group

1. Ostrich eggshell, short cylinder (43), D 3.5–4.1, L 0.7–1.7, HD 1.4

2. Faience, short cylinder, bluish (266), D 3.2, L 0.9–1.6, HD 1.0

Bibliography: OINE X, 103



224

Serra East B 87—2, 87—3: Beads with shell in grave (adult); OIM E19740A
C-Group

1. *Nerita* sp. shell, perforation on the last whorl of the spire, whitish (9), Th 9.3, L 12.4 × 17.1, HD 2.0–3.3
 2. Stone, irregular, gray (1), Th 4.6, L 15.0 × 11.3, HD 2.6
 3. Stone, irregular, brownish (1), Th 2.7, L 16.1 × 16.3, HD 1.8
 4. Diorite, drilled from both ends, short cylinder, white and black (4), D 2.5, L 1.3, HD 1.1–0.9–1.1
 5. Faience, disc and short cylinder, brownish core, greenish glaze (35), D 3.1–3.9, L 1.1–2.1, HD 1.3
 6. Shell, no traces of perforation (1), W 30.3, L 45.9, H 11.0—*not illustrated*
- Bibliography: OINE X, 103



225

Serra East: unknown location;
OIM E35651
Labeled as C-Group
Diorite, drilled from both ends, short
barrel (1), D 3.1, L 1.5, HD 1.8



226

Serra East: unknown location;
OIM E35659
Labeled as C-Group
Ostrich eggshell, drilled from both
ends, disc cylinder (3), D ca. 4.7, L 1.6,
HD 2.2



227

Serra East: unknown location;
OIM E35660
Labeled as C-Group
Faience, short barrel, blue (1), D 4.0,
L 1.8, HD 1.8



228

Serra East: unknown location; OIM E35661
Labeled as C-Group
1. Faience, ring (1), D 3.6, L 1.8, HD 1.5
2. Faience, ring (1), D 2.3, L 1.0, HD 0.8



229

Serra East: unknown location; OIM E35664
Labeled as C-Group
1. Faience, short cylinder, black (1), D 3.0, L 1.1, HD 1.0
2. Faience, ring, greenish (half), D 2.6, L 0.7, HD 0.8

3.1.2. CORPUS OF OINE C-GROUP N-TYPE BEADS AND PENDANTS

Sites and Chronology

In many Middle Nubian tombs at Serra East, no pottery was found.³³⁵ This is true of the N-Type tombs identified by the presence of needles in many or most of them—something that differentiates them from most C-Group burials.³³⁶ The N-Type tombs are considered to belong “to [the] earlier C-Group, ending roughly in phase IB”³³⁷ (ca. 2000–1900 BC, late Eleventh and early Twelfth Dynasties), a dating that would make N-Type beads the oldest in the Middle Nubian assemblage. This earlier dating would accord with an amulet form (244.5) that was dated to the Fifth and Sixth Dynasties in Egypt. Ring-shaped ostrich eggshell beads (244.1, 249.1) and large black faience discs (246), both found in N-Type graves, do not appear in other C-Group graves. Twenty-five N-Type graves contained beads (230–255).

Materials and Techniques

The N-Type assemblage is dominated by faience beads. Ostrich eggshell and carnelian examples constitute the second-largest share. Some beads are made of other stones (diorite, quartz), animal bone, and Red Sea marine mollusk shells. An overview of types from N-Type graves is given in table 7.

Seed/Fruit

Black, berry-like organics may have been included accidentally in one grave. These organics could be seed cones from a juniper tree of the cypress family, most probably of the *Juniperus excelsa* species. They measure about 5 mm in diameter, 3 mm in thickness, and 2 mm in hole diameter (233.1).

Marine Mollusk Shells

A *Polinices* sp. shell perforated on the last whorl of the spire (234.5) was found, and a *Cypraea* sp. cowrie shell had its dorsal part removed (234.4).

One disc cylinder / ring-shaped bead was made of a marine mollusk shell of an unidentified species (D 6.4–6.8, L 2.1, HD 2.9) (231.1).

Ostrich Eggshell

A few subtypes could be distinguished among ostrich eggshell beads: ring cylinders with wide perforation holes (D 4.1–4.7, HD 2.1 and D 2.9, HD 1.2) (244.1, 249.1), short cylinders with traces of drilling from both ends (D 4.1–6.7, L 0.9–1.8, HD 1.0–2.3) (234.1, 240.2, 244.2, 245), and disc cylinders with perfectly smoothed perforation holes (D 5.2–6.0, L 1.2–1.3, HD 1.6) (240.1).

Stones

Almost all stone (carnelian, quartz, and diorite) beads were drilled from both ends, resulting in a perforation with an hourglass shape. In softer stones (calcite), the perforation may have been made using copper drills, resulting in a bead hole with a double parallel shape.

Carnelian

Large globular beads were drilled from both ends, resulting in a perforation with an hourglass shape (D 9.5–10.3, L 6.9–8.4, HD 4.2–2.0–4.2) (230.1). They are comparable to one specimen from the C-Group.³³⁸

Carnelian/agate

Short truncated bicones can be divided according to their diameters: small (D 2.3–2.8, L 0.9–1.2, HD 1.2–2.0) (233.2, 235.2), medium (D 4.0–4.4, L 1.8, HD 2.0) (235.1), and large (D 5.2–5.4, L 1.7–2.1, HD 2.6) (234.2).

Quartz

Standard and long barrel beads were made of white quartz (D 7.4–8.1, L 4.7–7.0, HD 3.3) (240.3).

Diorite

The shapes of diorite beads are short cylinders (D 2.6–2.7, L 1.0–1.2, HD 0.6) (252.1).

Calcite

A remarkable calcite bead is shaped into a long barrel (Th 6.5, W 6.9, L 9.3, HD 2.6) (240.4).

Stone(?)

A tabular perforated object may have been made of stone or faience (W 8.8, Th 5.2, L 12.8, HD 2.1–3.1) and can be compared with objects recorded in other C-Group tombs (243.3).³³⁹

335 OINE X, 26, table 7.

336 Ibid., 26–27.

337 Ibid., 37.

338 Cf. cat. no. 218 and references therein.

339 Cf. cat. no. 224.1–2.

Table 7. Overview of types from N-Type graves

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
Seed/fruit	B	Oblate			233.1	
Marine mollusk shell	P	<i>Polinices</i> sp.			234.5	
	P?	<i>Cypraea</i> sp. dorsal part removed			234.4	
Ostrich eggshell	B	Disc cylinder			231.1	
	B	Ring cylinder			244.1, 249.1	
		Disc cylinder			240.1	
		Short cylinder			234.1, 240.2, 244.2, 245	
Carnelian	B	Spherical			230.1	
Carnelian/agate	B	Short truncated bicone	Small		233.2, 235.2	
			Medium		235.1	
			Large		234.2	
Quartz	B	Standard and long barrel			240.3	
Diorite	B	Short cylinder			252.1	
Calcite	B	Long barrel			240.4	
Unidentified stone	B	Tabular			243.3	
Faience	B	Disc to short cylinder	Small	Blue and green	233.4, 234.3, 235.4, 237, 238.1, 242.4, 243.2	
				Black to brown	230.2, 231.2, 232.1, 235.3, 238.2, 242.5, 6, 244.3	
		Short cylinder	Medium	Blue and green	232.2, 233.3	
			Large	Self-glazed	242.3	
		Disc cylinder	Large	Black	240.5, 246	
		Oblate		Blue-green	244.4	Fig. 12c
		“Long lion”			244.5	Fig. 12j

Faience

Faience beads appeared in blue, green-blue, and black, and in most cases they were made by cutting a core tube into discs or short, standard, and (rarely) long cylinders. Such segments turned into more or less convex shapes during firing and after applying the glaze. Most faience beads had glaze; however, some blue beads, which appeared as glassy faience, have their cores missing, and the very fine cores may have been burned

out during the glazing process. The beads may have been glazed by efflorescence, which was common in Kerman graves in the heartland and in Kerman burials in the Fourth Cataract region.³⁴⁰

In contrast to the P-Type bead assemblage, the large proportion of black faience beads in N-Type burials is significant.

³⁴⁰ Then-Obluska 2014.

Disc to short cylinders

Small disc to short cylinders (D 2.4–4.2) are blue, green (233.4, 234.3, 235.4, 237, 238.1, 242.4, 243.2), and black or sometimes brown (230.2, 231.2, 232.1, 235.3, 238.2, 242.5, 6, 244.3). **Medium** short cylinders (D 3.7–4.0) are blue and green (232.2, 233.3).

Much larger in diameter than the abovementioned ones are the black disc cylinders, both large (D 5.5–6.5, L 1.2–2.0, HD 1.6–2.0) (240.5) and very large (D 7.1–8.0, L 1.1–1.3, HD 1.0) (246), which are unique in the Middle Nubian assemblage. Another exceptional type in the N-Type assemblage is the larger short cylinder (D 4.6–4.7), most probably self-glazed during firing (242.3).

A tabular faience form (W 8.8, Th 5.2, L 12.8, HD 2.1–3.1) may have been a roughly shaped faience core or a stone (cf. above) (243.3).

Faience oblate

A large faience oblate bead is blue-green (D 5.6–5.8, L 9.9, HD 1.6–1.9) (244.4).

Faience amulet

A faience amulet measures 5.3 mm in width, 3.5 mm in thickness, 9.9 mm in length, and 1.6–1.9 mm in hole diameter (244.5). Brunton described the type as a long lion shape and dated it to the Sixth Dynasty.³⁴¹

Beadwork

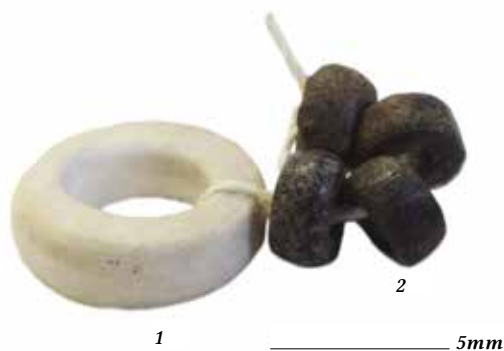
An **anklet** made of large black disc beads (246) is the only threaded beadwork preserved in N-Type burials.

The Bead Owners

Beads were recorded with children's burials in two cases. While one object (239) was not available for study, the second one (230) consists of a few faience and three large carnelian beads, whose jewelry attribution (necklace, bracelet, etc.) is uncertain. Other beads were found with a juvenile (233), a probable juvenile (244), and adults (231, 232, 234–238, 243, 245–255).

³⁴¹ Brunton 1937, pl. 56:15.H2, H7. In one case the amulet was ascribed to the Fifth or Sixth Dynasty, but in the majority of cases it was dated to the Sixth Dynasty. For an unperforated amulet of similar shape, described as a hare, from Zawyet el-Aryan grave 240, see MFA 11.2740.

Catalog

230.1-2231.1-2

230

Serra East N-B 40—1: Beads from tomb (older infant); OIM E19683

C-Group

1. Carnelian, globular, red (3), D 9.5–10.3,

L 6.9–8.4, HD 4.2–2.0–4.2—hourglass

2. Faience, disc cylinder, black (3), D 2.8–4.2,

L 1.1–1.6, HD 1.4

Bibliography: OINE X, 104

231

Serra East N-B 61—2: Beads from tomb (adult); OIM E19710

C-Group

1. Marine mollusk shell, disc cylinder (1),

D 6.4 × 6.8, L 2.1, HD 2.9

2. Faience, short cylinder, black (4), D 3.0,

L 1.5–1.6, HD 1.1

Bibliography: OINE X, 104

232

Serra East N-B 65—1: Beads from tomb (adult); OIM E19713

C-Group

1. Faience, short cylinder, black (79), D 2.8,

L 1.0, HD 0.8

2. Faience, short cylinder, blue (1), D 4.0, L 2.1,

HD 1.4

Bibliography: OINE X, 105

232.1-2

**233**

Serra East N-B 66—1: Beads from tomb (juvenile); OIM E19714

C-Group

1. Seed/fruit, oblate, black (1), D 5.4, L 3.2, HD 2.0

2. Carnelian/agate, short truncated barrel (1), D 2.8, L 1.1, HD 1.2–0.7–1.2—hourglass

3. Faience, short cylinder, turquoise (6), D 3.7, L 1.1–1.9, HD 1.3

4. Faience, short cylinder, turquoise (6), D 2.6–3.0, L 1.0–1.5, HD 0.8

Bibliography: OINE X, 105



234

Serra East N-B 70—4: Beads and perforated *Nerita* shell, at pelvis (adult); OIM E19573A–C

C-Group

OIM E19573A

1. Ostrich eggshell, disc cylinder, drilled from one end, whitish (35), D 4.6–5.9, L 0.9–1.5, HD 1.9

2. Carnelian, drilled from both ends, short barrel, light red to red (5), D 5.2–5.4, L 1.7–2.1, HD 2.6–1.5–2.6

3. Faience, short and standard cylinder, brownish core, bluish, greenish, and blackish glaze (171), D 2.7–3.1, L 1.2–2.9, HD 0.9

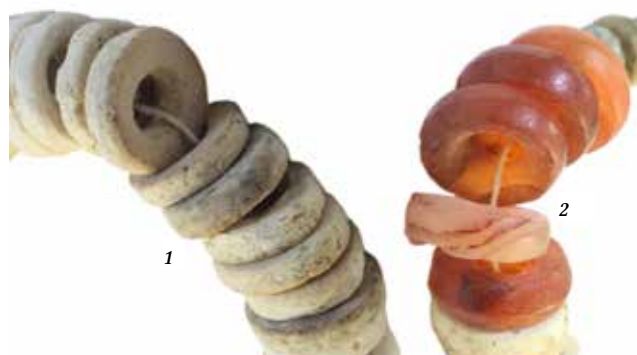
OIM E19573B

4. *Cypraea* sp. shell, body whorl perforated, whitish (1), Th 5.1, L 14.2 × 21.0, HD 14.7 × 11.4

OIM E19573C

5. *Polinices* sp. shell, apex missing (perhaps accidental) and spire whorl perforated, whitish (1), Th 9.8, L 13.7 × 15.6, HD 4.4; 4.8

Bibliography: OINE X, 105–6





235

Serra East N-B 84—1: Beads from tomb (adult); OIM E19735

C-Group

1. Carnelian, drilled from both ends, short truncated barrel, red (21), D 4.0–4.4, L 1.8, HD 2.0–0.9–2.0—hourglass

2. Carnelian, drilled from both ends, short truncated barrel, red (6), D 2.3, L 0.9–1.2, HD 2.0–0.9–2.0—hourglass

3. Faience, short cylinder, black (197), D 2.1–2.9, L 0.7–1.6, HD 0.8

4. Faience, short cylinder, greenish, bluish, yellowish (246), D 2.1–2.9, L 0.7–1.6, HD 0.8

Bibliography: OINE X, 106

236*

Serra East N-B 85—1: Beads from tomb (adult), sample—*non vidi*

C-Group

Bibliography: OINE X, 106

237

Serra East N-B 86—5: Bead necklace
from tomb (adult); OIM E19739

C-Group

Faience, disc cylinder, blue and green
(403), D 3.5, L 0.9–1.6, HD 1.0

Bibliography: OINE X, 106–7



237

5mm



238

Serra East N-B 91—1: Beads from
tomb (adult); OIM E19742

C-Group

1. Faience, short cylinder, turquoise
(115), D 3.2–3.5, L 0.9–2.2, HD 1.22. Faience, short cylinder, blackish
(21), D 3.2–3.5, L 0.9–2.2, HD 1.2

Bibliography: OINE X, 107–8

239*

Serra East N-B 93—1: Beads from
tomb (older infant), sample—*non vidi*

C-Group

Bibliography: OINE X, 57, 108

238.1–2

1

2

5mm



1

2

**240**

Serra East N-B 100B-1: Beads from tomb (no body recorded); OIM E19748

C-Group

1. Ostrich eggshell, disc cylinder, white (43), D 5.2–6.0, L 1.2–1.3, HD 1.6
2. Ostrich eggshell, disc cylinder, white (16), D 4.1, L 1.3–1.4, HD 0.9
3. Quartz, barrel, whitish (7), D 7.4–8.1, L 4.7–7.0, HD 3.3
4. Calcite(?), drilled from both ends, long barrel, colorless (1), D 6.9 × 6.5, L 9.3, HD 2.6—double parallel
5. Faience, disc cylinder, black (40), D 5.5–6.5, L 1.2–2.0, HD 1.6–2.0

Bibliography: OINE X, 108–9



**241**

Serra East N-B 103C—4: Beads from tomb (no body recorded); OIM E19751

C-Group

1. Ostrich eggshell, disc cylinder (3)
2. Ostrich eggshell, disc to short cylinder (37)
3. Carnelian, disc cylinder (4)
4. Faience, short to standard cylinder, black (23)

Bibliography: OINE X, 109

242

Serra East N-B 104—1: Beads from tomb (no body recorded); OIM E19752

C-Group

1. Ostrich eggshell, disc cylinder (39),
D 4.5–4.6, L 1.2–1.4, HD 1.5
2. Ostrich eggshell, disc cylinder (1), D 3.1,
L 1.5, HD 0.9
3. Faience, short cylinder, whitish (19),
D 4.6–4.7, L 1.9–2.8, HD 1.6
4. Faience, short cylinder, turquoise (11),
D 3.1–3.5, L 0.9–1.6, HD 1.6
5. Faience, short cylinder, black (18),
D 2.8–3.1, L 0.9–1.2, HD 0.8
6. Faience, short cylinder, black (2), D 3.9,
L 1.8, HD 1.5

Bibliography: OINE X, 109





243.1-3

243

Serra East N-B 106—1: Beads from tomb (adult); OIM E19755

C-Group

1. Carnelian, drilled from both ends, short truncated barrel (19), D 2.5–2.7, L 0.9–1.0, HD 0.5—hourglass

2. Faience, short cylinder, blue/green/gray (38), D 2.5–2.6, L 1.0, HD 1.0

3. Faience, tabular, gray core (1), L 12.8, W 8.8, Th 5.2, HD 2.1 × 3.1

Bibliography: OINE X, 108



244

Serra East N-B 107–8: Beads from tomb, probably with intrusive burial A (juvenile);

OIM E19756

C-Group

1. Ostrich eggshell, drilled from both ends, disc rings, white (80), D 4.1–4.7, L 1.0–1.4, HD 2.1

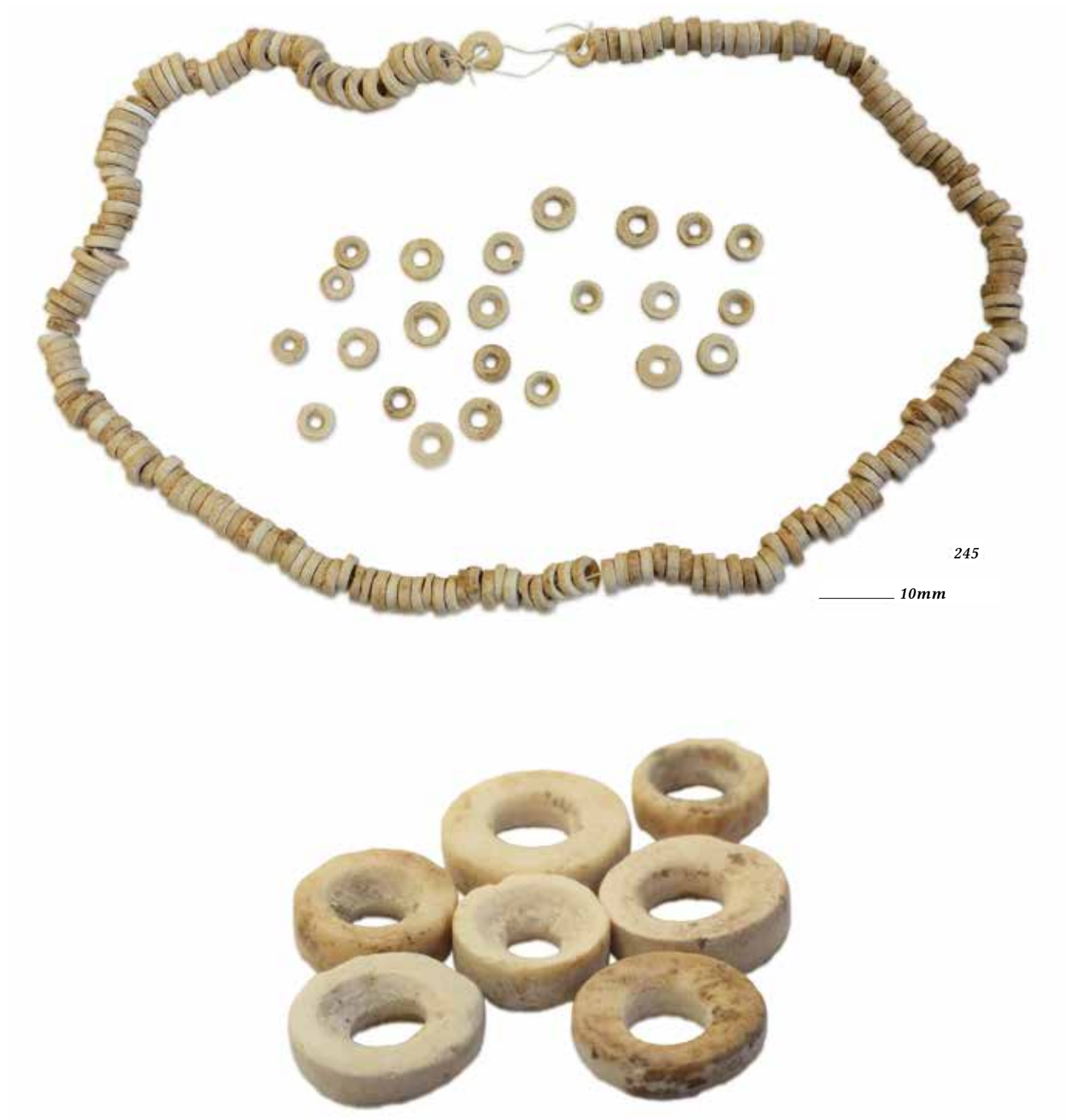
2. Ostrich eggshell, drilled from both ends, disc, white (2), D 6.1; 6.7, L 1.6; 1.5, HD 2.3; 1.5

3. Faience, short cylinder, black, brownish (2), D 3.9, L 2.7, HD 1.2

4. Faience, oblate, turquoise (1), D 5.8 × 5.6, L 4.8, HD 0.9

5. Faience, amulet, turquoise (1), W 5.3, Th 3.5, L 9.9, HD 1.9 × 1.6

Bibliography: OINE X, 109–10, 16, fig. 8a



245

Serra East N-B 109—2: Beads from tomb (adult); OIM E19760

C-Group

Ostrich eggshell, drilled from both ends, disc cylinder (218), D 4.5–6.3, L 1.5–1.8, HD 1.0–1.7

Bibliography: OINE X, 110



246

10mm

246

Serra East N-B 115-1: Bead anklet from tomb (adult); OIM E19764

C-Group

Faience, disc, black (256), D 7.1-8.0, L 1.1-1.3, HD 1.0

Bibliography: OINE X, 110, fig. 62



247

Serra East N-B 115—2: Beads from tomb (adult); OIM E19765

C-Group

1. Faience, short cylinder, turquoise (102), D 2.4–2.6, L 0.8–1.0, HD 0.7–1.0

2. Faience, short cylinder, turquoise (278), D 2.9–3.7, L 1.3–1.7, HD 1.5

3. Faience, short cylinder, turquoise (232), D 2.9–3.7, L 1.3–1.7, HD 1.5

4. Faience, short cylinder, turquoise (133), D 2.4–2.6, L 0.8–1.0, HD 0.7–1.0

Bibliography: OINE X, 110



247.3–4





248

248

Serra East N-B 118—1: Beads from tomb (adult); OIM E19766

C-Group

Faience, short and standard cylinder, black, a few blue/green (116), D 2.8, L 0.8–2.8, HD 1.0

Bibliography: OINE X, 111



249

Serra East N-B 119—1: Beads from tomb (adult); OIM E19767

C-Group

1. Ostrich eggshell, drilled from both ends, disc cylinder (13), D 2.9, L 0.8, HD 1.2
2. Carnelian, disc cylinder (91), D 3.5–4.1, L 0.9–1.5, HD 0.8
3. Faience, short and standard cylinder, black, brownish (51), D 2.8–3.3, L 0.8–2.0, HD 1.2
4. Faience, short and standard cylinder, turquoise (15), D 3.0–3.3, L 0.7–1.6, HD 1.7

Bibliography: OINE X, 111

**250***

Serra East N-B 122—2: Beads from tomb (adult), sample—*non vidi*

C-Group

Bibliography: OINE X, 58, 112

251

Serra East N-B 125—1: Beads from tomb (adult); OIM E19771

C-Group

1. Ostrich eggshell, disc cylinder (76), D 2.5–4.3, L 0.9–1.4, HD 0.8

2. Faience, short cylinder, black and brown (121), D 2.7–4.3, L 1.0–1.9, HD 1.5

3. Faience, short cylinder, turquoise (21), D 2.7–4.3, L 1.0–1.9, HD 1.5

Bibliography: OINE X, 112–13



252.1-3

252

Serra East N-B 126—1: Beads from tomb (adult); OIM E19772

C-Group

1. Diorite, drilled from both ends, short cylinder, black and white (5), D 2.6–2.7, L 1.0–1.2, HD 0.6
2. Carnelian, drilled from both ends, short cylinder, red (1), D 3.9, L 1.8, HD 2.4–1.4–2.4—hourglass
3. Faience, drilled from both ends, short cylinder, black (20), D 3.5, L 1.2, HD 1.0

Bibliography: OINE X, 113



253

Serra East N-B 127—1: Beads from tomb (adult); OIM E19773

C-Group

1. Ostrich eggshell, drilled from both ends, short cylinder (1), D 4.1, L 1.4, HD 1.0

2. Faience, disc turquoise (1), D 4.9, L 1.1, HD 1.4

3. Faience, short cylinder, turquoise (143), D 2.6–3.2, L 0.8–1.3, HD 1.1

4. Faience, short cylinder, black (3), D 2.6–3.2, L 0.8–1.3, HD 1.1

Bibliography: OINE X, 113



254

Serra East N-B 129—1: Beads from tomb in *redim* (adult); OIM E19777

C-Group

Faience, short cylinder, light turquoise (73), D 2.2, L 0.8–1.3, HD 0.9

Bibliography: OINE X, 113

255*

Serra East N-B 130—1: Beads from tomb in *redim* (adult), sample—*non vidi*

C-Group

Bibliography: OINE X, 113

3.1.3. CORPUS OF OINE C-GROUP P-TYPE BEADS AND PENDANTS

Sites and Chronology

Beads were recorded in eight P-Type graves (256–265). P-Type graves were contemporary with the latest phase of cemetery B at Serra East—**phase IIA** (ca. 1850–1750 BC, mid-Twelfth to Thirteenth Dynasty).³⁴² These graves were tentatively identified as Pan Grave burials,³⁴³ but while colorful lozenge-patterned leather beadwork and metal rings were found in C-Group tombs (258, 259), the latter have also been recorded in a Pan Grave tomb at Mostagedda.³⁴⁴ It seems that P-Type graves were linked with the Pan Grave culture, whose grave contents were dominated by ostrich eggshell beads (256).³⁴⁵ Still, it should be emphasized that the P-Type material is not a purely Pan Grave tradition despite the sharing of some common features. Pan Grave, in its strictest sense, is limited in time and space but emerged out of a longer-lasting and widespread tradition.

Materials and Techniques

Faience beads, however, dominated the P-Type bead assemblages. Ostrich eggshell, carnelian, and metal beads constitute the second-largest group. Other materials (glazed steatite, ocher) are represented by singular items. An overview of the bead types from P-Type graves is given in table 8.

Ostrich Eggshell

Ostrich eggshell beads, both discs and short cylinders, were drilled from both ends, often with almost-parallel perforations. They range from 3.0 to 5.5 mm in diameter, 0.9 to 1.8 mm in length, and 0.9 to 2.5 mm in hole diameter (256.1, 259.1, 8, 260.1, 3, 261.1, 6, 263.1, 264.1).

Metal

Gold

One necklace was made of cast gold disc cylinder rings. The beads measure 4.1 mm in diameter, 0.47 mm in length, and 2.2 mm in hole diameter (258.1).³⁴⁶

One gold foil was folded into a long bead and measures 2.6 mm in diameter, 3.4 mm in length, and 0.7 mm in hole diameter (260.4).

Silver(?) over a core

One bead fragment consists of silver(?) foil that was folded over a brown, probably ceramic, core.³⁴⁷ It measures 4.2 mm in diameter, 3.6 mm in preserved length, and 1.4 mm in hole diameter (265.1).

Stone

Stone beads make up a small portion of the P-Type assemblages.

Ocher or jasper

A flat crescent pendant with its perforation drilled from both sides measures 7.1 mm in width, 3.5 mm in thickness, 90.0 mm in length, and 3.1 mm in hole opening (262).³⁴⁸

Carnelian

Carnelian short cylinders, some with slightly convex or biconical sides, were drilled from both ends, resulting in an hourglass-shaped perforation. They range from 3.2 to 4.4 mm in diameter, 1.0 to 2.1 mm in length, and 1.8 to 2.4 mm in hole diameter (259.2, 261.2).

Glazed steatite

A long cylinder consists of a white core and blue-green glaze and measures 3.9 mm in diameter, 7.5 mm in length, and 1.9 mm in hole diameter (256.2).

Faience

Faience disc to short cylinders

Small, faience disc to short cylinders measure 2.3–4.0 mm in diameter (256.5, 258.2, 259.4, 6, 7, 9–11, 13, 261.5,

³⁴² OINE X, 37.

³⁴³ Ibid.

³⁴⁴ Andrews 1981, 86, cat. no. 617, n. 2.

³⁴⁵ Cf. the discussion in the chapter on the Pan Grave culture.

³⁴⁶ Säve-Söderbergh 1989a, 116; Säve-Söderbergh 1989b, pl. 50, 2 (site 179/6:5a—about seven hundred small gold rings, and from the same grave [179/6:5b] a necklace of some two thousand beads of silver; see *ibid.*, 1989a, 116; 1989b, pl. 50, 3).

³⁴⁷ For an electrum sheet over a barrel-shaped core in a Pan Grave context, see Brunton 1937, 126.

³⁴⁸ For a similarly shaped crescent pendant, in shell or ivory, from an A-Group context, see Firth 1915, pl. 28c:12 (grave 102:9:i).

Table 8. Overview of types from P-Type graves

Material	Bead (B) or pendant (P)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
Ostrich eggshell	B	Disc and short cylinder			256.1, 259.1, 8, 260.1, 3, 261.1, 6, 263.1, 264.1	
Gold	B	Disc cylinder			258.1	
		Barrel			260.4	
Silver over ceramic core	B	Long barrel			265.1	
Ocher/jasper	P	Flat crescent			262	
Carnelian	B	Short cylinder			259.2, 261.2	
Glazed steatite	B	Long cylinder			256.2	
Faience	B	Disc to short cylinder	Small	Blue-green	256.5, 258.2, 259.4, 6, 7, 9–11, 13, 260.5–6, 261.5, 7–8, 263.2	
			Large		261.3–4	
		Short cylinder		Gray	264.2, 265.2	
				Black	259.5, 12	
				Brownish core and blue glaze	256.3–4	
		Long bicone			256.6	

7–8, 263.2). Larger beads measure 4.1–4.6 mm in diameter (261.3, 4). While most of them no longer have their glaze, they retain traces of blue or blue-green glaze, and some blue examples have a characteristic glassy appearance due to the loss of their very fine faience core during the firing process. In other beads, the once-white core now has a greenish hue often covered with dark dirt. Only one bead has a black glaze (263.3). Small blue-green beads were found in Kerma graves³⁴⁹ and are common in C-Group assemblages.³⁵⁰

Some short cylinders have a darker, grayish appearance (264.2, 265.2). A few are black, most probably because they were overfired (259.5, 12). Some larger specimens with a brownish core preserve traces of blue glaze (D 3.4 to 4.0, L 1.9 to 3.1) (256.3, 4).

Faience long bicone

A long bicone of blue-green faience measures 3.7 mm in diameter, 6.0 mm in length, and 0.9 mm in hole diameter (256.6).

³⁴⁹ Then-Obluska 2014.

³⁵⁰ Cf. chapter 3.1 on the C-Group.

Beadwork

The beads found associated with leather remains in P-Type contexts were mainly of faience and ostrich eggshell (260, 264). In only one case, tomb P-B 73 (259), were the details of beadwork on leather preserved on a skirt or kilt, and a reconstruction was drawn on the burial excavation sheet (fig. 13). Blue faience, carnelian, and ostrich eggshell beads were arranged in colorful lozenges, comparable to C-Group examples known from Aniba,³⁵¹ while the border was designed in a zigzag pattern. Lozenge designs were also recorded from two other burials at Aniba.³⁵² In one case, the diversity of patterns and colors within the many diamond-shaped patterns is unique.³⁵³

A necklace of gold rings from the same burial, P-B 73 (258.1), was typical of C-Group adornment, and the burial might be attributed instead to the C-Group. However, strings of rings that were made of rolled-up

³⁵¹ Steindorff 1935, pls. 24, 25.

³⁵² Ibid., pls. 27, 28.

³⁵³ Ibid., pl. 28 (grave N 487).

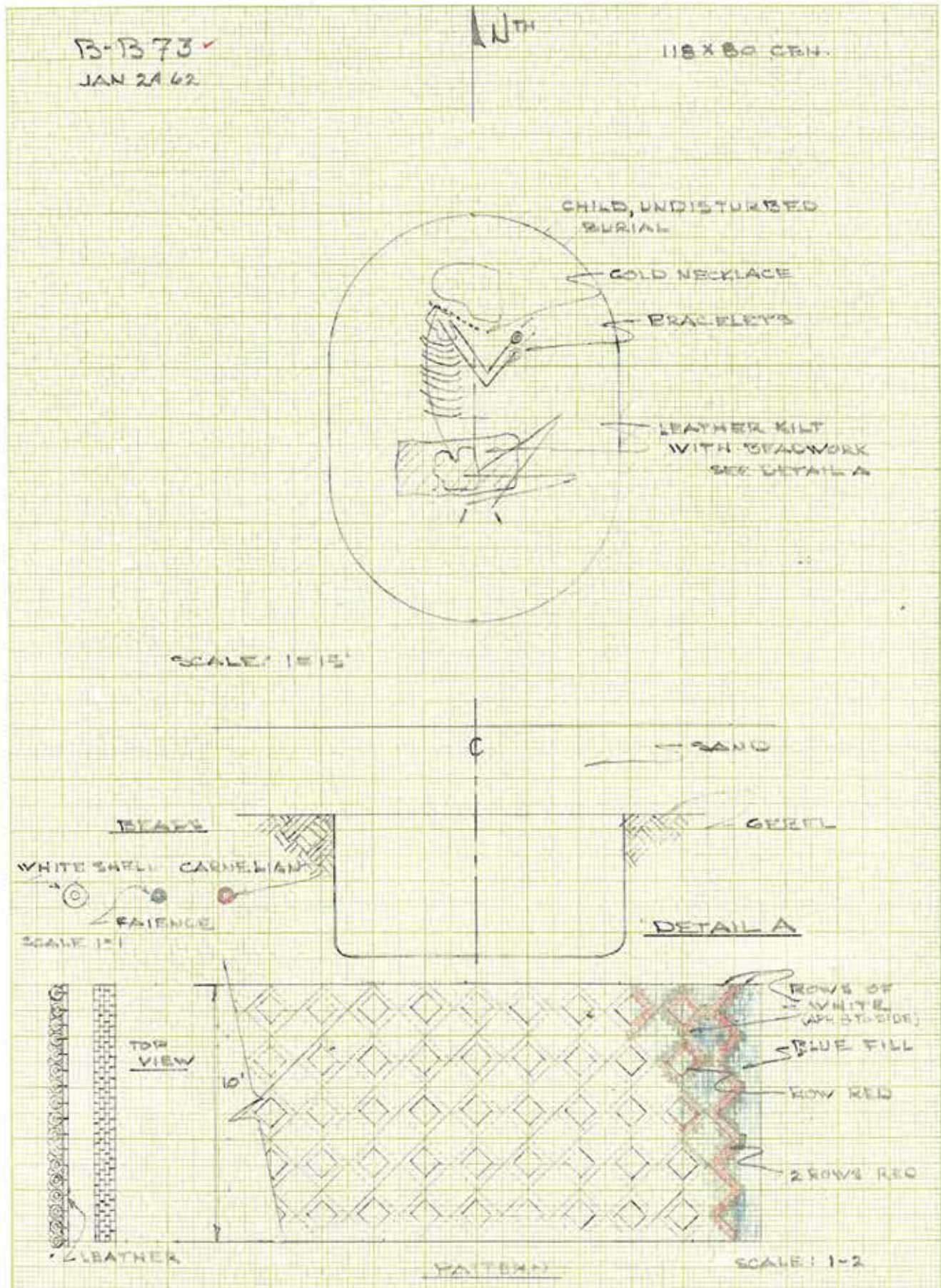


Figure 13. Excavation sheet of tomb P-B 73 (258-259)

gold, electrum, or silver strips are also recorded from Pan Grave contexts at Mostagedda.³⁵⁴

The Bead Owners

In one case, beads and a crescent-shaped pendant were found with a cattle burial (262–263). Bead adornments

associated with cattle have been recorded at other C-Group sites.³⁵⁵

Beads and pendants in P-Type graves were recorded with adults (256, 257, 260, 261), juveniles (258–259, 264), and infants (265). Leather beadwork from the pelvis area was found in both juvenile burials (259, 264). Beads on leather were also found in an adult grave (260).

³⁵⁴ Brunton 1937, 126, grave 3163, 3251, pl. 76, 47 (= Andrews 1981, cat. no. 617).

³⁵⁵ For strings of beads on sacrificial animals, see, e.g., Vila 1987, 217, fig. 246.

Catalog



256

Serra East P-B 69—1: Beads from grave (adult);

OIM E19568

C-Group

1. Ostrich eggshell, drilled from both ends, disc and short cylinder (250 and ca. 20 in fragments), D 3.9–5.5, L 1.1–1.7, HD 0.9

2. Steatite, long cylinder, blue/green glaze (1), D 3.9, L 7.5, HD 1.9

3. Faience, short cylinder, brownish weathering (39), D 3.7–3.9, L 1.9–3.1, HD 1.1

4. Faience, short cylinder, turquoise (5), D 3.4–4.0, L 2.0, HD 1.1

5. Faience, short cylinder, turquoise (17), D 2.6–3.0, L 1.0–1.7, HD 0.7

6. Faience, long bicone, turquoise (1), D 3.7, L 6.0, HD 0.9

Bibliography: OINE X, 113, fig. 66





257

257

Serra East P-B 72—2: Beads from grave (adult); OIM E19718

C-Group

Faience, short cylinder, blue/gray (121), D 2.4–3.1, L 1.4–1.9, HD 1.1

Bibliography: OINE X, 114



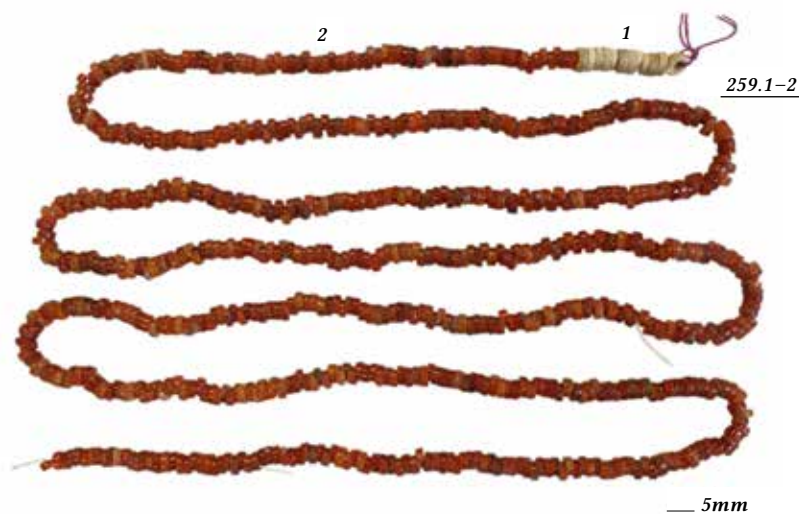
258

Serra East P-B 73—1: Gold and faience bead necklace from grave (juvenile); OIM E19577
C-Group

1. Gold, disc cylinder (ca. 170), D 4.1, L 0.47, HD 2.2

2. Faience, disc cylinder, blue (1), D 3.6, L 1.5, HD 1.6

Bibliography: OINE X, 114



259

Serra East P-B 73-4: Beads from leather—
girdle or kilt (juvenile); OIM E19582A-G
C-Group

OIM E19582A

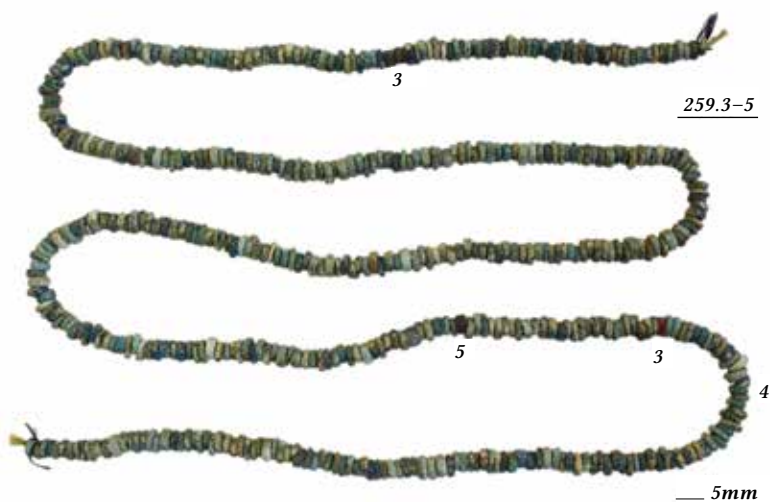
1. Ostrich eggshell, drilled from both
ends, disc cylinder (12), D 3.4–4.4,
L 1.3–1.6, HD 2.5–1.3–2.5

2. Carnelian, short cylinder, some
slightly convex or biconical, drilled from
both ends (709), D 3.2–3.4, L 1.1–1.5,
HD 1.8–1.0–1.8—hourglass

3. Carnelian, short cylinder,
truncated barrel and bicone, drilled
from both ends (1), D 3.2, L 1.3,
HD 1.8–1.0–1.8—hourglass

4. Faience, disc and short cylinder,
turquoise (492), D 3.0–3.9, L 1.0–1.5,
HD 1.1

5. Faience, short cylinder, brown (3),
D 2.6, L 1.7; 1.9, HD 1.5





10mm

259.6



259 (continued)

OIM E19582B

6. Faience, disc and short cylinder, turquoise (629), D 2.7–4.0, L 1.0–1.7, HD ca.1.0

OIM E19582C

7. Faience, disc and short cylinder, turquoise (597), D 2.7–4.0, L 1.0–1.7, HD ca.1.0

259.7



5mm



259 (continued)

OIM E19582D

8. Ostrich eggshell, drilled from both ends, disc cylinder (756), D 4.1–4.5, L 1.2–1.8, HD 1.2

9. Faience, disc cylinder, blue (1), D 3.7, L 1.4, HD 1.3

OIM E19582E

10. Faience, disc and short cylinder, turquoise (573), D 3.5, L 1.4, HD 1.3



259.10





259.11-12



259 (continued)

OIM E19582F

11. Faience, disc and short cylinder, turquoise (640), D 2.9–4.0, L 1.0–1.9, HD 1.3

12. Faience, short cylinder, brown (3), D 2.6–2.9, L 1.7; 1.9, HD 1.5

OIM E19582G

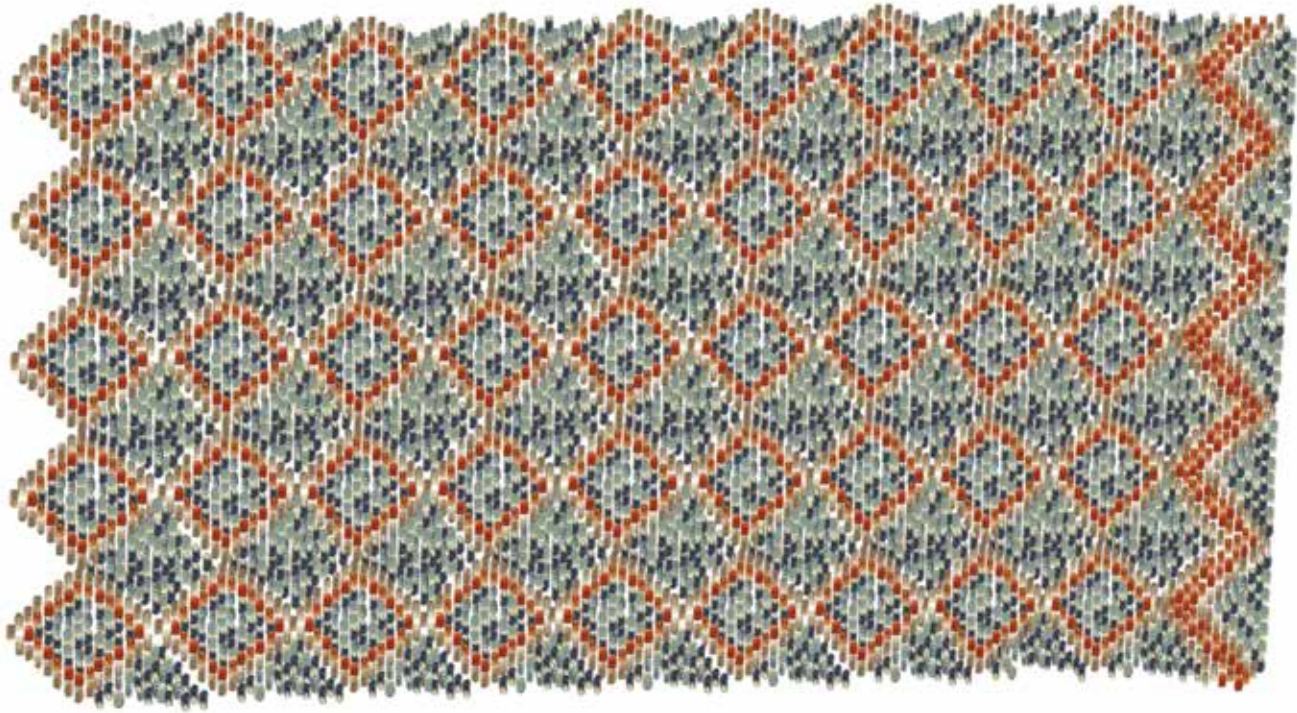
13. Faience, disc and short cylinder, turquoise (592), D 2.8–4.0, L 1.0–1.8, HD 1.3

Bibliography: OINE X, 114–15, fig. 68f, pl. 43



259.13



259.1-13**260**

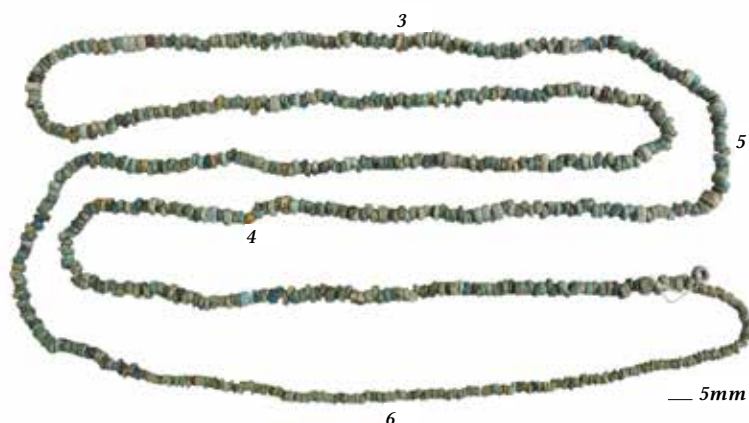
Serra East P-B 74-2, 3: Gold bead
and other beads on leather (adult);
OIM E19720

C-Group

1. Ostrich eggshell, drilled
from both ends, disc and short
cylinder (86), D 3.6-5.1, L 1.0-1.8,
HD 2.1-1.4-2.1

2. Faience, disc and short cylinder,
turquoise (298), D 1.8-4.1,
L 0.7-2.2, HD ca. 1.1

260.1-2

*260 (continued)*

3. Ostrich eggshell, drilled from both ends, disc cylinder (1), D 4.1, L 1.3, HD 1.5

4. Gold foil, folded, barrel (1), D 2.6, L 3.4, HD 0.7

5. Faience, short cylinder, turquoise (664), D 2.8–3.9, L 1.0–2.0, HD 0.9

6. Faience, disc cylinder, turquoise (235), D 2.1, L 0.6, HD 0.6

Bibliography: OINE X, 115

260.3–6

**261**

Serra East P-B 75—4: Beads in tomb (adult); OIM E19722

C-Group

1. Ostrich eggshell, drilled from both ends, short cylinder (311), D 3.0–4.3, L 0.9–1.7, HD 1.1

2. Carnelian, short truncated barrel (21), D 3.2–4.4, L 1.0–2.1, HD 2.4–1.2–2.4—hourglass

3. Faience, short cylinder, blue (19), D 4.1–4.6, L 1.2–1.8, HD 1.7

4. Faience, short cylinder, brownish, weathered (2), D 4.1–4.6, L 1.2–1.8, HD 1.7



261.1–4



*261 (continued)*

5. Faience, short cylinder, blue/green (2), D 3.1, L 1.3, HD 0.9

6. Ostrich eggshell, perforated from both ends (23), D 3.3–4.1, L 1.4–1.7, HD 1.3

7. Faience, short cylinder, bluish, greenish, dark blue, brown (126), D 2.8–3.6, L 0.8–1.8, HD 1.1

8. Faience, disc cylinder, bluish, greenish, dark blue, brown (316), D 3.0, L 0.6–1.5, HD 0.7

Bibliography: OINE X, 115

261.5–8

**262**

Serra East P-B 76–2: Pendant in cattle burial; OIM E19723

C-Group

Jasper or ocher, drilled from both ends, flat crescent pendant, dark red (1), Th 7.1 × 3.5, L 90.0, HD 3.1–0.8–3.1

Bibliography: OINE X, 115, fig. 71b





263

Serra East P-B 76—3: Beads in cattle burial;

OIM E19724

C-Group

1. Ostrich eggshell, short cylinder (7), D 4.2–5.4, L 1.0–1.4, HD 1.9

2. Faience, short cylinder, turquoise (14), D 2.5–3.0, L 0.4–1.0, HD 1.1–1.0

3. Faience, short cylinder, turquoise (2), D 3.9, L 1.9, HD 1.5

4. Faience, short cylinder, black (1), D 2.4, L 1.5, HD 0.9

Bibliography: OINE X, 115, 117, fig. 71

264

Serra East P-B 78—2: Beads from leather at pelvis (juvenile); OIM E19725

C-Group

1. Ostrich eggshell, short cylinder, drilled from both ends (55), D 3.3, L 1.7–1.8, HD 1.2–0.6–1.2

2. Faience, short cylinder, greenish, blue/gray (135), D 2.3–3.0, L 0.9–1.9, HD 1.1

Bibliography: OINE X, 117





265

Serra East P-B 80—2: Beads in tomb (older infant); OIM E19729

C-Group

1. Metal sheet over brown core, long barrel, silver (1—fragment), D 4.2, L 3.6 (preserved), HD 1.4

2. Faience, short cylinder, light blue (19), D 2.5–2.9, L 1.1–1.7, HD 1.4

Bibliography: OINE X, 118

3.2. THE PAN GRAVE BEAD STORY

The Pan Grave phenomenon links characteristics of material culture that have been recognized in the Nile Valley, the deserts of Egypt and Nubia, and even as far south as Jebel Moya, located in the Gezira Plain between the White and Blue Niles.³⁵⁶

One of the unique characteristics of Pan Grave pottery is a four-horned plate, often incised with motifs that resemble the pattern of ostrich feathers.³⁵⁷ Interestingly, a similar but etched design also appears on a leather wrist-guard used for archery and found in a Pan Grave burial at Mostagedda.³⁵⁸ Although ostrich eggshell beads are known from the Nubian C-Group and Kerma graves,³⁵⁹ they constitute the overwhelming majority of beads in Pan Grave assemblages. They are extremely common in Pan Grave tombs in Egypt,³⁶⁰ but they are much more numerous than faience beads in the largest Lower Nubian Pan Grave cemeteries.³⁶¹ At Aniba, almost all graves with shell plaques, or “spacers”—also a defining characteristic of Pan Grave jewelry—contained ostrich eggshell beads.³⁶² Bietak has noted that the combined weight of ostrich eggshell beads in Pan Grave ornaments could be so great that these ornaments are unlikely to have been everyday jewelry and could not have been worn at one time.³⁶³ Thus it is very probable that the more than twenty-four hundred ostrich eggshell and a few garnet beads found in grave K 47 (1a–b) at Adindan, and ascribed to the C-Group culture, actually

belonged to a Pan Grave burial (164). This likelihood stems from the considerable number of beads used for some item of adornment or clothing.

At Masmas, ostrich eggshell beads were found threaded to form belts³⁶⁴ or necklaces.³⁶⁵ In Pan Grave burials at Adindan, some ostrich eggshell beads were found still threaded together (272.1, 277.1, 279.2), but it is uncertain whether they were fragments of belts or necklaces. In some cases, ostrich eggshell beads were identifiably part of leather beadwork of an indeterminate nature³⁶⁶ (268.2, 270) or were stitched in single or double rows into the seams of leather clothes.³⁶⁷

Although large pendants made of the Red Sea shell *Pinctada* sp. were found in many Kerma graves,³⁶⁸ long rectangular plaques cut from *Pinctada* and pierced at each end were tied together into wristlets or armlets and are a diagnostic feature of the Pan Grave culture (269, 271, 273, 277.2, 278.1, 283.1, 290, 291.1). In the past, the nacre (mother-of-pearl) armlet plaques were called “spacers” because they could have been used to hold strings of beads apart; but they were found threaded together into armlets with a rawhide thong.³⁶⁹ In a burial at Hu (Diospolis Parva), in Egypt, were found three bracelets on each forearm of the deceased person. They were threaded together by two strands of sinew passing through each hole in opposite directions to keep the thin plaques edge to edge.³⁷⁰ Fragments of original threading were found at Hierakonpolis, and a tomb in cemetery HK47 had a beaded plaque with two threads that passed through each hole of the beads, strung together in a palisade arrangement with a leather thong.³⁷¹ Remarkably, such plaques formed a belt in one female adult burial at Masmas.³⁷² These shell “spacers” have been found as far south as Jebel Moya.³⁷³

After the nacre armlets, the Red Sea *Nerita* sp. shells (277.4) are the second most characteristic feature of Pan

356 Bietak 1966 and references therein; Addison 1949, pl. 40:S.5.F (= Gerharz 1994); Bourriau 1991; Gatto and Giuliani 2007; Hafsaas 2006; Manassa 2009; Näser 2012; Souza 2013; Liszka 2015 and references therein.

357 E.g., Säve-Söderbergh 1989b, pl. 21:PI I.

358 BM EA63225, grave 3135.

359 See Reisner 1923, 109, where he notes that “ring beads of white shell were used chiefly in decorating drawstrings of leather skirts . . . , in particolored beaded lozenges on leather skirts . . . , and in beaded pot-nets . . . , but they also occurred in necklaces.”

360 Brunton 1937, pl. 76, 63 (3170), 126; Andrews 1981, cat. nos. 580–81, 592–93, 595, 599–604, 606–7, 609–13, 615–16, 619, 621, 623–25, 628, 631–32, 634–35, 644–45, 647, 660—all described as “shell”; and at Hierakonpolis, where more than one thousand ostrich eggshell beads have been recorded at cemeteries HK47 and HK21 (Dr. Renée F. Friedman, personal communication).

361 Säve-Söderbergh 1989a, 84–88—at Pan Grave cemeteries at Debeira (sites 47, 99, 170) and Ashkeit (site 95), ostrich eggshell beads (A 1–A 2) are much more numerous than faience ones (F).

362 Steindorff 1935, 54 (form D 14 and G), pl. 27f.

363 Bietak 1966, 57.

364 Emery and Kirwan 1935, 312, object 201/1:11, 321, object 201/42:3.

365 Ibid., 322, object 201/51:2; BrMu 02.241—Diospolis Parva, described as “ivory.”

366 Brunton 1927, pl. 76, 63, grave 3170; Brunton 1937, 118, pls. 71, 71A; Petrie 1901, 47; Säve-Söderbergh 1989a, 84, object 47/33:8b; 86, object 95/122:2; 88, object 170/37:11.

367 Wainwright 1920, 20.

368 Then-Obluska 2014.

369 Petrie 1901, 46; Brunton 1937, 126, pl. 76, 54–57.

370 Petrie 1901, 46.

371 Sanders 2001, 25.

372 Emery and Kirwan 1935, 321, object 201/42:2.

373 Addison 1949, pl. 40:S.5.F (= Gerharz 1994).

Grave personal adornment.³⁷⁴ Some *Nerita* sp. shells were also found with burials ascribed to the C-Group culture (188, 195.1, 224.1).³⁷⁵ *Polinices* sp. shells were found in both C-Group (135, 138.1–2) and Pan Grave burials.³⁷⁶ In contrast to *Nerita*, *Conus*, and *Polinices* sp. (289), sliced *Nassa* shells (291.2, 292.4) have not been found in C-Group contexts but only in Pan Grave assemblages. On the other hand, cowrie shells, which were used by the C-Group people, are absent from Pan Grave contexts.³⁷⁷

Black beads made of fruit or seed (270.3) have been identified in Pan Grave burials in Hierakonpolis, where they were also found alternating with ostrich eggshell beads.³⁷⁸ They were collected in similar form as surface finds at Adindan cemetery (cf. 348.4). It is possible that the seeds/fruits come from a juniper tree of the cypress family.

Tiny disc cylinders of carnelian, so common in C-Group leather beadwork, are, except for seven specimens (267.3–4, 286.2, 291.4), almost absent from the OINE Pan Grave assemblages. They are rarely found at Pan Grave sites in Egypt,³⁷⁹ and only five carnelian beads were recorded at cemeteries HK47 and HK21 at Hierakonpolis.³⁸⁰ At Lower Nubian sites, carnelian beads are also rare finds; carnelian was recorded with only two Pan Grave burials at Aniba,³⁸¹ and at the largest Pan Grave cemeteries at Debeira site 47 and Ashkeit site 95, only a few carnelian beads were recorded.³⁸²

Although still restricted in number, beads made of amethyst and garnet seem to have been favored by the Pan Grave people. Amethyst beads were especially

common in the Middle Kingdom, during the Eleventh to Twelfth Dynasties,³⁸³ and they are also known from Kerma.³⁸⁴ Still, at Mostagedda,³⁸⁵ in Egypt, and in the Lower Nubian cemeteries at Masmara,³⁸⁶ Aniba,³⁸⁷ Debeira,³⁸⁸ Ashkeit,³⁸⁹ and Abka,³⁹⁰ amethyst beads were found mainly in Pan Grave tombs. In the Middle Nubian OINE collection they were found solely in Pan Grave contexts (267.1, 270.5, 291.5). Access to precious stone material from the Eastern Desert, like amethyst, was easier for the Pan Grave people, who dwelt there. Recently, the involvement of the Middle Nubian and Pan Grave cultures in such mining has been archaeologically verified from the amethyst mining area in the Wadi el-Hudi, about 35 km to the southeast of Aswan.³⁹¹

Many examples of garnet beads appear in Pan Grave contexts (267.5, 268.3, 274.3, 287.2, 288.2); for example, an exceptional bracelet composed of forty-eight garnet beads was recorded from Hierakonpolis burial 10.³⁹² Similarly to amethyst, garnet beads were common in Middle Kingdom Egypt.³⁹³ Some spherical garnet beads, whose source is believed to be

374 Wainwright 1920, 19; Bietak 1966, 59; Säve-Söderbergh 1989a, 138.

375 Steindorff 1935, pl. 27d; MAN 1980/91/305.8—ANX F, T.41, Argin W. ANX was ascribed to the C-Group culture (Almagro, Presedo, and Pellicer 1963).

376 For *Polinices* shell, called *Natica* in a Mostagedda Pan Grave tomb, see Brunton 1937, 126; Andrews 1981, cat. nos. 636, 668, 673, 674.

377 Wainwright 1920, 19.

378 Dr. Renée F. Friedman (personal communication)—Hierakonpolis HK47, burials B20, B23, B25 assoc.; for seed beads in C-Group burials, compare cat. no. 233.1.

379 E.g., Andrews 1981, cat. nos. 591 (string), 594 (one bead), 598 (some small beads), 617, 620 (two short cylinders), 634 (a few oblate), 636 (one tiny), and 653 (a few).

380 Dr. Renée F. Friedman (personal communication)—HK47, burials B9, B20 assoc., B23.

381 Steindorff 1935, 53, form C 4 from N 87, 54, form E 4 from N 87.

382 For all nineteen carnelian beads at cemetery site 47 at Debeira, see Säve-Söderbergh 1989a, 84–85; for all thirty carnelian beads at cemetery site 95 at Ashkeit, see *ibid.*, 86; Emery and Kirwan 1935, 316, object 201/20:2, 319, object 201/31:4.

383 For amethyst beads in Middle Kingdom Egypt, see, e.g., Andrews 1981, 95–96, cat. nos. 398–99, 414–15, 417, 420, 422–27, 429, 435, 439, 441–43, 445–48, 456, 459–64, 481, 484–92, 507, 537–38, 541, 545, 550–51, 556–57; MFA 99.745—Hu, Diospolis Parva, Twelfth Dynasty; MFA 21.975—Naga el-Deir, tomb N 453 b, Eleventh Dynasty; MFA 13.3721—Sheikh Farag; MFA 02.700—Abydos; MFA 97.1027—El-Kab, 2575–2465 bc.

384 For amethyst beads from Kerma, see Dunham 1982, 38; Reisner 1923, 73, 80, 82, 98, 99, 102, 106, 116, 120, 123, 130; Markowitz and Doxey 2014, fig. 10; MFA 13.4111—Middle Kerma, tomb K 1053; MFA 13.4113.

385 Andrews 1981, cat. nos. 634, 653.

386 Emery and Kirwan 1935, 312, object 201/1:9, 320, object 201/38:2—amethyst and carnelian ball and barrel beads in a necklace; *ibid.*, 315, object 201/15:8—mixed beads, including carnelian and amethyst beads; MAN 1980.97.39+40—cemetery at Masmara (FARK.1), excavated by the Spanish Mission to Sudan.

387 Steindorff 1935, 52–53—form B 5 from N 87, C 5 from N 27 and N 87.

388 Säve-Söderbergh 1989a, 79, objects 47/7:6a, 47/131:1, 87, object 170/1:4–6, 88, object 170/25:1, 79, object 95/171:3, 87, objects 99/6:5, 99/9:3; but also probably C-Group objects 332/25:2b and 410/20:2.

389 *Ibid.*, 86, object 95/171:2–3.

390 *Ibid.*, 233, object 254/3:1.

391 See Liszka 2014, 44–45, for Nubian engagement in the mining; Shaw 2006; Shaw 2012; Shaw and Jameson 1993 for Middle Kingdom amethyst mining.

392 Friedman 2001; Dr. Renée F. Friedman (personal communication)—a garnet bead in Hierakonpolis cemetery HK47 in burial B20 assoc.).

393 Andrews 1981, cat. nos. 416, 419–20, 423, 429–30, 434–35, 438–40, 471–73, 481, 491–92, 505–7, 519–24, 530–35, 537, 557.

surface deposits from Dongola Province, were found at Kerma.³⁹⁴

Some larger stone beads in the Pan Grave repertoire may have come from Kerma, since they were found together with a glazed rock-crystal bead (270.6). Blue-glazed quartz and rock-crystal beads constitute a characteristic feature of Kerma culture, and glazed crystal beads were especially common in the Classic Kerma phase (ca. 1700–1550 BC).³⁹⁵ Interestingly, a blue-glazed rock-crystal pendant was also recorded from a Pan Grave burial at Hu in Egypt.³⁹⁶

In contrast to other Middle Nubian assemblages, only a small number of faience beads were found in Pan Grave burials at Adindan and Serra East. Brunton noted that the material quality of the faience beads found at Mostagedda was clearly different from that of the faience found in contemporary Egyptian graves, and he concluded that the Pan Grave people manufactured their own faience.³⁹⁷ Since the quality is comparable to the faience products in the C-Group and Kerma assemblages, they may have been Nubian products. While C-Group leatherwork displays beads arranged in lozenge patterns, the Pan Grave people stitched blue faience beads into the seams of leather garments³⁹⁸ in single or double rows.³⁹⁹

It is noteworthy that a leather bag containing a tool kit for making carnelian beads—a kit consisting of a flint core to make microdrills, polishing stones, and carnelian cobbles—was found in the Pan Grave cemetery HK47 at Hierakonpolis, next to the above-mentioned burial 10, which also contained a bracelet of garnet beads. (As noted above, carnelian beads were rarely found in the Pan Grave repertoire.) The leather of the gourd-shaped bag had deteriorated, but it still preserved the band of woven faience beads that had once adorned it with an intricate diamond pattern, composed of blue and dark blue beads bordered by

a single row of white faience beads.⁴⁰⁰ However, the Lower Nubian Pan Grave beadwork usually lacks white faience beads, using ostrich eggshell beads instead. Indeed, beads found in the Pan Grave cemetery at Hu, Egypt, and described as ivory are of white faience.⁴⁰¹ This phenomenon would indicate cultural regionalization in Pan Grave body adornment. The faience beads from Hu were threaded together with a pendant of glazed rock crystal, a characteristic material of the Kerma culture (270.6). The leather bag may also have been of Kerma origin, especially considering that a large mollusk shell and tiny faience beads, both in Kerman style,⁴⁰² were found outside one of the tombs in the neighboring C-Group cemetery HK27C at Hierakonpolis.⁴⁰³ The remarkable bead types found at Hierakonpolis may indicate another cross-cultural “bead encounter” in Upper Egypt rather than Pan Grave regionalization.

Finally, reviewing the wooden figures of Nubian archers from the tomb of Mesehti (Eleventh Dynasty) in Middle Egypt, presently in the Grand Egyptian Museum in Giza (fig. 8) and the Nubian Museum in Aswan, soldiers with cream-colored kilts and with red kilts can easily be distinguished. Both have red sashes decorated with lozenges. While colorful designs on kilts are traceable in C-Group faience, carnelian, and ostrich eggshell leather beadwork, white kilts may indicate the use of ostrich eggshell beads in a Pan Grave leather beadwork tradition and could thus indicate the presence of a Pan Grave contingent along with C-Group troops. Independently of the kilt color, all these Nubian warriors wear beaded necklaces, anklets, or armlets.

3.2.1. CORPUS OF OINE PAN GRAVE BEADS AND PENDANTS

Sites and Chronology

Bead adornments were found in eleven Pan Grave tombs at Adindan cemetery K (266–281)⁴⁰⁴ and at Serra

394 Reisner 1923, 117; MFA 20.1759—garnet beads from Kerma, K X B-20.

395 For glazed quartz beads, see Reisner 1923, 52, 54, 80, 81, 82, 83, 92, 93, 100, 102, 106, 114–15, 118, 122, 127, 129, 132; for some illustrations of the latter, see MFA 13.3971—grave 1046 no.1; MFA 20.2011—tomb K IV B-46 body BA; MFA 13.4115—tomb K 1016l; MFA 13.3969—tomb K 1067; MFA 20.1718—tomb K III, 310/3; MFA 13.3970—tomb K 1053/16a; MFA 14.1530—tomb K X B-147, at the neck of body QB; MFA 20.1716—K 309, 12; MFA 20.1743—south cemetery K 334 debris; see Markowitz and Dockey 2014.

396 BrMu 02.242.

397 Brunton 1937, 125.

398 Wainwright 1920, 20, 29, and pl. 10, 1 (far left). The same technique is described at Rifeh (Petrie 1907, 20) and Mostagedda (Brunton 1937, 125).

399 Wainwright 1920, 20; Hafsaas 2006, 129.

400 Friedman 2001, 23.

401 For possible faience beads from the Pan Grave cemetery at Hu, see BrMu 02.242—which look like faience beads though they are described as ivory; see http://www.brooklynmuseum.org/opencollection/objects/3202/Pan_Grave_Necklace.

402 Then-Obluska 2014, 1075, pl. 1, and references given there.

403 Hierakonpolis HK27C—<http://www.hierakonpolis-online.org/index.php/explore-the-nubian-cemeteries/hk27c-c-group>; <http://interactive.archaeology.org/hierakonpolis/field/2004d.html>.

404 Additionally, compare the chapter on the Early Nubian period, cat. nos. 40, 45–41.

East in six tombs of cemetery C (282–288), one tomb of cemetery D (289), and three of cemetery F (290–293). Four graves were ascribed to uncertain C-Group or Pan Grave contexts (cf. above 74, 111, 174, 175).

The Pan Grave bead assemblages found in cemetery K at Adindan were in graves contemporary with the C-Group phase Late IIA,⁴⁰⁵ phase III, and early New Kingdom. Pottery and painted gazelle skulls from the offering pits in cemetery C at Serra East point to a late C-Group date (C-Group III) for these Pan Grave burials.⁴⁰⁶ Some burials are dated to the end of the Seventeenth Dynasty and the beginning of the Eighteenth Dynasty. Although the tombs in cemetery D at Serra East closely resemble Pan Grave burials, some objects indicate that the cemetery is to be assigned to the Napatian culture.⁴⁰⁷ There is no good dating evidence for cemetery F.

Materials and Techniques

The materials of which the beads and pendants were made are dominated by ostrich eggshell. Faience and stones (garnet, amethyst, carnelian, quartz), including glazed rock crystal, constituted the second-largest group. Marine mollusk shells, including nacre, were present in considerable quantity. An overview of types in Pan Grave contexts is given in table 9.

Seed/Fruit

A black, berry-like organic is probably seed cone (270.3).⁴⁰⁸

Marine Mollusk Shell

Perforated marine mollusk shells

Conus taeniatus shell has spiral bands of strong, alternating dark and light dashes on white or gray. It was perforated through the space where the apex was removed. The larger species measure 14.5 mm in length (289).⁴⁰⁹

The dark dashes did not remain on smaller shells. The *Conus* sp. seashells range from 4.7 to 6.0 mm in thickness and from 7.6 to 8.8 mm in length (274.1).⁴¹⁰

Nerita albicilla shell was found in only one case (277.4), although, next to shell plaques, this type is considered one of the diagnostic Pan Grave markers.⁴¹¹

Sliced *Nassa* seashell⁴¹² is another characteristic feature of the Pan Grave assemblage, but it may be reused from the burials of another cultural group at Mostagedda.⁴¹³ Sliced *Nassa* shells range from 7.3 to 9.2 mm in width, 10.8 to 11.7 mm in length, and 2.1 to 3.6 mm in thickness (291.2, 292.4).

Worked marine mollusk shells

A short cylinder was cut from a *Conus* sp. seashell.⁴¹⁴ It measures 9.6 mm in diameter, 4.0 mm in length, and 4.5 mm in hole diameter (268.1).

Nacre

Nacre of *Pinctada radiata* or *Pinctada margaritifera* shell was cut into long rectangular plaques.⁴¹⁵ In contrast

410 Dr. Renée F. Friedman (personal communication)—HK47, burials B9(?), B10A, and B23.

411 Wainwright 1920, 17; Brunton 1937, 126—at Balabish and Mostagedda, *Nerita* was the most common shell; Andrews 1981, cat. nos. 580, 634, 636–38, 666–69, 671–74; Bietak 1966, 59; Bietak 1968, 123; Säve-Söderbergh 1989a, 83, 138–40—objects 47/21:3; 176/14:06a; 220/5:4; 12:2; 42:5; 266/13:1; UC 38833—Rife; MAN 1980/91/7—SAC T.1, Argin W; MAN 1980/91/100—SAC T.21, Argin W.; Dr. Renée F. Friedman (personal communication)—Hierakonpolis HK47, burials B22, B24.

412 According to Brunton 1937, 126–27, a solitary specimen may have been reused in a Pan Grave burial; Andrews 1981, pl. 1.

413 Andrews 1981, 83.

414 Brunton 1937, 126, pl. 76, 48, 49—a few ring beads in graves 3122, 3129, 3163, 3248, 3258; MAN 1980.97.43—six short to standard cylinder beads cut from *Conus* seashell and found at a cemetery at Masmara (FARK.1), excavated by the Spanish Mission to Sudan, may be Pan Grave; Dr. Renée F. Friedman (personal communication)—Hierakonpolis HK47, burials B10A, B23.

415 For shell plaques with two and four perforations, see Bietak 1968, 122, and references therein; Petrie 1901, 46, pl. 40—Hu, Diospolis Parva; Andrews 1981, cat. no. 640; BM EA30849; Emery and Kirwan 1935, 536, fig. 487.64–69—Masmara; Steindorff 1935, 48, pl. 27f; Brunton 1937, 125, pl. 76, 54–58—Mostagedda; Brunton 1930, 7, pl. 11, 41–42—Qau; Petrie 1907, 20–21, UC 38826—Rife; Wainwright 1920, 20, pl. 3, 3—Balabish; Vila 1987, 215, fig. 243.4—Ukma West, tomb 45/5; Markowitz and Doxey 2014, 89, fig. 6, MFA 03.1694—six armbrands composed of rectangular plaques that are pierced at both ends and said to come from Naqada; Gatto and Cremaschi 2006, fig. 13—site WK 11 at Nag el-Qarmila; Dr. Renée F. Friedman (personal communication)—burials B5, B7, B7 assoc., B9, B10A, B11, B12, B15, B16, B20 assoc., B21 assoc., B22, B22 assoc., B24,

405 OINE V, 4; Dr. Bruce B. Williams (personal communication).

406 OINE X, 124.

407 Ibid., 133.

408 Cf. n. 378.

409 Brunton 1930, 5, grave 1303, 1989; Brunton 1937, 126; for *Conus* sp. in a Pan Grave, see also Andrews 1981, cat. nos. 580, 632–33, 635–37, 664–66, 668, 671–72, 674; Säve-Söderbergh 1989a, 83.

Table 9. Overview of types from Pan Grave graves

Material	Bead (B), pendant (P), or spacer (S)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
Seed/fruit	B	Oblate			270.3, 348.4	
Marine mollusk shell	P	<i>Conus taeniatus</i>			289	
		<i>Conus</i> sp.			274.1	
		<i>Nerita albicilla</i>			277.4	
		<i>Nassa</i> sp. sliced			291.2, 292.4	
	B	Short cylinder of <i>Conus</i> sp.			268.1	
Nacre	"S"	Long rectangular plaque with a hole at each end			266, 269, 271, 273, 277.2, 278.1, 283.1, 290, 291.1	Fig. 10c
Ostrich eggshell	B	Disc to short cylinder	Small		268.2, 270.1, 272.1, 274.2, 275.1, 277.1, 278.2, 279.2, 280, 282.1, 283.2, 284.1, 285, 286.1, 287.1, 288.1, 291.3, 292.1, 5, 293.1	
Carnelian	B	Spherical			267.3	
		Short oblate			291.4	
		Standard oblate			270.4, 286.2, 291.4	
		Long barrel			267.4	Fig. 11e
Amethyst	B	Spherical			267.2, 270.5, 291.5	Fig. 11i
		Long barrel			267.1	Fig. 11g
Quartz	B	Short barrel			279.3	
Garnet	B	Short barrel			268.3, 274.3, 287.2, 288.2	
		Standard barrel			267.5	
Glazed rock crystal	B	Spherical			270.6	
Faience	B	Ring			272.3, 274.5	
		Short to standard cylinder	Small		268.4, 270.7, 272.2, 275.2, 278.4, 284.2, 287.3, 288.4, 292.7	
			Medium		268.5, 278.3, 282.2, 292.8, 293.2	
			Large	Blue, green	275.3, 283.3, 288.3, 291.6, 292.2, 9	
				Black	291.7, 292.3, 11	
			Very large	Blue	292.10	

(continued)

Table 9. Overview of types from Pan Grave graves (*continued*)

Material	Bead (B), pendant (P), or spacer (S)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
		Long cylinder			274.6	
		Long pear-shaped			274.7	
		Standard barrel		Black	272.4, 274.4, 277.5	
	S	Spacer, long rectangular plaque			292.12	

to some examples with four holes, all the recorded plaques in the OIM's collection have two perforations. They measure 4.6–15.9 mm in width, 18.4–27.1 mm in length, 0.5–4.1 mm in thickness, and 1.5–4.2 mm in hole diameter (266, 269, 271, 273, 277.2, 278.1, 283.1, 290, 291.1). A fragment of *Pinctada* mollusk shell was found in one Pan Grave burial (268.5).

Terrestrial Mollusk Shell

Terrestrial snail shells of the *Cerionidae*(?) family were collected together with bead remains from Pan Grave pits at Adindan (277.3, 279.1), as well as from burials ascribed to “C-Group or Pan Grave” individuals (175.1). They are all unintentionally perforated objects. The Pan Grave pits may have been dug in natural land depressions and into the remains of former paleolakes where these snail shells were present.

Ostrich Eggshell

The ostrich eggshell beads were drilled from both ends. The perforations are characterized by an hourglass or biconcave shape.⁴¹⁶

In general, these beads measure 3.8–6.4 mm in diameter (268.2, 270.1, 272.1, 274.2, 275.1, 277.1, 278.2, 279.2, 280, 282.1, 283.2, 284.1, 285, 286.1, 287.1, 288.1, 291.3, 292.1, 5, 293.1).

Stone

All larger hard stone beads in Pan Grave assemblages were drilled from both ends, and almost all of them have perforations with a double parallel shape. A few

carnelian and quartz short barrel beads have truncated ends. These beads were perforated from both ends with tapered microdrills, resulting in perforations with an hourglass shape. This technique belongs to a long Nubian tradition and is not a chronological or cultural marker.

Carnelian

Carnelian bead shapes are spherical or standard to long barrel. A spherical carnelian bead measures 6.6 mm in diameter, 6.0 mm in length, and 0.9–1.9 mm in hole diameter (267.3).⁴¹⁷ Standard barrel, oblate, and globular carnelian beads were drilled from both ends. They measure 6.2–7.9 mm in diameter, 4.1–6.7 mm in length, and 1.3–1.6 mm in hole diameter (270.4, 286.2, 291.4). A carnelian long barrel measures 5.7 mm in diameter, 9.2 mm in length, and 1.5–17 mm in hole diameter (267.4).

A single example recalls a short barrel C-Group specimen. Drilled from both ends, it has an hourglass perforation and measures 7.2 mm in diameter, 4.1 mm in length, and 1.4–3.2 mm in hole diameter (291.4).

Amethyst

Amethyst was used to make spherical and long barrel beads. **Spherical** beads measure 6.2–7.2 mm in diameter, 4.8–6.9 mm in length, and 1.2–1.8 mm in hole diameter (267.2, 270.5, 291.5).⁴¹⁸ **Long barrel** beads measure 7.1–7.7 mm in diameter, 11.0–11.2 mm in length, and 1.3–1.6 mm in hole diameter (267.1).

Quartz

A single short quartz barrel, drilled from both ends and with an hourglass perforation, measures 4.4 mm

B25 assoc. at cemetery HK47, Hierakonpolis; Säve-Söderbergh 1989a, 113–14—sites 47, 65, 95, 99, 254; Säve-Söderbergh 1989b, pl. 48.2a—object 47/67:1; Addison 1949, pl. 40:S.5.F (= Gerharz 1994)—Jebel Moya.

416 Gatto and Cremaschi 2006, fig. 13; cf. n. 360.

417 Emery and Kirwan 1935, 316, object 201/20:2, fig. 303:2, 3, 320, object 201/38:2, fig. 2; Dr. Renée F. Friedman (personal communication)—HK47, burial B23, Hierakonpolis.

418 Brunton 1937, 126.

in diameter, 2.4 mm in length, and 1.2–2.3 mm in hole diameter (279.3).

Garnet

A standard garnet barrel was perforated from one end. It measures 6.3 mm in diameter, 5.5 mm in length, and 1.3–2.0 mm in hole opening (267.5).⁴¹⁹

Short garnet barrels and oblates were drilled from one end.⁴²⁰ They measure 3.0–3.9 mm in diameter, 2.0–3.5 mm in length, and 0.8–2.1 mm in hole diameter (268.3, 274.3, 287.2, 288.2).

Glazed Rock Crystal

A transparent rock crystal with spherical shape was drilled from one end and has traces of blue glazing.⁴²¹ It measures 6.5 mm in diameter, 4.7 mm in length, and 1.1–1.4 mm in hole diameter (270.6).

Faience

Except for a broken spacer, the majority of faience beads were disc to short cylinders, blue-green in color, and in two general sizes: small and large. The latter were sometime glazed black. There were also black barrel shapes.

Ring beads

Faience ring beads of blue-green color measure 4.0–4.3 mm in diameter, 1.0–2.3 mm in length, and 1.8 mm in hole diameter (272.3, 274.5).

Small, medium, large, and very large short to standard cylinder

Small short and standard faience cylinders are glazed blue and green, and they measure 2.4–3.4 mm in diameter, 1.0–3.2 mm in length, and 0.7–1.2 mm in hole diameter (268.4, 270.7, 272.2, 275.2, 278.4, 284.2, 287.3, 288.4, 292.7).

Medium-sized short faience cylinders with green and blue glaze range from 3.9 to 5.3 mm in diameter, 1.0 to 2.0 mm in length, and 1.0 to 1.8 mm in hole diameter (268.5, 278.3, 282.2, 292.8, 293.2).

Large faience short cylinders measure between 5.4 and 8.4 mm in diameter, 1.2 and 3.4 mm in length, and 1.2 to 2.1 mm in hole diameter. They are found in blue, green (275.3, 283.3, 288.3, 291.6, 292.2, 9), and black colors (291.7, 292.3, 11).

Very large faience short cylinders are blue in color (292.10). They range from 8.5 to 9.7 mm in diameter, 2.0 to 3.1 mm in length, and 1.2 to 2.7 mm in hole diameter.⁴²²

Long cylinder and pear-shaped beads

A long blue faience cylinder measures 5.2 mm in diameter, 13.4 mm in length, and 1.5 mm in hole diameter (274.6).

A long pear-shaped faience bead measures 3.9 mm in diameter, 11.3 mm in length, and 1.0 mm in hole diameter (274.7).

Standard barrel beads

Standard faience barrel beads were found solely with traces of black glaze and dark cores. They range from 3.5 to 4.4 mm in diameter, 2.9 to 3.9 mm in length, and 0.8 to 1.3 mm in hole diameter (272.4, 274.4, 277.5).

Spacer

A single faience spacer fragment⁴²³ measures 6.3 mm in width, 4.4 mm in thickness, 18.3 mm in preserved length, and 1.8 mm in hole diameter (292.12).

Beadwork

Shell plaques were recorded as part of **wristlets/armlets** and constitute one diagnostic adornment of the Pan Grave people (269, 271, 273, 277.2, 278.1, 283.1, 290, 291.1).⁴²⁴

Some ostrich eggshell beads were preserved still joined together by their ends to form a string of beads (272). Although not specified for the OINE Pan Grave assemblage, ostrich eggshell and blue and black faience beads could have been the remains of necklaces, anklets,⁴²⁵ or bracelets.⁴²⁶ As can be observed in other Pan Grave bead collections, the Pan Grave strings may be monochrome and made from one material⁴²⁷ or in alternating patterns: “in short lengths, 7 white and 7 black” or “usually 1 white alternating with 2 or 3 blue

419 UC 38834—Rifeh; Brunton 1937, 126; Andrews 1981, cat. nos. 617, 625, 634.

420 Brunton 1937, pl. 76, 39 (1811); Petrie 1901, 54.

421 Cf. nn. 395–96.

422 MFA 13.3974—Kerma, southern cemetery, K 10, grave 1041 no. 2. 1913.

423 Säve-Söderbergh 1989b, 10, pl. 48:2b, c—object 176/25:01; Säve-Söderbergh 1989a, 204—objects 176/25:01, 176/31:02 with no material specified.

424 E.g., Bietak 1968, table 13, and references therein.

425 Petrie 1901, 46; Sanders 2001, 26.

426 Sanders 2001, 25; Emery and Kirwan 1935, 315—object 201/15:10.

427 E.g., Steindorff 1935, 195—necklace from grave C 11; Emery and Kirwan 1935, 312—bracelet of faience beads, object 201/1:12.

or black.”⁴²⁸ Often necklaces were made from ostrich eggshell, with faience beads as accents.⁴²⁹ A complete bracelet made of about forty-eight barrel-shaped garnet beads was found at Hierakonpolis and is an exceptional find.⁴³⁰

Many beads were associated with **leather beadwork**. In contrast to C-Group beadwork, which was dominated by faience, Pan Grave leatherwork was decorated with ostrich eggshell beads. A headband with ostrich eggshell beads plaited in diagonally arranged rows is exhibited as a Pan Grave object in the Egyptian Museum in Cairo.⁴³¹ The beads may be stitched diagonally into an edge of leather or into the seam between

leather pieces. In the OINE collection, the ostrich eggshell beadwork was recorded as sewn on the edge of a leather band (268, 270).⁴³²

The Bead Owners

While amethyst, garnet, and carnelian beads were found in an adult female burial (267),⁴³³ males were found buried with a sliced *Nassa* seashell (291.2, 292.4). Armlets/wristlets made of seashell plaques were found in the grave of an adult male and a juvenile (278.1), with a mature individual (283.1), and with an adult, possibly a male (290, 291.1).⁴³⁴

428 Petrie 1901, 46; <http://www.hierakonpolis-online.org/index.php/explore-the-nubian-cemeteries/hk47-pan-graves>.

429 Sanders 2001, 26.

430 Friedman 2001.

431 JE 52899.

432 Brunton 1927, pl. 76, 63 (3170); Petrie 1901, 47.

433 For carnelian and amethyst ball and barrel beads found in an adult female burial at Masmara, see Emery and Kirwan 1935, 312, object 201/1:9; for a necklace of mixed materials, including amethyst and carnelian beads, in a young female burial, see *ibid.*, 315, object 201/15:8; for a necklace of carnelian and amethyst ball beads in a child burial, see *ibid.*, 320, object 201/38:2.

434 For spacer beads in an adult female burial, see *ibid.*, 314, object 201/10:1; for spacer beads in a child burial, see *ibid.*, 318, object 201/33:1.

Catalog

**266**

Adindan K 51—1: Shell plaque in shaft (no body recorded); OIM E23074

Pan Grave

Nacre, rectangular plaque, perforated at each end (1), W 12.0–13.9, L 21.5, Th 1.4, HD 2.3

Bibliography: OINE V, 213

267

Adindan K 74—3a–d: Beads in shaft, among bones (adult female); OIM E23159

Pan Grave

1. Amethyst, long barrel, light purple to transparent (2), D 7.7; 7.1, L 11.0; 11.2, HD 1.3–1.4; 1.3–1.6

2. Amethyst, globular, light purple to transparent (1), D 7.2, L 6.9, HD 1.8; 1.7

3. Carnelian, globular, red (1), D 6.6, L 6.0, HD 1.9–0.9

4. Carnelian, long barrel, red (1), D 5.7, L 9.2, HD 1.7–1.5

5. Garnet, barrel, dark purple (1), D 6.3, L 5.5, HD 2.0–1.3

Bibliography: OINE V, 221, pls. 116P, R, T



268

Adindan K 93—1a—d (c—d—*non vidi*): Beads found with and on leather in shaft (no body recorded);
OIM E23170A, C

Pan Grave

OIM E23170A

1. *Conus* sp. shell, cut, short cylinder (1), D 9.6, L 4.0, HD 4.5

2. Ostrich eggshell, drilled from both ends, short cylinder (985), D 4.2–6.6, L 0.9–2.0, HD 1.0–1.5



268 (continued)

3. Garnet or glass, short barrel (1), D 3.0, L 2.0, HD 1.1; 1.3

4. Faience, short cylinder, blue (2), D 3.9; 2.9, L 1.6; 1.2, HD 1.7; 1.1

OIM E23170C

5. Nacre, plaque fragment (1) Th 2.7, L 37.2 × 36.5

Bibliography: OINE V, 226



269



10mm

269

Adindan K 93—222: Pierced shell plaques in shaft (no body recorded); OIM E23170B

Pan Grave

Nacre, rectangular plaque, perforated at each end (23—3 broken), Th 1.2–2.5, L 5.1–8.0 × 21.0–22.0, HD 1.9

Bibliography: OINE V, 226, pl. 115H



270

Adindan K 94—7a—c: Beads in debris; some ostrich eggshell sewn on leather in debris (A—B—adult female); OIM E23171

C-Group, phase III or Pan Grave

1. Ostrich eggshell, disc cylinder (ca. 2,990), D 4.0–6.4, L 1.2–1.9, HD 1.0
2. Ostrich eggshell, disc cylinder (2), D 7.2–8.0, L 1.4–1.5, HD 2.3
3. Organic, seed/fruit, black (1), D 4.0, L 3.4, HD ca. 1.0
4. Carnelian, drilled from both ends, standard barrel, red (1), D 7.1, L 5.5, HD 1.9
5. Amethyst, drilled from both ends, barrel (1), D 6.6, L 5.5, HD 1.3
6. Rock crystal, barrel, blue glaze (1), D 6.5, L 4.7, HD 1.4; 1.1
7. Faience, disc and short cylinder, blue (50), D 2.5–3.2, L 1.0–2.2, HD 0.7

Bibliography: OINE V, 226–27



271

Adindan K 94—8: Shell plaques in debris (no body recorded); OIM E23171

C-Group, phase III or Pan Grave

Nacre, rectangular plaques, perforated at each end (9—2 broken), W 4.6–8.2, L 22.0–22.5, Th 1.2–1.8

Bibliography: OINE V, 226–27



272

Adindan K 95—1a-e: Beads in shaft (no body recorded); OIM E23911A
Pan Grave

1. Ostrich eggshell, short cylinder (ca. 975), D 3.8–6.3, L 1.4–1.9, HD 0.8

2. Faience, short cylinder, blue (4), D 2.4–3.4, L 1.0–1.5, HD 0.9

3. Faience, ring (10), D 4.0, L 1.5, HD 1.8

4. Faience, barrel, black (4), D 4.4, L 3.2, HD 1.1

Bibliography: OINE V, 227



273

Adindan K 95—2: Shell plaques in shaft (no body recorded); OIM E23911B

Pan Grave

Nacre, rectangular plaques, perforated at each end (65.5), W 5.4–11.6, L 18.4–26.6, Th 0.9–2.2, HD 1.3–2.8

Bibliography: OINE V, 227

274

Adindan K 95—1a–e, 2: Beads in shaft (no body recorded); OIM E23911C, D

OIM E23911C

Pan Grave

1. *Conus* sp. shell, apex removed (14), Th 4.7–6.0, L 7.6–9.8, HD 1.4–3.1



274 (*continued*)

OIM E23911D

2. Ostrich eggshell, disc (2), D 5.3; 4.2, L 1.5, HD 0.8

3. Garnet, drilled from both ends, barrel (1), D 3.9, L 3.5, HD 1.3

4. Faience, barrel, black (12), D 3.5–4.4, L 2.9–3.9, HD 0.8–1.3

5. Faience, ring, blue (22), D 4.1–4.3, L 1.0–2.3, HD 1.8

6. Faience, long cylinder (1), D 5.2, L 13.4, HD 1.5

7. Faience, long pear-shaped, blue (1), D 3.9, L 11.3, HD 1.0

Bibliography: OINE V, 227



275

Adindan K 96—1a-c: Beads in shaft (no body recorded); OIM E30275

Pan Grave

1. Ostrich eggshell, some drilled from both ends, disc cylinder (36), D 4.1–5.6, L 1.5–2.1, HD 0.9–1.6

2. Faience, disc and short cylinder, blue (4), D 3.0–3.2, L 1.6–3.2, HD 1.0–1.2

3. Faience, short cylinder, greenish (1), D 6.4 × 5.9, L 3.7, HD 1.7

Bibliography: OINE V, 227

276*

Adindan K 97—1: Beads in shaft (no body recorded), sample—*non vidi*

Pan Grave

Bibliography: OINE V, 228

277

Adindan K 98—1a-b, 2, 3, 4: Beads, pierced shell wristlet plaques, and 16 small snail shells in shaft (no body recorded); OIM E23906A–E Pan Grave

OIM E23906A

1. Ostrich eggshell, drilled from both ends, short cylinder (ca. 425), D 4.4–4.8, L 1.6–2.0, HD 0.9

OIM E23906B

2. Nacre, rectangular plaques, perforated at each end (18—1 broken), W 6.3–11.2, L 18.6–23.0, Th 1.2–2.2, HD 1.8

OIM E23906C



277.1

5mm



277.2

10mm



277 (continued)

3. Mollusk shell, perforation accidental (14),
Th 3.6, L 10.5—*not illustrated*

OIM E23906D

4. *Nerita albicilla* shell, black and white (1),
W 15.3, Th 8.3, L 16.4, HD 3.5 × 2.3

OIM E23906E

5. Faience, short barrel, black (1), D 4.3, L 3.3,
HD 1.3

Bibliography: OINE V, 228

278

Adindan K 99—1a-b: Pierced shell wristlet
plaques in shaft (A—adult male, B—juvenile);
OIM E23907

Pan Grave

1. Nacre, rectangular plaques, perforated at
each end (8—4 broken), W 5.8—7.0, L 19.4—22.5,
Th 1.6—2.4, HD 2.0

2. Ostrich eggshell, drilled from both ends,
short cylinder (ca. 340), D 3.8—6.4, L 1.2—1.9,
HD 0.6

3. Faience, short cylinder, green (1),
D 4.0 × 3.5, L 3.3, HD 0.9

4. Faience, short cylinder, blue (1),
D 2.9, L 2.3, HD 1.1

Bibliography: OINE V, 228





279

Adindan K 100: Beads in shaft (adult male); OIM E23910A-B

Pan Grave

OIM E23910B

1. Terrestrial snail shells, perforation accidental (63), D ca. 3.8, L 6.8–10.0—*not illustrated*

2. Ostrich eggshell, drilled from both ends, disc cylinder (ca. 683), D 5.1–6.3, L 1.7–1.9, HD ca.1.0

OIM E23910A

3. Quartz, drilled from both ends, short barrel (1), D 4.4, L 2.4, HD 2.3–1.2–2.3

Bibliography: OINE V, 229

280*

Adindan K 101: Beads in shaft (no body recorded), sample—*non vidi*

Pan Grave

Ostrich eggshell (4)

Bibliography: OINE V, 229

**281***

Adindan K Surface, 4a-f: Beads, sample—*non vidi*

Pan Grave

Carnelian, diorite, faience

Bibliography: OINE V, 229

282

Serra East C 1—1a-c: Beads, shell plaques from tomb (female?); OIM E24425

Pan Grave

1. Ostrich eggshell, drilled from both ends, disc and short cylinder (494), D 3.5–5.0, L 1.3–2.0, HD 1.6–0.9

2. Faience, drilled from both ends, disc cylinder (4), D 4.0, L 1.0–1.8, HD 1.1

Bibliography: OINE X, 123, 125–26

**283**

Serra East C 2—1, 2: Beads and shell wristlet plaques in tomb (mature); OIM E24426
Pan Grave

1. Nacre, perforated at each end (traces of drilling tool), rectangular plaque (3), Th 1.9–2.5, L 10.6 × 21.0–12.2 × 27.1, HD 2.7–1.5
2. Ostrich eggshell, drilled from one end, disc cylinder (9), D 4.0–5.2, L 0.9–1.4, HD 1.3–1.5

3. Faience, disc cylinder, light blue (3), D 6.1, L 2.3, HD 1.3–2.2

Bibliography: OINE X, 123, 127

284

Serra East C 3—5: Beads in offering pit B under tumulus (mature male); OIM E24430 (50 percent in SNM)
Pan Grave

1. Ostrich eggshell, drilled from both ends, short cylinder (1,136; ca. 587 in OIM), D 4.3–5.3, L 1.7–1.9, HD 1.7–1.0–1.7
2. Faience, short cylinder (2), D 3.3, L 2.7; 1.5, HD 0.7

Bibliography: OINE X, 123, 127



**285***

Serra East C 3—8a—b: Beads in shaft (mature male); OIM E24436—*non vidi*
Pan Grave

1. Ostrich eggshell (17)

2. Faience, black and blue (3)

Bibliography: OINE X, 123, 127

286

Serra East C 4—1a—b: Beads from tomb (mature male); OIM E24433
Pan Grave

1. Ostrich eggshell, drilled from both ends, disc cylinder (58), D 4.3–5.6, L 1.4–2.1,
HD 2.4–1.3–2.4—hourglass

2. Carnelian, drilled from both ends (traces of drilling tool), spherical, red (1), D 7.9, L 6.7,
HD 1.3—double parallel

Bibliography: OINE X, 123, 130

**287**

Serra East C 5—1a—c: Beads from tomb (mature to senile male); OIM E24438

Pan Grave

1. Ostrich eggshell, drilled from both ends, short cylinder (141), D 4.4–6.0, L 1.6–2.1, HD 2.7–1.6–2.7—hourglass

2. Garnet, oblate, dark purple (1), D 3.9, L 2.9, HD 1.0; 2.1—conical

3. Faience, short and standard cylinder, whitish core, bluish and greenish glaze (66), D ca. 3.1, L 1.2–1.7, HD 0.7

Bibliography: OINE X, 123, 130



288.1-4

288

Serra East C 6-2a-b: Beads from tomb (mature male); OIM E24440

Pan Grave

1. Ostrich eggshell, drilled from both ends, short cylinder (102), D 4.3-5.3, L 1.6-1.7, HD 2.8-1.6-2.8—hourglass

2. Garnet, drilled from one end, barrel, purple (1), D 3.5, L 2.7, HD 0.9; 1.7—conical

3. Faience, disc cylinder, light turquoise (17), D 6.4-8.4, L 1.5-3.3, HD 1.5

4. Faience, short cylinder, turquoise (6), D 2.7, L 1.7, HD 0.8

Bibliography: OINE X, 123, 130

**289**

Serra East D 1—1: Shell bead from tomb (adult); OIM E24448

Pan Grave

Conus taeniatus shell, spire removed, white with brown spots (1), D 9.5 × 8.5, L 14.5, HD 1.2

Bibliography: OINE X, 123, 138

290

Serra East F 1—1: Shell wristlet plaques on surface at shaft (adult, possibly male); OIM E24450

Pan Grave

Nacre, rectangular plaques, perforated at each end (7), D 10.8 × 24.9–15.9 × 27.1, Th 0.5–4.1, HD 4.2–2.2—conical

Bibliography: OINE X, 123, 145–46



291

Serra East F 1—2a—e: Beads from surface and shaft (adult, possibly male); OIM E24451
Pan Grave

1. Nacre, rectangular plaque, perforated at each end (1), L 11.1 × 21.9, Th 1.5, HD 1.4
2. *Nassa* sp. sliced shells, body whorl cut (5), Th 10.8 × 7.3 × 3.6, HD 4.6 × 3.2
3. Ostrich eggshell, drilled from both ends, disc cylinder (185), D 3.8–4.8, L 1.5–1.9, HD 2.3–1.2
4. Carnelian, drilled from both ends, oblate and spherical, red (3), D 6.2–7.2, L 4.1–5.5, HD 1.6; 3.2–1.4–3.2—hourglass perforation in 1 bead
5. Amethyst, drilled from both ends, spherical (3), D 6.2–6.8, L 4.8–5.6, HD 1.2—double parallel
6. Faience, disc cylinder, blue (141), D 5.5–6.7, L 1.2–3.4, HD 1.4
7. Faience, disc cylinder, brownish core, traces of black glaze (6), D 5.5–6.0, L 1.5–2.1, HD 1.5

Bibliography: OINE X, 123, 145–46



292

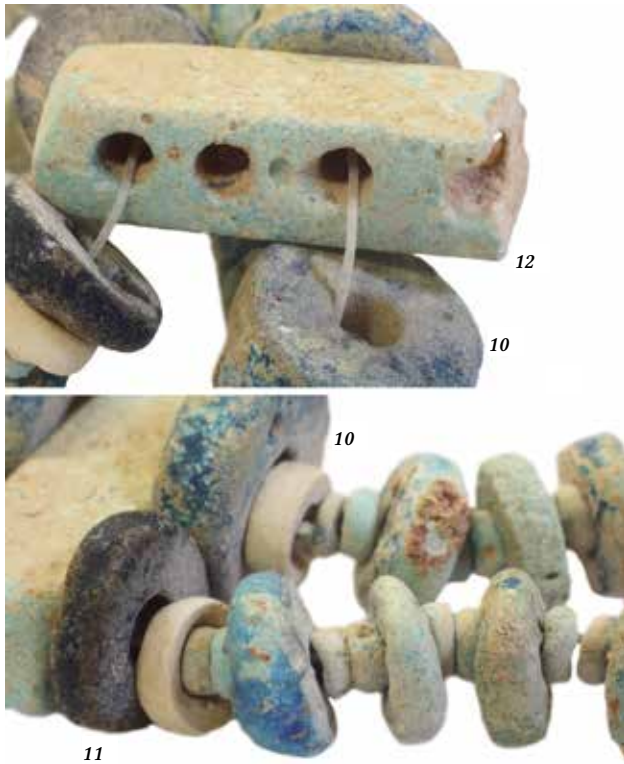
Serra East F 2—1a–f: Beads, faience spacer from surface, shaft, and pit (mature male);

OIM E24453

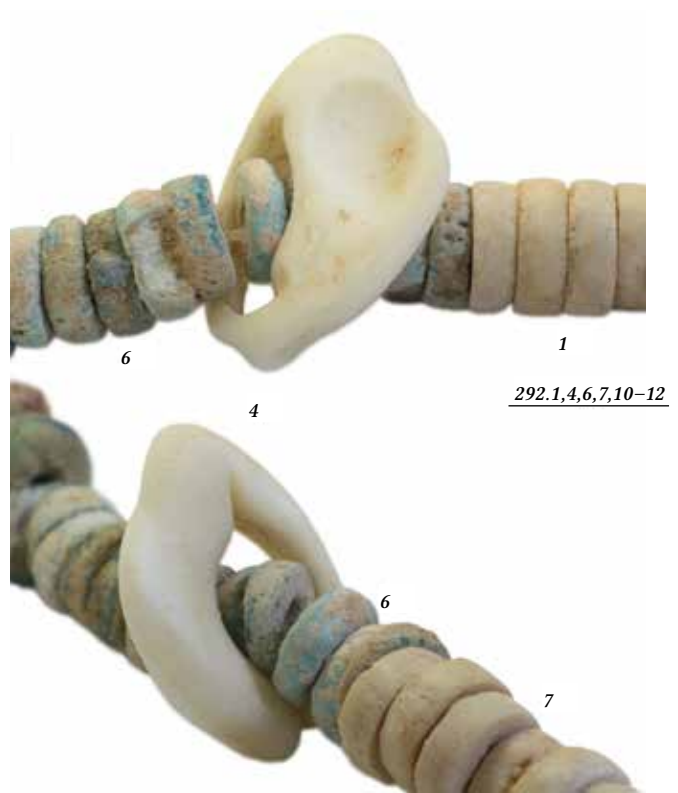
Pan Grave

1. Ostrich eggshell, short cylinder (306), D 4.2–4.9, L 1.4–1.8, HD 2.7–1.2–2.7—hourglass
2. Faience, disc cylinder, turquoise (16), D 5.4–6.3, L 2.2, HD 1.4
3. Faience, disc cylinder, black (10), D 6.4, L 2.0–2.6, HD 1.6
4. *Nassa* sp. shell, sliced (1), Th 9.2 × 11.7 × 2.1, HD 5.7 × 3.0
5. Ostrich eggshell, disc cylinder (6), D 4.0–4.8, L 1.1–1.7, HD 1.4
6. Faience, short cylinder, turquoise (29), D 4.3, L 1.5, HD 1.3
7. Faience, short cylinder, turquoise (64), D 2.6, L 1.3, HD 0.5
8. Faience, short cylinder, turquoise (1), D 4.2, L 1.5, HD 1.0
9. Faience, short cylinder, turquoise (15), D 6.3, L 2.0–3.0, HD 1.7
10. Faience, short cylinder, blue (3), D 8.5–9.7, L 2.0–3.1, HD 1.7–2.7
11. Faience, short cylinder, black (2), D 8.1–8.3, L 2.8, HD 2.1
12. Faience, spacer with four preserved holes (1—broken), Th 5.4 × 6.3, L 18.3 (preserved), HD 1.8

Bibliography: OINE X, 123, 147



292 (continued)



**293**

Serra East F 3—1a-b: Beads on surface and in shaft (adult female);

OIM E24449

Pan Grave

1. Ostrich eggshell, short cylinder (128), D 4.0–5.1, L 0.8–2.0,
HD 1.7–0.8–1.7—hourglass

2. Faience, short cylinder, blue (35), D 3.9–5.3, L 1.0–2.0, HD 1.0

Bibliography: OINE X, 123, 148

3.3. KERMA

3.3.1. CORPUS OF OINE KERMA BEADS

Tombs K 57 and K 88 in cemetery K at Adindan were identified as Kerma burials. They were contemporary with C-Group phase IIB and phase III, also present at cemetery K.⁴³⁵ Only in tomb K 88 were beads found (294)—beads made of ostrich eggshell (294.1), a globular shape in faience (294.2), and disc to short cylinders of faience (294.3).⁴³⁶

435 OINE V, 2; Dr. Bruce B. Williams (personal communication).

436 For globular faience beads from Kerma, see, e.g., Reisner 1923, 113–14; Markowitz and Doxey 2014, pl. 5, Classic Kerma (= MFA 20.1729); MFA 13.5776, Classic Kerma, K III grave 303; MFA 20.1719, tomb K II A-17.

Catalog



294

Adindan K 88—3a—d: Beads in shaft (no body recorded); OIM E30273
Kerma Classic(?)

1. Ostrich eggshell, disc cylinder (6), D 4.3–7.3, L 1.4–2.0, HD 0.8–2.4

2. Faience, globular, dark green (1), D 7.2, L 6.3, HD 1.3

3. Faience, disc and short cylinder, blue (2), D 2.9, L 1.3; 1.9, HD 0.8

Bibliography: OINE V, 224–25

3.4. MIDDLE KINGDOM

3.4.1. CORPUS OF OINE MIDDLE KINGDOM BEADS

A few objects came from the Middle Kingdom Quarry Dump II at Serra East. One amulet is probably in the shape of the hippopotamus goddess Taweret and has also been recorded from Nubian⁴³⁷ and Egyptian⁴³⁸ contexts dated to both the Middle Kingdom and New Kingdom (295). A long barrel made of wound black glass comes from an “assorted assemblage” and might have been later (296.3). Other, short cylinder beads were made of ostrich eggshell (296.4–5) and blue faience (296.1–2) and are not closely assigned to a chronological period or cultural group.

437 Säve-Söderbergh 1989b, 10, pl. 46.A.e, and 253, object 410/20:3—“Hippopotamus Taweret”; Junker 1919, 186, type 16:28 r 4; Dunham and Janssen 1960, fig. 45, and 84, no. 24–3–240g; Vercoutter 1975, 108, fig. 35, 19, tomb 100, fig. 33:19, tomb 131, fig. 82:69—Mirgissa, Middle Kingdom.

438 Herrmann 2003, 112–13, pl. 78, cat. no. 553—New Kingdom.

Catalog

**295**

Serra East, labeled 2S—527: Serra excavation register assigned this number to a “blue glazed bead” of Middle Kingdom date from Quarry Dump II; OIM E24772

Middle Kingdom

Faience, Taweret amulet, blue-green (1), H 8.0, W 4.2, Th 3.0, HD 0.9

Bibliography: —

296

Serra East, 2S—589: Serra excavation register assigned this number to “assorted beads” of Middle Kingdom date from Quarry Dump II; OIM E24808

Middle Kingdom

1. Ostrich eggshell, drilled from both ends, short cylinder (7), D 3.3–5.0, L 1.0–1.7, HD 1.2–2.0

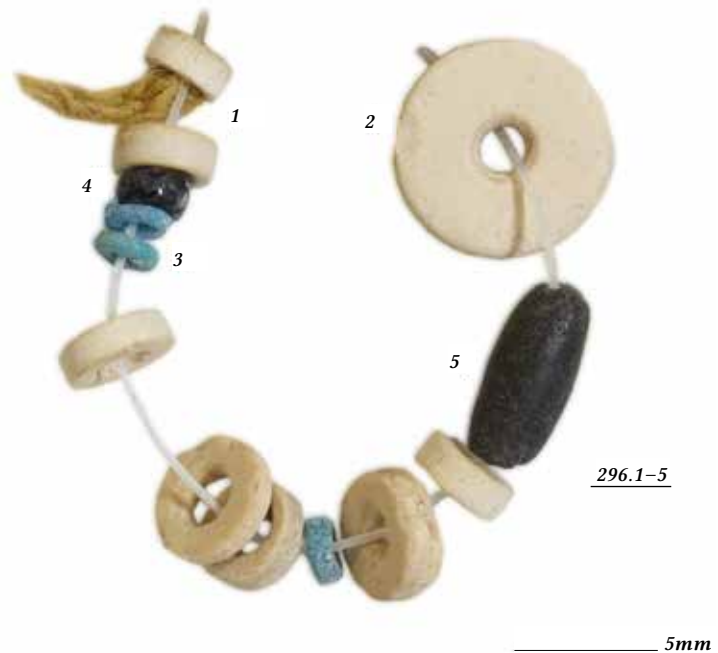
2. Ostrich eggshell, drilled from both ends, disc cylinder (1), D 8.2, L 1.4, HD 1.3–1.6

3. Faience, short barrel, blue (3), D 3, L 2.6, HD 1.0–1.2

4. Faience, short barrel, black (1), D 2.8, L 1.6, HD 1.2

5. Glass, wound, long barrel, black (1), D 3.8, L 7.1, HD 0.9

Bibliography: —



4

New Kingdom

4.1. THE NEW KINGDOM BEAD STORY

During the New Kingdom, the Lower Nubian region was controlled by the viceroy of Kush through the deputy of Wawat. The Eighteenth Dynasty kings created a series of new settlements and military posts, with Aniba and Buhen serving as major centers and with Qubban at the mouth of the Wadi Allaqi flourishing as a center for gold mining in the Eastern Desert. Gold mining and processing emerged in the area—notably in the Duweishat area south of Semna. Tribute scenes on wall paintings in New Kingdom Egyptian tombs show the bringing of gold to Egypt by Nubians.⁴³⁹ The Egyptians used gold so copiously as a gift and trade item that it may have caused huge changes in the Babylonian economy.⁴⁴⁰ Thus, gold jewelry is much in evidence not only in New Kingdom Egypt but also in Lower Nubia (298.1, 319.6, 331, 339.2–3). Among other items, a two-bead spacer (339.2) from Qustul (VF 72B) can be compared with those on the feline armlets attributed to foreign wives of Thutmose III.⁴⁴¹

Phase Early III of the C-Group culture was contemporary with the end of the Second Intermediate Period and the early Eighteenth Dynasty, the latter beginning around 1550 BC.⁴⁴² The earlier local populations continued to inhabit Lower Nubia,⁴⁴³ while tombs classified as Egyptian New Kingdom also appeared in the region. As a result, some kind of cross-cultural encounter was certainly taking place both in Egypt

and in Nubia.⁴⁴⁴ A scene on a fan shows Tutankhamun hunting ostriches in the Eastern Desert,⁴⁴⁵ and ostrich eggs are one of the attributes associated with Nubians in tribute or audience scenes.⁴⁴⁶ Moreover, in audience and triumphal scenes, ostrich feathers are shown on the heads of some Nubians.⁴⁴⁷ The presence of roughly shaped ostrich eggshell beads in New Kingdom tombs may have resulted from their own cultural encounter with Nubian jewelry fashions (301.17, 305.9, 308.10, 313.1, 322.3, 347, 351.1). Soon thereafter, ostrich eggshell beads disappeared from Egypt until the Twenty-Second Dynasty.⁴⁴⁸

Perforated **marine mollusk shells** of Red Sea origin were often found in Lower Nubian tombs (301.1–4, 305.11, 308.11–12, 310.1–2, 340.3–4, 352), but they have not been recorded in New Kingdom tombs in Egypt.⁴⁴⁹

In contrast to the case in earlier periods in Nubia, the majority of **stone beads** were found drilled from one end (297.4, 298.1, 299.1, 311, 319.1, 327.3, 339.1, 342.1, 350.1) in a process that requires more power and probably a bow-driven drill.⁴⁵⁰ A bow-driven metal drill for drilling multiple beads is illustrated in some New Kingdom tombs in the Theban necropolis that are dated to about 1475–1290 BC. A fragment of painted plaster from the tomb of Sebekhotep, a senior

439 E.g., Davies and Gardiner 1926, pls. 23–24; Davies 1943, vol. 2, pl. 18.

440 Smith 1998, 216.

441 Lilyquist 2004, cat. nos. 137–38, figs. 169–70.

442 Cf. the chapter on C-Group beads and cat. nos. 53–55, 67, 70, 71, 77, 101, 106, 120, 123, 177–83 for examples from phase Early III and an unspecified period within phase III.

443 Hafsaas 2006, 47.

444 Darnell and Manassa 2007, 91–136.

445 James 2000, 78–79, 186–87.

446 E.g., Davies 1943, pl. 19.

447 E.g., James 2000, 276–77, an openwork shield with the king as a sphinx and two defeated Nubians (= JE 61577 = Carter 379A); *ibid.*, 195, sandals with enemy figures (= JE 62685 = Carter 397); Davies and Gardiner 1926, pls. 23, 30.

448 Xia 2014, 117, 123.

449 Xia 2014.

450 Drilling without a bow is shown already in the tomb of Ti at Saqqara during the Fifth Dynasty; see *ibid.*, pl. 1 C (1).

treasury official of Thutmose IV (1400–1390 BC), shows craftsmen producing jewelry, including drilling stone beads with a bow-driven drill.⁴⁵¹ The same depiction can be observed in the tomb of Rekhmire.⁴⁵² Polishing, in which one or two men rub carnelian beads on a bead grinder, is illustrated in the tomb of Aba at Deir el-Gebrawi⁴⁵³ and in the tomb of Sebekhotep.⁴⁵⁴

New Kingdom tomb paintings also may help us understand cross-cultural encounters involving or relating to beads' being worn by the participants. The phenomenon may have occurred during audiences or on the arrival of tribute, as shown in the tomb of Rekhmire,⁴⁵⁵ a "governor of the town" (Thebes) and vizier during the reigns of Thutmose III and Amenhotep II. Garnet in the form of small oval red lumps, with the stone's Egyptian name written beside it, is depicted among the tribute from Nubia.⁴⁵⁶ Strings of beads are brought by representatives from both the southern⁴⁵⁷ and northern extents of Egypt's area of influence,⁴⁵⁸ and Nubians meet neighbors from Punt, as well as Minoans or Syrians, who are depicted with long strings of variously shaped beads hanging from their arms.⁴⁵⁹ Beads appear to have been the first glass products in the ancient world. Glass was manufactured in western Asia from at least 1500 BC, and this glass was a product demanded by Egyptian rulers, although glass was also produced in Egypt.⁴⁶⁰

Glass finds from the Late Bronze Age constituted valuable gifts exchanged between the elite classes of Mesopotamia, Egypt, and the Aegean.⁴⁶¹ By 1400 BC, long-distance exchange systems had evolved—systems connecting the shores of the Euphrates and Tigris rivers in Mesopotamia and the Nile in Egypt with the beaches of the Baltic and North Seas.⁴⁶² Glass beads

from Danish graves are the only attested finds of Egyptian glass outside the Mediterranean area, and these finds have demonstrated the far-reaching contacts of New Kingdom Egypt, most likely through intermediaries. Chemical analysis has also demonstrated that there was trade in raw glass materials imported from Mesopotamia and Egypt for bead production in Mycenaean Greece.⁴⁶³

Egyptian glass is considered to be an elite material, and Lower Nubians were quick to access this latest man-made product. The first glass beads in Egypt are said to have come from Qau, where tombs 3757 and 902 are dated to around 1550 BC.⁴⁶⁴ The small wound beads were translucent copper-green in color. Later glass objects were made from slabs of glass, such as examples found at Amarna during the reign of Akhenaten⁴⁶⁵ and still later at Qantir (Pi-Ramesses) during the reign of Ramesses II.⁴⁶⁶ Ruby-colored glass was produced later at Qantir and also identified at Gala Abu Ahmed,⁴⁶⁷ but it does not exist in the earlier materials of the Oriental Institute Nubian Expedition (OINE) collection. The earliest examples of translucent blue and amber glass beads in Lower Nubia were found in a sixteenth-century BC child's tomb (322.1–2, 349.3), and beads of the same type came from a tomb located on a rocky outcrop 1 km northwest of the Serapeum at Saqqara in Egypt.⁴⁶⁸ Multiple burials, placed beside a wooden coffin, were found intact in this tomb. The identity of the individuals buried in the tomb is unknown, as is the reason for the burials' presence in a remote location, away from the main cemetery of Saqqara. The beads were found within the coffin, containing multiple children's burials, which was dated to the Second Intermediate Period or early Eighteenth Dynasty. A pottery vessel found in the coffin was dated to the early Eighteenth Dynasty. The average diameter of the beads is 8.8 mm, and the thickness is 2.6 mm. The beads are translucent blue, brownish-red, and amber in color. Chemical analysis of the glasses revealed that the beads are made of a lime-magnesia glass composition,

451 BM EA920; Andrews 1990, 76, cat. no. 55; Dziobek and Abdel Rasziq 1990.

452 Davies 1943, vol. 2, pl. 54.

453 Xia 2014, 28B, pl. 1, and references therein.

454 Andrews 1990, 76, cat. no. 55.

455 For Nubian representatives with probable fly pendants on their necklaces and bearing tribute to the king, see wall paintings from, e.g., the tomb of Rekhmire (TT 100) in Davies 1943, vol. 2, pls. 18–20.

456 Andrews 1990, 43.

457 Davies 1943, vol. 2, pls. 30, 32.

458 Ibid., vol. 2, pls. 34–35.

459 Ibid., vol. 2, pls. 17, 20.

460 Rehren 2014.

461 Çınardalı-Karaaslan 2012 and references therein.

462 Varberg, Kaul, and Gratuze 2014; Varberg, Gratuze, and Kaul 2015—two cobalt-blue glass beads (type 1, fourteenth century BC) have been recognized as Egyptian. Dark blue and turquoise glass beads (type 2, fourteenth century BC), a blue-bead

body decorated with three stratified eyes in white, amber, and yellow (fig. 6, type 3, fourteenth century BC), blue and green beads (type 4, thirteenth to twelfth centuries BC), and turquoise glass beads (fig. 7, type 5, thirteenth to twelfth centuries BC) have been identified as Mesopotamian glass.

463 Walton et al. 2009.

464 Lilyquist and Brill 1993, 23.

465 Smirniou and Rehren 2011.

466 Rehren and Pusch 2005.

467 Daszkiewicz and Lahitte 2013, 271.

468 Yoshimura and Kawai 2007; Nakai et al. 2009, 27–31, pl. 1.

and plant ash was a source of the alkali.⁴⁶⁹ Specific information on the origin of the beads was not available because of the lack of trace elements in the analysis. The finds may have belonged to a foreign population living in Egypt during or just after the Hyksos war.⁴⁷⁰ The presence of these glass beads at Saqqara and Qustul may also have resulted from the transfer of some foreign groups into Egypt and Nubia and from the presence of foreign auxiliary troops as occurred in the late New Kingdom. For example, Apiru were sent from the Levantine coast to Nubia, while Nubian troops were requested by the ruler of Ugarit.⁴⁷¹

Opaque yellow glass pendants or spacers, decorated with stratified “eyes” in black and white (304.2, 345.4), represented one of the most characteristic adornments later in the New Kingdom.⁴⁷² Glass eye beads became popular after the Amarna period (1350–1333 BC) and were most common in the reigns of Tutankhamun and Ramesses II.⁴⁷³ One of the spacers (304.2) was found together with a flat lotus seed-vessel pendant (304.1). Both types were found strung together at Buhen.⁴⁷⁴

Semitranslucent and opaque wound-glass globular beads, either monochrome or trail decorated (324, 326), are among the most characteristic New Kingdom types. Together with multiple-segment faience beads, they were attached to a *menat* counterpoise that was found in the corner of a private house in the city of Amenhotep III at Malqata, Thebes.⁴⁷⁵ Long single- and multiple-segment tubes were the most common faience bead type in the New Kingdom (342.4).⁴⁷⁶ While these simple beads may have been segmented on grooved molds, the decorated, perforated faience objects were formed in pottery molds (306, 329, 334) similarly to beads that were excavated at Malqata.⁴⁷⁷

Lenticular⁴⁷⁸ and wafer-like⁴⁷⁹ faience beads were found, and they are also present at the palace of Amenhotep III at Malqata (321, 357.1–2, 358). One or more strands of lenticular beads made up a type of necklace, called the *shebyu* collar, that joined the repertoire

of Egyptian jewelry in the New Kingdom. The *shebyu* collars were composed of biconical or lenticular beads, or they consisted of flat, disc-like or wafer-shaped beads made of gold, faience, and glass.⁴⁸⁰ They were worn both by officials and by private individuals, including children.⁴⁸¹ Miniature gold *shebyu* collars were presented as honorific awards in the Eighteenth Dynasty.⁴⁸² The first securely dated example of a *shebyu* collar, made of faience beads, came from the tomb of Kha at Deir el-Medina, dated to the reign of Amenhotep III. An X-ray of his mummy revealed a necklace composed of a strand of large lenticular beads.⁴⁸³ However, a Pan Grave tomb at Saqqara, in which lentoid faience beads were found, has been dated earlier, to about the reign of Amenhotep I.⁴⁸⁴ Beads of this type are recorded in two sizes from late Eighteenth Dynasty Amarna.⁴⁸⁵ Interestingly, multicolored strands are well attested in artistic representations of the collar, but actual examples of polychrome necklaces were more commonly created for royalty; lower-quality, mass-produced *shebyu* collars generally have only one strand of blue or blue-green beads.⁴⁸⁶ *Shebyu* collars found in Tutankhamun’s tomb consist of lenticular rings of about 15 mm in diameter and are made of metal⁴⁸⁷ or of blue, white, red, and yellow faience.⁴⁸⁸ In contrast to the majority of mass-produced faience lentoid beads, Tutankhamun’s beads have large perforation holes, measuring about 10 mm in diameter.

Amulets were characteristic of Egyptian bodily ornamentation since the Predynastic period. Stone and glass lotus seed-vessel and pomegranate pendants first appeared in the New Kingdom repertoire (303, 304, 316, 335). The shape of the former resembles the base-ring juglets made in Cyprus and imported to Egypt in the Eighteenth Dynasty on a large scale. The vessel was intended to resemble the poppy-seed capsule, and it contained aromatic oils.⁴⁸⁹

469 Ibid.

470 Yoshimura and Kawai 2007.

471 Darnell and Manassa 2007, 110.

472 Xia 2014, 119.

473 Lankton 2003, 43, fig. 4.5.

474 Randall-MacIver and Woolley 1911, pl. 51:10252.

475 Met 11.215.450.

476 Xia 2014, 38; Met 11.215.216, 217.

477 E.g., Met 12.180.382–3—winged “falcon”; Met 12.180.375—Bes.

478 Met 11.215.537—palace of Amenhotep III.

479 Met 11.215.539, 540, 542, 543—palace of Amenhotep III, S. magazines to W. (1910–11), MMA excavations, 1910–12.

480 Brand 2006, 18, figs. 13–6 to 13–8, gold; 13–9 to 13–12, faience; 13–1 to 13–5, glass.

481 Lilyquist 2004, 136–37; Brand 2006, 17–42.

482 Andrews 1990, 183, cat. no. 169; for a depiction of general Horemheb invested with a number of *shebyu* collars, see *ibid.*, 185, cat. no. 168.

483 Brand 2006, 18.

484 Andrews 1981, cat. no. 662; Lilyquist 2004, 137, and reference therein.

485 Capel and Markoe 1996, 88, cat. no. 271 (= Cincinnati Art Museum 1927.362).

486 Brand 2006, 18.

487 JE 61931 = SR1/2918 = Carter 44-dd.

488 JE 61931 = SR1/2918 = Carter 44-cc.

489 E.g., Chovanec, Bunimovitz, and Lederman 2015, fig. 2, also for the theory that Cypriot base-ring juglets contained opium.

In the New Kingdom, fish and scarab amulet types were crafted of diverse materials, including red carnelian and blue glass (e.g., 319.3, 5, 325, 327.10, 335, 337). Fish pendants probably depict the *bolti* fish (*Tilapia nilotica*).⁴⁹⁰ In contrast to the various shapes and incised details of fish amulets known from other Nubian sites,⁴⁹¹ the fish amulets from Qustul lack an incised crisscross decoration that imitates fish scales (335, 337, 338).

Anthropological associations can be indicated for certain types of pendants and amulets, such as the fish mentioned above, as well as the Taweret, Hathor heads, Horus falcon, and *wedjat*-eye amulets (see below). A wooden figure of a girl, excavated during the nineteenth century on the west bank of the Nile near Thebes, is of special interest for the Bes amulet depicted (fig. 14). The figure seems to belong to the funerary goods of Meryptah, the chief priest of Amun under Amenhotep III (ca. 1390–1352 BC).⁴⁹² Made of boxwood with pigment and gold leaf, the wooden female figure wears a large Bes amulet and a gilded girdle around her hips.⁴⁹³ Unfortunately, the owner of the Bes amulets found at Qustul could not be anthropologically identified (306, 310.3).

The necklace of a mature male and an infant (315, 340) incorporated fly amulets. In Middle Nubian graves, large ivory fly pendants, with transverse holes through the head, were often covered in gold and gold/electrum, and they appeared in pairs in tombs at Kerma,⁴⁹⁴ Semna,⁴⁹⁵ Buhen,⁴⁹⁶ Qau⁴⁹⁷ in Egypt, and Gammai.⁴⁹⁸ Two silver flies were found on the neck



Figure 14. Wooden figure of a girl with a Bes amulet, courtesy of the Oriental Museum, Durham University, UK, EG4007

of a body in the sacrificial corridor in one of the Kerma tombs.⁴⁹⁹ Pairs of the fly pendants also appeared in tombs of Kerma warriors. Fly pendants returned to Lower Nubia in the New Kingdom in the form of small faience and glazed steatite amulets. At the same time, among various Nubians depicted in New Kingdom art, characteristic figures have lobe earrings or fly pendants in their necklaces. The gold fly, given as a military honor in Egypt, was possibly awarded for persistent attack of the enemy. Contrary to one suggestion,⁵⁰⁰ fly pendants depicted with Nubians in New Kingdom art seem to have had little in common with Egyptian gold jewelry made for persons of high rank, including the “gold of honor” collar.⁵⁰¹ Like C-Group leather beadwork depicted on Nubians in New

490 For fish pendants formed from gold sheet, see Freed 1982, 237–38, cat. no. 312, Eighteenth Dynasty.

491 E.g., Markowitz and Doxey 2014, fig. 9, MFA 27.899—Semna, S 563, Eighteenth Dynasty; Säve-Söderbergh and Troy 1991, pl. 21:6, object 185/137:1, pl. 26:2.

492 Oriental Museum, Durham University, UK, EG4007.

493 For Bes representations in Pan Grave art, see BM EA63225—a leather wrist-guard from Mostagedda, grave 3135; for Bes depictions in C-Group art, see a faience bowl decorated with a dancing Bes in Säve-Söderbergh 1989b, pl. 62; for a faience Bes amulet, see *ibid.*, pl. 46.

494 Binder 2008, 51, table 4.6:1–5; for an illustration, see Markowitz and Doxey 2014, fig. 14; MFA 20.1775a–b, 20.1776a–b, 13.4006.

495 MFA 27.878a–b—from tomb S 579, ascribed to the New Kingdom.

496 Randall-MacIver and Woolley 1911, pl. 51; O’Connor 1993, 137, fig. 50, pl. 7 (= Penn E10347A, B—Second Intermediate Period).

497 Brunton 1930, pl. 21: tomb 7196 (= UC 26032A, B—Second Intermediate Period).

498 Bates and Dunham 1927, 16, pls. 10.4, A, A’, 69, fig. 48—Gammai, grave 200, R 1.

499 Reisner 1923, 110, K 401:5.

500 Roy 2011, 281; Markowitz and Doxey 2014, 100.

501 For gold flies in the New Kingdom, see Andrews 1994; for discussion, see Binder 2008.



Figure 15. Nubians in tribute scene in the tomb of Rekhmire, courtesy of the Metropolitan Museum of Art, New York, Met 31.6.40 (fascimile)

Kingdom art,⁵⁰² the Kerma fly pendant was simply an attribute and element of Nubian costume.

Some Nubians bearing tribute wear necklaces with white fly pendants and mollusk shells in the tomb of Rekhmire (TT 100) (figs. 15, 16).⁵⁰³ Of special interest is a Nubian in the front, who seems to wear three flies in his necklace.⁵⁰⁴ A fly pendant can be seen in the necklace of a Nubian depicted on a painted relief scene of a boat with oarsmen from the east wall of the hypostyle hall in the temple of Thutmose III at Deir el-Bahari (see fig. 9 in chapter 3).⁵⁰⁵ While the oarsmen wear the lozenge-decorated kilts known from C-Group beadwork,⁵⁰⁶ the enemy depicted on the boat, with darker

skin and a fly pendant, would be an individual from farther south in Nubia.

In the tomb of Sebekhotep (TT 63), a treasury official in the service of the Egyptian king Thutmose IV, Nubian envoys bringing gifts are depicted with a fly pendant⁵⁰⁷ and mollusk shells in their necklaces (figs. 17, 18).⁵⁰⁸ In the tomb of Qenamun (TT 93), a scene of Amenhotep II enthroned shows, among others from subject nations beneath the throne, a Nubian with a fly pendant (fig. 19).⁵⁰⁹ A fly with unfolded wings is also easily discernible in the necklace of a Nubian prisoner depicted in bas-relief in the temple of Soleb, which was commissioned by Amenhotep III.⁵¹⁰

502 Cf. the sections on leather beadwork in the chapters on the C-Group and Pan Grave cultures.

503 Binder 2008, 51; for an illustration, see Davies 1943, vol. 2, pls. 18–20; Wilkinson 1983, Met 30.4.81, Met 31.6.40 fascimiles.

504 Davies 1943, vol. 2, pl. 18.

505 Dolińska 2014, fig. 4A.

506 Cf. the chapter on the C-Group.

507 Binder 2008, 51.

508 For illustrations, see BM EA921; BM EA922; Dziobek and Abdel Rasziq 1990; Quirke and Spencer 1992.

509 For an illustration, see Wilkinson 1983, Met 30.4.69 fascimile.

510 Photo available at <http://www.gettyimages.com/detail/photo/bas-relief-depicting-nubian-prisoner-temple-high-resolution-photography/479633965>.



Figure 16. Nubians in tribute scene in the tomb of Rekhmire, courtesy of the Metropolitan Museum of Art, New York, Met 30.4.81 (facsimile)

The large fly pendants depicted in New Kingdom art are most probably derived from large ivory and metal objects well known from the tombs of Kerman warriors. Moreover, fly pendants of metal and other materials were long-lasting phenomena in Nubia starting in the A-Group period (10.1) and surviving until the post-Meroitic period.⁵¹¹

4.1.1. CORPUS OF OINE NEW KINGDOM BEADS AND PENDANTS

Sites and Chronology

Bead objects were recorded from twelve New Kingdom tombs at **Qustul** in cemetery R (297–325), from

511 Cf. the chapter on A-Group beads and amulets. For a gold fly pendant from El-Kurru tomb Ku 16, from the Napatan period, see MFA 21.314; for quartz and carnelian flies from the Napatan period cemetery at Missiminia, see Vila 1980, fig. 76:6–8; for Meroitic examples, see MFA 24.1092–Meroe, Beg. W. 179, third century BC to third century AD, and MFA 24.538–Meroe. For gold fly pendants from a Meroitic burial mound in a mining village in the Nubian Desert in Wadi Terfowi, Sudan, third century BC to third century AD, see Castiglioni and Castiglioni 2004, cat. no. 106. For silver toe rings with a fly attached from a royal post-Meroitic tomb at Ballana, see Emery and Kirwan 1938, pl. 42, B. 47–48 (= JE 70384–70387).

ten tombs in cemetery V (326–342), from one tomb in cemetery S (343), and from other uncertain locations at **Qustul** (344–347). Beads were found in one tomb at **Adindan** (349), at surface (348), and in ten graves at **Serra East** (350–359).

New Kingdom cemetery R was located on the low desert near the southern end of **Qustul** village. It contained large chamber tombs that were filled with burials dated mostly to the sixteenth and fifteenth centuries BC.⁵¹² Detailed dates were estimated by Bruce B. Williams on the basis of the pottery types present in the tombs, as well as other attributes.⁵¹³ A few graves were dated to the period of Thutmose III (311, 312, 349), although other tombs could have been dated to the periods between Amenhotep II and Thutmose IV (300, 314–318, 342), between Amenhotep III and the Amarna period (310, 313, 319–321, 326–329, 335, 340, 341, 343, 344), and to the post-Amarna period (297–299, 301–309, 323–325, 330–332). A detailed chronology of New Kingdom objects given according to OINE VI and other works already mentioned is additionally presented in table 10.

512 OINE VI, 160.

513 Ibid., table 4, 17–20.



Figure 17. Nubian envoys depicted in the tomb of Sebekhotep, courtesy of the British Museum, EA921

Table 10. Dating of New Kingdom objects according to OINE VI and X

Phase	Catalog numbers
Thutmose III	311–312, 349
Between Amenhotep II and Thutmose IV	300, 314–318, 342
Between Amenhotep III and Amarna period	310, 313, 319–321, 326–329, 335, 340–341, 343–344
Post-Amarna period	297–299, 301–309, 323–325, 330–332

Materials and Techniques

The overwhelming majority of New Kingdom beads and pendants were made of faience, and in many shapes. Glass and stone (carnelian, amethyst, garnet, diorite, chalcedony, black stone) constitute the second-most common groups. Transitional materials, such as vitreous materials and glazed steatite, are also present. Organics (mollusk shell, bone, ostrich eggshell) and metals were rarely found. The shapes of some beads and pendants from New Kingdom sites are illustrated

in figure 20. An overview of types from New Kingdom graves is given in table 11.

Marine Mollusk Shell

All marine mollusk shells that come from New Kingdom tombs are of Red Sea provenance. These are *Nerita* (310.1, 340.3–4, 352),⁵¹⁴ *Polinices* (308.11), *Cypraea*

⁵¹⁴ Vercoutter 1975, fig. 23, tomb 47, fig. 84, tomb 132A, fig. 93–Mirgissa; Minault-Gout and Thill 2012, pl. 120:Fb–Saï.



Figure 18. Nubian envoys depicted in the tomb of Sebekhotep, courtesy of the British Museum, EA922

annulus cowrie (308.12),⁵¹⁵ *Conus taeniatus* (301.1), *Columbella* (*Pyrene*) *testudinaria* (301.2),⁵¹⁶ *Nassarius coronatus* (301.4), and *Ancilla* sp. (301.3, 305.11, 310.2).

Bone

Two drop pendants made of bone have slightly flattened sides and rounded bases (303.1–2).⁵¹⁷

Ostrich Eggshell

Ostrich eggshell beads were drilled from one end, resulting in a perforation with a truncated conical shape. They include discs and short cylinders (D 4.5–5.8, Th 1.1–2.1, HD max. 2.9) (301.17, 305.9, 308.10, 347, 348.1).⁵¹⁸

A larger disc bead (D 6.6, L 1.5, HD 2.4) was found in an infant's grave together with the early translucent glass beads dated to the sixteenth century BC mentioned above (322.3). Other beads were slightly smaller (D 2.9–4.3, Th 1.1–1.5, HD 1.2) (351.1).

Much smaller short cylinder beads (D 2.2–3.0, Th 0.9–1.2, HD 0.8) (313.1, 348.2) recall the C-Group types.

Stone

Carnelian

In the New Kingdom, small carnelian barrel beads or truncated, slightly biconical beads were drilled from one end, resulting in a perforation with a truncated conical shape (D 1.7–3.8, Th 1.4–4.0, HD 0.7–1.3).⁵¹⁹ New Kingdom carnelian beads are typically either semitranslucent or opaque, in contrast to the translucent carnelian used in the C-Group period (297.4, 298.1, 299.1, 311, 319.1, 327.3, 339.1, 342.1, 350.1).

A long barrel bead was drilled from one end and has a perforation with a truncated conical shape (D 3.3, L 4.4, HD 0.8; 1.7) (305.10).

The pendants are amulets of faunal, anthropoid, or floral shape. They are either flat on one side and convex on the other or three-dimensional. In the first group, a scarab pendant with three pairs of legs (325.1),⁵²⁰ a Taweret (333.3–4, 335.2),⁵²¹ and fish amulets have flat reverse sides and obverse sides incised with basic details. Fish swim both to the right (319.3a, 337.2) and to the left (319.3b, 337.3, 338).⁵²² Other carnelian amulets are flat on one side, have a protruding tail, and are possibly representations of ducks (327.2, 335.3).⁵²³

One heart amulet pendant is flat on one side and divided across the top and down the center with incised lines on its convex side (303.3); another undecorated

519 MFA 11.2583, Zawiyet-el-Aryan, excavated by the Harvard University–Boston Museum of Fine Arts Expedition; Markowitz and Doxey 2014, fig. 9–Semna, Eighteenth Dynasty (= MFA 27.899, Semna S 563).

520 Säve-Söderbergh and Troy 1991, pl. 25:5–6; Andrews 1994, fig. 5c—black steatite; for a carnelian beetle with two pairs of legs and dated to the Late Period (664–332 BC), see Lacovara 2001, 168, cat. no. 119A.

521 Firth 1915, pl. 38:g.26—Sebek amulets from the New Kingdom and made of dark and light blue glass; Markowitz and Doxey 2014, fig. 9, MFA 27.899, from the Eighteenth Dynasty and made of carnelian and other materials—Semna S 563; Randall-MacIver and Woolley 1911, pl. 51:10221—Buhen; Met 11.215.168, an amulet of schist—Malqata palace of Amenhotep III; Almagro, Ripoll, and Monreal 1964, 71, fig. 58:3–4—Masmas; Minault-Gout and Thill 2012, pl. 70:S74, pl. 119:T14S74—Saï; Säve-Söderbergh and Troy 1991, pl. 27:8—third in first row.

522 UC 51476, of red jasper—Nineteenth Dynasty; UC 23688, of black stone—Tell el-Amarna, Eighteenth Dynasty.

523 Säve-Söderbergh and Troy 1991, pl. 22:1, object 185/665:7, pls. 26:6, 27:8; UC 23829, UC 23664—Tell el-Amarna, Eighteenth Dynasty; Säve-Söderbergh 1989b, pl. 46C:e; Steindorff 1937, pl. 53, S8.

515 Vercoutter 1975, fig. 93; Minault-Gout and Thill 2012, pl. 120:Fa—Saï.

516 Vercoutter 1975, fig. 93.

517 Säve-Söderbergh and Troy 1991, pl. 28:7.

518 Lahitte 2013.



Figure 19. Nubian representative depicted in the tomb of Qenamun, courtesy of the Metropolitan Museum of Art, New York, Met 30.4.69 (© Photo SCALA, Florence)

heart amulet is flat on one side and has a convex profile on the other side⁵²⁴ (319.2). On one side of a remarkable *wedjat*-eye amulet is a tiny incised figure of a goddess with a uraeus and holding a *wedj* scepter, the figure being placed within an oval field (332).⁵²⁵

A carnelian teardrop bead is flat on one side and convex on the other (327.1), similar to the profiles of a lotus seed-vessel pendant (304.1)⁵²⁶ and another pendant of uncertain shape with pointed base (335.4). Other beads rendered in three dimensions include lotus seed-vessel pendants with (303.5)⁵²⁷ or without (303.4) a clearly defined, flared base.

524 Säve-Söderbergh and Troy 1991, pl. 21:5, object 185/658:4.

525 OINE VI, 119; Brunton and Engelbach 1927, pl. 42:38; Steindorff 1937, pl. 51:30.

526 Andrews 1994, fig. 48d—Eighteenth Dynasty; BME A18172—Akhmim; Inizan 2000, fig. 1.1–2—necklaces found in tombs at Mari, dated to the thirteenth to twelfth centuries BC; McGovern 1985, 47–48, 161, pl. 11:4. F.5.a 143. McGovern ascribes them to a period between Late Bronze II and Iron II (e.g., early Late Bronze IIB from Beth Shan, and from an Late Bronze I–IIA tomb at Megiddo). See also Herrmann and Staubli 2010, 60, cat. no. 22—Iron IA–B (1250–1000 BC); Säve-Söderbergh and Troy 1991, pl. 23:3, object 318/7A:8, pl. 27:1, 3; Randall-MacIver and Woolley 1911, pl. 51:10252—from Buhen. For similar types from Napatan graves, see Griffith 1923, pl. 58, ob. 10, gr. 231/8 (of carnelian) and 140, pl. 64, ob. 8, gr. 949 (of red paste)—Sanam; Minault-Gout and Thill 2012, pl. 59:Ca18, 21—Sai; Then-Obluska 2014, pl. 1, cat. no. 80.

527 Numerous parallels for this type can be cited from Egyptian Eighteenth and Nineteenth Dynasty contexts; see McGovern 1985, 48, and references therein; Emery and Kirwan 1935, fig. 486:55; Freed 1982, 238, cat. no. 314—from Semna—and references therein; Randall-MacIver and Woolley 1911, pl. 51:10249—from Buhen; Beck 1928, fig. 24:B.3.d; Inizan 2000, fig. 1:1 and 2—necklaces found in the tombs at Mari, dated to the thirteenth to twelfth centuries BC; McGovern 1985, 47–48, 161, pl. 11:4.F.5b 155—examples from five Palestinian sites dated mainly to the Late Bronze IIB; Säve-Söderbergh and Troy 1991, pl. 27:4.

Jasper

A figure of the god Bes-Pataikos is depicted *en face* while his back is roughly shaped (333.5).

Garnet

Roughly shaped globular garnet beads were drilled from one end, resulting in a truncated conical shape (D 3.2–4.3, L 2.1–3.1, HD 1.1; 2.4) (298.2). Long bicones (D 3.6–4.2, L 4.1–7.9, HD 1.7–1.8) (326.10)⁵²⁸ and standard cylinders (L 3.0–4.2) (326.11) were drilled from both ends, resulting in a perforation with a double parallel shape.

Amethyst

An amethyst bead is globular and was drilled from one end (315.1).

Black stone

Black stone, probably steatite, was shaped into a moon and crescent, with a suspension loop atop the crescent so that the piece would hang upside down (343).⁵²⁹ It is flat on one side. This type of amulet is known as early as the Amarna period.

Diorite

In contrast to the period of the C-Group culture, when diorite was used to make small disc beads, in the New Kingdom only pendants were made of this stone. These items are a teardrop-shaped pendant with a rounded base (335.1), a heart amulet that is flat on one side and divided across the top and down the center with

528 Met 26.7.1386, 26.7.1386—Thebes, el-Asasif, Second Intermediate Period to early New Kingdom.

529 Andrews 1994, fig. 90a—New Kingdom, faience; McGovern 1985, 70, fig. 67:6.B.2 299, faded faience examples from Late Bronze II to Iron I contexts; Müller-Winkler 1987, pl. 29:59.

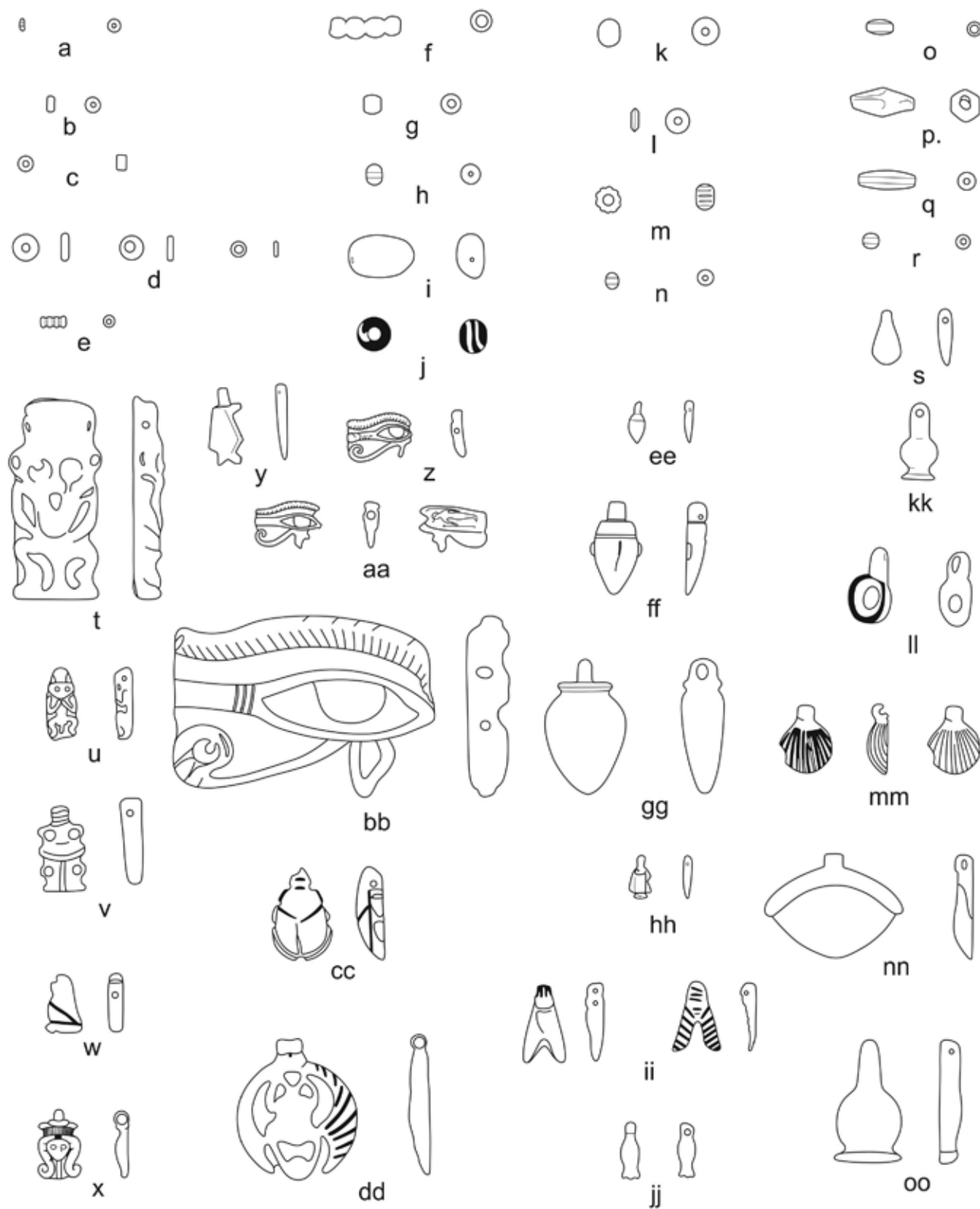


Figure 20. Beads and pendants: a (298.8), b (299.3), c (324.5), d (305.2), e (326.2), f (317.1), g (311), h (298.3), i (316.1), j (324.4), k (298.6), l (299.2), m (317.4), n (298.2), o (298.5), p (312), q (297.3), r (297.4), s (327.1, 10), t (306), u (310.3), v (302), w (299.4), x (334), y (333.1-4), z (331), aa (332), bb (309), cc (325), dd (329), ee (319.2, 4), ff (303), gg (307), hh (319.3a), ii (315.5, 4), jj (316.2), kk (303.5), ll (304.2), mm (349.2), nn (343), oo (304.1). Scale 1:1 (adapted from OINE VI, fig. 17)

Table 11. Overview of types from New Kingdom graves

Material	Bead (B), pendant (P), or spacer (S)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
Marine mollusk shell	P	<i>Nerita</i> sp.			310.1, 340.3–4, 352	
		<i>Polinices</i> sp.			308.11	
		<i>Cypraea annulus</i>			308.12	
		<i>Conus taeniatus</i>			301.1	
		<i>Columbella (Pyrene) testudinaria</i>			301.2	
		<i>Nassarius coronatus</i>			301.4	
		<i>Ancilla</i> sp.			301.3, 305.11, 310.2	
Bone	P	Drop with flattened side and rounded base			303.1–2	
Ostrich eggshell	B	Discs and short cylinder	Very small		313.1, 348.2	
			Small		351.1	
			Medium		301.17, 305.9, 308.10, 347, 348.1	
			Large		322.3	
Carnelian	B	Small barrel or truncated biconical			297.4, 298.1, 299.1, 311, 319.1, 327.3, 339.1, 342.1, 350.1	Fig. 20g, r
		Long barrel			305.10	
	P	Scarab pendant with three pairs of legs			325.1	
		Taweret			333.3–4, 335.2	Fig. 20y
		Fish swimming to the right			319.3a, 337.2	Fig. 20hh
		Fish swimming to the left			319.3b, 337.3, 338	
		Duck?			327.2, 335.3	
		Heart amulet			303.3	Fig. 20ff
		Heart amulet, flat on one side			319.2	Fig. 20ee
		<i>Wedjat</i>			332	Fig. 20aa
		Teardrop, flat on one side			327.1	Fig. 20s

(continued)

Table 11. Overview of types from New Kingdom graves (*continued*)

Material	Bead (B), pendant (P), or spacer (S)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
		Lotus seed-vessel, flat on one side			304.1	Fig. 20oo
		Lotus seed-vessel with pointed base, flat on one side			335.4	
		Lotus seed-vessel pendant with outlined base, in three dimensions			303.5	Fig. 20kk
		Lotus seed-vessel pendant without outlined base, in three dimensions			303.4	
Jasper	P	Bes-Pataikos			333	
Garnet	B	Spherical			298.2	Fig. 20n
		Standard cylinder			326.11	
		Long bicone			326.10	
Amethyst	B	Spherical			315.1	
Steatite	P	Moon and crescent, flat on one side			343	Fig. 20nn
Diorite	P	Teardrop with rounded base			335.1	
		Heart amulet, flat on one side			319.4	Fig. 20ee
		Scorpion amulet			354	
Chalcedony	P				319.7	
Gold	B	Standard and long barrel			298.3–5, 319.6, 339.2	Fig. 20h, o
	S	Two-bead bicone			339.3	
	B	<i>Wedjat</i>			331	Fig. 20z
Silver		Coiled wires			315.7	
Metal over ceramic	B	Long faceted bicone			312.1	Fig. 20p
Glazed steatite	P	Fly with hatched wings			315.4	Fig. 20ii
		Fly with undecorated wings			340.1	
		Bes			302	Fig. 20v

Table 11. Overview of types from New Kingdom graves (*continued*)

Material	Bead (B), pendant (P), or spacer (S)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
Faience	B	Short, standard, and long barrel			350.2–3, 5	
		Segmented long cylinder		Blue	310.6, 324.8, 327.5–7, 328, 330.2–3, 342.4, 346.2	
				Yellow	345.1–2	
				Red	326.2, 345.3	Fig. 20e
				Green	317.1	Fig. 20f
		Lenticular disc			321, 357.1–2, 358	
		Disc truncated bicone			299.2	Fig. 20l
		Disc cylinder			301.12, 305.2, 308.9, 344	Fig. 20d
		Short cylinder		Blue	299.3, 300.1, 301.13, 308.7, 356.1	Fig. 20b
				Green	308.3	
				White	301.9, 12, 356.2	
				Black	301.10–11, 305.4, 320.2, 326.3	
				Red	301.10, 305.6, 308.4, 320.1, 324.5, 326.2, 356.3	Fig. 20c
				Yellow	305.3, 308.5, 320.3, 326.1, 335.5	
		Irregularly shaped disc to standard cylinder with rounded edges		Black	298.8, 318.2	Fig. 20a
		Long barrel		Green	346.1	
		Melon			317.4	Fig. 20m
	S?	<i>Wedjat</i>			309	Fig. 20bb
	B	Scaraboid			316.1	Fig. 20i
	P	Bes with long penis			306	Fig. 20t
		Bes with short penis			310.3	Fig. 20u
		Fly with undecorated wings			315.5	Fig. 20ii

(continued)

Table 11. Overview of types from New Kingdom graves (*continued*)

Material	Bead (B), pendant (P), or spacer (S)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
Vitreous material	B	Flying scarab with double- ring suspension loop	Small Large		329	Fig. 20dd
		Taweret amulet with attached ring loop			330.1	
		Hathor			334.1–11	Fig. 20x
		Short barrel		Blue	315.6	
				Orange	317.6	
		Standard barrel		Red	351.3	
Glass wound	B			Black	351.4	
		Oblate	Translucent amber	318.1		
			Translucent purple	324.2		
			Translucent blue	326.4		
		Spherical	Translucent blue	308.1		
			Semitranslucent blue	324.3		
			Translucent dark blue	308.2		
			Opaque black	342.5		
			Spherical	Black with white trail	324.4	Fig. 20j
		Long	Translucent amber	326.9		
			Translucent cobalt blue	297.8, 326.6		
			Black	326.7		
			Translucent purple	324.1		
			Opaque yellow	297.9		
			Opaque light blue	297.3, 326.8	Fig. 20q	
	S	Tabular body with attached loop	Yellow body with white and black eye	304.2, 345.4	Fig. 20ll	

Table 11. Overview of types from New Kingdom graves (*continued*)

Material	Bead (B), pendant (P), or spacer (S)	Length and shape	Size	Color(s)	Catalog number(s)	Figure number
Glass molded	P	<i>Cardium edule</i> seashell, flat on one side		Light blue	349.2	Fig. 20mm
		Teardrop pendant, flat on one side		Opaque light blue	327.10	Fig. 20s
		<i>Bulla</i>		Opaque red-orange	349.1	
		Fish amulet, swimming to the left with decorated obverse		Light blue	319.5	
		Fish amulet, swimming to the right with decorated obverse		Semitranslucent blue	337.2	
		Fish amulet, swimming to the left with slightly convex obverse			335.7	
		Taweret		Opaque blue	333.1–2	Fig. 20y
		Beetle pendant flat on one side with three pairs of legs		Blue	325.2	Fig. 20cc
		Falcon		Light blue	299.4	Fig. 20w
		Cornflower/pomegranate		Opaque light blue	316.2, 335.9	Fig. 20jj
		Cornflower/pomegranate with attached loop		Blue	335.8	
				Light green	335.10	
		Heart amulet		Red	307	Fig. 20gg
		Short cylinder		Yellow	297.5	
				Blue and dark blue	297.6–7	
Glass drawn, folded, and cut up	B	Short barrel/oblate		Translucent blue	322.1, 349.3	
				Translucent amber	322.2	
Gold-in-glass	B	Oblate			297.1—intrusive Meroitic bead	

incised lines (319.4), and perhaps a scorpion amulet (354.1).⁵³⁰

Chalcedony

A long pendant was drilled from both ends, resulting in a perforation of hourglass shape (319.7).

Clay

Although not perforated, a five-armed star may have been suspended in some other way (359).⁵³¹

Metal

Standard and long barrels of gold (298.3–5) came from a post-Amarna context.⁵³² A longer barrel bead made of gold sheet is another example (319.6). These beads are perfectly shaped, and a seam, placed where the ends of the sheet join, is not visible with the naked eye.

Another standard barrel bead (339.2) and two-bead biconical spacers were made of folded gold sheet with visible seams (339.3). They come from a context dated to Thutmose III and find parallels in the beads of other New Kingdom armlets and bracelets,⁵³³ including the feline armlets of the foreign wives of Thutmose III.⁵³⁴ Two-bead biconical spacers were also part of the double suspension pectoral string dating to the reign of Psusennes I in the Twenty-First Dynasty, about 1030 BC.⁵³⁵

A gold sheet *wedjat* amulet is made of two parts (331). The upper part of this remarkable amulet is formed of gold sheet over a core that was then removed, leaving the element hollow. The base is a flat sheet. The edges of the upper and lower parts were soldered together, and a thread hole was punched through the upper part.

530 For a similarly shaped amulet, but made of metal, see Met 26.7.1384—Thebes, el-Asasif, tomb CC 37, burial 78, dated to the reigns of Ahmose to Thutmose III.

531 For faience star amulets, see Met 22.1.1944—Lisht North, cemetery south of pyramid, house A 1, a “faience factory,” Thirteenth to Eighteenth Dynasty; Met 11.215.201; Met 15.3.491—Malqata palace of Amenhotep III; Met 22.1.1298—Lisht North, Middle Kingdom to early New Kingdom; Markowitz and Doxey 2014, pl. 4—Kerma, K 1041, Classic Kerma, 1700–1550 BC (= MFA 13.3969); Petrie 1914, pl. 45:275b.

532 Met 26.7.1384—Thebes, el-Asasif, tomb CC 37, burial 78, dated to the reigns of Ahmose to Thutmose III.

533 Eggebrecht 1993, fig. 46.

534 Andrews 1990, 153, cat. no. 134; Lilyquist 2004, cat. nos. 137–38, 191, fig. 89.

535 Andrews 1990, 192–93, cat. no. 173.

Coiled wires made from a folded silver sheet (315.7) come from a tomb dated to the period between Amenhotep II and Thutmose IV.⁵³⁶

Metal over a ceramic core

A metal copper-alloy sheet was folded over a ceramic core that was shaped into a long, faceted biconical bead (312.1). Other beads in the jewelry object have lost their metal covers.

Glazed Steatite

A green-glazed steatite fly with hatched wings is pierced transversely for suspension (315.4).⁵³⁷ Another fly has undecorated wings but a horizontally segmented, raised back. The fly was pierced transversely for suspension (340.1).

A blue-glazed steatite amulet has been identified elsewhere as Bes (302) and dated to the Eighteenth Dynasty.⁵³⁸

Faience

Large, short standard and long barrel beads (350.2–3, 5), as well as short bicones (350.4), may have been intrusive Meroitic and post-Meroitic beads. The remaining faience beads are well-known New Kingdom types.

Segmented beads

Among the most characteristic monochrome faience beads in the New Kingdom are multiple-segmented tubes. Tubular cores were most probably rolled on grooved molds before glazing. New Kingdom multiple-segment beads reveal white cores when found broken (342.4), and they have short cylinder segments (D 1.6–3.6) in blue (310.6, 324.8, 327.5–7, 328, 330.2–3, 342.4, 346.2), yellow (345.1–2), and red (345.3). One item is a quadruple-segment green tube with barrel-shaped segments (D 3.7) (317.1).

Disc beads

Lenticular disc and wafer-shaped blue beads (D 11.7–21.0, Th 1.1–4.0) (321, 357.1–2, 358)⁵³⁹ were most prob-

536 UC 26390—Qau, although ascribed to the Late Period.

537 Similar to BM EA3135; Petrie 1914, pl. 44:19g; Säve-Söderbergh 1989b, pl. 46D.b.

538 Berman 1999, 543–44, cat. no. 475—el-Riqqa, tomb 26, Eighteenth Dynasty; UC 51184—Eighteenth Dynasty.

539 Freed 1982, 238–39, cat. no. 316; Brand 2006 and references therein; MFA 11.3077—Zawiyet el-Aryan, Z/247; Almagro, Ripoll, and Monreal 1964, 72, fig. 58:5–6—Masmas; Säve-Söderbergh and Troy 1991, pl. 20:2, object 182/257:1.

ably remains from a necklace,⁵⁴⁰ while a faience disc truncated bicone in blue (299.2) constitutes another type. There are also blue and green disc cylinder beads (301.12, 305.2, 308.9, 344).

Short cylinder beads

Short faience cylinders were regularly shaped beads found in many colors: blue (299.3, 300.1, 301.13, 308.7, 356.1), green (308.3), white (301.9, 12, 356.2), black (301.10–11, 305.4, 320.2, 326.3), red (301.10, 305.6, 308.4, 320.1, 324.5, 326.2, 356.3), and yellow (305.3, 308.5, 320.3, 326.1, 335.5).

Irregular disc to short cylinder

Irregularly shaped disc to standard cylinder beads have rounded edges. They are found in black (298.8, 318.2) and are more similar to Middle Nubian faience specimens.

Long beads

A long green faience barrel bead measures 5.8 mm in length (346.1), and long blue bicones (349.4) with lengths ranging from 6.4 to 7.6 mm are also represented in the corpus.

Decorated beads and pendants

Except for a blue faience melon bead (317.4),⁵⁴¹ faience objects were shaped in pottery molds and one of their sides is flat. These items include a *wedjat* amulet with four holes, which may indicate that it is a spacer (309); a blue scaraboid (316.1);⁵⁴² a large Bes with a long penis (306);⁵⁴³ and a Bes with a short penis (310.3). A green-glazed faience fly is flat on one side and has undecorated wings and a longitudinally segmented head, pierced transversely for suspension (315.5).⁵⁴⁴

Other amulets have single- or double-ring loops attached for suspension. These items include a pendant in the form of a flying scarab, with a double-ring

loop (329),⁵⁴⁵ and a Taweret amulet molded with an attached ring loop (330.1).⁵⁴⁶ Faience Hathor amulets have flat backs and suspension loops running horizontally over the attached headdresses (334.1–11).⁵⁴⁷ The plaque forms a woman's head with the ears of a cow, and the face of the goddess is depicted in relief. She wears a two-tiered wig ending in two locks and a crown atop her head. At the hair's part, there may be three uraei. Under the chin is a long neck, marked by horizontal strokes, that may also be interpreted as a sistrum handle.⁵⁴⁸ The amulets come from a tomb dated variously to Thutmose III or from Amenhotep III to the Amarna period.

Vitreous Material

Short, opaque and matte blue barrel beads are present in two sizes. The smaller ones measure 2.4–4.0 mm in diameter (315.6), and the larger beads measure 4.5–5.0 mm in diameter (298.6). Other matte beads that lack traces of glaze are short barrels, light orange in color (317.6).

Some glossy coating can also be discerned on standard barrel cores of red (351.3), brown, and almost black color (351.4).

Monochrome Glass

Drawn and cut glass

Short cylinders in opaque yellow and blue are made of glass that bears traces of a drawing method (297.5–7).

Drawn, folded, and cut-up glass strip

H. C. Beck noticed that Amarna tubes were drawn from strips of glass folded around a wire and then broken into beads.⁵⁴⁹ They were also found at Amenhotep III's Malqata palace near Thebes.⁵⁵⁰ However, these types of glass beads from Malqata, as presented at the Metropolitan Museum of Art, are missing from

540 The same is true of those on a *shebyu* necklace.

541 Säve-Söderbergh and Troy 1991, pl. 23:4, object 185/133:2.

542 Patch 2005, 207, cat. no. 126b—from a basket in a child's coffin in western Thebes, Birabi, tomb 37, burial 31, early Eighteenth Dynasty, reigns of Thutmose I to Thutmose III (1504–1425 BC) (= Met 26.7.1369); Minault-Gout and Thill 2012, pl. 116: T3Ca20—Saï.

543 MFA 27.903a–c—from New Kingdom remains at Semna S 563, H 3.5 cm; MFA 11.2583—from Egypt, Zawiyet-el-Aryan; Vercoutter 1975, fig. 43:13—Mirgissa; Goulding 2013, fig. 5—Eighteenth Dynasty, of red faience (= UC 1135).

544 Säve-Söderbergh and Troy 1991, pl. 21:4, object 185/129:7, pl. 23:4, object 185/133:2, pl. 26:9; Vercoutter 1975, fig. 28b:a–d—Mirgissa, tomb 84.

545 Herrmann 2003, 161, pl. 123, cat. no. 943—New Kingdom; Herrmann and Staubli 2010, 121—Nineteenth to Twentieth Dynasties, 1306–1070 BC; Müller-Winkler 1987, pl. 29:595.

546 Bleiberg 2008, cat. no. 84 (= BrMu, inv. 48.66.42)—probably late Eighteenth Dynasty, ca. 1332–1292 BC; Herrmann 2003, 111, pl. 76, cat. no. 539 (Ramesside), and references therein; Herrmann and Staubli 2010, 79, cat. no. 37—Iron Age IA–B, 1200–1000 BC, Megiddo; OIM E20617.

547 Herrmann 2003, 70, pl. 36, cat. nos. 258–59—Ramesside; Herrmann and Staubli 2010, 59, cat. no. 8—Nineteenth to Twentieth Dynasties (1306–1070 BC); BrMu 48.66.37.

548 Vincentelli 2006, 161.

549 Beck 1928, 61; Petrie 1894, 27, pl. 13, 55—Tell el-Amarna.

550 Lankton 2003, 43.

the OINE assemblage.⁵⁵¹ The same technique was identified by Beck as used for short beads from Abydos.⁵⁵² These beads are now in the Petrie Museum of Egyptian Archaeology, University College London,⁵⁵³ and in contrast to the Malqata examples, they are comparable to some OINE beads. In the OINE assemblage, segments of drawn tubes, folded and cut up into short barrel or oblate beads, were recorded in translucent blue (322.1, 349.3)⁵⁵⁴ and translucent amber (322.2).⁵⁵⁵ They measure 4.6–5.8 mm in diameter, 2.1–3.2 mm in thickness, and 1.4–2.2 mm in hole diameter. This type of bead was also found in a sixteenth-century BC burial at northwest Saqqara.⁵⁵⁶

Wound glass

Evidence for the production of wound-glass beads was found at Tell el-Amarna.⁵⁵⁷ Among monochrome wound-glass beads, short, standard, and long beads can be distinguished. These oblate beads are translucent amber (318.1), translucent purple (324.2), and translucent blue (326.4) in color.

Globular beads made of wound glass are translucent blue⁵⁵⁸ (308.1), semitranslucent blue (324.3), translucent dark blue⁵⁵⁹ (308.2), and opaque black (342.5) in color.

Long beads are colored translucent amber⁵⁶⁰ (326.9), translucent cobalt blue⁵⁶¹ (297.8, 326.6), black (326.7), translucent purple⁵⁶² (324.1), opaque yellow (297.9), and opaque light blue (297.3, 326.8).

551 E.g., Met 11.215.655–656, 11.215.658–659, 11.215.661.

552 Beck 1928, 61; Lankton 2003, 43; UC 43028—from Abydos, but ascribed to the Roman period.

553 UC 43028.

554 Nakai et al. 2009, pl. 1.

555 Ibid.

556 Yoshimura and Kawai 2007.

557 Petrie 1894, 27, fig. 13.

558 Cooney 1976, cat. no. 1044—Akhenaten, Tell el-Amarna, Eighteenth Dynasty; UC 51644, UC 24388—Tell el-Amarna, Eighteenth Dynasty; Varberg, Kaul, and Gratuze 2014—a single Egyptian glass bead was confirmed by laboratory analysis and came from a Bronze Age woman's burial excavated in Denmark; Met 11.215.655, 659—wound-glass barrel beads can be discerned among other beads found at the palace of Amenhotep III at Malqata, about 1390–1353 BC; Firth 1912, pl. 55.9—standard to long beads.

559 Cooney 1976.

560 UC 51644—Tell el-Amarna, Eighteenth Dynasty.

561 Cooney 1976, cat. no. 1044—Tell el-Amarna, reign of Akhenaten, Eighteenth Dynasty; UC 51644, UC 24388—Tell el-Amarna, Eighteenth Dynasty; Firth 1912, pl. 55, no. 9; Met 11.215.662—from the Malqata palace of Amenhotep III.

562 Met 11.215.66—from the Malqata palace of Amenhotep III.

Molded

Many glass pendants are made of molded glass. They are flat on one side or executed in three dimensions. Many of the glass pendants are decorated in the same manner as their carnelian equivalents.

Molded light blue glass was shaped into a *cardium edule* seashell (349.2), the shape of which is found elsewhere but made of carnelian.⁵⁶³ A teardrop pendant, flat on one side, is made of opaque light blue glass (327.10)⁵⁶⁴ and was also executed in carnelian (cf. 327.1). A glass pendant, flat on one side, is called a *bullā* and is matte opaque red/orange in color (349.1), perhaps to resemble carnelian.⁵⁶⁵ A fish amulet, swimming to the left, has incised details (319.5) in the same manner as one in carnelian (cf. 319.3). Another translucent blue fish, with a flat reverse and decorated obverse side, swims to the right (337.1).⁵⁶⁶ A Taweret amulet in opaque blue glass (333.1–2) is shaped like its carnelian counterparts (cf. 333.3–4), and a blue glass beetle pendant, flat on one side and with three pairs of legs (325.2), was found with carnelian examples (cf. 325.1).⁵⁶⁷ In addition, a light blue glass falcon⁵⁶⁸ (299.4) and a fish amulet swimming to the left (335.7) are flat on their reverse sides but have slightly convex obverse sides.

Other forms were executed in three dimensions. Glass cornflower/pomegranate pendants are made of opaque light blue glass and are rod pierced for suspension (316.2, 335.9), while blue (335.8) or light green (335.10) ones have attached ring loops.⁵⁶⁹ A heart amulet pendant is made of opaque red glass (307).⁵⁷⁰

563 Petrie 1914, 27, cat. no. 111.

564 Arnold, Green, and Allen 1999, fig. 20—a wooden figure of Queen Tiye with a necklace of dark blue pendants.

565 Säve-Söderbergh and Troy 1991, pl. 27:10, 13.

566 Patch 2005, 206, cat. no. 124b. This object is dated to the early Eighteenth Dynasty, between the reigns of Thutmose I and Thutmose III (1504–1425 BC), and is from a small box in a man's grave, burial 53 in tomb 37, in the area of Birabi, western Thebes.

567 Cf. cat. no. 325.1.

568 For stone falcon amulets, see Herrmann 2003, 28–29, 141, pl. 105, cat. no. 801; Berman 1999, 173, cat. no. 114—assemblage of beads and amulets of mostly Middle Kingdom date.

569 Beck 1928, B.2.g, faience—Tell el-Amarna.

570 Smith 2007, 4, color pl. 3 for the shape of the amulet from New Kingdom contexts at Tombos.

Bichrome and Polychrome Glass

Wound glass

Spherical beads were made of a body of wound black glass and decorated with an applied white trail around the middle (324.4).⁵⁷¹

Glass eye spacer beads consist of perforated bodies and loops. A black-and-white eye was applied in layers to one side of the yellow body. While still on a rod, the decorated side was flattened and the loop attached (304.2, 345.4).⁵⁷²

Drawn gold-in-glass

A gold-in-glass bead is made of two drawn layers of clear glass with gold foil between them (297.1). The ends of the bead are heat-rounded. However, this object is an intrusive Meroitic find.⁵⁷³

Beadwork

In only a few cases were beads found associated with parts of the body in a way that indicates the type of object to which they belonged. Beads were found presumably **at the head** (300), as **cap or headband pendants** (303), from the **neck** (307, 315, 334[?], 340), on or near the **chest** (317, 336, 338), as **bracelets** (313), around the **pelvis** (341), and near the **hand and head** (351).

Beads that were found presumably at the head (300) may have been part of a cap, as observed on the head of a figure of Queen Tiye, which had inset blue glass beads.⁵⁷⁴

Although the *shebyu* collar is composed of single or multiple rows of gold disc beads,⁵⁷⁵ it is possible that

imitations were made of faience disc, biconical, or wafer beads (321, 357.1–2, 358).⁵⁷⁶

The Bead Owners

Since New Kingdom tombs contained multiple burials, it was often not possible to assign beads or beadwork to any particular burial. Beads associated with anthropologically identified individuals at Qustul included burials of females (299, 300, 314, 317–319, 320[?], 326, 330, 334, 339), males (309, 310[?], 315), and children, including infants (307, 322, 340, 341). In addition, two tombs contained skeletons of infants and females together (323, 324, 336–338) or infants with mature males (321). At Serra East, beads were also recorded with a juvenile body (351).

Some anthropological associations can be indicated for some types of objects. Fish amulets come from a burial of a mature female (319.3, 5) and from a shared infant and female grave (337). Fish amulets, called *nekhaw*, are said to have been given especially to children to protect them from drowning, and during the Twelfth Dynasty they were attached to the end of the side lock or plait of the child's hair.⁵⁷⁷ A Taweret amulet is associated with a senile female (330.1), and an unusual group of eleven Hathor head pendants also comes from a senile female burial (334). As the goddess protector of pregnant women, Taweret was believed to protect the deceased woman during her rebirth into the next world.⁵⁷⁸ A Horus falcon amulet belonged to a female (299). A *wedjat*-eye amulet was found with a juvenile male (309). Heart amulets were recorded from a child's grave (307) and a mature female's burial (319).

571 UC 24388, UC 68630—Tell el-Amarna, Eighteenth Dynasty; UC 51534; Met 15.3.712—Lisht North, Nineteenth to Twentieth Dynasties.

572 Randall-MacIver and Woolley 1911, pl. 51:10252—Buhen; Beck 1928, fig. 34b, no. B.7.a—Eighteenth to Twentieth Dynasties; Goldstein 1979, 81, pl. 9, nos. 133–37—Eighteenth Dynasty; Lankton 2003, fig. 4.5—late Eighteenth to Nineteenth Dynasties; UC 42432—Nineteenth Dynasty; Met 26.2.64—Thebes, tomb of Rau, reign of Thutmose III; Berman 1999, 543–44, cat. no. 475—Eighteenth Dynasty, el-Riqqa, tomb 26, a yellow loop, blue, white, and black eye; *ibid.*, cat. no. 461—yellow loop, blue, white, and black eye; Dubin 2009, timetable, cat. no. 480d—Eighteenth to Nineteenth Dynasties; Xia 2014, pl. 3:36h; Berlev and Hodjash 1998, pl. 174:14.172.

573 For gold-in-glass beads, see, e.g., Spaer 2001.

574 Arnold, Green, and Allen 1999, 32, fig. 26.

575 Binder 2008.

576 Brand 2006; Binder 2008, 45–46, table 4.2.

577 Tait 2006, 200, cat. no. 482.

578 Bleiberg 2008, 89.

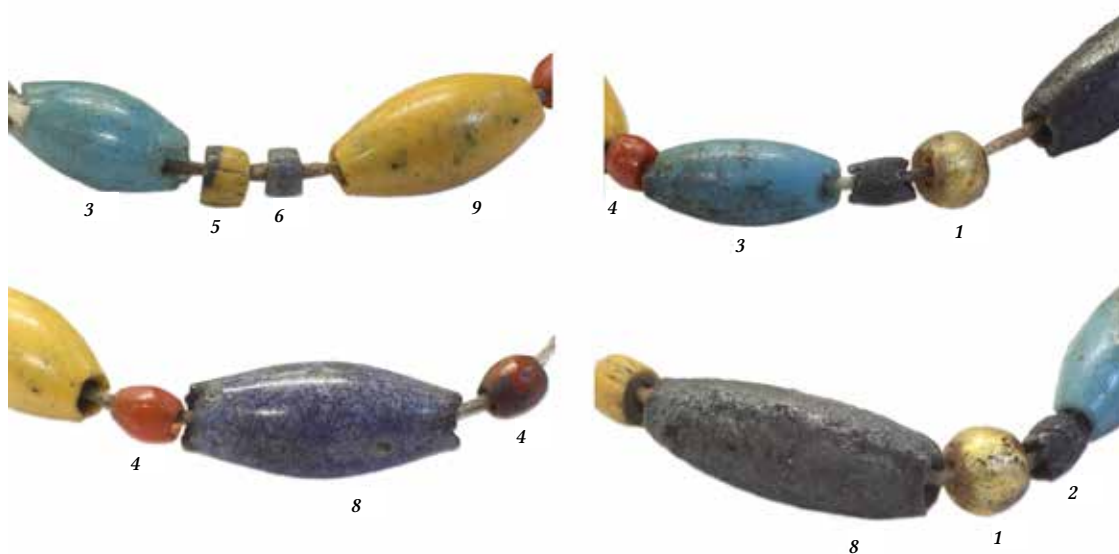
Catalog

297

Qustul R 4B—13a-j: Beads from uncertain location, presumably the eastern chamber (D—mature male, E—mature female, F—child); OIM E20666

New Kingdom, post-Amarna period

1. Gold-in-glass, drawn and rounded, standard barrel (1), D 3.0, L 2.5, HD 1.4—Meroitic bead
 2. Silver, barrel (2), D 1.7, L 2.2, HD 0.7
 3. Glass, wound, long barrel, blue (2), D 3.4; 3.8, L 7.7; 7.6, HD 0.8
 4. Stone, carnelian, drilled from one end, barrel, red (3), D 2.1, L 2.2, HD 0.8; 0.7
 5. Glass, drawn and cut, short cylinder, opaque yellow (2), D 2.3, L 1.7, HD 0.6—Meroitic bead
 6. Glass, drawn and cut, short cylinder, blue (1), D 1.8, L 1.1, HD 0.7
 7. Glass, drawn and cut, short cylinder, blue (1—broken), D 2.3, L 1.9, HD 0.7
 8. Glass, wound, long barrel, dark blue, one bead covered with silverfish patina (2), D 3.8; 4.3, L 10.3; 10.1, HD 0.8
 9. Glass, wound, long barrel, opaque yellow (2), D 2.9; 4.1, L 6.5; 8.4, HD 0.9
- Bibliography: OINE VI, 125, 161, fig. 17q, r





298

Qustul R 19-4a-g: Beads from tomb (A—unidentified individual, B—adult male); OIM E20898

New Kingdom, Post-Amarna period

1. Carnelian, drilled from one end, short irregular bicone (2), D 3.8, L 2.8, HD 1.1; 1.3

2. Garnet, drilled from one end, irregular globular, slightly biconical, purple (58), D 3.2-4.3, L 2.1-3.1, HD 1.1; 2.4

3. Gold sheet, barrel (21), D 3.0-3.3, L 2.4, HD 1.1

4. Gold sheet, barrel (2), D 3.5, L 2.8, HD 1.6

5. Gold sheet, long barrel (3), D 2.8, L 4.9, HD 1.4

6. Vitreous material, barrel, blue (32), D 4.5-5.0, L 3.6-3.7, HD 1.0

7. Faience, barrel, blue (3), D 3.2, L 2.2, HD 0.6

8. Faience, disc and short cylinder, black (237), D 2.1-2.3, L 0.9-2.1, HD 0.8

Bibliography: OINE VI, 125, 165, fig. 17a, h, k, n, o





299

Qustul R 20–44a–c: Beads, including falcon amulet from eastern chamber (F—mature female, G—mature female, H—senile female); OIM E20913

New Kingdom, post-Amarna period

1. Carnelian, drilled from one end, barrel, red (93), D 2.0–2.4, L 1.8, HD 0.8

2. Faience, truncated bicone disc, blue (7), D 3.9–4.6, L 1.4–1.6, HD 1.2

3. Faience, short cylinder, blue (1), D 2.8, L 1.4, HD 1.2

4. Glass, falcon amulet, light blue (1), Th 3.0, W 5.8, H 10.2, HD 1.4 × 1.3–1.9 × 1.4

Bibliography: OINE VI, 166–70, figs. 17l, b, v, w, 41k



300

Qustul R 32—11a—c: Beads from uncertain location, presumably at head (mature female);
OIM E20893

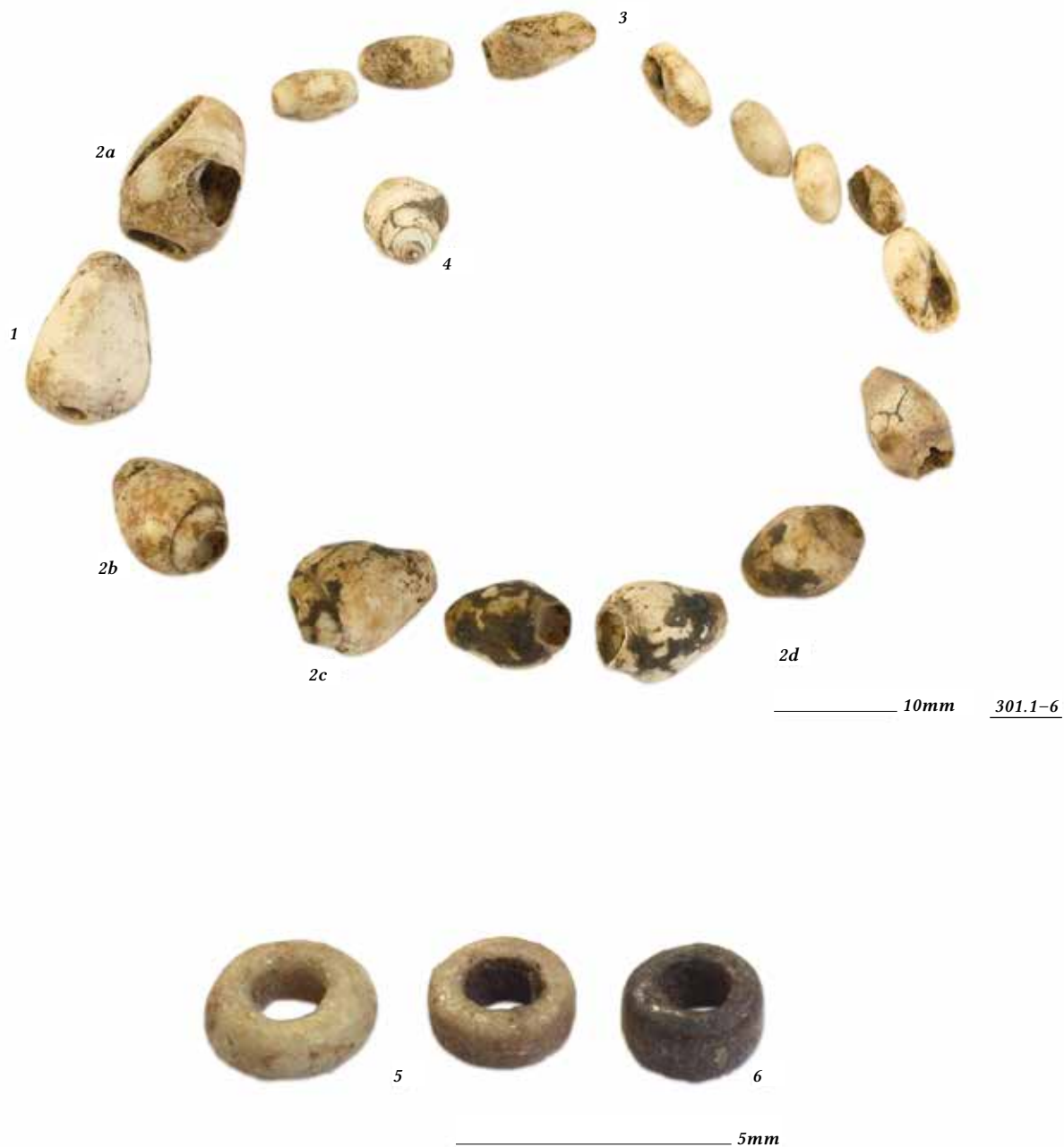
New Kingdom, Thutmose III to Amarna period (and most likely Amenhotep II to Thutmose IV)

1. Faience, short barrel, blue and green (374), D 2.8–5.0, L 1.4–1.8, HD 1.0

2. Faience, short barrel, white (4), D 3.0, L 1.6, HD 1.1

3. Faience, short barrel, black (2), D 2.9, L 1.0, HD 0.9

Bibliography: OINE VI, 183–84



301

Qustul R 35-4: Beads from shaft, level 1 (A—younger infant, B—senile female, C—mature female, D—mature female, E—mature male, F—); OIM E21297A-B

OIM E21297A

New Kingdom, post-Amarna period

1. *Conus taeniatus* shell, apex removed, whitish (1), W 9.3 × 8.7, L 13.1, HD 2.4

2a. *Columbella (Pyrene) testudinaria* shell, body whorl cut and apex removed, whitish (1), W 9.7 × 8.1, L 13.0, HD 4.5; 5.5 × 4.2—cut might be accidental

2b. *Columbella (Pyrene) testudinaria* shell, apex removed, brown waves, whitish (1), W 8.4 × 7.4, L 10.7, HD 2.4

2c. *Columbella (Pyrene) testudinaria* shell, apex removed, brown and whitish (1), W 9.0 × 8.1, L 11.5, HD 3.5

2d. *Columbella (Pyrene) testudinaria* shell, apex removed, whitish (4), W 6.0 × 7.1, L 9.6, HD 2.8

3. *Ancilla* sp. shell, apex removed, whitish (8), W 3.4 × 3.1–4.6 × 4.2, L 5.6–9.1, HD 1.0–1.6

4. *Nassarius coronatus* shell, whitish (1—broken), W 6.4

5. Faience, disc cylinder, whitish (2), D 2.5; 3.0, L 1.3; 1.2, HD 1.0

6. Faience, disc cylinder, black (1), D 2.6, L 1.4, HD 0.8



301 (continued)

OIM E21297B

7. Faience, disc cylinder, black (57), D 2.6–2.7, L 0.9–2.1, HD 0.8

8. Faience, disc cylinder, yellow (41), D 2.4–3.2, L 1.0–2.0, HD 1.0

9. Faience, disc cylinder, blue (20), D 2.2–2.9, L 1.0–1.8, HD 0.8

10. Faience, disc cylinder, red (1), D 2.9, L 1.1, HD 1.0

11. Faience, disc cylinder, blue and green (116), D 4.1–5.6, L 1.1–2.0, HD 1.4

12. Faience, disc, blue (3), D 6.7–7.0, L 0.9–1.0, HD 1.3

13. Ostrich eggshell, drilled from one end, disc cylinder, whitish (77), D 4.5–5.1, L 1.4–1.9, HD 2.6–1.4

14. Faience, oblate, yellow (1), D 3.8, L 2.9, HD 0.6

Bibliography: OINE VI, 126, 188–91



302

10mm

302

Qustul R 35—5: Amulet, Bes, from shaft, level 2 (G—younger infant, H—mature male, I—mature female, K—mature female, J—senile individual, L—juvenile female, M—, N—); OIM E21324

New Kingdom, post-Amarna period

Steatite, Bes pendant, blue glaze (1), W 7.7, Th 4.0, H 15.1, HD 1.2

Bibliography: OINE VI, 126, 188–91, figs. 17v, 41k

303

Qustul R 35—13: Amulets and band pendants from shaft, level 2, with burials G–N (G—younger infant, H—mature male, I—mature female, J—senile individual, K—mature female, L—juvenile female, M—, N—); OIM E21296A–F
New Kingdom, post-Amarna period

OIM E21296A

1. Bone, teardrop, white (1), W 8.7, Th 5.7, H 13.5, HD 1.5–1.8

OIM E21296B

2. Bone, teardrop, white (1), W 8.6, Th 5.4, H 10.8, HD 1.5–1.8

OIM E21296C–D



303.1–2

10mm



303.3

303 (continued)

3. Carnelian, heart pendant, red (2), W 9.5, Th 3.3, H 16.7; 16.2, HD 0.8–1.4

OIM E21296E

4. Carnelian, lotus seed-vessel pendant, red (1—broken), D 6.2, H 10.3, HD 1.0–1.6

OIM E21296F

5. Carnelian, lotus seed-vessel pendant, red (1), D 6.7, H 13.4, HD 1.0–1.3

Bibliography: OINE VI, 126–27, 189–99, figs. 17ff, kk, 41f, pl. 49a

10mm



4

303.4–5

5

10mm

304.1-2**304**

Qustul R 35—15a-b: Pendants from shaft, level 2, with burials G–N (G—younger infant, H—mature male, I—mature female, J—senile individual, K—mature female, L—juvenile female, M—, N—); OIM E21190A–B

New Kingdom, post-Amarna period

OIM E21190A

1. Carnelian, flat lotus seed-vessel pendant, light to dark red (1), W 11.6, Th 4.0, L 21.8, HD 1.1–1.6

OIM E21190B

2. Glass, stratified eye pendant/spacer, opaque yellow, black-and-white eye (1), W 8.1, Th 4.6, H 13.3, HD 2.4 × 1.6 (loop), HD 2.3 (body)

Bibliography: OINE VI, 126–27, 189–99, figs. 17ll, oo, 41l



305

Qustul R 35–18a–h: Beads from shaft, level 2, with burials G–N (G—younger infant, H—mature male, I—mature female, J—senile individual, K—mature female, L—juvenile female, M—, N—); OIM E21195

New Kingdom, post-Amarna period

1. Faience, disc cylinder, blue and green (146), D 3.8–6.5, L 1.9, HD 1.6–1.9
2. Faience, disc and short cylinder, blue and green (60), D 2.0–3.7, L 1.0–1.9, HD 1.0–1.3
3. Faience, disc and short cylinder, yellow (3), D 2.1–2.5, L 1.1, HD 0.6–0.9
4. Faience, disc cylinder, black (3), D 2.6, L 1.3, HD 0.9
5. Faience, disc cylinder, brown (3), D 2.6, L 1.6, HD 1.0
6. Faience, disc cylinder and disc barrel, dark red (10 and 1 double-segment), D 2.3–3.1, L 1.0–1.2, HD 1.0
7. Faience, disc cylinder, white (3), D 2.6–2.9, L 1.0–1.4, HD 0.8
8. Faience, disc cylinder, yellowish core (1), D 2.7, L 1.2, HD 0.8
9. Ostrich eggshell, some drilled from one end and some from both ends, disc cylinder, whitish (68), D 4.6–5.7, L 1.1–1.8, HD 1.7–2.9—hourglass or conical
10. Stone, carnelian, drilled on one end, long barrel, red (1), D 3.3, L 4.4, HD 0.8; 1.7
11. *Ancilla* sp. shell, apex removed, white (6), W 3.2–4.7, L 5.9–9.4, HD 1.1–1.5
12. Faience, disc cylinder, yellow (1), D 5.3, L 1.3, HD 1.8

Bibliography: OINE VI, 126–27, 189–99, fig. 17d



306

10mm



307

10mm

306

Qustul R 35—19: Amulet, Bes, in shaft, level 2, with burials G—N (G—younger infant, H—mature male, I—mature female, J—senile individual, K—mature female, L—juvenile female, M—, N—); OIM E21192

New Kingdom, post-Amarna period

Faience, Bes amulet, blue (1), W 15.2, H 34.9, Th 6.5, HD 1.4

Bibliography: OINE VI, 126–27, 189–99, figs. 17t, 41j

307

Qustul R 35—33: Heart pendant, uncertain location in shaft, from neck (child); OIM E21198

New Kingdom, post-Amarna period

Glass, heart pendant, opaque dark red (1), W 14.5, Th 6.9, H 24.0, HD 2.0 (loop)

Bibliography: OINE VI, 189–99, figs. 17gg, 41m



308.1-12



308

Qustul R 35-34a-m: Beads from uncertain location in shaft; OIM E21293

New Kingdom, post-Amarna period

1. Glass, wound, oblate, translucent blue (2), D 9.0; 9.0, L 7.8; 9.9, HD 3.3; 2.7

2. Glass, wound, oblate, cobalt blue (1), D 11.2, L 9.8, HD 2.6

3. Faience, disc and short cylinder, green (10), D 2.5-3.2, L 1.1-1.4, HD 0.7

4. Faience, disc and short cylinder, red (6), D 2.9-3.1, L 1.1, HD 0.7

5. Faience, disc and short cylinder, white and yellow (5), D 2.4-3.4, L 1.1, HD 0.7

6. Faience, disc and short cylinder, light blue (1), D 2.8, L 1.7, HD 0.9

7. Faience, disc and short cylinder, dark blue (1), D 2.7, L 0.9, HD 1.4

8. Faience, disc cylinder, blue (1), D 4.5, L 1.6, HD 1.2

9. Faience, disc cylinder, turquoise (3), D 5.2, L 1.6, HD 1.2

10. Ostrich eggshell, drilled from one end, disc cylinder, white (8), D 5.1, L 1.8, HD 2.7-1.9

11. *Polinices* sp. shell, body whorl perforated, white (1), W 16.2, Th 13.8, L 28.0, HD 3.6

12. *Cypraea annulus* shell, body whorl perforated, cowrie, white (1), W 16.7, L 22.3, HD 3.5 × 2.4

13. Shell, not perforated, white (4), W 5.8-7.5, L 10.6-13.8, Th 3.5 × 2.4—*not illustrated*

Bibliography: OINE VI, 189-99

309



309

Qustul R 35-45: Amulet, *wedjat*-eye, in eastern chamber, from burial X (juvenile male); OIM E21227

New Kingdom, post-Amarna period

Faience, *wedjat*-eye amulet spacer, blue (1), L 45.0, Th 4.9, H 28.9, HD 1.8

Bibliography: OINE VI, 189-200, fig. 17bb

310.1-6

5mm



5mm

310

Qustul R 35-100a-g: Beads and Bes amulet in western burial chamber (scattered bones—at least 7 mature or senile, mostly male); OIM E21196

New Kingdom, Amenhotep II to post-Amarna period (and most likely Amenhotep III to Amarna period)

1. *Nerita* sp. shell, perforation on the last whorl of the spire, whitish (1), W 16.7, L 20.8, H 12.4, HD 4.3

2. *Ancilla* sp. shell, apex removed, white (2), W 4.4 × 3.2, L 5.6, HD 1.9

3. Faience, Bes amulet, green (1), W 5.5, Th 3.3, H 12.9, HD 1.0

4. Faience, barrel, green (1), D 4.0, L 3.4, HD 1.3

5. Faience, disc cylinder, blue (3), D 3.5-4.3, L 0.7-1.0, HD 0.7

6. Faience, quadruple-segmented cylinder, blue (1), D 1.6, L 5.2, HD 0.8

Bibliography: OINE VI, 188-201, fig. 17u



311

311

Qustul R 40—13: Beads from shaft, level 2 (B—male, C—); OIM E21364

New Kingdom, Thutmose III

Stone, carnelian, drilled from one end, standard barrel, red (84), D 2.1–3.8, L 1.6–3.0,
HD 0.8–1.1

Bibliography: OINE VI, 127, 202–4, fig. 17g



312

Qustul R 40–48a–b: Beads from eastern chamber in uncertain location (I—child, J—mature female, K—mature female(?), L—mature male, M—juvenile male (I and M probably the same burial); OIM E21365

New Kingdom, Thutmose III

1. Metal, slightly faceted long bicone (1), D 5.4 × 4.8, L 11.4, HD 1.0

2. Ceramic core, bicone, blue, green (14.5), D 3.5–4.2, L 3.5–7.0, HD 1.0

Bibliography: OINE VI, 127, 202–10, fig. 17p



312.1–2



313

Qustul R 41–3a–b: Bracelet (no body recorded); OIM E20890

New Kingdom, Thutmose III to post-Amarna period (and most likely Amenhotep III to Amarna period)

1. Ostrich eggshell, short cylinder, whitish (59), D 2.2–2.4, L 0.9–1.2, HD 0.8

2. Faience, short cylinder, blue (1), D 2.8, L 2.2, HD 0.9

Bibliography: OINE VI, 128, 211



313.1–2

1

2



314*

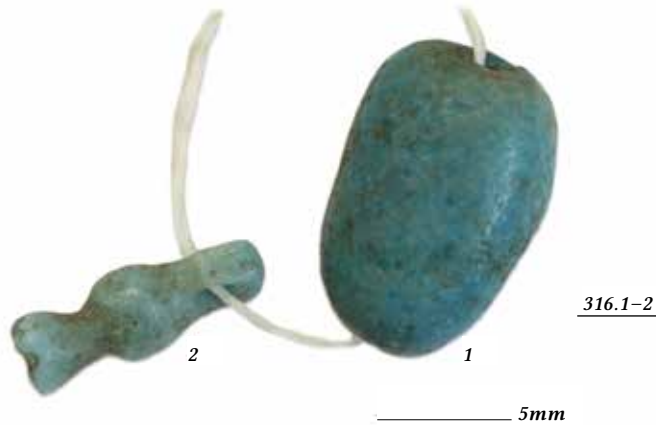
Qustul R 45—3a: Beads in shaft, level 2, from coffin in burial I (senile female); OIM E21309—*non vidi*
 New Kingdom, Amenhotep II to Thutmose IV
 Bibliography: OINE VI, 128, 215, pl. 49d

315

Qustul R 45—12a—d: Beads, amulets, coils in shaft, level 3, from neck of burial K (mature male); OIM E21310
 New Kingdom, Amenhotep II to Thutmose IV

1. Amethyst, drilled from one end, spherical, light purple (1), D 4.7, L 4.2, HD 1.0; 0.8
2. Carnelian, short truncated barrel, red (1), D 3.9, L 2.8, HD 1.3; 1.8
3. Carnelian, short truncated barrel, salmon (1), D 2.5, L 1.6, HD 1.1
4. Steatite, fly, green glaze (1), Th 2.9, W 9.1, H 11.7
5. Faience, fly, green (2), Th 3.6, W 7.1, H 13.4
6. Vitreous material, short barrel, blue (7), D 2.4–4.0, L 1.3–2.9, HD 0.9
7. Metal coils (2), D 1.7, W 8.2, H 8.8; 11.0, L ca. 26.0

Bibliography: OINE VI, 128, 215–17, fig. 17ii, pl. 49c



316

Qustul R 45—14a—b: Pendant and amulet in shaft, uncertain location (A—H—, I—senile female, J—mature female, K—mature male); OIM E21265 New Kingdom, Amenhotep II to Thutmose IV

1. Faience, barrel, flat on one side, blue (1), Th 4.9, W 8.0, L 11.8, HD 1.3

2. Glass, cornflower pendant, light blue (1), Th 3.4, H 7.9, HD 1.1–1.4

Bibliography: OINE VI, 128, 215–17, fig. 17i, jj, pl. 49b



317.1–7



317

Qustul R 45—31a, c: Shell and beads in eastern chamber with burial N, shell on chest (mature female); OIM E21327C New Kingdom, Amenhotep II to Thutmose IV

1. Faience, quadruple-segment, green (1), D 3.7, L 13.0, HD 1.6

2. Faience, disc barrel, blue/green (2), D 4.1, L 1.5, HD 1.0

3. Faience, disc barrel, blue (2—attached), D 2.6, L 2.5, HD 0.6

4. Faience, melon, blue (1), D 4.6, L 3.2, HD 1.5

5. Glass, short barrel, light blue (1), D 2.6, L 1.6, HD 1.2

6. Vitreous material, short and standard barrel, light orange (16), D 2.7, L 1.7, HD 0.9

OIM E21327C bis

7. Faience, disc and short cylinder, dark green to black (22), D 2.6–3.3, L 0.6–0.7, HD 0.9

Bibliography: OINE VI, 128, 215–17, fig. 17f, m



318.1-2

318

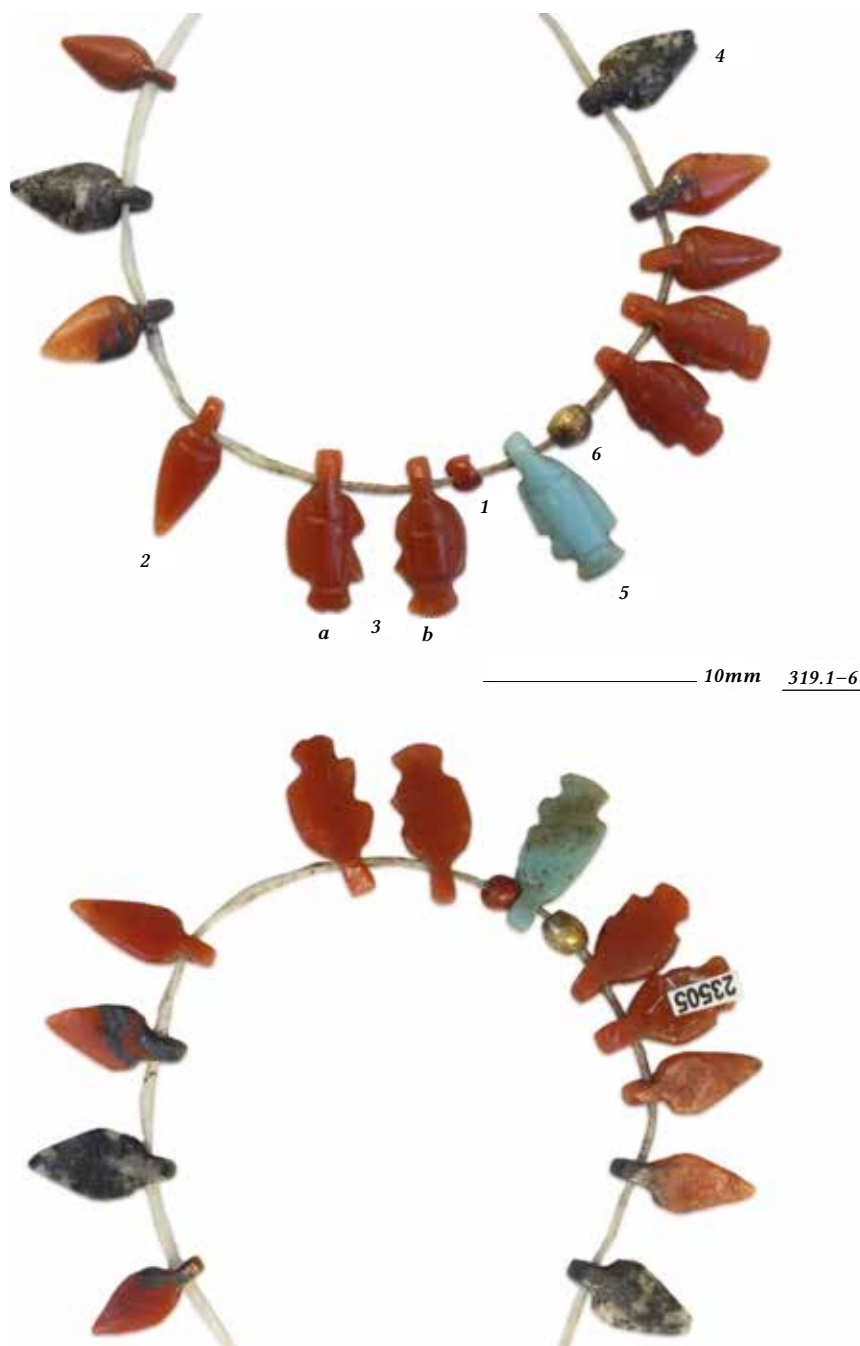
Qustul R 45–44a–b: Beads in eastern chamber, uncertain location (M—senile female, N—mature female); OIM E21354

New Kingdom, Amenhotep II to Thutmose IV

1. Glass, short barrel, amber (1), D 3.2, L 1.5, HD 1.1

2. Faience, disc and short cylinder, dark blue, green, black (427), D 2.6–3.4, L 1.5–3.0, HD 1.0

Bibliography: OINE VI, 128, 215–20



319

Qustul R 75—8a—b or R 75—18:
Pendants (5 fish, 7 heart) and beads
(2), under burial G or D (G—mature
female, D—mature female); OIM E23505,
OIM E42485

New Kingdom, Amenhotep III to
post-Amarna period (and most likely
Amenhotep III to Amarna period)
OIM E23505

1. Carnelian, drilled from one end, short
barrel (1), D 1.7, L 1.4, HD 0.7; 0.8

2. Carnelian, pointed heart amulet (5),
W 2.7–3.0, Th 1.4, H 6.0–7.1, HD 0.6; 0.7

3. Carnelian, fish amulet, three facing
left, one facing right (4), W 3.5, Th 1.8,
H 6.9–7.3, HD 0.6; 0.7

4. Diorite, pointed heart amulet (2),
W 3.3, Th 1.7, H 6.7, HD 0.6; 0.7

5. Glass, fish amulet facing left, blue (1),
W 3.3, Th 1.8, H 7.8, HD 0.7; 0.9

6. Gold, barrel (1), D 1.8, L 2.3, HD 0.7
OIM E42485 (found in box with scarab
OIM E23506, possibly from burial G)

7. Stone, pendant, drilled from
both ends, brown, semitranslucent
(1), Th 9.8, W 10.8, H 29.9,
HD 3.8–1.7–3.8—hourglass

Bibliography: OINE VI, 128, 232–34,
fig. 17ee, hh



319.7

10mm



320

Qustul R 75—9a-b: Beads in fill of shaft and opening of chamber (probably female);
OIM E23422

New Kingdom, Amenhotep III to post-Amarna period (and most likely Amenhotep III to
Amarna period)

1. Faience, short cylinder, red (53), D 1.6, L 0.9–1.0, HD 0.5

2. Faience, short cylinder, black (67), D 1.8–2.7, L 0.9–1.0, HD 0.5–1.1

3. Faience, short cylinder, yellow and light orange (74), D 1.4–2.1, L 1.0–1.4, HD 0.5–1.1

Bibliography: OINE VI, 128, 232–34



321

10mm

321

Qustul R 84—9a: Beads in fill of shaft
(A/C—mature males, B—older infant,
D—younger infant); OIM E42486
New Kingdom, Amenhotep III to
post-Amarna period (and most likely
Amenhotep III to Amarna period)
Faience, disc cylinder and bicone,
whitish core, blue glaze (4), D 11.7–13.0,
L 1.1–3.0, HD 1.7
Bibliography: OINE VI, 128, 242–46

322

Qustul R 85—2a–c: Beads from tomb
(infant, 1–2 years old); OIM E23424
New Kingdom
1. Glass, drawn, folded and cut into rings,
translucent turquoise (13), D 4.7–5.3,
L 2.1–3.0, HD 1.7–1.9
2. Glass, drawn, folded and cut
into ring, translucent amber (11–2
linked together), D 4.6–5.8, L 2.5–3.2,
HD 1.4–2.2
3. Ostrich eggshell, disc, grayish (1),
D 6.6, L 1.5, HD 2.4
Bibliography: OINE VI, 129, 247



5mm

322.1–3

323*

Qustul R 94—12: Amulets, Taweret,
from western chamber with I–O burials
(I–M—adult females, N—younger infant,
O—younger infant?); OIM E23519—*non
vidi*
New Kingdom, post-Amarna period
Bibliography: OINE VI, 129, 248–52





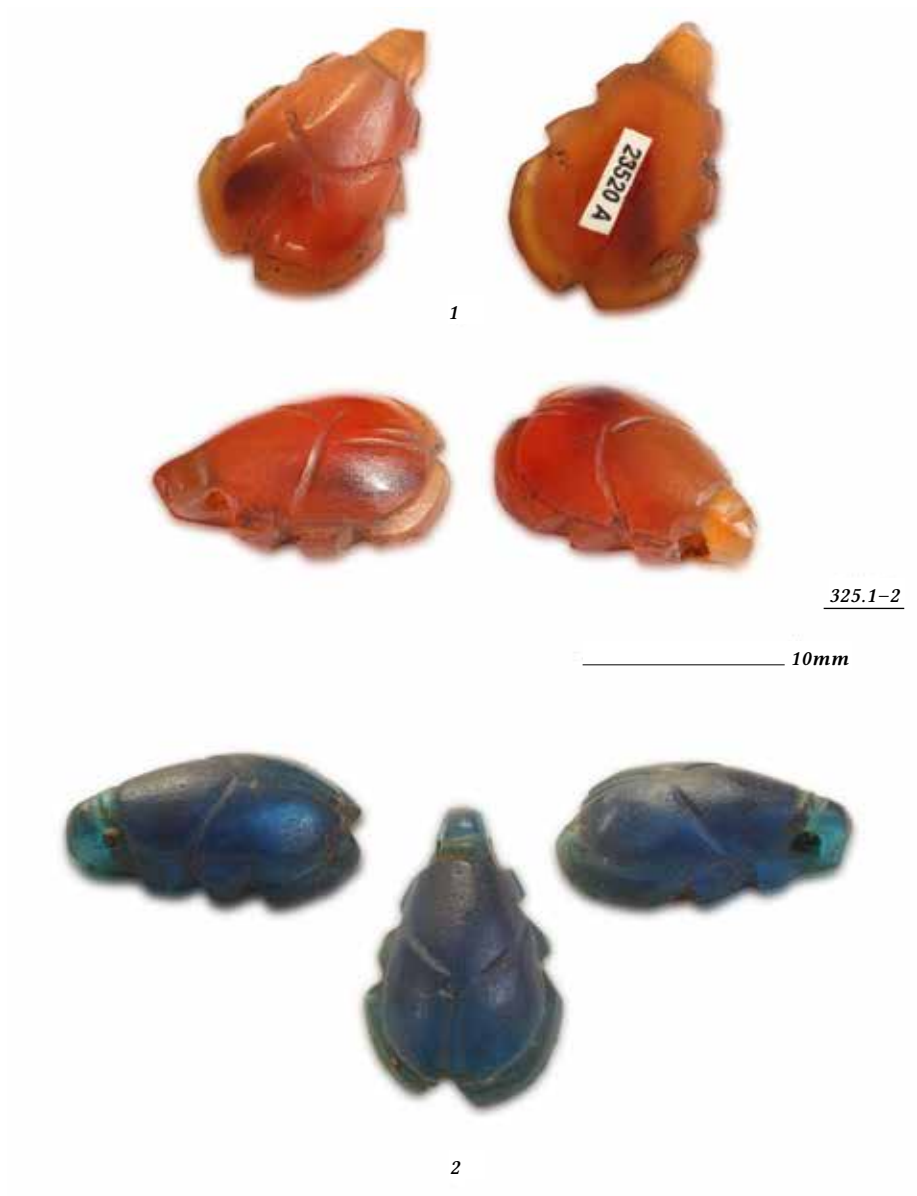
324

Qustul R 94-13a-g: Beads from western chamber with burials I-O (I-M—adult females, N—younger infant, O—younger infant?); OIM E23528

New Kingdom, post-Amarna period

1. Glass, wound, short and standard barrel, translucent purple (10), D 4.6–5.3, L 3.6–5.9, HD 1.5
2. Glass, wound, short barrel, translucent purple (1), D 3.8, L 2.4, HD 1.6
3. Glass, wound, standard barrel, semitranslucent blue (1), D 6.4, L 5.5, HD 2.1
4. Glass, wound, standard barrel, black white trailed (8.5), D 5.0–5.8, L 3.9–4.9, HD 1.9
5. Faience, short cylinder, red (1), D 2.8, L 2.0, HD 1.0
6. Faience, short to standard cylinder, blue (4), D 2.5–3.1, L 1.4–2.2, HD 0.9
7. Faience, barrel, blue (1), D 4.4, L 4.7, HD 1.3
8. Faience, triple-segment, blue (2), D 2.5; 2.8, L 4.4; 5.0, HD 0.8

Bibliography: OINE VI, 129, 248–52, fig. 17c, j



325

Qustul R 94–26: Amulet, scarab from eastern chamber with burials P–Y (P—adult [probably male], Q/S–V—adult female, W—younger infant, X/Y—female); OIM E23520A–B

New Kingdom, post-Amarna period

OIM E23520A

1. Carnelian, scarab, light red (1), W 10.5, Th 4.9, L 15.9, HD 1.0–1.6

OIM E23520B

2. Glass, scarab, blue, translucent (1), W 10.9, Th 5.3, L 16.4, HD 1.0–1.6

Bibliography: OINE VI, 129, 248–52, fig. 17cc



326

Qustul VC 45—5a-k: Beads with burial B, under body (juvenile female); OIM E21633
New Kingdom, Amenhotep III to Amarna period (with possible extension)

1. Faience, short cylinder, yellow (343), D 1.7–2.4, L 0.8–1.3, HD 0.7
2. Faience, short cylinder, red (233), D 1.7–2.4, L 0.9–1.4, HD 0.9
3. Faience, double- to quadruple-segment, gray/bluish (38), D 1.7–2.4, L 0.9–1.4, HD 0.9
4. Glass, wound barrel, translucent blue (13), D 3.5–3.9, L 2.1–4.3, HD 0.6–0.9
5. Glass, wound, long barrel, semitranslucent blue (3), D 3.4, L 6.3, HD 0.9
6. Glass, wound, long barrel, dark blue (1), D 3.4, L 5.9, HD 0.6
7. Glass, wound, long barrel, black (1), D 3.7, L 7.3, HD 0.7
8. Glass, wound, long barrel, semitranslucent light blue (1), D 3.2, L 7.0, HD 1.0
9. Glass, wound, long barrel, translucent dark amber (2), D 3.1, L 5.9, HD 0.7
10. Stone, garnet, drilled from both ends, long barrel, dark purple (14), D 3.6–4.2, L 4.1–7.9, HD 1.7–1.8
11. Stone, garnet, drilled on both ends, standard tubular, dark purple (3—2 broken), D 3.7–4.0, L 3.0–4.2, HD 1.9; 1.4

Bibliography: OINE VI, 129, 255, fig. 17e





327

Qustul VC 46–66a–c: Beads, pendants, and amulet in chamber with burials AD–AO (AD—senile male, AE/AM—mature to senile female, AF/AH—, AI—adult to mature male, AJ/AK—senile female, AL—mature to senile individual, AO—); OIM E21783

New Kingdom, Amenhotep III to post-Amarna period (and most likely Amenhotep III to Amarna period)

1. Jasper, drop pendant, flat on one side, red (1), W 5.0, Th 3.0, H 9.2, HD 0.7–1.2
 2. Carnelian, amulet, flat on one side, red (1), W 5.7, Th 2.7, H 9.8, HD 0.7–1.2
 3. Carnelian, drilled from one end, barrel, red (2), D 2.0, L 1.6, HD 0.8–1.1
 4. Faience, short cylinder, green (8), D 2.7, L 1.5, HD 1.1
 5. Faience, double-segment cylinder, green (18), D 2.7, L 3.1, HD 1.1
 6. Faience, triple-segment cylinder, green (9), D 2.7, L 3.1, HD 1.1
 7. Faience, quadruple-segment cylinder, green (8), D 2.7, L 3.1, HD 1.1
 8. Faience, barrel, green (2), D 3.9, L 3.2, HD 1.7
 9. Faience, long barrel, reddish (1), D 1.9, L 3.2, HD 0.7
 10. Glass, drop pendant, flat on one side, light blue (3), W 5.9, Th 3.0, H 9.2, HD 0.7–1.2
- Bibliography: OINE VI, 130, 256–68, fig. 17s

328

Qustul VC 46–69a: Beads in shaft, uncertain location (29 burials in shaft, mostly mature or senile individuals of both sexes); OIM E21778

New Kingdom, Amenhotep II to post-Amarna period (and most likely Amenhotep III to Amarna period)

Faience, single- and multiple-segment, blue (41 segments),

D 2.5–3.6, L 0.9–1.7, HD 1.1

Bibliography: OINE VI, 130, 256–68



328

5mm



329

Qustul VC 46–70: Amulet, winged scarab in fill, just within chamber (11 burials in chamber, mostly mature or senile individuals of both sexes); OIM E21782

New Kingdom, Amenhotep III to post-Amarna period (and most likely Amenhotep III to Amarna period)

Faience, mold, winged scarab pendant, blue (1), W 20.6, Th 3.5, H 24.7, HD 1.3

Bibliography: OINE VI, 130, 256–68, fig. 17dd

329

10mm



330

Qustul VC 47—1a, b: Amulet, Taweret, beads probably from shaft (A—senile female); OIM E21631A–B

New Kingdom, post-Amarna period

OIM E21631A

1. Glass, Taweret amulet, blue (1), W 6.4, Th 2.7, H 15.7, HD 1.1

OIM E21631B

2. Faience, double-segment cylinder, blue (1), D 3.6, L 3.3, HD 1.3

3. Faience, triple-segment cylinder, light blue (1), D 3.1, L 6.3, HD 1.2

Bibliography: OINE VI, 130, 269

330.1–3

331

Qustul VC 48—23: Amulet, *wedjat*-eye, in shaft, level 7 (M—, N—juvenile, O—); OIM E21784

New Kingdom, Amenhotep III to post-Amarna period

Gold sheet, *wedjat*-eye amulet (1), Th 2.9, W 11.3, H 8.4, HD 0.9

Bibliography: OINE VI, 272–87, fig. 17z, pl. 49f



332

Qustul VC 48—27: Amulet *wedjat*-eye with goddess on back in shaft, level 7 (M—, N—juvenile, O—); OIM E21786

New Kingdom, Amenhotep III to post-Amarna period

Carnelian, drilled from both ends, *wedjat*-eye (1), W 11.0, Th 3.1, H 8.3, HD 1.2—double parallel

Bibliography: OINE VI, 272–87, fig. 17aa, pl. 49g





333

Qustul VC 48–117: Amulets, Taweret, uncertain location (shaft and chamber with mostly mature or senile individuals of both sexes); OIM E21754A–E

New Kingdom

OIM E21754A

1. Glass, Taweret amulet, blue (1—broken), W 4.2, H 11.2, Th 2.2

OIM E21754B

2. Glass, Taweret amulet, blue (1), W 4.4, H 12.2, Th 2.7, HD 1.1

OIM E21754C

3. Carnelian, Taweret amulet, red (1—broken loop), W 5.1, H 12.3, Th 2.3, HD 1.2

OIM E21754D

4. Carnelian, Taweret amulet, red (1), W 5.4, H 13.2, Th 2.1, HD 0.7

OIM E21754E

5. Carnelian, Bes amulet, red (1), W 4.8, Th 2.9, H 9.0

Bibliography: OINE VI, 272–90, fig. 17y, pl. 49e



334.1–5



5mm

334

Qustul VD 54–7: Necklace(?) of Hathor amulets, in tomb (senile female);

OIM E21647A–K

New Kingdom, Thutmose III or Amenhotep III to Amarna period

Faience, Hathor-head amulets with attached ring loops, blue or green glaze (11), W 5.7–8.3, H 11.7–16.0, Th 2.4–3.4, HD 1.4–2.6

Bibliography: OINE VI, 130, 292, fig. 17x, pl. 49h



334.6–11



5mm



335

Qustul VF 60—39: Beads, pendants, and amulets from various locations; OIM E21977
New Kingdom, Amenhotep II to post-Amarna period (and most likely Amenhotep III to
Amarna period)

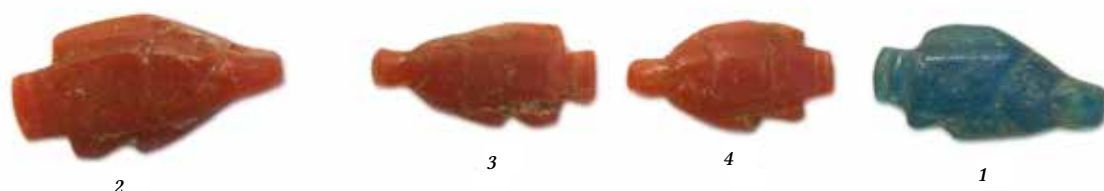
1. Diorite, teardrop pendant, black and white (1), Th 4.5, W 4.7, H 9.4, HD 1.6–2.0
2. Carnelian, Taweret amulet, flat on one side, red (1), W 2.6, Th 1.4, H 8.3, HD 0.5
3. Carnelian, amulet pendant, flat on one side, red (1), W 3.9, Th 2.3, H 8.7, HD 0.7
4. Carnelian, pendant, flat on one side, red (1), W 2.7, Th 2.2, H 7.0, HD 0.7
5. Faience, short cylinder, yellow (21), D 1.8, L 0.9–1.0, HD 0.9
6. Faience, double-segment cylinder, yellow (3), D 1.8, L 2.6, HD 0.9
7. Glass, fish amulet, light green (1), W 4.1, Th 2.0, H 6.7, HD 0.7–1.1
8. Glass, pomegranate pendant, dark blue (1), Th 2.1, H 5.2, HD 0.7–1.1
9. Glass, pomegranate pendant, blue (1), Th 2.1, H 5.8, HD 0.7–1.1
10. Glass, pomegranate pendant, light green (1), Th 2.1, H 5.8, HD 0.7–1.1

Bibliography: OINE VI, 130, 297–303

336*

Qustul VF 69—3: Beads in tomb, near chest (older infant and female), sample—*non vidi*
New Kingdom

Bibliography: OINE VI, 130, 307

337.1-4

5mm

337

Qustul VF 69-4: Amulets in tomb, near chest (older infant and female); OIM E21888A-D

New Kingdom

OIM E21888A

1. Glass, fish amulet, turquoise, translucent (1), W 4.7, Th 2.2, L 9.5, HD 0.9-1.6

OIM E21888B-D

2. Carnelian, drilled from one end, fish amulet, light red (1), W 5.6, Th 2.9, L 11.1, HD 0.8-1.3

3. Carnelian, drilled from one end, fish amulet, light red (1), W 4.2, Th 2.9, L 9.0, HD 0.8-1.2

4. Carnelian, drilled from one end, fish amulet, light red (1), W 4.6, Th 2.1, L 8.2, HD 0.6-0.9

Bibliography: OINE VI, 130, 307, pl. 49i



338

338

Qustul VF 69-5: Amulet in tomb, near chest (older infant or female); OIM E21892

New Kingdom

Carnelian, fish amulet, red (1), W 4.3, Th 2.3, L 8.0, HD 0.6-0.8

Bibliography: OINE VI, 130, 307, pl. 49j

5mm

339

Qustul VF 72B—38a—d: Beads in chamber B fill
(E—mature to senile female, F—senile female);
OIM E21999

New Kingdom, Thutmose III

1. Carnelian, drilled from one end, short barrel (1), D 3.3, L 2.4, HD 1.0; 1.3
2. Gold sheet, barrel (1), D 3.4, L 2.7, HD 1.4
3. Gold folded sheet, double long bicone spacer (2), D 3.1, W 6.2, L 6.6, HD 1.0
4. Faience, short cylinder, greenish (10), D 2.8, L 1.0–1.8, HD 0.8–0.9

Bibliography: OINE VI, 130, 311–17



340

Qustul VF 74—5a—b: Beads, shells, and amulet
around neck (older infant); OIM E21836A–D
New Kingdom, Thutmose III to post-Amarna
period (and most likely Amenhotep III to
Amarna period)

OIM E21836A

1. Glazed steatite, fly, light green (1), W 8.7, Th 5.1, L 15.9, HD 1.7

OIM E21836B

2. Glass, long barrel, opaque light blue (1), D 6.6 × 6.8, L 15.7, HD 2.2

OIM E21836C

3. *Nerita* sp. shell, perforation on the last whorl of the spire, white with black (1), W 10.2, Th 5.9, L 11.8, HD 3.0

OIM E21836D

4. *Nerita* sp. shell, spire perforated, white with black (1), W 9.3, Th 5.3, L 10.4, HD 3.0

Bibliography: OINE VI, 130, 321



341*

Qustul VF 74—4: Shells on string around pelvis
(older infant); OIM E21836—*non vidi*
New Kingdom, Thutmose III to post-Amarna
period (and most likely Amenhotep III to
Amarna period)

Bibliography: OINE VI, 130, 321





342

Qustul VF 76—19a–f: Beads and fragment of gold leaf from western chamber (5 disturbed skulls and other bones); OIM E22071A–B

New Kingdom, Amenhotep II to Thutmose IV (with possible extension)

OIM E22071A

1. Carnelian, drilled from one end, standard barrel, red (2), D 3.8, L 3.4; 4.0, HD 1.1; 1.8

2. Faience, disc cylinder, traces of bluish glaze (1), D 4.8, L 0.9, HD 1.4

3. Faience, standard cylinder, blue (1), D 8.0 × 8.4, L 7.8, HD 2.3

4. Faience, long cylinder, multiple-segment (double to octuple), blue/green (24), D 2.1–2.9, L 3.1–11.4, HD 1.0

5. Glass, wound, barrel, black(?) (1), D 3.7, L 3.9, HD 0.7

OIM E22071B

6. Glass, wound, spherical, blue (1—fragment), D ca. 7.4, L 6.3, HD 1.7

Bibliography: OINE VI, 130, 322–28



343

343

Qustul S 8-6: Amulet, under burial in west chamber (I-); OIM E21419 New Kingdom, Amenhotep III to Amarna period (with possible extension)

Stone, moon with crescent amulet, black (1), W 22.7, Th 4.6, H 21.5, HD 2.3

Bibliography: OINE VI, 130, 387-92



344



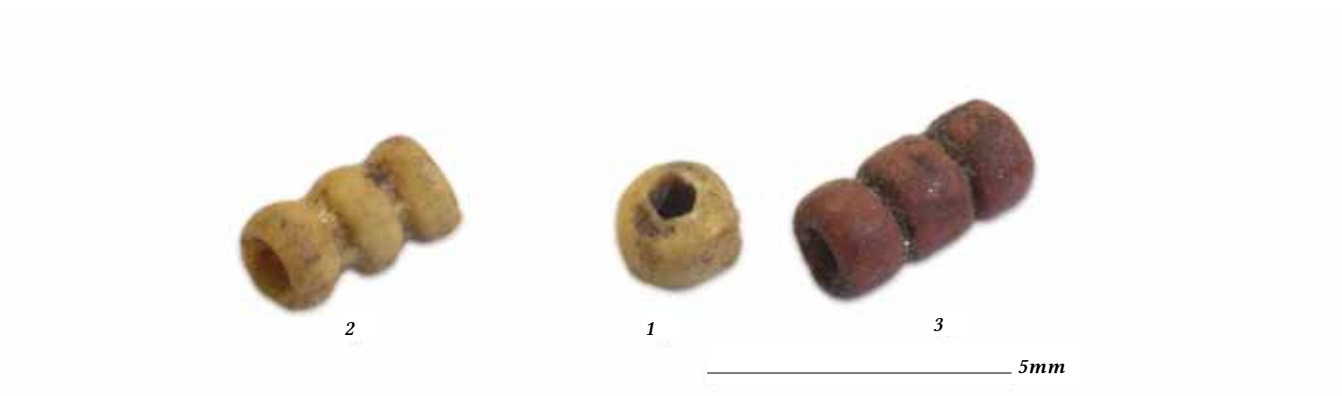
344

Qustul S 8-27, 32: Beads from shaft in chamber with burials A-P (A-C—mature individuals, D—juvenile, E/G—H—mature males, F—senile female, I-); OIM E21418A

New Kingdom, Amenhotep III to Amarna period (with possible extension)

Faience, disc cylinder, light green (467), D 4.1-5.3, L 1.4-1.8, HD 1.6

Bibliography: OINE VI, 130, 387-92



345

Qustul: OIM E42484A

New Kingdom

1. Faience, short cylinder, yellow (1), D 1.8, L 1.3, HD 0.7

2. Faience, triple-segment, yellow (1), D 1.7, L 3.0, HD 0.6

3. Faience, triple-segment, red (1), D 1.7, L 3.5, HD 0.8

4. Glass, eye pendant with loop, opaque yellow body, black-and-white stratified eye (1—broken), W 7.8, Th 4.7, H 11.4

Bibliography: —



1



2

346.1-2

5mm



347



5mm

346

Qustul: OIM E42487

New Kingdom(?) (written on label)

1. Faience, long barrel, green glaze (1), D 3.7, L 5.8, HD 1.2

2. Faience, quadruple-segment long cylinder, blue glaze (1), D 2.4, L 5.8, HD 1.0

Bibliography: —

347

Qustul: OIM E42488

New Kingdom(?) (written on label)

Ostrich eggshell, disc cylinder (1—broken), D 5.3, L 1.1, HD 1.3

Bibliography: —



348.1-4

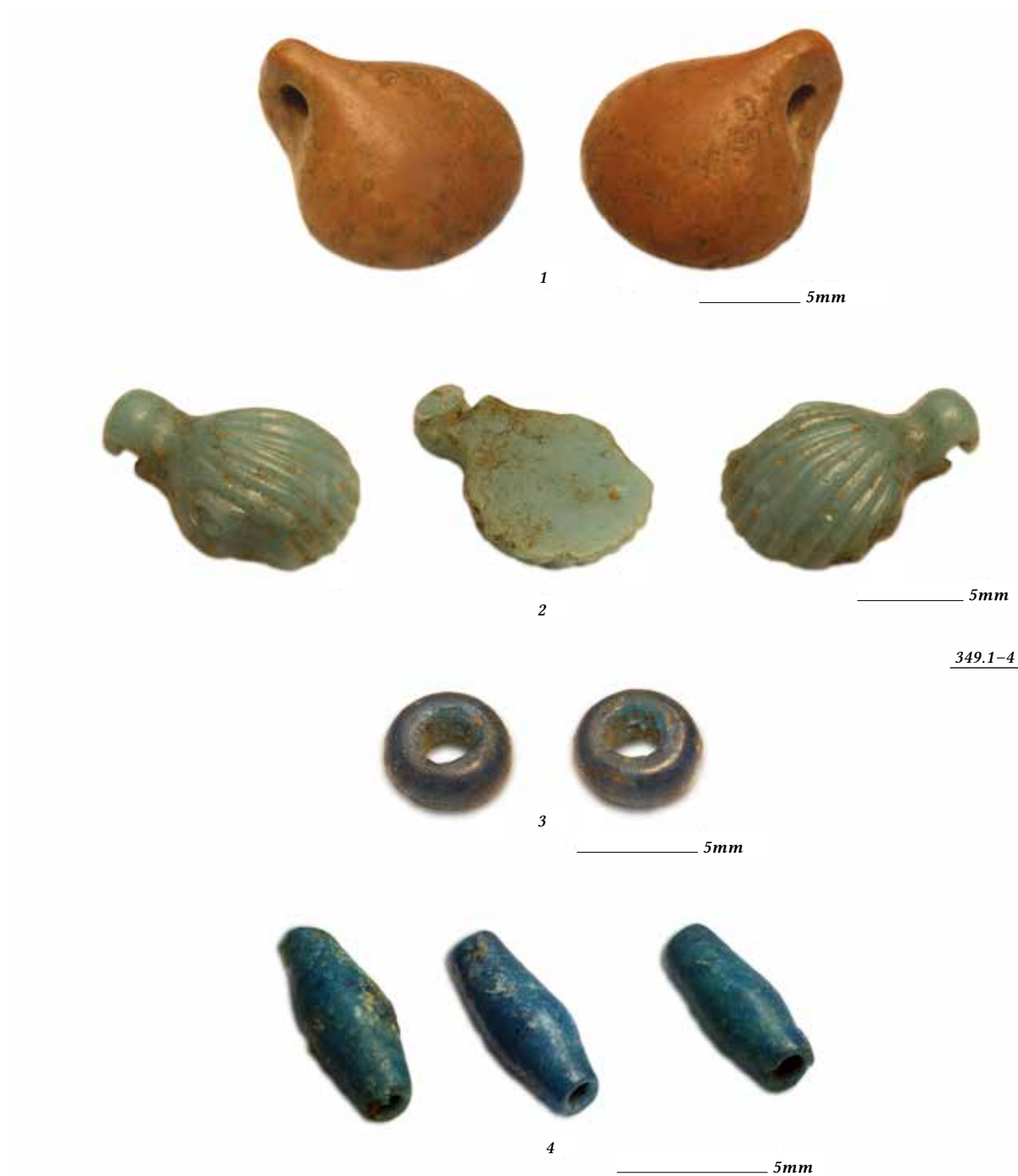


348

Adindan B 661 Surface: Beads, some beads on string fragments; OIM E23019
New Kingdom(?) (written on label)

1. Ostrich eggshell, disc cylinder (27), D 4.7-5.8, L 1.2-2.1, HD 1.2
2. Ostrich eggshell, disc cylinder (35), D 2.5-3.0, L 0.5-1.2, HD 0.8-1.4
3. Faience(?), short cylinder, greenish (3), D 2.8-3.1, L 1.4-2.7, HD 0.9
4. Seed/fruit, oblate, blackish (8), D 2.8-4.0, L 2.3-3.0, HD 1.1

Bibliography: —



349

Adindan K 31—17a—b: Beads, amulets, and shell, from uncertain location; OIM E23060
New Kingdom, Thutmose III

1. Glass, rod formed, tear-shaped pendant, flat on one side, opaque orange (1), Th 6.1, W 11.6, H 13.4, HD 1.3
2. Glass, shell pendant, flat on one side, light blue (1—broken loop), Th 3.7, W 8.6, H 12.5, HD 0.6
3. Glass, drawn, folded and cut, short oblate, translucent blue (1), D 6.5, L 3.1, HD 2.9
4. Faience, spindle-like, turquoise (5), D 2.7–2.9, L 6.4–7.6, HD 0.8

Bibliography: OINE VI, 130, 369, fig. 17mm



350

Serra East A 18–25a–d: Beads from chamber A (no bodies recorded); OIM E24525

Early New Kingdom

1. Stone, carnelian, long truncated bicone, red (3), D 1.7, L 1.5, HD 0.7

2. Faience, standard cylinder, light green (1), D 6.2, L 6.1, HD 2.0

3. Faience, short cylinder, light green (1), D 7.5, L 3.0, HD 2.0

4. Faience, short bicone, light green (1), D 7.5, L 3.5, HD 1.9

5. Faience, long cylinder, light green (1), D 6.7, L 10.0, HD 2.2

Bibliography: OINE X, 158, 190



351

Serra East A 25–4 (Quarry Dump II): Beads near hand and head, some strung (juvenile); OIM E24797

New Kingdom

1. Ostrich eggshell, disc ring, whitish (4), D 2.9–4.3, L 1.1–1.5, HD 1.2

2. Faience core, long barrel, whitish/gray (1), D 6.4, L 9.7, HD 0.8

3. Faience, short and standard barrel, dark red (63), D 2.9–3.9, L 2.5–3.6, HD 0.8

4. Faience, short and standard barrel, black (2), D 3.8; 5.3, L 3.2; 4.4, HD 0.9

5. Vitreous material, short and standard cylinder, light green/blue (3), D 3.0, L 1.6–2.5, HD 0.9

6. Vitreous material, disc, short and standard cylinder, light green/blue, dark red, black (119), D 2.4–3.3, L 1.2–2.4, HD 0.7

Bibliography: OINE X, 158, 194



352



354

5mm

352

Serra East G 5—6: Shells from burial (A—adult male, B—adult to mature female? C—child); OIM E24480
New Kingdom

Nerita sp. shells, perforation on the spire, whitish (2), H 7.4, W 11.2, L 12.6, HD 1.6 × 2.5

Bibliography: OINE X, 158, 207

353*

Serra East G 11—2: Faience bead from burial (scattered bones), discarded—*non vidi*
New Kingdom

Bibliography: OINE X, 158, 212–13

354

Serra East G 12—15b, c(?): Pendant and bead, uncertain location (7 bodies of diversely aged individuals); OIM E24491A–B

New Kingdom

OIM E24491A

1. Diorite scorpion, black and white (1), Th 2.5 × 2.7, L 11.2, HD 0.7

OIM E24491B

2. Faience, elongated bicone, green (1), D 4.7, L 11.0, HD 1.3–1.6—*not illustrated*

Bibliography: OINE X, 158, 213–15

355*

Serra East G 14—5: Bone bead from uncertain location, sample—*non vidi*

New Kingdom

Bone(?)

Bibliography: OINE X, 158, 217–18



356

Serra East, 1S—205: Beads from uncertain location; OIM E19798

New Kingdom

1. Faience, disc cylinder, turquoise (116), D 3.0–3.8, Th 1.0–1.3, HD 0.6–1.0

2. Faience, disc cylinder, white (3), D 2.7–3.0, Th 1.1, HD 1.1

3. Faience, disc cylinder, red (5), D 3.8–4.5, Th 1.2, HD 1.1

Bibliography: —



1



2

357.1-2

10mm

357

Serra East, 1S—206: Beads from uncertain location;

OIM E19799A, C

New Kingdom

OIM E19799A

1. Faience, disc bicone, blue (1), D 21.0, L 3.76, HD 1.6

OIM E19799C

2. Faience, disc bicone, blue (1), D 13.7, L 4.0, HD 2.3

Bibliography: —

358

Serra East, 1S—599: Bead from uncertain location;

OIM E24811

New Kingdom

Faience, disc, blue (1), D 20.7, Th 3.9, HD 1.4

Bibliography: —



358

10mm



359

359

Serra East, 2S—45: OIM E24466

New Kingdom

Clay, star with five arms (1)

Bibliography: —

5

Synoptic and Concordance Tables

Table 12A. A-Group (1-9, 11-14, 16-26)



Table 12B. A-Group (27–31, 32[^], 34[^]–35[^], 37[^]–39[^], 41, 43–44), Post-A-Group (40, 45–49), C-Group (50–59)












				
27.1-10 OIM E23863	34 [^] OIM E19747	41 OIM E30359	48 OIM E23384	54 OIM E21516
				
28 OIM E23859	35 [^] OIM E19758	43 OIM E30561	49 OIM E23383	55 OIM E21514
				
29.1-6 OIM E21834	37 [^] OIM E35624	44 OIM E30362	50 OIM E21428	56 OIM E21534
				
30 OIM E21886	38 [^] OIM E19770	45 OIM E23380	51 OIM E21568B	57 OIM E21532
				
31 OIM E21887	39 [^] OIM E19776	46 OIM E23381	52 OIM E21535	58 OIM E21518
				
32 [^] OIM E19741	40 OIM E30363	47 OIM E23382	53 OIM E21536	59 OIM E21509a

Table 12C. C-Group (60–71, 73–78, 80–91)



Table 12D. C-Group (93–122)

 <p>93 OIM E30140</p>	 <p>99 OIM E30162A-D</p>	 <p>105 OIM E23370</p>	 <p>111* OIM E23296B</p>	 <p>117 OIM E23392</p>
 <p>94 OIM E23356</p>	 <p>100 OIM E30164</p>	 <p>106 OIM E30168</p>	 <p>112 OIM E23388</p>	 <p>118 OIM E23398</p>
 <p>95 OIM E30154</p>	 <p>101 OIM E30163</p>	 <p>107 OIM E23373</p>	 <p>113 OIM E30177</p>	 <p>119 OIM E23543</p>
 <p>96 OIM E23297</p>	 <p>102 OIM E23372</p>	 <p>108 OIM E23391</p>	 <p>114 OIM E23390</p>	 <p>120 OIM E30183</p>
 <p>97 OIM E23375</p>	 <p>103 OIM E30166</p>	 <p>109 OIM E23400</p>	 <p>115 OIM E23389</p>	 <p>121 OIM E23419</p>
 <p>98 OIM E23368</p>	 <p>104 OIM E23376</p>	 <p>110 OIM E23362</p>	 <p>116 OIM E30179</p>	 <p>122 OIM E23399</p>

Table 12E. C-Group (123–142, 144–154)



Table 12F. C-Group (155–184)

 <p>155 OIM E22982</p>	 <p>161 OIM E23071</p>	 <p>167 OIM E23145</p>	 <p>173 OIM E23155</p>	 <p>179 OIM E21519</p>
 <p>156 OIM E23069</p>	 <p>162 OIM E23067</p>	 <p>168 OIM E23153</p>	 <p>174H OIM E23157</p>	 <p>180 OIM E21537</p>
 <p>157 OIM E23147</p>	 <p>163 OIM E23070</p>	 <p>169 OIM E23076</p>	 <p>175H OIM E20274</p>	 <p>181 OIM E21539A</p>
 <p>158 OIM E20259</p>	 <p>164 OIM E23065</p>	 <p>170 OIM E23144</p>	 <p>176 OIM E23228</p>	 <p>182 OIM E21539B</p>
 <p>159 OIM E23073</p>	 <p>165 OIM E23066</p>	 <p>171 OIM E23150</p>	 <p>177 OIM E21512A-F</p>	 <p>183 OIM E21533</p>
 <p>160 OIM E23072</p>	 <p>166 OIM E23075</p>	 <p>172 OIM E23149</p>	 <p>178 OIM E21515</p>	 <p>184 OIM E19644</p>

Table 12G. C-Group (185–206, 208–215)



Table 12H. C-Group (217–229), N-Type (230–235, 237–238, 240–248)



Table 12I. N-Type (249, 251–254), P-Type (256–265), Pan Grave (266–275, 277–279, 282–283)

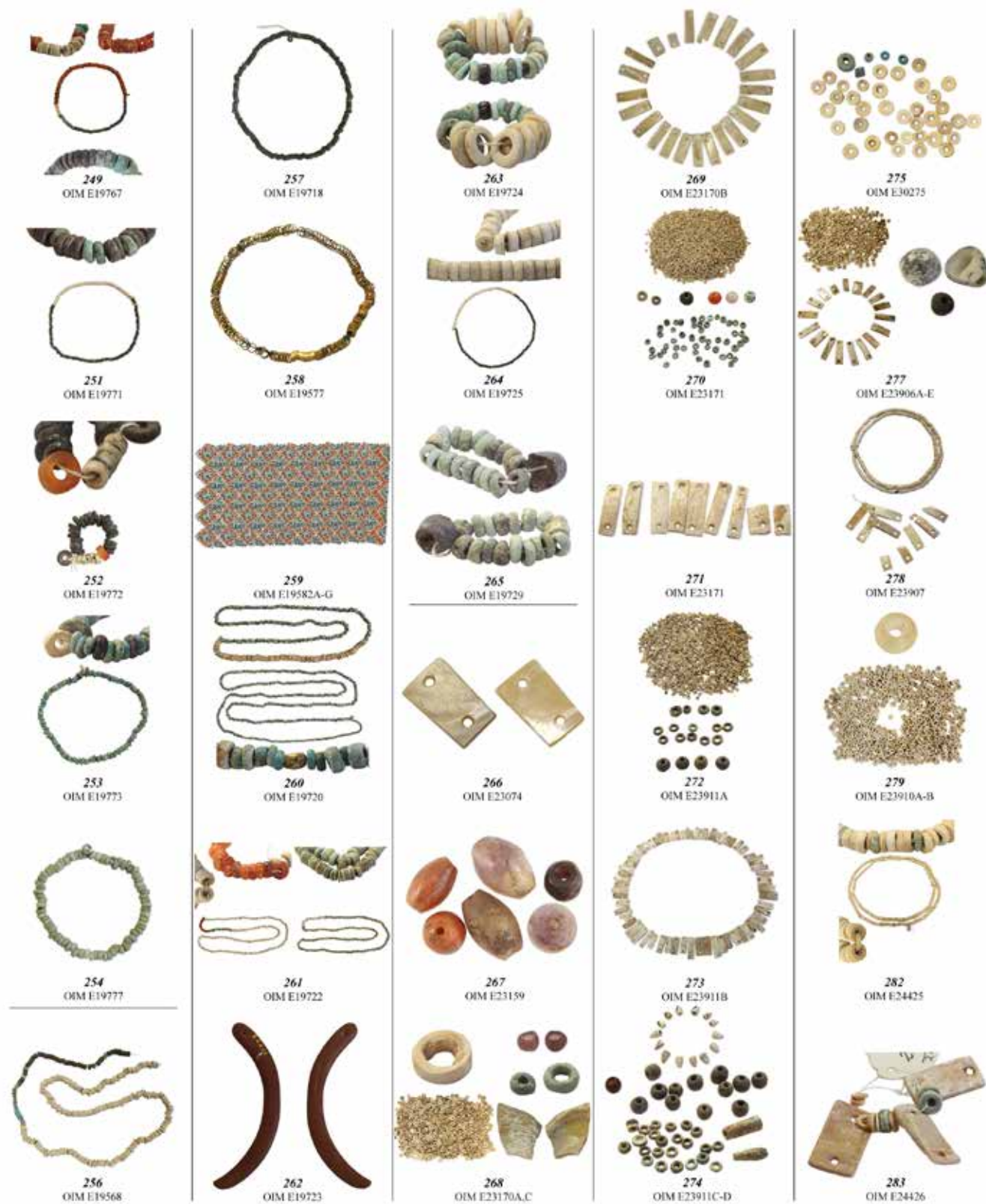


Table 12J. Pan Grave (284, 286–293), Kerma (294), Middle Kingdom (295–296), New Kingdom (297–313, 315)



Table 12K. New Kingdom (316–322, 324–335, 337–340, 342–348)



Table 12L. New Kingdom (349–352, 354, 356–359)



Table 13. Concordance of the OIM, catalog, and OINE find numbers
 (* = *non vidi*; # = C-Group or Pan Grave; ^ = A-Group or possibly C-Group)

OIM number	Catalog number	OINE find number
E19568	256	P-B 69—1
E19571	187	B 7—6
E19573A-C	234	N-B 70—4
E19577	258	P-B 73—1
E19582A-G	259	P-B 73—4
E19644	184	B 2—4
E19646	185	B 3—5
E19649	186	B 5—4
E19650	186	B 5—4
E19651	188	B 8—3
E19656	189	B 9—6
E19662	190	B 10—6
E19663	191	B 11—5
E19667	192	B 12—7
E19669	193	B 17—3
E19672	194	B 19—4
E19673	195	B 22—3
E19674	196	B 29—3
E19675	197	B 30—3
E19677	198	B 31—2a-b
E19679	199	B 32—3
E19680	200	B 36—2
E19681	201	B 37—5
E19683	230	N-B 40—1
E19685	202	B 41—1
E19687	203	B 42—6
E19688	204	B 43—1
E19689A, C	205	B 43—2, 7
E19691	206	B 44—3
E19692	208	B 46—1
E19693	209	B 47—2
E19695	210	B 48—1
E19697	211	B 49—6b, 8
E19698	212	B 49—7

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E19701	213	B 51—4
E19702	214	B 52—1
E19703	215	B 53—3
E19704	217	B 55—2
E19706	218	B 56b—2
E19708	219	B 59—2
E19709	220	B 60—1
E19710	231	N-B 61—2
E19711	221	B 62—1
E19712	222	B 63—1
E19713	232	N-B 65—1
E19714	233	N-B 66—1
E19718	257	P-B 72—2
E19720	260	P-B 74—2, 3
E19722	261	P-B 75—4
E19723	262	P-B 76—2
E19724	263	P-B 76—3
E19725	264	P-B 78—2
E19729	265	P-B 80—2
E19734	223	B 81—3
E19735	235	N-B 84—1
E19739	237	N-B 86—5
E19740A	224	B 87—2, 3
E19741	32 [^]	B 88—1
E19742	238	N-B 91—1
E19747	34 [^]	B 100A—5
E19748	240	N-B 100B—1
E19751	241	N-B 103C—4
E19752	242	N-B 104—1
E19755	243	N-B 106—1
E19756	244	N-B 107—8
E19758	35 [^]	B 107B—10
E19760	245	N-B 109—2
E19764	246	N-B 115—1

(continued)

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E19765	247	N-B 115—2
E19766	248	N-B 118—1
E19767	249	N-B 119—1
E19770	38 [^]	B 123—2
E19771	251	N-B 125—1
E19772	252	N-B 126—1
E19773	253	N-B 127—1
E19776	39 [^]	B 128A—5
E19777	254	N-B 129—1
E19798	356	
E19799A, C	357	
E20666	297	R 4B—13a—j
E20890	313	R 41—3a—b
E20893	300	R 32—11a—c
E20898	298	R 19—4a—g
E20913	299	R 20—44a—c
E21190A—B	304	R 35—15a—b
E21192	306	R 35—19
E21195	305	R 35—18a—h
E21196	310	R 35—100a—g
E21198	307	R 35—33
E21227	309	R 35—45
E21265	316	R 45—14a—b
E21293	308	R 35—34a—m
E21296A—F	303	R 35—13
E21297A—B	301	R 35—4
E21310	315	R 45—12a—d
E21324	302	R 35—5
E21327C	317	R 45—31a, c
E21354	318	R 45—44a—b
E21364	311	R 40—13
E21365	312	R 40—48a—b
E21380	23.1—2	S 1—1
E21418A	344	S 8—27, 32

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E21419	343	S 8–6
E21428	50	T 3–3a–c
E21509a	59	T 12B–2
E21512A–F	177	U 1–5a–b, 10
E21514	55	T 8–3a–b
E21515	178	U 2–6
E21516	54	T 8–2
E21518	58	T 12B–1a–c
E21519	179	U 2–8a–b
E21532	57	T 11–1a–g
E21533	183	U 4–2a–b
E21534	56	T 10–1a–b
E21535	52	T 5–3
E21536	53	T 8–1a–b, 5a–b
E21537A–C	180	U 2–9
E21539A	181	U 3–4a–b
E21539B	182	U 3–4a–b
E21568B	51	T 4B–6a–b
E21631A–B	330	VC 47–1a–b
E21633	326	VC 45–5a–k
E21647	334	VD 54–7
E21754A–E	333	VC 48–117
E21778	328	VC 46–69a
E21782	329	VC 46–70
E21783	327	VC 46–66a–c
E21784	331	VC 48–23
E21786	332	VC 48–27
E21834	29.1–6	V 59
E21836A–D	340	VF 74–5a–b
E21886	30	V 67–1
E21887	31	V 67–5
E21888A–D	337	VF 69–4
E21892	338	VF 69–5
E21977	335	VF 60–39a

(continued)

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E21999	339	VF 72B—38a–d
E22071A–B	342	VF 76—19a–f
E22982	155	K 26
E23019	348	K surface
E23060	349	K 31—17a–b
E23062	78	T 76
E23065	164	K 47—1a–b
E23066	165	K 49—1
E23067	162	K 44—3
E23068	154	K 25—3a–b
E23069	156	K 28—1a–b
E23070	163	K 45
E23071	161	K 43B—4a–b
E23072	160	K 41—4
E23073	159	K 40—2
E23074	266	K 51—1
E23075	166	K 56—4
E23076	169	K 66
E23144	170	K 69—2a–b
E23145	167	K 62
E23147	157	K 32—8
E23149	172	K 76—2
E23150	171	K 75—1
E23153	168	K 63—7a–g
E23155	173	K 78
E23157	174#	K 89—1a–c
E23159	267	K 74—3a–d
E23170A, C	268	K 93—1a–d
E23170B	269	K 93—2
E23171	270	K 94—7a–c
E23171	271	K 94—8
E23200	68	T 54—1
E23201	69	T 55—1a–c
E23203	70	T 56—1

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E23204	74#	T 66—1
E23206	73	T 65—1
E23207	71	T 60—1a—c
E23227	76	T 71—1
E23228	77	T 72—4a—b , 6
E23228	176	K Surface
E23231A—B	83	T 93—3
E23233	84	T 98—2a—b
E23234	88	T 107—4a—c
E23276	92*	T 122—3
E23285	91	T 121—1a—b
E23288	90	T 117
E23291	86	T 104—5a—b
E23292A—B	85	T 101—6a—b
E23293	89	T 115—1a—e
E23295	89	T 115—1a—e
E23296B	111#	T 177—2
E23297	96	T 136—1
E23300	61	T 33—1
E23302A, C	60	T 32—2
E23305A—D	65	T 46—1b—d
E23356	94	T 134—6a—c, 7
E23357	66	T 46—3a—b
E23359	63	T 40—7
E23360	62	T 39—5
E23362	110	T 176—1
E23368	98	T 147—4a—c
E23370	105	T 163—1
E23372	102	T 154—2a—d
E23373	107	T 166—4a—f
E23375	97	T 141—2a—d
E23376	104	T 160—2a—b
E23380	45	T 155—1a—c
E23381	46	T 155—11a—e

(continued)

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E23382	47	T 155—12a-b
E23383	49	T 155—14a-b
E23384	48	T 155—13a
E23388	112	T 182A—2a-b
E23389	115	T 187—1
E23390	114	T 184—1
E23391	108	T 169—2
E23392	117	T 194—1a-d
E23398	118	T 195—2a-c
E23399	122	T 213—3a-b
E23400	109	T 171—3
E23401	123	T 214—3a-c
E23402	125	T 217—3a-c
E23403A-C	126	T 221—1a-c
E23405	128	T 224—2a-b
E23406A-C	129	T 225—2a-c
E23409	132	T 236
E23412	136	T 249—1
E23414	127	T 223—4a-b
E23416	131	T 234—3a-d
E23417	134	T 239—5a-b
E23418	133	T 239—4a-b
E23419	121.1-4	T 205—7a-d
E23420	121.5	T 205—7a-d
E23421	137	T 253—1a-b
E23422	320	R 75—9a-b
E23424	322	R 85—2a-c
E23501	25.1-4	W 19—9
E23505	319	R 75—8a-b or R 75—18
E23520A-B	325	R 94—26
E23528	324	R 94—13a-g
E23533	145	T 271—1
E23537A	141	T 263—6b
E23537B	139	T 263—2

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E23537B	140	T 263–2, 3
E23537B	142	T 263–7
E23543	119	T 195–4a–b
E23548B–C, E	4	L 8–3a–b
E23650A–B	3	L 5–5
E23663	9.1	L 17–10, 11a
E23663A–B	9.2–6	L 17–10, 11a
E23663C–D	9.7–15	L 17–10, 11a
E23664	7	L 15–25
E23672B	8	L 17–2
E23718	11.1–4	L 17–14g, 28
E23718A	11.16	L 17–14g, 28
E23718A–B	11.5–15	L 17–14g, 28
E23718E	11.17–19	L 17–14g, 28
E23720	5	L 11–8a–b, 11a–f
E23730A–B	18.1–12	L 24–8a–k, 20, 29
E23730C–D, O–P, S–T	18.13–29	L 24–8a–k, 20, 29
E23731	20	L 24–50
E23859	28	W 29–1
E23860	26.1–2	W 20–1
E23863	27.1–10	W 22
E23867	24	W 11–23
E23900	146	T 277–1
E23901	148	T 280–1a–d
E23902	151	T 288–1a–b
E23903	152	T 289–2a–b
E23905A	153	T 294–1a–c
E23906A–E	277	K 98–1a–b, 2, 4
E23907	278	K 99–1a–b
E23910A–B	279	K 100
E23911A	272	K 95–1a–e
E23911B	273	K 95–2
E23911C–D	274	K 95
E24145B	135	T 246–4

(continued)

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E24154	138	T 255—1a
E24155A-P	11.20-24	L 17—14g, 28
E24425	282	C 1—1a-c
E24426	283	C 2—1, 2
E24430	284	C 3—5
E24433	286	C 4—1a-b
E24438	287	C 5—1a-c
E24440	288	C 6—2a-b
E24448	289	D 1—1
E24449	293	F 3—1a-b
E24450	290	F 1—1
E24451	291	F 1—2a-e
E24453	292	F 2—1a-f
E24466	359	
E24480	352	G 5—6
E24491A-B	354	G 12—15b, c?
E24525	350	A 18—25a-d
E24772	295	2S—527
E24797	351	A 25—4
E24808	296	2S—589
E24811	358	
E24866	2	L 2—11
E30088	64	T 43—1
E30096	67	T 52—2a-c
E30096	72*	T 61—2
E30100	75	T 68—3, 5
E30111	80	T 84—4a-c
E30114	81	T 88—4
E30118	82	T 89—3a-c
E30132	87	T 106—5
E30140	93	T 131—3
E30154	95	T 135—2
E30162A-D	99	T 148—2
E30163	101	T 151—1

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E30164	100	T 150—1
E30166	103	T 156—1a-b
E30168	106	T 165—2
E30177	113	T 183—1
E30179	116	T 192—1
E30183	120	T 201—1a-b
E30191?	79*	T 84—2
E30199	124	T 215—2
E30213A-C	130#	T 229—1-3
E30233	138	T 255—1a
E30241	141	T 263—6b
E30243	144	T 268—4
E30251	147	T 279—1b
E30252	149	T 281—1
E30253	150	T 285—1
E30259	158	K 34—5
E30273	294	K 88—3a-d
E30274	175#	K 91—3
E30275	275	K 96—1a-c
E30359	41	T 75—2
E30361	43	T 243—1
E30362	44	T 247—1a-c
E30363	40	T 35—3
E30431C	22	L 33—1, 4
E30433	17	L 23—31a-c
E31188	6	L 13—3
E31205	13	L 19—19a-c
E31360	16.1-9	L 22—16a-g
E31550A-E	19.1-13	L 24—20
E31560	21.1-2	L 29?
E31564	12	L 19—11
E31565A, D, E	14.1-5	?
E35624	37^	B 108—3
E35651	225	

(continued)

Table 13. Concordance of the OIM, catalog, and OINE find numbers (*continued*)

OIM number	Catalog number	OINE find number
E35659	226	
E35660	227	
E35661	228	
E35664	229	
E42484A	345	
E42486	321	R 84—9a
E42487	346	
E42488	347	
E44499	1.1	L 1—11a—d
E44500	1.2—5	L 1—11a—d
	10*	L 17—11b
	15*	L 22—3
	33 [^] *	B 94—1
	36 [^] *	B 107B—11
	42*	T 113—4
	143*	T 263—4
	207*	B 45—5
	216*	B 54—1
	236*	N-B 85—1
	239*	N-B 93—1
	250*	N-B 122—2
	255*	N-B 130—1
	276*	K 97—1
	280*	K 101
	281*	K Surface—4a—f
	285*	C 3—8a—b
	314*	R 45—3a
	323*	R 94—12
	336*	VF 69—3
	341*	VF 74—4
	353*	G 11—2
	355*	G 14—5

Table 14. Concordance of the catalog, OIM, and OINE find numbers
 (* = *non vidi*; # = C-Group or Pan Grave; ^ = A-Group or possibly C-Group)

Catalog no.	OIM no.	OINE find no.
1.1	E44499	L 1–11a–d
1.2–5	E44500	L 1–11a–d
2	E24866	L 2–11
3	E23650A–B	L 5–5
4	E23548B–C, E	L 8–3a–b
5	E23720	L 11–8a–b, 11a–f
6	E31188	L 13–3
7	E23664	L 15–25
8	E23672B	L 17–2
9.1	E23663	L 17–10, 11a
9.2–6	E23663A–B	L 17–10, 11a
9.7–15	E23663C–D	L 17–10, 11a
10*		L 17–11B
11.1–4	E23718	L 17–14g, 28
11.5–15	E23718A–B	L 17–14g, 28
11.16	E23718A	L 17–14g, 28
11.17–19	E23718E	L 17–14g, 28
11.20–24	E24155A–P	L 17–14g, 28
12	E31564	L 19–11
13	E31205	L 19–19a–c
14.1–5	E31565A, D, E	
15*		L 22–3
16.1–9	E31360	L 22–16a–g
17	E30433	L 23–31a–c
18.1–12	E23730A–B	L 24–8a–k, 20, 29
18.13–29	E23730C–D, O–P, S–T	L 24–8a–k, 20, 29
19.1–13	E31550A–E	L 24–20
20	E23731	L 24–50
21.1–2	E31560	L 29?
22	E30431C	L 33–1, 4
23.1–2	E21380	S 1–1
24	E23867	W 11–23
25.1–4	E23501	W 19–9
26.1–2	E23860	W 20–1

(continued)

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
27.1–10	E23863	W 22
28	E23859	W 29–1
29.1–6	E21834	V 59
30	E21886	V 67–1
31	E21887	V 67–5
32 [^]	E19741	B 88–1
33 ^{^*}		B 94–1
34 [^]	E19747	B 100A–5
35 [^]	E19758	B 107B–10
36 ^{^*}		B 107B–11
37 [^]	E35624	B 108–3
38 [^]	E19770	B 123–2
39 [^]	E19776	B 128A–5
40	E30363	T 35–3
41	E30359	T 75–2
42 [*]		T 113–4
43	E30361	T 243–1
44	E30362	T 247–1a–c
45	E23380	T 155–1a–c
46	E23381	T 155–11a–e
47	E23382	T 155–12a–b
48	E23384	T 155–13a
49	E23383	T 155–14a–b
50	E21428	T 3–3a–c
51	E21568B	T 4B–6a–b
52	E21535	T 5–3
53	E21536	T 8–1a–b, 5a–b
54	E21516	T 8–2
55	E21514	T 8–3a–b
56	E21534	T 10–1a–b
57	E21532	T 11–1a–g
58	E21518	T 12B–1a–c
59	E21509a	T 12B–2
60	E23302A, C	T 32–2

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
61	E23300	T 33—1
62	E23360	T 39—5
63	E23359	T 40—7
64	E30088	T 43—1
65	E23305A-D	T 46—1b-d
66	E23357	T 46—3a-b
67	E30096	T 52—2a-c
68	E23200	T 54—1
69	E23201	T 55—1a-c
70	E23203	T 56—1
71	E23207	T 60—1a-c
72	E30096	T 61—2
73	E23206	T 65—1
74#	E23204	T 66—1
75	E30100	T 68—3, 5
76	E23227	T 71—1
77	E23228	T 72—4a-b, 6
78	E23062	T 76
79	E30191?	T 84—2
80	E30111	T 84—4a-c
81	E30114	T 88—4
82	E30118	T 89—3a-c
83	E23231A-B	T 93—3
84	E23233	T 98—2a-b
85	E23292A-B	T 101—6a-b
86	E23291	T 104—5a-b
87	E30132	T 106—5
88	E23234	T 107—4a-c
89	E23293	T 115—1a-e
89	E23295	T 115—1a-e
90	E23288	T 117
91	E23285	T 121—1a-b
92*	E23276	T 122—3
93	E30140	T 131—3

(continued)

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
94	E23356	T 134—6a—c, 7
95	E30154	T 135—2
96	E23297	T 136—1
97	E23375	T 141—2a—d
98	E23368	T 147—4a—c
99	E30162A—D	T 148—2
100	E30164	T 150—1
101	E30163	T 151—1
102	E23372	T 154—2a—d
103	E30166	T 156—1a—b
104	E23376	T 160—2a—b
105	E23370	T 163—1
106	E30168	T 165—2
107	E23373	T 166—4a—f
108	E23391	T 169—2
109	E23400	T 171—3
110	E23362	T 176—1
111#	E23296B	T 177—2
112	E23388	T 182A—2a—b
113	E30177	T 183—1
114	E23390	T 184—1
115	E23389	T 187—1
116	E30179	T 192—1
117	E23392	T 194—1a—d
118	E23398	T 195—2a—c
119	E23543	T 195—4a—b
120	E30183	T 201—1a—b
121.1—4	E23419	T 205—7a—d
121.5	E23420	T 205—7a—d
122	E23399	T 213—3a—b
123	E23401	T 214—3a—c
124	E30199	T 215—2
125	E23402	T 217—3a—c
126	E23403A—C	T 221—1a—c

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
127	E23414	T 223–4a–b
128	E23405	T 224–2a–b
129	E23406A–C	T 225–2a–c
130#	E30213A–C	T 229–1–3
131	E23416	T 234–3a–d
132	E23409	T 236
133	E23418	T 239–4a–b
134	E23417	T 239–5a–b
135	E24145B	T 246–4
136	E23412	T 249–1
137	E23421	T 253–1a–b
138	E24154	T 255–1a
138	E30233	T 255–1a
139	E23537B	T 263–2
140	E23537B	T 263–2, 3
141	E23537A	T 263–6b
141	E30241	T 263–6b
142	E23537B	T 263–7
143*		T 263–4
144	E30243	T 268–4
145	E23533	T 271–1
146	E23900	T 277–1
147	E30251	T 279–1b
148	E23901	T 280–1a–d
149	E30252	T 281–1
150	E30253	T 285–1
151	E23902	T 288–1a–b
152	E23903	T 289–2a–b
153	E23905A	T 294–1a–c
154	E23068	K 25–3a–b
155	E22982	K 26
156	E23069	K 28–1a–b
157	E23147	K 32–8
158	E30259	K 34–5

(continued)

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
159	E23073	K 40—2
160	E23072	K 41—4
161	E23071	K 43B—4a—b
162	E23067	K 44—3
163	E23070	K 45
164	E23065	K 47—1a—b
165	E23066	K 49—1
166	E23075	K 56—4
167	E23145	K 62
168	E23153	K 63—7a—g
169	E23076	K 66
170	E23144	K 69—2a—b
171	E23150	K 75—1
172	E23149	K 76—2
173	E23155	K 78
174#	E23157	K 89—1a—c
175#	E30274	K 91—3
176	E23228	K Surface
177	E21512A—F	U 1—5a—b, 10
178	E21515	U 2—6
179	E21519	U 2—8a—b
180	E21537A—C	U 2—9
181	E21539A	U 3—4a—b
182	E21539B	U 3—4a—b
183	E21533	U 4—2a—b
184	E19644	B 2—4
185	E19646	B 3—5
186	E19649	B 5—4
186	E19650	B 5—4
187	E19571	B 7—6
188	E19651	B 8—3
189	E19656	B 9—6
190	E19662	B 10—6
191	E19663	B 11—5

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
192	E19667	B 12—7
193	E19669	B 17—3
194	E19672	B 19—4
195	E19673	B 22—3
196	E19674	B 29—3
197	E19675	B 30—3
198	E19677	B 31—2a—b
199	E19679	B 32—3
200	E19680	B 36—2
201	E19681	B 37—5
202	E19685	B 41—1
203	E19687	B 42—6
204	E19688	B 43—1
205	E19689A—B	B 43—2, 7
206	E19691	B 44—3
207*		B 45—5
208	E19692	B 46—1
209	E19693	B 47—2
210	E19695	B 48—1
211	E19697	B 49—6b, 8
212	E19698	B 49—7
213	E19701	B 51—4
214	E19702	B 52—1
215	E19703	B 53—3
216*		B 54—1
217	E19704	B 55—2
218	E19706	B 56B—2
219	E19708	B 59—2
220	E19709	B 60—1
221	E19711	B 62—1
222	E19712	B 63—1
223	E19734	B 81—3
224	E19740A	B 87—2, 3
225	E35651	

(continued)

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
226	E35659	
227	E35660	
228	E35661	
229	E35664	
230	E19683	N-B 40—1
231	E19710	N-B 61—2
232	E19713	N-B 65—1
233	E19714	N-B 66—1
234	E19573A—C	N-B 70—4
235	E19735	N-B 84—1
236*		N-B 85—1
237	E19739	N-B 86—5
238	E19742	N-B 91—1
239*		N-B 93—1
240	E19748	N-B 100B—1
241	E19751	N-B 103C—4
242	E19752	N-B 104—1
243	E19755	N-B 106—1
244	E19756	N-B 107—8
245	E19760	N-B 109—2
246	E19764	N-B 115—1
247	E19765	N-B 115—2
248	E19766	N-B 118—1
249	E19767	N-B 119—1
250*		N-B 122—2
251	E19771	N-B 125—1
252	E19772	N-B 126—1
253	E19773	N-B 127—1
254	E19777	N-B 129—1
255*		N-B 130—1
256	E19568	P-B 69—1
257	E19718	P-B 72—2
258	E19577	P-B 73—1
259	E19582A—G	P-B 73—4

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
260	E19720	P-B 74—2, 3
261	E19722	P-B 75—4
262	E19723	P-B 76—2
263	E19724	P-B 76—3
264	E19725	P-B 78—2
265	E19729	P-B 80—2
266	E23074	K 51—1
267	E23159	K 74—3a—d
268	E23170A, C	K 93—1a—d
269	E23170B	K 93—2
270	E23171	K 94—7a—c
271	E23171	K 94—8
272	E23911A	K 95—1a—e
273	E23911B	K 95—2
274	E23911C—D	K 95
275	E30275	K 96—1a—c
276*		K 97—1
277	E23906A—E	K 98—1a—b, 2, 4
278	E23907	K 99—1a—b
279	E23910A—B	K 100
280*		K 101
281*		K Surface—4a—f
282	E24425	C 1—1a—c
283	E24426	C 2—1, 2
284	E24430	C 3—5
285*		C 3—8a—b
286	E24433	C 4—1a—b
287	E24438	C 5—1a—c
288	E24440	C 6—2a—b
289	E24448	D 1—1
290	E24450	F 1—1
291	E24451	F 1—2a—e
292	E24453	F 2—1a—f
293	E24449	F 3—1a—b

(continued)

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
294	E30273	K 88—3a—d
295	E24772	2S—527
296	E24808	2S—589
297	E20666	R 4B—13a—j
298	E20898	R 19—4a—g
299	E20913	R 20—44a—c
300	E20893	R 32—11a—c
301	E21297A—B	R 35—4
302	E21324	R 35—5
303	E21296A—F	R 35—13
304	E21190A—B	R 35—15a—b
305	E21195	R 35—18a—h
306	E21192	R 35—19
307	E21198	R 35—33
308	E21293	R 35—34a—m
309	E21227	R 35—45
310	E21196	R 35—100a—g
311	E21364	R 40—13
312	E21365	R 40—48a—b
313	E20890	R 41—3a—b
314*		R 45—3a
315	E21310	R 45—12a—d
316	E21265	R 45—14a—b
317	E21327C	R 45—31a—c
318	E21354	R 45—44a—b
319	E23505	R 75—8a—b or R 75—18
320	E23422	R 75—9a—b
321	E42486	R 84—9a
322	E23424	R 85—2a—c
323*		R 94—12
324	E23528	R 94—13a—g
325	E23520A—B	R 94—26
326	E21633	VC 45—5a—k
327	E21783	VC 46—66a—c

Table 14. Concordance of the catalog, OIM, and OINE find numbers (*continued*)

Catalog no.	OIM no.	OINE find no.
328	E21778	VC 46–69a
329	E21782	VC 46–70
330	E21631A–B	VC 47–1a–b
331	E21784	VC 48–23
332	E21786	VC 48–27
333	E21754A–E	VC 48–117
334	E21647	VD 54–7
335	E21977	VF 60–39a
336*		VF 69–3
337	E21888A–D	VF 69–4
338	E21892	VF 69–5
339	E21999	VF 72B–38a–d
340	E21836A–D	VF 74–5a–b
341*		VF 74–4
342	E22071A–B	VF 76–19a–f
343	E21419	S 8–6
344	E21418A	S 8–27, 32
345	E42484A	
346	E42487	
347	E42488	
348	E23019	K surface
349	E23060	K 31–17a–b
350	E24525	A18–25a–d
351	E24797	A25–4
352	E24480	G5–6
353*		G11–2
354	E24491A–B	G12–15b, c
355*		G14–5
356	E19798	
357	E19799A, C	
358	E24811	
359	E24466	



ORIENTAL INSTITUTE NUBIAN EXPEDITION
FOR A LIST OF AVAILABLE VOLUMES, PLEASE VISIT
OI.UCHICAGO.EDU