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Content

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Abbreviations

Ancient Sources

The abbreviations for ancient authors and their works follow the list published in the ›Der Neue Pauly‹ (DNP) and the citation system of the ›Thesaurus Linguae Latinae‹, 2nd edition 1990, as published in the internet by wikipedia:

https://de.wikipedia.org/wiki/Liste_der_Abkürzungen_antiker_Autoren_und_Werktitel

Journals, Series and Frequently Cited Publications

The abbreviations used for periodicals and often cited works are based on already established and well-known abbreviation systems. The list is regularly updated and expanded.

AA	Archäologischer Anzeiger
AAA	Αρχαιολογικά Ανάλεκτα εξ Αθηνών
AAJ	s. ***ADAJ***
AAS	Les annales archéologiques arabes syriennes
AASOR	The Annual of the American School of Oriental Research
ActaArch	Acta archaeologica. København
ActaHyp	Acta hyperborea. Danish Studies in Classical Archaeology
ADAJ	Annual of the Department of Antiquties of Jordan
ADelt A	Αρχαιολογικόν Δελτίον Μελέτες
ADelt B	Αρχαιολογικόν Δελτίον Χρονικά
AEphem	Αρχαιολογική Εφημερις
AErgoMak	Το Αρχαιολογικό Έργο στη Μακεδνία και Θράκη
AF	Archäologische Forschungen
Agora	The Athenian Agora
AgoraPB	Excavations of the Athenian Agora. Picture Book
AHL	Archaeology and History in Lebanon
AJA	American Journal of Archaeology
AM	Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Athen
AMA	Antičnyi mir i arkheologija (Ancient World and Archaeology)
AmJNum	American Journal of Numismatics
AnnIstItNum	Annali. Istituto italiano di numismatica
ANRW	Aufstieg und Niedergang der römischen Welt
AntCl	L'antiquité classique
AnthrAChron	Ανθωπολογικά και Αρχαιολογικά Χρονικά
AntK	Antike Kunst
Archaeometry	Archaeometry. Bulletin of the Research Laboratory for Archaeology and History of Art, Oxford University
ArchCl	Archeologia classica

ArchEubMel	Αρχαίον Ευβοϊκών Μελετών
ArchPF	Archiv für Papyrusforschung und verwandte Gebiete
ArchRep	Archaeological Reports
ASAE	Annales du Service des antiquités du l'Égypte
ASAtene	Annuario della scuola archeologica di Atene e delle missioni italiane in Oriente
ASOR Reports	American Schools of Oriental Research Archaeological Reports
Atiqot	ʿAtiqot. Journal of the Israel Department of Antiquities
AtiqotHeb	ʿAtiqot. Journal of the Israel Department of Antiquities. Hebrew Series
Atlal	Atlal. The Journal of Saudi Arabian Archaeology
Atlante	Atlante delle forme ceramiche. Enciclopedia dell'arte antica classica e orientale, suppl.
AttCItRom	Atti. Centro studi e documentazione sull'Italia romana
AvP	Altertümer von Pergamon
BA	Biblical Archaeologist
BAAL	Bulletin d'archéologie et d'architecture libanaises
BABesch	Bulletin anteke beschaving. Annual Papers on Classical Archaeology
BAIAS	Bulletin of the Anglo-Israel Archaeological Society
BaM	Baghdader Mitteilungen
BAngloIsrASoc	Bulletin of the Anglo-Israel Archaeological Society; since 2009: ***Strata***
BAProv	Bulletin archéologique de Provence
BAR	British Archaeological Reports. British Series
BARIntSer	British Archaeological Reports. International Series
BASOR	Bulletin of the American School of Oriental Research
BCH	Bulletin de correspondance hellénique
BCom	Bullettino della Commisione archeologica comunale di Roma
BdA	Bollettino d'arte
BdE	Bibliothèque d'études, Institut français d'archéologie orientale, Cairo
BeitMikraJSBW	Beit Mikra. Journal for the Study of the Bible and its World (Hebrew)
BerlMus	Berliner Museen
BibAr	The Biblical Archaeologist. The American Schools of Oriental Research
BibArchRev	Biblical Archaeological Review
BIFAO	Bulletin de l'institut française d'archéologie orientale
BMB	Bulletin du Musée de Beyrouth
BMCR	Bryn Mawr Classical Review
BMetMus	Bulletin of the Metropolitan Museum of Art
BOntMus	Bulletin of the Royal Ontario Museum of Archaeology, University of Toronto
Boreas	Boreas. Münsterische Beiträge zur Archäologie
BoreasUpps	Boreas. Uppsala Studies in Ancient Mediterranean and Near Eastern Civilization
BSA	The Annual of the British School at Athens
BSR	Papers of the British School at Rome
BSS	Black Sea Studies
CahPEg	Cahier de recherches de l'institut de papyriologie et d'égyptologie de Lille. Sociétés urbaines en Égypte et au Soudan

Cathedra	Cathedra: For the History of Eretz Israel and Its Yishuv (Hebrew)
CCE	Cahiers de la céramique égyptienne
CEFR	Collection de l'École française de Rome
CENiM	Cahiers »Égypte Nilotique et Méditerranéenne«
Conspectus	E. Ettlinger et al., Conspectus formarum terrae sigillatae Italico modo confectae, Materialien zur römisch-germanischen Keramik 10 (Bonn 1990)
Corinth	Corinth. Results of Excavations Conducted by the American School of Classical Studies at Athens
ChronEg	Chronique d'Égypte. Bulletin périodique de la Fondation Égyptologique Reine Elisabeth
ClQ	The Classical Quarterly
CIS	Corpus Inscriptionum Semiticarum
CVArret	A. Oxé – H. Comfort, Corpus Vasorum Arretinorum. A Catalogue of the Signatures, Shapes, and Chronology of Italian Sigillata (Bonn 1968)
Dacia	Dacia. Revue d'archéologie et d'histoire ancienne
Daremberg–Saglio	Dictionnaire des antiquités grecques et romaines d'après les textes et les monuments. Ouvrage rédigé sous la direction de Ch. Daremberg et E. Saglio
Délos	***= EAD***
DJD	Discoveries in the Judean Desert
DNP	Der Neue Pauly. Encyklopädie der Antike
DossAParis	Les dossiers d'archéologie
DSD	Dead Sea Discoveries
Dura-Europos	The Excavations at Dura-Europos Conducted by Yale University and the French Academy of Inscriptions and Letters
EAD	Exploration archéologique de Délos faite par l'école française d'Athènes
EllKer 1	Α' Επιστημονική Συνάντηση για την Ελληνιστική Κεραμική, Ιωάννινα 6 Δεκεμβρίου 1986 (Rhodes 2000)
EllKer 2	Β΄ Επιστημονική Συνάντηση για την Ελληνιστική Κεραμική, Χρονολογικά προβλήματα της ελληνιστικής κεραμεικής, Ρόδος 22–25 Μαρτίου 1989 (Rhodes 1990)
EllKer 3	Γ' Επιστημονική Συνάντηση για την Ελληνιστική Κεραμική. Χρονολογημένα σύνολα – εργαστήρια 24–27 Σεπτεμβριου 1991 Θεσσαλονικη (Athens 1994)
EllKer 4	Δ' Επιστημονική συνάντηση για την Ελληνιστική κεραμική. Χρονολογικά προβλήματα κλείστα σύνολα – Εργασηρια, Μυτιλήνη, Μάρτιος 1994 (Athens 1997)
EllKer 5	Ε' Επιστημονική Συνάντηση για την ελληνιστική κεραμική. Χρονολογικά προβλήματα, κλειστά σύνολα, εργαστήρια (Athens 2000)
EllKer 6	ΣΤ' Επιστημονική Συνάντηση για την Ελληνιστική Κεραμική, προβλήματα χρονολόγησης κλειστά σύνολα - εργαστήρια, Βόλος 17–23 Απριλίου 2000 (Athens 2004)
EllKer 7	Ζ' Επιστημονική Συνάντηση για την Ελληνιστική Κεραμική, Αιγίο 4–9 Απριλίου 2005 (Athens 2011)
EllKer 8	Η' Επιστημονική συνάντηση για την Ελληνιστική κεραμική, Ιωαννινα 5–9 Μαΐου 2009 (Athens 2014)
EllKer 9	Θ' Διεθνής Συνάντηση για την Ελληνιστική Κεραμική, Θεσσαλονίκη, 5–9 Δεκέμβριος 2012, in press
EllKerAigaean	Ελληνιστική Κεραμική από το Αιγαίο (Mytilene 1994)
EllKerCrete	Ελληνιστική Κεραμική από την Κρήτη (Chania 1997)
EllKerEpirus	Ελληνιστική Κεραμική από την αρχαία Ήπειρο, την Αιτωλο-ακαρνανία και τα Ιόνια Νησιά (Ioannina 2009)

EllKerMacedonia	Ελληνιστική Κεραμική από τη Μακεδονία (Thessaloniki 1991)
EllKerMacedonia 2	Θέματα της Ελληνιστικής Κεραμικής στην Αρχαία Μακεδονία (Athens 2012)
EllKerPeloponnes	Ελληνιστική Κεραμική από την Πελοπόννησο (Aigio 2005)
EllKerThessaly	Ελληνιστική Κεραμική από τη Θεσσαλία (Volos 2000)
Eretria	Eretria. Fouilles et recherches
Eretz-Israel	Eretz-Israel. Archaeological, Historical and Geographical Studies
ESI	= ***ExcIsr***
EtAlex	Études Alexandrines
EtTrav	Études et travaux. Studia i prace. Travaux du Centre d'archéologie méditerranéenne de l'Académie des sciences polonaise
EurAnt	Eurasia antiqua
ExcIsr	Excavations and Surveys in Israel
FACTA	FACTA. A Journal of Roman Material Culture Studies
FGH / FGrHist	F. Jacoby, Die Fragmente der griechischen Historiker
FHG	Fragmenta historicorum Graecorum
FiA	Forschungen in Augst
FiE	Forschungen in Ephesos
FuB	Forschungen und Berichte. Staatliche Museen zu Berlin
Glasnik	Glasnik Zemaljskog muzeja Bosne i Hercegovine u Sarajevu
HA-ESI	Hadashot Arkheologiyot – Excavations and Surveys in Israel
Hama	Hama. Fouilles et recherches de la Fondation Carlsberg
HEROM	Journal of Hellenistic and Roman Material Culture
Hesperia	Hesperia. Journal of the American School of Classical Studies at Athens
IAA Reports	Israel Antiquities Authority Reports
IARPotHP	International Association for Research on Pottery of the Hellenistic Period
IEJ	Israel Exploration Journal
IG	Inscriptiones Graecae
IGLS	Inscriptions grecques et latines de la Syrie
IGRom	Inscriptiones Graecae ad res Romanas pertinentes
IIMK	Institut istorii materialnoj kultury (Institute for the History of Material Culture, Russian Academy of Science) Moscow
Iliria	Iliria. Revistë arkeologjike
IOSPE	Iscriptiones antiquae Orae Septentrionalis Ponti Euxini
IsrMusStA	Israel Museum Studies in Archaeology
IsrNumJ	Israel Numismatic Journal
IsrNumR	Israel Numismatic Research
IstMitt	Istanbuler Mitteilungen
JASc	Journal of Archaeological Science
JAncEgInter	Journal of Ancient Egyptian Interconnection
JbBerlMus	Jahrbuch der Berliner Museen
JbÖByz	Jahrbuch der Österrreichischen Byzantinistik
JbRGZM	Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz
JdI	Jahrbuch des Deutschen Archäologischen Instituts
JEA	The Journal of Egyptian Archaeology

JGS	Journal of Glass Studies
JHP	Journal of Hellenistic Pottery and Material Culture
JHS	The Journal of Hellenic Studies
JMedA	Journal of Mediterranean Archaeology
JNG	Jahrbuch für Numismatic und Geldgeschichte
JPOS	The Journal of the Palestine Oriental Society
JRA	Journal of Roman Archaeology
JRASS	Journal of Roman Archaeology Supplement Series
JRS	The Journal of Roman Studies
JWaltersArtGal	The Journal of the Walters Art Gallery
KAI	Kanaanäische und aramäische Inschriften
Kerameikos	Kerameikos. Ergebnisse der Ausgrabungen
Klio	Klio. Beiträge zur aten Geschichte
Kokalos	Κώκαλος. Studi pubblicati dall'Istituto di storia antica dell'Università di Palermo
KSIA	Kratkie soobščenija o dokladach i polevych issledovanijach Instituta archeologii
Kush	Kush. Journal of the National Corporation for Antiquities and Museums (NCAM)
LGPN	A Lexicon of Greek Personal Names (https://www.lgpn.ox.ac.uk/)
LibyaAnt	Libya antiqua
LIMC	Lexicon iconographicum mythologiae classicae
LRCW	Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry.
LSJ	H. G. Liddle & R. Scott & H. S. Jones, A Greek-English Lexicon (Oxford 1925–1940)
Maarav	Maarav. A Journal for the Study of the Northwest Semitic Languages and Literatures
Makedonika	Μακεδονικά. Σύγγραμμα Περιοδικόν της Εταιρείας Μακεδονικών Σπουδών
MatIsslA	Materialy i issledovanija po archeologii SSSR
MDAIK	Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo
MedA	Mediterranean Archaeology
MEFRA	Mélanges de l'École française du Rome. Antiquité
MelBeyrouth	Mélanges de l'Université Saint-Joseph
MemAmAc	Memoirs of the American Academy in Rome
MetrMusJ	Metropolitan Museum Journal
Mnemosyne	Mnemosyne. A Journal of Classical Studies
MonPiot	Monuments et mémoires. Fondation E. Piot
NEA	Near Eastern Archaeology
NEAEHL	The New Encyclopedia of Archaeological Excavations in the Holy Land
NGSBAArchJ	Nelson Glueck School of Biblical Archaeology. Archaeology Journal
NGWG	Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen. Philologisch-Historische Klasse
Nikephoros	Nikephoros. Zeitschrift für Sport und Kultur m Altertum
NNM	Numismatic Notes and Monographs. American Numismatic Society
NSc	Notizie degli scavi di antichità

NTOA	Novum Testamentum et orbis antiquus. Series archaeologica
OBO	Orbis Biblicus et Orientalis Series Archaeologica
OCK	A. Oxé – H. Comfort, Corpus Vasorum Arretinorum. A Catalogue of the Signatures, Shapes, and Chronology of Italian Sigillata, 2nd ed., completely revised and enlarged by Ph. Kenrick (Bonn 2000)
Olynthus	Excavations at Olynthus
OxfJA	Oxford Journal of Archaeology
PATABS	Production and Trade of Amphorae in the Black Sea
PCZ	Papyri Cairo Zenon
PEFQS	Palestine Exploration Fund Quarterly Statement
PEQ	Palestine Exploration Quarterly
PF	Pergamenische Forschungen
Phoenix	Phoenix. The Journal of the Classical Association of Canada
Prakt	Πρακτικά της εν Αθήναις Αρχαιολογικής Εταιρείας
ProcAmPhilSoc	Proceedings of the American Philosophical Society
PSI	Papyri greci e latini. Publicationi della Societá Italiana per la ricerca dei papiri greci e latini in Egitto
Qadmoniot	Qadmoniot. A Journal for the Antiquities of Eretz-Israel and Bible Lands
QDAP	The Quarterly of the Department of Antiquities in Palestine
RA	Revue archéologique
RAC	Reallexikon für Antike und Christentum
RB	Revue Biblique
RCRFActa	Rei Cretariae Romanae Fautorum Acta
RDAC	Report of the Department of Antiquities, Cyprus
RE	Paulys Realencyclopädie der classischen Altertumswissenschaften
REG	Revue des études grecque
ScrClIsr	Scripta classica Israelica. Yearbook of the Israel Society for the Promotion of Classical Studies
SEG	Supplementum Epigraphicum Greacum
Semitica	Semitica. Cahiers publiés par l'institut d'études sémitiques du College de France
SHAJ	Studies in the History and Archaeology of Jordan
SIG	W. Dittenberger, Sylloge inscriptionum Graecorum (Leipzig 1915–1924)
SIMA	Studies in Mediterranean Archaeology
SNG	Sylloge nummorum Graecorum
SovA	Sovetskaja archeologija
StAnt	Studi di antichità. Università di Lecce
Starinar	Starinar. Arheološki institut Beograd
STDJ	Studies on the Texts of the Desert of Judah
Strata	Strata. Bulletin of the Anglo-Israel Archaeological Society (since 2009; from 1982–2008 s. ***BAngloIsrASoc***)
Syria	Syria. Revue d'art oriental et d'archéologie
Talanta	Τάλαντα. Proceedings of the Dutch Archaeological and Historical Society
Taras	Taras. Rivista di archeologia
TelAvivJA	Tel Aviv. Journal of the Institute of Archaeology of Tel Aviv University
TGIM	Trudy gosudarstvennogo istoričeskogo museja, Moscow

TOM	Travaux de la Maison de l'Orient Méditerranéen
TransactAmPhilAss	Transactions and Proceedings of the American Philosophical Assocation
TransAmPhilosSoc	Transactions of the American Philosophical Society
TSO	Teiresias Supplements Online (https://www.uni-muenster.de/Ejournals/index.php/tso/index)
VDI	Vestnik drevnej istorii
Xenia	Xenia. Konstanzer althistorische Vorträge und Forschungen
ZborMuzBeograd	Zbornik Narodnog muzej Beograd
ZDPV	Zeitschrift des Deutschen Palästina-Vereins
ZPE	Zeitschrift für Papyrologie und Epigrafik

Other Abbreviations

BCE	Before the Christian Era	***inv.***	inventory
bibl.	bibliography	***L.***	length
c.	century	***max.***	maximum
ca.	circa	***min.***	minimum
cat.	catalogue	***Mus.***	Museum
CE	Christian Era	***no(s).***	number(s)
cent.	century	***p.***	page
cf.	compare	***pl(s).***	plate(s)
cm	centimeter	***pp.***	pages
D.	Diameter	***pres.***	preserved
ed(s).	editor(s)	***rest.***	restored
e.g.	for example	***rev.***	review
est.	estimated	***Suppl.***	Supplement
etc.	et cetera	***s.v.***	sub voce
fasc.	fascicle	***Th.***	thickness
fig(s).	figure(s)	***us.***	unstratified
fr.	fragment/s	***W.***	width
gr.	gram/s	***Wt.***	weight
H.	height	***vol(s).***	volume(s)

Articles

The Metal Finds from Pyla-*Vigla*: An Early Hellenistic Fort in Southern Cyprus

Christina DiFabio – Brandon R. Olson – Thomas Landvatter – Justin Stephens

Introduction

The death of Alexander the Great in 323 BCE cast a great shadow of uncertainty throughout the Eastern Mediterranean in the absence of a clear path to successorship. The epitome of an autonomous leader, Alexander did little to share his authority but surrounded himself with the strongest, most capable leaders that Greece and his newly acquired lands had to offer. It was this approach to leadership and those individuals that both proved integral to the success of his campaigns and led to one of the most disruptive eras of the ancient world. Furthermore, Alexander's imperial policies following the subjugation of any given area often mimicked the political structure of the former entity. Those regions previously subject to the Achaemenid Persian Empire continued a system of satrapies, where Alexander replaced local satraps with an ally. The eastern provinces, especially around the Indus River Valley, maintained a kingdom-oriented organization with a monarch of Alexander's choosing. While one can argue the degree to which Alexander created a centralized empire after the conclusion of his campaigns in 326 BCE, it is clear that the continuation of such an entity was simply impossible. Alexander's realm was in its infancy and required regular interventions against local uprisings and reassertions of authority to maintain control. It was at this juncture that his former generals devised a minimum of three separate plans in 323 BCE, 320 BCE, and 311 BCE to stabilize the empire. All three documented partitions named a king (or soon to be king), a regent, and divided the realm into satrapies or regions governed by a formal general or ally. The plans paved the way for either Alexander's son (Alexander IV) or his half-brother Arrhidaeus (Philip III) to become the sole legitimate heir of Alexander the Great and provide the long-term answer to dynastic succession and stability. These plans, however, never materialized. The assassinations of Philip III (Alexander's half-brother) in 317 BCE, Olympias (Alexander's mother) in 316 BCE, and Roxane (Alexander's wife) and Alexander IV (Alexander's son) in 310 BCE ended the Argead Dynasty and any hopes of a singular ruler taking over Alexander's great empire.

Following these assassinations, there were no less than twenty individuals with legitimate claims to at least part of the empire. The nearly thirty years following Alexander's death were fraught with assassinations, the formation and collapse of coalitions, and war. Finaly by 294 BCE, three successors – Ptolemy, Seleucus, and Antigonus – had carved out their

own disparate imperial spheres from Alexander's realm. Moving beyond the assassinations, alliances, and power grabs characterizing this period, one must also consider the imperial machinations of the successors. Alexander's system of using a highly skilled, technologically advanced army to take over a region and then, from a centralized position to maintain the status quo, was not an option moving forward. The Ptolemies, Seleucids, and Antigonids, devised unique methods to take over an area and maintain control of it. The fortified site of Pyla-*Vigla* (Vigla) in southeast Cyprus reflects one of the many disparate methods the Diadochoi deployed to achieve their greater imperial aspirations. Either Ptolemy or Antigonus constructed and garrisoned small, yet heavily fortified, forts situated in strategic locations to exercise imperial dominion over a previous semi-autonomous island and protect those interests against others.

The Site of Pyla-*Vigla*

The site of Vigla was discovered by the Pyla-*Kousopetria* Archaeological Project (PKAP), a landscape oriented archaeological project ongoing since 2003 (**fig. 1**)[1]. The site sits atop a natural plateau overlooking the Mediterranean and with an in-filled embayment to the south and Cyprus' interior to the north. The site is also situated along the primary terrestrial route connecting Salamis and Kition, the two major urban entities in the region. Five years of intensive pedestrian survey yielded remnants of significant fortifications and a settlement dated to the Hellenistic period based on the presence of a robust ceramic assemblage dating to this era. Alongside the main PKAP survey project, small-scale excavations were conducted at Vigla in 2008, 2009, and 2012, with the specific goal of the ground-truthing of survey results and refining the site's chronology. Larger excavation seasons followed in 2018, 2019, 2022, and 2023 beginning a longer-term, multi-year excavation project to further investigate Vigla's fortification system and its inhabitants[2].

The majority of the layers excavated at Vigla that produced cultural material presented a high level of stratigraphic integrity, as they were sealed on the top by mudbrick tumble and on the bottom by bedrock. Also absent were later intrusions into the stratified layers that are common throughout archaeological sites in the Eastern Mediterranean. The excavations have identified five discrete phases of occupation: Phases 1, 2, and 3 date to the Hellenistic period; Phase 4 includes limited evidence for a post Roman phase on the western edge of the plateau; and Phase 5 represents modern land use primarily associated with agricultural activities. These phases have left nearly two meters of accumulated soil sitting atop bedrock, and while small fragments of Iron Age pottery were found scattered throughout the ridge, the earliest and most substantial architecture is consistently associated with the early Hellenistic period.

Evidence for the earliest phase at the site Phase 1 is represented by a plastered mudbrick wall discovered in various units below the Phase 2 floor surface. Phase 2 occurs in the majority of Vigla excavation units and consists of stone socles for mudbrick walls and packed earth and clay floors set immediately on bedrock, which was partially exposed across the plateau during the earliest period occupation. Packed earth subfloors served to level irregularities in the bedrock and in the absence of ceramic roof tiles, the structures were most likely covered with a thatched roof. A preliminary analysis of the ceramics, coins, and diagnostic metal implements dates Phase 2 from the end of the 4th century to early decades of the 3rd century BCE. The presence of another floor surface above the Phase 2 floors confirmed the presence of a third phase (Phase 3) of activities at Vigla that appears to have immediately followed Phase 2. The ceramic and numismatic assemblages excavated up to this point from all three phases are chronologically indistinguishable, suggesting little lag between phases. With limited evidence for Phase 1, little can be ascertained regarding the function and nature of the earliest phase, but

1 Caraher et al. 2005; Caraher et al. 2007; Caraher et al. 2008; Caraher et al. 2011–2012; Caraher et al. 2014; Olson et al. 2013.

2 Landvatter et al. 2018; Stephens et al. 2019; Olson et al. 2021.

Fig. 1

it is clear that following the end of Phase 2, those living at the site leveled Phase 2 debris, using it for sub-floor packing, and continued the tradition of mudbrick walls set on stone socles and packed earth floors.

Catalog

The following is the catalog of non-numismatic metal objects found at Vigla that have been conserved and studied excavated in 2008, 2009, 2012, 2018, and 2019. If objects have the same inventory number, that means they were kept together from the same context during excavation and conserved together, even though below in the catalog objects are separated by function. Findspots specify whether the objects were found in the central plateau, where domestic and workshop spaces have been found, or in the fortifications. ›EU‹ stands for Excavation Unit, or trench in which the object was found. Overall most finds appear to be from the early Hellenistic period, and if found in a floor level the finds date to either Phase 2 (referred to as earlier floor level) or Phase 3 (referred to as later floor level). As mentioned above, though, the chronology of the three early Hellenistic phases is indistinguishable. The many examples of weapons, such as projectiles and sling bullets, as well as pieces of chainmail armor confirm military activity at the site. Other metal finds provide insight into the daily life of the soldiers, including pieces of adornment; nails, spikes, and fittings for furniture and possibly tents; cosmetic and medical equipment; fishing equipment; and other tools. At least some portion of the weapons were produced on-site, in particular lead sling bullets, attested by a lead sprue leftover from the casting process, and a stone mold for the casting of bronze spearheads (found in 2023). The exact location of these on-site metalworking activities has yet to be found, however.

Weapons and Armor (figs. 2–3)

The many metal weapons that have been found at Vigla confirm that the site was used as a fortified settlement and attests to the tumultuous time of the Early Hellenistic period. Weapon types include the following: bronze and iron tanged projectiles with four-sided pyramidal points, a bronze point of the Scythian type, iron knives, and lead sling bullets. The projectiles have tangs that would have been slotted into likely a wooden shaft. The bronze Scythian type point has a hollow socket opening for a wooden shaft[3]. Some lead sling bullets still have the seam preserved from casting, suggesting that they were made on-site. One has an inscription ΘΑΡΥΠΟΣ, which is the name in the genitive of the owner or maker of the sling bullet[4]. Pieces of armor have been found in the form of small bronze rings that were likely originally parts of chainmail armor. The weapons and armor are a reminder of the constant fighting and uncertain times during the Hellenistic period.

1 Inv. No.: LN 76/2020
Measurements: D.: 0.009, Wt.: 10.8 g.
Description: bronze tanged projectile with four-sided pyramidal point.
Findspot: EU 19 in northern end of plateau. Mudbrick collapse of northern fortification. Excavated in 2019.
Comparanda: Merker 2012, 255–258 pl. 37, M180a. M181 for shape, but made of iron.

2 Inv. No.: LN 3/2014
Measurements: L.: 0.071, W.: 0.011, Wt.: 13.4 g.
Description: bronze tanged projectile with four-sided pyramidal point.
Findspot: EU 8 in southern plateau. Later floor level of a room. Found in sieve but identified as coming from a floor level. Excavated in 2009.

3 Inv. No.: LN 275/09
Measurements: L.: 0.063, W.: 0.007, Wt.: 10.6 g.
Description: bronze tanged projectile with four-sided pyramidal point.
Findspot: EU 2 in plateau. Occupation and destruction in earlier floor level. Excavated in 2008.

4 Inv. No.: LN 7/14
Measurements: L.: 0.047, W.: 0.006, Wt.: 9.2 g.
Description: bronze tanged projectile with four-sided pyramidal point.
Findspot: Surface Find. Found in 2009.

5 Inv. No.: LN 203/2018
Measurements: L.: 0.045, W.: 0.010, Wt.: 5.2 g.
Description: bronze tanged projectile with four-sided pyramidal point; flatter in section than previous ones and has beaded tang.
Findspot: EU 15 in north-central part of plateau. Destruction, foundation cut, and fill before construction of later floor level. Excavated in 2012.

6 Inv. No.: LN 198/2018
Measurements: L.: 0.066, W.: 0.006, Wt.: 9.4 g.
Description: bronze tanged projectile with four-sided pyramidal point
Findspot: EU 15 in north-central part of plateau. Destruction of later phase. Excavated in 2012.

3 See Olson et al. 2021, 295–296; on Scythian type arrowheads see Olson – Najbjerg 2011–2012; Olson et al. 2018.

4 See Olson et al. 2021, 295–296; Olson 2014.

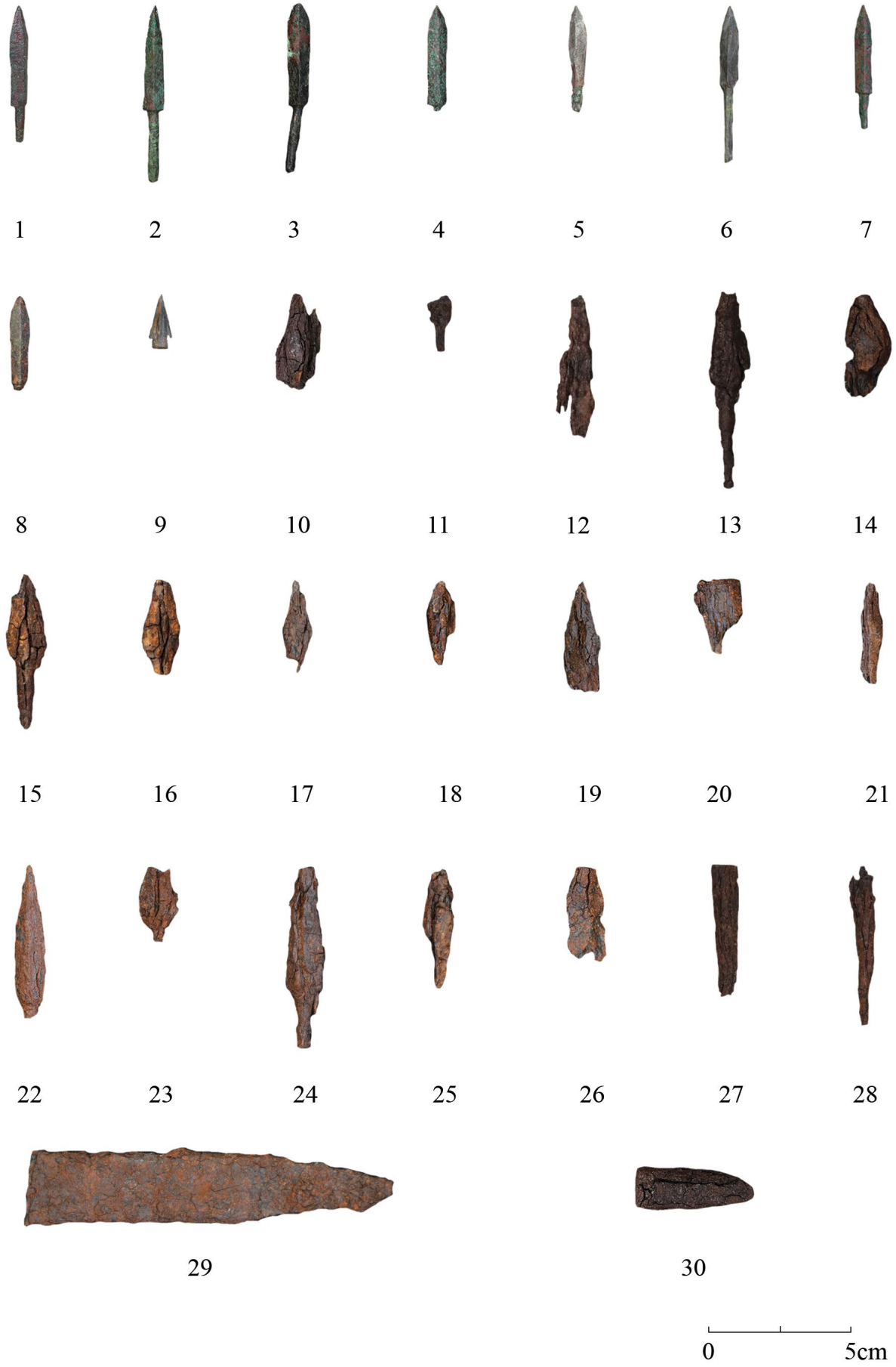
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Fig. 2

7 Inv. No.: LN 189/2018.1

Measurements: L.: 0.051, W.: 0.008, Wt.: 7.1 g.
Description: bronze tanged projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.

8 Inv. No.: LN 222/2020

Measurements: L.: 0.039, W.: 0.007, Wt.: 7.0 g.
Description: bronze tanged projectile with four-sided pyramidal point; flatter in section than others.
Findspot: EU 18 in northern part of plateau by northern fortification. Modern plow zone. Excavated in 2018.

9 Inv. No.: LN 196/2018

Measurements: L.: 0.021, W.: 0.006, Wt.: 1.9 g.
Description: bronze trilobate arrowhead of the Scythian type with a circular hollow opening at other end for shaft insertion (socketed).
Findspot: EU 15 in north-central part of plateau. Destruction of later phase and plow zone. Excavated in 2012.

10 Inv. No.: LN 91/2020

Measurements: D.: 0.014, total Wt.: 28.5 g, weight includes other iron objects.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 20 in center of plateau. Destruction layer above later floor. Excavated in 2019.

11 Inv. No.: LN 98/2020

Measurements: D.: 0.007, Wt.: 1.4 g.
Description: iron projectile tang with broken four-sided pyramidal point.
Findspot: EU 21 in southern fortification. Modern plow zone. Excavated in 2019.

12 Inv. No.: LN 95/2020

Measurements: D.: 0.018, total Wt.: 58.7 g.
Description: iron projectile with four-sided pyramidal point. Weight includes other iron fragments.
Findspot: EU 20 in center of plateau. Later floor level. Excavated in 2019.

13 Inv. No.: LN 102/2020

Measurements: D.: 0.016, total Wt.: 36.5 g.
Description: one iron projectile with four-sided pyramidal point (second from top), three iron fragments.
Findspot: EU 22 in southern fortification. Foundation trench for earlier phase of fortification. Excavated in 2019.

14 Inv. No.: LN 23/14

Measurements: L.: 0.037, W.: 0.011, Wt.: 9.2 g.
Description: iron tanged projectile with short four-sided pyramidal point.
Findspot: EU 8 in southern plateau. Collapse layer in southern and northern room. Excavated in 2009.

15 Inv. No.: LN 291/09.1

Measurements: L.: 0.061, W.: 0.017, Wt.: 13.4 g.
Description: iron tanged projectile with four-sided pyramidal point.
Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.

16 Inv. No.: LN 291/09.2

Measurements: L.: 0.039, W.: 0.008, Wt.: 9.1 g.
Description: iron projectile with possible tang and four-sided pyramidal point.
Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.

17 Inv. No.: LN 189/2018.2

Measurements: L.: 0.037, W.: 0.013, Wt. 3.8 g.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. Scarp cleaning. Excavated in 2012.

18 Inv. No.: LN 188/2018.1

Measurements: L.: 0.044, W.: 0.14, Wt. 3.1 g.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.

19 Inv. No.: LN 188/2018.2

Measurements: L.: 0.033, W.: 0.010, Wt.: 3.0 g.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.

20 Inv. No.: LN 188/2018.3

Measurements: L.: 0.032, W.: 0.13, Wt. 3.6 g.
Description: iron projectile with four-sided pyramidal base with partial tang.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.

21 Inv. No.: LN 185/2018

Measurements: L.: 0.041, W.: 0.008, Wt.: 3.0 g.
Description: broken iron projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. In monumental fortification wall made of field stones and roughly cut stones for facings. Excavated in 2012.

22 Inv. No.: LN 181/2018.1

Measurements: L.: 0.061, W.: 0.011, Wt.: 13.5 g.
Description: iron tanged projectile with four-sided pyramidal point.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Dark brown soil in northern part of trench. Excavated in 2012.

23 Inv. No.: LN 204/2018

Measurements: L.: 0.035, W.: 0.018, Wt.: 12.1 g.
Description: iron tanged projectile with four-sided pyramidal point.
Findspot: EU 15 in north-central part of plateau. Fill above earlier floor level and before construction of later floor level. Excavated in 2012.

24 Inv. No.: LN 208/2018

Measurements: L.: 0.069, W.: 0.014, Wt.: 16.9 g.
Description: iron tanged projectile with four-sided pyramidal point.
Findspot: EU 15 in north-central part of plateau. Sub-floor fill before earlier floor level. Excavated in 2012.

25 Inv. No.: LN 268/09

Measurements: Projectile: L.: 0.041, W.: 0.010, Wt. 5.0 g.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 5 in plateau. Later occupation associated with late wall. Excavated in 2008.

26 Inv. No.: LN 210/2018

Measurements: L.: 0.035, W.: 0.013, Wt.: 6.0 g.
Description: possible iron projectile; flatter than other examples. Round at one end and hollow opening at the other end.
Findspot: EU 14 in center of plateau. Mudbrick collapse layer above occupational buildings. Excavated in 2012.

27 Inv. No.: LN 99/2020

Measurements: D.: 0.009, Wt.: 8.7 g.
Description: iron tang.
Findspot: EU 21 in southern fortification. Mudbrick collapse layer north of fortification. Excavated in 2019.

28 Inv. No.: LN 89/20

Measurements: D.: 0.061, Wt.: 5.28 g.
Description: iron tang.
Findspot: EU 20 in center of plateau. Destruction layer above later floor. Excavated in 2019.

29 Inv. No.: LN 212/2018

Measurements: L.: 0.106, W.: 0.021, Wt.: 25.2 g.
Description: iron knife.
Findspot: EU 14 in center of plateau. Subfloor packing, possibly from floor level in second phase of construction (this trench found three levels of occupation). Excavated in 2012.
Comparanda: Merker 2012, 225 pl. 5, M21b. M21c.

30 Inv. No.: LN 111/20

Measurements: D.: 0.015, Wt.: 8.9 g.
Description: iron knife point
Findspot: EU 21 in southern fortification. Modern plow zone. Excavated in 2019.

31 Inv. No.: LN 181/2020

Measurements: L.: 0.032, D.: 0.013, Wt.: 29.8 g.
Description: lead sling bullet.
Findspot: EU 20 in center of plateau. Fill above later floor. Excavated in 2019.

32 Inv. No.: LN 176/2020

Measurements: L.: 0.031, D.: 0.016, Wt.: 33.9 g.
Description: lead sling bullet.
Findspot: EU 20 in center of plateau. Articulation of stone socle wall. Excavated in 2019.

33 Inv. No.: LN 74/2020

Measurements: L.: 0.031, D.: 0.014, Wt.: 30.0 g.
Description: lead sling bullet.
Findspot: EU 19 in northern end of plateau. Mudbrick collapse of northern fortification. Excavated in 2019.

34 Inv. No.: LN 174/2020

Measurements: L.: 0.031, D.: 0.013, Wt.: 36.8 g.
Description: lead sling bullet.
Findspot: EU 20 in center of plateau. Modern plow zone. Excavated in 2019.

35 Inv. No.: LN 235/09

Measurements: L.: 0.019, D.: 0.016, Wt.: 16.4 g.
Description: lead sling bullet, miscast during manufacture.
Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.

36 Inv. No.: LN 176/2018

Measurements: L.: 0.032, D.: 0.016, Wt.: 40.8 g.
Description: lead sling bullet with one hole (hole depth: 0.003).
Findspot: EU 17 in collapsed part of southwestern face of ridge. Soil deposit from erosion down south face. Excavated in 2012.

37 Inv. No.: LN 197/2018

Measurements: L.: 0.034, D.: 0.013, Wt.: 39.1 g.
Description: lead sling bullet with inscription ΘΑΡΥΠΟΣ on one side and a possible vegetal motif or spearhead on the other; stamping seams present (possibly unused?). Name is in third-declension genitive singular. Π has longer left leg than right leg.
Findspot: EU 15 in north-central part of plateau. Destruction of later phase. Excavated in 2012.
Comparanda: Decorative motif similar to 1978/XI-20/2 in Olson 2014, 156. 163.

38 Inv. No.: LN 184/2018

Measurements: L.: 0.029, D.: 0.016, Wt.: 30.3 g.
Description: lead sling bullet with partially preserved inscription depicting an a Λ.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Dark brown soil in northern half of trench. Excavated in 2012.

39 Inv. No.: LN 223/2020

Measurements: L.: 0.031, D.: 0.017, Wt.: 31.7 g.
Description: lead sling bullet, broken on one side.
Findspot: EU 18 in northern part of plateau by northern fortification. Mudbrick collapse of northern fortification. Excavated in 2018.

40 Inv. No.: LN 180/2020

Measurements: L.: 0.031, D.: 0.015, Wt.: 33.8 g.
Description: lead sling bullet.
Findspot: EU 20 in center of plateau. Destruction layer above later floor level. Excavated in 2019.

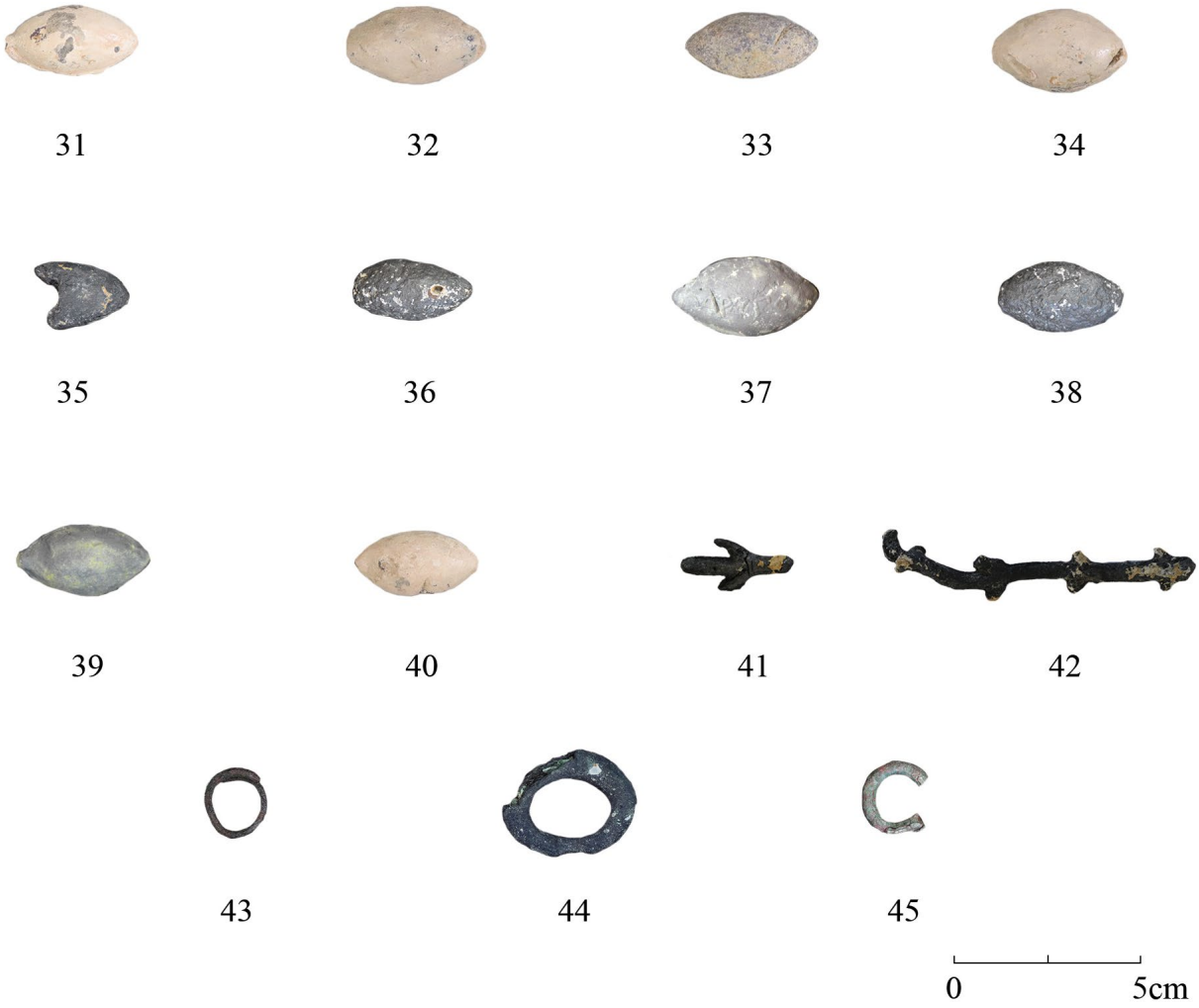

Fig. 3

41 Inv. No.: 5016_1001
Measurements: L.: 0.029, D.: 0.005, Wt.: 2.8 g.
Description: lead sling bullet sprue.
Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.

42 Inv. No.: 5016_1002
Measurements: L.: 0.092, D.: 0.005, Wt.: 22.9 g.
Description: lead sling bullet sprue.
Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.

43 Inv. No.: LN 104/2020
Measurements: D.: 0.012, Wt.: 1.1 g.
Description: bronze chain mail link, ends overlap.
Findspot: EU 20 in center of plateau. Modern plow zone. Excavated in 2019.

44 Inv. No.: LN 288/09
Measurements: D.: 0.037, Th.: 0.004-0.008, Wt.: 9.4 g.
Description: bronze chain mail link, worn down on one side.
Findspot: Surface find. Found in 2008.

45 Inv. No.: LN 181/2018.2
Measurements: D.: 0.019, Th.: 0.0035, Wt.: 2.0 g.
Description: bronze chain mail link, broken.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Dark brown soil in northern part of trench. Excavated in 2012.

Nails, Spikes, and Other Fittings (figs. 4–5)

Many metal objects found at Vigla are nails and spikes of bronze and iron. These objects are an attestation to the need for hardware in daily life at the fortified settlement. They were likely used in furniture and anchors for a wooden roof frame supporting a thatch overlay. As Merker suggests, more delicate nails could have been used in applying appliques to wood[5]. There are some bent examples of both bronze and iron spikes; some examples were also found at Tel Anafa which Merker says were »hammered into a right angle after being driven through the wood«[6]. Merker suggests some larger spikes could have been used for pinning down tents at Tel Anafa, and this could be a possibility for Vigla[7].

46 Inv. No.: LN 191/2018
Measurements: D.: 0.015, L.: 0.059, Wt.: 9.9 g.
Description: bronze spike.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.

47 Inv. No.: LN 183/2018
Measurements: D. of head: 0.015, L. of head: 0.018, L. total: 0.062, Wt.: head: 3.8 g; shaft: 5.5 g.
Description: bronze spike with shaft bent at obtuse angle; broken.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Dark brown soil in northern part of trench. Excavated in 2012.

48 Inv. No.: LN 108/2020
Measurements: D.: 0.006, Wt.: 31.0 g.
Description: bronze spike with bent shaft.
Findspot: EU 20 in center of plateau. Destruction layer above later floor. Excavated in 2019.

49 Inv. No.: LN 93/2020
Measurements: D.: 0.004, D. of nail head: app. 0.010, Wt.: 2.6 g.
Description: bronze nail.
Findspot: EU 20 in center of plateau. Pit deposit cut into mudbrick collapse layer. Excavated in 2019.

50 Inv. No.: LN 86/2020
Measurements: D.: 0.006, Wt.: 10.3 g.
Description: bronze nail or spike.
Findspot: EU 20 in center of plateau. Modern plow zone. Excavated in 2019.

5 Merker 2012, 238.

6 Ibid.

7 Ibid.

Fig. 4

51 Inv. No.: LN 186/2018.1

Measurements: D.: 0.018, L.: 0.020, Wt.: 3.0 g.
Description: bronze nail.
Findspot: EU 16 in northern fortification. Monumental fortification made of field stones and roughly cut stones for facings. Excavated in 2012.

52 Inv. No.: LN 186/2018.2

Measurements: D.: 0.016, L.: 0.019, Wt.: 3.0 g.
Description: iron nail.
Findspot: EU 16 in northern fortification. Monumental fortification made of field stones and roughly cut stones for facings. Excavated in 2012.

53 Inv. No.: LN 92/2020

Measurements: D.: 0.011, Wt.: 19.6 g.
Description: iron nail.
Findspot: EU 20 in center of plateau. Pit deposit cut into mudbrick collapse layer. Excavated in 2019.

54 Inv. No.: LN 96/2020

Measurements: D.: 0.014, Wt.: 37.1 g.
Description: iron spike with two right angle bends.
Findspot: EU 20 in center of plateau. Later floor level. Excavated in 2019.

55 Inv. No.: LN 84/2020

Measurements: D.: 0.011, Wt.: 7.7 g.
Description: bent iron spike.
Findspot: EU 20 in center of plateau. Topsoil. Excavated in 2019.

56 Inv. No.: LN 80/2020.1

Measurements: D.: 0.007, Wt.: 8.5 g.
Description: iron spike.
Findspot: EU 19 in northern end of plateau. Second ash layer and fill underneath mudbrick elevation. Excavated in 2019.

57 Inv. No.: LN 80/2020.2

Measurements: D.: 0.005, Wt.: 13.5 g.
Description: iron spike.
Findspot: EU 19 in northern end of plateau. Second ash layer and fill underneath mudbrick elevation. Excavated in 2019.

58 Inv. No.: LN 224/09.1

Measurements: L.: 0.017, D.: 0.019, Wt.: 4.6 g.
Description: iron nail head.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

59 Inv. No.: LN 224/09.2

Measurements: L.: 0.047, D.: 0.020, Wt.: 13.3 g.
Description: iron nail.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

60 Inv. No.: LN 224/09.3

Measurements: L.: 0.030, W.: 0.015, Wt.: 11.7 g.
Description: iron spike bent at right angle.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

61 Inv. No.: LN 224/09.4

Measurements: L.: 0.044, W.: 0.009, Wt.: 8.7 g.
Description: iron curved end of nail or spike (square in section).
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

62 Inv. No.: LN 224/09.5

Measurements: L.: 0.028, W.: 0.006, Wt.: 1.0 g.
Description: pointed iron piece (nail end?).
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

63 Inv. No.: LN 179/2018

Measurements: L.: 0.011, D.: 0.019, Wt.: 2.7 g.
Description: iron nail.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Dense stratum potentially from a looter's pit. Excavated in 2012.

64 Inv. No.: LN 180/2018

Measurements: larger piece: L.: 0.085, W.: 0.011, Wt.: 27.3 g; smaller piece: L.: 0.033, W.: 0.009, Wt.: 4.9 g.
Description: iron spike in two pieces, square in section.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Soil deposit from erosion down south face. Excavated in 2012.

65 Inv. No.: LN 177/2018

Measurements: L.: 0.046, D.: 0.07, Wt.: 15.0 g.
Description: iron nail, shaft square in section.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Opening cleaning. Excavated in 2012.

66 Inv. No.: LN 206/2018

Measurements: L.: 0.121, W.: 0.013, Wt.: 31.0 g.
Description: iron stake with bend at one end; round in section.
Findspot: EU 15 in north-central part of plateau. Earlier floor level. Excavated in 2012.

67 Inv. No.: LN 224/09.6

Measurements: head: L.: 0.011, D.: 0.013; shaft: L.: 0.044, W.: 0.004; total Wt.: 7.9 g.
Description: bronze nail (?) in two pieces: one head with hole, one body piece round in section.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

68 Inv. No.: LN 78/2020

Measurements: D.: 0.04, total Wt.: 4.2 g.
Description: looped end bronze fitting. Weight includes another fragment.

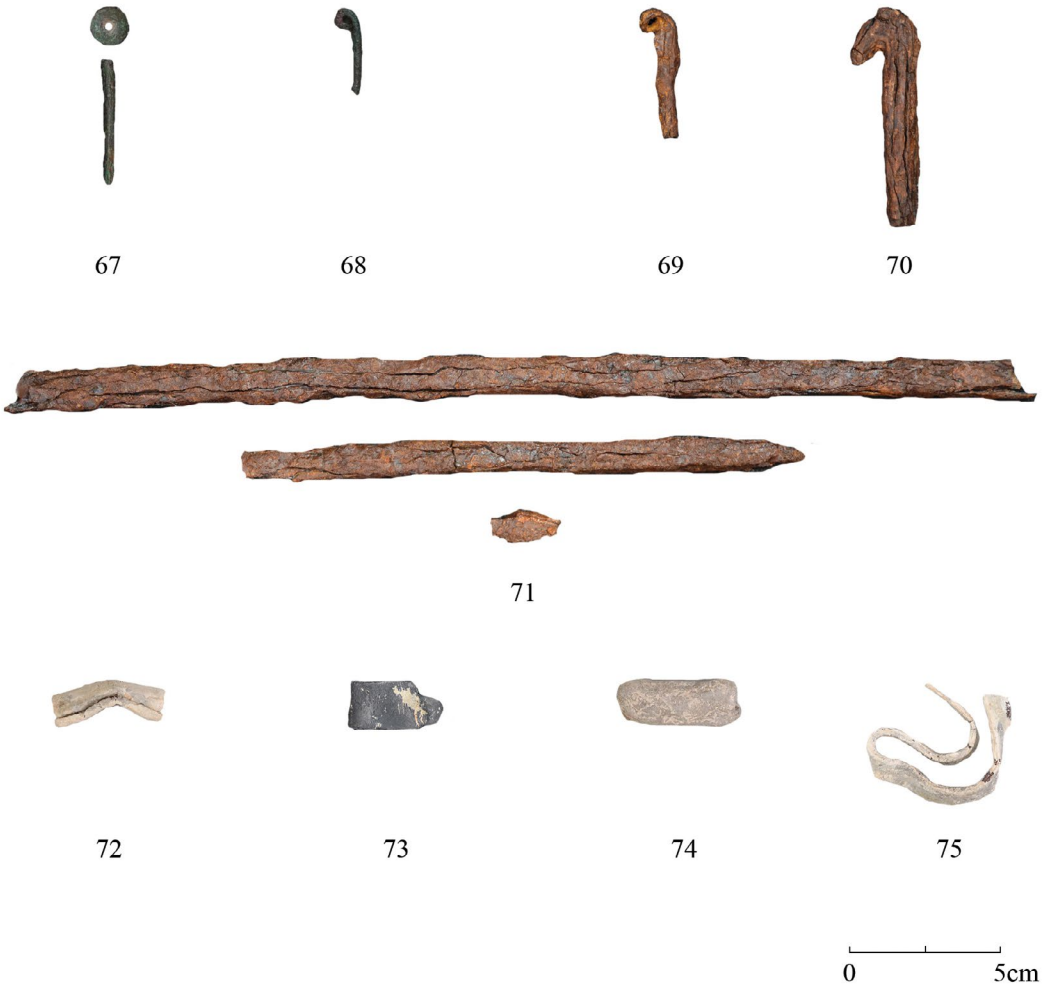

Fig. 5

Findspot: EU 19 in northern end of plateau. Mudbrick wall and part of first ash layer underneath mudbrick elevation. Excavated in 2019.
Comparanda: Merker 2012, 236–238 pl. 17, M92.

69 Inv. No.: LN 224/09.7

Measurements: L.: 0.043, W.: 0.007, Wt.: 3.7 g.
Description: iron fitting with looped end.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

70 Inv. No.: LN 224/09.8

Measurements: L.: 0.070, W.: 0.01, Wt.: 20.3 g.
Description: iron rod fitting with hooked end.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

71 Inv. No.: LN 24/14

Measurements: largest piece: L.: 0.345, W.: 0.013, Wt.: >100g; medium piece: L.: 0.200, W.: 0.012, Wt.: 66.0g; smallest piece: L.: 0.024, W.: 0.008, Wt.: 3.3 g.
Description: large iron spit.
Findspot: EU 8 in southern plateau. Found in occupation context with large bones in later floor level. Excavated in 2009.

Fishing Equipment (fig. 6)

The following lead objects are suggested to have been used for fishing. Most were found in occupation levels or in destruction above occupation. The folded lead weights are similar to examples from Naukratis (now at the British Museum) which have been suggested to be net weights[8]. The Vigla finds could have been used as weights for fishing lines. A similar stone that was modified to be a net weight to those found at Myos Hormos were also found during the Vigla excavations in 2022[9]. The last folded lead and ›lead strap‹ pieces in this section are not as similar to other folded lead net weights, but they could have functioned as such. The presence of fishing equipment is logical, as Vigla is close to the Mediterranean Sea and soldiers could have easily gone out to fish. These objects provide more insight into the daily life of the soldiers apart from their experiences in war. Similarly loom weights have been found made of ceramic from excavations, indicating that the soldiers or other family members, perhaps women, were weaving and producing textiles on-site.

72 Inv. No.: LN 177/2020
Measurements: D.: 0.014, Wt.: 17.5 g.
Description: folded lead fishing weight.
Findspot: EU 20 in center of plateau. Destruction layer above later floor.
Excavated in 2019.
Comparanda: Merker 2012, 228–229 pl. 10, M42.

73 Inv. No.: LN 237/09
Measurements: L.: 0.032, D.: 0.017, Wt.: 24.9 g.
Description: folded lead fishing weight.
Findspot: EU 2 in plateau. Occupation debris in second phase of occupation.
Excavated in 2008.
Comparanda: Merker 2012, 228–229 pl. 10, M41.

74 Inv. No.: LN 179/2020
Measurements: D.: 0.014, Wt.: 26.4 g.
Description: folded lead, possible net weight.
Findspot: EU 20 in center of plateau. Later floor level. Excavated in 2019.

75 Inv. No.: LN 178/2020
Measurements: D.: 0.011, Wt.: 22.4 g.
Description: lead strap, possible net weight.
Findspot: EU 20 in center of plateau. Destruction layer above later floor.
Excavated in 2019.

Cosmetic or Medical Equipment (fig. 6)

A few objects that were likely used for cosmetics or medicine give a glimpse of activities beyond warfare at Vigla. Injuries and everyday medical issues would have been present at the site, so instruments like these would have been necessary to treat the ailments.

76 Inv. No.: LN 90/2020
Measurements: D.: 0.05, Wt..: 5.5 g.
Description: rounded end of bronze implement with bent shaft, possibly from spatula or curette. Broken at shaft.

8 https://www.britishmuseum.org/collection/object/X__6104, catalogued by the British Museum, now at the Bolton Museum.

9 Recorded but not kept. See Thomas 2010, 127.

Findspot: EU 20 in center of plateau. Destruction layer above later floor. Excavated in 2019.
Comparanda: Merker 2012, 232–234 says that some spatulas »have been bent into a right angle and apparently were meant to be used in that way«. The rounded end with the bend in the shaft is similar to a curette in Bliquez 2015, 411 figs. 48a and 48b. The other end of the curette in Bliquez has a scooped tool used for scraping.

77 Inv. No.: LN 106/20

Measurements: D.: 0.02, Wt.: 6.8 g.
Description: bronze probe with two rounded ends.
Findspot: EU 20 in center of plateau. Destruction layer above later floor level. Excavated in 2019.

78 Inv. No.: LN 87/2020

Measurements: D.: 0.01, total Wt.: 9.1 g.
Description: bronze dual ended pronged implement, possibly a forceps.
Findspot: EU 20 in center of plateau. Modern plow zone. Excavated in 2019.

Jewelry and Accessories (fig. 6)

The examples of adornment objects below also provide insight into the daily life of the soldiers and perhaps their families. The pieces include one hair pin, a fibula, a possible pin, a small silver relief of the head of a Hellenistic ruler, and a bronze ring that was found in occupied areas of Vigla. The fibula is of the semicircular type. The curved end on one side identifies it as a fibula, as this is where the pin would have rested when closed. This piece of adornment provides insight into the daily life aspect of clothing. The hair pin especially could indicate the presence of women at the site, but it is not possible to say whether women lived longer term or not at Vigla.

79 Inv. No.: LN 4/2014

Measurements: D.: 0.010, Th.: 0.020, Wt.: 0.5 g.
Description: silver round object with portrait of a Hellenistic ruler looking to right and wearing a fillet.
Findspot: EU 9 in fortification in northwest corner of plateau. Fill associated with later rubble wall attempt to repair fortification. Excavated in 2009.

80 Inv. No.: LN 224/2020

Measurements: L.: 0.017, W.: 0.014, Th.: 0.002, Wt.: 1.3 g.
Description: bronze ring; twisted on one end, the other end has flat oval bezel.
Findspot: EU 18 in northern part of plateau by northern fortification. Mudbrick collapse of northern fortification. Excavated in 2018.
Comparanda: Merker 2012, 251 pl. 33, M158.

81 Inv. No.: LN 199/2018

Measurements: L.: 0.097, W.: 0.003, Wt.: 3.2 g.
Description: bronze hair pin with round beaded decoration at one end.
Findspot: EU 15 in north-central part of plateau. Mudbrick collapse above later floor level. Excavated in 2012.
Comparanda: Merker 2012, 250 pl. 33, M154.

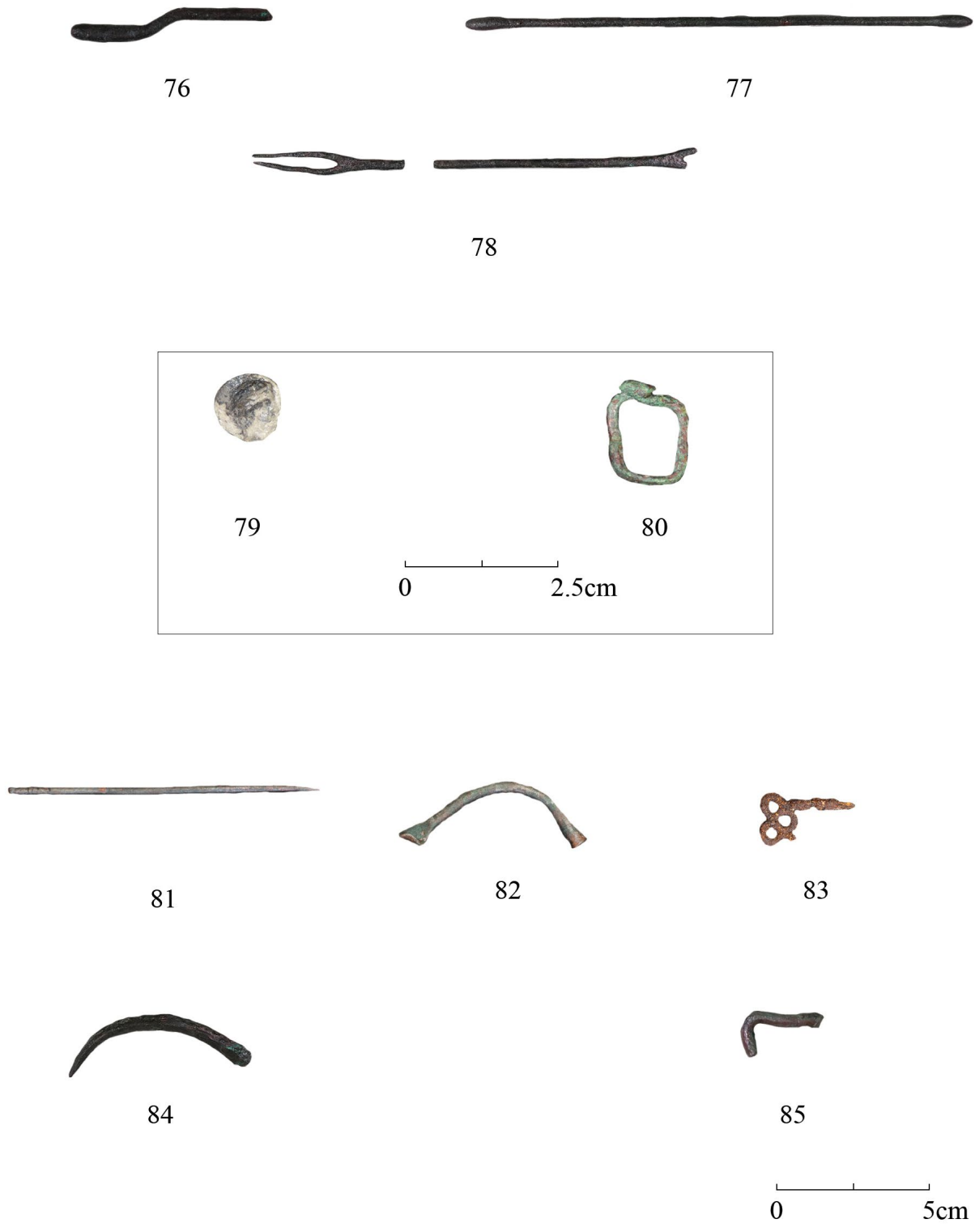

Fig. 6

82 Inv. No.: LN 200/2018

Measurements: L.: 0.059, W.: 0.005-0.008, Wt.: 6.4 g.
Description: bronze semicircular fibula, missing pin and part of hinge.
Findspot: EU 15 in north-central part of plateau. Mudbrick collapse above later floor level. Excavated in 2012.
Comparanda: Merker 2012, 252–253 pl. 34, M166.

83 Inv. No.: LN 194/2018

Measurements: L.: 0.029, W.: 0.016, Wt.: 1.0 g.
Description: iron pin (?) with one twisted end in design ("pretzel-shaped"); one shaft coming off of design and small stub present opposite extant shaft.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.

Other Tools (fig. 6)

The functions of these objects are not definitively known, but they do not fall within other categories above. Two bronze curved objects (84 and 85) are similar to possible grappling hooks identified at Tel Anafa by Merker.

84 Inv. No.: LN 100/2020

Measurements: D.: 0.004, Wt.: 7.1 g.
Description: bronze grappling hook (?) with square section and socket.
Findspot: EU 21 in southern fortification. Mudbrick collapse layer north of fortification. Excavated in 2019.
Comparanda: Merker 2012, 231–232 pl. 12, M56 and M57 but in iron.

85 Inv. No.: LN 103/20

Measurements: D.: 0.004, Wt.: 3.1 g.
Description: bronze grappling hook (?).
Findspot: EU 22 in southern fortification. Foundation trench for earlier phase of fortification. Excavated in 2019
Comparanda: Merker 2012, 231–232 pl. 12, M56 and M57 but in iron.

Miscellaneous (fig. 7)

These objects do not fit in with the categories above. Some pieces of slag indicate metal production on-site at Vigla, also demonstrated by the lead sprues above.

86 Inv. No.: LN 178/2018

Measurements: L.: 0.074, W.: 0.019-0.042, Th. 0.014, Wt.: 64.8 g.
Description: round, flat iron piece with shaft (handle of an object?).
Findspot: EU 17 in collapsed part of southwestern face of ridge. Opening cleaning. Excavated in 2012.

87 Inv. No.: LN 97/2020

Measurements: D.: 0.012, Wt.: 8.3 g.
Description: fragment of iron horse shoe.
Findspot: EU 21 in southern fortification. Modern plow zone. Excavated in 2019.

Fig. 7

88 Inv. No.: LN 225/09

Measurements: L: 0.100, W.: 0.034-0.041, Th.: 0.001, Wt.: 36.4 g.
Description: lead sheet with six holes and two partial holes.
Findspot: EU 1 in south-central part of plateau. Mudbrick collapse layer. Excavated in 2008.

89 Inv. No.: LN 182/2020

Measurements: D.: 0.011, Wt.: 32.0 g.
Description: lead weight?
Findspot: EU 22 in southern fortification. Foundation trench for earlier phase of fortification. Excavated in 2019.

90 Inv. No.: LN 175/2020

Measurements: D.: N/A, Wt.: >100 g.
Description: miscellaneous lead.
Findspot: EU 21 in southern fortification. Intentional backfill after construction of fortification. Excavated in 2019.

91 Inv. No.: LN 8/2014

Measurements: L.: 0.080, W.: 0.032-0.080, Wt.: 6.2 g.
Description: thin bronze fragment, portion of the base and rim of a shallow bowl or other vessel?
Findspot: Excavated in 2009.

92 Inv. No.: LN 81/2020

Measurements: D.: 0.012, Wt.: 6.6 g.
Description: miscellaneous slag, four pieces.
Findspot: EU 19 in northern end of plateau. Compact, burned layer of mudbrick under mudbrick fortification. Excavated in 2019.

Conclusion

This survey of the metal finds from Vigla demonstrates the militaristic nature of the site in the early Hellenistic period, but also provides insight into daily life at the fortified settlement. In addition to the abundant weapons, many pieces of metal hardware came from the furniture, architecture, and possibly tents that the soldiers were using. Other activities that took place included fishing and metal production, as evidenced by the lead fishing weights, and slag and lead sprues. The everyday personal objects also include possible cosmetic or medical equipment as well as pieces of adornment that show a more personal side to the soldiers and perhaps their families. As excavations at Vigla continue, more metal finds in context with other objects from the site will continue to give information on the people stationed at Vigla.

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A Late Hellenistic Storage Complex in Tel Aviv, Israel: Pottery Finds and a Broader Perspective

Yoav Arbel – Peter Gendelman

Abstract

Salvage excavations at a site in central Tel Aviv, Israel, uncovered a storage complex from the Hellenistic period. The complex probably belonged to an adjacent farm, similar to several that were discovered in excavations in Jaffa's vicinity. Abundant pottery found on the floors of some of the rooms included mostly storage jars generally dated to the 2nd century BCE – the Seleucid phase of the Hellenistic period – as well as some irregular types. The storage complex is the largest Hellenistic structure exposed in and around Jaffa, and attests to turbulent times in Jaffa's region, as well as to the thriving trade of the period along the Mediterranean coasts.

Introduction

An unusual Hellenistic structure was exposed in salvage excavations conducted in 2020 and 2021 at the junction of the streets Arlozorov and Ibn Gvirol in central Tel Aviv (**figs. 1–2**). It is the largest Hellenistic structure exposed so far in Jaffa's region. No Hellenistic sites or structures are known in its vicinity, other than a hexagonal building exposed further east at Arlozorov Street, which the excavator identified as a bastion in a fortification line built by Hasmonean king Alexander Jannaeus (103–76 BCE)[1].

The site (henceforth ARIG) is located on the edge of the second of three ›kurkar‹ ridges at a north-south course across metropolitan Tel Aviv. The location is a topographic vantage point that prior to modern construction offered a broad westward view toward the coastline. The Hellenistic remains lay under structures and graves of the village of Summayl (al-Mas'udiyya), which stood at the site from Ottoman times until 1948, and later apartments.

1 Kaplan 1972, 90. Based on *Ios., ant. Iud.* 13, 390; contra Fantalkin – Tal 2003.

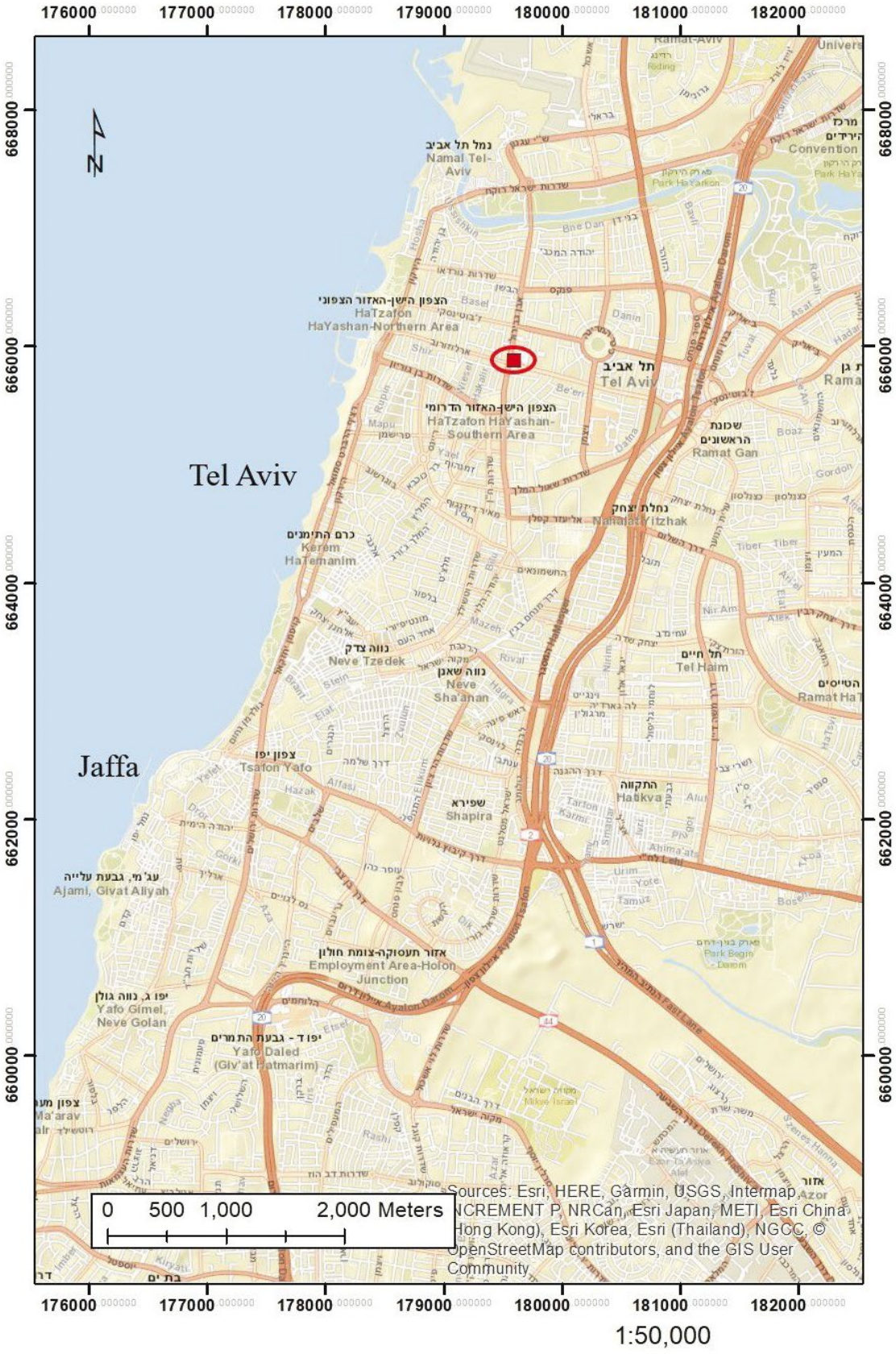

Fig. 1 : Location of the site (map by A. Dagot, Israel Antiquities Authority)

Fig. 2 : The site in its present urban environment
(photograph by A. Peretz, Israel Antiquities Authority).

Historical background

At the conclusion of the Diadochi conflicts, Jaffa and its region became part of the Egypt-based Ptolemaic kingdom. Over 190 settlements, farms, graveyards and fragmentary architectural remains in the southern coastal plain reflect considerable demographic and economic growth under the Ptolemaic agrarian and trade system[2]. Jaffa's role in this system was significant, due to its fertile soil and its position as a key harbour and a crossroads on the ›Via Maris‹. Material evidence for Jaffa's consequent prosperity and Hellenistic cultural traits was discovered both on the mound[3] and at sites immediately to its east, where late Iron Age and Persian habitations evolved into a Lower Town[4]. The Ptolemaic court boosted Jaffa's political and economic potential by granting it the status of an independent city with the right to mint coins[5].

The economic organization of Jaffa's region conformed to the central-place system – a central town enjoying the products of a surrounding agricultural-industrial belt and reciprocating with marketing services and a measure of security[6]. Other than profits from trade, harbour services and local industry, Jaffa enjoyed the produce of its surrounding farms and villages, where grapes for wine and cereals were cultivated[7]. Numerous winepresses

2 'Ad 2016, 94–95.

3 Kaplan 1972, 88; Tsuf 2018a; Burke et al. 2014, and references there.

4 Arbel 2017, 68–70, and references there; Gendelman 2020b, 178–182.

5 Tal 2006, 302–303. 310–11.

6 Renfrew 1984, 48–49; 'Ad 2021, 101–102.

7 Keimer 2017, 383–387.

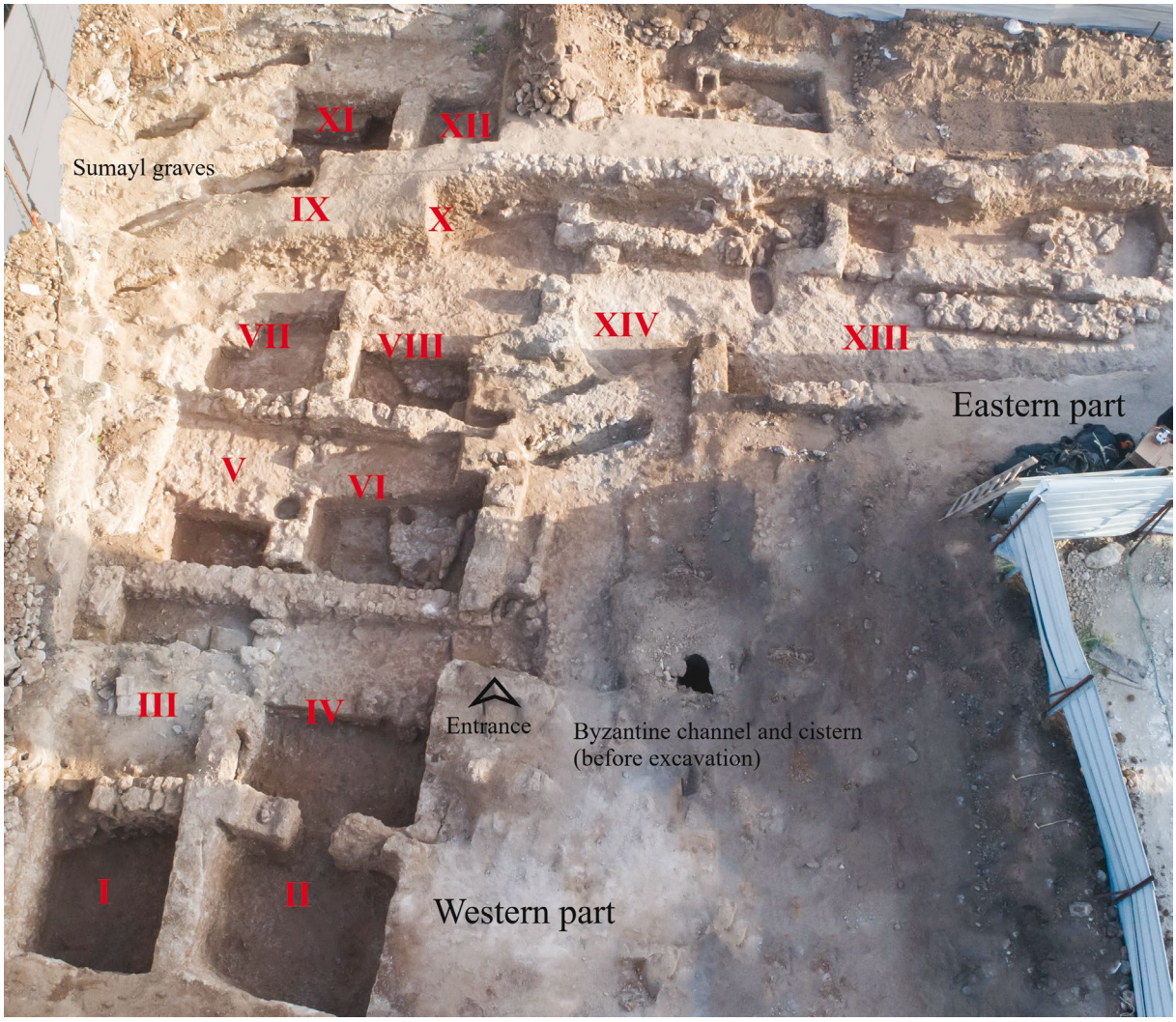

Fig. 3 : General image of the Hellenistic complex, looking north
(photograph by A. Peretz, Israel Antiquities Authority).

found in the southern coastal plain attest to extensive wine production, part of an international commercial exchange reflected in the profusion of imported wares in local ceramic assemblages[8]. Stamped handles of amphorae represent importation from the Greek Islands, Cyprus, Sicily and Italy. Greek merchants and others benefitting from this thriving trade settled in Jaffa and its region[9].

The mutually beneficial economic system between Jaffa and its environs remained in effect under the Seleucids, yet an analysis of excavations conducted in the city and its environs reveals significant alterations. While the town experienced gradual regression during the 2nd century BCE, the farms and villages in its environs were clearly less affected. Some, such as the settlement at Gan Soreq, ca. 11 km to the southeast of Jaffa, even enjoyed a peak in expansion during the early Seleucid phase[10]. The advantage of the environs compared with the city in this period has additional evidence at ARIG.

8 'Ad 2021, 100; Gendelman 2020b; Gendelman 2020c; Gendelman 2021.

9 Finkielsztejn 2020; Finkielsztejn 2021; Stern 1995, 437.

10 'Ad 2021, 96.

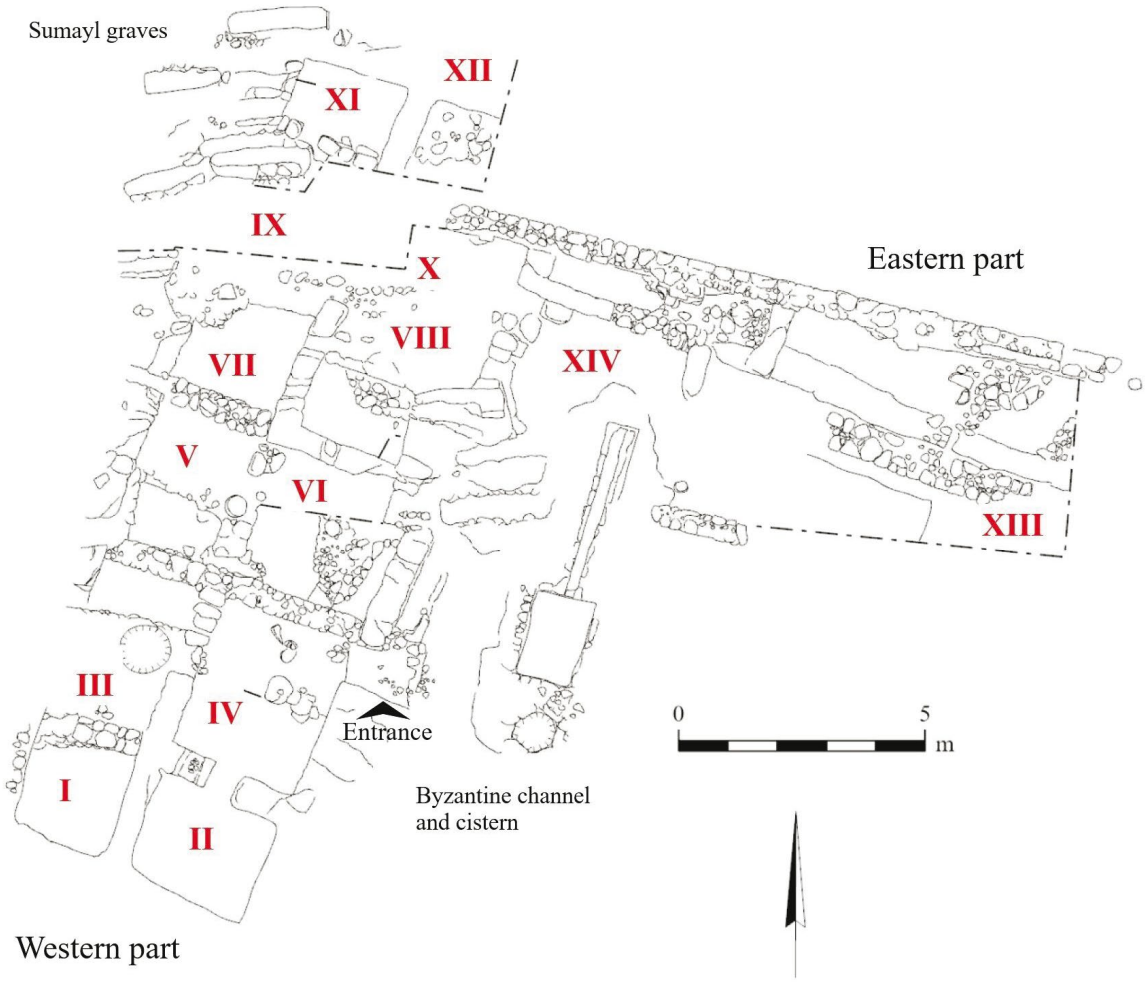

Fig. 4 : Plan of the Hellenistic complex (plan by M. Kahan, Israel Antiquities Authority).

The Hellenistic Complex

The main segment of the Hellenistic complex at ARIG consisted of a double row of up to twelve rooms (ca. 3 × 3.5 m) with a common central wall along a north-south course (**figs. 3, I-XII; 4**). The outer walls of the complex and some of the inner walls were hewn into the sandstone (›kurkar‹) bedrock. Other inner walls were stone-built (**fig. 5**). Doorways linked between the rooms (**figs. 5–6**), and shelves or closets were installed in some of the walls (**fig. 7**). The single known entrance was located at the eastern perimeter wall, with three stone steps descending to room IV from the surface. This entrance served only the southern rooms, as a solid stone wall separated them from the northern rooms. The latter may have been reached through an undetected second entrance, or by means of ladders placed in openings in the floors of superimposing rooms. An eastern wing comprising at least four larger and irregularly sized spaces adjoined the complex at a perpendicular angle. These spaces may have been open courtyards, in which various chores were performed. A basalt-made tripod mortar and a rock-cut sump discovered there were used for grinding, an activity usually carried out in courtyards.

The size of the complex, the symmetrical room arrangement, the lack of baking ovens (›tabuns‹) and other domestic installations, as well as the marked statistical advantage of amphorae in the ceramic assemblage (see below) strongly suggest a semi-subterranean

Fig. 5
Rock-hewn and stone-built partitions, looking north (photograph by A. Peretz, Israel Antiquities Authority)

Fig. 6
Entrance between Rooms II-IV, looking north (photograph by A. Peretz, Israel Antiquities Authority)

Fig. 7
Rock-cut niches in the wall between rooms III-IV, looking west (photograph by A. Peretz, Israel Antiquities Authority)

storage complex. It likely belonged to a farmstead or estate, as at sites in mainland Greece[11]. Local examples of storage structures within farmsteads were discovered near El'ad, where the storages occupied the ground floor[12], and at Rosh Ha'Ain[13]. The limited volume of debris at ARIG falls below what could be expected had residential rooms stood over the storage space, although this option cannot be dismissed, as stones could have been removed for later construction. If the associated residence stood near the storage complex its remains are yet to be discovered or may have been uprooted by modern activity.

Other stone-built warehouses from this period were exposed in Jaffa[14], Ashkelon[15], and in contemporary rural sites such as Gan Soreq[16], and Shikmona, near modern Haifa[17]. Large warehouses were reported as parts of the administrative complex at Tel Kadesh[18] and in Nahal Tut, where the remains were interpreted as a military fortified storage depot[19].

The Ceramic Finds from the Hellenistic Complex

A soil layer up to 40 cm thick over the floors of several Hellenistic rooms contained the sherds of dozens of vessels, most of which local amphorae. The vessels may have fallen from shelves, or tumbled down as the roof of the building or the upper story collapsed. Far fewer table-ware items were found, most of them in the four northern rooms, hinting to function variation between the two parts. The assemblage includes local and imported forms.

Table Wares

Unidentified Eastern Mediterranean Centres' Production (Levant?)

A group of vessels made of well-levigated light-coloured clay and covered with mottled slip varying from red to dark gray colour. This ware was produced in unidentified eastern Mediterranean workshops[20], and is commonly reported from Jaffa and its satellite sites. These well-known and widely distributed shapes correspond to common pan-Hellenic forms, dating from the late 4th till the late 2nd centuries BCE[21]. The high frequency of these vessels in the region and particularly in Jaffa[22] might suggest production centres located somewhere in the southern Levant. The assemblage includes hemispherical (›echinus‹) (**fig. 8, 1**)[23], outturned rim

11 Margaritis 2015.

12 Nagorsky 2019, 48.

13 Shadman 2019.

14 Herzog 2008, 1792.

15 Stager et al. 2008, 317 fig. 15.97.

16 'Ad 2016, 92.

17 Elgavish 1974.

18 Herbert – Berlin 2003, 27–30.

19 Alexandre 2006.

20 For possible identification see Rosenthal-Heginbottom 2015, and discussion therein.

21 e.g., Guz-Zilberstein 1995, 290–291 figs. 6.1, 1–29; 6.2, 14–19; Rosenthal-Heginbottom 1995, 215–216 fig. 5.5, 13–15.

22 Gendelman 2020c, 408.

23 These bowls were produced from the late 4th till the late 2nd centuries BCE and were very common and wildly distributed in the region, especially along the Mediterranean coast and particularly at Jaffa. See Gendelman 2020a, 56 fig. 1, 97–98; Gendelman 2020c, 409–410 fig. 3, 1–8; Gendelman 2021, 59 fig. 4.3; Jakoel – Gendelman 2017, 61* fig. 19, 1; Tsuf 2018b, fig. 9.2, 29–56, and sites in its territory: Tel Aviv – Gorzalczany 2003, 7 fig. 2, 1–2; Apollonia-Arsuf – Tal 1999, 153–154 fig. 4.35, 2–4; Fischer – Tal 1999b, 230 fig. 5.7, 7–8 and Tel Michal – Fischer 1989, 183 fig. 13.3, 1–3.

(**fig. 8, 2**)[24] and moldmade bowls (**fig. 8, 3**)[25], and small fishplate circle saucers with grooved lips (**fig. 8, 4**)[26].

Ptolemaic Fine Table Ware of Egypt

The second group of imported fine table wares from ARIG includes vessels made of hard, micaceous fabrics and red and grey clay. The red ones may originate in Lower Egypt workshops[27], while the dark gray/black fabrics are known from various Egyptian regions[28]. Rather small, but stable numbers of Egyptian vessels reached the markets of Jaffa[29] and other sites of the region[30]. The illustrated sherds include a red carinated cup (**fig. 8, 5**) and a gray fabric bowl decorated with stamped palmettes (**fig. 8, 6**). Parallels for the former type were reported from Upper Egypt[31], and for the latter from Lower Egypt sites[32], Jaffa[33], Ramat Aviv (in northern Tel Aviv, across the Yarkon River)[34] and Maresha[35].

Locally Produced Colour-Coated Fine Table Wares

In addition to the imported vessels there is a distinct group of locally produced table wares with poor-quality black or red coating. The type is inspired by and imitates imported vessels of Pan-Hellenic shapes widespread throughout the Mediterranean and beyond. This group includes a small fishplate (**fig. 8, 7**) and echinus bowls (**fig. 8, 8–9**). Parallels date from the late 4th or early 3rd till the early 1st century BCE, and are known from Jaffa[36], and surrounding sites[37].

24 Carinated bowls were produced in various eastern Mediterranean workshops from the late 4th till the 2nd century BCE. Carinated bowls with out-curved rims thought to imitate Attic bowls date ca. 275 to the 2nd century BCE, and see Rotroff 1997, 159–160. Such vessels are rarely reported from Jaffa (Tsuf 2018b, 110–112 fig. 9.2, 57–60; Gendelman 2020a, 55–56 fig. 1, 5 and other costal sites of the region (e.g., Elgavish 1974, 51–52, pl. XXX, 282; Oleson et al. 1994, 146 fig. 55, BG 6. 7; Guz-Zilberstein 1995, 290–291 photo 6.6. 346–347 fig. 6.2, 14–19).

25 During the Hellenistic period such bowls were produced in numerous eastern Mediterranean workshops. Such vessels, generally dated to the 2nd – early 1st century BCE, are well represented in the Hellenistic sites of the region (Rosenthal-Heginbottom 1995, 215). The decoration on the poorly preserved ARIG fragment is of an ovolo on rim-zone. This decoration scheme is well known from other sites of the region (e.g., Elgavish 1974, 58–59, pls. XXXV, 319–320. 324. 326; XXXVI, 327–330; Rosenthal-Heginbottom 1995, 216 fig. 5.5, 13–15; Rosenthal-Heginbottom 2016, nos. 42–43. 57–61. 101).

26 Rather rare shape (cf. Tsuf 2018b, 112–113 fig. 9.3, 87–92; Młynarczyk 2002, 120–121 fig. 4, 53) marked as Type BL4c and dated to the 3rd–2nd century BCE in the Tel Dor excavations (Guz-Zilberstein 1995, 292. 348–349 fig. 6.3, 20).

27 Harlaut 2002; Ballet 2002, 90–91.

28 Gill 2012, 19.

29 Gendelman 2021, 59.

30 cf. Rosenthal-Heginbottom 2019.

31 Closely shaped painted or slipped bowls, dated to the 3rd and 2nd centuries BCE, were reported from Karnak and Elephantine, Upper Egypt (Pierrat-Bonnefois 2002, fig. 12; Masson 2011, 280 figs. 68–69; Consonni 2016, 197. 203 fig. 8, 19; Licitra – David 2016, fig. 21, 114.

32 e.g., Berlin 2001, fig. 2.14, 6–12; Harlaut 2002, 271 fig. 10, b.

33 Gendelman 2021, fig. 4, 4.

34 Gorzalczany 2003, 7 fig. 2, 3–4.

35 Rosenthal-Heginbottom 2019, 61 fig. 3f, no. 3.

36 Tsuf 2018b, 98–99 fig. 9.1, 12–14; Gendelman 2020a, 56 fig. 1, 9; Jakoel – Haddad 2015, fig. 5, 1–3.

37 Kletter 2015, 121 fig. 37, 2. 4–5; Gorzalczany 1999, 28 fig. 4, 1–4. 6; Gorzalczany 2003, 7 fig. 2, 1–4; Fischer – Tal 1999b, 238 fig. 5.12, 11–14; Singer-Avitz 1989, 133 fig. 9.13, 4–5.

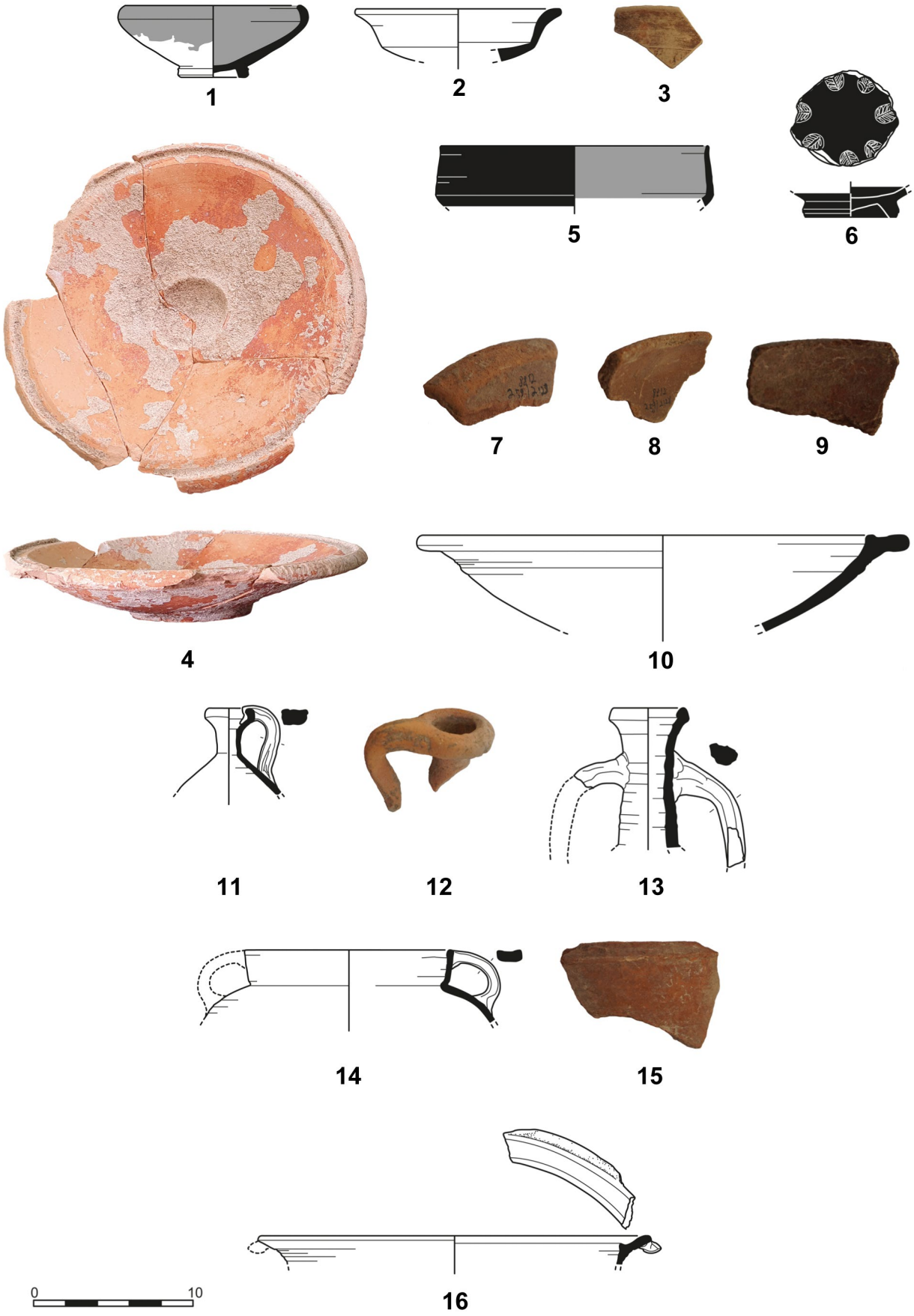

Fig. 8 : The pottery: table, household and kitchen wares.

Household and Kitchen Wares

The slim household assemblage includes an imported mortarium (**fig. 8, 10**), two variants of local perfume juglets (**fig. 8, 11–12**) and a pilgrim flask (**fig. 8, 13**).

Mortarium

Fragment of an imported mortarium bowl with wide shelf-like rim (**fig. 8, 10**). These eastern Mediterranean vessels were reported from Kition, in layers from the end of the 4th and beginning of the 3rd centuries BCE[38]. Similarly shaped vessels are commonly reported from Jaffa[39] and other sites in the region[40].

Perfume Juglets

Two slightly different variants of small juglets were identified at the site. The first is represented by the fragment of a globular juglet with short narrow neck, up-raised concave rim, and ovoid handle connected to the rim (**fig. 8, 11**). Similarly shaped perfume juglets are reported as early as the late Persian-early Hellenistic period (mid/late 4th – early 3rd centuries BCE)[41] and seem to be continuously produced during 2nd – early 1st centuries BCE[42]. Such juglets were recovered from nearby Tel Qasile[43].

The second variant is characterized by an out-rolled rim (**fig. 8, 12**). Similar vessels, with or without red wash, dated to the 2nd and early 1st centuries BCE, were reported from diverse sites of the region[44].

Pilgrim Flask

Fragment of a lentoid-shaped pilgrim flask with narrow neck and flaring rim (**fig. 8, 13**). This vessel is similar to Type PF from Tel Dor, where it was dated to the early Hellenistic period[45]. Such vessels, dated from the mid-6th till the late 4th or early 3rd century BCE are commonly reported from Jaffa[46] and nearby sites[47].

Cooking Pots

The cooking pots assemblage comprises only two variants of locally produced vessels (**fig. 8, 14–15**). The first variant is characterized by a short concave neck with inner lid setting and rounded lip (**fig. 8, 14**). It is a common shape of Hellenistic cooking pot, generally dated

38 Salles 1983, 73–74 fig. 28, 245; Salles 1993, 189. 267–268 figs. 200, 239; 230, 521; 232, 521.

39 Jakoel – Gendelman 2017, 61* fig. 19, 12; Tsuf 2018b, fig. 9.17, 336–339; Gendelman 2021, 414–416 fig. 4, 4–7.

40 E.g., Kenyon 1957, 228 fig. 40, 4; Briend 1980, 108. 114 pls. 12, 7; 17, 14; Rochman-Halperin 1999, 107 fig. 23, 11.

41 Cf. vessels from Apollonia-Arsuf, see Tal 1999, 157 fig. 4.38, 6 and Tel Michal, see Singer-Avitz 1989, 135 fig. 9.13, 10.

42 As reported from Maresha (Levine 2003, 108–109 fig. 6.13, 123–128) and Jerusalem (Geva 2003, 129–130 fig. 5.2, JT 2, pls. 5.2, 41; 5.6, 28; 5.8, 23, 5.9, 16; 5.10, 19; photos 5.7, 5.8; Berlin 2015, 638. 665 pl. 6.1.18, 12).

43 Kletter 2015, 122 fig. 37, 13.

44 E.g, Tirat Yehuda (Yeivin – Edelstein 1970, fig. 7, 8–9), Or Aqiva (Yannai 2009, 60 fig. 6, 11–12) and Maresha (Levine 2003, 109 fig. 6.13, 126; Stern – Osband 2015, fig. 2.9, 6).

45 Guz-Zilberstein 1995, 310–311. 382–383 fig. 6.34, 1–3.

46 Tsuf 2018b, fig. 9.8, 182–184; Gendelman 2020c, 417–419 fig. 5, 8–10.

47 Such as Tel Qasile (Kletter 2015, 122 fig. 37, 15) Tel Mikhal from Stratum VI, dated to 350–300 BCE (Singer-Avitz 1989, 135 fig. 9.13, 16) and Apollonia-Arsuf (Fischer – Tal 1999b, fig. 5.14, 4; Tal 1999, 157 fig. 4.38, 12).

from the 3rd to the late 2nd or early 1st centuries BCE and reported from numerous sites along the Israeli Mediterranean coast and inland[48]. It was also reported from Jaffa and nearby sites[49].

The second variant is a globular cooking pot with high cylindrical neck and out-curved rim (**fig. 8, 15**). This shape appears as early as the end of the Persian and the beginning of the Hellenistic periods and is continuously represented till the late 2nd century BCE. It was reported from Jaffa[50] and from numerous sites of the region[51].

Casserole

The only shape of casseroles in the ARIG assemblage is a barrel-shaped vessel with a ledge-shaped rim, inner lid support and a pair of horizontal rod handles (**fig. 8, 16**). This shape is commonly reported from Jaffa and neighboring sites, dating from the late Persian trough the Hellenistic periods[52] and was reported from numerous sites in Israel and beyond[53].

Hellenistic Amphorae

Local Amphorae

As stressed above, local amphorae are by far the most common vessels found at both parts of the ARIG complex. Two distinct variants represent the local sack-shaped amphorae.

The first variant, represented by a few fragments, is characterized by a relatively high cylindrical neck and out-folded rim (**fig. 9, 1**). This is the most common shape of local containers from the Persian and early Hellenistic periods in Jaffa[54]. Closely shaped vessels, dating between the mid-5th and mid-4th centuries BCE, are reported from Tel Michal and Apollonia-Arsuf[55].

Hundreds of fragments belonging to over 40 vessels correspond to the second variant. They were found mainly in the four southern rooms of the storage building and at the easternmost space of the eastern wing. The vessels are relatively small and slender. They have a thickened out-splayed rim with pointed lip set directly upon the rounded shoulder, and a pair of loop handles connected to the shoulders (**fig. 9, 2–5**). This common shape appears as early as the 3rd century BCE and became dominant during the 2nd and early 1st centuries BCE[56]. Such vessels are commonly reported from late Hellenistic deposits in Jaffa[57] and its surroundings[58]. One vessel from a burial cave at Bat-Yam bears a Phoenician inscription of Baal'salah, ascribed to the 3rd century BCE[59].

48 e.g., Briend 1980, 107 pl. 11, 5a–b; Guz-Zilberstein 1995, 299. 366 fig. 6.19, 13–14.

49 Tsuf 2018b, 177–178 fig. 9.20, 374–376; Fischer 1989, 184 fig. 13.3, 17; Fischer – Tal 1999b, 238 fig. 5.13, 10–12.

50 Tsuf 2018b, 174–175 fig. 9.19, 363–368; Gendelman 2020c, 420–421 fig. 6, 5.

51 e.g., Briend 1980, 107 pl. 11, 1. 2; Alexandre 2006, 155 figs. 48, 7; 53, 5. 6; Guz-Zilberstein 1995, 299. 365 fig. 6.18, 5–11.

52 Fischer – Tal 1999b, 238 fig. 5.13, 3; Kapitaikin 2006, 29–30 fig. 5, 8; Gendelman 2020c, 422.

53 e.g., Guz-Zilberstein 1995, 300 fig. 6.22, 1; Berlin 2001, 34 fig. 2.23, 11.

54 See Gendelman – Jakoel 2017, 301 fig. 16.1, 3; Jakoel – Gendelman 2017, 61* fig. 9, 14; Tsuf 2018b, 220–221 fig. 9.34, 586–591; Gendelman 2020a, 59 fig. 2, 5. 6; 2020c, 422 fig. 7, 2.

55 Singer-Avitz 1989, 122–124 figs. 9.4, 1–3. 5–6. 9. 12; 9.5, 8; 9.6, 1–4. 7; 9.12, 6–10; Tal 1999, 102 fig. 4.13, 12. 13; Kapitaikin 2006, 30–31 fig. 6, 1. 8.

56 Guz-Zilberstein 1995, 311. 386 fig. 6.37, 1–6.

57 e.g., Tsuf 2018b, 221–222 fig. 9.43, 593–600; Jakoel – Gendelman 2017, 61* fig. 19, 15–16.

58 Kaplan – Kaplan 1989, 355–356 figs. 6–7; Kletter 2015, 122 figs. 38, 3–6; 39, 13; Gorzalczany 1999, 30 fig. 4, 14–17. 19–20.

59 Shapira 1966, pl. 4.

Fig. 9 : The pottery: Hellenistic amphorae

Imported Amphorae

Few fragments of imported amphorae were found at ARIG, and only two are identifiable.

One shard represents a vessel with a narrow neck, rounded rim and massive curved handles connected to the neck below the rim. The single preserved handle is bearing an illegible circular stamp (**fig. 9, 6**). The coarse pale fabric suggests Antioch or Cilicia origins[60].

The second shard belongs to an amphora with a short neck and wide out-splaying ridged rim (**fig. 9, 7**). It follows a characteristic Punic production tradition with origins at Carthage and other coastal Tunisian sites[61]. Such vessels, known as Mañá C1/2 and Ramon T-7.4.2.262 are dated c. 200–150 BCE[63]. Similarly shaped amphorae were reported from 'Akko and Tel 'Ira[64].

Oil Lamps

Two types of oil lamps were found. The common wheel-made lamp (**fig. 10, 1**), dated to the 4th–2nd centuries BCE, has many examples in Jaffa[65] and other sites[66]. Decorated mold-made oil lamps (**fig. 10, 2–3**), dated ca. 200–50 BCE[67], were also reported from Jaffa[68] and its surroundings[69].

Ceramic Beehives (?)

Two fragmentary, locally produced vessels with an elongated body, narrow shoulders and a simple, slightly out-turned rim were discovered (**fig. 10, 4–5**). Their closest parallel is a group of pipe-like vessels recovered from a Hellenistic deposit at Straton's Tower/Caesarea Maritima[70] and tentatively identified as amphorae. A similarly shaped fragmentary vessel from a Hellenistic deposit at Tel Qasile was marked as possibly a »pipe?«[71]. Yet a feasible possibility, first presented here, that all these vessels, including the newly discovered shards from ARIG are in fact terracotta horizontal beehives. Terracotta or unbaked clay biconical pipe-like beehives were used in Egypt in as early as the 3rd millennium BCE till at least the 6th century BCE[72]. In Canaan, two-ended-open clay beehives appeared in the Iron Age II and persisted until the 20th century[73]. Terracotta beehives resembling the ARIG finds, dated to the late 4th-early 3rd centuries BCE are also known from Greece[74].

60 cf. stamped amphorae from Issos: Gates 2015, fig. 19.

61 Nasef 2015, 33 fig. 39.4–6.

62 Ramón Torres 1995, 426–442.

63 Guerrero 1986, 160–163 fig. 6, 1–3.

64 Dothan 1976, 36 fig. 30, 17; Fischer – Tal 1999a, fig. 6.141, 8; Wolff 2004, 453–454.

65 e.g., Tsuf 2018b, 314–315 figs. 9.68, 1109–1114; 9.69, 1115–1117; Gendelman 2020a, 60 fig. 2, 10–11.

66 Rosenthal-Heginbottom 1995, 235 figs. 5.13, 9–10; 5.14, 1–8.

67 Rosenthal-Heginbottom 1995, 238 figs. 5.17, 11–13; 5.18, 1–3.

68 Tsuf 2018b, 317–318 figs. 9.69, 1124; 9.70, 1127–1130.

69 Kaplan – Kaplan 1989, 356 fig. 16.

70 Oleson et al. 1994, 143–144. 147 figs. 52, A97–99; 53; pls. 27, A97; 28, A100–102.

71 Kletter 2015, 122 fig. 38, 7.

72 Crane 1999, 164. 166 fig. 20, 3a. 4a; Kritsky 2015, 10. 47–53 figs. 2.3–2.5; 5.5–5.6.

73 Mazar 2017, figs. 4–5, 9.

74 Jones et al. 1973, 394. 446–448 fig. 19 and pls. 76, 170–177; 77.

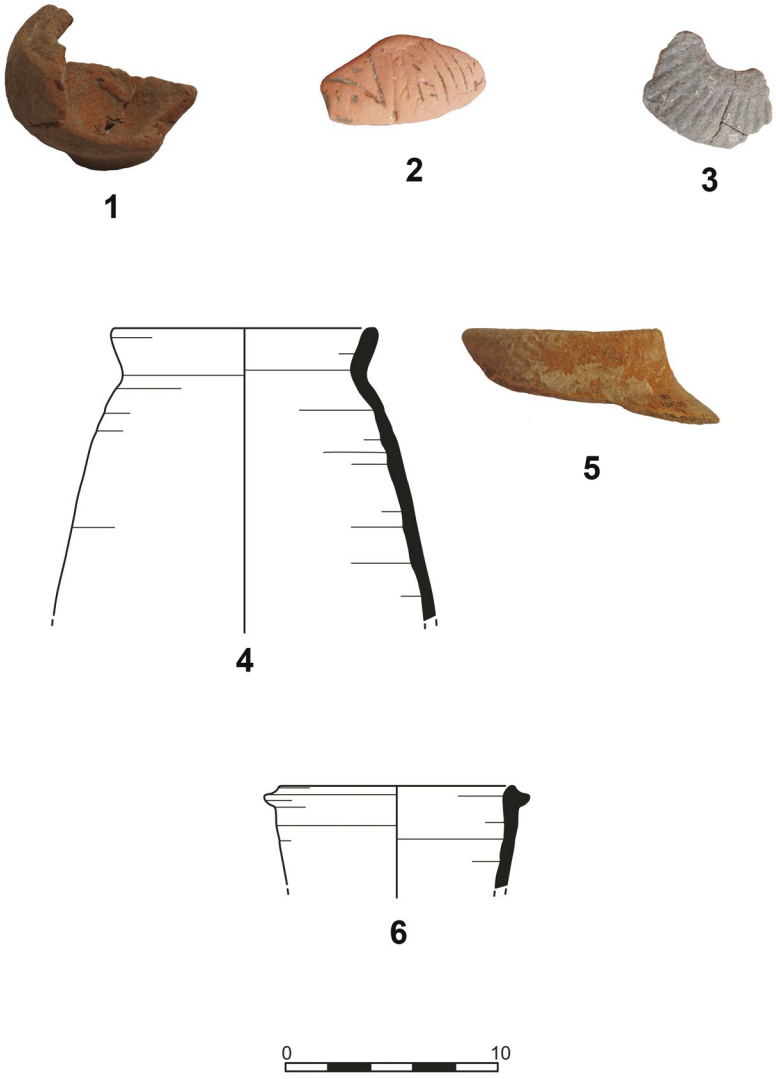

Fig. 10 : The pottery: Hellenistic lamps and beehives, Roman amphora.

Roman amphorae

A few fragmentary local bag-shaped amphorae from the 1st–early 2nd century CE were also found at the site (**fig. 10, 6**). Such amphorae are common at Jaffa[75] and various other sites[76].

Date and Significance

The Hellenistic pottery assemblage from ARIG consists almost exclusively of types/variants dated to the 3rd and 2nd centuries BCE. While most types, especially the locally made vessels, had a wide span of production, a date in the 2nd century BCE is viable for the assemblage. The mid-late 2nd century BCE is the latest represented stage for the datable types, particularly the local amphorae, which comprise the bulk of pottery finds.

The fragments of a mortarium and of local amphora from the late 4th and early 3rd centuries BCE (**figs. 8, 10; 9, 1**) are the only indicators of an earlier presence at the site, but

75 e.g., Gendelman – Jakoel 2017, 303 fig. 16.2, 7–11.

76 e.g., Oleson et al. 1994, 16. 117 fig. 40, 71.

their small quantity and negligible percentage in the total assemblage suggest chance deposits rather than an actual occupation. The scattered fragments of amphorae from the Early Roman period may have reached the site during post-dereliction stone extraction, quarrying and farming.

The owners of the ARIG estate evidently adopted Hellenistic fashions, as indicated by the presence in the pottery of Levantine and Egyptian drinking vessels as well as of vessels for wine and fish products imported from as far as the Punic west. These were probably acquired in Jaffa's markets. Still, the ceramic assemblage is relatively poor in fine table wares compared with contemporaneous pottery from Jaffa, and is sharply dominated by local amphorae undoubtedly utilized for an agriculture byproduct, possibly wine. If the interpretation of the vessels in **fig. 10, 11–12** as beehives is correct, this is rare evidence for beekeeping in the region during that time[77].

Discussion and conclusions

During the Hellenistic period, ARIG was one of over 40 farmsteads and five villages in an area spanning from across the Yarkon River at the north to Gan Soreq, with Jaffa in its centre. ARIG was at a relatively short distance from Jaffa, although not in the closest belt of affluent, agricultural-based farmsteads immediately east of the Lower City[78]. The structures at ARIG were relatively short-lived. Built after the Seleucid takeover of the coastal region in 198 BCE, they stood until no later than the mid-2nd century BCE. The ceramic assemblage contains no exclusively Ptolemaic or Hasmonaean vessels. These periods are also missing in the small numismatic assemblage. ARIG and other rural sites affiliated with Jaffa evidently outlived the developments that had led the Hellenistic city into gradual decline. The economic system they were part of met its end only with the Hasmonean conquest of the region in 142 BCE. At its aftermath Jaffa withdrew back into its ancient mound, underwent a thorough demographic change, and its affiliated farms and villages were abandoned.

A broader perspective may shed light on the reasons behind the latter outcome. For the Hasmoneans, control over Jaffa meant profitable sea trade and a vital communication venue with the influential Jewish diaspora and with Rome, their political ally in the struggles with the Seleucids. As the Hellenized residents of Jaffa enjoyed under Seleucids a valued and profitable autonomy[79], and could not be trusted to shift their loyalties to the new rulers, the Hasmoneans replaced them with Jews. Yet had the affiliated rural settlements and estates remained in place, the newly converted Jaffa would have stayed surrounded by an indignant population as sympathetic to the court of Antioch as the expelled urban residents. There is no evidence for attempts to resettle the farms with Jews as was done in Jaffa itself and maintain the profitable economic/agricultural system. The Hasmoneans may have felt incapable of defending isolated and unfortified spots from anticipated Seleucid campaigns, or did not consider such effort worthwhile. The promise of crops and subsequent taxes could wait for stabler and calmer times.

Time-frozen ash layers and fragmented or intact vessels left in their original positions are absent at ARIG, as are other straightforward testimonies of destruction. Neither was such evidence found at other Hellenistic sites near Jaffa, such as Gan Soreq[80] and Shai 'Agnon Street in Ramat Aviv[81]. Still, ARIG's amphorae assemblage represents dozens of crushed vessels. They may have been shattered by resentful residents forced to leave their homes, or

77 For literary and epigraphic evidence for beekeeping in the region from the Bronze Age until late Persian – early Hellenistic period see Crane 1999, 174.

78 Haddad 2010; Jakoel – Marcus 2017, 44–46. 67; Arbel 2020.

79 Geiger 1990.

80 'Ad 2021, 105.

81 Gorzalczany 1999, 31; 2003, 10.

broken as the derelict house's roof or upper floor caved or were destroyed during or after the abandonment. ARIG's final desertion may have taken place under a Hasmonean decree, out of fear of repressive measures, because the residents may not have wished to live under the new rulers or under some other stress. Either way, it was not an isolated episode but rather part of a system collapse; it put an end to the solid, efficient and largely self-dependent system that flourished under Alexandria and Antioch and was maintained by sympathetic populations that shared the ideological and cultural traits of these courts. Its disappearance was to change Jaffa's region for centuries.

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From Crisis to Recovery: The Influence of Warfare and Administrative Reforms on Settlement Patterns from the Late Persian Period to Ptolemy II in the Land of Israel

Igor Kreimerman – Débora Sandhaus

Abstract

The current article re-evaluates the pottery assemblages of sites in the southern Levant in order to distinguish, for the first time, between those occupied in the late 4th century BCE, namely in the late Persian period or in the very early Hellenistic period, and those occupied in the early 3rd century BCE – roughly during the reign of Ptolemy II. The insights gained from this re-evaluation are used to outline changes in settlement patterns during the transition between the Persian and the Hellenistic periods and to address the nature of the transition between the periods – whether it was smooth and accompanied by a period of prosperity as was argued by previous archaeological studies, or whether it was a period of instability and decline as seen from literary evidence.

Introduction

The defeat of the Persian Empire and the conquest of Persian-held lands by Alexander the Great was swift. The Macedonian conquest was relatively peaceful in the southern Levant. Alexander faced significant military resistance only in Tyre and Gaza when he arrived in the region. Although soon after the conquest a revolt broke out in Samaria, it was quickly quelled[1].

From a political point of view, the Macedonian conquest reconfigured the geopolitical map of the region for decades. Most historical studies stress that this period of transition was not simple. Constant struggles between the Diadochi in the territory of Coele Syria and Phoenicia, and later on during the Syrian wars suggest the possibility of a temporary decline[2].

1 Meyers – Chancey 2012, 7–17; Lipschits et al. 2014, 135.

2 E.g., Abel 1935; Hengel 1981; Grainger 1991, 50–51; Grabbe 2008; Fischer-Bovett 2021; Bar-Kochva 1976, 76–77.

However, even in these studies, the early 3rd century is described as a period of urbanization, economic growth, and prosperity[3]. The written evidence emphasizes the political events that affected the upper ruling classes – who naturally were more exposed to change than the lower classes. Concerning the Ptolemaic administration and the impact of the struggles on the hinterland territories, it is commonly accepted that, in general, local populations were allowed to remain on their land and continue with their daily lives. Thus, at least potentially, local communities went on with their ways of life and possibly with the prevailing local economic structures. Indeed, this trend seems evident through the relatively fragmentary written sources.

Nevertheless, there is a point of discrepancy in the current state of research. In contrast to historical sources, archaeology supplies a wealth of data on the lives of ordinary people and rural communities. Indeed, archaeological studies depict a different picture. They argue for the lack of destruction in the transition between the Persian and Hellenistic periods, that most sites remained settled, and that, in fact, during this time, we may see numerous new sites built, pointing to an age of prosperity[4]. This discrepancy between the picture drawn by the historical sources of economic decline and some instability and the archaeological studies that depict an era of prosperity is at the heart of the current contribution[5]. Our departure point is archaeological, and we aim to draw a more balanced picture of the transition from the Persian to the Hellenistic periods in the Land of Israel.

Previous archaeological studies suffered from several shortcomings. First, most studies concentrated on data emerging from field surveys which are known to be inaccurate and supply only rough dating[6]. In most surveys, no distinction was made, for instance, between early and late Hellenistic periods[7]. Furthermore, until recently, no distinction was drawn between locally produced pottery of the Persian and early Hellenistic periods, except for the Galilee, which was prolifically published[8]. For this reason, many sites could not have been accurately dated – especially those in the inland where imported pottery is rare. Thus, it was not possible to distinguish between sites that were built (or destroyed) in the late Persian or early Hellenistic periods. Consequently, discussion of the Persian–Hellenistic transition could only be made in broad terms[9].

This situation has changed in the past few years. First, due to the excavation of Khirbet Qeiyafa, it became possible to distinguish between local pottery of the late 4th and early 3rd century BCE[10]. Furthermore, numerous salvage excavations of sites from this period were conducted and, more importantly, published. In addition, research on the Galilee in the Persian and Hellenistic periods is now at its peak[11]. With so many new known sites, it is currently possible to discuss settlement patterns in this period based on excavated sites without including problematic data from surveys.

We recently adopted an approach that utilized these changes to review the nature of the transition between the late Persian to the early Hellenistic periods in the highlands of Judah and Samaria and the Shephelah region[12]. It appeared that in these regions, the transition was not

3 E.g., Meyers – Chancey 2012: 13–23; Kasher 1990: 14–29; Zangenberg – van de Zande 2010.

4 E.g., Carter 1999; Tal 2006, 15–163; Faust 2007; Lipschits – Tal 2007; Lipschits et al. 2014.

5 We thank Andrea Berlin and Benedikt Eckhardt for reading an earlier version of the paper and for their comments. Any possible mistakes are, of course, our own.

6 See, e.g., Faust – Safrai 2005; Garfinkel – Ganor 2010; Paz et al. 2010, 39.

7 Faust 2007, 28–29; Lipschits et al. 2014, 134.

8 See Berlin 1997a; Berlin 1997b; Berlin 1997c; Herbert – Berlin 2003; Berlin et al. 2014; Hartal et al. 2016; Berlin – Herbert 2021.

9 Berlin 1997b; Carter 1999, 233–248; Faust 2007; Lipschits – Tal 2007; Finkelstein 2010.

10 Sandhaus – Kreimerman 2015.

11 Berlin – Herbert 2021, and see above.

12 Sandhaus – Kreimerman 2017; Kreimerman – Sandhaus 2021; Sandhaus 2018; Sandhaus 2021.

smooth. Some sites, especially those of administrative nature, were destroyed or abandoned. Other sites showed an occupation gap – pointing at a period when they were abandoned, while some sites continued to exist without a break. Still, it seems that no new sites in these regions were built within this time frame. Berlin and Herbert's recent discussion of southern Phoenicia also showed considerable changes in settlement patterns[13]. As could be surmised, these conclusions stand in contrast to most previous archaeological studies of the period.

Our intention in the current paper is to continue studying the effect of the transition from Persian to Hellenistic rule on the population of the Land of Israel by examining settlement patterns across the entire area. There is reason to believe that the varying economic importance of the different regions, the resources available in each area, and the proximity to roads, might have played an essential role in the way these sites were affected by the transition[14].

Methodology

In practical terms, we will now examine excavated sites from the later Persian to the early Hellenistic period. The sites are first dated according to the numismatic evidence and pottery, and when available, by other finds. Then, the nature of the transition between the periods can be assessed. For the reasons mentioned above, we have classified the transition into four categories:

- Sites that existed continuously in both periods.
- Sites inhabited in both periods but rebuilt according to a new plan in the second one.
- Sites that were abandoned during the transition between the two periods.
- Sites that were constructed in the second half of the discussed period.

For sites to be included in the analysis, they had to fulfill two criteria:

- The presence of sufficient architectural remains that can be verifiably attributed to these periods.
- The existence of a publication that includes detailed stratigraphy and pottery plates accompanying the architecture analysis.

Consequently, we excluded from our analysis sites where the pottery sherds or stamp impressions uncovered could not be associated with architectural remains, and sites in which such finds originated from fills, pits, or an unclear stratigraphic context.

It is worth noting that adherance to this methodology considerably reduced the number of excavated sites that could have been considered[15].

The sites are examined according to geographical areas and within each area from north to south. Data regarding the Shephelah and the Central Hill region were discussed in detail elsewhere[16], and so were data from southern Phoenicia[17], which are summarized here in brief.

The Coastal Plain

Giv'at Yasaf: Remains of the Persian period were found in several areas of the site. Area C, at the top of the mound, was occupied by a large structure, perhaps a farmhouse. On the southern slope in Area D, a large open courtyard bounded by massive walls was found. On the western slope, Area B, a domestic structure with agricultural installations was uncovered. All structures continued to exist with minor changes into the Hellenistic period (2nd century BCE)[18].

13 Berlin – Herbert 2021.

14 See also Berlin 2019.

15 For fuller lists of sites known from the period, see NEAEHL; Berlin 1997b; Tal 2006; Faust 2018.

16 Sandhaus – Kreimerman 2017; Sandhaus 2018; Kreimerman – Sandhaus 2021; Sandhaus 2021.

17 Berlin – Herbert 2021.

18 Rochman-Halperin 1999.

'Akko: In the Persian period, the city was concentrated mainly on the tel and its immediate vicinity[19]. The remains on the tel consisted of Strata 5 and 4 of the 4th century BCE. The remains are of domestic structures and one massive administrative building built partly of hewn stones[20]. By the late Persian period, the settlement had already expanded to areas around the tel. In the Hellenistic period, probably during the early 3rd century BCE, the city moved closer to the shore, and the tel was abandoned. The harbor area was settled only in the late part of the 3rd century and in the 2nd century BCE[21].

Tel Keisan: The site was occupied by a structure at the end of the Persian period (Phase 3a). According to the excavators, the structure was abandoned around 380 BCE; a piazza following a new plan was built in Phase 2b[22]. However, all the pottery of Phase 2 is Hellenistic. Thus, the transition between Phases 3a and 2b must have been later, although it is unclear when exactly this occurred.

Shikmona: A small structure, perhaps a citadel, was constructed in the second half of the 4th century BCE. The structure was violently destroyed, and the numismatic evidence suggests that the destruction occurred during the reign of Alexander the Great or slightly later. Most probably it was a Persian citadel destroyed by Alexander. Alternatively, it could have been a citadel constructed by Alexander and destroyed slightly later. It seems that the citadel was reconstructed in the Ptolemaic period[23].

Tell Abu-Hawam: Stratum IIA at the sites represents a Persian settlement that was probably destroyed in 385–383 BCE after it was sacked as part of the fighting between the Persians and the Egyptians over Tyre. The city was reconstructed (Stratum IIB); in this phase, massive fortifications were constructed, and the city was built according to the Hippodamic plan. This phase probably lasted until the Macedonian conquest. The site was reconstructed in the Hellenistic period following a new plan with a possible occupation gap between the phases[24].

Tel Dor: This was a sizeable fortified site during the Persian period. Transition to the Hellenistic period was rather smooth, and the town plan was maintained. New structures, some of them probably of a public nature, and a city wall were constructed[25].

Tel Tanninim: Architectural remains of this relatively large site were exposed only in limited areas. Although scanty, there seems to be a continuity between the remains of both periods[26]. Nevertheless, one should treat these conclusions with caution.

Tel Mevorakh: A large building complex occupied the site in the final phase of the Persian period (Stratum IV). The site was abandoned about the mid-4th century BCE and resettled only in the 2nd century BCE[27].

Tel Michal: This was an important site during the Persian period. On the tel (Stratum VII dated to the first half of the 4th century BCE), a fort as well as domestic and industrial structures were built. In this phase, the settlement was planned and developed. In Stratum VI, dated to the second half of the 4th century BCE, the settlement maintained the same layout, and it was

19 Stern 2016, 229–230, fig. 11.1

20 Dothan 1976; Dothan 1993, 22.

21 Berlin – Stone 2016; Stern 2016, 229–230.

22 Nodet 1980; Briend 1980

23 Elgavish 1968, 47–54.

24 Stern 1968; Finkielsztejn 1989; Balensi et al. 1993, 9.

25 Nitschke et al. 2011, 143–144.

26 Eger 2006, 22–25, 45–46, 54; Yankelevitch 2006.

27 Stern 1979: 25–28.

not disturbed until the end of the 4th century BCE[28]. In the first half of the 3rd century BCE, a large fortress and a massive industrial winepress were erected. The structures were arranged according to a different plan and do not show direct continuity with the layout of the previous settlement[29].

New evidence provided by further excavations on the northern hill reconfigured our understanding of the site's stratigraphy. Evidence of the Persian occupation is widespread over the entire kurkar ridge, including the northern hill[30]. This hill was occupied in the early Persian period by a cemetery, but in later phases, it was turned into an industrial, commercial and administrative area which reached a peak when pottery and metal workshops as well as storage and administrative buildings became widespread in the area[31]. This phase is dated to the second half of the 4th century BCE until its decline when Apollonia replaced it in importance[32].

It is difficult to understand whether the site was occupied in the 3rd century BCE, and what was the settlement's extent. Clearly, most of the site was abandoned. According to the excavator, habitation layers were identified in one of the buildings, but the activity is related to the 2nd century BCE according to numismatic evidence. On these grounds, the excavator suggested that, due to the lack of destruction levels, the building was in use without changes from the 3rd century BCE until the mid-2nd century BCE[33].

Jaffa: Persian and Hellenistic settlement remains were extensively excavated at the site. At the end of the Persian period (Visitor Center Phase V), a planned city existed in Jaffa[34]. The next construction (Visitor Center Phase IV) is dated to the 3rd century BCE and follows a new plan[35].

Holot Rishon Le-Zion: This is a crucial site for understanding the transitional phase in the Coastal and Sharon plains. Several excavations were conducted on the site, yielding Persian and early Hellenistic remains[36]. Stratum II features a farmstead with pottery dating to the 5th or 4th century BCE[37]. Stratum I contains a new farmhouse with a different plan that was erected and used between the last quarter of the 4th to the first quarter of the 3rd century BCE[38], more precisely after 301 until 270/280 BCE[39]. Based on the material evidence analyzed in the frame of the historical events, Tal proposed that the site was abandoned together with Jaffa/Joppa and Ashkelon in the first quarter of the 3rd century BCE, suggesting that this was a regional phenomenon that had not been mentioned in the historical record[40].

Tel Yaʿoz: Excavations uncovered the remains of three buildings built of alternate ashlar piers filled with field stones. Two were discovered in Areas C and D, dated to the Persian period[41], and a third one was found in Area A, yielding Hellenistic pottery in the foundation

28 Herzog 1989a, 88–114.

29 Herzog 1989b, 165–173.

30 Gorzalkzany 2006 contra Herzog et al. 1989, 5.

31 Gorzalczany 2006, 12–14.

32 Gorzalczany 2006, 19.

33 Gorzalczany 2006, 14.

34 Burke et al. 2014, 44.

35 Burke et al. 2014.

36 Peilstöcker 2000; Tal 2005; Tal 2014.

37 Tal 2005; Tal 2014, 38.

38 Tal 2014, 35.

39 Tal 2014, 545.

40 Tal 2014, 54.

41 Segal et al. 2006; Fischer et al. 2008.

trenches of walls[42]. After our re-evaluation of the published material, we can conclude that the building in Area A should be dated to the 2nd century BCE and not any earlier. A thick layer of ash covered the buildings in Areas C and D, and the pottery within suggested a date in the late 4th century BCE.

Yavneh-Yam: Domestic structures of the Persian period (Stratum VII) exposed at the site were abandoned in the late Persian period (not later than the arrival of Alexander the Great). The site was resettled with a different plan in the Hellenistic period, but this probably occurred after a certain occupation gap[43].

Ashdod: The city was settled in the Persian period and contained pits, installations, domestic structures and pottery kilns[44]. It is unclear when the site was abandoned, but the pottery found in the kilns is similar to that found in other coastal sites in contexts dated to the late 4th century BCE. New excavations reported three pottery kilns of the Hellenistic period[45]. If this is the case, Ashdod shows a continuity pattern.

Ashkelon: This was one of the significant southern sites in the region. The site shows urban planning and well-built structures in the late Persian period (Grid 38: Phase 10, Grid 50: Phase 3; Grid 57 Phases 4–3)[46]. However, the construction date of this phase is not precise, and it might have been built only in the Hellenistic period. According to numismatic data[47], the phase ended in 290, as evidenced in one area that had been destroyed by fire. The city was soon reconstructed[48].

The North

Banias: While there is limited evidence of occupation at the site during the Persian period[49], much more pottery is found from the Hellenistic period (albeit with no known architectural remains). Written evidence indicates that a shrine already existed there in the Ptolemaic period[50].

Kedesh: A massive administrative center was constructed around 500 BCE. The complex was abandoned in the late 4th century BCE, perhaps due to Alexander's conquest and occupation. A short time later, the same building complex was reoccupied, probably by the Ptolemies[51].

Tel Anafa: Several domestic structures belonging to a small settlement were exposed at the site. The settlement was probably founded in the early 3rd century BCE, possibly during the reign of Ptolemy I[52].

Mizpe Yamim: The Phoenician sanctuary at the site was active from the 5th to the mid-4th century BCE. It was probably abandoned around the time of the Macedonian conquest[53].

42 Fischer et al. 2008: 134, fig. 14.

43 Fischer 2005, 183–190.

44 Dothan 1971, 38–39; Kee 1971; Dothan – Porath 1982, 41–44; Dothan 1993, 101–102; Ben-Shlomo 2005; Mazar – Ben-Shlomo 2005, 59–61.

45 Varga 2005.

46 Stager et al. 2008, 236. 283–290. 316–317. 321–322.

47 Gitler 2008.

48 Stager et al. 2008, 236. 283–290. 316–317. 321–322.

49 Tzaferis 1992, 132*–133*.

50 Berlin 1999, 29–31; Berlin – Herbert 2021.

51 Berlin – Herbert 2012; Berlin – Herbert 2013; Herbet – Berlin 2003; Berlin 2021; Berlin – Herbert 2021.

52 Herbert 1994, 13–14; Berlin 1997a, 7–9. 18–19; Herbert et al. 1997; Berlin – Herbert 2021.

53 Berlin – Frankel 2012, 59; Berlin – Herbert 2021.

Sassa: Many shards and large fragments of vessels from the Persian period (5th–4th centuries BCE) were excavated. The Hellenistic remains were meager and unstratified[54].

Hazor: An impressive citadel was constructed in Area B (Stratum III) in the 7th century BCE and re-used during the Persian period (Stratum II). According to the pottery, the Persian citadel was abandoned sometime in the early Hellenistic period, either in the late 4th or early 3rd century BCE. Later, a smaller Hellenistic citadel was built at this spot[55]. Further remains dating to the Persian period on the tel indicate that there were two phases of occupation; the first phase was when pits and cemeteries covered the site[56] and were sealed by domestic rural houses in Area G[57], and the second phase was on the northern slopes in area M, dated to the 4th century BCE[58]. The settlement was abandoned with no signs of violence.

Ḥorbat ʿUẓa: A large settlement, five hectares in size, was excavated. The remains are relatively scant, but fills from the period were found everywhere. The settlement continued to exist until the end of the Persian period, and the site was then settled from the second half of the 3rd century BCE. There is probably an occupation gap at the site between the two phases[59].

Naḥal Tut: A massive citadel was excavated at the site. It was constructed during the late 4th century BCE, probably immediately after the Hellenistic conquest, and it could have served as a storage depot for the Macedonian army. The author suggests crediting the construction of the fortress to Alexander at the time of his siege of Tyre (333–332 BCE) and its destruction to the time of the revolt of Samaria a year later (332–331 BCE)[60].

Horvat ʿEleq: A fortified complex was constructed in the late Persian or early Hellenistic period, probably in the 4th century BCE. However, as the publication of this site is only preliminary, more accurate construction and abandonment dates are still unavailable[61].

Ḥorvat Roẓeẓ: Four domestic structures were excavated from the late Persian settlement. The excavator dated the settlement to the 4th century BCE, although he also noticed shards from the 3rd century BCE[62]. In our opinion, a few other vessels could also be dated either to the very late 4th or to the early 3rd century BCE[63]. The site was abandoned either slightly before the time of Ptolemy II or during his reign.

The Shephelah and the South

These sites were discussed in detail elsewhere[64]. They are therefore discussed here briefly in order to complete the presented data.

Rosh ha-ʿAyin: A large building, possibly of an administrative nature, was uncovered. It was constructed in the Persian period and abandoned in the very late 4th or early 3rd century BCE[65].

54 Stepansky et al. 1993, 71–73.

55 Yadin et al. 1958, 45–63.

56 Yadin 1972; Sandhaus forthcoming.

57 Yadin et al. 1958; Yadin 1972.

58 Sandhaus forthcoming.

59 Smithline – Getzov 2009, 149–150.

60 Alexandre 2006, 182; 2014.

61 Peleg-Barkat – Tepper 2014; Tepper – Peleg-Barkat 2019.

62 Yannai 2010, 135.

63 Yannai 2010, Fig. 15, 3, 4, 13–14.

64 Sandhaus – Kreimerman 2017; Kreimerman – Sandhaus 2021.

65 Haddad et al. 2015.

Gezer: Based on published material, Stratum IV is represented by a few domestic remains dated to the 5th and 4th centuries BCE[66]. Stratum III was represented mainly by coins and no architectural remains; however, Gitin proposed a meager occupation in the late 3rd century BCE (Stratum III)[67]. A current overview and re-interpretation of the stratigraphy of the Persian and Hellenistic phases is being carried out by Berlin and Sandhaus, based on the unpublished material from the HUC and Tandy excavations. Based on their analysis, the dog cemetery likely dates to the 5th or 4th centuries BCE (Stratum IV) and was overlain by a pottery workshop and kiln, datable from the later 4th to the early 3rd centuries BCE (Stratum III), after which the site was abandoned for several decades[68].

Khirbet Qeiyafa*[69]: In the late Persian period, the site was occupied by several domestic structures built in Areas B and C[70]. These structures were abandoned in the late 4th century BCE, probably shortly after the Macedonian conquest[71]. In the early 3rd century BCE, new domestic structures were built at the site, although in different areas (Areas D and F)[72]. These buildings were abandoned during the reign of Ptolemy II[73].

Khirbat el-Keikh*: According to the excavator in preliminary articles, this settlement was constructed in the early Persian period at the latest and continued without interruption until the early Roman period[74]. A re-interpretation of the stratigraphy refines the processes that occurred in the site. Domestic structures built in the 4th century were abandoned by the end of the century, and two new buildings with a new plan that were built on top of the former by the early 3rd century BCE were abandoned by the mid-3rd century BCE[75].

Khirbat Shumeila*: A large building built in the Persian period was excavated. According to the excavators it continued in use until the early Hellenistic period without interruption and was abandoned shortly afterward[76]. A re-interpretation of the stratigraphy depicts remains of rural installations and a pottery workshop occupied in the 4th century and abandoned in an organized way at the end of the century. A subsequent stratum with new domestic structures was built on top of the former one with a completely new plan. These buildings were abandoned by the mid-3rd century BCE for several decades[77].

ʿAzekah*: Three structures that were constructed in the late Persian period were excavated at the site — two in Area W1 and one in Area S. The two buildings in Area W1 continued with no interruptions until the mid-3rd century BCE, while the abandonment of the structure in Area S is associated with the end of the 4th century BCE[78].

Maresha: The site was one of the primary mounds in the Shephelah region. During the Persian and Hellenistic periods, the site was part of the Idumean territory. Although

66 Dever et al. 1970, 65–68; Dever et al. 1974, 83–86; Gitin 1990, 18–20. 31–32. 229–37; Barag 2014; Gilmour 2014, 16–17.

67 Gitin 1990, 19 and chart, p. 38.

68 Berlin – Sandhaus in preparation.

69 Sites marked with * are studied in detail in Sandhaus 2022.

70 Freikman – Garfinkel 2014, 101–28; Garfinkel – Ganor 2009, 73–78; Kang 2014, 66–76; Garfinkel 2021; Sandhaus 2022.

71 Farhi 2014; Sandhaus – Kreimerman 2015, 251–54; Sandhaus 2022.

72 Hasel 2014, 241–75; Kang 2014, 66–76; Sandhaus 2022, Kreimerman in preparation.

73 Farhi 2014; Sandhaus – Kreimerman 2015, 251–54; Sandhaus 2018; 2022.

74 Kogan-Zehavi 2009; Kogan-Zehavi 2014a; Kogan-Zehavi 2014b.

75 Sandhaus 2018; Sandhaus 2020; Sandhaus 2022.

76 Kogan-Zehavi 2014b.

77 Sandhaus 2018; Sandhaus 2020; Sandhaus 2022.

78 Lipschits et al. 2012; Shatil 2016, 113. 127; Sandhaus 2018; Sandhaus 2020; Sandhaus 2022.

fragmentary, available archaeological remains demonstrate that the site was densely occupied in the Persian period, mainly on the upper mound. However, some remains were found in the lower city, in the tower (Area 100) and its vicinity, in subterranean cave 75, and Area 940, southeast of the upper city[79]. It is unclear how the settlement of the Persian period came to an end; in one place, a layer of ashes was mentioned in the reports, but it is unclear if it is part of the site-wide destruction (or destruction at all)[80]. Occupation continued through the period of Alexander the Great and into the Ptolemaic era[81]. The construction date of the upper and lower cities that were both well-planned cannot be determined with accuracy and need not be the same (the upper city could have been built first). Yet, it seems probable that the lower city had already been built by 280 BCE, during the reign of Ptolemy II[82]. At this stage, it became a major administrative center of the Ptolemaic regime, as known from archaeological and epigraphic finds and the Zenon papyri[83].

Lachish: According to the excavators, Lachish was a significant site in the Persian and Hellenistic periods[84]. However, at the current state, it is impossible to re-evaluate the nature of the transition at the site[85].

Tel ʿEton*: Most of the excavated remains are dated to the late Persian period[86], although some early Hellenistic pottery (contemporary with the late phase of Khirbet Qeiyafa) appears on the surface. Therefore, it seems that either the activity at the site shifted from one area to another or became more limited during the transition[87].

Tel Hesi: Betylon argued in favor of a military logistic center at Tell Hesi during the Persian and early Hellenistic periods – abandoned no later than 275 BCE[88]. Unfortunately, there is still no final publication of the architectural remains and the finds retrieved from the Hellenistic levels. Furthermore, the architectural remains discussed by Betylon consist primarily of refuse pits and structures re-used from previous periods. Therefore, currently, Betylon's suggestion is questionable at best.

En Gedi: According to the excavators, Stratum IV is dated 350–340 BCE[89]. We believe that it could have ended also several years later. It also appears that the site was abandoned in the early 3rd century BCE[90].

Beersheba: The site is characterized by pits dated to the Persian period, in which dozens of ostraca were found. Evidently, some of the ostraca date to the last years of the Persian rule in the region[91]. Some of these pits were sealed by a Hellenistic Temple, allegedly constructed in the late 4th or early 3rd century BCE[92]. However, all the finds, including pottery, stamps and coins, are dated to the 2nd century BCE. Thus, it seems reasonable that the temple was

79 Eshel 2007; Kloner – Stern 2007; Kloner 2010, 13–14.

80 Kloner 1993, 948–949; Kloner 2010, 8.

81 Kloner, personal communication.

82 Kloner 2008; Kloner 2010; Kloner – Zissu 2013, 47–51.

83 Kloner 2008.

84 Ussishkin 2004; Fantalkin – Tal 2004; Fantalkin – Tal 2006.

85 For a detailed discussion, see Sandhaus – Kreimerman 2017; Kreimerman – Sandhaus 2021.

86 Faust et al. 2015, 113.

87 Sandhaus – Kreimerman 2017; Sandhaus 2018; Sandhaus 2020; Sandhaus 2022.

88 Betylon 1991.

89 Matskevich – Stern 2007, 193–197; Stern 2007, 198–242.

90 Kreimerman – Sandhaus 2021.

91 Aharoni 1975, 156–157; Naveh 1973; Naveh 1979.

92 Derfler 1993.

built later, maybe only in the 2nd century BCE, suggesting a gap in Beersheba during the early 3rd century BCE.

The Central Hills

These sites were discussed in detail elsewhere[93], so, they are referenced here briefly in order to complete the presented data.

Shechem: The re-evaluation of the pottery of the site suggests that Stratum V ended in the late Persian period. Stratum IV should therefore be dated from the very late 4th to the early 3rd century BCE (before Ptolemy II) and Stratum III to the early Ptolemaic period[94]. No significant architectural remains from Stratum V are known[95]. In Stratum IV, the city was reconstructed on a large scale and completely rebuilt again in Stratum III[96].

Samaria: Although two expeditions extensively excavated the site, regretfully, no good correlation exists between the architectural and material remains. Although pottery from both the Persian and early Hellenistic periods was found, it is impossible to delineate the exact changes that occurred at the site in the transition between the periods based solely on archaeological finds. Two major construction phases should probably be dated to the early Hellenistic period. In the first stage, rounded towers were added to the Iron Age fortification system, which was probably re-used. At a later stage, the city was reconstructed following a new plan, including a new fortification wall and a grid of domestic structures; it is unclear if this phase should be dated to the 3rd or 2nd century BCE[97].

Mount Gerizim: The site served as a cultic precinct in the Persian and Hellenistic periods. The establishment of the site is securely dated to the mid-5th century BCE. It seems that the site continued without a break until the late 3rd century BCE, at which point it was rebuilt according to a new plan[98].

Wâdī ed-Dâliyeh: A cave at this site was probably used as a shelter for refugees fleeing Samaria after Alexander's conquest[99]. The assemblage of finds counterparts the earlier phase at Khirbet Qeiyafa, which is in keeping with the excavators' interpretation.

Jerusalem: Detailed summaries of the finds uncovered in Jerusalem were published[100]. Few architectural remains can be associated with the Persian and early Hellenistic periods. Published reports of the Shiloh excavations record some remains of dwellings with a few floors attributed to the Persian–early Hellenistic period (Strata IX and VIII)[101]. Until recently, the consensus among scholars was that only the upper part of the City of David was inhabited. However, new evidence from excavations in the Givati parking lot led to a re-interpretation of the finds of the Persian and Hellenistic periods in Jerusalem[102]. Persian period occupation was identified in the re-use and clearances of some of the rooms of the previous ashlar building destroyed in 586 BCE[103]. Remains of a massive building and a few structures associated with

93 Sandhaus – Kreimerman 2017; Kreimerman – Sandhaus 2021.

94 Sandhaus – Kreimerman 2017.

95 Campbell 2002, 299–309.

96 Campbell 2002, 311–42.

97 Crowfoot et al. 1942, 24–31; Crowfoot et al. 1957; Cross 1974; and see Tal 2006, 20–22 for discussion of the chronology.

98 Magen 2007, 157–212; Magen 2008, 167–180.

99 Lapp – Lapp 1974, 7–29.

100 See Finkelstein 2008, 501–520; Finkelstein 2009, 9–13; Lipschits 2009; Lipschits 2011, 163–175; De Groot 2012, 173–175; Ussishkin 2012, 101–130; Ristau 2016, 15–28; Shalev at al. 2021.

101 Shiloh 1984, 14. 20–21; Berlin 2012; De Groot – Bernick-Greenberg 2012; Zuckerman 2012.

102 Shalev et al. 2021.

103 Shalev et al. 2021.

the early 3rd century BCE were also uncovered in the excavations of Gadot and Shalev[104], and in those of Ben-Ami and Tchekhanovets[105]. After a thorough analysis, Shalev and his colleagues proposed that the Persian period town re-used Iron Age structures and occupied the Western Hill, not only the Eastern Hill as was thought earlier[106]. As for the early Hellenistic period, the research is just at its starting point. It seems that, in the meantime, there is insufficient published material to discuss the settlement nature in each of the periods or the changes that took place in the transition between them.

Khirbet er-Ras: One excavated structure was from the late Persian period and continued to exist without a break until the early Hellenistic period[107].

Ramat Rahel: A large administrative complex built in the early Persian period was uncovered at the site. It might have suffered destruction at the end of the period. No architectural remains from the early Hellenistic period were found[108].

Har Adar: A large building uncovered here was interpreted as a fortress and it probably remained in continuous use during the transition between the 4th and 3rd centuries BCE[109].

Ḥurvat ʿEres: The fortress at the site was most probably built in the late Persian period and abandoned in the early Hellenistic period, presumably during the time of Ptolemy II[110].

Beth Zur: Although it is difficult to attribute the pottery to a stratified context, the evidence from the coins and the pottery suggests that the site was occupied both in the Persian and Hellenistic periods, possibly without interruption[111].

Jabel Nimra: A massive, two-phase building was excavated at the site. The later phase was destroyed by fire at the end of the 4th century BCE[112].

Discussion

Figure 1 summarizes the results in graphic form. The above survey shows that 41 sites[113] existed in the late Persian period compared to 28 in the early Hellenistic period, a decrease of 32%. Furthermore, only 11 out of 41 sites (27%) continued with no interruption and without any considerable change in plan[114]. 23 out of 41 sites that existed in the Persian period were abandoned in the late 4th century BCE, about 55% of the number of total sites[115]. Out of these, 17 were abandoned for a prolonged period of time (or abandoned altogether), and six others show at least a short occupation gap before their reconstruction in the Ptolemaic period (before or during the reign of Ptolemy II). Only three new sites were established from scratch during the transition – Tel Anafa, the Paneion, and Nahal Tut (which was also destroyed).

104 Shalev et al. 2021.

105 Ben-Ami and Tchekhanovets, personal communication.

106 Shalev et al. 2021.

107 Gadot 2015.

108 Lipschits et al. 2011, 34–37.

109 Dadon 1997; Gitler 1997, 80–81.

110 Mazar – Wachtel 2015, 239–240.

111 Sellers et al. 1968.

112 Hizmi – Shabtai 1994.

113 Note that Lachish, Jerusalem and Tel Hesi are not included in the count as the nature of the transition is unclear. We decided to keep them in the review here due to their importance.

114 Note that for five of these sites evidence is not clear cut (see **fig. 1**).

115 Note that two of the sites – Ḥorvat Roẓeẓ and Rishon Le-Zion – might have been abandoned only in the early 3rd century.

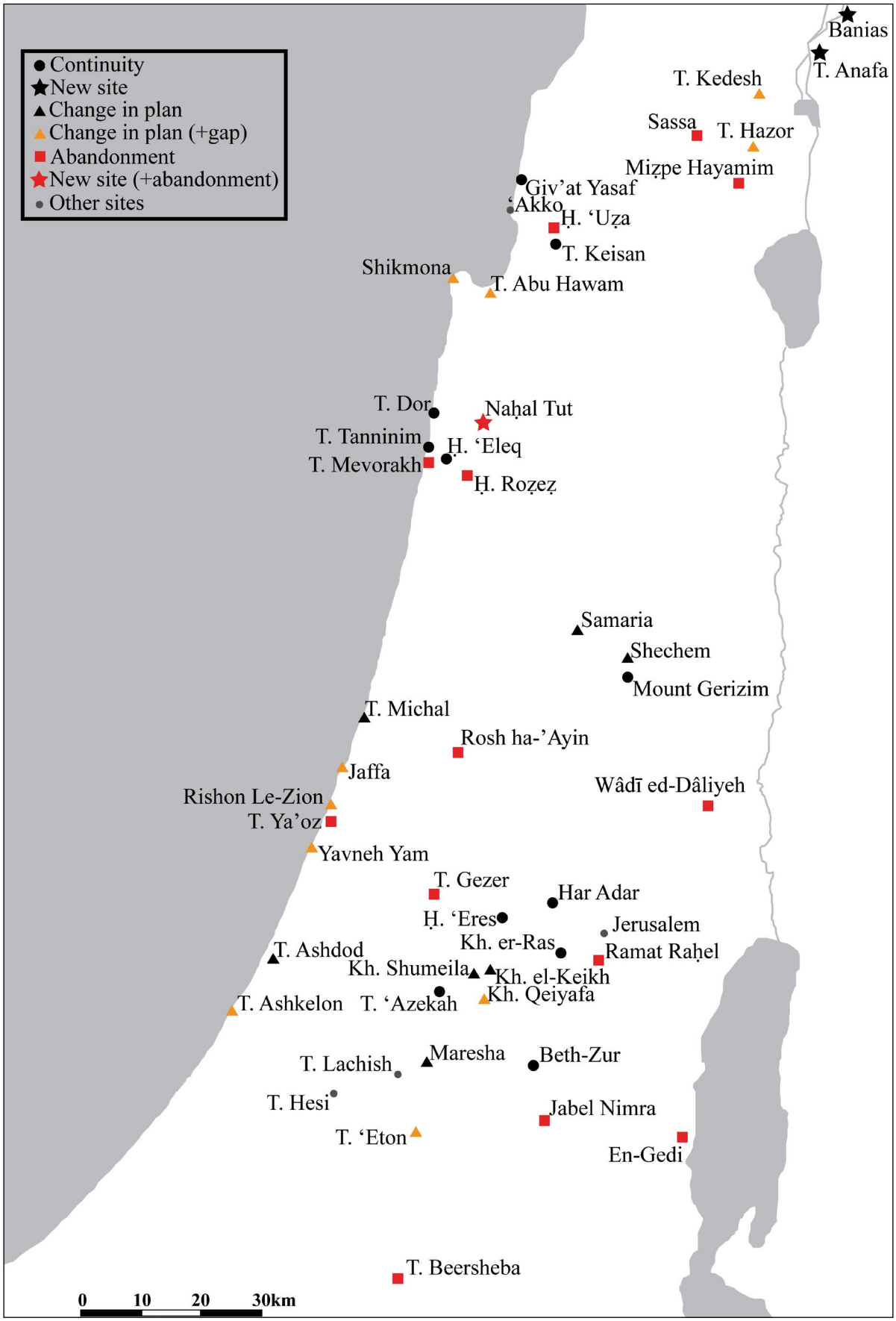
Continuity
New site
Change in plan
Change in plan (+gap)
Abandonment
New site (+abandonment)
Other sites
Banias
T. Anafa
T. Kedesh
Sassa
T. Hazor
Mizpe Hayamim
Giv'at Yasaf
'Akko
Ḥ. 'Uza
T. Keisan
Shikmona
T. Abu Hawam
T. Dor
Naḥal Tut
T. Tanninim
Ḥ. 'Eleq
T. Mevorakh
Ḥ. Rozez
Samaria
Shechem
Mount Gerizim
T. Michal
Rosh ha-'Ayin
Jaffa
Wâdī ed-Dâliyeh
Rishon Le-Zion
T. Ya'oz
Yavneh Yam
T. Gezer
Har Adar
Ḥ. 'Eres
Jerusalem
Kh. er-Ras
Ramat Raḥel
T. Ashdod
Kh. Shumeila
Kh. el-Keikh
T. Ashkelon
T. 'Azekah
Kh. Qeiyafa
T. Lachish
Maresha
Beth-Zur
T. Hesi
Jabel Nimra
T. 'Eton
En-Gedi
T. Beersheba
0
10
20
30km

Fig. 1

To sum up, the settlement patterns show a sharp decrease of about 50% in the number of sites in the late 4th century BCE, with a partial recovery in the early 3rd century BCE. How can these trends be explained? In order to understand these patterns, a closer look at the military and administrative activity in the area is required[116].

After the death of Alexander, the Land of Israel was overrun several times by various armies. The first was Perdiccas, who invaded Egypt in 321/320 BCE and faced Ptolemy Soter. His soldiers assassinated him[117]. Next, probably in 320 BCE[118]. Ptolemy Soter captured Syria from Laomedon, the first satrap of Syria. Several different sources describe the events; while Diodorus claims that Ptolemy sent a general named Nicanor who marched into Syria and took Laomedon captive. *Appian's Syrian Wars* (52) argues that it was Ptolemy himself who arrived in Syria with a fleet to negotiate with Laomedon. After the latter refused to hand Syria to Ptolemy in exchange for a large sum of money, he seized him[119]. Be the actual events as they may; it is clear that Ptolemy was able to conquer Syria and position some garrison troops in it[120].

In 315 BCE, Antigonus captured Phoenicia from Ptolemy Soter, probably after the latter retreated from all the Syrian cities except Tyre. Antigonus then began building ships to besiege Tyre and, in the meanwhile, stormed and captured the cities of Joppa (Jaffa) and Gaza. After a siege lasting for a year and three months and ending in the autumn of 314 BCE, Ptolemy's garrison in Tyre agreed to evacuate[121]. In 312 BCE, Ptolemy, with Seleucus, launched a campaign to regain the lost territories in Phoenicia. They first faced the forces of Demetrius, Antigonus' son, near Gaza, and after winning the battle, captured the city. They continued northwards and captured cities in Phoenicia either by siege or negotiations, and later also captured Sidon and Tyre[122]. In the same year, Demetrius again marched against Ptolemy and defeated Cilles, a general that Ptolemy sent against him. After hearing the news about Antigonus' decision to join his son with large forces, Ptolemy retreated to Egypt. On his way to Egypt, he razed four prominent cities to prevent them from falling into his enemies' hands: Akko, Jaffa, Samaria, and Gaza[123].

In 306 BCE, Antigonus gathered a large army and marched to Egypt. At Gaza, he was joined by Demetrius with additional forces, and they crossed the Sinai desert to face Ptolemy, but they failed to cross the Nile and retreated to Syria[124]. While Antigonus and Demetrius were busy with other events leading to the Battle of Ipsus, Ptolemy captured Syrian cities aside from Tyre and Sidon. Due to a rumor of Antigonus' victory, he retreated to Egypt but left garrisons in the central Syrian cities. The fact that Tyre and Sidon remained in Demetrius' hands probably allowed him to send a force to devastate Samaria at about 298/296 BCE[125]. Ptolemy was able to exploit the situation after the Battle of Ipsus to retain the territories he

116 See summary on the Ptolemaic foreign relations in Fischer-Bovet 2021.

117 *Diod.* 18, 29. 33–36; Errington 1970: 65; Roisman 1984, 380.

118 See Wheatley's 1995 study concerning dating, especially important is the numismatic data from Sidon.

119 *Diod.* 18, 43.

120 Wheatley 1995.

121 *Diod.* 19, 58. 59. 61; for chronology see Wheatley 1998, contra Errington 1977.

122 *Diod.* 19, 80–86; *Plut. Demetr.* 5; see also McKenchie 2018, 42.

123 *Diod.* 19, 93; *Plut. Demetr.* 6; Champion 2014.

124 *Diod.* 20, 73–76; *Plut. Demetr.* 19.

125 *Hier. Chron. a. Abr.* 121.

captured in Syria. Several years later, he was able to capture Tyre and Sidon[126] *Josephus* tells the story in which Ptolemy takes over Jerusalem by deceit. He then transferred prisoners from Samaria and Judaea to Egypt[127].

Although these events were the last known struggles of the Diadochi in Syria, after the death of Ptolemy I Soter and Seleucus I, rivalries resumed in a series of wars – ›the Syrian Wars‹. In 274 BCE, Ptolemy II invaded Syria, but his troops ultimately retreated. Antiochus, in response, planned to invade Egypt but eventually abandoned his plans due to an economic crisis[128]. There is no evidence of armies crossing through Palestine during the Second Syrian War, although there might be evidence of a Ptolemaic maritime invasion of northern Syria and Cilicia[129].

This summary demonstrates that the period under discussion could be divided into two parts from a military point of view. The first part between 321 and 296 BCE is one of unrelenting military confrontation. The second part, from 296 BCE to the end of the reign of Ptolemy II, is one of relative stability with no record of open battles.

Although many battles were fought in this fiery period, most of them took place in the central Levant or Egypt, and only a few were fought in the southern Levant. The destruction of cities in the southern Levant was also a relatively rare event. Antigonus stormed and captured Jaffa and Gaza, Ptolemy I destroyed Akko, Jaffa, Samaria, and Gaza upon his retreat, Demetrius captured and destroyed Samaria and Ptolemy I captured Jerusalem (through deceit) and deported prisoners from Samaria and Judaea to Egypt. Notably, except for the Samaritan revolt and the evidence found in the cave at Wadi ed-Daliyah, none of these other events could be recognized archaeologically. Jaffa and ʻAkko do not show continuity between the Persian and early Hellenistic periods, and these changes might be associated with the described events. However, it should be stressed that no violent destruction by fire could be traced in the reports.

The effects of warfare and siege are well-known. The cities that resisted and their surroundings were affected dramatically by warfare. If a city was conquered, some people might have been executed, and sometimes, but not always, the city was destroyed[130]. The population of the conquered cities was at times expelled to other areas[131]. When it was long enough, the siege itself could bring about starvation, the outbreak of epidemics, and societal tensions within the city[132]. While the large cities were besieged, the countryside was severely damaged. The besieging army had to feed itself either by using the supply in storehouses of nearby towns that gave access to these resources either wilfully or after a raid, or the produce in the fields could be harvested and consumed[133]. Livestock and slaves were also targeted and captured, mostly as a form of booty[134]. In many cases, the besieging army used to intimidate the local population and loot abandoned houses for spoil[135], or create pressure on the besieged

126 *Diod.* 21, 5; *Polybius* 5, 67. It seems that Demetrius was able to keep Sidon and Tyre after the battle of Ipsus (*Plut. Demetr.* 32) and that these cities were captured eventually by Ptolemy I, but the dating cannot be inferred with certainty from the literary sources. For two different suggestions for dating based on numismatic evidence, see Lorber 2012 and Wheatley 2003 with references to earlier works and other suggestions.

127 *Ios. ant. Iud.* 12, 1.

128 Bernard 1990, 532–536; Hölbl 2001, 40.

129 Grainger 2010, 122–124.

130 Eph'al 2013, 48–68; Kreimerman 2016; Kreimerman 2022.

131 van Wees 2010; van Wees 2011.

132 Foxhall 1993; Eph'al 2013, 48–68.

133 Garlan 1975, 137–145; Chandezon 1999; Chaniotis 2005, 122.

134 Chandezon 1999, 198–199; Kreimerman 2022.

135 Chandezon 1999, 196.

ruler and force him to fight or surrender. Sometimes, this pressure also consisted of damaging crops, fields, and agricultural installations[136].

Such actions demoralized the besieged people and created internal turmoil in the cities. In turn, this situation made travel on the roads unsafe and the cultivation of the fields risky. These processes harmed trade and significantly reduced the yield of the fields. The latter effects were felt even if the siege was unsuccessful and the besieger had to retreat. Therefore, after a period of warfare, the attacked area had to coup with less available financial resources, but with a higher demand for such resources, since ruined cities, fortifications, villages, fields, and orchards had to be rehabilitated[137].

Yet, more relevant for our case is that the area was overrun at least eleven times by armies. As the carrying capacity of marching armies was limited, most of the food had to be acquired while on the road. The food was either purchased or retrieved from the land. Furthermore, soldiers did not always behave morally and sometimes ravaged the land they were passing through or stayed at for personal profit[138].

In other words, conflicts involve both military and economic aspects. The acquisition and exploitation of new territories, as well as the potential of seizing booty, were fundamental considerations when it was decided to wage war[139]. Military power was used to increase economic wealth, which, in turn, was used to increase the military and political power of the state[140]. Coele Syria and Phoenicia were highly prized territories for both strategic and economic reasons and, therefore, control over them was disputed between the Seleucids and Ptolemies[141]. Due to the economic importance of Coele Syria and Phoenicia, armies crossed through the area repeatedly, causing the economy to be exhausted and drained. Notably, according to the written sources, the main sites that were hit were ʻAkko, Jaffa, and Gaza, located on the coast – probably the most important area from an economic point of view.

Economically, the period could also be divided into two. In the first time frame, between 333 and 296 BCE, economic investments were relatively low. There is no evidence to suggest that Alexander was much bothered with administrative issues and continued to use the same administrative system of the Persian Empire throughout the conquered lands[142]. It seems that Ptolemy I also retained the organization and administration of his territories as they were in the Persian period[143]. The Aramaic ostraca from Idumea also indicates that the same tax collection system as in the time of the Persian administration was used during the first decades after the Macedonian conquest[144].

Besides quelling the Samaritan rebellion in Samaria and settling some Macedonian soldiers, we do not know about many other administrative actions in the late 4th century BCE. Possibly, the city of Gerasa was founded by Alexander or by his general Perdiccas. The evidence for this theory is from the Roman period[145], and it was suggested that the association of the city

136 Foxhall 1993; Hanson 1998; Chaniotis 2005, 122; Eph'al 2013, 48–54. Due to the physical difficulty in destroying crops and cutting trees, some scholars suggested that the economic effect might have been marginal (Foxhall 1993; Hanson 1998), but some scholars believe that the damage could be formidable (see Thorne 2007, with references therein). However, the actions demoralized the besieged people and created internal turmoil in the cities.

137 Chaniotis 2005, 127–128.

138 Grainger 1991, 50–51; Austin 2001, 92; Chaniotis 2005, 124–125.

139 Austin 1986, 460–461; Finely 1999, 204–207; Chaniotis 2005, 129–140.

140 Garlan 1975, 183.

141 Austin 1986, 461.

142 Bosworth 1993, 229; Shipley 2000, 39; Welles 1965, 219.

143 Hölbl 2001, 25–26.

144 Lemaire 2007, 56.

145 Welles 1938, 423; Seyrig 1965, 25–28; Cohen 2006, 248. 404.

with Alexander and Perdiccas is a mere legend and that the city was founded by Antiochus III or Antiochus IV[146]. It is also possible that Perdiccas established forts in Transjordan[147].

The lack of investment in the development of the economy is probably due to the diversion of all existing means to waging war. Settlements in the region had to recover from the repeated campaigns that exhausted their supplies and damaged the fields. Any surplus had to go into sustaining and recovering the existing settlements rather than to the foundation of new settlements or investments in infrastructure and beauraucracy.

Only from the time of Ptolemy II do we see more investment in the foundation of cities, minting, and administration. Nysa-Scytopolis (Beth-She'an), Akko (Ptolemais), Philoteria (Bet Yerah), and Philadelphia (Rabat Ammon) were founded[148]. Archaeologically, we know that Akko expanded beyond the limits of the tel already in the Persian period (but grew in size in the 3rd century BCE), and Nysa-Scythopolis was probably a relatively small settlement in the early 3rd century BCE[149]. Indeed, it is possible that these foundations were mainly a formal procedure that included granting minting rights rather than establishing cities from scratch[150]. In Bet Yerah, evidence of the early phase, probably from the mid-3rd century BCE, comes from Rhodian amphorae handles, pottery forms, and coins found mainly in fills. There is no clear mid-3rd century BCE architectural phase[151].

Generally, the Ptolemaic regime recognized and was dependent upon local elites, giving them a certain level of autonomy in handling local matters and respecting earlier arrangements[152]. However, we do see much more involvement in the affairs in the area[153]. This direct involvement is especially evident in the Zenon Papyri, where a high Egyptian official, Zenon, was sent to Palestine to take care of economic and administrative matters and improve the economic yield of the area. Another attestation for the extension of the Egyptian bureaucracy down to the village level is also seen in the decree of Ptolemy II issued in his 24th year[154].

It should be noted that despite Ptolemaic involvement in the local affairs, its control was still limited, which is best exemplified by the affair in which Zenon bought slaves from two brothers in Maresha. Three slaves escaped and returned to their former owners who demanded further payment before returning them to Zenon. Zenon's pleas to local officials seem to have been ineffective, suggesting that local elites and strong families retained much of their power against the central administration[155]. Clearly, the existing elites used their power to hinder any attempts to reorganize the economy that would, naturally, come at the expense of their influence.

To summarize, the second period from approximately 296 BCE to the end of the reign of Ptolemy II is characterized by more economic and administrative investments, especially seen in the massive construction activities at Tel Michal, Kedesh, Shechem, possibly in Samaria and especially in Maresha[156]. These investments explain the partial recovery of the settlement system. Yet, growth was not the only characteristic of this period. Some sites, including

146 Lichtenberger 2003, 315–316.

147 Fuks 1983, 15–16.

148 Fuks 1983, 22–23; Tal 2006, 6.

149 Mazor – Atrash 2017; Mazor et al. 2018.

150 Tal 2011.

151 Tal 2018, 115–117.

152 Bevan 1968, 157–158; Bagnall 1976, 9–10; Manning 2003, 130–133; Grabbe 2008, 186; Grabbe 2011, 86–90.

153 Grabbe 2008, 173–176.

154 Grabbe 2008, 215. 292–293; Berlin – Herbert 2021.

155 Tscherikower 1937, 40–42.

156 See a detailed discussion on southern Phoenicia in Berlin – Herbert 2021.

Ḥurvat ʻEres, Khirbet Qeiyafa, and possibly Ḥorvat Roẓeẓ, Tel ʻEton and Rishon Le-Zion were abandoned during this period, bringing the total number of sites at the end of Ptolemy II's reign to 25, still over 30% less than the number of sites in the Persian period.

Conclusions

One of the aims of the paper was to explain the alleged differences between a picture of decline and stagnation drawn from historical sources and a picture of prosperity drawn from archaeological evidence. Our analysis has demonstrated that, in fact, both sources draw the same picture, namely that while the transition from the Persian to the Hellenistic period in Israel was not violent, it was not smooth either and was generally characterized by decline.

The eighty years from Alexander's conquest to the end of Ptolemy II's reign could be divided into two. The first period is from Alexander's conquest until the end of the struggles of the Diadochi. Historical and archaeological evidence shows that this period was dominated by massive armies continually crossing over and ravaging the land with no means left for investment and development. Indeed, few new sites were founded, no changes were made in the administration, and the abandonment of many of the sites indicates that this was a period of instability, insecurity and decline.

The second period is after 296 BCE and throughout the reign of Ptolemy II. Literary evidence shows that cities were founded and that Egypt's general regime was involved in administrative matters in the land of Israel. Still, local elites retained much power. Some of the abandoned sites before 296 BCE were resettled, although not necessarily by the same people who abandoned them. Nevertheless, the number of sites was still 30% lower than in the Persian period, and there is no evidence of growth in settlement size (except possibly in Maresha) or the expansion of sites beyond the mounds. In other words, while it is not entirely inaccurate to describe these periods as a time of prosperity, the prosperity is only relative to the situation in the late 4th century BCE.

New studies applying the same approach to later phases of the Hellenistic period were published in specific areas and are being conducted in the present in order to evaluate the growth and prosperity of settlement sites in the Hellenistic period[157].

The changes in our understanding of the transition between the Persian and early Hellenistic periods were facilitated mainly by the adopted methodology. As previously shown, excavation data are much more reliable than those collected in surveys. They also allow for more accurate dating of the examined sites. It is worth considering applying similar methodologies to other periods and trying to consider giving up the use of surveys altogether as a means for studying settlement patterns in such a densely excavated area as Israel.

157 Sandhaus 2018; Sandhaus 2021; Sandhaus 2022.

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Hellenistic Dora: The Moldmade Bowls from the 1980 – 2000 Seasons, Part 2

Renate Rosenthal-Heginbottom

The Dora assemblage of Moldmade Bowls (MMBs) is published in two parts. The first (Rosenthal-Heginbottom 2022, cat. nos. **1–112**) forms a homogeneous group of Ephesian/Ionian manufacture, with a fair number of bowls originating from the PAR-Monogram workshop (hereafter Monogram workshop)[1]. Part 2 comprises 202 fragments of diverse fabric and origin (cat. nos. **113–314**), arranged in four groups: Ephesian/Ionian products (nos. **113–202**), BSP (Black Slip Predecessor) and RSP (Red Slip Predecessor) ceramics (nos. **203–263**), ESA ware (nos. **264–311**) and three singular fragments (nos. **312–314**). Altogether, after twenty years of excavation the number of bowls recovered is negligible[2]. However, with more than 700 bowls from the successive Dor expedition to be published[3], the site will be among the major locations with a substantial amount of MMBs in the southern Levant, together with the ca. 1120 specimens from Tel Anafa[4] and hundreds of bowls, dozens of them complete, from the Subterranean Complexes at Marisa[5]. References in Part 1 concentrated on the Ephesian/

1 I express my thanks to Patricia Kögler who diligently read the chapter and offered several suggestions, corrections and improvements. It has been decided to forgo many drawings published in Rosenthal-Heginbottom 1995a; Rosenthal-Heginbottom 1995b. To date, with the photos available, the comparison indicates that the drawings are not reliable. Photos are by Gabi Laron, drawings by Vered Rozén. Still, the imagery of a fair number fragments remains an enigma. My original plan had been to complete the chapter in autumn 2023 and to reckeck the identification in Jerusalem, a plan that did not work out. There are some corrections for Part 1. The locus of no. 61 (p. 110) is 17523; of no. 99 (p. 132) 17592; of no. 100 (p. 133) 17578. For no. 107 (p. 137) the wrong area and locus numbers are given, see Table 1 (p. 147) for the correct ones, Area C0, L564. The drawings fig. 1, 13 (p. 75) and fig. 9, 102 (p. 130) have been erroneously reversed, the photos on pp. 82. 134 are correct.

2 Forty tiny fragments have been excluded, bringing the overall number to about 350. In Part 2 six fragments have been omitted, as no photos or profile drawings are available (see Rosenthal-Heginbottom 1995b, pls. 3, 7; 4, 8; 6, 4; 7, 11–13).

3 Mermelstein 2022, 805,

4 Cornell 1997, 407.

5 Rosenthal-Heginbottom 2019, 75–81. The publication comprises only a selection of bowls from Complex 169. The remainder and the bowls from Complex 89 will be published by the author.

Ionian parallels, while references in Part 2 focuses on sites in the southern Levant, adding further information on some finds presented in Part 1. Keeping in mind that there is definite uncertainty when relying on fabric description and decoration, the occasional finds from other sites are studied in order to determine the customers' preference for the imagery and décor of the relief bowls. With very few exceptions the assemblage comprises small fragments and the overall décor remains unknown, hence the informative value is limited.

Bowls of likely Ephesian/Ionian manufacture

Nos. **113–202** comprise micaceous fragments tentatively assigned by visual fabric assessment and décor to Ephesian/Ionian workshops and some to the Monogram workshop (note that the moulds and rim friezes cited according to Rogl 2001; Rogl 2014 refer to the latter). The renewed visual inspection suggests that fragments nos. **126**. **129**. **132**. **160**, previously identified as Attic[6], belong to the grey ware category. The finds are discussed in five groups:

1. foliage and linear bowls (nos. **113–134**; nos. **126–134** in grey ware);
2. figured bowls (nos. **135–148**; nos. **139–140**. **143** in grey ware);
3. MMBs with a single décor scheme covering the entire wall comprise pine-cone bowls (nos. **149–156**), two bowls with horizontal rows of small leaves (nos. **157–158**), those decorated with imbricate leaves (nos. **159–181**) and with a net pattern (nos. **182–187**);
4. the singular bowl no. **188** of unknown origin;
5. rim fragments with Ionian cyma and ovules (nos. **189–202**), illustrating the typical profiles.

A characteristic feature of Ionian MMBs is the arrangement of the wall décor in zones (hence ›Zonenbecher‹)[7]/friezes/registers, divided by ridge(s) and a row of beading. Foliage bowls of the Monogram workshop have bands of garlands/tendrils/wreaths decorating the upper zones below the various rim motifs, and calices of lotus petals and acanthus leaves (›Blattkelchbecher‹)[8] on the lower zones (nos. **3**. **7**. **10**. **14–16**. **22**). Figured bowls can have two zones like no. **1** with Amazons on the upper and Erotes on the lower and no. **2**[9] with an animal frieze and lotus petals. In Part 2, fragments of the upper zone comprise nos. **113–116. 133**, and nos. **117–121**. **129–132** represent the lower zone, also often described as main zone. The linear bowls nos. **123–125**. **134** and no. **145** with the nearly complete profile preserved have a single décor zone. Nos. **122**. **126–128**. **146–147** preserve both zones, and nos. **135–142** the upper zone, nos. **143–144**. **148** the lower.

References are confined to specific finds of geographical and chronological significance, in particular the Ephesos excavations with their abundance of complete and fragmentary bowls and their substantial collection of moulds. Here the focus is on the assemblages from Terrace House 2 (›Hanghaus 2‹) (Dereboylu 2001; Ladstätter 2005; Ladstätter 2010; Waldner – Ladstätter 2014). No attempt has been made to present the full comparative material.

Foliage bowls

113 (Area C0, L493, Reg.–No. 4537)
Rim and wall fragment.
Light brown fabric, ext./int. mottled dark brown/dark grey slip.
Rim: Ionian cyma. Upper zone: tendrils of ivy leaves.
The fragment could belong to bowls with tendrils of ivy leaves and a three-dot motif that occurs on a mould attributed to the Monogram workshop (Rogl 2002, 194–195 fig. 2, Ephe 108 = Rogl 2014, 118 Type 4 right; see the references

6 Rosenthal-Heginbottom 1995a, 209; Rosenthal-Heginbottom 1995b, 369.

7 Rogl 2014, 126.

8 Rogl 2014, 16 fig. 12.

9 An identical dog on a fragment from Dora is of BSP fabric (Mermelstein 2013, 75 fig. 3.17. 142 cat. 259).

for no. **102**[10]), although the dots are missing on the Dora fragment. Ivy tendrils without and with the three-dot motif occur on upper wall fragments from Milet, attributed to workshops at Pergamon or Antioch (Kossatz 1990, 39. 103–104 M 258. 259. 261). The motif is found on moulds from Samos (Rogl 2002, 195 note 30), indicating a connection between Ephesos and Samos and pointing to the possible copying of stamps or their trade (Tsakos 1994, 295 and pl. 229a). The fragment with ivy tendrils from the Metropolis Group A comes from a fill dating back to the second quarter of the 3rd century (Gürler 2003, 13 no. A 30).

114 (Area D1, L16907, Reg.–No. 261096)
Wall fragment.
Reddish-brown fabric, ext./int. dark brown slip. Thin-walled.
Upper zone: spiral tendrils.
The small fragment is assigned to the décor of spiral tendrils with the three-dot motif. Monogram workshop: Mitsopoulos-Leon 1991, 70 D 1–2; Dereboylu 2001, 43 nos. 3–4 and pls. 22, 204–205; 43 no. 7 and pl. 23, 208 = Ladstätter 2005, 266 K 2 and pl. 147; Ladstätter 2010, pl. 119, A–K 86; Günay Tuluk 2001, 68 no. 28 (mould). Import: *Akko-Ptolemais*: Regev 2009/10, 167 no. 240 and fig. 36 (Ionian); for the décor see nos. **102** (Monogram workshop). **127**.

10 The drawing of no. **102** fig. 9 on p. 130 has been erroneously reversed.

115 (Area D2, L15306, Reg.–No. 152538)
Wall fragment.
Light brown fabric, ext./int. red slip. Thin-walled.
Upper zone: spiral tendrils with cluster of grapes.
Monogram workshop: Bouzek – Jansová 1974, 26 fig. 3, 70. 62; Laumonier 1977, pl. 124, 1440. 1456–1457; Mitsopoulos-Leon 1991, 70 D 3; Gassner 1997, 80 no. 240; Ladstätter 2010, 196 A-K 7: see also the more elaborate vine tendrils nos. **3**–**13** and the moulds in Rogl 2001, 109 RB 14–15.

116 (Area D1, L16344, Reg.–No. 165485/4)
Rim and wall fragment.
Light brown fabric, ext./int. red slip.
Rim: ridge. Upper zone: bent/tipped acanthus leaf with jeweled mid-rib, tipped to the left and forming a noose; below the tipped leaf another indistinct leaf.
For similar leaves see the mould in Rogl 2001, RB 14 = Rogl 2002, 194 fig. 2, Ephe 105 and Mitsopoulos-Leon 1991, 70 D 10; Gassner 1997, 77 no. 221; 78 no. 226; *Museum of Ephesos*: Günay Tuluk 2001, 65 no. 16.

117 (Area C0, topsoil, Reg.–No. 4007/1)
Lower wall fragment.
Dull slip, ext. mottled brown/reddish-brown slip, int. dark grey slip.
Wall: vine tendril (?), preserved are a leaf and part of a cluster of grapes. Below, framing the medallion, running dog between ridges.
Laumonier 1977, pl. 18, 769-1463.

118 (Area B2, Wall 219, Reg.–No. 2337/5)
Wall fragment.
Light brown fabric, ext./int. red slip, double dipping on int.
Lower zone: alternating acanthus leaves and spiral tendrils. Calyx: circle of triangular leaves filled with pointed leaf within.
Stalk/tendril: see nos. **221**. **232**. **235**. **244**. **290**. **296**; calyx: see no. **111**.

119 (Area F3, L8936, Reg.–No. 87516)
Wall fragment.
Light brown fabric, red slip, on ext. dark grey patch on upper half of fragment.
Lower zone: on the left acanthus leaf below large veined leaf, possibly a nymphaea nelumbo petal, on the right acanthus leaf.
Dereboylu 2001, 35 no. 25 and pl. 16, 116 (degenerate nelumbo petal).
The orientation of the décor is given by the interior wheel-marks. The dark patch could be an isolated discoloration.

120 (Area C0, L564, Reg.–No. 4928)
Wall fragment.
Light brown fabric, ext. reddish-brown slip, int. red slip.
Lower zone: schematic acanthus leaf.
The ceramics from L564 represent the repertoire characteristic of the late Hellenistic occupation at Dora and can be dated to ca. 175–125 BCE (Guz-Zilberstein 1995, 318; see also cat. nos. **7**. **107**[11]. **200**).

11 For no. **107** (Rosenthal-Heginbottom 2022, 137) the wrong area and locus numbers are given, see **Table 1**, p. 147 in the same publication for the correct ones.

121 (Area C0, L4045, Reg.–No. 40387/8)
Wall fragment.
Light brown fabric, ext./int. reddish-brown slip.
Lower zone: veined lotus petal and floral tendril.
Petal: no. **15** (bent/tipped); the stalk is similar to nos. **1**. **87** (identical stamp); see Gassner 1997, 78 no. 228 (fantastic plant). *Ashdod*: Kee 1971, fig. 19, 11 (similar).
The analysis of the ceramics from L4045 (Guz-Zilberstein 1995, 314–316) indicated that it contained redeposited material of phase 4a (ca. 175–125 BCE), with Ionian no. **121** assigned to this phase, while the other vessels represent Phase 3, dated 125–60(?) BCE. The assemblage documents that the main difference between Phases 4a and 3 is the increase of imported ESA ware.

122 (Area F, L8736, Reg.–No. 86263)
Wall fragment.
Light brown fabric, ext./int. red slip. Thin-walled.
Wall divided into two zones by pronounced ridge. Lower zone: two cabled stems.
Popești (Dacia): Vulpe - Gheorghiță 1976, 170 fig. 1, 13d; 185 no. 125 and pl. 6, 10; 186 no. 134 and pl. 6, 3; for the mid-1st century BCE date see p. 169. Another find spot with a local/regional production is Lissos in Albania (unpublished, pers. comm. Patricia Kögler).

Linear bowls

123 (Area D2, topsoil, Reg.–No. 195010/1)
Three joining fragments of lower wall section. Thin-walled.
Light brown fabric, ext./int. lustrous red slip.
Single zone: alternating nymphaea caerulea petals and lines of jeweling with flower umbel above.
Ephesos: flower umbel (›Blütendolde‹): Mitsopoulos-Leon 1991, 72 D 37 (identical); Gassner 1997, 82 no. 248 (lotus bud); *Pergamon*: stylized club bud (›Keulenknospen‹): de Luca 2021, 309 no. 1198; different buds: *Museum of Ephesos*: Günay Tuluk 2001, 64 no. 13; Lätzer 2009, 146 fig. 11; 192 no. 87 (bowl signed by Philon, date of fragment early 1st century BCE, context date second half – last quarter of 1st century BCE). *Sardis*: Rotroff -Oliver 2003, 113–114 no. 461 (lotus bud between lotus petals, local production).
The identical motif on a late Hellenistic grey-ware bowl from Samaria is identified as ›Isis crown palmette‹ (Crowfoot 1957a, 255 fig. 52, 34. 39; 258–259).

124 (Area D2, L5126, Reg.–No. 51141)
Wall fragment.
Light brown fabric, ext./int. lustrous red slip.
Single zone: alternating long tongue-shaped petals and lines of jeweling.
Mould: Rogl 2001, 110 RB 20; parallels: *Ephesos*: Laumonier 1977, pls. 58–60; Mitsopoulos-Leon 1991, 72 D 39; Dereboylu 2001, 36–37 no. 6 and pl. 18, 135. 37 no. 13 and pl. 18, 142; Ladstätter – Lang-Auinger 2001, 75 and pl. 48, 10 (context date 170–130 BCE); Ladstätter 2010, 197 A-K 15 (context date 170–130 BCE); *Museum of Ephesos*: Günay Tuluk 2001, 66 no. 21. At Athens plain and jeweled long-petal bowls were manufactured (Rotroff 1982, 36–37; for an imported jeweled bowl see no. 398). *Dora*: Mermelstein 2013, 80 fig. 3.25. For the décor see no. **134**.

124 125

125 (Area E1, L6497, Reg.–No. 64701/1)
Rim and wall fragment.
Light brown fabric, ext./int. red slip.
Rim: band of tiny six-petal rosettes. Single zone: concentric semicircles, probably shield décor, with lines of jeweling and dot décor.
Mould: Rogl 2001, RB 11. 24; parallels: Bouzek – Jansová 1974, 33 fig. 5, 99–100. 68; Laumonier 1977 pl. 112, 4301. 4304; Mitsopoulos-Leon 1991, 73 D 48; Günay Tuluk 2001, 67 nos. 24–25; Ladstätter 2010, 197 A-K 19 (shield, context 170–130 BCE); *Olbia*: Guldager Bilde 2010, 280 F 45–47 and note 556, pendent semicircle design. At Ramat Aviv a complete bowl has been recovered (Gorzalczany 1999, 27* fig. 1 = Rosenthal-Heginbottom 2015, 679. 690–691 pl. 6.2.3, 1). For fragments of imported bowls in Athens see Rotroff 1982, 38–39. 42. 91 nos. 401–402 (no. 401 ca. 150–145 BCE, no. 402 from an early Roman context). See no. **104** for a fragment of the lower wall and medallion.

Foliage bowls – grey ware (›vases gris‹ ateliers)

Bowls in grey ware represent the second major group produced in Ephesian workshops. Mica inclusions are clearly visible, while shape and slip vary. The fabric is the same as that of Ephesian grey lamps and the grey platters, and analyses indicate that they belong to the same mineralogical group and were produced in the same workshops, hence Ephesian production is definite (Laumonier 1977, 14; Mitsopoulos-Leon 1991, 67; Gassner 1997, 71; Rogl 2001, 103; Meriç 2002, 33). In the publication of Terrace House 2 at Ephesos E. Dereboylu noted the clear increase of dark grey and metallic lustrous black fabric towards the end of the 1st century BCE (Dereboylu 2001, 29).

126 (Area C0, L4123, Reg.–No. 40545/1)[12]
Wall fragment.
Light brown fabric, lustrous black/dark grey slip.
Wall divided into two zones by two ridges. Upper zone: wreath of rounded ribbed leaves and lotus buds. Lower zone: lanceolate lotus petal with hatched edge and acanthus leaf with curled tip. Acanthus leaf: see nos. **220**. **222**. **279**.

12 The fragment is not Attic as published in Rosenthal-Heginbottom 1995b, 369 no. 1.

127 (Area G, L9622, Reg.–No. 96123)
Wall fragment.
Light grey fabric, ext./int. black/dark grey slip.
Wall divided into two zones by ridge. Upper zone: spiral tendrils. Lower zone: pointed lotus petal with jeweled mid-rib.

128 (Area D2, topsoil, Reg.–No. 195010/3)
Wall fragment.
Light brown fabric, ext./int. dark grey slip.
Wall divided into two zones by ridge. Upper zone: spiral tendrils (?). Lower zone: pointed lotus petal with jeweled mid-rib.

Nos. **127–128** are fragments of bowls that could have been made in the same mould. The décor of spiral tendrils with the three-dot motif tallies with that of no. **114**. The petal is similar to the schematized and drawn-out petals used in the Monogram workshop (Rogl 2001, RB 12). Compare also no. **242**.

129 (Area F, L8049, Reg. –No. 80385)13
Wall fragment.
Light brown fabric, lustrous black/dark grey slip.
Lower zone: two acanthus leaves with two vessels above, loutrophoroi (?).
For different vessels see Günay Tuluk 2001. 61 no. 1; de Luca 2021, pl. 222.

130 (Area E1, L6573, Reg.–No. 66672/5)
Lower wall fragment.
Light grey fabric, dark grey slip.
Lower zone: alternating palm frond and tendrils with ivy leaves.

13 The drawing published in Rosenthal-Heginbottom 1995b, pl. 1, 2 is inaccurate.

131 (Area D1, L 5410, Reg.–No. 54090/1)
Lower wall fragment.
Light grey fabric, dark grey slip.
Lower zone: two ribbed leaves alternating with indistinct décor. Row of beading framing medallion.

132 (Area E2, L6012, Reg.–No. 60066)
Lower wall fragment.
Light brown fabric, lustrous black/dark grey slip.
Lower zone: to left tendrils, to right two slim elongated leaves, recalling Athenian prototypes of stalks of serrated, spiky and ribbed leaves (see Rotroff 1982, pls. 8, 49; 10, 59; 21, 120).

133 (Area C0, L499, Reg.–No. 4496)
Rim and wall fragment
Light grey fabric, dark grey slip.
Rim: band of heart-shaped leaves. Upper zone: tongue-shaped petal. possibly nymphaea nelumbo petal, three raised dots.
The leaves appear to be a simplified imitation of Lesbian cymae or heart-shaped leaves with a plain surface (compare Rogl 2014, fig. 13, 1, 13). Patricia Kögler suggests an inverted wavy band/running dog (see Rogl 2014, fig. 13, 10). Petal: see no. **71**.

Linear bowl

134 (Area E1, L6141, Reg.–No. 61264/7) (**fig. 1**)
Diam. of base 4.2. Lower wall and base fragment.
Light grey fabric, dark grey slip.
Single zone: alternating long tongue-shaped petals and lines of jeweling. Flat base.
Ephesos: grey ware: Mitsopoulos-Leon 1991, 73 D 42 (with base-ring); Dereboylu 2001, 36 no. 5 and pl. 18, 134 (flat base). A signed bowl from the workshop of Philon is of yellowish-orange clay with a brown/grey slip (Meriç 2002, 34 K 46). The vessel came to light in Fill A of the shaft well in the State Agora, dated to late Hellenistic and Augustan times (Meriç 2002, 23 fig. 3). *Tel Yokneam*: Avissar 1996, 49–50, fig. X.1, 29 (Ionian, with black slip). For the décor see no. **124**.

Figured bowls – human

The micaceous bowls of different fabrics indicate different workshops, and an attribution to Ionian workshops is suggested; half are in grey ware, eight out of fifteen. The attribution of nos. **135**. **138** to a south Syrian/north Palestinian workshop is no longer maintained[14].

135 (Area E1, L6160, Reg.–No. 61338 + L6348, Reg.-No. 63413/2) (**fig. 1**)
Diam. 15.5. Two joining fragments of rim and wall.
Light brown fabric, ext. dark grey/brown slip, int. reddish-brown slip with band of dark brown slip along the lip.
Rim: Ionian cyma. Upper zone: warriors with Phrygian helmet.
The figures were produced from single stamps and repeated in sequence.

14 Rosenthal-Heginbottom 1995b, 373 nos. 109–110.

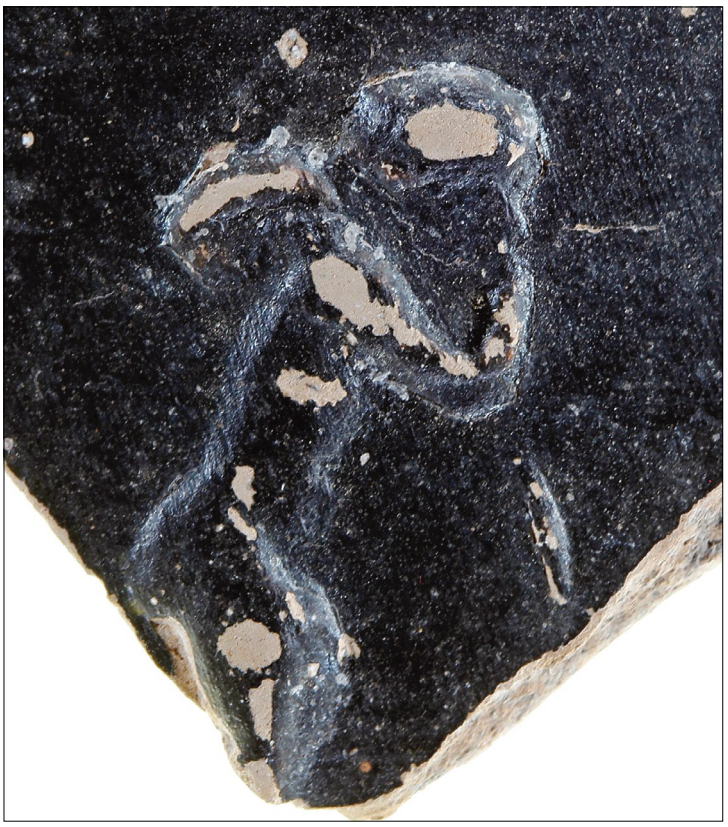
136 (Area C0, L611, Reg.–No. 5068) (**fig. 1**)
Diam. 14. Rim and wall fragment.
Reddish-brown fabric, ext./int. red slip.
Rim: Lesbian cyma. Upper zone: upper part of figure, holding a knife in the raised angled arm.
Cyma: *Dora*: Mermelstein 2013, 79 fig. 3.24. Upper zone: possibly part of an Amazonomachy, the figure can represent a Greek warrior or an Amazon. For variants of the motif see Laumonier 1977, pls. 31, 3343; 37, 3358; 118, 3371. 5377.
L611 is assigned to Phase 4a, ca. 175–125 BCE (see Guz-Zilberstein 1995, 350 fig. 6.4, 19–20).

137 (Area D2, L17500, Reg.–No. 175000/1)
Rim and wall fragment.
Light brown fabric, ext. dark grey slip, int. red slip.
Rim: indistinct design between ridge and row of beading, possibly like nos. **205** and **302**. Upper zone: frontal view of hunter with spear, wearing short skirt.
The identification of the figurative subject is not definite. For nearly identical figures, striding right to fight an animal as part of a lion hunt see the fragments from Antioch (Waagé 1948, figs. 9, 5; 10, 6; 14, 6) and from Samaria (Crowfoot 1957b, 276 fig. 62, 10); for figures and animals produced from single stamps and repeated in sequence see Waagé 1948, fig. 14, 6. Similar are the figures on fragments from Caesarea Maritima in Rosenthal-Heginbottom 2016, 125–126 no. 4 (hunter with spear striding right); *Tel Michal*: Fischer 1989, 180 fig. 13.2, 22. 193 (tiny fragment, lower body of a man holding a spear); *Gezer*: Gitin 1990, pl. 40, 15 (Stratum IIB, 142–ca. 100 BCE). See also Laumonier 1977, pl. 97, 9015.

138 (Area B1, L2204, Reg.–No. 32056/1)
Rim and wall fragment.
Light brown fabric, ext. brown slip, int. dark grey slip.
Rim: Ionian cyma with row of beading below. Upper zone: Nike right, holding wreath, about to decorate a trophy. The tropaion has a bearded head set on a pole or body. The element at the back of the woman is not clear, she appears not to be winged.
Delos: Laumonier 1977, pl. 20, 3295+329. In combination with other figures the motif occurs on Pergamene bowls (de Luca 1997, 367 and pl. 269b; de Luca 2021, 197–198 nos. 143–146) and on an Athenian bowl in combination with the Rape of Ganymede and Eros on panther (Rotroff 1982, 68 no. 200).

139 (Area D1, L16041, Reg.–No. 165352/1)
Diam. 14. Rim and wall fragment. Grey ware.
Light grey fabric, ext./int. dark grey slip.
Rim: band of circles with small circle within between bead-and-reel and row of beading. Upper zone: seated female to right in front of a lyre; to her right splayed tail of dolphin. Row of beading below the figures demarcates the upper and lower zones.
Rim: see no. **52**. For a winged figure with kithara, seated on the head of a dolphin see Laumonier 1977, pls. 26; 122, 3040.

140 (Area E2, L6029, Reg.–No. 60162)
Rim and wall fragment. Grey ware.
Light grey fabric, ext. dark grey slip, int. brown slip.
Rim: Ionian cyma and row of beading below. Upper zone: Eros moving right.
The wing and head suggest a second figure.
The figures were produced from single stamps and repeated in sequence.



141 (Area E1, L6473, Reg.–No. 64317/12)[15] (**fig. 1**)
Diam. 15.5. Rim and wall fragment.
Light brown fabric, ext./int. brown slip.
Rim: Ionian cyma. Upper zone: two figures in frontal position, the right one female, the left one male.
Depicted are actors with masks, see the bowls from Ephesos in Gassner 1997, 75 no. 212 for the male, Meriç 2002, 34 K 43 for the female and from Pergamon in de Luca 1997, 367 and pl. 271b = de Luca 2021, 215 no. 303, in particular the woman with her right arm on the left shoulder, wearing a coat (pl. 55 figure 4). The figures alternate with Ionian columns, see no. **215** with probably the same subject. The figure with the upper body half in Meriç 2002, 34 K 43 is identified as Eros; it came to light in Fill B1 of the shaft well in the State Agora, dated to ca. 1–25 CE (Meriç 2002, 23 fig. 3).

15 Rosenthal-Heginbottom 1995b, 373 and pl. 12, 2. The correct locus number is L6473.

142 (Area C0, L4344, Reg.–No. 43337/10)
Rim and wall fragment.
Light brown fabric, ext./int. reddish-brown slip.
Rim: Ionian cyma. Upper zone: upper half of a figure with a horned head and raised right arm.
The figure recalls the depiction of Pan/Aegipan on fragments in the PAR-workshop (Laumonier 1977, 167 no. 3242; 168 no. 3252 and pl. 37).

143 (Area D1, L16041, Reg.–No. 163387/4)
Wall fragment. Grey ware.
Light grey fabric, ext./int. dark grey slip.
Wall, probably lower zone: on right lotus petal, on left head of Silenos placed with his face looking downwards.

144 (Area D1, L16063, Reg.–No. 163900)
Wall fragment.
Light brown fabric, ext. red slip, int. dark grey slip.
Wall, probably lower zone: slave mask between acanthus leaves with hatched veins.
See no. **1** for a mask in place of the medallion.

Figured bowls – animals

145 (Area H, L21022, Reg.–No. 206492/1)
PH. 5. Joining wall and base fragment.
Reddish-brown fabric, ext./int. mottled red to brown/dark grey slip.
Rim: Ionian cyma and bead-and-reel below. Single zone: two animals(?). On the right head of dog to left. Base-ring, concave within.

146 (Area H, L20623, Reg.–No. 204843)
Wall fragment.
Reddish-brown fabric, ext./int. red slip.
Wall divided into two zones by ridge. Upper zone: on the left hind leg of animal, on the right human foot.. Lower zone: foliage décor, on left tipped acanthus leaf like on no. **10** (reversed).
The leg might be that of a lion or dog like on cat. no. **2**, though their tails are lacking; compare the lions on bowls from Akko-Ptolemais (Tatcher 2000, 35* fig. 8, 8) and Beit Eliezer, Hadera (Rosenthal-Heginbottom 2016, 162–163 no. 110).

147 (Area D1, L16902, Reg.–No. 261155/2)
Wall fragment.
Light brown fabric, ext./int. lustrous dark grey slip.
Wall divided into two zones by row of beading. Upper zone: leg(?). Lower zone: eight-petal flower rosette and tip of large leaf.
Rosette: probably from ateliers succeeding the ΠΑΡ-Monogram workshop (Rogl 2014, fig. 14, 90). While rosettes are usually applied to the zones, there can be divergencies (Rogl 2014, 127). For two zones, the upper figured and the lower floral, see Laumonier 1977, pl. 120, 3331.

Figured bowl – object

148 (Area H, L20612, Reg.–No. 203908)
Wall fragment with ridge demarcating the medallion.
Brown/light grey fabric, ext./int. dark grey slip.
Lower zone: alternating krater and lanceolate lotus leaf with hatched edges, set within a schematic frond. Medallion: ridge.
Hama: Papanicolaou Christensen 1971, 30 fig. 13, 119. Krater: see no. **216**.

Bowls of likely Ephesian/Ionian manufacture with décor covering the entire wall

The category comprises pine-cone bowls (nos. **149–155**), rows of small leaves (nos. **157-158**), imbricate (nos. **159–181**) and net-pattern bowls (nos. **182–187**). No complete bowl has been recovered. Fragments preserving sections of the lower wall indicate a preference for low base-rings with a diameter ratio of one to two between base and rim. A single fragment has a pointed base (no. **154**), and two fragments have a medallion with rosette (nos. **186–187**).

Pine-cone bowls

The fragments of ten bowls with a wall decoration of pine cones (Dereboylu 2001, 35–36 ›Buckelbecher‹) comprises two variants, in the first the top of the scales is marked by diagonal lines converging at the centre (nos. **149–153**), and in the second they form plain nodules (nos. **154–155**). No. **156** could be a pine-cone bowl, while nos. **157–158** are adorned with horizontal rows of small leaves, related to imbricate bowls (compare no. **181**).

149 (Area D1, L5751, Reg.–No. 56678) (**fig. 1**)
Diam. 15.5. Rim and wall fragment.
Reddish-brown fabric, ext./int. lustrous dark grey slip on the upper half, red slip below.
Rim: star rosette. Main zone: pine cones.
Moulds: Rogl 2001, RB 21 (rim: meander); Rogl 2014, 118 fig. 4 type 4 left (rim: Ionian cyma, Monogram workshop); Günay Tuluk 2001, 67 no. 26 (mould); parallel: Ladstätter 2010, 552 B-K 120 and pl. 210 (diam. 12, context date: late 2nd-early 1st centuries BCE).

150 (Area D2, L5126, 51057) (**fig. 1**)
Diam. 14.5. Rim and wall fragment.
Light grey fabric, ext./int. dark grey slip.
Rim: rosette.

151 (Area C0, L607, Reg.–No. 4963/6) (**fig. 1**)
Diam. 14. Rim and wall fragment.
Light brown clay, ext./int. worn dark grey slip with reddish-brown patches.
Rim: Ionian cyma, three shallow grooves above. Wall: pine cones.
Published as of eastern manufacture, the bowl is now defined as Ionian.

152 (Area D1, Wall 16032, Reg.–No. 260456)
Wall fragment.
Reddish-brown fabric, ext. lustrous dark grey slip, int. brown slip.

153 (Area C2, L4520, Reg.–No. 45068/1)
Wall fragment.
Reddish-brown fabric, ext./int. reddish-brown slip.
Wall: pine cones.
Dora: Mermelstein 2013, 76 fig. 3.18; *Maresha*: Levine 2003, 82 no. 24 and fig. 6.2.
The analysis of the pottery assemblage suggests a date in the first half of the 2nd century BCE (Guz-Zilberstein 1995, 333. 417 fig. 6.60, 1).

Nos. **149–153**: Dereboylu 2001, 35–36 nos. 1–8 and pls. 17, 122–128; 18, 129 = nos. 6–7 Waldner – Ladstätter 2014, 480 K 69–70 (context date 1st century BCE and Augustan times); Lätzer 2009, 193 nos. 95–96 and pl. 10 (date of fragments end of 2nd–late 1st century BCE, context date second half of 1st century BCE).

154 (Area F2, L8730, Reg.–No. 85925) (**fig. 1**)
Wall and base fragment.
Light grey fabric, ext. dark grey slip, int. brown slip.
Low base-ring (diam. 4.2).

155 (Area D2, L5133, Reg.–No. 51112) (**fig. 1**)
Wall and base fragment.
Light grey fabric, ext./int. dark grey slip.
Pointed base.
Ephesos: Gassner 1997, 81 nos. 244–245 (grey ware); *Iasos*: Pierobon-Benoit 1997, 372 and pl. 275a, 7 (Ionian grey ware). A red-slipped vessel with a pointed base has been recorded at Caesarea Maritima (Rosenthal-Heginbottom 2016, 154–155 no. 93, with references).

156 (Area F2, L8496, Reg.–No. 84783) (**fig. 1**)
Diam. 11.5. Rim and wall fragment.
Reddish-brown fabric, ext./int. lustrous dark grey slip.
Rim: ovules, row of beading above. Main zone: pine cones (?).

Small leaves

Two fragments adorned with horizontal rows of small leaves are in-between pine-cone and imbricate bowls (compare no. **181**).

157 (Area E2, L6006, Reg.–No. 60040/1) (**fig. 1**)
Diam. ca. 16. Rim and wall fragment.
Light brown fabric, ext./int. worn dark grey slip.
Rim: Ionian cyma. Main zone: two bands of small leaves.

158 (Area C1, L4443, Reg.–No. 48221/5)
Wall fragment.
Light brown fabric, ext./int. worn dark grey slip.

Imbricate bowls

S. Rotroff defines imbricate bowls as decorated with overlapping leaves or petals, produced from the last quarter of the 3rd century to the early 1st century BCE (Rotroff 1982, 16–17). The ornamentation covers the entire wall from beneath the rim pattern until the medallion. By size, the leaves can be divided into two groups. First, there are relatively uniform large rounded nymphaea lotus petals with single central vein (nos. **159–163**). The second more common group comprises a variety of small pointed leaves described as ›small ferns‹ (Rotroff 1982, pl. 94). The Dora assemblage includes five variants: triangular with two parallel ridges (nos. **164–172**), filled with tiny raised dots (nos. **173–174**), ribbed (nos. **175–178**) and a schematic leaf with mid-rib (no. **179**). Less common are small rounded leaves (nos. **180–181**). See also nos. **157–158** for horizontal rows of small leaves.

Lotus petals

159 (Area D1, L16698, Reg.–No. 169399)
Rim and wall fragment. Thin-walled.
Reddish-brown fabric, ext./int. lustrous dark grey slip.
Rim: guilloche and bead-and-reel. Main zone: lotus petals with single central vein.

160 (Area C0, L457, Reg.–No. 4335/3)[16] (**fig. 1**)
Base and lower wall fragment. Thin-walled.
Reddish-brown fabric, ext./int. worn dark grey slip.
Wall: six rows of large rounded nymphaea lotus petals with single central vein. Medallion: rosette.

Nos. **159–160**: moulds: Rogl 2001, RB 9. 22; Günay Tuluk 2001, 69 no. 31; parallel: Dereboylu 2001, 31 no. 20 and pl. 14, 74.

161 (Area H, L20020, Reg.–No. 200244/5)
Wall fragment. Thin-walled.
Reddish-brown fabric, ext./int. lustrous dark brown slip.
Wall: three rows of large rounded nymphaea lotus petals with single central vein.
Bowls with rows of overlapping lotus petals were produced in several workshops. Monogram workshop: moulds: Rogl 2001, RB 22; Günay Tuluk 2001, 69 no. 31; complete profile: Ladstätter 2003, 47 K 45 (with band of bead-and-reel and meander rim, from the well filling 2, dated about 100 BCE; for

16 The fragment is not Attic as published in Rosenthal-Heginbottom 1995b, 369 no. 4.

the date see pp. 42 and 46). *Metropolis*: Gürler 2003, 11–12 no. A 22, pl. 10 (fragment with petals, ›dense black glaze‹, local production, bowls with this type of ornamentation existed in the second quarter of the 3rd century BCE); *Athens*: Rotroff 1982, 37–38 (lotus-corolla bowl); 46 nos. 14. 18 (dated ca. 225–200 and 220–175 BCE); *Olbia*: Guldager Bilde 2010, 278–279 F 25 (Ephesian import, complete profile with a band of vine tendrils and a meander rim, attributed to the Monogram workshop).

162 163

162 (Area D2, L5102, Reg.–No. 51007)[17] (**fig. 1**)
Diam. 16. Rim and wall fragment.
Rim: Ionian cyma with twisted arrow. Main zone: lotus petals with single central vein.
Reddish-brown fabric, ext./int. red slip.
Rim frieze: from ateliers succeeding the ΠΑΡ-Monogram workshop (Rogl 2014, fig. 14, 89).

163 (Area B2, L3784, Reg.–No. 37528)
Rim and wall fragment.
Light brown fabric, ext. reddish-brown slip, int. dark grey slip.
Rim: Ionian cyma. Main zone: lotus petals with single central vein.

Small leaves

Bowls with small imbricate leaves, mostly in grey ware, are well-documented in the assemblages of Terrace House 2 at Ephesos, including moulds. For further information see Dereboylu 2001, 30–33 (most specimens are also discussed in Waldner – Ladstätter 2014); *Museum of Ephesos*: Günay Tuluk 2001, 66 no. 20; moulds: Rogl 2001, RB 8–9; 2014, fig. 3, Type 2 and fig. 4 for base fragments; Dereboylou 2001, 44 no. 2 and pl. 23, 220 = Waldner – Ladstätter 2014, 437 text fig. 1, K 536; 448; 524 (context date 1st century BCE and Augustan times). Covering the main zone, the size of the leaves with pointed or rounded top is quite uniform, while the indicated veins and ribs vary. A limited number of references is cited.

17 The drawing published in Rosenthal-Heginbottom 1995b, pl. 10, 4 is not correct, showing pointed leaves, while the photo documents the lotus petal with a pronounced mid-rib.

164 (Area C0, L516, Reg.–No. 4633/8. 12) (**fig. 1**)
Diam. 12.5. Three joining fragments. Grey ware.
Rim: star rosettes. Main zone: two rows of pointed imbricate leaves.
Monogram workshop: rosettes: Rogl 2001, RB 2–5. 8; Rogl 2014, fig. 13, 3; Dereboylou 2001, 32–33 no. 36 and pl. 15, 90 = Ladstätter 2005, 296 K 320; see also nos. **12**. **53**–**61**; leaves: Ladstätter 2010, 543 B-K 1 (context date 1st century BCE); import: *Tel Anafa*: Cornell 1997, pl. 4, MB 57 (Ionian); *Akko-Ptolemais*: Dothan 1976, 31. 34 fig. 31 (rim: Ionian cyma, signed ANTI[…]; for the signature assigned to the Monogram workshop see Rogl 2014, 119–120 fig. 7); *Shikmona*: Elgavish 1974, pl. 36, 342.

165 (Area D1, Wall 16338, Reg.–No. 166287)
Base and wall fragment.
Reddish-brown fabric, ext./int. dark grey slip.
Main zone: three rows of pointed imbricate leaves. Base-ring.

166 (Area D1, L5402, Reg.–No. 54026) (**fig. 1**)
Base and lower wall fragment. Grey ware.
Main zone: five rows of pointed imbricate leaves. Base-ring.
Meriç 2002, 34 K 46 (workshop of Menemachos (?). The vessel came to light in Fill B1 of the shaft well in the State Agora, dated to ca. 1–25 CE (Meriç 2002, 23 fig. 3).

167 (Area E2, L6024, Reg.–No. 60148/6)[18] (**fig. 1**)
Base and lower wall fragment. Grey ware.
Main zone: three rows of imbricate leaves. Base-ring.
Pointed leaves with mid-rib: Dereboylou 2001, 32–33 no. 36 and pl. 15, 90 = Ladstätter 2005, 296 K 320.

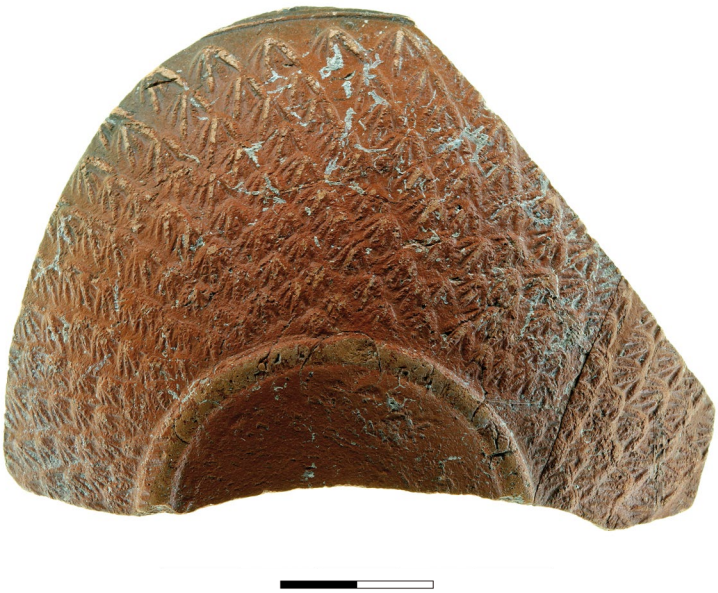
18 Rosenthal-Heginbottom 1995b, 372 and pl. 8, 7. The correct numbers are L6024, Reg.–No. 60148/6.

168 (Area F, L8748, Reg.–No. 86380) (**fig. 2**)
Base and lower wall fragment. Grey ware.
Ext./int. lustrous dark grey slip.
Main zone: four rows of imbricate leaves. Base-ring.
Pointed leaves with two ridges and mid-rib: Dereboylou 2001, 32 no. 34 and pl. 15, 88 = Waldner – Ladstätter 2014, 482 K 85 (context date 1st century BCE and Augustan times).

169 (Area D1, Wall 5795, Reg.–No. 163590)
Base and wall fragment.
Reddish-brown fabric, ext./int. dark brown slip.
Main zone: five rows of pointed imbricate leaves. Base-ring.

170 (Area B2, debris, Reg.–No. 2773) (**fig. 2**)
Base and lower wall fragment. Grey ware.
Light grey fabric, ext./int. dark brown slip.
Main zone: three rows of pointed imbricate leaves, separated by diagonal ridges. Base-ring.

171 (Area E2, L6006, Reg.–No. 60052/2)
Wall fragment. Grey ware.
Reddish-brown fabric, ext./int. dark grey slip.
Main zone: ten rows of pointed imbricate leaves.



172 (Area B2, L3819, Reg.–No. 37455/1) (**fig. 2**)
Diam. of inner base 4.2. Base and wall fragment, the wall is preserved until the rim band, as indicted by ridge. Ionian red.
Reddish-brown fabric, ext./int. red slip, on the ext. dark brown slip on the upper row of leaves and the ridge.
Main zone: pointed imbricate leaves. Base-ring.

173 (Area D1, L16133, Reg.–No. 164462/1) (**fig. 2**)
Diam. 12.5. Rim and wall fragment. Grey ware.
Reddish-brown fabric, ext./int. reddish-brown slip, on ext. rim dark brown patch.
Rim: row of beading. Main zone: four rows of pointed imbricate leaves.
The leaves are filled with tiny raised dots.

174 (Area D1, L16133, Reg.–No. 164462/2)
Wall fragment. Grey ware.
Reddish-brown fabric, ext./int. dark grey slip.
Main zone: six rows of pointed imbricate leaves.
The leaves are filled with tiny raised dots.

175 (Area F3, topsoil, Reg.–No. 87352)
Diam. 16. Wall and rim fragment. Grey ware.
Rim: meander with a square filled with a star. Wall: pointed imbricate leaves.
Ribbed leaves: Maresha: Rosenthal-Heginbottom 2019, 75–76 fig. 3.13, 1 (complete profile, rim: Ionian cyma).

176 (Area G, L18362, Reg.–No. 185000)
Diam. ca. 13–14. Wall and rim fragment. Grey ware.
Ext. on wheel-made rim and the meander band dark grey slip, then dark brown slip, int. dark brown slip.
Rim: meander with a square filled with a star. Wall: pointed imbricate leaves.
Nos. **175–176**: rim: Rogl 2014, fig. 13, 8; Dereboylu 2001, 31 no. 7 and pl. 13, 61. *Dora*: Mermelstein 2013, 71 fig. 3.8. See also nos. **28**. **36–51**.

177 178

177 (Area B2, L227, Reg.–No. 2320)[19]
Wall fragment. Grey ware.
Main zone: four rows of pointed imbricate leaves.

178 (Area C1, L492, Reg.–No. 4491/2)[20]
Wall fragment.
Light brown fabric, ext. dark brown slip, int. reddish-brown slip.
Main zone: six rows of pointed imbricate leaves.

Nos. **177–178**: pointed ribbed leaves: Dereboylu 2001, 30 nos. 3–5 and pl. 13, 56–59.
The suggested general date of 100 BCE–100 CE (Guz-Zilberstein 1995, 325) reflects the mixed locus with late Hellenistic and Roman ceramics.

19 The drawing has been erroneously published in Guz-Zilberstein 1995, 404 fig. 6.51, 1 as a find from L492 (see p. 325). The correct piece is cat. no. **178**.

20 Rosenthal-Heginbottom 1995a, fig. 5.4, 5; Rosenthal-Heginbottom 1995b, 372 and pl. 10, 9. The correct Reg.–No. is 4491/2).

179 (Area F3, L8427, Reg.–No. 84246)
Wall fragment.
Reddish-brown fabric, ext./int. red slip.
Wall: schematic pointed leaves with mid-rib.
Dereboylou 2001, 32–33 nos. 29. 32. 36 and pls. 14, 83; 15, 86. 90 = nos. 29. 32 Waldner – Ladstätter 2014, 485 K 113–114 (context date 1st century BCE and Augustan times); *Maresha*: Rosenthal-Heginbottom 2019, 76 fig. 3.13, 2. 78 (complete profile, rim: Ionian cyma and floret pattern).

180 (Area E1, L6261, Reg.–No. 62842/2)
Rim and wall fragment.
Reddish-brown fabric, ext. dark grey slip on most of the guilloche band, red slip below, int. red slip with narrow band of dark grey slip along the lip.
Rim: guilloche between rows of beading. Main zone: rounded ribbed leaves.
Monogram workshop: guilloche: Rogl 2014, fig. 13, 9; see no. **74** for the fragment of a second bowl of identical fabric, with only a single leaf preserved, using the same stamps. Moulds with identical leaves: Günay Tuluk 2001, 69 no. 32 (mould, lower wall and rosette medallion, Monogram workshop); Rogl 2001, RB 8 (›Blattschuppen‹; rim: star rosette); Rogl 2014, fig. 4; Ladstätter 2010, 196 A-K 10 (context date 170–130 BCE); rim motif of bowls from the succeeding ateliers: Rogl 2014, fig. 14, 102. See also no. **37** with three rows of transverse leaves, pointing to the left, probably covering the main zone.

181 (Area C1, L4868, Reg.–No. 48346)
Rim and wall fragment.
Reddish-brown fabric, ext. lustrous dark grey slip, int. red slip.
Rim: meander between rows of beading. Wall: rounded ribbed leaves without mid-rib. Thick-walled.
Dereboylu 2001, 35 no. 28 and pl. 17, 119 = Waldner – Ladstätter 2014, 480 K 72 (context date 1st century BCE and Augustan times).

Net-pattern bowls

Net-pattern bowls are not as common as bowls with imbricate leaves. S. Rotroff suggests that their invention is an imitation of tortoise shell[21].

182 (Area F2, L8615, Reg.–No. 85317) (**fig. 2**)
Diam. 17.5. Rim and wall fragment. Grey ware.
Light grey fabric, ext./int. dark grey slip.
Rim: guilloche. Main zone: pentagonal pattern.
Guilloche: Rogl 2014, fig 13, 9.

21 Rotroff 1982, 39.

183 (Area C1, L524, Reg.–No. 4804/4)
Rim and wall fragment.
Reddish-brown fabric, ext./int. dark grey slip.
Rim: running dog. Main zone: pentagonal pattern.

184 (Area C0, L600, Reg.–No. 5071)
Wall fragment.
Reddish-brown fabric, ext./int. dark brown/dark grey slip.
Main zone: pentagonal pattern.

Pentagonal net pattern for nos. **182–184**: mould: Rogl 2001, RB 10; parallels: Mitsopoulos-Leon 1991, 73 D 49 (Monogram workshop); Ladstätter – Lang-Auinger 2001, 74–75 and pl. 48, 9 (context date 170–130 BCE); Ladstätter 2010, 196–197 A-K 14 (context date170–130 BCE); Bouzek 2017, 623 fig. 2 (rim: guilloche).

185 (Area F3, L8824, Reg.–No. 86525)
Fragment of lower wall, possibly the tiny section of a ridge at the lower left indicates the demarcation of the medallion.
Reddish-brown fabric, ext./int. lustrous dark grey slip.
Probably a hexagon formed by lines of jeweling.
Rotroff 1982, 42. 92 no. 403 (imported bowl with two rows of hexagons, origin Syria or Anatolia, ca. 150 – early first century BCE); *Dora*: Mermelstein 2013, 75 fig. 3.16 (BSP); *Maresha*: Rosenthal-Heginbottom 2019, 76 fig. 3.13, 3. 78 (complete profile, rim: Ionian cyma and row of beading).

186 (Area H, L20182, Reg.–No. 201280)
Reddish-brown fabric, ext./int. dark grey slip, worn on the ext.
Main zone: net-pattern. Medallion: rosette.
See Rogl 2014, 124 fig. 10 Type 2 for similar rosettes.

187 (Area C0, topsoil, Reg.–No. 4005/1)
Brown fabric, ext./int. reddish-brown slip.
Main zone: net-pattern.
Dereboylu 2001, 37 nos. 1–2 and pl. 19, 152–153.

Singular bowl

188 (Area B1, L12835, Reg.–No. 127952) (**fig. 2**)
Diam. 16. Upper wall fragment with rim.
Reddish-brown fabric, ext./int. reddish-brown slip.
Rim: Ionian cyma. Row of beading separating rim and wall. Rim with two pronounced grooves. Wall: garland.
The garland is very similar, possibly identical to that on an ESA bowl from Beirut, with only the upper section preserved on both (Élaigne 2007, 140 fig. 16 = Élaigne 2013, 221 fig. 6 – 427-316; the rim has a heart-shaped floret pattern like **302**). See also *Ephesos*: Ladstätter 2010, 553 B-K 126 (different garland, context 1st century BCE).

Rim fragments with Ionian cyma and ovules

Nos. **189–202** illustrate the profiles of the Ionian bowls, with the rim décor of the Ionian cyma most common (Rogl 2014, 126), and with ovules (no. **201**) and semi-circles (no. **202**) the exception. On no. **190** the cyma is set between rows of beading. The diameter ranges from 13 to 15.5 cm.

189 (Area D2, L10422, Reg.–No. 104228) (**fig. 2**)
Diam. 14.
Brown fabric, ext. dark grey slip on the wheel-made plain rim and the cyma band (most of the slip gone), int. dark grey slip with narrow band of reddish-brown slip along the lip.
Rim: faint darts. Below possibly a wreath or parts of the foliage décor of the wall.

190 (Area F3, L8708, Reg.–No. 85863) (**fig. 2**)
Diam. 14.
Light brown fabric, ext./int. silvery dark grey slip.
Rim: Ionian cyma between rows of beading. Wall: foliage.

191 (Area E1, L6467, Reg.–No. 64980/1) (**fig. 2**)
Diam. 14. Height of wheel-made rim 3.
Light brown fabric, ext. mottled dark grey/brown slip, int. brown slip with band of dark grey slip along the lip.

192 (Area D2, L15130, Reg.–No. 150952) (**fig. 2**)
Diam. 14.
Light brown fabric, ext./int. reddish-brown slip.

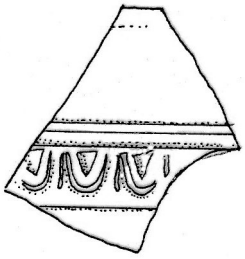
193 (Area E1, L6572, Reg.–No. 66497/4) (**fig. 2**)
Diam. 14.
Light brown fabric, ext./int. mottled dark grey/dark brown slip.

194 (Area F3, L8744), Reg.–No. 86044) (**fig. 2**)
Diam. 14.
Light grey fabric, ext./int. dark grey slip.

195 (Area C0, L462, Reg.–No. 4372/4) (**fig. 2**)
Diam. ca. 13.
Light brown fabric, ext./int. red slip, ext. dark brown slip on the wheel-made plain rim and the cyma band, int. narrow band of dark grey slip along the lip.

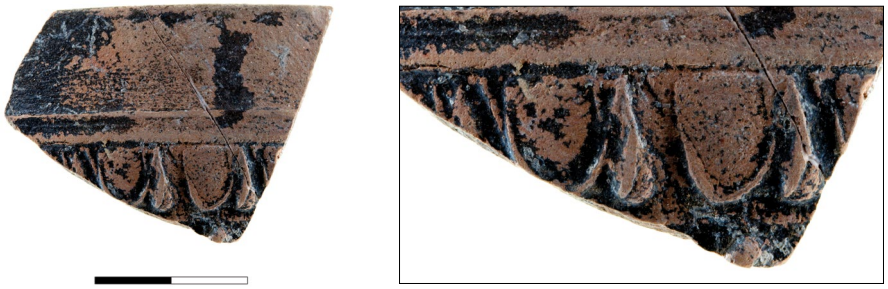
196 (Area B2, L3906, Reg.–No. 38592/1) (**fig. 2**)
Diam. 15.5.
Light brown fabric, ext./int. reddish-brown slip, along the rim on both surfaces dark grey band.

197 (Area D1, L5410, Reg.–No. 54090/2) (**fig. 2**)
Diam. 12.
Light brown fabric, ext./int. reddish-brown slip, along the rim on both surfaces dark grey band.



198 (Area E2, L6003, Reg.–No. 60026) (**fig. 2**)
Diam. ca. 15.
Light brown fabric, ext. worn dark grey slip, int. reddish-brown slip.

199 (Area E2, L6020, Reg.–No. 60115/10) (**fig. 2**)
Diam. 10.
Ext./int. reddish-brown slip.
Wall: foliage.



200 (Area C0, L564, Reg.–No. 4799)
Diam. ca. 13.
Light brown fabric, ext./int. dark grey slip, ext. surface worn.
The ceramics from L564 represent the repertoire characteristic of the late Hellenistic occupation at Dora and can be dated to ca. 175–125 BCE (Guz-Zilberstein 1995, 318; see also cat. nos. **7**. **107**[22]. **120**).

201 (Area B2, L13504, Reg.–No. 135004)
Light brown fabric, ext. mottled dark grey/brown slip, int. red slip except for a narrow band of dark grey slip along the lip.
Rim: ovules.

202 (Area H, L20060, Reg.–No. 200623)
Light brown fabric, ext./int. dark grey slip.
Rim: semi-circles/egg-and-dart. The darts are short

22 For no. **107** (Rosenthal-Heginbottom 2022, 137) the wrong area and locus numbers are given, see **Table 1**, p. 147 for the correct ones – Area C0, L564.

Black and Red Slip Predecessors (BSP and RSP)

It was K. W. Slane who identified the Black Slip Predecessor with black glaze traditions at Tel Anafa and established that it was chemically indistinguishable from ESA, with both undergoing a different firing process[23]. The characteristic features are a reduced slip, varying in colour from dark grey (N3/0) to greyish-brown (10 YR 3/4 or 4/6) and dark reddish-brown (5YR 3/2); many pieces have a mottled appearance, sometimes with patches of red (2.5YR 3/6 or 4/6) and occasionally mottled to red or maroon. The biscuit is often like ESA, a very pale brown (10 YR 7/4 – 8/4) and sometimes pink (7.5 YR 7/4).

Already in the 2nd century MMBs in BSP/RSP and ESA wares had made their appearance; the neutron activation analyses indicated the same mineralogical group and their origin in the same workshops[24]. The 1.120 MMBs recorded at Tel Anafa comprise 73 % in BSP and ESA fabric and 27 % imports from the eastern Aegean and Asia Minor, including Ionian red and grey specimens[25]. Contextual evidence from Tel Anafa indicates that the BSP category was used alongside ESA and continued to be used during the occupation of the large Hellenistic building (the LHSB), dated ca. 125–80 BCE[26]. Based on the material from Beirut S. Élaigne dates the production of RSP already in the second half of the 3rd century with well-represented assemblages from the early 2nd century and a continuation till just before the occurrence of ESA around 125 BCE, while the BSP category is dated to the short time span of ca. 150–125 CE, appearing later than RSP[27]. According to the author the RSP category had a limited form repertoire, including MMBs, and its diffusion was restricted to the Levant[28]. Admittedly, without a final excavation report and the publication of the archaeometric analysis[29], the interpretation of the Beirut evidence is tentative.

In Akko-Ptolemais MMBs in BSP made their appearance in the late Hellenistic Level (mid–late 2nd century BCE)[30]. The in situ-assemblage at Kedesh contained BSP bowls[31]. It is dated to the years 144 or 143 BCE, when the administrative building complex underwent a »sudden and wholesale abandonment« in the wake of the battle between Jonathan the Maccabean and Demtrius I, king of Syria[32]. While the abandonment assemblage did not contain a single fragment of standard ESA, the remains left by a small group of dwellers who lived there for a short time after the battle and the abandonment included standard ESA. Hence, the contextual evidence from Kedesh documents »the first appearance of ESA in this part of the southern Levant to the decade of the 130s BC«[33]. The dating evidence gained from the excavations at Akko-Ptolemais and Kedesh provides a reliable endorsement for the Dora assemblage.

23 Slane 1997, 270–271.

24 Élaigne 2013, 216 notes 8. 10; Berlin – Stone 2016, 139–140. The authors' systematic study of the finds from Akko-Ptolemais demonstrated that the Northern Coastal Fine Ware (NCF) belongs to the same group, and the reader will find ample examples of table ware. For MMBs see 163–164 fig. 9.12, 16 (NCF); 174–175 fig. 9.18, 3 (ESA?). 4 and 6 (NCF). 8 and 10 (BSP); 180–181 fig. 9.21, 10 (ESA). My renewed visual inspection of the Dora assemblage did not identify NCF bowls; however, I am not sufficiently familiar with the fabric for an accurate assessment.

25 Cornell 1997, 407–408.

26 Slane 1997, 271–272. On the dating see pp. 257–258.

27 Élaigne 2013, 217; for MMBs in BSP see fig. 5 on p. 218 and in ESA see fig. 6 on p. 221.

28 Élaigne 2007, 111. 114. 137 fig. 13, 98-364 (MMB); 2013, 219.

29 See Élaigne 2013, 216 note 10.

30 Berlin – Stone 2016, 136–137.

31 Berlin et al. 2014, 319 fig. 14.

32 Berlin et al. 2014, 311–312.

33 Berlin et al. 2014, 318–319 and fig. 13 for an ESA mastos.

The division of the finds from Sha'ar Ha'Amaqim (Gaba) into four fabric groups tallies with the approach applied to the Dora MMBs: two micaceous groups imported from western Asia Minor (20 %), a group related to ESA and ESA[34]. The earliest imports date to the second half of the 2nd century BCE, based on their absence in a deposit of an underground silo that was sealed by a later wall built after the mid-2nd century BCE[35]. In the Caesarea harbours excavation report the description misfired is used, underlining the irregularity of the fired slip with several hues present on most fragments[36]. The present author considered it a characteristic feature of Caesarea workshops[37]. The congruence of bowls from the neighbouring sites Dora and Caesarea is striking, and it is likely that merchants and consumers in both cities acquired the drinking-cups from the same supply source. However, without petrographic analyses and the evidence of moulds and wasters, the localisation of workshops is not justified; hence, based on the visual fabric inspection the Dora bowls are presented here in the BSP/RSP category. The single mould recorded at Samaria is not sufficient to imply local production, and as the excavators suggest might have been a cast made in some attempt to imitate imported wares[38]. Nevertheless, the quantity of MMBs from the Subterranean Complexes at Maresha, with only a small amount published so far, will be a watershed in future research. The bulk of MMBs with flaring rim, relatively thick walls and diversified composition schemes appears to represent a local and regional development[39], considering the evidence for local ceramic workshops at the site[40]. Recent research by S. Mermelstein documented that the MMBs recovered at sites in present-day Israel have all been imported and that there is no evidence for local production[41]. The author assigns the Dora assemblage to three fabric groups[42]: reddish ware most likely produced in Ephesian workshops, buff ware/ESA-like MMBs originating from northern Phoenicia or Syria[43] and grey ware either part of Group 1 or outliers[44]. The definitions tally with the classification of the finds from the 1980 – 2000 seasons, and after the publication of Mermelstein's research the compatibility of the two assemblages can be assessed.

The majority of the bowls have outcurved rims like those in ESA ware, a feature clearly distinguishing them from the Ionian MMBs[45].

By motif and décor the bowls comprise eight groups: figured bowls - mythological and human (nos. **203**–**207**) and animals (nos. **208**–**214**), objects (nos. **215**–**216**), imbricate bowls (nos. **217**–**218**), foliage bowls (nos. **219**–**237**), varia (nos. **238**–**240**), medallions (nos. **241**–**246**), and rim fragments with Ionian cyma and ovules (nos. **247**–**263**).

34 Naor 2014, 148–149.

35 Naor 2014, 163.

36 Oleson 1994, 140–141 RG186; 146 RG197.

37 Rosenthal-Heginbottom 2016, 122. 157 note 12.

38 Reisner et al. 1924, 307.

39 Rosenthal-Heginbottom 2019, 75. 83.

40 Stern 2019, 36; Ambar-Armon 2019, 133–134. 150. 163–164.

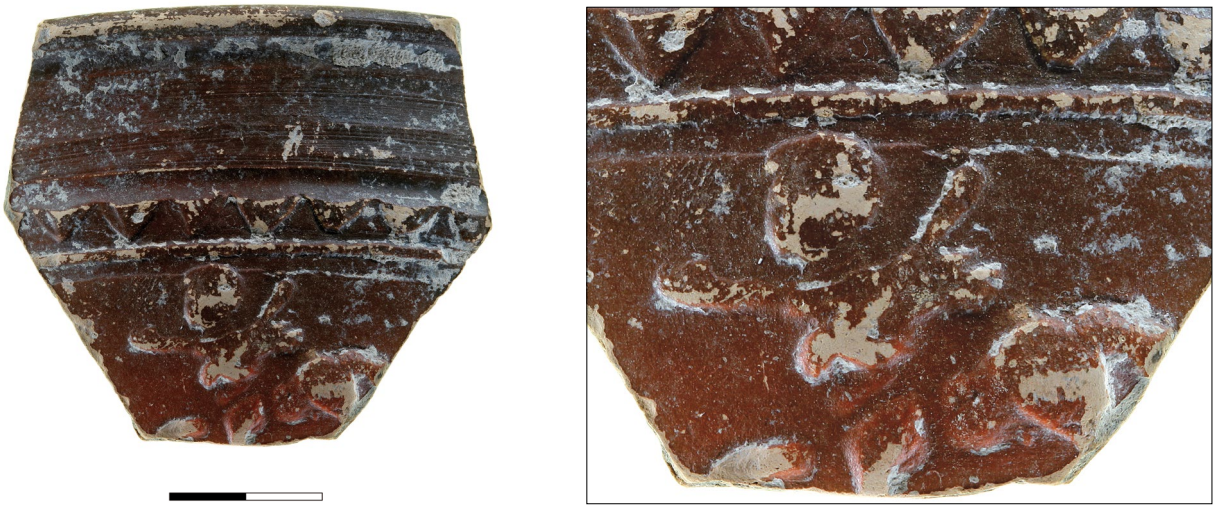
41 Mermelstein 2022, 805. 809. 811.

42 In her earlier study S. Mermelstein defined five fabric groups (Mermelstein 2013, 105–110); the fragments tested with NAA can be divided into Group 1 from Asia Minor and Group 2, the Coastal Levantine – Syro-Phoenician group. The parallels cited here mention the definite BSP category, and when the fabric definition is followed by a question mark the information is omitted, awaiting the final publication of the NAA testing. In part 1 of the Dora publication, Mermelstein's MA thesis is wrongly dated to 1994 instead of 2013).

43 According to the recent classification originating from workshops along the Bay of Iskenderun, see Lund 2005, 234. 238. 243; Hayes 2008, 19.

44 Mermelstein 2022, 808–809.

45 See the typical profiles in Rogl 2014, 125 fig. 11.



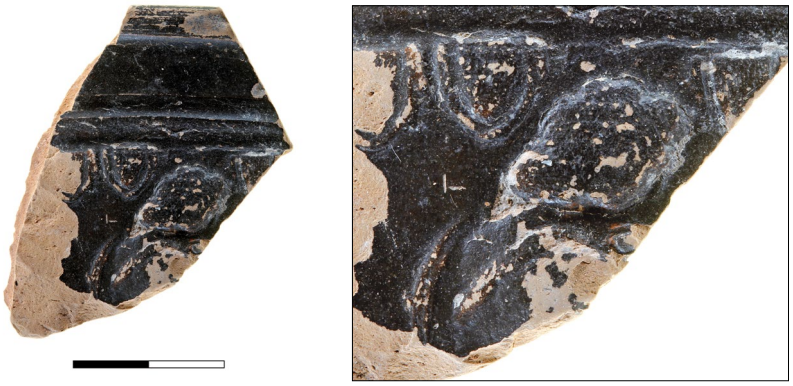
Figured bowls – mythological and human

203 (Area C1, L4446, Reg.–No. 48224) (**fig. 2**)
Diam. 15.5. Rim and wall fragment.
Light brown fabric, ext. irregular dark grey/dark brown/reddish-brown slip, int. red slip with brown band along the lip.
Rim: ovules, their top damaged when the rim was added. Upper zone: centaur to left, holding a club in his left arm.

204 (Area E1, L6546, Reg.–No. 66404)
Rim and wall fragment.
Light brown fabric, ext. dark grey/dark brown slip, int. dark brown slip.
Rim: indistinct décor. Upper zone: centaur to left, holding tambourine with both hands.
Shikmona: Elgavish 1974, pl. 35, 324 (possibly).

205 (Area D1, L5400, Reg.–No. 54001) (**fig. 3**)
Diam. 14. Two joining rim and wall fragments[46].
Light brown fabric, ext./int. dark grey slip, worn on the exterior.
Rim: floret pattern between rows of beading. Upper zone: Erotes moving right.
The figures were produced from single stamps and repeated in sequence. The relatively high rim with ridges is unusual. Floret pattern: see nos. **222**. **302–305**.

46 The non-micaceous bowl is not from Ionian workshops as tentatively classified in Rosenthal-Heginbottom 1995b, 373 no. 112.



206 (Area C1, L4443, Reg.–No. 48221/1) (**fig. 3**)
Diam. ca. 14. Rim and wall fragment.
Light brown/reddish-brown fabric, ext. dark grey slip, int. reddish-brown slip with dark grey band along the lip.
Rim: Ionian cyma. Upper zone: figure to right, the head in the cyma band.

207 (Area D1, L16681, Reg.–No. 166981)
Diam. 15.5. Two joining rim and wall fragments.
Light brown fabric, ext./int. lustrous dark grey slip.
Rim: ovules between rows of beading. Upper zone: indistinct head and upper body of human figure to right.

Figured bowls – animals

208 (Area D2, L17606, Reg.-No. 175979)
Diam. 14. Rim and wall fragment.
Light brown fabric, ext. mottled dark grey slip until middle of cyma band, below red slip.
Wall divided into two zones by row of beading. Rim: schematic Ionian cyma between ridge and row of beading. Upper zone: dog leaping left, to the right reclining bull.
Fabric, profile and the division of the décor tally with no. **2**, depicting a leaping lion. However, its tail is different (see the detailed photo in Part 1 on p. 71) and similar to that on the complete bowl from Maresha (Rosenthal-Heginbottom 2019; 77 fig. 3.14), hence I concur with Patricia Kögler's suggestion to identify a dog and a boar.

209 (Area F3, balk, Reg.–No. 86947)
Wall fragment.
Light brown fabric, ext. worn mottled dark grey/brown slip, int. dark grey slip.
Wall divided into two zones by row of beading. Upper zone: possibly animal frieze. Lower zone: palmette and lanceolate lotus petal.
Bowls with an animal frieze in the upper zone, separated by a row of beading from the lower zone like no. **208** are quite common. See also no. **2**, the two zones separated by a ridge.

210 (Area E2, L6006, Reg.–No. 60058)[47]
Wall fragment.
Light brown fabric, ext. dark grey slip with red spots, int. reddish-brown slip.
Rim: indistinct Ionian cyma or ovules. Wall: dolphin on the right and rosette on the left. Calyx: closely set lotus petals with rounded top. Rows of beading separate rim, wall frieze and calyx. See no. **293** for rosettes alternating with bull heads.
The previously suggested attributions to a south Syrian/north Palestinian workshop (Rosenthal-Heginbottom 1995b, pl. 18, 3) or a workshop located at Caesarea Maritima (Rosenthal-Heginbottom 2016, 160 no. 103) were based on visual fabric identification and not supported by petrographic evidence, hence the new assignment to the BSP category.

47 Published in Rosenthal-Heginbottom 2016, 160–161 no. 103.

211 (Area D1, L26699, Reg.–No. 260001)
Wall fragment.
Light brown fabric, ext./int. dark grey to reddish-brown slip.
Rim: Ionian cyma and row of beading. Upper zone: on the right, head of duck looking left; on the left, foliage preserving a lanceolate lotus petal with mid-rib and above of acanthus leaf tipped to right (?).

212 (Area E2, L6024, Reg.-No. 60127/4)
Wall fragment.
Light brown fabric, ext./int. reddish-brown slip.
Lower zone: leg of animal, the row of beading below probably demarcating the medallion.

213 (Area C1, L4878, Reg.–No. 48456/2)
Wall fragment.
Light brown fabric, ext./int. reddish-brown slip.
Row of beading and bucranium below.

214 (Area C1, L4868, Reg.–No. 48319/2)
Probably fragment of same bowl, the bucranium is on the left side below the row of beading, above the row a leaf?
Samaria: Crowfoot 1957b, 276–277 fig. 62, 9; *Ashdod*: Kee 1971, fig. 19, 4 (alternating bucrania and rosettes); *Akko-Ptolemais*: Regev 2009/10, 167 no. 242 and fig. 37 (band of bucrania); *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 123–124 no. 1 (alternating bucrania and rosettes).

Figured bowls – objects

215 (Area D1, L16420, Reg.–No. 166857)
Diam. 16. Rim and wall fragment.
Light brown clay, ext./int. worn dark grey slip.
Rim: Ionian cyma. Upper zone: columns flanking person (?) moving left.
It is possible that the fragment depicts actors alternating with Ionian columns like the bowls from Ephesos in Gassner 1997, 75 no. 212 and from Pergamon in de Luca 2021, 215 no. 303; 216 no. 311. Compare no. **141**.

216 (Area H, L20071, Reg.–No. 200552)
Wall fragment close to medallion.
Yellowish-light brown fabric, ext./int. faint traces of dark grey/reddish-brown slip.
Wall: three acanthus leaves and two bases of kraters, suggesting alternating leaves and kraters.
Krater: see no. **148**.

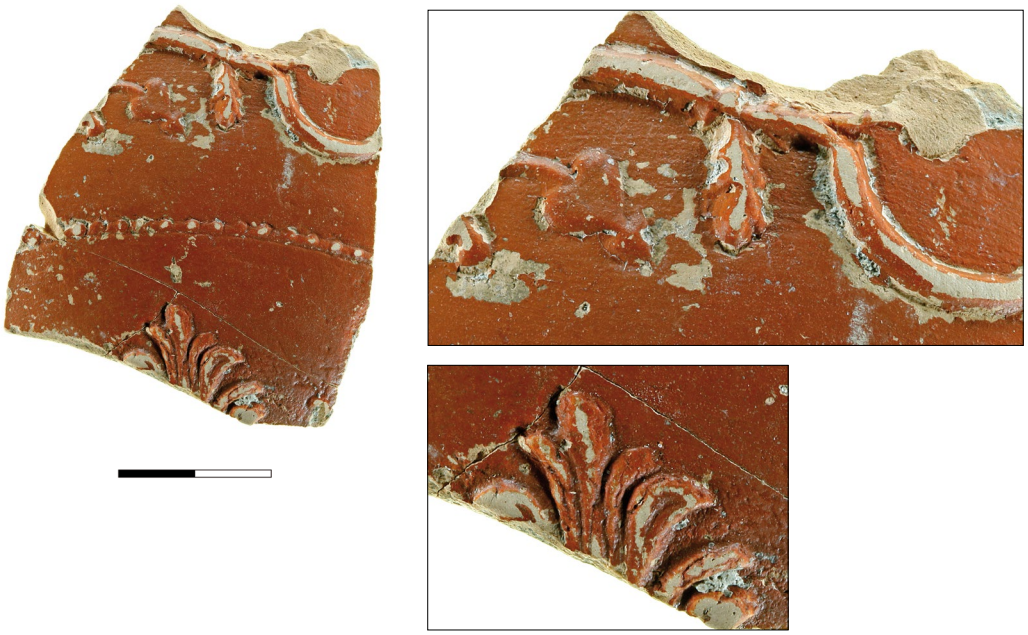
Imbricate bowls

217 (Area D1, L16938, Reg.–No. 262034)
Diam. 13. Rim and wall fragment.
Light brown fabric, ext. reddish-brown/dark brown slip, int. reddish-brown slip.
Rim: Ionian cyma. Wall: alternating rows of large lotus petals and smaller ones.

218 (Area E1, L6577, Reg.–No. 65208/6)[48]
Wall fragment.
Light brown/reddish-brown fabric, ext. dark grey/brown slip, int. dark grey slip.
Wall: large pointed leaves with two inner ribs and a jeweled mid-rib.

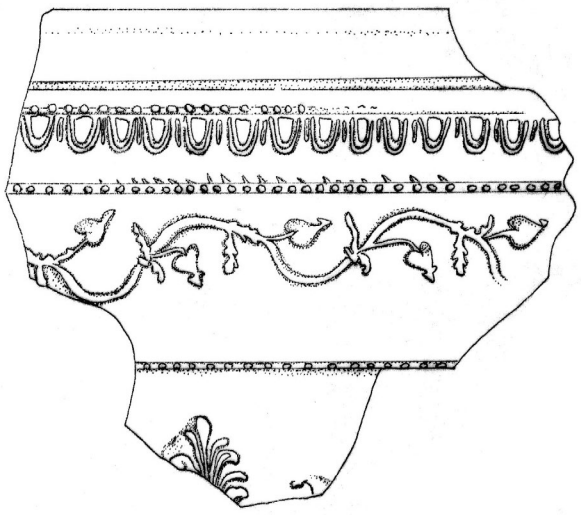
48 The Reg.–No. in Rosenthal-Heginbottom 1995b, 373 no. 98 is to be corrected.

219



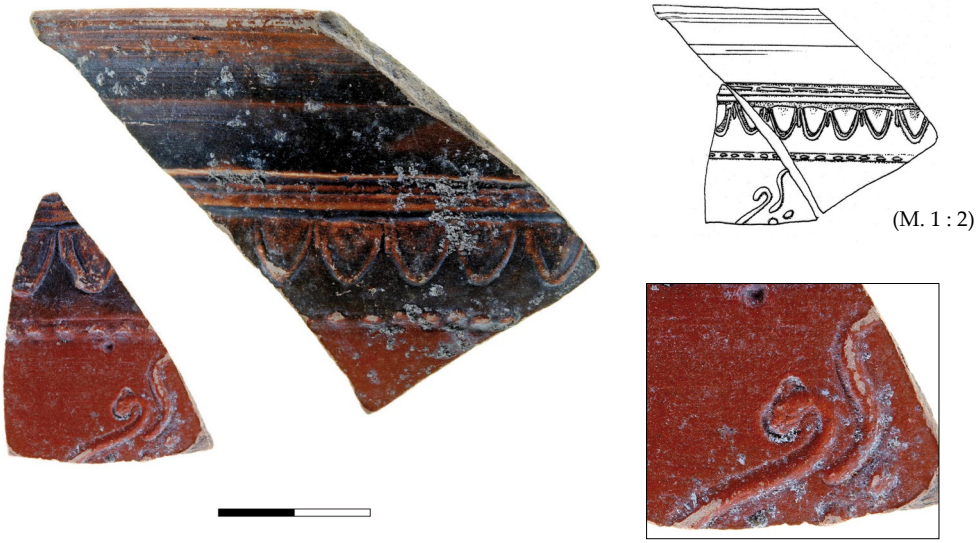
Foliage bowls

219 (Area E1, L6261, Reg.–No. 62842/1–2 + 63052/2) (**fig. 3**)
Diam. 16. Three joining rim and wall fragments and one non-joining.
Reddish-brown fabric, ext. dark grey slip until tendril, red slip below, int. red slip.
Wall divided into two zones by row of beading. Rim: Ionian cyma between rows of beading. Upper zone: tendrils of ivy leaves. Lower zone: top of palmette.
To the same bowl belong two joining rim and wall fragments (L6261, Reg.–No. 62773/1) and another rim and wall fragment (L6536, Reg.–No. 64912/2).
The tendrils appear to be a simplified version of the Ionian décor (see no. **113**).
See also no. **223**.



(M. 2 : 3)

220 (Area B1, L2034, Reg.–No. 20117/1)[49] (**fig. 3**)
Diam. 17.5. Rim and wall fragment.
Rim: Ionian cyma and row of beading below. Wall: acanthus leaf with curled tip.
Little is preserved of the acanthus leaf. For parallels from Tel Yokneam see Avissar 1996, 49–50, fig. X.1, 30 (red slip); Caesarea Maritima see Rosenthal-Heginbottom 2016, 128–129 nos. 11–12; 137 no. 38; 157 no. 98; the latter = Oleson et al. 1994, 140–141 and fig. 51, RG186. See also nos. **126**. **222**. **279**.



221 (Area E1, L6572, Reg.–No. 66497/1. 4) (**fig. 3**)
Diam. 16. H. of rim 3. Rim and wall fragment.
Light brown/reddish-brown fabric, ext. lustrous dark grey slip, int. red slip with wide dark grey band along lip.
Rim: Ionian cyma and row of beading below. Upper zone: spiral tendrils.

49 Published in Rosenthal-Heginbottom 2016, 160–161 no. 105 – south Syrian/north Palestinian group, possibly manufactured at Caesarea Maritima, an attribution no longer maintained.

Several fragments came to light, two more are illustrated (66336/1 and 66672/1), and two not (66336/2 and 66412/3).
Stalk/tendril: see nos. **118**. **232**. **235**. **244**. **290**. **296**.

222 (Area B1, L6522, Reg.–No. 64833/2)[50] (**fig. 3**)
Diam. 16. Rim and wall fragment.
Light brown fabric, mottled slip, ext. dark brown with light brown patches, int. dark brown.
Rim: ovules and heart-shaped floret pattern, separated by a ridge. Wall: alternating rhomboid lotus petals and acanthus leaves with curled tip.
Floret pattern: see nos. **205**. **302–305**; lotus petal: see nos. **10**. **16**[51]; acanthus leaf: see nos. **126**. **220**. **279**.

50 Published in Rosenthal-Heginbottom 2015, 679. 690–691 pl. 6.2.3, 5 and photo 6.2.1, 2 – south Syrian/north Palestinian group, possibly manufactured at Caesarea Maritima, an attribution no longer maintained.

51 No. **11** is not a rhomboid lotus petal, but pointed at top.

223 (Area E1, L6577, Reg.–Nos. 64431 + 65208/5)[52] (**fig. 3**)
Diam. 20.5. Two joining rim and wall fragments.
Light brown fabric, ext./int. dark grey/brown slip.
Rim: row of beading. Upper zone: tendrils of ivy leaves.
The diameter of the bowl is uncommon.
Tendrils: see no. **219**.

224 (Area E1, L6546, Reg.–No. 66629) (**fig. 3**)
Diam. 15.5. Rim and wall fragment.
Light brown fabric, ext./int. dark grey slip, lustrous on the ext.
Rim: row of beading. The profile is unusual with a high outcurved rim and a constriction above the row of beading.
Bethsaida-Iulias: Fortner 2008, 147 no.122 (reddish-brown slip).

52 Published in Rosenthal-Heginbottom 2016, 160–161 no. 108.

225 (Area D2, L17541, Reg.–No. 175227)
Wall fragment.
Light grey fabric, dark grey slip.
Wall divided into two zones by ridge. Lower zone: leaf curved to right.

226 (Area H, surface, Reg.–No. 200606/1)
Rim and wall fragment.
Light brown fabric, ext./int. dark brown slip, ext. rim dark grey slip.
Rim: plain (?) and row of beading below. Upper zone: on the right trefoil leaf with unclear décor below, on the left leaf.
Caesarea Maritima: Rosenthal-Heginbottom 2016, 137 no. 37; Avissar 1996, 49–50, fig. X.1, 30.

227 (Area D1, L16420, Reg.–No. 166916)
Rim and wall fragment.
Light brown fabric, ext. mottled reddish-brown/dark brown slip, int. dark brown slip.
Rim: Ionian cyma and row of beading below. Upper zone: tipped acanthus leaf (?).

228 (Area B2, L13550, Reg.–No. 135145/1)
Rim and wall fragment.
Light brown fabric, ext./int. dark brown/light brown slip.
Rim: ovules between ridges. Upper zone: an elongated wreath, held together by an angular bow. Above the bow a finger print.
The shape of the bow is unusual. In Pergamon it occurs with a semicircular wreath (De Luca 2021, pl. 34, 205).

229 (Area B2, L12614, Reg.–No. 125335/1)[53]
Wall fragment.
Light brown fabric, ext./int. reddish-brown/brown slip.
Wall: lanceolate lotus petal superimposed on an acanthus with only the outer edges of leaves shown and acanthus leaf, separated by a vertical band of astragals or beads.
Caesarea Maritima: Rosenthal-Heginbottom 2016, 133–134 no. 23.

230 (Area H, balk, Reg.–No. 201078/1)
Wall fragment.
Light brown fabric, ext. reddish-brown slip, int. dark brown slip.
Wall: acanthus leaf with jeweled mid-rib and bouquet of three small lanceolate leaves.

53 Published in Rosenthal-Heginbottom 2016, 160–161 no. 106.

231 (Area F3, topsoil, Reg.–No. 86000)
Wall fragment.
Light brown fabric, ext./int. red slip.
Wall: two fragmentary acanthus leaves.

232 (Area C0, L533, Reg.–No.4771/2)
Wall fragment.
Yellow ochre light clay, ext./int. worn dark grey slip.
Wall: alternating acanthus leaves and spiral tendrils.
Caesarea Maritima: Oleson et al. 1994, 140–141 and fig. 51, RG186 = Rosenthal-Heginbottom 2016, 157 no. 98. Acanthus leaf: see no. **118**; tendril: see nos. **118**. **221**. **235**. **244**. **290**. **296**.

233 (Area H, L20032, Reg.–No. 200374/1)
Rim and wall fragment.
Light brown fabric, ext. dark grey/red slip, int. red slip.
Rim: Ionian cyma and row of beading below. Wall: foliage bowl, indistinct décor.

234 (Area C0, topsoil, Reg.–No. 40040)
Rim and wall fragment.
Light brown fabric, ext./int. dark grey slip.
Rim: Ionian cyma (?). Upper zone: tendrils with single ivy leaf and bud preserved, in field flower rosette.

235 (Area H, topsoil, Reg.–No. 200606/2)
Rim and wall fragment.
Light brown fabric, ext. mottled dark grey/reddish-brown slip, int. brown slip.
Rim: row of beading. Wall: spiral tendrils.
Caesarea Maritima: Oleson et al. 1994, 140–141 and fig. 51, RG186 = Rosenthal-Heginbottom 2016, 157 no. 98. Tendril: see nos. **118**. **221**. **232**. **244**. **290**. **296**.

236 (Area B2, L205, Reg.-No. 2005/7)
Wall fragment.
Light grey fabric, worn brown/dark grey slip.
Wall: acanthus leaf with jeweled midrib.
See nos. **258**–**286**. **289** for ESA fragments.

237 (Area D1, L16082, Reg.–No. 163699)
Wall fragment.
Light brown fabric, ext./int. mottled reddish-brown/brown slip.
Wall: flower rosette and indistinct décor.

Varia

238 (Area F3, L8823, Reg.–No. 86556)
Rim and wall fragment.
Light brown fabric, ext. dark grey slip, int. worn red slip.
Rim: row of semi-circles. Wall: possibly an ivy leaf on the left.
The fragment is one of the few examples of poor-quality workmanship.

239 (Area C1, L4920, Reg.–No. 48509)[54]
Wall fragment.
Light brown fabric, ext./int. worn brown slip.
Wall: band of elongated pointed leaves (?).

240 (Area C0, L 418, Reg.–No. 4322/2)
Wall fragment.
Net-pattern bowl, the design formed by vertical and horizontal lines of jeweling.

Medallions

241 (Area C0, L418, Reg.–No. 4279/4) (**fig. 3**)
Thickness of base: 7 mm. Lower wall and base fragment.
Flesh colour/reddish-yellow fabric, ext./int. slight traces of red slip.
Wall: six acanthus leaves. Calyx: six small triangular leaves. Medallion: eight-petal rosette within ridge.
Samaria: Reisner et al. 1924, 308 and pl. 72 a (complete bowl).

242 (Area C1, L4056, Reg.–No. 40107/1)
Lower wall and base fragment.
Yellow ochre light fabric, ext./int. dark grey slip.

54 The fragment was not published in the 1995 final reports of Area C1, hence the assignment to a settlement phase remains open.

241

242

Lower zone: on the right pointed lotus petal with jeweled mid-rib and jeweled edges, flanked by tendrils with leaves and buds; on the left the corner of a second petal. The decoration in-between is unclear, probably a figure with a leg preserved. Medallion: rosette, two petals preserved within ridge.
Lotus petal: *Antioch*: Waagé 1948, fig. 13, 23; compare nos. **127–128**.

243 (Area G, L9307, Reg.–No. 92790/3)
Lower wall and medallion fragment.
Light brown fabric, ext./int. worn dark grey slip.
Lower zone: nymphaea nelumbo petal flanked by indistinct foliage. Medallion: rosette, two ribbed petals preserved within two ridges.

244 (Area D1, L16110, Reg.–No. 164100/1)
Lower wall and medallion fragment.
Light brown fabric, ext. worn dark grey slip, int. lustrous dark grey slip.
Lower zone: three human figures separated by spiral tendrils. Medallion: rosette, two ribbed petals preserved within a row of beading.
Patricia Kögler identifies a frontal figure (male?) on the right, holding a cluster of grapes in the lowered right hand. In the middle the back of a female is depicted with her robe slipped down. Of the figure on the left only the lowered club is preserved (Heracles?). Tendril: see nos. **118**. **221**. **232**. **235**. **290**. **296**.

245 (Area D2, L5321, Reg.–No. 52404/15)
Lower wall and medallion fragment. Thickness of wall: 7 mm.
Light brown fabric, ext./int. lustrous dark grey slip.
Lower zone: female figure and tendrils on the left. Medallion edge: row of beading.
Patricia Kögler suggests to identify Aphrodite Kallipygos, see DE LUCA 1995, 267 fig. 1; DE LUCA 2021, 216 no. 315.

246 (Area E1, L6121, Reg.–No. 61196/1)
Lower wall and medallion fragment.
Light brown fabric, ext./int. lustrous dark grey slip.
Lower zone: leaf with vertical ribs flanked by acanthus leaves. Medallion: row of beading and indistinct petal.

Rim fragments with Ionian cyma and ovules

Nos. **247–263** illustrate the profiles of the outcurved rim bowls and the variegated rim bands. Noteworthy is a mediocre technical practice in the finish of the rims. Ovules are not uncommon (nos. **254**. **257**. **260–263**); no. **258** has pointed ovules and no. **259** is double-struck. Rows of beading are frequent. The diameter ranges from 13 to 16 cm.

247 (Area E2, L6024, Reg.–No. 60149/4) (**fig. 3**)
Diam. 13.
Light brown fabric, ext. dark grey slip, int. brown slip with dark grey band along the lip

248 (Area C0, L4032, Reg.–No. 41024/16) (**fig. 3**)
Diam. 15.5.
Light brown fabric, ext./int. reddish-brown slip.

249 (Area D1, L16110, Reg.–No. 164100/2)
Diam. 16. The profile is like no. **221**.
Light brown/reddish-brown fabric, ext./int. mottled dark grey/reddish-brown/brown slip.

250 (Area D1, L26212, Reg.–No. 261917)
Diam. 16.
Light brown fabric, ext./int. dark grey/brown slip.

251 (Area D1, L16107, Reg.–No. 164311/2)
Diam. ca. 14. The profile is like no. 257.
Light brown fabric, ext. dark grey slip, int. dark grey/brown slip.

252 (Area E 1, L6470, Reg.–No. 64850/1)
Light brown fabric, ext./int. dark grey/brown slip.

253 (Area D1, Wall 16065, Reg.–No. 168504)
Light brown fabric, ext. dark grey slip, int. reddish-brown slip.

254 (Area E1, L6111, Reg.–No. 61044)
Light brown fabric, ext. dark brown slip, int. reddish-brown slip.

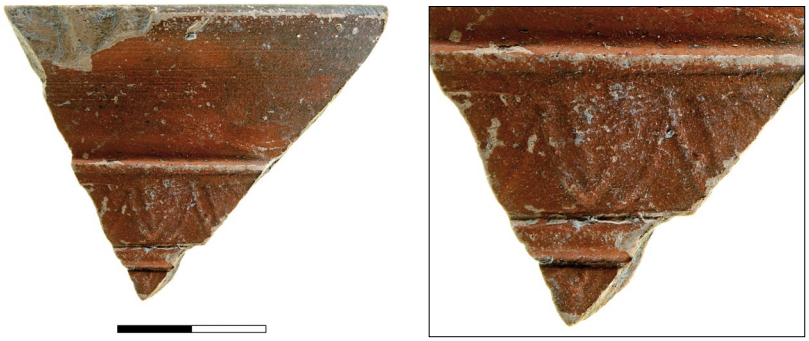
255 256

255 (Area B2, L12614, Reg.–No. 125335/2)
Light brown fabric, ext. dark grey slip, int. dark brown slip.

256 (Area E2, L6012, Reg.–No. 60078)
Light brown fabric, ext./int. dark brown slip.

257 (Area C1, L4537, Reg.–No. 43306/1) (**fig. 3**)
Diam. 13–14.
Light brown fabric, ext. mottled brown slip, int. red slip with narrow dark grey band along the lip.

258 (Area H, L20044, Reg.–No. 200502) (**fig. 3**)
Diam. 14. Thick-walled.
Light brown/reddish-brown fabric, ext. dark grey/brown mottled slip, int. until ridge above row of ovules dark grey slip, then red slip.
For the profile and the rim with pointed ovolo pattern and row of beading see the bowl from Caesarea Maritima, from Deposit 7, dated to the last years of existence of Straton's Tower, with 79 % ceramics of the 1st century BCE (Oleson et al. 1994, 146–147 RG197, diam. 15.6, origin: Levant = Rosenthal-Heginbottom 2016, 158 no. 101).



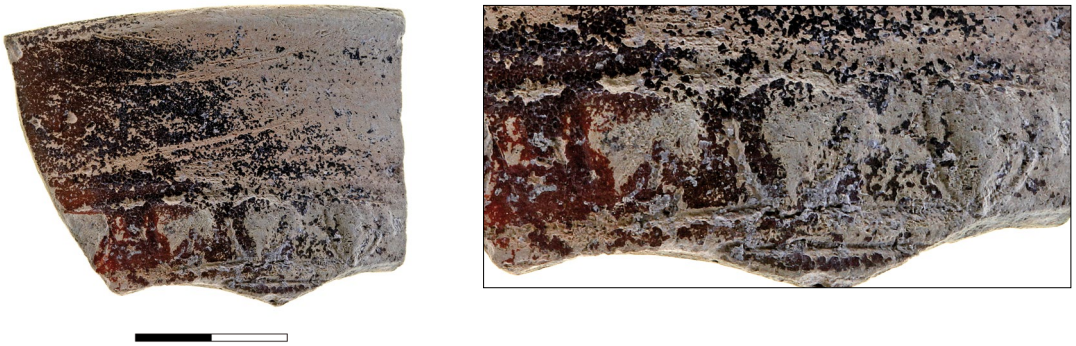
259 (Area B2, L3888, Reg.–No. 38443/3) (**fig. 3**)
Diam. 13.5.
Light brown/reddish-brown fabric, ext. reddish-brown slip, int. brown/dark grey slip.

260 (Area D2, L17607, Reg.–No. 175912/2)
Diam. 14.
Light brown/reddish-brown fabric, ext. dark grey slip with brown patch, int. red slip with dark grey band along the lip.

(without scale)

261 (Area D1, L26223, Reg.–No. 262340/1)
Diam. 14.
Light brown/reddish-brown fabric, ext. dark grey with brown patches, int. reddish-brown slip with wide dark grey band along the lip.

262 (Area H, L20213, Reg.–No. 202157)
Diam. 14.
Light brown/reddish-brown fabric, ext. worn brown slip until row of beading, then red slip, int. red slip with grey band along the lip.



263 (Area D1, L16014, Reg.–No. 163149/5)
Diam. 14.
Light brown/reddish-brown fabric, ext. worn brown/reddish-brown slip, int, then red slip with dark grey band along the lip.

Eastern Sigillata A (ESA) bowls

The ESA bowls (nos. **264–301**)[55] form the homogenous category of light brown/buff fabric with a red slip on the exterior and interior surfaces, displaying a »high degree of fabric and shape standardisation«[56], and on ›standard‹ ESA ware the slip fully covers the entire vessel after having been dipped[57]. The manufacture in workshops along the Bay of Iskenderun began around the middle of the 2nd century BCE[58].

Like the bowls of the BSP/RSP category, most bowls have outcurved rims. The exception are the hemispherical long-petal bowls (nos. **271–273**).

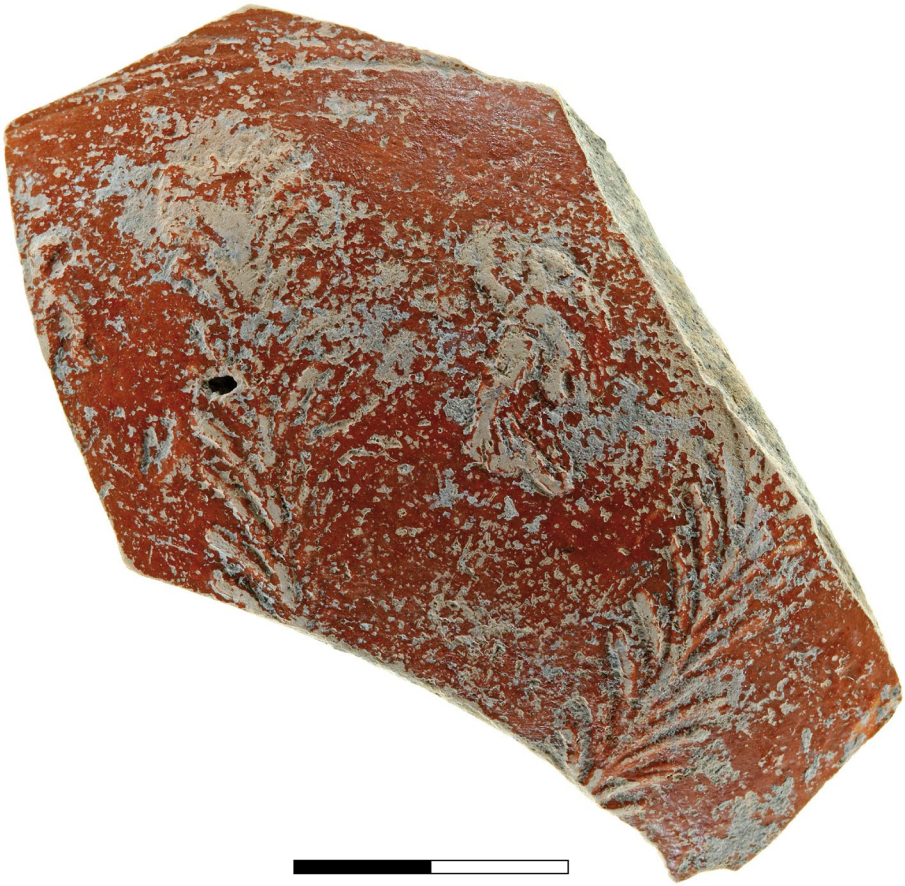
By motifs and décor the bowls comprise four groups: figured bowls – mythological and human (nos. **264–269**) and animals (no. **270**), long-petal bowls (nos. **271–278**), and foliage bowls (nos. **279–301**).

55 Individual descriptions will be dispensed with; the good or poor quality with a lustrous or dull slip results from the state of preservation.

56 Lund 2005, 238.

57 For details and further information on the characteristic features of ESA see Slane 1997, 269–271.

58 Lund 2005, 234. 238. 243; Hayes 2008, 19.



Figured bowls – mythological and human

264 (Area B2, L12412, Reg.–No. 123776)
Wall fragment.
Main zone: alternating Nike walking left and palm fronds.
Caesarea Maritima: Rosenthal-Heginbottom 2016, 136 no. 5.

265 (Area D2, L19411, Reg.–No. 195482)
Wall fragment.
Female in frontal position.
Considering the details of the dress and the outstretched arms Patricia Kögler identifies the ›Rankenfrau‹ (female holding tendrils), see de Luca 2021, 46–47).

266 (Area B1, L12777, Reg.–No. 127689)
Wall fragment, two friezes.
Wall: two figures. Calyx: imbricate leaves.
Similar leaves: *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 149 no. 76.

267 (Area H, L20014, Reg.–No. 200476)
Rim and wall fragment.
Wall: leaf on left, Eros on right side?
Compare no. **264** with Nike between palm fronds.

268 (Area C0, L625, Reg.–No. 5429/5)
Rim and wall fragment.
Rim: ovules and band of beading. Upper zone: hunter striding right, with his right hand swinging a club and with his left hand holding an oblong shield. Row of beading below.
Parallels from Akko-Ptolemais, Beit Eliezer, Hadera and Shikmona suggest a bowl with two friezes, a figured scene and a calyx of leaves (Tatcher 2000, 35* fig. 8, 8; Regev 2009/10, 167 no. 243 and fig. 37; Riklin 1998, 57 fig. 83, 3 = Rosenthal-Heginbottom 2016, 162–163 no. 110; Elgavish 1974, pl. 35, 326). The fragment is part of a hunting scene, the hunter with club and shield facing a leaping/rampart lion. Larger fragments have been retrieved at Antioch-on-the-Orontes, where it is the commonest single subject on bowls with two friezes (Waagé 1948, 29 and figs. 9, 52–55; 10, 1–5; 12, 18; 14, 5). One of the fragments (fig. 12, 18) attests that figures and animals were produced from single stamps and repeated in sequence. Other sites include *Tarsus*: Jones 1950, fig. 131, B; *Gindaros*: Kramer 2004, 148 MB 83–84 and pl. 60 (MB 84 warrior with raised sword and oval shield, striking back at a jumping leopard); *Ibn Hani*: Bounni et al. 1978, 289 fig. 36, 1 (fragment with the hunter); *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 125–126 no. 3; 152–153 no. 87 (hunter with club); *Samaria*: Reisner et al. 1924, 308 and pl. 73 j 2 (warrior); Crowfoot 1957b, 276 and fig. 62, 7 (man with club fighting lion); *Jaffa*: Tsuf 2018, 277 no. 871; 393 fig. 9.53 (lion). For similar depictions of the lion see no. **2** and Crowfoot 1957b, figs. 62, 11; 63, 12; the lion's tail differs on the parallels cited. Although the pose of the male figure is similar on the listed specimens, the interpretation as a hunting scene is tentative in case of single figures with no animal preserved. Furthermore, while the oblong shield is a constant feature, the weapon held in the raised arm is not always distinct. For no. **268** a club is suggested; other identifications include sword and spear (Crowfoot 1957b, 276 and fig. 62, 10), and a combat scene cannot be ruled out. Fragments from Antioch show a figure with spear (Waagé 1948, figs. 9, 5; 10, 6; 14, 6) similar to no. **137**.

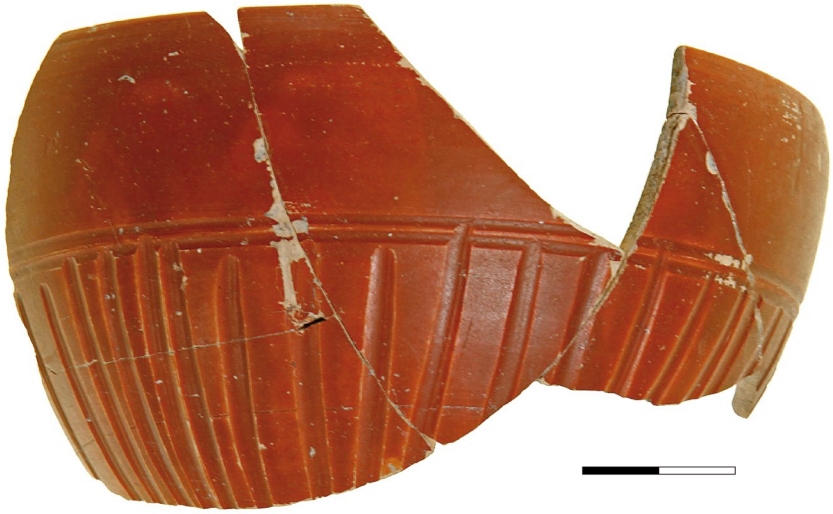
269 (Area C1, L4876, Reg.–No. 48384/2)
Wall fragment.
Upper zone: indistinct figure, possibly hunter holding a spear.
See no. **137** for similar figure.

Figured bowls - animals

270 (Area D1, L16480, Reg.–No. 167421)
Wall fragment. The wall is relatively thick, 6 mm at the bottom.
Light brown fabric, ext./int. red slip.
Wall: alternating acanthus leaves and cocks shown sideways with a rosette below.

Long-petal bowls

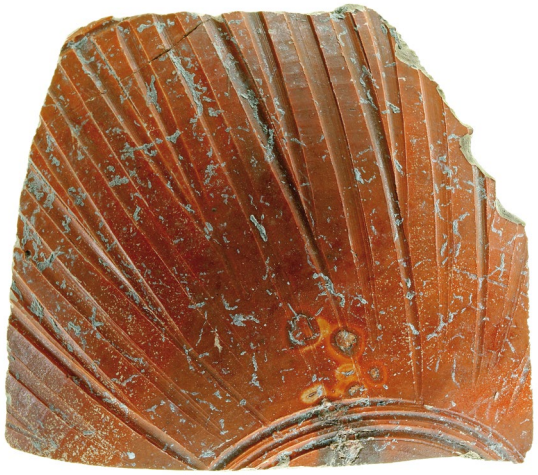
On the retrieved fragments the red slip is smooth, sometimes lustrous, with shaded patches hardly visible to the eye. Towards base wall thickness increases. Double dipping is common. Several bowls (nos. **271**–**275**) have petals modelled to be concave on the surface (see Rotroff 1982, 36 nos. 323. 327. 330. 344), while most have flat surfaces. The poorly preserved fragment no. **276** might belong to this category, while no. **277** is a plain long-petal bowl (see Rotroff 1982, pls. 58–60). No. **278** with pronounced vertical ribs appears to be a variant of the long-petal bowls. J. Lund assigns the bowls to a ›second generation‹ of ESA forms, dating from the last quarter or so of the 2nd century BCE and remaining popular through most of the 1st century CE (Lund 2005, 234. 236 fig. 10.2 Form 19 B). The shape-type is common at Tarsus (Jones 1950, 164) and at Hama (Friis Johansen 1971, 119 fig. 46 Form 19; see also 30 fig. 13, 117–118; 34 fig. 172–174).



271 (Area D2, L5240, Reg.–No. 52181) (**fig. 4**)
Diam. 11.5. Four joining rim and wall fragments.
Akko-Ptolemais harbour: Sharvit et al. 2013, 48 fig. 12, 5–6 (ESA); *Sha'ar Ha'Amaqim*: Młynarczyk 2009, 105 and fig. 6, 2 (ESA); *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 150 nos. 79–80 (ESA); *Jaffa*: Tsuf 2018, 289 no. 940. 397 fig. 9.57 (ESA).

272 (Area G, L9049, Reg.–No. 90397) (**fig. 4**)
Diam. 11.7.
Rim and wall fragment.

273 (Area G, L9050, Reg.–No. 90395/1)
Rim and wall fragment.
Profile and size tally with no. **272**.



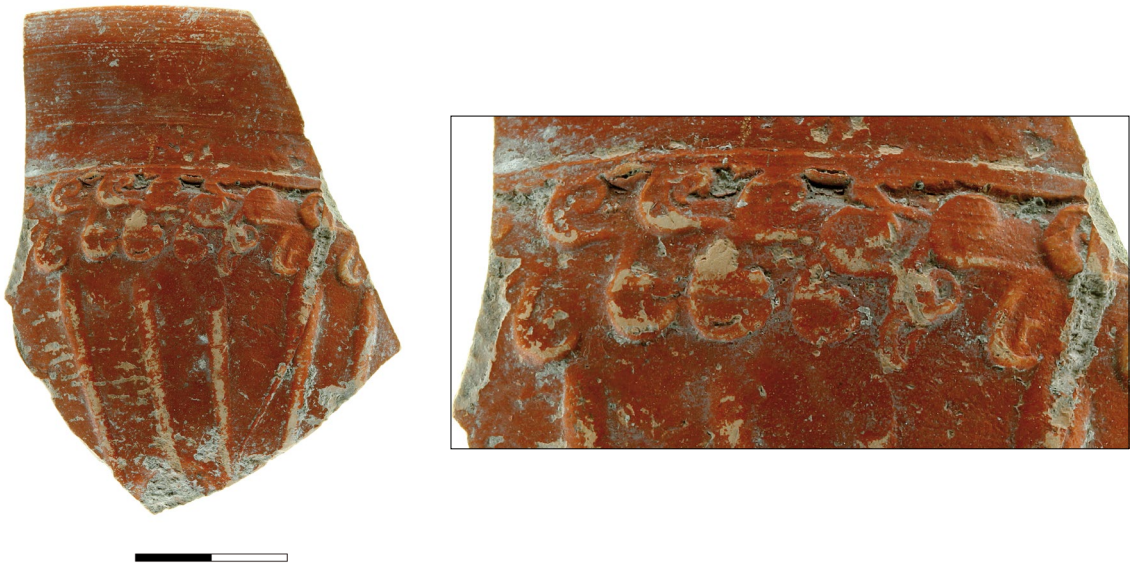
274 (Area G, L9622, Reg.–No. 96123)
Wall and base fragment. Diam. of base 5.
Double dipping line preserved (1.3–1.6 cm).
Medallion: probably plain, demarcated by two grooves.

275 (Area D2, L5606, Reg.–No. 52342/2–3)[59]
Wall and base fragment. Diam. of base 5.
Two joining wall fragments close to base.

59 Mentioned but not illustrated in Rosenthal-Heginbottom 1995b, 375 no. 153.

276 (Area B2, L13518, Reg.–No. 135253)
Wall and base fragment. Diam. of base 5.
Wall: long petals, four dots preserved of a line of jeweling.

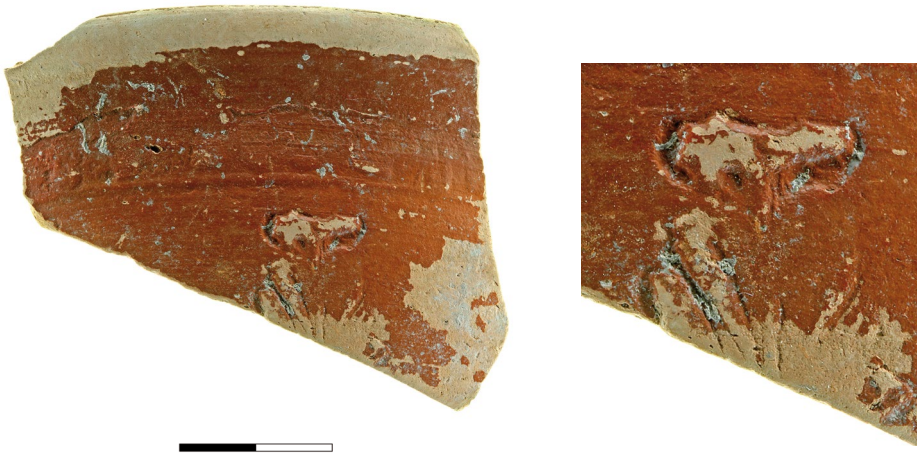
277 (Area H, balk, Reg.–No. 201078/2)
Wall fragment.
The petals form ribs, on which the slip is completely gone.



278 (Area D1, L26053, Reg.–No. 260695)
Diam. 13.5. Rim and wall fragment. Thick-walled. On the interior wheel-ridging where rim was added.
Rim: guilloche. Wall: vertical ribbing.

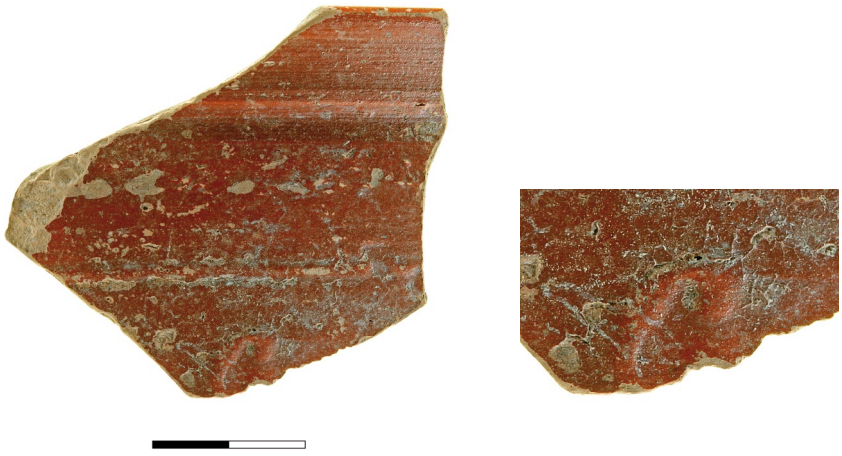
Foliage bowls

In ESA ware foliage bowls with outcurved rim (nos. **279–283**) are predominantly decorated with acanthus leaves (nos. **279**. **282–289**), and compared to the BSP/RSP category they display less décor variety. Unfortunately, with few exceptions (nos. **290–292**) the wall fragments are so small that only the acanthus leaf or part of it is preserved, preventing an assessment of the decoration scheme. Parallels have been published from Caesarea Maritima (Rosenthal-Heginbottom 2016, 130–131 nos. 14–16; 132–134 nos. 18–24).



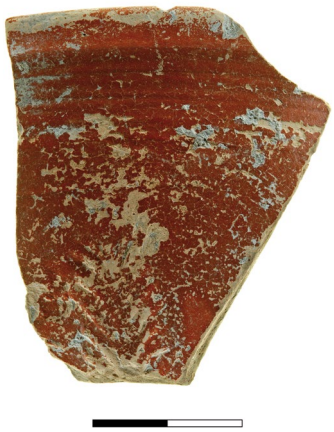
Rim and wall fragments

279 (Area C1, L41, Reg.–No. 4376/1) (**fig. 4**)
Diam. 13.5.
Rim: indistinct ovules. Main zone: acanthus leaf with curled tip.
Tel Yokneam: Avissar 1996, 49–50, fig. X.1, 30 (red slip); *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 123–125 nos. 1–2. 157 no. 98; *Ashdod*: Kee 1971, fig. 19, 8. See also nos. **126**. **220**. **222**.



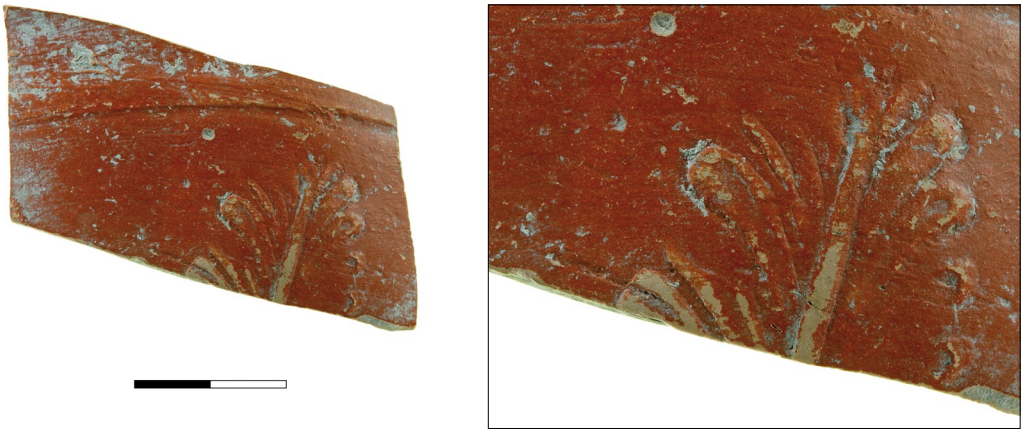
280 (Area B2, L7347, Reg.–No. 73444/11) (**fig. 4**)
Diam. 15.
Main zone: leaf (?) with scrolled tip.

281 (Area E1, L6141, Reg.–No. 61306/1) (**fig. 4**)
Diam. 14.
Rim or main zone: rosette.



282 (Area H, topsoil, Reg.–No. 202413)
Main zone: acanthus leaf.

283 (Area B2, L231, Reg.–Nos. 2249 + 2250/2)
Main zone: acanthus leaf.



Wall fragments – main zone: acanthus leaves

284 (Area B2, L7398, Reg.–No. 73685/2)
Row of beading above the leaf.

285 286

285 (Area F3, L8734, Reg.–No. 85937)[60]
Leaf with jeweled mid-rib.
Caesarea Maritima: Rosenthal-Heginbottom 2016, 132–133 no. 20. See no. **236** for a BSP fragment.

286 (Area E1, L6572, Reg.–No. 66779/2)

60 Published in Rosenthal-Heginbottom 2016, 160–161 no.107.

287 (Area D2, cleaning, Reg.–No. 301031)

288 (Area F3, L8911, Reg.–No. 86914)

289 (Area D3, L14156, Reg.–No. 141153)

Lower wall fragments

290 (Area F3, L8745, Reg.–No. 86027)
Lower zone: alternating acanthus leaves and palm fronds, spiral tendrils in between.
Ashdod: Kee 1971, fig. 19, 12 (similar). Tendril: see nos. **118**. **221**. **232**. **235**. **244**. **296**.

291 (Area H, L20005, Reg.–No. 200203)
Wall: row of leaves with pointed tip and three vertical ribs. Calyx: four acanthus leaves preserved, encircling the medallion that is not preserved (see the three raised dots at the bottom right).

292 (Area C2, L4600, Reg.–No. 40628)
Calyx: two acanthus leaves preserved. Medallion: rosette within row of beading.
Caesarea Maritima: Rosenthal-Heginbottom 2016, 130–131 no. 16. For a similar rosette in Ephesian production see Rogl 2014, 124 Type 4b.

Wall fragments – lotus petals

Due to the size of the wall fragments the description uses the neutral terms upper and lower zones and main zone, though the wall decoration might represent a calyx (see Rotroff 1982, 3).

293 (Area H, L20117, Reg.–No. 201079)
Wall divided into two zones by row of beading. Upper zone: flower rosette alternating with bull heads. Lower zone: alternating lanceolate lotus petals and acanthus leaves.
See no. **218** for rosettes alternating with dolphins.

294 (Area C1, L4914, Reg.–No. 48481)
Main zone: row of beading, below a lanceolate lotus petal.

295 (Area D1, L16524, Reg.–No. 167790/1)
Main zone: row of beading, below a lanceolate lotus petal and a stalk with a heart-shaped bud.
For lanceolate lotus petals alternating with acanthus leaves see *Sha'ar Ha'Amaqim* (Gaba): Naor 2014, 161 no. 42; *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 130–131 nos. 14–15. 134 no. 28. For the décor on bowls from the Monogram workshop see nos. **26**. **31**.

Foliage bowls – Various wall fragments

296 (Area C1, L4883, Reg.–No. 48341/1)
Main zone: spiral tendrils and tongue-shaped leaf (?).
Tendril: see nos. **118**. **221**. **232**. **235**. **244**. **290**; *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 131–132 no. 17.

297 (Area C1, L4868, Reg.–No. 48319/1)
Main zone: tendril with buds or leaves.
Caesarea Maritima: Rosenthal-Heginbottom 2016, 130 no. 14; *Ashdod*: Kee 1971, fig. 19, 11.

298 (Area H, L20989, Reg.–No. 206275/1)
Main zone: two palm fronds.
The décor recalls the »tall spiky plants which are probably stems of the date palm« on Athenian bowls (Rotroff 1982, 18 and pl. 10, 59–60). See also the Ionian fragments nos. **110**. **112** for similar fronds, erroneously described as acanthus leaves. *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 131–132 no. 17.

299 (Area C1, L4445, Reg.–No. 48232/2)
Upper zone: possibly a frieze. Lower zone: row of beading, below two long tongue-shaped petals joined by a vertical row of beading.

300 (Area E1, topsoil, Reg.–No. 61383)
Main zone: tendrils with flower rosette.

301 (Area F3, L8823, Reg.–No. 86592)
Main zone: band of club-shaped buds.

Floret patterns

A prevalent rim motif on bowls produced in the Bay of Iskenderum workshops, the floret pattern is variegated with two basic forms. The first is a heart-shaped band[61] with several close variants, a characteristic feature is the drop at the bottom (nos. **302–307**, see also **205**. **222**); the second[62] has bud- or dart-like elements (nos. **309–310**). No. **308** is a variant with ovules. The pattern might be a blurry imitation of the Lesbian cyma (Rogl 2014, fig. 13, 1; see f. ex. Dereboylu 2001, 42 no. 5 and pl. 22, 201 = Ladstätter 2005, 269 K 13) or a poor replica of the heart-shaped leaves used in the Monogram workshop (Rogl 2014, fig. 12, 13). A band of heart-shaped leaves was used in the Monogram workshop, though without the drop at the bottom (Rogl 2014, fig. 13, 13). At Antioch the floret pattern is a third as common as the Ionian cyma; both forms are represented, though the heart-shaped version is more common like at Dora (Waagé 1948, 29 and figs. 9, 28. 35. 51; 12, 17).

Different descriptions are given in other excavation reports: Crowfoot 1957b, 276–277 fig. 62, 9 ›dart with pendant drops below‹; Regev 2009/10, nos. 232–234 ›rows of buds‹

61 Rosenthal-Heginbottom 2016, 128–129 nos. 10–13. 146–148 nos. 67–73 (Caesarea Maritima).

62 Ibid., 144–145 nos. 61–62 ›darts with pendant drops‹.

and no. 235 ›heart-shaped garland under the rim‹; Tsuf 2018, nos. 868–869. 939 ›pendant drops pattern (or female dancers)‹ and no. 934 ›'row of hearts' pattern‹. In the Olbia report the pattern is termed ›rim frieze with heart buds‹, with the many bowls attributed to the workshop of Kirbeis, and while some scholars argue for a workshop located in the Black Sea region (Guldager Bilde 2010, 186 F-100. 285; Bouzek 2017, 623), the archaeometric analysis of a fragment from the region assigned its production to Kyme (Žuravlev – Žuravleva 2014, 257–258 and note 12).

302 (Area E1, L6431, Reg.–No. 64266/2) (**fig. 4**)
Diam. 14. Rim and wall fragment. ESA.
On interior band of brown slip along the lip.
Beirut: Élaigne 2007, 138 fig. 14 = Élaigne 2014, 217 fig. 5, 186-168 (BSP); *Akko-Ptolemais*: Regev 2009/10, 165 nos. 235 and fig. 36; *Shikmona*: Elgavish 1974, pl. 35, 316. 325; *Sha'ar Ha'Amaqim* (Gaba): Naor 2014, 160 no. 38; 162 no. 45 (ESA); *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 128–129 nos. 10–13; 146–148 nos. 67–73; *Samaria*: Crowfoot 1957b, 278 fig. 63, 3 (black slip); *Jaffa*: Tsuf 2018, 288 no. 934. 397 fig. 9.57 (ESA).

303 (Area D1, L16079, Reg.–No. 163525/1)
Rim and wall fragment. BSP.
Light grey fabric, ext. dark grey slip, int. red slip with band of dark grey slip along the lip.

304 (Area B1, L2080, Reg.–No. 20217/1)
Wall fragment. BSP.
Light brown fabric, ext. dark grey slip, int. reddish-brown slip.
Row of beading below floret band. Wall: tip of leaf.

305 (Area C1, L4868, Reg.–No. 48319/3)
Wall fragment. BSP.
Light brown fabric, ext./int. dark grey/dark brown slip.
Row of beading below floret band.

Nos. **303–305**. *Bethsaida-Iulias*: Fortner 2008, 147 no.121 (dark brown/black slip); 148 no. 129 (ext. black, int. dark red); *Dora*: Mermelstein 2013, 74 fig. 3.15; 77 fig. 3.20 (BSP); *Maresha*: Rosenthal-Heginbottom 2019, 80–81 fig. 3.16, 2 (identical floret band).

306 (Area F, L8005, Reg.–No. 86878)
Wall fragment. BSP.
Ext. dark grey/brown slip, int. dark grey slip.

307 (Area D1, L16806, Reg.–No. 260427)
Rim and wall fragment. BSP.
Ext. dark grey slip, int. brown slip with band of reddish-brown slip along the lip.

308 (Area D1, L5430, Reg.–No. 54211/2)[63]
Wall fragment. BSP.
Ext./int. dark grey slip.
Rim: band of ovules related to the floret pattern.
Caesarea Maritima: Oleson et al. 1994, 140–141 and fig. 51, RG186 (identified as ank sign) = Rosenthal-Heginbottom 2016, 157 no. 98; *Gezer*: Gitin 1990, pl. 44, 16 = Rosenthal-Heginbottom 2016, 162–163 no. 111; *Ashdod*: Kee 1971, fig. 19, 8.

63 The correct Reg.–No. is 54211/2 and not 54211/3 as in Rosenthal-Heginbottom 1995b, 375 no. 165.

309 (Area F3, L8753, Reg.–No. 86101)
Diam. ca. 14. Rim and wall fragment. ESA.
Rim: Ionian cyma and floret band.
Bethsaida-Iulias: Fortner 2008, 147 no. 123 and colour pl. 2, 4 (black slip); 148 no. 132 (reddish-brown slip).

310 (Area H, L20437, Reg.–No. 203143/2)
Diam. ca. 14. Rim and wall fragment.
Light brown fabric, ext./int. worn reddish-brown slip.
Similar floret band. Row of beading below.

311 (Area C1, L4878, Reg.–No. 48312)
Wall fragment. Relatively thick-walled: 7 mm. ESA.
Similar floret band. Row of beading below.

The floret pattern of nos. **309–311** recalls buds and darts. *Antioch*: Waagé 1948, fig. 9, 25; *Hama*: Papanicolaou Christensen 1971, 22 fig. 10, 102; 30 fig. 13, 116; *Gindaros*: Kramer 2004, 147 MB 77–79 and pl. 60; *Beirut*: Aubert 1996, 67 fig. 3 (bowl with outcurved rim, no fabric details given); *Tel Anafa*: Cornell 1997, pl. 1, MB 6–7 (ESA); *Akko-Ptolemais*: Regev 2009/10, 165 nos. 233–234 and fig. 36; *Sha'ar Ha'Amaqim* (Gaba): Naor 2014, 159 no. 35 (ESA); *Shikmona*: Elgavish 1974, pl. 35, 319–320; *Dora*: Mermelstein 2013, 78 fig. 3.22 (BSP); *Tel Yokneam*: Avissar 1996, 49–50, fig. X.1, 30 (red slip); *Caesarea Maritima*: Rosenthal-Heginbottom 2016, 140 no. 46. 144–145 nos. 61–62; *Samaria*: Crowfoot 1957b, 276 fig. 62, 9. 11; *Jaffa*: Tsuf 2018, 277 nos. 868–869; 393 fig. 9.53 (workshops in the vicinity of Antioch) and 289 no. 939; 397 fig. 9.57 (ESA); *Gezer*: Gitin 1990, pl. 44, 16 = Rosenthal-Heginbottom 2016, 162–163 no. 111; *Ashdod*: Kee 1971, fig. 19, 5 (red slip); *Maresha*: Levine 2003, 80–82 nos. 20–22 and fig. 6.2; Rosenthal-Heginbottom 2019, 76 fig. 3.13, 2. 78.

Varia

Bowl/cup

312 (Area B1, L7911, Reg.–No. 73737) (**fig. 4**)
Diam. of base 6. Base-ring, slightly concave within. Grey ware[64].
A faint row of beading frames the base-ring.
The small section preserved of the lower wall suggests that the fragment does not belong to a relief bowl. On a fragment with base-ring in grey ware the décor of tongue-shaped lotus petals and lines of jeweling starts at the base-ring (Mitsopoulos-Leon 1991, 73 D 42: see no. **134**). This applies also to the bowls nos. **166–167** with low base-ring, decorated with imbricate leaves.

Skyphos

313 (Area E1, L6536, Reg.–No. 64912/3)
Wall fragment. Grey ware.
Light grey fabric, ext./int. dark grey slip.
Row of beading and two ivy leaves.
The profile of the tiny fragment suggests a skyphos. It is moldmade and appears to be the Ionian version of the skyphoi in the Pergamene application-decorated category. An imported skyphos with an elaborate ivy bouquet came to light in Fill B1 of the shaft well in the State Agora, dated to ca. 1–25 CE (Meriç 2002, 23 fig. 3. 31 K 38 and pl. 5). Three simpler leaves, similar to those on no. **313**, and berries adorn a kantharos(?) of probably Knidian manufacture, also produced in the application technique (Meriç 2002, 31 K 38 a, from Fill B3 dated to the times of Nero). A skyphos with a possible erotic scene was found in the basilica at the State Agora (Mitsopoulos-Leon 1991, 60–61 C 18); the author considers the vessel an imitation of a Pergamene prototype, made in or near Ephesos. Local production is also documented at Hierapolis: Semeraro 2003, 85–87 and pls. 56–57, for the leaves pl. 57, 9. 12 (dated from the mid-1st century BCE until Julio-Claudian times).

64 The Ionian fragment was erroneously published as Knidian (Rosenthal-Heginbottom 1995b, 372 no. 13).

Knidian rouletted bowl

314 (Area D1, topsoil, Reg.–No. 168311)
Diam. 16. Rim and upper wall.
Brown fabric, ext./int. dark grey slip, micaceous.
Wall: band of rouletting set between ridges.
Based on the profile the fragment tallies with the variant dated to the first half – mid-second century BCE (Kögler 2010, fig. 71 B.16).
Hemispherical to ovoid bowls with rouletting have been recorded in quantities at Knidos, where they were produced (Kögler 2010, 123–126, Form VI, Typ A, Becher mit Kerbdekor). The author concludes that without handles and base-ring, sometimes with a narrow ring, they lack stability and were meant to be held in the palm of hand like the MMBs; when empty they were most likely placed upended. Characteristic features are the slightly outcurved lip and two ridges about 1–2 cm below the lip; the rouletting is arranged in registers (Kögler 2010, fig. 10, D 36). The production began at the beginning of the 2nd century and continued into the early 1st century BCE, with a probable maximal time-span from the late 3rd century into the third quarter of the 1st century. The shape is part of the basic dining equipment at Knidos from about 200–60 BCE (Kögler 2014, 158 fig. 1). Hundreds of sherds came to light in the destruction level of the Apollo terrace in the second quarter of the 1st century BCE (Find Complex E), while no longer present in the filling of the cistern of the Blocked Stoa (Find Complex G) (Kögler 2010, 124). The wide-spread distribution in the eastern Mediterranean, though not in great numbers, emphasizes the Knidian long-distance trade network, reaching also the Black Sea area (*Olbia*: Guldager Bilde 2010, 288 F-127, probably an imitation made somewhere else than Knidos; four more, two surely Knidian, have been recorded).
Workshop: Kassab Tezgör 2003, 41–42, pl. 35, 1–2: *Ephesos*: Dereboylu 2001, 39 no. 2 and pl. 19, 159; *Knidos*: Doksanalti 2003, 29; 32 and pls. 28, 5; 30, 9–10; *Kaunos*: Schmaltz 1996, 71, pl. 23, 5; *Iasos*: Pierobon-Benoit 1977, 375 and pl. 279b; *Delos*: Peignard 1997, 314 and pl. 234a (context date early 1st century until 69 BCE); *Athens*: Rotroff 1997, 400 no. 1583 and pl. 124; *Tenos*: Étienne

– Braun 1986, 216 no. Cb.2 and pls. 97. 117; *Paphos*: Hayes 1991, 15 fig. 6, 3–4, dated ca. 125–100 BCE; *Akko-Ptolemais*: Regev 2009/10, 167 no. 244 and fig. 37 (diam. 16); *Maresha*: Rosenthal-Heginbottom 2019, 80–81 fig. 3.16, 8; (diam. 16); *Athribis*: Południkiewicz 2011, 426. 435–436 nos. 15–16 (an Ionian provenance is suggested).

Conclusions

Although a fair number of the finds presented are from areas unpublished to date as well as from topsoil and fills, the assemblage is chronologically and typologically connected with Dora's Hellenistic and early Roman settlements[65] and represents the inhabitants' preference in fine-ware drinking cups. Unfortunately, the bulk of excavated material comprises fragments with limited possibilities to focus on motifs and décor systems, in particular the ESA bowls and their predecessors. The moulds among 5.000 bowls and fragments from Ephesos, studied by C. Rogl[66], document the decorative elements on complete bowls, supplemented by a fair number in the Museum of Ephesos[67]. For the non-Ionian finds from Dora two excavation reports present convergent comparative material, Tel Anafa in the Upper Galilee[68] and Gindaros in northwest Syria[69]. At Tel Anafa about 1.200 fragments were studied, with 819 (73 %) of ESA and BSP origin and 301 (27 %) of eastern Aegean and Asia Minor origin, among them Ionian red and grey bowls and no Athenian imports[70]. At Gindaros, the peak of use is set between the mid-2nd to the mid-1st centuries BCE; the 195 fragmentary bowls are classified by decoration and are mainly imports from workshops at Antiochia[71].

Like at Tel Anafa Attic MMBs are absent at Sha'ar Ha'Amaqim (Gaba), Maresha and Dora where the few fragments previously considered of Attic origin are now defined Ionian imports. S. Mermelstein's research of the bowls recovered at Dora during post-2000 seasons confirmed the absence of Athenian products[72]. S. Rotroff pointed out that while Attic MMBs were widely exported to the countries around the Mediterranean and along the Black Sea, they were never found in large numbers; the reason probably economical as local imitations provided cheaper products of equal quality[73]. In the southern Levant the import of Attic black-gloss ceramics came to a halt around 200 BCE, and during the 2nd–1st centuries BCE cheaper products from eastern workshops enabled more people to acquire foreign tableware considered to be superior to the local products, in the case of relief drinking cups from workshops in Ionia and along the Bay of Iskenderun[74].

Dating

The contextual evidence at Dora indicates the beginning of imports in the first half of the 2nd century BCE, starting with the early Ephesian production and tallying with the production period of the PAR-Monogram workshop. The imports represent phase one and two of the

65 For information consult Nitschke et al. 2011.

66 Rogl 2014, 127.

67 Günay Tuluk 2001.

68 Cornell 1997.

69 Kramer 2004.

70 Cornell 1997, 407–408.

71 Kramer 2004, 140–141.

72 Mermelstein 2013, 110.

73 Rotroff 1982, 10–11.

74 Rosenthal-Heginbottom 2015, 673. 678–679.

four chronological phases determined by C. Rogl[75]. She refers to nos. **81** and **87** as probable examples of the early Ephesian production in the first half of the 2nd century BCE, with a post-190 BCE date, and underlines that these bowls are rarely found at distant sites[76]. The export of the Monogram workshop started shortly after 166 BCE when Delos became a freeport and continued until the end of the 2nd century, with the bowls widely distributed throughout the Mediterranean and the Black Sea areas[77]. The quantity of Ephesian imports recorded at Delos underlines the city's importance as crucial hub in sea trade. The import and distribution of MMBs to sites in the southern Levant was most likely in the hands of Phoenician traders who at the same time exported Levantine lamps in grey ware to Delos[78]. The merchant associations of the Herakleistai of Tyre and the Poseidoniastai of Beirut established sanctuaries at Delos, indicating religious activeness besides trade connections[79]. With the recorded 2nd century Ephesian imports to Beirut[80] it can be assumed that simultaneously they were distributed to sites further south.

Nos. **7** and **107** from Area C0, L564, the locus representing the repertoire characteristic of the late Hellenistic occupation at Dora with ESA ware rare, are assigned to Phase 4a, ca. 175–125 BCE[81]; in the ceramics of the earlier Phase 4b, dated 275–175 BCE, no MMBs have been recovered[82]. The tiny rim fragment no. **79** attributed to Phase 3(b?) might be intrusive as the locus has a context date of ca. 275/250–200 BCE[83]. Finds presented in Part 2 complement the information. The attribution to Phase 4a is attested for nos. **120** and **200** from L564 and no. **136** from Area C0, L61184. The Ionian fragment no. **121** from L 4045 in Area C0 is assigned to Phase 3 (unsealed); it comes from an assemblage with redeposited material of Phase 4a and vessels characteristic of Phase 3, dated 125–60(?) BCE, with an increase of imported ESA ware[85]. The Ionian fragment no. **155** from L4520 from Area C2 is assigned to Phase 3(a?), dated to the first half of the 2nd century BCE[86].

Phases three and four of Rogl's production phases comprises the ateliers succeeding the Monogram workshop, dated to the end of the 2nd century and the first decade of the 1st century BCE, and the ›latest‹ workshops manufacturing until about the middle of the 1st century BCE[87], with the termination of Ephesian production in the second half of the 1st century BCE[88]. The fragment no. **147** is tentatively assigned to Phase 3, and the grey ware bowls nos. **166–168** tally with products signed by Athenaios and dated to the end of the

75 Rogl 2014, 131–133; Rosenthal-Heginbottom 2022, 65.

76 Rogl 2014, 132 and note 26.

77 Rogl 2014, 132–133 and note 28, the author referring to pls. 1–5 in Rosenthal-Heginbottom 1995b.

78 Aubert 1996, 67; Młynarczyk 1997, 25. 39; Dobbins 2012, 110; Rosenthal-Heginbottom 2020/2021, 60.

79 Steuernagel 2022, 69–70; Verboven 2022, 336–337 and Table 14.1 on p. 344.

80 See Bouzek 2005, fig. 1 for bowls of the Monogram workshop and Élaigne 2007, 116–117. 134 fig. 10; Élaigne 2013, 222 fig. 8.

81 Guz-Zilberstein 1995, 316

82 Guz-Zilberstein 1995, 320.

83 Rosenthal-Heginbottom 1995a, 217; Guz-Zilberstein 1995, 327–328. 409 fig. 6.54, 6.

84 Guz-Zilberstein 1995, 350 fig. 6.4, 19–20.

85 Guz-Zilberstein 1995, 314–316.

86 Guz-Zilberstein 1995, 331–333. 417 fig. 6.60, 1.

87 Rogl 2014, 133–135.

88 Lätzer 2009, 147.

1st century BCE[89]. C. Rogl considered that the end of the Ephesian production could perhaps be the result of a change in drinking customs[90].

The manufacture of MMBs in BSP/RSP in the 2nd century and the emergence of ESA ware around 160–130 BCE[91] resulted in the export of moldmade bowls to Syro-Palestinian sites in ›fair quantity‹ during late Hellenistic times and through much of the 1st century CE in reduced numbers[92], yet their initial appearance at Dora is still an open question. MMBs in ESA standard fabric have not been recorded in L564 (dated ca. 175–125 BCE) which contained Ionian imports and ESA bowls with internal molding of Atlante Form 18, dated ca. 150–80 BCE[93]. During the 2nd century imports from Ionia and from workshops along the Bay of Iskenderun reached Dora and were used concurrently. When and why the turning-point occurred is unclear, yet the change from Ionian bowls to bowls in ESA ware took place when the former still held a dominant market lead and other tableware in BSP/RSP and ESA was imported in considerable quantity. It is possible that the distance and the transport costs of the sea trade played a role and that the products from the Bay of Iskenderun workshops were cheaper.

Consumption

The Dora assemblage of imported fine tableware indicates a fairly affluent society, participating in a supra-regional trade network. The precondition for understanding the production and consumption preferences of consumers in the global Hellenistic koine is the knowledge why the relief-decorated drinking cups were widely imported and imitated. Is the use an indication for the acceptance of the Greek symposium[94] as a social gathering, does the acquisition represent a status symbol or should the cups be considered part of the ordinary day-to-day table service? C. Rogl addresses these questions, focusing on the evidence from sites in present-day Albania and comparing it with the material from Ephesos. The author points out the absence of rooms for the celebration of symposia at Ephesos and elsewhere and concludes that only with a thorough contextualization of the material culture at individual sites and regions answers to the question of cultural and social affiliation and its local mode of expression can be provided[95]. The reason for adopting a hemispherical drinking cup with a slightly flattened resting surface, held in the palm of hand or supporting it on the fingertips[96], can be related to the celebration of symposia, and with the participants reclining on klinai in a horizontal position it is the more convenient way. Yet, by the end of the 3rd century BCE the day-to-day use of the drinking cups had become the norm for Athenians who drank their wine from clay cups[97].

For the symposium additional tableware was needed, in particular vessels for mixing and serving the wine. Studying the ample ceramics from Ephesos A. Lätzer-Lasar pointed out that in the late Hellenistic period decorated vessels were favoured: moldmade bowls, application-decorated vessels and ceramics in West Slope style[98]. At Dora MMBs and tableware in West Slope technique complement each other, the latter including saucers and plates, skyphoi and

89 Lätzer 2009, 146 fig. 12; 192–193 no. 90. The context date is Augustan-Tiberian.

90 Rogl 2014, 135.

91 Hayes 2008, 19. The date about 150–140 BCE is suggested in Lund 2005, 243.

92 Hayes 2008, 16.

93 Rosenthal-Heginbottom 1995a, 219 nos. 15. 18.

94 See Rosenthal-Heginbottom 2022, 65.

95 Rogl 2008b, 528.

96 Rotroff 2020, 61.

97 Rotroff 2020, 70.

98 Lätzer-Lasar 2015, 255.

kantharoi, kraters and table amphoras[99]. At Maresha, the finds from Subterranean Complex 169 present the same picture[100], and the large quantity of imported tableware might have been used for special or festive occasions like symposia. However, even though at both sites the residents were able to acquire and use valuable tableware, the standard of which was set by Athenian manufacturers and taken over by various eastern Mediterranean producers, the performance of symposia is not certain as long as the appropriate rooms have been unearthed. The tableware could have been used in common social gatherings and in daily life. With regard to the imagery the majority are foliage bowls, and subjects like the Amazonomachy[101] and hunting scenes (nos. **1**–**2**) as well as figured bowls with human and animal figures are rare in comparison with the substantial Athenian production of vessels with elaborate figured decoration, serving at the same time as drinking cups and conversation pieces[102].

99 Rosenthal-Heginbottom 1995a, 222–231.

100 Rosenthal-Heginbottom 2019, 59–70. 83; Stern 2019, 405.

101 See other examples from Dora in Mermelstein 2013, 77 fig. 3.21 (BSP); Mermelstein 2020, 808–809 fig. 1 (from Ephesos) and Tel Nov (southern Golan) in Weksler-Bdolah 2010, 21* fig. 7, 7. 195.

102 Rotroff 1982, 19–24; Rotroff 2020, 68.

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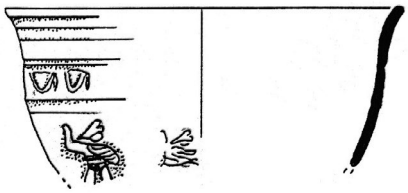

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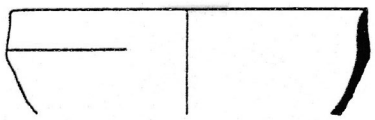

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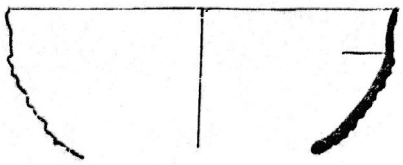

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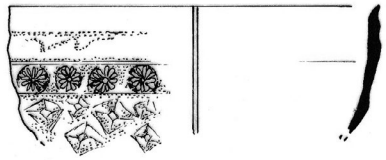

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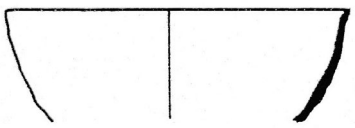

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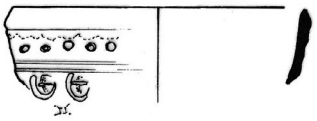

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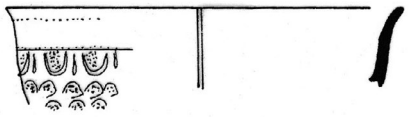

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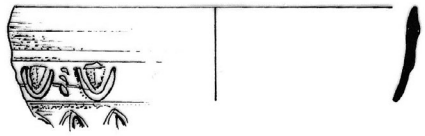

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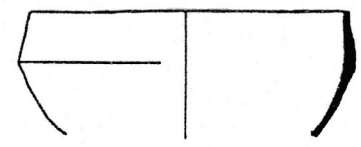

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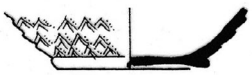

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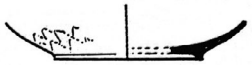

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Fig. 1 (M. 1 : 3)

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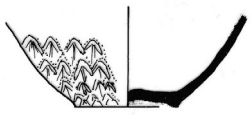

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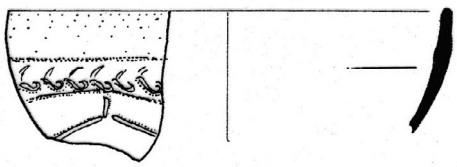

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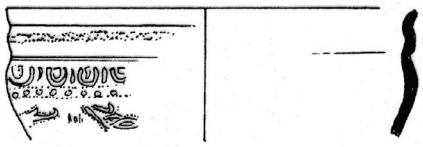

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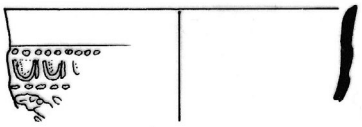

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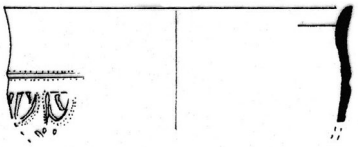

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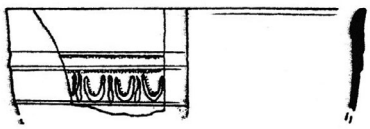

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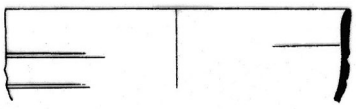

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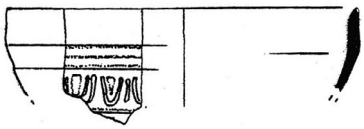

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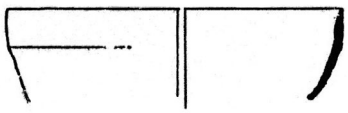

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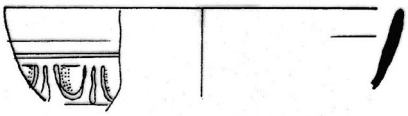

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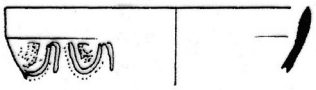

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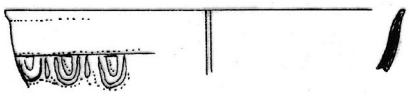

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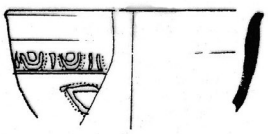

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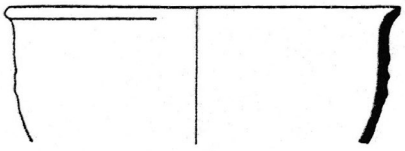

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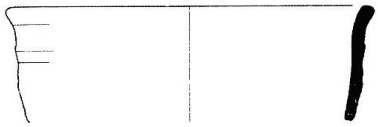
Fig. 2 (M. 1 : 3)



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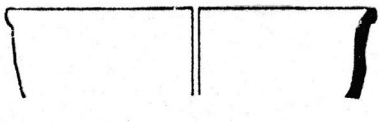

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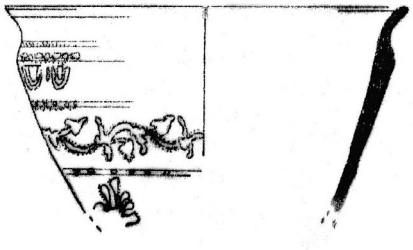

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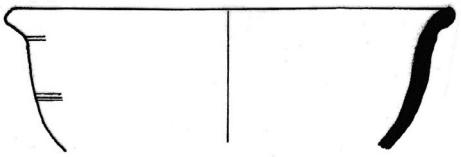

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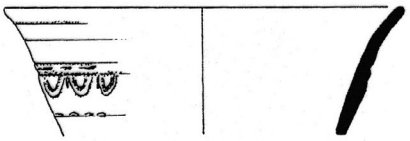

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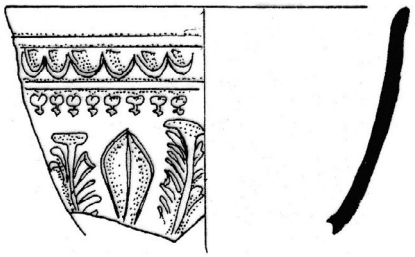

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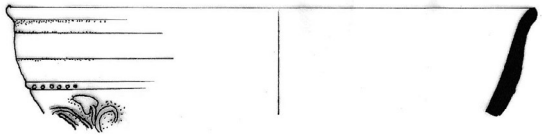

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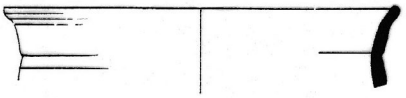

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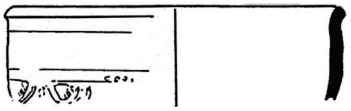

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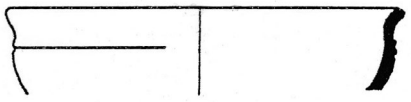

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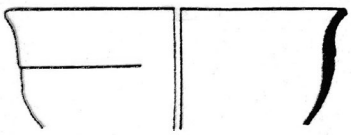

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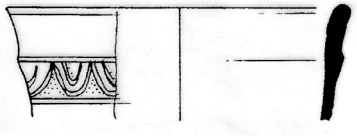

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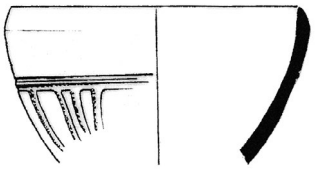
Fig. 3 (M. 1 : 3)



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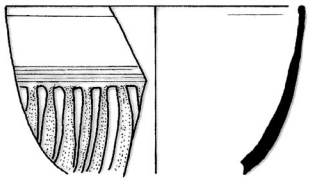

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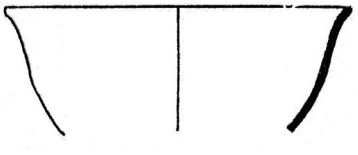

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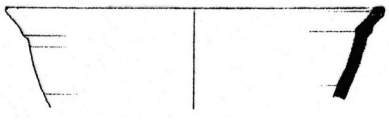

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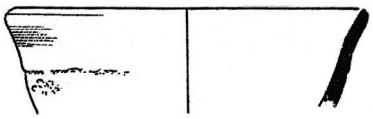

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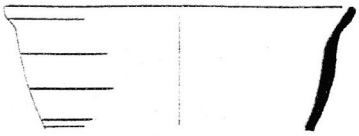

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Fig. 4 (M. 1 : 3)

Table 1

Concordance with list of published finds in
Rosenthal-Heginbottom 1995a – 1995b – 2015 – 2016

Cat. No.	Area	Locus	Reg. No.	1995a, fig.	1995b, pl.	2015, photo	2016, no.
113	C0	493	4537	5.5, 18	15, 15		
114	D1	16907	261096				
115	D2	15306	152538				
116	D1	16344	165485/4				
117	C0	topsoil	4007/1	5.3, 5	3, 5		
118	B2	Wall 219	2337/5		13, 6		
119	F3	8936	87516				
120	C0	564	4928	5.4, 2	3, 8		
121	C0	4045	40387/8	5.3, 14	3. 9		
122	F	8736	86263				
123	D2	topsoil	195010/1			6.2.1, 10	
124	D2	5126	51141		14, 4		
125	E1	6497	64701/1		14, 3		
126	C0	4123	40545/1	5.3, 1	1, 1		
127	G	9622	96123				
128	D2	topsoil	195010/3				
129	F	8049	80385		1, 2		
130	E1	6573	66672/5		9, 1		
131	D1	5410	54090/1		9, 4		
132	E2	6012	60066		1, 5		
133	C0	499	4496	5.4, 14	9, 11		
134	E1	6141	61264/7		9, 10		
135	E1	6160 + 6348	61338 + 63413/2		12, 3		
136	C0	611	5068	5.3, 7	11, 7		
137	D2	17500	175000/1				
138	B1	2204	32056/1		12, 4		
139	D1	16041	165352/1				
140	E2	6029	60162		12, 7		
141	E1	6473	64317/12		12, 2		
142	C1	4344	43337/10	5.3, 8	11, 8		
143	D1	16041	163387/4				
144	D1	16063	163900				

Cat. No.	Area	Locus	Reg. No.	1995a, fig.	1995b, pl.	2015, photo	2016, no.
145	H	21022	206492/1				
146	H	20623	204843				
147	D1	16902	261155/2				
148	H	20612	203908				
149	D1	5751	56678		10, 1	6.2.1, 11	
150	D2	5126	51057		8, 1		
151	C0	607	4963/6	5.5, 23	15, 16		
152	D1	Wall 16032	260456				
153	C2	4520	45068/1	5.4, 9	10,2		
154	F3	8730	85925		8, 2		
155	D2	5133	51112		8, 3		
156	F2	8496	84783		10, 3		
157	E2	6006	60040/1		7, 4		
158	C1	4443	48221/5				
159	D1	16698	169399			6.2.1, 12	
160	C0	457	4335/3	5.3, 3	1, 4		
161	H	20020	200244/5				
162	D2	5102	51007		10, 5		
163	B2	3784	37528		10, 4		
164	C0	516	4633/8. 12	5.4, 6	8;4		
165	D1	Wall 16338	166287				
166	D1	5402	54026		8, 8		
167	E2	6024	60148/6		8, 7		
168	F	8748	86380				
169	D1	Wall 5795	163590				
170	B2	debris	2773		10, 7		
171	E2	6006	60052/2		10, 8		
172	B2	3819	37455/1		10,6	6.2.1, 13	
173	D1	16133	164462/1				
174	D1	16133	164462/2				
175	F3	topsoil	87352				
176	G	18362	185000				
177	B2	227	2320		8, 6		
178	C1	492	4491/2		10, 9		
179	F3	8427	84246		15, 12		
180	E1	6261	62842/2				

Cat. No.	Area	Locus	Reg. No.	1995a, fig.	1995b, pl.	2015, photo	2016, no.
181	C1	4868	48346	5.5, 28	11, 1		
182	F2	8615	85371		9, 9		
183	C1	524	4804/4	5.4, 10	11, 5		
184	C0	600	5071	5.4, 1	11, 6		
185	F	8824	86525				
186	H	20182	201280				
187	C0	topsoil	4005/1	5.4, 12	14, 6		
188	B1	12835	127952		14, 1		
189	D2	10422	104228		7, 1		
190	F3	8708	85863		7, 3		
191	E1	6467	64980/1		6, 8		
192	D2	15130	150952				
193	E1	6572	66497/4		7, 8		
194	F3	8744	86044				
195	C0	462	4372/4	5.4, 21	7, 9		
196	B2	3906	38592/1		7, 5		
197	D1	5410	54090/2		7, 7		
198	E2	6003	60026		7, 6		
199	E2	6020	60115/10		7, 2		
200	C0	564	4799	5.4.24	7, 10		
201	B2	13504	135004				
202	H	20060	200623				
203	C1	4446	48224	5.5, 13	18, 1		
204	E1	6546	66404		12, 8		
206	C1	4443	48221/1	5.5, 14	18, 2		
207	D1	16681	166981				
208	D2	17606	175979				
209	F3	balk	86947				
210	E2	6006	60058		18, 3		103
211	D1	26699	260001				
212	E2	6024	60127/4		20, 2		
213	C1	4878	48456/2	5.5, 5	15, 8		
214	C1	4868	48319/2	5.5, 6	15, 7		
215	D1	16420	166857				
216	H	20071	200552				
217	D1	16938	262034				

Cat. No.	Area	Locus	Reg. No.	1995a, fig.	1995b, pl.	2015, photo	2016, no.
218	E1	6577	65208/6		11, 2		
219	E1	6261	62842/1–2 + 63052/2		18, 4		108
220	B1	2034	20117/1		19, 6		105
221	E1	6572	66497/1. 4		18, 5		
222	E1	6522	64833/2		19, 1	6.2.1, 2	104
223	E1	6577	64431 + 65208/5		20, 8		
224	E1	6546	66629		20, 9		
225	D2	17541	175227				
226	H	topsoil	200606/1				
227	D1	16420	166916				
228	B2	13550	135145/1				
229	B2	12614	125335/1		19, 4	6.2.1, 4	106
230	H	balk	201078/1				
231	F3	topsoil	86000				
232	C0	533	4771/2	5.5, 20	15, 17		
233	H	20032	200374/1				
234	C0	topsoil	40040	5.5, 19	15, 14		
235	H	topsoil	20006/2				
236	B2	205	2005/7				
237	D1	16082	163699				
238	F3	8823	86556				
239	C1	4920	48509				
240	C0	418	4322/2	5.5, 12	15, 13		
241	C0	418	4279/4	5.5, 21	14, 9		
242	C1	4056	40107/1	5.5, 22	20, 6		
243	G	9307	92790/3				
244	D1	16110	164100/1				
245	D2	5321	52404/15		20, 3		
246	E1	6121	61196/1		20, 1		
247	E2	6024	60149/4		19, 8		
248	C0	4032	41024/16	5.5, 16	17, 2		
249	D1	16110	164100/2				
250	D1	26212	261917				
251	D1	16107	164311/2				
252	E1	6470	64850/1				

Cat. No.	Area	Locus	Reg. No.	1995a, fig.	1995b, pl.	2015, photo	2016, no.
253	D1	Wall 16065	168504				
254	E1	6111	61044		20, 13		
255	B2	12614	125335/2		20, 11		
256	E2	6012	60078		20, 10		
257	C1	4357	43306/1	5.5, 15	19, 7		
258	H	20044	200502				
259	B2	3888	38443/3		20, 12		
260	D2	17607	175912/2				
261	D1	26223	262340/1				
262	H	20213	202157				
263	D1	16014	163149/5				
264	B2	12412	123776		12, 5		
265	D2	19411	195482				
266	B1	12777	127689		12, 1		
267	H	20014	200476				
268	C0	625	5429/5	5.4, 25	11, 10		
269	C1	4876	48384/2	5.5, 1	11, 9		
270	D1	16480	167241				
271	D2	5240	52181		16, 1	6.2.1, 9	
272	G	9049	90397		16, 2		
273	G	9050	90395/1				
274	G	9622	96123				
275	D2	5606	52342/2–3				
276	B2	13518	135253				
277	H	balk	201078/2				
278	D1	26053	260695				
279	C1	441	4376/1	5.5, 2	14, 8		
280	B2	7347	73444/11		13, 2		
281	E1	6141	61306/1		13, 1		
282	H	topsoil	202413				
283	B2	231	2249 + 2250/2		13, 4		
284	B2	7398	73685/2		13, 5		
285	F3	8734	85937		19, 3		107
286	E1	6572	66779/2		13, 7		
287	D2	cleaning	301031				
288	F3	8911	86914				

Cat. No.	Area	Locus	Reg. No.	1995a, fig.	1995b, pl.	2015, photo	2016, no.
289	D3	14156	141153				
290	F3	8745	86027				
291	H	20005	200203				
292	C2	4600	46028	5.5, 9	13, 8		
293	H	20117	201079				
294	C1	4914	48481	5.5, 4	15, 2		
295	D1	16524	167790/1				
296	C1	4883	48341/1	5.5, 11	15, 4		
297	C1	4868	48319/1	5.5, 10	15, 11		
298	H	20989	206275/1				
299	C1	4445	48232/2	5.5, 3	15, 1		
300	E1	topsoil	61383		15,10		
301	F3	8823	86592				
302	E1	6431	64266/2		13, 3		
303	D1	16079	163525/1				
304	B1	2080	20217/1		19, 2		
305	C1	4868	48319/3	5.5, 7	15, 6		
306	F	8005	86878				
307	D1	16806	260427				
308	D1	5430	54211/2		19, 5		
309	F3	8753	86101				
310	H	20437	203143/2				
311	C1	4878	48312	5.5, 8	15, 5		
312	B1	7911	73737		9, 13		
313	E1	6536	64912/3		9, 12		
314	D1	topsoil	168311				

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