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Tall Zirā'a

The Gadara Region Project (2001-2011)

Final Report

Volume 5

Hellenistic to Roman Period (Strata 8-6)

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Roman pottery from Tall Zirā'a – imports, table wares
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LIST OF ABBREVIATIONS

Abbreviated Journals, Series and Collective Works

AA	Archäologischer Anzeiger			
AASOR	The Annual of the American Schools of			
	Oriental Research			
ADAJ	Annual of the Department of Antiqui-			
	ties of Jordan			
AfO	Archiv für Orientforschung			
AJA	American Journal of Archaeology			
ANRW	Aufstieg und Niedergang der römischen			
	Welt			
AnSt	Anatolian Studies			
AntTard	Antiquité tardive. Revue internationale			
	d'histoire et d'archéologie			
AST	Araştırma Sonuçları Toplantısı			
BAR	Biblical Archaeological Review			
BASOR	Bulletin of American School of Orien-			
	tal Research			
Bjb	Bonner Jahrbücher des Rheinischen			
	Landesmuseums in Bonn			
CBRL	Council for British Research in the Le-			
	vant Bulletin			
DNP	Der Neue Pauly. Enzyklopädie der An-			
	tike			
IEJ	Israel Exploration Journal			
IstMitt	Istanbuler Mitteilungen			
JBL	Journal of Biblical Literature			

JNES	Journal of Near Eastern Studies				
JNSL	Journal of Northwest Semitic Languag-				
	es				
JRA	Journal of Roman Archaeology				
Levant	Levant. Journal of the British School of				
	Archaeology in Jerusalem and the Brit-				
	ish Institute at Amman for Archaeology and History				
MAA	Journal of Mediterranean Archaeology				
	and Archaeometry				
NEA	Near Eastern Archaeology				
NEAEHL	New Encyclopaedia of Archaeological				
	Excavations in the Holy Land				
PEQ	Palestine Exploration Quarterly				
RE	Paulys Realencyclopädie der clas-				
	sischen Altertumswissenschaft				
SHAJ	Studies in the History and Archaeology				
	of Jordan				
TIB	Tabula Imperii Byzantini				
TMA	Tijdschrift voor Mediterrane archeolo-				
	gie				
ZPE	Zeitschrift für Papyrologie und Epi-				
	graphik				
ZDPV	Zeitschrift des Deutschen Palästina				
	Vereins				

Abbreviated Coin Literature

BMC Crete	Catalogue of the Greek Coins in the
	British Museum; Greek Coins of Crete
	and the Aegean Islands
CSE I	Corpus speculorum Etruscorum I
RIC VI	The Roman Imperial Coinage VI
RPC I	Roman Republican Coinage I
Rouvier	Numismatique des Villes de la Phénicie

SC I	Seleucid Coins I
SC II	Seleucid Coins II
SNG	Sylloge Nummorum Graecorum, Black-
Blackburn	burn Museum
SNG	Sylloge Nummorum Graecorum, Danish
Kopenhagen	National Museum
SNG	Sylloge Nummorum Graecorum, Israel I,
Spaer	Arnold Spaer Collection

Abbreviated Ancient Authors and Works

Cato agr. Colum	Cato, de agri cultura Columella: rei rusticae libri duodecim	Plin. nat. Pol	Plinius maior, De naturalis historia Polybios historiae
Dan.	Book of Daniel	Ptol. geogr.	Claudius Ptolemaeus, geographia
Jos.		1. Macc.	1. Book of the Maccabees
Ant. Jud.	Josephos (Flavius Josephus), antiqui-	2. Macc.	2. Book of the Maccabees
	tates Judaicae	Mk.	Gospel of Mark
Bell. Jud.	Josephos (Flavius Josephus), bellum	Mt.	Gospel of Matthew
	Judaicum	Strab.	Strabo, geographica
vita	Josephos (Flavius Josephus), de sua vita	Vitr.	Vitruvius, de architectura

General Abbreviations

BAI	Biblical Arcl Wuppertal	haeological	Institute	GPIA	German chaeolog	Protestant y	Institute	of	Ar-
DoA	Department of	Antiquities of	Jordan						

Abbreviations used in the Catalogues

D	Diameter	Obv.	Obverse
g	gram	rem	remaining
Н	Height	Rev.	Reverse
h	hour (position of stamp on coins)	Th	Thickness
L	Length	W	Width



Fig. 0.1 Tall Zirā'a, view from west to east (Source APAAME D. Kennedy 2011).

PREFACE

by D. Vieweger/J. Häser

When the German engineer G. Schumacher explored Transjordan in 1885, he discovered among other sites, Tall Zirā'a¹ (*Fig. 0.1*). He was the first European since the time of the Crusaders to enter this region. However, after thousands of years of prosperity, the valley had changed significantly during the Ottoman Period. The bedouins told Schumacher that the wādī had degenerated into a "popular shelter for all sorts of refugees and criminal scum".

Except for a few sugar mills that were operated by water power, there were only a few small hamlets. A water flow of about 0.75 m^3 per second flowed through the Wādī al-'Arab in June 1885, and

 Schumacher 1890, 110. 142 f. Schumacher visited Tall Zirāʿa and described remains of rectangular buildings. His observations are published by Steuernagel 1926, 81. the Wādī az-Zaḥar added the same amount of spring water. C. Steuernagel wrote:

"Where the valley widens and the water becomes shallow, there are large numbers of trout that are easy to catch. Once while bathing, Schumacher saw a black water snake, almost a metre long. These are said to be very common here and are highly dreaded"².

The archaeologist N. Glueck visited Tall Zir \bar{a} 'a in 1942. He reported the

*"singularly imposing and completely isolated hill of Tall Zera 'ah (...)"*³

and mentioned a water source on the plateau of the tall as the

- 2 Steuernagel 1926, 80. Citation is given in English translation; cf. also Schumacher 1890, 142 f. For Schumacher's travels see in general: Schumacher 1886.
- 3 Glueck 1951a, 182 Fig. 71.

"result of a natural siphon phenomenon leading the underground flow of the water from the higher level of the hills beyond down to below the bottom and, as through a pipe piercing its center, up to the top of Tall Zera'ah".

Although the tall⁴ had already attracted attention due to its location and imposing appearance, no intensive research was conducted at that time, because of the hill's location close to the border of Israel to the west and Syria to the north. During the establishment of the State of Israel in 1948 and again during the Six-Day War in 1967, the western part of the Wādī al-'Arab was declared a military zone. A passage which had been open in all directions for millennia was thus essentially cut off from sections of its surroundings. The territory around Gadara and the Wādī al-'Arab, in the triangle between Jordan, Syria and Israel, became the northwesternmost corner of the Hashemite Kingdom, and there was not even a paved road to the tall.

Even the construction of the Wadī al-'Arab Dam in 1978 did not make a significant difference to the status quo. The archaeologists who surveyed the area prior to the dam's construction as part of salvage investigations did not appreciate the archaeological potential of the tall that majestically overlooked the future reservoir. Some more time passed before the ratification of the Oslo Peace Accords in 1993, but it was not until after the peace treaty between Jordan and Israel, signed by King Hussein and Prime Minister Yitzhak Rabin on October 26, 1994, that the area became accessible to the public again. D. Vieweger, director of the Biblical Archaeological Institute Wuppertal (BAI), and, since 2005, also of the German Protestant Institute of Archaeology (GPIA), traveled to the northwestern part of Jordan several times between 1998 and 2000, exploring the area for a suitable tall site that would serve as authoritative chronological record for the region's long and important cultural history. He found it in the Wadī al-'Arab.

Tall Zirā'a—located in the middle of the Wādī al-'Arab (*Fig. 0.2* and *Fig. 0.3*)—was continuously inhabited for at least 5,000 years and offers a unique insight into the way of life of the region's people. Its outstanding archaeological significance results from the artesian spring at its center, which created optimal settlement conditions over thousands of years. For this reason, Tall Zirā'a offers a great opportunity to compile a comparative stratigraphy for northern Jordan from the Early Bronze Age right through to the Islamic period, while at the same time tracing cultural developments in urban life, crafts and religious history over long periods of time. Moreover, it is possible to study the numerous remains from Biblical times in a broad cultural and historical context.

As mentioned earlier, a major trade route ran through the valley, connecting Egypt in the south with the Syrian-Mesopotamian region in the north. The Wādī al-'Arab also connects the Jordan Vallev with the Mediterranean coast via the northern Jordan ford at Ğisr el-Mağami' (Gešer Naharajim), and the plains of Jezreel and Tall al-Hisn (Beth Shean) with the eastern Jordanian highlands. It was possible to climb from the Jordan valley, at some 290 m below sea level, to the fertile and very early populated Irbid-Ramtha basin, which lies around 560 m above sea level. Direct routes led from the Irbid-Ramtha basin to Dimašq (Damascus) in the north, Bagdad in the east and Amman in the south. Since the Yarmūk valley in the north and the Wādī Ziglāb in the south are too steep and narrow to serve as major transportation routes, the Wadī al-'Arab played a prominent geopolitical role. Not surprisingly, economic success and the hard work of residents over the millennia have left a wealth of traces in the valley. More than 200 sites of human habitation, from the very earliest settlements to the Islamic Period, provide an eloquent testimony to the history of this region: Settlements, channels, water mills, cisterns, oil presses, wine presses, watchtowers and burial sites.

Tall Zirā'a offered good living conditions for a settlement; the artesian spring ensured an unfailing water supply, and the hill provided security. The tall rises impressively (depending on the direction) between 22-45 m above the ground. As the only prominent natural elevation in the lower Wadī al-'Arab, Tall Zirā'a dominates the valley. From here, not only Gadara can be seen, but also the narrow entrance of the wadī to the west can be well monitored. The adjacent fertile wadī ensured adequate nourishment, with potentially arable land in the western and central valleys, terraced slopes and spurs suitable for rainfed agriculture in the east, and wādī slopes suitable for grazing small livestock, forming a broad semicircle from east and south to the west. Based on his observations, D. Vieweger

4 The Arabic word 'tell' or 'tall' as well as the Hebrew word 'tel' will be written in this publication in the standard literary Arab version 'tall' or 'Tall NN'.





Fig. 0.3 Map of the Tall Zirā'a area (Source: BAI/GPIA; P. Leiverkus).

Fig. 0.2 Tall Zirā'a and its geographic location (Source: Ababsa 2013, Fig. 1).

decided to implement preliminary investigations here from 1998 to 2000.

The 'Gadara Region Project' was launched in 2001 by the Biblical Archaeological Institute (BAI) in Wuppertal, Germany. During the first survey season, the surface of Tall Zirā'a was explored, the tall was accurately surveyed, and more than 24,000 pottery sherds and many other finds were systematically collected and analyzed⁵. The results of the survey helped to formulate the objectives of the excavation program and to select suitable areas (residential, religious, administrative and craft production) for investigation.

The first excavation season on the tall took place in 2003. The first team was financed by the 'Society of Friends of the BAI Wuppertal' and traveled under the direction D. Vieweger with a Volkswagen bus from Wuppertal via Turkey and Syria to Amman. A house of the Ottoman period in the Gadara/ Umm Qēs archaeological site served as living and working quarters, which was in a very poor condition at that time, but was sympathetically renovated and equipped with modern sanitary facilities and kitchens in the following seasons. The results of the first season were so promising that the 'Gadara Region Project' was inaugurated, with a planned time frame of ten to twenty years.

Over the course of the subsequent 18 seasons, 25 strata were uncovered in three areas and several scientific processes and archaeological experiments were carried out; surveys were also completed for the area around Tall Zirā'a and in the Wādī al-'Arab.

The slopes of the Wādī al-'Arab from Tall Zirā'a upward to the region of Ṣēdūr and Dōqara, as well as the region around the Wādī al-'Arab dam, were surveyed in 2009; large parts of this region had not previously studied in detail. 78 sites, 30 of which were previously unknown, were documented. The environmental survey continued in 2010 in the region of Dōqara, which is near Irbid; 57 sites were documented at that time.

In 2004, the BAI Wuppertal under the directorship of D. Vieweger, and the German Protestant

⁵ Vieweger et al. 2017, 59–155; Vieweger et al. 2003, 191– 216.

Institute of Archaeology (GPIA) in Amman which also served as the research unit for the German Archaeological Institute (DAI), under the directorship of J. Häser, agreed on a close partnership, which ensured ongoing archaeological and interdisciplinary collaboration for the remainder of the archaeological seasons. The subsequent directors of the GPIA in Amman, F. Kenkel, K. Schmidt and B. Jansen, agreed to continue this cooperation.

In 2018, excavations in Area II resumed under the direction of K. Schmidt with a special focus on the Iron Age. The results of the 2018 and 2019 campaigns have been published in a printed and an on-line version⁶.

All finds were stored at the excavation house in Umm Qēs. Some of the more important finds were exported to the Biblical Archaeological Institute Wuppertal (BAI) and restored by M. Blana; they were returned to the Department of Antiquities of Jordan in several stages, with the last ones returning to Jordan in spring 2015. More than 50 objects discovered during the project are on display in the Jordan Museum in Amman.

In July 2019, a special exhibition titled 'Tall Zirā'a – Mirror of Jordan's History' opened at the Jordan Museum in Amman, displaying 84 finds from Tall Zirā'a that attest to the cult and religion, arts and crafts, and cultural contacts of the people at this site over thousands of years⁷. In 2020, the exhibition was also presented at the Museum of Jordanian Heritage at the Yarmouk University in Irbid.

The results of the excavations have been presented in the form of articles in several scientific journals as well as monographs and dissertations⁸. In addition, the Tall Zirā'a website provides information in German and English about current activities on and around the tall⁹. After 18 intensive seasons exploring the tall and its surrounding, it was decided to interrupt excavation and survey activities in order to publish a complete record of the results so

6 Schmidt (ed.) 2022.

- 7 Häser Schmidt (eds.) 2019.
- 8 For a complete list of the publications concerning the 'Gadara Region Project' cf. http://www.tallziraa.de/Pub-likationen/0335.html (10.12.2022).
- 9 Cf. www.tallziraa.de
- 10 Several authors in: Vieweger Häser (eds.) 2017.
- 11 Vieweger 2019.

far. To this end, it was decided that work from 2012 onward would consist of study seasons in the excavation house at Umm Qēs to process the data and results gathered to date.

The following volumes of the final publication are already published or planned:

Volume 1: Introduction¹⁰ Volume 2: Early and Middle Bronze Age (Strata 25-17)11 Volume 3: Late Bronze Age (Strata 16–14)¹² Volume 4: Iron Age and Persian Period (Strata $13-9)^{13}$ Volume 5: Hellenistic and Roman Period (Strata 8–6) Volume 6: Hellenistic to Umavvad Period (Strata 8–3). Ceramic, Glass and Metal Finds¹⁴ Volume 7: Byzantine and Umayyad Period (Strata 5-3)15 Volume 8.1/8.2: Wādī al-'Arab Survey¹⁶ Volume 9: The Iron Age, Hellenistic and Early Roman Period in Area II¹⁷

All volumes will be or have been already published online in English, in order to make the results available free of charge and to a wide audience. The online publication also allows the integration of 3D-images, reconstructions and digital films. Furthermore, original data from the excavations, such as plans and database extracts, are included. These additional documents are published in German¹⁸; however, they will be understandable to anyone with some knowledge of the German language and allow professional researchers to access the primary data.

The printed version of the publication can be ordered from Gütersloh Verlag in Germany. Volumes 1, 2, 3, 6, 7, 8.1/8.2 and 9 have already been published.

General comments on the systems and processes used in the publications follow:

- 12 Soennecken 2022.
- 13 Soennecken in prep.
- 14 Kenkel 2020; Hoss 2020a; Hoss 2020b.
- 15 Häser 2024.
- 16 Soennecken Leiverkus 2021.
- 17 Schmidt (ed.) 2022.
- 18 Cf. the appendices to the present volume.

5

The Palestine Grid 1923 is the basis for the geographic grid system used for the project. It was first used in the autumn 2001 for 5 m x 5 m squares on Tall Zirā'a, for both excavation and survey work¹⁹.

• The citation style is based on the guidelines of the German Archaeological Institute (DAI), but has been adapted to the conventions of English language publications.

• In order to minimize misunderstandings, the problem of transliterating Arabic and Hebrew words into English orthography with Latin letters for local place and family names is solved with by the transcription system of the Deutsche Morgenländische Gesellschaft, which is based on the guidelines of TAVO (Tübinger Bibelatlas des Vorderen Orients).

• In this publication, the name of the site is called *Tall Zirā* 'a. Other transcriptions include *Tell Zer* 'ah (MEGA Jordan; Jadis; Kerestes et al. 1977/1978; Glueck 1951a; Glueck 1951b); *Tell Zer* 'a (Reicke – Rost 1979); *Tell Zara* 'a/*Tell Zara* 'a (Schumacher 1890; Steuernagel 1926); *Tell Zira* 'a (Hanbury-Tenison 1984), *Tall Zar* 'a (AAJ, SHAJ).

• All dimensions in the catalogues and in the captions are in cm unless otherwise stated.

19 Cf. Vieweger – Häser (eds.) 2017, 235–237 for the grid system used on Tall Zirā'a.

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Susan Schütz

INTRODUCTION

by S. Schütz/J. Häser

The present volume of the Tall Zirā'a Final Reports contains the results of the excavations of the Hellenistic to Roman strata, *i.e.* Strata 8 to 6, which were carried out under the direction of D. Vieweger and J. Häser.

So far on Tall Zirā'a, three areas (I–III) have been opened in a total excavation area of about 3000 m2 (*Fig. 0.4* and *Fig. 0.5*)¹.

All areas serving different aims. In Area I we explored residential areas, specifically the living quarters and working areas of the tall's artisans (*Fig. 0.6*). In Area II we focused primarily on administrative buildings (*Fig. 0.7*), and in Area III on a prestigious building from the (Roman-) Byzantine era (*Fig. 0.8*). The Hellenistic and Roman strata were reached out in all areas, but mainly in Area I and II, which are the focus in this work.

The architectural remains of the Hellenistic period (Stratum 8) were found only in Area I and II. They represent a fortified structure and agricultural installations. So far, no architectural features of Hellenistic date were found in Area III. However, finds like Hasmonean coins—although found in later strata—might be a hint to occupational remains of the Hellenistic period in this area too.

Architectural remains of the Roman period (Strata 7 and 6) were found in all three excavated areas. The main feature was a Roman villa in Area II with associated agricultural installations in Area I. The large vaulted structure that was found in Area III was surely used as a cistern at some time but it is questionable if this was its original purpose².

Volume 5 is based on the excavation results from 2001 to 2011. The descriptions of the individual strata follow the same scheme used already in Volumes 2,3, 4, 5 and 7 of the Tall Zirā'a final reports: 1) A short comprehensive introduction and an overall map of the area to include the context numbers and complex names. The individual context categories (walls, floors, pits etc.) are colour-coded. The complexes are labelled by capitals (A, B, C etc.) from north to south and from west to east.

2) Description of the individual complexes. First the complex is roughly described, naming the squares it covers.



Fig. 0.4 Tall Zirā'a with its three excavation areas and the artesian spring in 2011 (Source: APAAME, D. Kennedy).



Fig. 0.5 Tall Zirā'a. Topographical map with Areas I to III with 5 m \times 5 m excavation squares (Source: BAI/GPIA).

- 1 Vieweger Häser 2017a, 27–57; Vieweger Häser 2017b, 235–266.
- 2 Vieweger Häser 2017a, 19 and Fig. 1.11; Häser 2024, 69–72.



3) Description of the individual rooms, which are labelled by numbers (A 1, A 2 etc.), again from north to south and from west to east. A room constitutes an enclosed area and can be either an interior space or a yard.

a) In this description, the rooms' boundaries as well as the architecture in their respective area (walls) are characterized. Unless stated otherwise, wherever the term "wall" appears in the text, it means the foundation of a wall. These generally consist of several layers of stone.

b) Next, installations are described, (i.e. finds that are neither a wall nor fill layer and were used to serve a specific everyday purpose) such as stoves, silos, etc.

The "context" denotes a coherent area (i.e. a find context within one square, usually a wall,

Fig. 0.6 Plan with squares in Area I (Source: BAI/GPIA).

an installation, a stove, soil or a floor). In some cases, a find was given a context number, however, this documentation practice was common only during the first years of excavation³.

c) These are followed by the fill layers that can be attributed to a specific room. It can either be a fill layer between two floor levels, collapse debris of the roof or the walls, a floor, paving, or an area that was intentionally levelled when a new stratum was created. Since these can only occasionally be positively differentiated, the term "fill layer" was chosen and, if possible, further specified in the text. The fill layers lying above

3 Context numbers in Area I consist of one to four digits, in Area II of five digits (starting with 10000).


Fig. 0.7 Plan with squares in Area II (Source: BAI/GPIA).

a stratum's floors are also included as the finds enclosed belong to this stratum. Fill layers illustrate the downside of continuous settlement and frequently, a clear distinction between individual phases or strata are impossible, and only the finds contained within the fill layers give evidence of a transition from one stratum to the next. Likewise, many pits of younger strata disturb the contexts of older ones.

d) Next, selected or relevant finds are described. Finds are labelled with a six-digit number with the prefix "TZ" and a three-digit extension (e.g. TZ 001234-001). In an appendix, all finds of a specific stratum are listed and briefly described in catalogues which are subdivided into catalogues of metal, glass, stone, worked bone, ceramics. Finds are described in the context of the stratum where they were discovered, even if they might be dated to an earlier or later period.

4) The description of a complex is rounded off, if possible, by a reconstruction and an overall interpretation of the complex.

5) At the end of the description of each complex, there is a short table listing all contexts pertaining to this complex (*Tab. 0.1*). This is a condensed version of the detailed table of contexts (*Tab. 0.2*) and only states whether there are any finds in any particular context. The finds are categorized into artefacts, which are objects processed or made by humans, and ecofacts, such as organic material, components of the natural environment, e.g., unworked animal bones. The artefacts are once more subdivided into



225185

22518

Fig. 0.8 Plan with squares in Area III (Source: BAI/GPIA)

ceramics and small finds. The column of the ceramics only lists the diagnostic finds (such as rim sherds or decorated sherds) and no body sherds. The bone finds often lack a description and a definite number since their state of preservation frequently rendered them both uncountable and indescribable. When evaluating the bone finds, only the definable ones were taken into account. Flint objects are given the general term "flint/tool" in the tables.

At the end of each subchapter, a short interpretive overall description of the respective stratum is given. This addresses the stratum's pattern of settlement, its architecture, notable complexes, crafts and trade, unusual small finds, ceramics and bones.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
3271	AR 120	loose sediment with cobbles	A 2	\checkmark	\checkmark	-
3280	AR 120	sandy, loose sediment	A 2	\checkmark	\checkmark	\checkmark
3294	AR 120	remains of clay wall and stone foundation of tabun	A 2	\checkmark	_	\checkmark
3307	AR 120	debris	A 2	-	-	-

Tab. 0.1 Example of context table (Source: BAI/GPIA).

Befund	Quadrant	Komplex	Beschreibun	Beschreibung			emerkung			Interpretation		
5	AM 118	D 4	Trockenmaue Spolien	Trockenmauer aus Feldsteinen und Spolien			Stratum 05 auch 04 a.b.c.03 a.b			Mauer		
	Material	Fundnr.	Ansprache	Anzahl	Warengruppe	Bemerkung	Datierung	Dekor	Typo- logie	Тур		
	Keramik	20621	Deckel	1	WM C Buff		MB SB EZ			Bauchscherbe		
			Flasche	1	WM C Buff		MB SB EZ			Henkel mit Randlippe		
			Flasche/ Krug	1	WM C Buff		MB SB EZ			Henkel		
			Kochtopf	1	CP 5		MB	Relief- dekor	Kt MB 1b	Bauchscherbe		
			Kochtopf	1	CP 5		MB			Randlippe		
			Krug	1	HM R2B		FB			Boden		
			Krug	1	WM C Buff		MB SB EZ			Bauchscherbe mit Henkel- ansatz		
			Krug	1	WM C Buff		MB			Randlippe		
			Krug	2	WM C R2B		MB SB EZ			Bauchscherbe mit Henkel- ansatz		
			Schale	1	WM C Buff		MB SB EZ			Randlippe		
			Schale	1	WM C R2B		MB			Randlippe		
8	AL 117	D 5/6	Trockenmaue	er aus Felds	steinen	Stratum 05 au	1ch 04 a.b.c.03	a.b	Mauer			

Tab. 0.2 Example of table with detailed registration of contexts and finds (Source: BAI/GPIA).

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Long before the Greeks and Romans occupied the Levant, it was the Hittites, Egyptians, Assyrians, Jews, Babylonians and Persians who had left their mark on northern Jordan and helped shape it¹, resulting in a mixed culture moulded by the various rulers and inhabitants. Extensive trade relations with Egypt, Mesopotamia, Syria, Arabia, Cyprus and the Aegean, which are documented as early as the second millennium BC, also contributed to shaping the culture of northern Jordan². The first Greek merchants (and with them Greek goods), as well as soldiers, are documented in the Levant as

1.1. The Hellenistic Period

With the invasion of Macedonian occupation troops in the course of Alexander the Great's victorious march through the Near East after the Battle of Issus in 333 BC, the immigrants brought more intensive, and predominantly Greek, economic and cultural influences⁵. The Macedonian advance met with relatively little resistance from the local populations in the region covered here⁶. After the death of Alexander in 323 BC, the unity of the empire could not be maintained and finally, in the so-called Diadochi Wars, Alexander the Great's officers fought to establish their own zones of power on the soil of his emearly as the seventh century BC³. Due to its strategic location and natural environment, the entire region has been marked by conflicts throughout the ages and is therefore aptly described by I. Shatzman as a "military buffer zone"⁴. The clash of different cultures in a very confined space and under changing rulers also led to repeated disputes in the region.

These factors are also reflected in the diverse types of construction found in the settlements and in the way of life of the people (such as eating and drinking habits) of the region, factors which are also detectable in the finds and features of Tall Zirāʿa.

pire⁷. The southern Levant—and thus also northern Jordan—fell under the control of Ptolemy I Soter in 301 BC⁸ and was thus under Ptolemaic rule⁹. Ptolemy I began to reorganise the region immediately after coming to power and restructured some cities, including Gaza, Jaffa and Ptolemais, into *póleis*¹⁰. However, the area did not find peace, as who had legitimate dominion over the region remained disputed between the Ptolemaic and Seleucid dynasties, resulting in a series of long-lasting wars (the so-called Syrian Wars)¹¹. These only came to an end with the victory of the Seleucid king Antiochus III

- 1 Kennedy 1999, 78.
- Meyer 1925, 7; Momigliano 1979, 94; Wenning 2004, 29– 31.
- 3 Meyer 1925, 7; Hengel 1969, 61; Kuhnen 2004, Foreword VII.; Wenning 2004, esp. 31–35. 39–41. On the presence of the Greeks and Greek cultural heritage in the Levant from the 6th century BC onwards: Kaiser 2003, 93–96; The presence of Greek pottery is not, however, a definite indication of the presence of Greeks: Wenning 2004, 36.
- 4 Shatzman 1991, 37; similarly also Aharoni 1979, 6.
- 5 Schäfer 2010, 1; Kuhnen 1990, 19 (Colony foundations and settlements of veterans), 32; Kuhnen 1987, 74; Hengel 1969, 5, 108 f.; Meyer 1925, 16 (Foundations of cities). In general, about the evidence from the time of the Alexander

campaign: Kuhnen 1990, 32; Kuhnen 2004, 3–5. 8. 24–26. See also Gilhaus 2017.

- 6 Stern 1995a, 231; Kuhnen 2004, 2.
- 7 Stern 1995a, 231; Kuhnen 2004, 2.
- 8 Hengel 1969, 8; Kuhnen 2004, 2.
- 9 Momigliano 1979, 103.
- 10 Kuhnen 2004, 2.
- 11 Hengel 1969, 8–14; The so-called Zenon papyri from Fayum provide an interesting insight into the time of Ptolemy II Philadelphus. Zenon, the διοικητής (financial administrator) of the Ptolemaic ruler, travelled to Transjordan among other places, for inspection: Kuhnen 1990, 33.

Megas at Panium in 200 BC¹². After the new ruler had taken Abila and Pella without difficulty, he was forced to besiege Gadara¹³—described by Polybius as the most strongly fortified city¹⁴ in the region¹⁵. Under Antiochus IV Epiphanes the first acts of resistance on the part of the Jews¹⁶ against the Hellenization measures he imposed took place¹⁷. Not only did he want to fill the position of high priest with his own candidate, but in 167 BC he also announced the end of the temple cult in Jerusalem¹⁸. The uprising was led by the Maccabees, who even-

1.2. The Roman Period

The conquest of the Levant in 64–63 BC by Pompey the Great, who forcibly ended the disputes between the last Hasmonean rulers and the emboldened Herodian family, is widely regarded as the beginning of the Roman period²³. Initially, northern Jordan belonged to the area of responsibility of the Roman governor of Syria²⁴. In the course of the reconstruction measures, Gadara was also rebuilt²⁵ and began minting its own coins²⁶. The gratitude of the Gadarenes was reflected as late as the second century AD in coinage, by the inscription $\PiO(\mu\pi t \omega v) \Gamma A \Delta A P E \Omega N^{27}$.

Sources provide us with ample information about the events that followed. Flavius Josephus, in his two great works *Bellum Iudaicum* and *Antiquitates*

- 12 Kuhnen 2004, 2; Lewin 2004, 11; On the end of the socalled 5th Syrian War and the conditions under Antiochos III Megas: Jos. Ant. Jud. 12.
- 13 Jos. Ant. Jud.1, 5, 2.
- 14 Pol. 5, 71, 3.
- 15 Jos. Ant. Jud. 1, 5, 2.
- 16 Lewin 2004, 11.
- Meißner 2007, 65; Schäfer 2010, esp. 42–52; esp. 2. Macc.
 4, 10, 13.
- 18 Lewin 2004, 12; 1. Macc. 37, 39, 54–57; Dan. 11, 31.
- 19 Lewin 2004, 12; Jos. Ant. Jud. 11, 111; 12, 1.
- 20 Lewin 2004, 12.
- 21 Jos. Bell. Jud. 1, 4, 2.
- 22 Jos. Ant. Jud. 12, 3, 3; 13, 13, 3; 13, 15, 4.
- 23 Kasher 1990, 171; Kuhnen 1990, 124; Chancey Porter 2001, 164; El-Khouri 2009, 20; The liberation by Pompey was honoured by the following cities of the region by adopting the Pompeian era: Hippos, Gadara, Abila, Kanatha, Skythopolis, Pella, Dion and Gerasa: Kasher 1990, 175.

tually gained political independence in 129 BC and founded the dynasty of the Hasmoneans, named after their progenitor Asmoneus (the Hellenised form of his name)¹⁹. At first, their realm was concentrated only around Jerusalem, but under Alexander Jannaeus it extended from the coastal regions to beyond the Jordan River²⁰. In the course of his conquests, the cities of the Decapolis and their inhabitants suffered considerable harm²¹. Gadara fell around 100 BC after a siege lasting ten months, and was integrated into the Jewish state²².

Iudaicae, gives a particularly detailed account of the period between Pompey and the first Jewish Revolt during the reigns of Nero and Vespasian²⁸. After the turmoil that followed Pompey's conquest, which was mainly characterised by the internal power struggles of the remaining Hasmoneans, Herod was finally appointed King of the Jews in 37 BC by the Roman Senate and confirmed by Augustus²⁹. Herod's realm now also encompassed Gadara³⁰ and Tall Zirā'a. He pushed back the invading Persians and had the last Hasmonean king, Antigonus, executed³¹. As *rex socius et amicus populi Romani*, Herod was an official ally of the Romans³² and follower of Augustus, from whom he received further territories after the battle of Actium in 31 BC³³. Herod expanded his kingdom

- 24 Kenkel 2012, 15.
- 25 Jos. Bell. Jud. 1, 7, 7.
- 26 Weber 2002, 68; Wenning 1994, 7 f.
- 27 Weber 2002, 68.
- 28 Kuhnen 1990, 125.
- 29 Jos. Ant. Jud. 1, 20, 1; Japp 2000, 6.
- 30 Hoffmann 2002, 102.
- 31 Kuhnen 1990, 117; Lewin 2004, 13; Under the reign of the Hasmonean John Hyrcanus II, the actual ruler was Antipater, who was appointed procurator (επιτρόπος) of Judea and, through his good relations with Rome, was also able to make his sons Phasael and Herod governors of Jerusalem and Galilee. After the poisoning of Antipater in 43 BC and Herod's flight from the Parthians to Rome, the latter was eventually sent back as the new ruler: Kuhnen 1990, 116.
- 32 Lewin 2004, 13.
- Jos. Ant. Jud.15, 7, 3; 15, 10, 3; Jos. Bell. Jud. 1, 20, 5; 1, 20, 4; Kuhnen 1990, 117.

considerably and until his death in 4 BC ruled over Galilee, Samaria, Judaea, Edom, Perea, the Golan, Trachonitis, Auranitis, Batanaea and the north and north-east shores of the Sea of Galilee, as well as the cities of Caesarea, Samareia-Sabastiva, Apollonia, Jaffa, Yabnə'el, Ashdod, Gaza, Hippos, Gadara and their surrounding areas³⁴. After his death, with the approval of Augustus, his sons Herod Archelaus (Judea, Edom and Samaria-although he did not receive the title of king but only the rank of ethnarch), Herod Antipas (Galilee and Perea) and Herod Philip (Batanea, Trachonitis, Auranitis and the Golan) inherited the former Herodian realm³⁵. However, the territories gradually fell back under Roman administration-beginning with the exile of Archelaus in 6 AD and the establishment of the province of Judea³⁶. Gadara (like Hippos and Gaza) was now under the control of the Syrian governor³⁷ and expanded in the first century AD, which indicates that the region was flourishing at this point³⁸. Eventually, however, the Jewish population showed increasing displeasure with Roman rule, and this culminated in the First Jewish Revolt, in 66 AD, during the tenure of procurator Gessius Florus³⁹. In the course of the fighting, radical groups increasingly brought the insurgency movement under their influence⁴⁰. Only the Roman army, under the command of Titus Flavius Vespasian (who was succeeded by his son in 70 AD), was able to put a stop to this uprising and brought Galilee back under Roman command as early as 67 AD—eventually destroying Jerusalem as well as the Second Temple in 70 AD and ultimately taking the last centres of resistance by 73-74 AD⁴¹. These events also had a profound effect on northern Jordan, as the Jewish population was largely displaced from the Decapolis. In order to stabilise the region, the *Legio X Fretensis* was ordered to be stationed in Jerusalem⁴².

The Jewish heartland did not participate in the so-called Kitos War (or "rebellion of the diaspora") of 115-117 AD against Roman rule, which affected large parts of Egypt, Cyrenaica, Cyprus and Mesopotamia43. However, under Hadrian, in 132 AD, local unrest culminated in the so-called Bar Kokhbar Revolt⁴⁴. This could not be completely suppressed until 135–136 AD⁴⁵. The consequences of the war were severe; not only was Judea largely destroyed and the Jewish heartland shifted to Galilee⁴⁶, but from then on Jews were forbidden to enter Jerusalem, and the Colonia Aelia Capitolina was established in its place⁴⁷. Under Antonius Pius, the situation in the newly organised province of Syria-Palestine calmed down, even if one legion each was stationed in Aqaba and Udhruh48. Gadara continued to grow over the course of the second century AD and finally reached its greatest expansion in the third century AD⁴⁹.

The historical classification of the transition from the Roman to the Byzantine period is disputed⁵⁰ and was characterised by two major events: the triumph of Christianity and the creation of the second Roman capital, Constantinople⁵¹. Archaeologically, this transition is just as difficult to grasp as previous upheavals in the region, since one must assume that it was not so much a wide-ranging change as a slow transformation. Thus, pottery, as the best dating criterion, hardly varies in technique and production⁵². The end of the Byzantine period for the region is marked by the Islamic conquest in 636 AD⁵³.

- 34 Kuhnen 1990, 117; Lewin 2004, 14.
- 35 Stern 1995a, 303; Japp 2000, 7; Lewin 2004, 17; Schäfer 2010, 122.
- 36 Kuhnen 1990, 118; Stern 1995a, 303 f., 312–314; Lewin 2004, 15–17.
- 37 Japp 2000, 7.
- 38 Weber 2002, 73.
- 39 Kuhnen 1990, 119 f.; Lewin 2004, 24.
- 40 Stern 1995a, 366; Lewin 2004, 24.
- 41 Kuhnen 1990, 120; Stern 1995a, 370–373.
- 42 Kuhnen 1990, 120.
- 43 Schäfer 2010, 172.

- 44 Kuhnen 1990, 121; Lewin 2004, 32.
- 45 Lewin 2004, 32–35; Schäfer 2010, 186–190.
- 46 Kenkel 2012, 17.
- 47 Kuhnen 1990, 121; Lewin 2004, 32; Schäfer 2010, 192.
- 48 Lewin 2004, 35 f.
- 49 Weber 2002, 79.
- 50 Peterman 1994, 427; For Constantine's accession to the throne in 324 AD as the first Christian emperor: Lewin 2004, 36; Kuhnen 1990, 124 with references to further works.
- 51 Al-Daire 1988, 14.
- 52 El-Khouri 2009, 19.
- 53 Kenkel 2012, 18; Stoll 2015, 20.

1.3. Periodisation

Archaeologically, the beginning and end of an epoch can rarely be fixed to concrete dates, as these were almost always slow processes in which economy, religion, social structures and culture gradually took on new forms⁵⁴. A sudden change in material culture is also rarely discernible⁵⁵. The periodisation of the occupational phases of Tall Zirā'a is therefore determined according to key historical data for the respective epoch (*Tab. 1.1*).

1.4. Definition of the Decapolis

The term Decapolis is frequently used in literature when referring to the region under discussion, specifically for the Hellenistic and Roman periods. More generally, the Decapolis includes some cities founded in the Hellenistic period in present-day southern Syria, Israel and northern Jordan⁵⁶. Tall Zirā'a—as part of the Chora of the city of Gadara—thus falls within the Decapolis⁵⁷.

Exactly how the Decapolis came into being can only be surmised⁵⁸. Its foundation is sometimes associated with the conquest of the area by Pompey in 64–63 BC, but the first mention of the term does not appear in the sources until 100 years later⁵⁹. These earliest mentions of the Decapolis are found in the Gospel of Mark, from around 70 AD and in the Gospel of Matthew, from around 90 AD, although the use of the term remains vague⁶⁰. Flavius Josephus mentioned the Decapolis in connection with the First

- 54 Peterman 1994, 427; Al-Daire appropriately comments on this 1988, 12: "It is well attested that the way of life with its cultural, economical and political variables cannot be changed in a day or a year, but the historical events in a definite period lead to consider a date for the transitional and intermediate periods."
- 55 Kuhnen 1990, 125; Peterman 1994, 427.
- 56 Lichtenberger 2003, 1.
- 57 At a distance of just under 5 km, Gadara is the closest town to Tall Zirā'a, which also has a direct line of sight to the tall. On the Chora of the town of Gadara: Weber 2002, 28–31. However, the southern and eastern boundaries cannot be determined with certainty: Weber 2002, 31.
- 58 On a pre-Augustan conceptualisation: Lichtenberger 2003, 20.
- 59 Wenning 1994, 7; El-Khouri 2009, 21; Isaac 1981, 71. According to R. Wenning, two periods for its foundation

Hellenism	336 BC - 64 BC
Ptolemies	301 BC – 198 BC
Seleucids	198 BC – 64 BC
Hasmoneans	167 BC - 64 BC
Roman Period	64 BC – 324 AD
Early Roman	64 BC – 135 AD
Late Roman	135 AD – 284 AD

Tab. 1.1 Overview of the eras covered in this volume.

Jewish-Roman War, which broke out in 66–67 AD, and he described Scythopolis as the largest city in the region⁶¹. Pliny the Elder was the first to mention the cities of the Decapolis by name in his De naturalis historia, completed before 79 AD: Damascus, Philadelphia, Raphana (Abila?)⁶², Scythopolis, Gadara, Hippos, Dion, Pella, Gerasa and Canatha, although he also acknowledged lists that named other cities⁶³. The same cities (except Raphana) were also mentioned by Ptolemy in the second century AD, but he identified other associated settlements as well⁶⁴. An inscription from et-Taivibe from the middle of the second century AD was the first to name Abila as belonging to the Decapolis, while an inscription from Rome, also from the mid-second century AD, listed Gadara again⁶⁵. In the sixth century AD, Stephanus of Byzantium was aware of a total of 14 associated cities66.

should be considered: the time between the death of Herod Agrippa I and the beginning of the regency of Herod Agrippa II, i.e. 43–53 AD, or the First Jewish-Roman War, in which it was necessary for the cities to take sides: Wenning 1994, 12.

- 60 Lichtenberger 2003, 6 f.; Mk. 5, 20; 7, 31; Mt. 4, 25.
- 61 Jos. Bell. Jud. 3, 9, 7.
- 62 Lichtenberger 2003, 19.
- 63 Plin. nat. 5, 16; Graf 2002, 4; Lichtenberger 2003, 8–10. On the identification of cities: Spijkerman 1978, 19.
- 64 Ptol. geogr. 5, 15, 22 f.; Graf 2002, 4. On the issue of the chapter title Κοίλης Συρίας Δεκαπόλεως πόλεις αίδε: Lichtenberger 2003, 12–17.
- 65 Lichtenberger 2003, 12.
- 66 Lichtenberger 2003, 19.

Most sources of the first century AD only point to the Decapolis as a geographical unit, without providing more detailed information⁶⁷. Pliny, for example, described the Decapolis as "decapolitana regio"68 and in the New Testament we find, among other things, the expression " $dva \mu \epsilon \sigma ov \tau \omega v$ όρίων Δεκαπόλεως"⁶⁹. For a more narrow characterisation of the term, two parts of an inscription found in the Thracian city of Madytos are telling; they give a fragmentary account of the career of a Roman knight⁷⁰, who around 90 AD served as prefectus or procurator of the " $\Delta \varepsilon \kappa \alpha \pi \delta \lambda \varepsilon \omega \zeta \tau \eta \zeta \dot{\varepsilon} v$ $\Sigma v \rho i \alpha$ ", whereby—at least in this period—the Decapolis must have been an administrative unit attached to the province of Syria⁷¹. After the founding of the province of Arabia in 106 AD, the term Decapolis has to be understood solely as a regional designation, because the associated cities were divided among three provinces (Gadara falls to the new province of Arabia), and therefore no longer formed any kind of administrative unit⁷². However, the name was still in use, as the inscription from et-Taiyibe from 134 AD shows⁷³.

In summary, it can be stated that the Decapolis referred to a varying number of cities whose common feature was their foundation in Hellenistic times⁷⁴ and which originally consisted—as the name suggests—of ten cities⁷⁵. Inconsistent references to these cities can be explained by changing provincial divisions and restructuring throughout history⁷⁶. The Decapolis was demonstrably an administrative unit of the province of Syria by the second half of the first century AD at the latest⁷⁷. When this unit was established, however, has not yet been fully ascertained, while an end to the administrative unity seems likely to have occurred with the founding of the province of Arabia and the subdivision of the cities of the Decapolis into different provinces⁷⁸. After 106 AD, the term, which continues to be used in the sources, can be understood as a geographical designation.

It should also be noted that the region had a significant status. Geostrategically, it seems to have acted as a kind of buffer zone between the Roman province of Syria and the Nabataean Empire⁷⁹. The major powers regarded the land as a passageway and always sought to establish their dominance over it in order to control favourable trade routes⁸⁰. These—the *via maris*, *via nova trajana*⁸¹ and the Silk Road—led to Mesopotamia, Egypt, the Mediterranean and Central Asia and made the area of great importance for the respective rulers. Tall Zirā'a was conveniently accessible from all of these routes, as it was possible to reach Damascus to the north, Baghdad to the east and Philadelphia to the south via the Wādī al-'Arab, among others⁸².

- 67 Parker 1975, 438.
- 68 Plin. Nat. 5, 16. A. Lichtenberger argues that the separate description and demarcation of the *decapolitana regio* and the tetrarchies (Plin nat. 5, 17, 77) indicates that the Decapolis does not only describe a landscape—which, according to Pliny, was not continuous—but that this was already an indication of a politico-administrative area: Lichtenberger 2003, 10.
- 69 Mk. 7, 31 ("in the midst of the Decapolis area"). It is also interesting to note that Strabo makes no mention of the Decapolis, although he mentions several of the cities belonging to it: Parker 1975, 438.
- 70 One part of the inscription has since been lost. The other part is installed as a spolia in a church, which has caused the inscription to become badly worn and partly illegible: Isaac 1981, 68 (with original wording of the inscription parts).
- 71 Isaac 1981, 67, 70 f.; Wenning 1994, 7. 11–13; Lichtenberger 2003, 11.

- 72 Isaac 1981, 74; Lichtenberger 2003, 20.
- 73 Lichtenberger 2003, 12: A. Lichtenberger also suggests that the term should now be used as a historical title of honour.
- 74 On other similarities and differences: Wenning 1994, 12– 15; also Graf 2002, 4.
- 75 Plin. nat. 5, 16.
- 76 Wenning 1994, 11. For a brief overview of the provincial reorganisations: Isaac 1981, 71.
- 77 Isaac 1981, 74; Wenning 1994, 1. 7; Lichtenberger 2003, 19.
- 78 Lichtenberger proposes using the term as an administrative unit from Pompey to the founding of the province of Arabia: Lichtenberger 2003, 20.
- 79 Kenkel 2012, 16.
- 80 Aharoni 1979, 6.
- 81 Graf 2002, 5.
- 82 Vieweger Häser 2009, 3.

2. Stratum 8: Hellenistic Period

2.1. General Information

At Tall Zirā'a, the Hellenistic period can be identified in Stratum 8. Architectural remains are found primarily in Area II, predominantly in Squares AV– AS 126–134. The northern section contains isolated features to which, with the exception of a wall (Complex A Room 2), no architectural elements can be assigned, but several tabuns and remains of floors indicate a more extensive complex. In the south-west of the area, the corresponding features have not yet been reached by the current stage of excavation, therefore, hardly any statements can be made about this part.

Altogether, four complexes (A–D) can be identified within the stratum (*Fig. 2.1a*): Complex A (red) denotes the area outside the enclosing wall (Complex B: purple) and is characterised by several accumulations of tabuns and fragments of floor, whereas Complexes C and D (yellow and green) contain domestic buildings and the corresponding entrance area of the settlement (*Fig. 2.2*).

Large-scale disturbances meant the walls in Area II are preserved in a fragmented state (*Fig. 2.1b*).

The upper brickwork can be found in a few places, as well as entrance areas, of which two could be detected. Foundations are mostly of double-faced walls with a rubble core.

In Area I, apart from a wall, only isolated fill layers and pits were found (*Fig. 2.3*). Further features are not to be expected here, as the excavation has already progressed down to the Early Bronze Age. It appears that the area remained almost undeveloped, which is confirmed also by the foundation of the Early Roman buildings directly on top of those of the Iron Age. The fill layers mentioned must be regarded as occupation or backfill layers, which were dated according to the material finds and their location directly under the Roman buildings.

For Stratum 8, it is not possible to prove a clear reconstruction phase (superimposed floors, repairs, refurbishments); a possible repair in Complex B and D is too unclear to postulate a single construction phase.



Fig. 2.1a Stratum 8, Area II, with find numbers and colour-coded complexes (Source: BAI/GPIA).



Fig. 2.1b Stratum 8, Area II, with overlying disturbances (Source: BAI/GPIA).



Fig. 2.2 Stratum 8, Area II, aerial view of the state of excavation in 2011 with the complexes marked in colour (B violet, C yellow and D green) (Source: BAI/GPIA).

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Fig. 2.3 Stratum 8, Area I, with context numbers (Source: BAI/GPIA).

2.2. Complexes Stratum 8

2.2.1. Complex A: Outer Settlement



Fig. 2.4 Complex A, Stratum 8, traces of habitation outside the fortified settlement (Source: BAI/GPIA).

Complex A lies to the north, outside the settlement wall (Complex B) in Squares AW–AY 127–132 (*Fig. 2.4*). The complex consists of several accumulations of tabuns extending over these squares. In what was once probably a more extensively built-up area, wall 11172 in Square AY 129 was the only wall identified. Other architectural remains seem to have been obscured by the foundations from the overlying strata.

Complex A 1 refers to the features in Squares AX/ AY 128/129 to the west of the only wall (11172) belonging to the complex. Here a stone enclosure (with reused quern) of tabun 11416 (diameter 0.90 m) (*Fig. 2.5*) was visible together with a partially preserved cladding of fired clay. Nearby, in Square AX 129, a roughly round ash pit 11214 was discovered, probably belonging to a hearth or another tabun. No remains of floors could be distinguished. **Complex A 2** lies to the east of Square AY 129 and is bounded by wall 11172 and floor 11351. The wall is aligned southeast-northwest like other stonework in the stratum (*Fig. 2.6*). It consists of two courses of roughly hewn limestone blocks. Both in the north and south it is intersected by later buildings from Strata 4 and 3. Fill layer 11351¹, in the north of Square AY 129 (east and west of wall 11172), contained a fish plate and a complete cooking pot (TZ 101524-006) found still *in situ*² (*Fig. 2.7*), dating from the second to first century BC, which is why—at least to the east of the wall—a floor level can be assumed.

- 1 The soil west and east of wall 11172 was given this number, therefore, both the floor and the soil have the same designation. A separation of the finds has taken place.
- 2 Vessel TZ 101524-006 was reconstructed by Naif Zaban of the ACC and is exhibited in the GPIA Amman for teaching purposes.



Fig. 2.5 Complex A 1, Stratum 8, Square AY 128: remains of the stone and clay wall of tabun 11416 with built-in quern (arrow); 11416 intersects the Iron Age tabun to the east (Source: BAI/GPIA).

Fig. 2.6 Complex A 1 / Complex A 2, Stratum 8, Square AY 129: wall 11172; view to the east (Source: BAI/GPIA).

Fig. 2.7 Complex A 2, Stratum 8, Square AY 129: cooking pot TZ 101524-006, from the second-first century BC, *in situ* on clay floor 11351 in a spandrel between the disturbances of Strata 4 and 3 (Source: BAI/GPIA).



Fig. 2.8 Complex A 3; Stratum 8; Square AW 127/128; Tabun 10768/10803 with visible stone enclosure and clay cladding inside (Source: BAI/GPIA).

Complex A 3 lies in Squares AW 127/128, on the boundaries of which the closely spaced tabuns 10768/10803 (diameter *c*. 1.10 m) and 10085 (diameter *c*. 1.00 m) were found. A partial clay cladding (*Fig. 2.8*) was still preserved in both; the outer wall of the former still contained a jar/jug that could be classified as Hellenistic-Roman and a rudimentary stone enclosure was visible, while in the latter there were only a few remains of clay. Traces of white ash, in the form of loose sediment, testified to the use of both tabuns.

To the west of these installations were the remains of a solid pisé floor 10778 and another tabun 10788 (diameter c. 0.50 m). A sherd of a Hellenistic-Roman amphora was found in its outer shell. To the south-east of the tabun, pit 10742 was identified, which contained bones of sheep or goat (9), goat (1), cattle (1), domestic fowl (1), domestic pig (1) and fallow deer (1), as well as an oil lamp that could be classified as Hellenistic. Due to its location and contents, the pit is interpreted as a waste pit. In the north-west of Square AW 127, cooking site 11106 (Fig. 2.9) was uncovered with an almost intact late Hellenistic/Early Roman cooking pot TZ 101236-0013. A soil sample taken from the vessel contained a piece of undefined grain husk (gluma) and a grain of common wheat $(triticum a estivum)^4$. A thin ash layer 11385 (diameter c. 0.70 m) with

- 3 Vessel TZ 101236-001 was reconstructed by Naif Zaban of the ACC and is exhibited in the GPIA Amman for teaching purposes.
- 4 Olsvig-Whittaker 2017, 211 Tab. 3.1.



Fig. 2.9 Complex A 3, Stratum 8, Square AW 127: cooking site with Late Hellenistic-Early Roman cooking pot TZ 101236-001 *in situ*; burn marks on the cooking pot still clearly visible (Source: BAI/GPIA).





several burnt clay fragments found to the south of Square AW 129 could indicate another fragmentary tabun. The surrounding soil 11177 and 11178 contained Hellenistic-Roman pottery, glass and bones of sheep (4), cattle (5), sheep or goat (39) and domestic fowl (2).

Complex A 4 denotes the isolated, seemingly oval tabun 11089/11123 (diameter c. 0.70 m x 0.50 m) in the south-east part of AW 132 together with the adjacent fire place (same context number). The stone and clay cladding were still partially preserved and interspersed with ash and some charred seashell remains on the inside.

In addition to the features that clearly belonged to this phase of occupation, fill and collapse layers were found, which for the most part probably indicated the phase of abandonment or destruction of the settlement. In Squares AX/AY 128–130 (Complexes A 1 and A 2), more than 300 finds were retrieved in fill layers 10329, 10366⁵ and 10446. The vast majority of pottery types were amphorae (> 50) and cooking pots (> 30). Characteristic pottery types of the Hellenistic period were also found: fish plates (4), Echinus bowls (6) and Rhodian amphorae (3).

In several places within Squares AY/AX 129, layers of loose stone collapse (10289, 10330, 11216 and 11280) were also found, which can be interpreted as the collapse layers of the building recognisa-

ble in A 1 and A 2 (*Fig. 2.10*) and point to a formerly larger ground plan.

In the area around tabuns 10768/10803, 10085, 10788, 11385 and cooking site 11106 (Complex A 3), numerous finds were also discovered within fill layers 11102, 11081, 11277, 11295, 10758, 11079, 11092, 10740, 11080, 10839, 11084, 11093, 10014, 11477, 11331, 11476, 11023, 10795, 10876 and 10874, but these were heavily intermixed with the overlying layers, which is why the find material dates from the third century BC to the fourth century AD. Finds worth mentioning include three Hasmonean coins TZ 111245-001 from Context 10740 (Pl. 10.3), TZ 111278-001 from Context 10795 (Pl. 10.4) and TZ 112683-001 from Context 11277 (Pl. 12.2) which, thanks to measurement, can be attributed to the Hellenistic stratum, as well as a weaver's shuttle TZ 112242-001 (Fig. 2.68), a small part of a bronze mirror TZ 112182-001 (Fig. 6.17) and a latch-lifter key TZ 111382-001 (Fig. 6.18).

Fill layers 11087, 10611, 11128, 11134 and 11376 located in the Squares AW/AX 131/132 are to be regarded as fill layers around tabun 11089/11123 (Complex A 4). The many disturbances in the entire northern section of Area II, caused by the walls of Stratum 7 and Strata 4 and 3, also led to a strong mixture of finds, which are difficult to classify in this section—also due to the lack of walls—and can only be evaluated subject to reservations.

Complex A was located outside the settlement structure bounded by Complex B. The main evidence of habitational activity here is provided by tabuns and fire places concentrated in three sections

⁵ The find 10476 (see *Fig. 2.1a*) made within the fill layer was initially identified as Islamic Pottery and therefore numbered separately, but it later turned out to be Bronze Age pottery.

(A 1/A 2, A 3 and A 4). The size of the tabuns varied between approximately 0.50 m and 1.10 m, and the larger examples 11416 and 10768/10803 (diameter 0.90 m and 1.10 m) had an additional stone enclosure. The only clearly identifiable building structure can be seen in the wall of a room in Complex A 2 with an adjoining floor 11351 and a vessel resting on the floor. An interpretation of the collapse in AX 129 as a continuation of the house structure is possible, but very speculative. It seems likely that in all three parts of Complex A at least simple residential buildings (probably made of perishable material) existed, as the complete lack of structures can hardly be explained otherwise. Accordingly, it could be posited that there were several domestic structures to the north of Complex B, which, judging by Complex A 1/A 2, extended to the edge of the tall. Likewise, it seems that, like Complex C, the structures were built very close to, if not adjacent to, Complex B (Complexes A 3, A 4).

The construction of houses outside the fortified settlement complex suggests the following: it seems reasonable to assume that the settlement area within the secure walls was fully occupied, so that it was necessary to move to the outer area. This would mean that the settlement was flourishing, which is also supported by the large number of finds.

Context	Square	Description/Interpretation	Complex	Arte	Artefacts	
				Pottery	Other	
(10014)	AW 128	Fill layer	A 3	√	\checkmark	~
10085	AW 128	Tabun	A 3	√	_	~
10289	AY 129	Collapse	A 1	\$\lambda\$	-	1
10329	AX 129	Fill layer	A 1	\checkmark	1	1
10330	AY 129	Collapse	A 1	-	-	-
(10366)	AX 130	Fill layer	A 2	√	_	1
10446	AY 129	Fill layer	A 1	\checkmark	_	-
(10476)	AY 130	Find	A 2	\$\lambda\$	-	-
(10611)	AW 132	Fill layer	A 4	√	1	1
(10740)	AW 127	Fill layer	A 3	√	1	1
10742	AW 127	Pit	A 3	~	-	~
(10758)	AW 127	Fill layer	A 3	~	\checkmark	~
10768	AW 127	Tabun	A 3	√	_	-
10778	AW 127	Floor	A 3	-	_	-
10788	AW 127	Tabun	A 3	√	_	-
10795	AW 126	Fill layer	A 3	~	\checkmark	-
10803	AW 127	Tabun fill	A 3	_	_	-
(10839)	AV 127	Fill layer	A 3	 ✓ 	\checkmark	-
10874	AV 126	Fill layer	A 3	1	\checkmark	~
10876	AV 126	Fill layer	A 3	~	\checkmark	~
11023	AV 127	Collapse	A 3	~	\checkmark	~
11079	AW 127	Fill layer	A 3	 ✓ 	_	~
11080	AV 127	Fill layer	A 3	-	_	-
11081	AW 127	Fill layer	A 3	~	\checkmark	-
11084	AV 127	Fill layer	A 3	~	\checkmark	~
(11087)	AW 132	Fill layer	A 4	~	_	~
11089	AW 132	Tabun	A 4	~	\checkmark	~
11092	AW 127	Fill layer	A 3	1	_	1

11093	AV 127	Fill layer	A 3	-	-	-
11102	AW 127	Fill layer	A 3	\checkmark	\checkmark	-
11106	AW 127	Cooling place	A 3	\checkmark	\checkmark	\checkmark
11123	AW 132	Tabun fill	A 4	\checkmark	\checkmark	\checkmark
11128	AW 132	Fill layer	A 4	\checkmark	_	\checkmark
(11134)	AV 132	Fill layer	A 4	\checkmark	\checkmark	\checkmark
11172	AY 129	Wall	A 1 / A 2	-	-	-
11177	AW 129	Fill layer	A 3	\checkmark	\checkmark	\checkmark
11178	AW 129	Fill layer	A 3	\checkmark	_	\checkmark
11214	AX 129	Fire place	A 1	-	-	-
11216	AX 129	Collapse	A 1	\checkmark	\checkmark	\checkmark
11277	AW 128	Fill layer	A 3	-	\checkmark	\checkmark
11280	AX 129	Collapse	A 1	-	-	\checkmark
11295	AW 128	Fill layer	A 3	\checkmark	\checkmark	\checkmark
11331	AV 128	Fill layer	A 3	\checkmark	\checkmark	\checkmark
11351	AY 129	Floor/Fill layer	A 2	\checkmark	-	\checkmark
11376	AX 132	Fill layer	A 4	\checkmark	\checkmark	\checkmark
11385	AW 129	Tabun	A 3	_	_	_
11476	AV 128	Fill layer	A 3	_	_	_
11477	AV 128	Fill layer	A 4	_	-	_

Tab. 2.1 Contexts within Complex A; Stratum 8.

2.2.2. Complex B: Enclosing Wall



Fig. 2.11 Complex B, Stratum 8, outer wall (Source: BAI/GPIA).

Complex B designates the outer wall of the Hellenistic settlement, which extended approximately 35 m, from AU/AV 126 to AV 132 in a north-easterly direction (*Fig. 2.11*). The wall had an average width of 2.50 m along its entire length and was a double-faced wall with a rubble core, in which the outer faces on both sides consisted of a course of medium-sized fieldstones and the space in between were filled with smaller stones (*Fig. 2.12*).

In Square AU/AV 126, the wall still stood about 0.60–0.80 m high, but the base was not reached anywhere (*Fig. 2.13*). The overlying strata caused damage in several places and cut through the full width of the wall (*Fig. 2.14*). Complex B was part



Fig. 2.12 Complex B, Stratum 8, Square AU/AV 126: double-faced wall construction (Source: BAI/GPIA).

Fig. 2.13 Complex B, Stratum 8, Square AV/AU 126: preserved height of the wall; view to the south (Source: BAI/GPIA).



Fig. 2.14 Complex B, Stratum 8, individual wall sections (Source: BAI/GPIA).



Fig. 2.15 Complex B, Stratum 8, Square AU 127: row of ashlars placed in front of the complex (Source: BAI/GPIA).

- 11134 11120 Kamplex D
- Fig. 2.16 Complex B, Stratum 8, Square AV 132: eastern end of the wall (Source: BAI/ GPIA).

of the residential development (Complex C) and formed the northern end of the adjoining rooms. In AU 127, the wall appears to have been strengthened on the south side. Here, a new (supporting?) wall of worked ashlars 11273 and 11274 was built within Room C 3 (*Fig. 2.15*).

The continuation of the wall beyond Area II is unclear. To the east, it terminated on the area boundary at the level of the end of Complex D (*Fig. 2.16*). The two fill layers 10651 and 11282 to the east of the end of the wall were completely free of stones and consisted of loose soil with only a few finds. The limited finds point to the Hellenistic-Roman period, although Byzantine-Islamic pottery was also found. To the west, the wall ran into the western baulk of the excavation trench. However, since it did not reemerge in Area I (the unexcavated space between Area I and II is 10 m wide) and no other traces of a similar wall were found in Area I, it is assumed that

6 Rassmann - Reiter 2017, 193-196.

it turned somewhere in the unexcavated area and continued to the south. Geomagnetic investigations in this area did not yield any further results⁶.

Altogether, the finds from wall segments 10836, 11071, 11005, 11186, 10084, 10076, 10458, 10464, 10392, 10481, 11120 and 10587 were quite sparse. As the wall has not yet been dismantled, there have been no finds from it so far. Those from wall feature 11005 originated from the uppermost layer, which was still partly mixed with the overlying fill layers and came from areas that were impacted by later disturbances, which was reflected in the find composition (including Roman cooking pots, Byzantine cooking bowls and a mortarium). Features 11128 and 11134 (thin layers of soil on wall sections 11120 and 10587) are interpreted as fill layers, even if the archaeological finds date to the Hellenistic-Roman period. The same applies to fill layer 10485, in which there were no finds.

An affiliation between Complex B and tower 4062/4017 in Area I (Square AT 122/123) cannot



Fig. 2.17 Complex B, Stratum 8: location of tower 4062/4017 in Area I and Complex B, Area II (Source: BAI/GPIA).

be identified with certainty (*Fig. 2.17*). The massive foundation of the tower became visible directly below the modern ground surface and so far reaches down 3.50 m, into the Late Bronze Age layers, but it was not possible to verify where the foundation terminated. No structures connecting to the tower have yet been identified, but there may be some outside the excavation area.

However, it appears that the tower foundation intersects a Roman wall of Stratum 6. Tower structures associated with fortified settlements are quite common in the Hellenistic period. Numerous examples from the Greek sphere of influence are known, the composition of which can vary greatly: zigzag or linear walls with integrated or attached towers of round and/or angular shape⁷. Generally, the city plan have a relatively clear shape, i.e., the layouts are either rectangular, square and sometimes even round⁸. When looking at the remaining traces on Tall Zirā'a, a straight wall can be seen, which does not run directly into the tower, but rather runs past it. A connection between the outer wall and the massive tower would require a very individual and unusual course of the wall or a tower with a much larger base, which would be disproportionate to the size of the

wall (both cannot be entirely ruled out, of course). The question of the further trajectory of Complex B remains open. Since no traces of Hellenistic architecture have come to light in Area I, except for wall 6111, its extension beyond Area II to the west can be ruled out, which would mean that the tower lay outside the fortification. On the other hand, it was preserved to such a height that it would still have been visible in Roman times and would either have been incorporated into the newly built structures or at least functioned as a source of building material, as attested, for instance, at Dēr al-Arba 'īn⁹.

Neither appears to be the case here. The ceramic material from an illegal excavation pit (*Fig. 2.18*)

- Round tower: Kuhnen 1990, Fig. 2 (Samareia-Sabasţiya); square towers: Kuhnen 1990, Fig. 2.3 (Dōra); Wright 2002, Ill.12. (Tall al-Balāţa); Lapp 1981, Fig. 25 (Tall al-Fūl); Thiel 2007, esp. 127–136, Kuhnen 1990, Fig. 2.4 (angular: Marisa); Mitchel 1992, Fig. 2.3 (Hisbān); Getzov 2006, 153 (Philoteria); Thiel 2007, 64 (Dēr al-Arbaʿīn westerly Tall al-Fuḥħār).
- 8 Circular city layout: Wright 2002, III.1. (Tall al-Balāța).
- 9 Thiel 2007, 64.

at the foot of the tower (extracted from between the inner stones) was classified as Iron Age to Byzantine, but due to the circumstances it can only be included in the evaluation with reservations.

Based to current research, Tall Zirā'a appears to be a Hellenistic fortification without towers¹⁰. Similar excavation results from the same period were also found elsewhere. During the excavations in 2005 and 2006 on Tall 'Ammatā (48 km south of Tall Zirā'a) in the central Jordan Valley, a radical change in the occupation layer is revealed in Stratum IV. A wall with deep foundations of large stones was found, running north-south, and there was a base for an adjoining wall in a west-east direction. It seems to have been part of a larger enclosure wall. A thin layer of clay bricks was found on the foundation, but only in fragments. At one point, a thinner wall of medium-sized stones was attached to the outer wall, which showed remnants of plaster. The pottery material corresponds to the previous Strata 10 and 9, which can be considered Late Late Iron Age and Persian. Cooking pots, bowls and plates of the sixth to fourth century BC as well as Attic fine ware with black and red coating are new types in the inventory. A precise dating is not undertaken here. Since the typical Hellenistic fish plates and amphorae featuring "out-foleg" and "slightly everted rims"¹¹ are missing, the finds are older than those of Tall Zirā'a. Another example is provided by the Late Hellenistic features at Tulul ad-Dahab (about 50 km from Tall Zirā'a), whose two opposite talls exhibit a fort and a fortified residential settlement. While the fort on the western of the two hills was equipped with a strong perimeter wall and several rectangular towers, the eastern tall shows an extensive perimeter wall without towers¹².



Fig. 2.18 Tower in Area I, Square AT 123: the hole from an illegal excavation in 2013 can be seen on the left (Source: BAI/GPIA).

As on Tall 'Ammata, the limited amount of collapse at Tall Zirā'a (10093, 11406, 10480, 10482) is surprising, as one would expect there to be much more extensive on a fortress wall of this size. The possibility of its reuse as building material in more recent settlements must be taken into consideration, as well as a clay wall construction, which is also attested at Tall 'Ammatā. Thin clay layers above Complex B (clearly visible on 10076) were detected, but on such a small scale that it is hardly possible to speak of a clay wall with any certainty. Other examples from Tēl Ānāfā and Philoteras, where clay walls were also found, led R. Arav to conclude that not every city had the financial means to procure stone for a stone wall in accordance with the new Hellenistic customs, and therefore resorted to the local and traditional construction method of stone foundations and a clay superstructure¹³. This could also apply to Tall Zirā'a.

- 10 For the latest excavations from 2018 and 2019 see K. Schmidt 2022.
- 11 Petit 2009, 46.
- 12 Mittmann 1987, 58–60.
- 13 Arav 1989, 151.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
10076	AV 129	Wall	В	-	_	-
10084	AV 129	Wall	В	-	_	-
10093	AV 129	Collapse	В	-	_	-
10392	AV 131	Wall	В	-	_	-
10458	AV 130	Wall	В	-	_	-
10464	AV 130	Wall	В	-	_	-
10480	AV 131	Collapse	В	-	_	-
10481	AV 131	Wall	B / C 12	-	_	-
10482	AV 130	Fill layer	В	-	_	-
10485	AV 130	Fill layer	B / C 8	-	_	-
10587	AV 132	Wall	В	-	~	-
(10651)	AV 133	Fill layer	B/D	~	\checkmark	-
10836	AV 126	Wall	В	1	_	-
11005	AU 127	Wall	В	1	~	1
11071	AU 126	Wall	B / C 1	1	-	-
11120	AV 132	Wall	В	-	_	-
11128	AV 132	Fill layer	В	1	_	1
(11134)	AV 132	Fill layer	В	1	\checkmark	1
11186	AV 128	Wall	B / C 5	-	\checkmark	-
11245	AV 133	Fill layer	B / D 1	1	~	1
11282	AV 133	Fill layer	B/D	~	\checkmark	
11406	AV 130	Collapse	B / C 8 / C 12	-	_	-

Tab. 2.2 Contexts within Complex B, Stratum 8.



2.2.3. Complex C: Residential Development

Fig. 2.19 Complex C, Stratum 8, residential development (Source: BAI/GPIA).

Complex C extends over Squares AU–AR 126–133 (*Fig. 2.19*). It consisted of several residential structures which adjoined the outer wall of the settlement (Complex B) almost perpendicularly and were oriented north to south. Fourteen rooms could be clearly defined, as well as several tabuns and fireplaces. The majority of the walls and wall connections were disturbed by Strata 5 to 3. By the end of the excavation in 2011, it had generally been possible to reach the uppermost layers of the preserved foundations or to expose some of the upper masonry. Thus, only a small proportion of the finds came directly from walls or rooms, and the majority came from fill layers.

Room Complex C 1 describes the area in AU–AS 126 that is bounded by walls 11071 to the north (Complex B), 11272/11222 to the east and an unnumbered wall to the south. Given the dimensions of other rooms of the residential complex, this space most likely represented two rooms, particularly since the central area—where a dividing wall can be assumed—was badly disturbed (AT 126) by buildings in Stratum 4. In the northern part of the room were fill layers 11015, 11244 and 11352,

which can be interpreted as layers of backfill and collapse.

Among the 191 finds, the accumulation of metal objects is particularly striking: seven nails, a handle TZ 111652-005, three hooks (TZ 112194-001 among others), a shaft, a piece of metal sheet and two knife blades (TZ 112206-001 and 112205-001) as well as a Ptolemaic coin TZ 112168-001 (*Pl. 11.5*). Among the pottery finds were fish plates, an Echinus bowl, a kantharos handle unique to the Tall Zirā'a (TZ 101533-028) (*Fig. 2.20*) and some glass fragments.

A total of eight pottery items have been assigned to the Roman to Umayyad period, but can be attributed to disturbances on and around the site. Most of the pottery certainly dates to the Hellenistic or Hellenistic to Early Roman period. In the southern part of the room, individual stones 11309 were found, representing a layer of collapse.

A corner of **Room Complex C 2** was still preserved in Square AS 126 (*Fig. 2.21*), consisting of wall 11222 to the east and the unnumbered room-dividing wall to the north, which separated Rooms C 1/C 2 on an east-west axis. This area has not yet been completely excavated, which is why

Fig. 2.20 Complex C 1, Stratum 8, Square AU 126. Finds: No. 1: handle TZ 111652-005, No. 2: knife blade TZ 112206-001, No. 3: kantharos handle TZ 101533-028, No. 4: hook TZ 112194-001, No. 5: knife blade TZ 112205-001 (Source: BAI/GPIA).





Fig. 2.21 Complexes C 1, C 2 and C 4, Stratum 8, Square AS 126 (Source: BAI/GPIA).

only the topmost preserved layer of the walls has been exposed so far. Accordingly, no floors or associated fill layers have yet been recorded. In this room there was also a layer of collapse, represented by feature 11283.

Room Complex C 3 is located in Square AU 126–128 (*Fig. 2.22*). The room is formed by walls 11273/11274 to the north, 11474 to the east, 11472 and 11363 to the south, and the northern section of 11272 to the west, and measures 6.0 m x 2.15–2.80 m. Walls 11273/11274, aligned east-west, consisted of large carved blocks (0.30 m–0.60 m) placed in a single row, were the only addition of this type to Complex B. The wall was bonded with

walls 11272 and 11474 at its west and east ends, so that it can be assumed that they were erected at the same time. The remaining walls were double-faced walls with a rubble core, with 11474 to the east being much wider. The room probably had an opening to the south since there had been no disturbances in this area and 11363 terminates along a straight line.

In the south-east of the interior, there were remains of a calcareous clay floor 11285 (*Fig. 2.23*). It produced some late finds, which, however, are likely to have been deposited here during constructions of Stratum 5. Fill layer 11353 formed the backfill layer of the room, which, in addition to a fish plate, a jug, a mortar and a Hellenistic coin



Fig. 2.22 Complex C 3 and C 4, Stratum 8, Square AU 127 (Source: BAI/GPIA).



Fig. 2.23 Complex C 3, Stratum 8, Square AU 127: floor remains 11285 (Source: BAI/GPIA).



Fig. 2.24 Complex C 3, Stratum 8, Square AU 127: unnumbered collapse (Source: BAI/GPIA).



Fig. 2.25 Complex C 4, Stratum 8, Square AU 128: eastern room wall 11063/11458 and entrance area (Source: BAI/ GPIA).



Fig. 2.26 Complex C 4/C 6, Stratum 8, Square AU 128: wall 11063/11458 in elevation (Source: BAI/GPIA).

TZ 112166-001 (*Pl. 11.4*) with the head of Helios, once again contained finds from the Roman period, which probably came into this area in the course of the infill of the room and the preparation of the site for later constructions (Stratum 7). Throughout the room, there were some unnumbered, isolated, large stones (in part clearly on the floor), which can be interpreted as the room's collapse (*Fig. 2.24*). The floor level makes it clear that the uppermost layer of the room walls exposed must represent layers of masonry above the wall foundations.

Room Complex C 4 adjoins C 3 in AT 126/127 to the south and is composed of walls 11363, 11472 to the north, 11063/11458 to the east and 11127 to the west (*Fig. 2.25*). The southern end of the room has not yet been excavated. Wall 11063/11458, like

11474 in Square AU 128, was wider than the other walls of this room. In addition, two large, flat stones with a total width of 1.00 m within the wall suggest a doorway¹⁴. Striking are three large ashlars incorporated into the southern part of the wall (see *Chap. 2.2.3.2.*), which can be attributed to the upper masonry (*Fig. 2.26*). In the north of the room, adjacent to wall 11472, was tabun 11470/11471, in which whetstone TZ 112696-001 (*Fig. 2.82*) was discovered. To the west of the tabun, a few loose stones (11367) again indicate a collapse. A small mortared area (11364) in the north-west part of the room,

14 For a comparable entrance setting in a Late Hellenistic residential house, e.g. at Scythopolis: Kuhnen 1990, Fig. 2.11.



Fig. 2.27 Complex C 3 and C 5, Stratum 8, Square AU 128: wall 11474 (Source: BAI/GPIA).

Fig. 2.28 Complex C 6, Stratum 8, Square AT 128/129: overlying disturbances (Source: BAI/GPIA).

which adjoined walls 11363 and 11272, indicated the existence of a former floor. Since it continued more than a metre to the east, it can be assumed that the room had an opening towards C 3. In the centre of the room was fill layer 11271, but due to numerous disturbances it contained finds from the Hellenistic to the Byzantine periods. In addition, 11324, located to the east of wall 11222, represents a layer of collapse interspersed with several stones.

Room Complex C 5 borders Room C 3 in Square AU 128/129 to the east. It is formed by walls 11005/11186 to the north (Complex B), 10638/11454 to the east, a wall without designation to the south and wall 11474 to the west (*Fig. 2.27*). The walls were only reached in the last days of excavation, which is no digging took place here. How-

ever, it was possible to measure the room's dimensions of 5.0 m x 3.80 m.

Room Complex C 6 occupies most of Square AT 128/129 and adjoins Room C 5 to the south. The room is formed by the aforementioned walls without designation to the north, 11062 to the east, 11061 to the south and 11063/11458 to the west. The two south-eastern walls were heavily disturbed. The finds from wall 11061 must belong to a later stratum, and can probably be assigned to the overlying pit (*Fig. 2.28*). The internal fill of the room was not reached.

Room Complex C 7 adjoins C 6 to its south, in AS 128/129. Only wall 11062 indicated that another room must adjoin C 6, but the area has not yet been excavated.



Fig. 2.29 Complexes C 5, C 8 and C 9, Stratum 8, Square AU 129 (Source: BAI/GPIA).

Fig. 2.30 Complex C 8, Stratum 8, Square AU 130: tabun 10622/ 10623; view facing west (Source: BAI/GPIA).

Room Complex C 8 is located in Square AU 129/130 and adjoins Room C 5 to the east (*Fig. 2.29*). Room walls can be referred to as 10076/10084 to the north (Complex B) and 10638/11454 to the south-west and west. The eastern side is unclear, but it was probably an L-shaped room.

In front of wall 10638/11454, ash pit 11455, only millimetres thick, was visible on the surface. This probably belonged to tabun 10622/10623 (diameter 0.70 m), 0.50 m away in Square AU 130, which was still clearly recognisable from its clay walls (*Fig. 2.30*). To the south and north of the tabun, features 10620 and 10457 contained remains of clay floor, the latter extending as far as wall 10464. Between wall sections 10076 and 10464, a layer heavily interspersed with ash extended partly

into the room. This might represent a destruction layer.

Room Complex C 9 is located in Square AT 129/130 and is bordered to the north by wall 10638/11454, to the south by 11451 and to the west by 11062. It can be assumed that wall 11451 continued to the north and formed a corner with 10638/11454, so that neither tabun 11459/11460 nor 10622/10623 were destroyed (*Fig. 2.31*). The room dimensions would thus amount to 3.30 m x 3.30 m. The aforementioned tabun 11459/11460 (diameter 0.40 m) lay in the centre of the room, but was only recognisable in because of its round stone floor. In the north of the room lay fill layer 11467, which possibly marked the filling of the room, but has so far not produced any finds.



Fig. 2.31 Complexes C 6, C 9, C 10 and C 11, Stratum 8, Square AT 129/130. Left: with colour marking of the room walls (yellow) and disturbances (grey); right: the same photo without colour markings (Source: BAI/GPIA).



Fig. 2.32 Complex C 11 and C 13, Stratum 8, Square AT 131 (Source: BAI/GPIA).

Room Complex C 10 is in Square AT/AS 130 and is formed by walls 11451 to the north and east and 11062 to the west. The continuation of the walls to the south and the contents of the room have not yet been researched.

Room Complex C 11 in Square AT 130/131 adjoins the east side of C 9 and C 10 (*Fig. 2.32*). The room is 5.10 m wide and formed by walls 11468 to the north, 11267/11398 to the east, and 11451 to the west. The southern end was again missing. Only in the eastern part of the room could the collapse layers 11466 and 11404 be identified, revealing a large number of loose stones, a nail and a glass fragment (possibly from the fourth century AD).

Room Complex C 12 designated the area to the north of C 13 in Squares AU 131/132 (*Fig. 2.33*). The room is bounded to the north by wall 10481 (Complex B), to the east by 11158, 10665 and to the south by 11465/11468. Even if there was no separating wall to the west towards C 8, the finds were so different (stone collapse in C 12) that it can be assumed that these were two separate rooms. A tabun 11314/11315 (diameter < 0.50 m) was found in the north-east corner and several pisé floor frag-



Fig. 2.34 Complex C 13, Stratum 8, Square AT 132: miniature jug TZ 101522-002. Dating: 150-76 BC (Source: BAI/GPIA).

ments (11336, 11350, 11239, 11232 and 11073) were found scattered across the room. Apart from a weight and an amphora sherd of the Hellenistic-Roman period, no finds could be associated with the clay floors. Furthermore, pit 11241/11240 (its diameter could not be determined) was found in the northern part of the room and ash pit 11276 a little to the south. Burnt bones and pottery indicate a cooking site. Three fill layers 11224, 11233 and 11247 were identified within the room and revealed rich finds of the Hellenistic-Roman period. In addition to a large number of amphorae, jars, cooking pots, bowls, cooking jars, a fish plate, two oil lamps and a pithos were found. A metal hook, a nail and a knife blade were also among the finds. A large number

of loose stones, which are probably to be interpreted as collapse, may have fallen into the room from Complexes B and D. In detail, the following features can be regarded as layers of collapse: 11236, 11238, 11077, 11149, 11147, 11190, 10678, 11281 and 11464, and they contained no finds.

Room Complex C 13 is the easternmost room of the building in AT 131/132 and its west side borders on C 11. The room is made up of walls 11465 to the north and 11267/11398 to the west. Connections to the east were unclear and were missing to the south. A tabun 11068/11069 (diameter < 0.50 m) emerged in the northern part of the room, probably at wall 11465. In the centre of the room, fill layer

11339 was found, which also contained parts of the former clay floor, but which was too fragmented to be separated from the fill layer. The same applies to fill layer 11405. In the south, on the other hand, clay floor 11072 was well preserved. Particularly noteworthy among the finds within 11339 is a 4 cm high, modelled jug TZ 101522-002, which can be dated between 150 and 76 BC (*Fig. 2.34*) and can be compared with a find at Pella¹⁵. Fill layer 11202, lying in the northern part of the room, contained a

corroded coin TZ 112037-001 (*Pl. 24.1*), a fragment of an amphora and a cooking pot from the Hellenistic-Roman period, as well as an ETS sherd, which can be dated between 125 BC and AD 50. A jar fragment from the Roman period can be attributed to a disturbance at this location. A rubbing stone and a nail were also among the finds.

Room Complex C 14 was in Squares AR 132/133. A single wall 11039/11053 provides evidence of the continuation of the complex to the south.

Context	Square	Description/Interpretation	Complex	Arte	Artefacts	
				Pottery	Others	
10076	AV 129	Wall	C 8 / B	-	-	-
10084	AV 129	Wall	C 8 / B	_	-	-
10457	AV 130	Floor	C 8	_	-	-
10464	AV 130	Wall	C 8 / B	-	-	-
10481	AV 131	Wall	C 12 / B	-	-	-
10485	AV 130	Fill layer	C 8 / B	-	-	-
(10620)	AU 130	Floor	C 8	 ✓ 	-	\checkmark
10622	AU 130	Tabun	C 8	-	-	-
10623	AU 130	Tabun fill	C 8	 ✓ 	-	-
10638	AU 129	Wall (= 11454)	C 8 / C 9	-	1	-
10656	AV 132	Wall block	C 12 / D 1	-	-	-
10665	AU 132	Wall	C 12 / D 1	-	-	\checkmark
10678	AU 133	Wall	C 12 / D 1	-	-	-
11015	AU 126	Fill layer	C 1	 ✓ 	1	 ✓
11039	AR 132	Wall	C 14	\checkmark	\checkmark	-
11053	AR 133	Wall	C 14	_	-	-
11061	AT 129	Wall	C 6 / C 7	\$\lambda\$	1	\checkmark
11062	AT 129	Wall	"C 6 / C7 / C 9 / C 10"	-	-	-
11063	AT 127	Wall (= 11458)	C 4	-	-	-
11068	AU 132	Tabun	C 13	_	-	-
11069	AU 132	Tabun fill	C 13	_	-	-
11071	AU 126	Wall	C 1 / B		-	-
11072	AT 132	Floor	C 13	-	-	-
11073	AU 132	Floor	C 12	-	-	-
11074	AU 132	Wall foundation for 10665 (= 11170, 11192)	C 12 / D 1	-	_	-
11077	AU 132	Collapse	C 12		1	
11147	AV 132	Collapse	C 13 / D 1	_	\checkmark	_

11149	AV 132	Collapse	C 13 / D	_	-	_
11158	AV 132	Wall	C 13 / B / D	_	_	_
11170	AV 132	Wall foundation	C 13 / D	_	<i>√</i>	<i>√</i>
11186	AV 128	Wall	C 5 / B	_	1	_
11190	AU 132	Collapse	C 12 / D 1	_	-	_
11192	AV 132	Wall foundation	C 12 / D 1	<i>√</i>	<i>√</i>	<i>√</i>
11196	AU 132	Wall	C 13 / D 2	\checkmark	1	\checkmark
11197	AU 132	Wall foundation	C 13 / D 2	-	-	-
11202	AU 132	Fill layer	C 13	 ✓ 	1	 ✓
11222	AS 126	Wall	C 1 / C 2 / C 4	_	~	_
11224	AV 131	Fill layer	C 12	~	~	\checkmark
11232	AU 132	Floor	C 12	-	-	-
11233	AU 131	Fill layer	C 12	~	<i>✓</i>	~
11236	AV 131	Collapse	C 12	~	~	\checkmark
11238	AV 131	Collapse	C 12	_	-	_
11239	AV 131	Floor	C 12	_	-	_
11240	AV 131	Pit fill	C 12	\checkmark	~	\checkmark
11241	AV 131	Pit	C 13	-	~	-
11244	AU 126	Fill layer	C 1	\checkmark	\$\lambda\$	\checkmark
11247	AU 131	Fill layer	C 12	\checkmark	\checkmark	\checkmark
11267	AU 131	Wall	C 11 / C 13	-	\checkmark	-
(11271)	AT 127	Fill layer	C 4	\checkmark	\checkmark	\checkmark
11272	AU 126	Wall	C 1 / C 3 / C 4	\checkmark	-	-
11273	AU 126	Wall	C 3	-	-	-
11274	AU 127	Wall	C 3	-	-	-
11276	AU 131	Fire place	C 12	-	\checkmark	\checkmark
11281	AU 131	Collapse	C 12	-	\checkmark	-
(11283)	AS 126	Collapse	C 2	\checkmark	✓	\checkmark
11285	AU 127	Floor	C 3	\checkmark	✓	-
11294	AU 133	"Wall foundation (= 11197)"	C 13 / D 2	_	-	_
(11309)	AS 126	Collapse	C 1	_	-	_
11314	AV 131	"Tabun (Fill 11315)"	C 12	-	-	\checkmark
11315	AV 131	Tabun fill (Tabun 11314)	C 12	-	-	-
(11324)	AS 126	Collapse	C 4	-	-	-
11336	AV 131	Floor	C 12	\checkmark	<i>√</i>	_
11339	AT 132	Fill layer	C 13	\checkmark	-	\checkmark
11350	AU 131	Floor	C 12	-	-	-
11352	AU 126	Fill layer	C 1	<i>√</i>	<i>√</i>	<i>√</i>
11353	AU 127	Fill layer	C 3	\checkmark	✓	\checkmark
11363	AU 126	Wall	C 3 / C 4	_	-	_
11364	AU 126	Floor	C 4	_	-	_
11367	AT 127	Collapse	C 4	_	-	_
11398	AT 131	Wall	C 11 / C 13	_	-	_

11404	AT 131	Collapse	C 11	-	_	-
11405	AT 131	Fill layer	C 13	-	_	-
11406	AV 130	Collapse	C 8 / C 12 / B	-	_	-
11451	AT 130	Wall	C 9 / C 10 / C 11	-	-	-
11454	AU 129	Wall	C 8 / C 9	-	_	_
11455	AU 130	Cooking place or Ash pit	C 8	-	_	_
11458	AT 128	"Wall with entrance (= 11063)"	C 4 / C 6	-	\checkmark	-
11459	AT 130	Tabun (fill 11460)	С9	-	_	-
11460	AT 130	Wall	С9	-	_	_
11464	AU 131	Collapse	C 12	-	_	-
11465	AU 131	Wall	C 12 / C 13	-	_	_
11466	AU 131	Fill layer	C 11	-	\checkmark	\checkmark
(11467)	AU 129	Fill layer	С9	-	_	_
11468	AU 131	Wall	C 11 / C 12	-	_	_
11470	AT 128	Tabun	C 4	-	-	-
11471	AT 128	Tabun fill	C 4	-	\checkmark	\checkmark
11472	AT 128	Wall	C 3 / C 4	-	_	-
11474	AU 128	Wall	C 3 / C 5	-	-	-

Tab. 2.3 Contexts within Complex C; Stratum 8.
2.2.3.1. Comparable Settlement Types

Complex C was connected to Complex B in several places, as evidenced by features in C 1 (wall 11272), C 3 (wall 11273/11274) and C 8 (floor 10457), which is why the settlement can be considered as contemporaneously and deliberately laid out alongside Complex B. In this context, Complex B functioned as the northern wall of Complexes C 1, C 3, C 5, C 8 and C 12. Room C 3 is an exception here in that the dressed ashlar row 11273/11274 stands out by virtue of its workmanship. The outer wall (Complex B) appeared to be broken at this point, which is why the feature is interpreted as a repair. Since a repair can be ascertained only at this point, and there is no subsequent structural intervention resulting in changes within the architectural concept, it was decided not to designate it as a separate construction phase. Rather, it seems that during the construction of Complexes B and C, the structural instability that occurred led to emergency measures being taken with the help of this supporting wall specifically. The use of larger ashlars appears to be a consistent approach to retain the loosened backfill of the wall successfully. The integration of the outer wall into the inner development is clearly part of the indigenous Bronze Age building tradition, whereas the characteristic feature of Hellenistic cities in Greece, Asia Minor and Syria was to have an open space between the wall and the inner residential structures in order to allow military units sufficient room to operate¹⁶.

Little concrete information can be given on the abandonment or destruction of the residential structures. Clear layers of collapse of the dwelling—albeit to a limited extent—can be found in almost all of the rooms examined (C 2, C 3, C 4, C 8, C 12). It has not yet been possible to excavate any features within the other rooms nor to identify any clear layers of collapse.

Overall, the residential development (Complex C) gives the impression of being rather irregular; any order, in the form of a sequence of rooms, could only be discerned for C 1-C 5. Here, however, the poor state of preservation of the eastern area unfortunately made it difficult to distinguish clearly defined rooms. The rooms were characterised by an "oblique, nested interior layout" and represented an "accumulative construction", thus corresponding to the second type identified by H. P. Kuhnen¹⁷. Inner courtyards can be assumed, although they can no longer be identified with certainty. Installations include several tabuns, which underline the economic

character of the settlement. The water supply may have been provided by the spring at the centre of Tall Zirā'a, possibly located within the walls of the settlement. Including it in the settlement area would be reasonable, as so far, no evidence of water reservoirs has been found in the excavated area. Without a well, the settlement would be cut off from its water supply in the event of a siege. The extension of the settlement area to the well, or beyond it to Area III, is supported by finds from previous excavation seasons. Under the monastery in Area III, the first walls came to light, and five coins from the Hellenistic period (none from the Roman period) have already been recovered (see *Chap. 2.5.3.*)¹⁸.

The building styles were clearly in keeping with the indigenous traditions of the pre-Hellenistic period¹⁹ and, like the overall design, were not modelled on the Hellenistic cities of Greece or the large Greek-style polis of the Levant. In addition to the ashlar wall, two other types of walls can be seen within the complex, namely wide and narrow double-faced walls. On average, the stretch of wide wall running north-south 11474/11063/11458 (C 3 and C 4) and the corner of a wall running east-west 11468 (C 11) and 10638/11454 (C 8) are twice as wide (c. 1.25 m) as the rest of the walls within the complex. It seems reasonable to assume that these are external walls or demarcations between individual parts of the building. A precise designation as units is possible for Rooms C 1 to C 4, whereas the separation of the remaining rooms proves to be more difficult. Assuming that the wide double-faced walls are to be understood as divisions, the individual parts of the building are likely to consist of one unit comprising C 5, C 8 and C 12 and another of C 6, C 7, C 9, C 10, C 11 and C 13. As far as any floors have been preserved, they are pisé floors. Stone paving or more sophisticated furnishings have not been discovered so far. Only one doorway can be seen, in wall 11063/11458, between C 4 and C 6, which is distinguished by two large, flat-worked stones within the wall. Here, too, is the only clearly recognisable upper masonry. It is

- 16 Arav 1989, 153: Priene, Knidos, Miletus, Laodiceia, Damascus and Dura Europos are mentioned as examples.
- 17 Kuhnen 1990, 61.
- Hellenistic coins found in Area III: TZ 310428-001, TZ 310429-001, TZ 310469-001, TZ 310592-001, TZ 310594-001
- 19 Kuhnen 1990, 63.



unclear whether this is the entrance to a residential building, but this would presuppose a small street in front of the entrance. Such winding streets are also considered a feature of settlements built according to indigenous traditions²⁰.

The form of house encountered can be found throughout the Levant in the Hellenistic period. Two Hellenistic courtyard houses are known from Bethsaida (*c*. 32 km north-northwest of Tall Zirā'a) by the Sea of Galilee (*Fig. 2.35*). Both date from the third to the first century BC, have an asymmetrical layout and are separated from each other by a paved road. A large farmyard forms the centre of both houses²¹.

There are also promising excavation results from Tall al-Balāța (*c*. 58 km south-west of Tall Zirā'a) in the present-day West Bank²². Several residential buildings from the Hellenistic period were excavated²³. The tower that was found, together with part of the defensive walls, suggests that, like Tall Zirā'a, this settlement was also comprehensively fortified²⁴. A small building with two rooms is known from Field II in what is assumed to be the centre of the settlement²⁵, while in Field I and III walls appeared over a large area²⁶. The location Fig. 2.35 Hellenistic courtyard house at Bethsaida, area plan B. Farmyard (no. 8) forms the centre of the house; floor area of the house is 500 m² (Source: Fortner 2008, Fig. 18).

of excavation fields I and III in direct proximity to the excavated fortification and the fact that the walls were probably aligned with the latter (Field I still NNE-SSW; Field III slightly rotated rather NNW-SSE) lead us to expect a similar pattern of findings. The overall ground plan of the settlement, like that of the preceding settlement, was rounded, not angular²⁷. The most telling structures originate

- 20 Kuhnen 1990, 61.
- 21 Fortner 2008, 85 f., Pl. 11-13. 18. 19. 21. 22.
- 22 Toombs Wright 1961, 43, Fig. 16.; Campbell 2002, 311; Wright 2002, Ill. 1. Since the site was completely destroyed by John Hyrcanus and no settlement was subsequently founded on the same spot, the features are almost undisturbed: Wright 1965, 183; Toombs – Wright 1961, 46 f.
- 23 Toombs Wright 1961, 43, Fig. 16.
- 24 Wright 1965, Fig. 35; Wright 2002, Ill. 12.
- 25 Wright 2002, Ill. 31.
- 26 Wright 2002, Ill. 17 f., 39 f.
- 27 Wright 2002, Ill. 1: The Hellenistic tower (Field I) is located in front of the East Gate, the adjoining walls suggest an extension along the previous fortification; Field III adjoins Field I to the north.



Fig. 2.36 Merisha; general plan (Source: Bliss 1900, 326).

from Field VII, located to the west of Field II and thus also closer to the centre of the settlement. Two buildings from the mid-third century to the early second century BC are located along a smaller alley and show an irregular internal layout with at least one paved courtyard and a tabun. A distinction between internal and external walls is possible on the basis of the width of the masonry²⁸.

Evidence of residential structures dating from the latter half to the end of the second century BC (period IV B) is also found on Tall al-Fūl (*c*. 95 km south-west of Tall Zirā'a), which were connected to a massive enclosure wall with a tower²⁹. Three rooms of the complex have been excavated; they are laid out with pisé floors and equipped with at least one silo (Silo 31). The walls are partly recognisably double-faced and partly set in single rows of large fieldstones.

One of the most thoroughly excavated and largest sites in terms of area (300,000 m²) is undoubtedly Merisha (*c.* 125 km south-west of Tall Zirā'a), which, due to its location, represented the most important access from the coastal strip up into the southern Judean Mountains (*Fig. 2.36*)³⁰. A grave inscription from so-called Tomb I suggests that Phoenicians from Sidon as well as Macedonians may have settled on this tall as early as the fourth century BC³¹. The city dates from the middle of the second century BC and was laid out in a grid pattern, thus pointing to a Greek model³². The solid dual city wall was built according to Phoenician design (see *Chap. 2.2.3.2.*) and fortified by several towers. The residences, laid out in twelve "insulae-like building blocks", are placed against the outer wall—almost along its entire length—and follow regular as well as irregular ground plans according to Greek and indigenous building traditions³³. Both types of houses can also be found in the lower town. The apparent mixture of Greek and indigenous elements takes full effect here.

Among the elements of indigenous construction are classical farmvards with tabuns. Five such tabuns were also identified within Complex C on Tall Zirā'a. They are evenly distributed over the building units and are located in wall corners or centrally in front of a wall face. The size of the tabuns varies from about 0.30 cm to 0.70 cm. Tabuns are usually recorded in residential contexts, as they were used in the preparation of meals. In addition, there were two ash pits 11455 and 11276 in the immediate vicinity of the tabuns; the use of the latter and their emptying out was indicated by thin layers of ash. Pit 11241/11240 seems to have served a similar function, since inside there were only burnt remains of pottery and bones. This is also evidence that tabun 11314/11315 was most likely used for cooking. An interpretation of the rooms as courtyards is reasonable, especially given the need of providing an outlet for smoke and light for the surrounding rooms. Because of this, the large size of the two tabuns in Rooms C 4 and C 8, point to a central courtvard within each of the two buildings³⁴.

- 28 Toombs Wright 1961, 43-46.
- 29 The Northeast Hellenistic House is connected to the Northeast Hellenistic Tower: Lapp 1981, 63. 65 Fig. 1, 26, 28, 29.
- 30 Thiel 2007, 127. 133.
- 31 Thiel 2007, 128 f.
- 32 The traditional form of urban planning mentioned by W. Thiel, as found in the Iron Age *e.g.* at Babylon, Nineveh, Assur or Tall al-Mutasallim, proves that the orthogonal town planning concept was already present in pre-Hellenistic times. The certain presence of Phoenician and Macedonian settlers points rather to a western model serving as prototype: Thiel 2007, 143. 171.
- 33 Thiel 2007, 138 f.
- 34 An interesting approach was successfully taken by M. Krafeld-Daugherty, who related ancient house elements in the Middle East to modern houses and highlighted a similar use and significance, for example of courtyards. She was able to prove that in antiquity, as well as far into modern times, the courtyard was the centre of life within the

Smaller tabuns were, in fact, used inside covered rooms, if the smoke was able escape through a nearby doorway or window.

2.2.3.2. Phoenician influence at Tall Zirā'a?

An interesting find within Complex C was discovered to the south of wall 11063/11458. Large ashlars, striking in their careful workmanship and arrangement, were attached to the double-faced wall made of fieldstones. A header and stretcher system has been suggested for them, a building technique known mainly from Phoenician architecture and dating back to Iron Age II, though it can also be found in Persian and Hellenistic buildings up to the third century BC³⁵. Previously, this building technique was considered limited to the Phoenician coast (e.g. the early Hellenistic phase of Tall al-Fuhhār)³⁶, but was also found during excavations at the already mentioned Merisha and on Tall Mubārak in the hinterland of the coast (c. 70 km west of Tall $Zir\bar{a}^{(a)}$ ³⁷. The remains from the second century BC (Stratum III B) on Tall Mubārak are sparse and provide little information about the overall appearance and function of the settlement³⁸. The masonry technique of finds W-111 and W-8, however, can clearly be assigned to the Phoenician culture³⁹. According to E. Stern, the findings are by no means exceptional, as they are also evident in other cities⁴⁰. It would, therefore, not be surprising to encounter such a feature at Tall Zirā'a as well.

In working on the pottery, F. Kenkel already noted that this influence was mainly to be found in the northern areas and the coastal regions⁴¹. In his work on the cult of the Decapolis, A. Lichtenberger concluded that this region had probably been under Phoenician influence since pre-Hellenistic times, and does not exclude the possibility that Phoenicians may also have founded settlements in the area, although this must remain unproven due to the lack of evidence⁴². The written sources also clearly record Phoenician populations within the Greek cities east of the Jordan River. Strabo, for example, mentioned Phoenicians in Philadelphia in addition to Arabs and Egyptians⁴³. And the philosopher Menippus of Gadara, born in Gadara at the end of the fourth century BC, was even referred to as a Phoenician44. According to A. Lichtenberger, the depiction of juvenile deities on the coins of the Decapolis is also striking and should be understood as a Phoenician influence45. A possible influence of the Phoenicians on the area can thus not be dismissed out of hand. Nevertheless: the majority of the walls of Tall Zirā'a were built of unworked fieldstones and partially recognisable double-faced construction, which corresponds to customary regional techniques. The Phoenician influence on the settlement can therefore remain only an assumption⁴⁶.

house due to local climatic conditions. Even today, cooking, milking animals, slaughtering and weaving carpets takes place in the courtyard. Due to a lack of windows in rural areas of Syria in the 1930s, the courtyard was usually the only source of natural light for the house: Krafeld-Daugherty 1994, 153–157.

- 35 Stern 1978, 72–75, Fig. VIII, find 5: An example from the fourth century BC is Tall al-Mutasallim Stratum IV, in the casemate walls of which the header and stretcher system known as Phoenician masonry was used. The walls there alternate between carved stone ashlars and fieldstones.
- 36 Stern 1978, 75.
- 37 Stern 1978, 71–75, Fig. 24.

- 38 E. Stern assumed that this was an agricultural estate: Stern 1978, 85.
- 39 Stern 1978, Fig. 24 and for illustration Fig. VIII; Stern 1977, 17–22.
- 40 Among others, Tell Sūkās, Ţabbat al-Ḥammām and Sarepta are mentioned: Stern 1978, 73; Stern 1995b, 439.
- 41 Kenkel 2012, 148.
- 42 Lichtenberger 2003, 357 f.
- 43 Lichtenberger 2003, 244; Strab. geogr. 16, 2, 34.
- 44 Weber 2002, 61, SQ 55:B.
- 45 Lichtenberger 2003, 357.
- 46 Kuhnen 1990, 64.



2.2.4. Complex D: Entrance Area to the Settlement

Fig. 2.37 Complex D, Stratum 8 (Source: BAI/GPIA).

Complex D extends over Squares AV/AU 132–134 and AT 134 (*Fig. 2.37*) and formed the eastern end of the Hellenistic settlement. The complex, which has at least four rooms, is oriented south-east to north-west and adjoined the Hellenistic outer wall (Complex B) at an angle of 115 degrees.

With a thickness of 1.00-1.50 m, the double-faced walls were significantly wider than those of Complex C, but did not reach the solidity of Complex B. Most of the walls were disturbed by Strata 4 and 3. The lowest layer of the upper brickwork was still discernible, which was characterised by much larger unworked stones (*Fig. 2.38*). The foundation was made in the same way as that of

Complex B, with the corners to the north supported by large, carefully worked blocks. The upper brickwork and the foundation were the same width.

Room Complex D 1 is located in Square AU/AV 132/133 (*Fig. 2.39*). The room consists of walls 10656, 10657 to the north and east, 10678 to the south and 10665 to the west (foundations 11074, 11170, 11192). The interior was almost completely destroyed, with fill layer 11290 found only in the central area was found, but there were no finds in it. The square room measures 2.50 m x 1.70 m and had a small square alcove measuring 1.0 m x 0.50 m in wall section 10665 on the west side of the



Fig. 2.38 Complex D 1 and C 12, Stratum 8, Square AU 132: foundation and upper brickwork; view facing east (Source: BAI/GPIA).

Fig. 2.39 Complex D 1, D 2, D 3 and C 12, Stratum 8, Square AU 133: view facing north (Source: BAI/GPIA).

room, which was set directly onto the foundation (*Fig. 2.40*).

Room Complex D 2 is formed by walls 10678 to the north, 11279 and 11286 to the south, and 11196 to the west (with foundations 11197, 11294). The room, measuring just under 1.0 m x 3.0 m, was a narrow anteroom or corridor. Fill 11287 within the room was devoid of finds. The remains of the wall between D 1 and D 2 could be recognised in the collapse 11252, 11253 and 11296.

Room Complex D 3 adjoins D 2 to the south (*Fig. 2.41*). The rectangular room consists of walls 11279, 11286, 10955 to the north, 10990 to the east and 11010 (foundation 11011) to the south. The western end has not yet been excavated. At 2.65 m wide and at least 5.30 m long, the room

extended 1.00 m beyond the width of Room D 1 (and probably also D 2) and continued up the slope of Tall Zirā'a. An entrance 11057/11058 was preserved within the southern wall 11010. No fill layers within the room could be determined. The assumed floor level would have been expected above the Iron Age walls that were already visible in the room, but structures from Stratum 4 were built on top of them, so that the contents of the room were completely lost.

Room Complex D 4, judging by wall 10960, followed in the south, but the wall probably did not run all the way to D 3, and so it may possibly have belonged to a separate room or even complex. If wall 10960 had reached D 3, it would have blocked entrance 11057/11058 (*Fig. 2.42*). However, the



Fig. 2.40 Complex D 1, Stratum 8, Square AU 132: alcove in wall 10665 (arrow); view facing west (Source: BAI/GPIA).



Fig. 2.41 Complex D, Room D 3, Stratum 8, Square AU 134: in the centre of the space, the Iron Age structures are visible; view facing east (Source: BAI/GPIA).



Fig. 2.42 Complexes D 3 and D 4, Stratum 8, Square AT 134: view facing east (Source: BAI/ GPIA).



Fig. 2.43 Complexes C 12, C 13 and D 1, Stratum 8, Square AU 132: collapse 11190 (single row, resting on soil) within Room C 12, probably belonging to wall 10665 (foundations 11074, 11170, 11192); view facing north (Source: BAI/ GPIA).

Fig. 2.44 Complexes B and D (red), Stratum 8: ascending side of the tall; view facing south (Source: BAI/GPIA).

entrance was filled with loose soil 11059 and had not been subsequently blocked up. Since the overall picture is unclear here, this room was affiliated with Complex D based on wall thickness (1.30 m), orientation and height.

Area II

A destruction layer was identified in several places. Firstly, to the west of 10665 (C 12/D 1),

there were several loose stones, including 11190, on floor 11073 (C 12), which probably came from the outer face of this wall (*Fig. 2.43*). All in all, the collapse both inside and outside of Complex D and B appears to be relatively limited considering the solidity of the walls, so it can be assumed that the wall stones have been stripped away.



Fig. 2.45 Complexes D and B, Stratum 8, Square AV 132: area between the complexes; view facing north (Source: BAI/ GPIA).

Complex D was initially noteworthy because of its particular orientation. The slightly sloping extension to Complex B was probably oriented towards an entrance to the settlement (Fig. 2.44), which, due to the conditions at Tall Zirā'a, could be assumed to be at this location (among other places). The structure of the complex is very interesting: the integrated alcove of the small-scale complex is striking and offers the only indication of the room's furnishings. A use as a cabinet seems likely. Such alcoves are rooted in the tradition of the Near East and can still be found today in a wide variety of contexts: in storerooms, courtyards, living quarters and stables. They are the equivalent to pieces of furniture such as cupboards in the West. They are seldom encountered in archaeological sites⁴⁷.

Structurally, the entire complex is anything but typical for the region: its location and orientation as well as its stable construction suggest that it was a gateway. There are few comparable buildings in the Hellenistic-Roman surroundings. Apart from large gates such as the one at Gadara, gate houses are generally rare in the Levant. The double gate building to the northwest of Maresha can be interpreted as such a building⁴⁸. A similar structure exists at Hirbat al-Karak, where two rectangular towers on the lake shore probably mark one of at least three gate structures⁴⁹.

Given the position of this entrance area at Tall Zirā'a (laterally at the edge of the tall) it can be assumed that it was not the main access point to the settlement, but rather a secondary entrance. The main entrance was presumably further to the south and was possibly more imposing. The slightly sloping position on the outer wall (Complex B) made it necessary to build an intermediate wall 11158 (foundation 11149) to close the resulting gap (Fig. 2.45). The large ashlars 10656 can probably be seen as a stabilising measure, as the architects were most likely aware that later repairs at this location would be difficult. The material from intermediate space 11245 is Hellenistic, and includes cooking pots and a typical fish plate, which can be assigned to the period between the third and first centuries BC.

- 47 Krafeld-Daugherty 1994, 64–69.
- 48 Thiel 2007, 137.
- 49 Thiel 2007, 183.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Orthers	
(10651)	AV 133	Fill layer	D/B	\checkmark	\checkmark	_
10656	AV 132	Wall block	D 1 / C 12	_	_	-
10657	AV 133	Wall	D 1	\checkmark	_	-
10665	AU 132	Wall	D 1 / C 12	_	_	\checkmark
10678	AU 133	Wall	D 1 / C 12	-	-	-
10955	AU 134	Wall	D 2 / D 3	-	_	-
10960	AT 134	Wall	D 4	_	\checkmark	\checkmark
10990	AT 134	Wall	D 2	_	\checkmark	-
11010	AT 134	Wall	D 3	_	_	-
11011	AT 134	Wall foundation for 11010	D 3	-	-	-
11057	AU 134	Entrance	D 3	_	_	-
11058	AU 134	Floor of the entrance	D 3	_	_	-
11059	AU 134	Fill of the entrance	D 3	_	_	-
11074	AU 132	"Wall foundation for 10665 (= 11170, 11192)"	D 1 / C 12	_	_	-
11147	AV 132	Collapse	D1/C13	-	~	-
11149	AV 132	Collapse	D / C 13	_	_	-
11158	AV 132	Wall	D / C 13	_	_	-
11170	AV 132	Wall foundation	D / C 13	-	\checkmark	\checkmark
11190	AU 132	Collapse	D 1 / C 12	-	-	-
11192	AV 132	Wall foundation	D 1 / C 12	\checkmark	\checkmark	\checkmark
11196	AU 132	Wall	D 2 / C 13	\checkmark	\checkmark	\checkmark
11197	AU 132	Wall foundation	D 2 / C 13	-	-	-
11245	AV 133	Fill layer	D 1 / B	\checkmark	\checkmark	\checkmark
11252	AU 133	Collapse	D 1 / D 2	_	_	_
11253	AU 133	Collapse	D 1 / D 2	_	_	_
11279	AU 133	Wall	D2 / D 3			
11282	AV 133	Fill layer	D / B	\checkmark	\checkmark	\checkmark
11286	AU 133	Wall	D 2 / D 3	-	-	-
11287	AU 133	Fill layer	D 2	-	-	-
11290	AU 133	Fill layer	D 1	_	_	_
11294	AU 133	"Wall foundation (= 11197)"	D 2 / C 13	_	_	_
11296	AU 133	Collapse	D 1 / D 2	_	\checkmark	_

Tab. 2.4 Contexts within Complex D, Stratum 8.

2.2.5. Features in Area I

In Area I some features are scattered without any clear connections (*Fig. 2.3*). Wall 6111 in Square AR 121 gives an indication of some construction in the area (*Fig. 2.50*). The alignment corresponds to that of the walls in Area II. However, there are no other matching features. The large construction works (especially from Strata 4 and 3) led to extensive disturbances.

Fill layers (containing a lot of Iron Age pottery) and pits were found as follows:

AQ 118: 2834 AP 118: 2832 AM 119: 684, 1040 AP 120: 4183 AQ 121: 4293 AP 121: 4262 AS 122: 4179 AP 122: 4895 AR 123: 5311, 5829 AQ 123: 5830, 5120, 5118, 5281 AP 123: 5204



Fig. 2.46 Area I, Stratum 8, Square AR 121; Wall 6111 (Source: BAI/GPIA).

Notable finds include a Seleucid or Ptolemaic coin TZ 006993-001 from the third to first century BC (*Pl. 5.1*) in Context 1040. A Ptolemaic coin TZ 010325-001 of Ptolemy VI (*Pl. 5.5*) dated 180–145 BC in Context 2832. The four coins TZ 014196-

001/002/003/004 (*Pls.* 7.1–7.4) and another coin TZ 015288-001 (*Pl.* 8.1), which can be attributed to Alexander Jannaeus, were found in Contexts 4262 and 5204. Additionally, six loom weights were found in 4293 and 5120.

Context	Square	Description/Interpretation	Complex	Arte	efacts	Ecofacts
				Pottery	Others	
684	AM 119	Tabun	Area I		-	-
1040	AM 119	Find	Area I	-	1	-
2832	AP 118	Fill layer	Area I	-	1	-
2834	AQ 118	Fill layer	Area I	~	1	~
(4179)	AS 122	Fill layer	Area I	~	1	~
4183	AP 120	Fill layer	Area I	~	-	~
(4262)	AP 121	Fill layer	Area I	\checkmark	\checkmark	\checkmark
4293	AQ 121	Pit	Area I	~	\checkmark	\checkmark

4895	AP 122	Fill layer	Area I	\checkmark	\checkmark	\checkmark
5118	AQ 123	Fill layer	Area I	\checkmark	-	-
5120	AQ 123	Fill layer	Area I	\checkmark	\checkmark	\checkmark
5204	AP 123	Fill layer	Area I	_	\checkmark	\checkmark
5281	AQ 123	Fill layer	Area I	\checkmark	\checkmark	\checkmark
5311	AR 123	Fill layer	Area I	\checkmark	\checkmark	\checkmark
5829	AR 123	Fill layer	Area I	\checkmark	-	\checkmark
5830	AQ 123	Fill layer	Area I	\checkmark	\checkmark	\checkmark
6111	AR 121	Wall	Area I	\checkmark	\checkmark	-

Tab. 2.5 Contexts within Area I, Stratum 8.

2.3. Find Analysis

2.3.1. Pottery

The pottery of the Hellenistic to Byzantine period was studied by F. Kenkel⁵⁰. About 80,000 pottery sherds can be assigned to these periods. The fact that the buildings from Strata 4 and 3 for the most part penetrate the underlying features into the Iron Age, and that the finds in the individual strata and rooms are thus heavily mixed, is more evident with-in the datable pottery material than with other types of finds. F. Kenkel was not able to assign all the pottery to specific periods because of the stratigraphic analysis had not yet been completed. It is now complete and the pottery can be reassessed.

The majority of fill layers-and this applies to all phases, not only to the Hellenistic period-are backfill layers. It follows that a lot of pottery was also found outside the stratum under discussion and that Byzantine and Umavyad objects also found their way into the Hellenistic-Roman contexts. In addition to the pottery finds mentioned in the stratigraphic analysis from inside the complexes, evaluating pottery finds as a whole and compiling a pottery repertoire for the stratum must also take into account those pieces that could be dated as Hellenistic but were found outside the complexes or in fill layers of other strata. In the following, the results of F. Kenkel on the Hellenistic pottery material are summarised, expanded by the latest findings and re-evaluated.

2.3.1.1. Distribution of Pottery Finds

Architectural remains from the Hellenistic period have only been found in Area II, while in Area I there are no structures (except for wall 6111). Nevertheless, a rich repertoire of finds has come to light in Area I. This can be explained either by the fact that no architecture survived in this area (weathering of building material), that the finds were dispersed during levelling work for Stratum 7, or-and this seems to be the most likely according to the current state of research-that refuse was dumped outside the settlement; in the case of Tall Zirā'a, outside the settlement walls. The latter hypothesis would support the previously postulated course of the enclosure wall (Complex B) between Areas I and II (see Chap. 2.2.2.). As F. Kenkel already stated in her work, the population density in Area II

was considerably higher than in Area I. She also concluded that Area I was used only as a waste disposal site⁵¹. This hypothesis is supported here and reflects the existing repertoire of findings.

At the current stage of excavation within the Hellenistic stratum in Area II, no pottery has been found in some rooms and comparatively little in others (Fig. 2.47), which makes an evaluation difficult. First of all, it can be stated that the majority of pottery finds can be attributed to amphorae, followed in roughly equal proportions by local/regional tableware and cookware. Only in four rooms (A 4, C 2, C 3, C 8) is the proportion of other everyday tableware higher than the number of amphorae. It is interesting to note the concentration of imports (3), vessels for personal use (6) and oil lamps (5) in Complex A 3 and in Room C 1. Even if the number of finds is low, the two rooms or complexes seem to have a certain significance, as both imports and vessels for personal use have been found exclusively there. Room C 1 as well as Complex A 3 are also notable for the high number of metal objects found (see Chap. 2.3.2.).

The fact that the entirety of Complex D remains without pottery finds is due to the heavy destruction of the individual complexes, but it also supports its interpretation as an entrance area to the site.

The distribution of finds inside (Complex C) and outside the settlement (Complex A) is both quantitatively and qualitatively balanced. The courtyards are notable for their low number of finds or none at all, but here, too, the state of excavation must be taken into consideration.

2.3.1.2. Repertoire of Shapes

According to F. Kenkel, the pottery was categorised as follows: imports, local/regional tableware, cookware, everyday utensils, vessels for personal use, oil lamps and terracotta figurines. Among the imports, which illustrate the extensive trade relations of the region, the large number of Rhodian amphora handles (78) stands out, which were particularly fre-

⁵⁰ Kenkel 2012.

⁵¹ Kenkel 2012, 68 f.



Fig. 2.47 Stratum 8; distribution of pottery finds (Source: BAI/GIA).

quent in the third to second centuries BC (*Pl.* 1.5)⁵². Other dominant shapes such as "grey ware" (especially plates) from Ephesus (3) can also be dated to the second century BC (*Pl.* 1.1, *Fig.* 6.1)⁵³. Two kantharos handles (*Pl.* 1.2, *Fig.* 2.20 and *Fig.* 6.2), an example of Western Slope style ware (*Pl.* 1.3, *Fig.* 6.3), relief beakers from Antioch (*Pl.* 1.4, *Fig.* 6.4) and an amphora fragment from Kos (*Pl.* 1.6) are also among the imports, but show longer periods of use, i.e. from the third to first century BC (amphora, relief beaker)⁵⁴.

The local/regional tableware expanded the repertoire of sophisticated eating and drinking utensils of the population living at Tall Zirā'a in addition to the imports and, with a share of 33.54 %, made up 20 % more of the finds than the imports themselves. These include mainly 'Echinus bowls' (181) (*Pl. 2.2*) and 'fish plates' (100) (*Pl. 2.3*) typical of the period, the shapes already mentioned among the imports such as 'grey ware' (plates) as well as small bowls, plates (*Pl. 2.1, Fig. 6.5*), table amphorae, lagynoi and jars (*Pl. 2.4, Fig. 6.6*)⁵⁵. The large quantity of drinking vessels, especially from the second century BC, is striking⁵⁶.

The cooking utensils mainly consisted of cooking pots and a few cooking jars (*Pl. 2.6, Fig. 6.8*). Although casseroles for preparing meat and vegetables already appeared in this region with Alexander the Great, they are only found at Tall Zirā'a in the late Hellenistic period and then only in small numbers (*Pl. 2.5, Fig. 6.7*)⁵⁷.

Almost 70 % of the everyday tableware consists of amphorae (*Pl. 3.4, Fig. 6.9*). Jars and jugs form the second largest group (*Pl. 3.3*). Pithoi (*Pl. 3.5*), kraters (*Pl. 3.2*) and bowls (*Pl. 3.1*) are found in

- 52 On the chronology: Kenkel 2012, 54, footnote 327.
- 53 Kenkel 2012, 68.
- 54 Kenkel 2012, 308.
- 55 Kenkel 2012, 101, 104–117, 147; on the early ESA examples on Tall Zirā'a cf. Kenkel 2012, 73 f.
- 56 Kenkel 2012, 308.
- 57 Kenkel 2012, 189 f.

the archaeological material, but they, too, date more frequently from the Late Hellenistic period⁵⁸.

The vessels for personal use form the smallest group of pottery and include amphoriskoi (*Pl. 3.6*, *Fig. 6.10*), unguentaria (*Pl. 3.7*), small jars (*Pl. 4.1*, *Fig. 6.11*) and ointment dishes (*Pl. 4.2*, *Fig. 6.12*). Such vessels generally appeared in the second century BC and their use extended into the first century AD^{59} . They occur only sporadically at Tall Zirā'a, all within the Hellenistic stratum.

Oil lamps were mainly produced in local centres. However, imitations of the Greek models do occur (*Pl. 4.3, Fig. 6.13*). A distinction must be made between wheel-thrown wares and lamps made in moulds, which were produced from the early second century BC onwards (*Pl. 4.4, Fig. 6.14*)⁶⁰. As was the case with the previous pottery types, the majority of the examples date from the second to first century BC. As many as 30 % of all oil lamps found at Tall Zirā'a can be dated to the Hellenistic period⁶¹.

Examining the pottery suggests the following: the characteristic household repertoire at Tall Zirā'a, especially in the second century BC, consisted of imported fine wares as tableware, supplemented by imitations from the Greek world and a large proportion of locally/regionally produced wares. The latter wares are to be regarded primarily as eating utensils, while the imports made up the bulk of drinking vessel. From the middle of the second century BC, tableware was supplemented by Eastern Sigillata A (ESA) bowls and plates, albeit only to a small extent. There were also small jars, table amphorae and lagynoi which represented the eating and drinking habits of Greek society62. Cookware initially consisted of cooking pots. Casseroles only appeared towards the end of the Hellenistic period and then only in small numbers. A few storage vessels, bowls and larger jars were also part of the range. Amphoriskoi, unguentaria, small single-handled jars and ointment containers were used for personal needs63.

2.3.1.3. Terracotta Head TZ 007430-001

Terracotta figurines as a reflection of cultic activities, cultural affiliation of the owners and aesthetic preferences allow a variety of interpretations and form a special category among the pottery finds⁶⁴. This stratum does not offer any terracotta figurines clearly assignable to the Hellenistic period. Of the total of ten fragments mentioned so far as Hellenis-



Fig. 2.48 Terracotta head TZ 007430-001; dimensions: 9.2 cm x 7.5 cm x 4.4 cm; Stratum 0; Square AM/AN 117 (Source: BAI/GIA).

tic-Roman⁶⁵, nine can potentially be assigned to the Roman period (see *Chap. 4.3.1.2.*).

A particularly striking find is terracotta head TZ 007430-001 (*Fig. 2.48*). It was first published by D. Vieweger and J. Häser in 2007 and dated to the Late Bronze Age⁶⁶. Later, A. Gropp revised this classification and suggested dating it to the fifth-fourth centuries BC^{67} . However, this must be refuted at this point, which is why a renewed examination of the object is necessary. The dating was based on the apparently ornamental ears, which

- 58 Kenkel 2012, 244–246.
- 59 Kenkel 2012, 258.
- 60 Kenkel 2012, 264-266.
- 61 Kenkel 2012, 273.
- 62 Lagynoi occur primarily in the period between the middle of the third to the first century BC: Ashmead 1999, 46.
- 63 Kenkel 2012, 309.
- 64 Kenkel 2012, 307.
- 65 Kenkel mentions eight terracottas because TZ 007430-001 was not included: Kenkel 2012, 300–307; A. Gropp focuses on Bronze and Iron Age cult objects. A few Hellenistic-Roman pieces are mentioned in a brief overview, including TZ 007430-001: Gropp 2013, 834–838.
- 66 Vieweger Häser 2007, 7, Pl. 3.
- 67 Gropp 2013, 836 (with illustration and drawing).

was, however, an incorrect observation; although the ears appear somewhat curved, they are by no means ornamental, as is the case with the kores and kouros of the classical period.

The head, which can probably be described as male, was found in 2005 as a surface find in Area I on the baulk between AM/AN 117. It measures 9.2 cm x 7.5 cm x 4.4 cm, a considerable size, and there are some fine details. Most of the upper part of the forehead as well as the left half of the face, above nose and ear, are broken off, as is the nose itself. Fractures, which indicate that the figure would originally have been larger, or embedded into something, are found on the neck and on the entire right side of the head. The left ear is entire, in other words, the back of it is not flat and shows no marks of having been embedded in something. The head appears to be slightly turned to the left, *i.e.*, in the direction where other parts were presumably attached. A braided band or wreath can be identified on the preserved part of the forehead. The hairline is no longer visible, not even around the undamaged part of the left ear, which is why a short hairstyle can be assumed.

The protruding ears, the thick brow ridges, the open mouth and the dull, expressionless gaze are particularly striking. The ears clearly reflect the influence of Egyptian culture and derive from the portraits and masks of the pharaohs⁶⁸. The Ptolemies also adopted this manner of depiction. Similar representations are found later in the North African provinces under Roman rule. The somewhat thicker contour of the ear, which was described as ornamental by A. Gropp, is also found in small Hellenistic sculptures, as an example from Acre vividly demonstrates⁶⁹. The distinctive bulging eyes are known mainly from earlier figurines. It is possible that a well-established form of representation was adopted here, as the skill required for delicate work was still lacking⁷⁰. The mouth, forehead and cheek area paint a different picture, however. The slightly open mouth, the plump cheeks and the receding chin are distinctive characteristics of Hellenistic art. Open mouths appear, for example, in the depiction of the fallen or wounded in relief art⁷¹. The background for this depiction is that the open mouth is significant, among other things, as an outlet for the soul⁷². In grotesques, too, a partly distorted or wide-open mouth can be found repeatedly, as well as protruding ears⁷³. The head from Tall Zirā'a, however, shows no signs of age such as wrinkles or distorted facial features. Rather, the figure radiates youth and agelessness. In addition, it is covered with a headdress, whereas in a caricature such headdresses tend to be absent and the depicted were often bald, as the examples from the Egyptian Sieglin and Schreiber Collection vividly show⁷⁴. The characteristics of the figure point to the Hellenistic period, although it may also belong to the Roman period. A dating based on comparative pieces ranges from the second century BC to the third century AD, but the Hellenistic elements dominate and the corresponding comparative pieces from this period are much more similar. After reviewing the relevant literature, a date from the second to first century BC is now proposed.

Where the figurine was used is difficult to determine. The back is flattened, but shows clear traces of workmanship. A slightly protruding bar is visible on the back of both the upper central area and the neck area. The assumption made by A. Gropp that the figure was possibly attached to an object or architectural element seems very likely⁷⁵. The clear orientation of the face towards the viewer of the piece together with the previously mentioned elements lead to the assumption that TZ 007430-001 was part of a relief, which is also supported by the fracture lines. Whether it was a decorative element within a private household or even a public building must remain unanswered for the time being, as there are no comparative finds available in this context⁷⁶.

- 68 Török 1995, 166 f., Pl. CXXXIX; Bayer-Niemeier 1988, 234–236, Tab. 96, 97, Cat. Nr., 547, 548, 550, 551, 555.
- 69 Erlich 2009, 44, Fig. 43.
- 70 Appropriate comments are made on the art of the region by Erlich 2009, 105: "It is Hellenistic in its fundamental principles and provincial in its crude design and careless technique" and of the terracottas he said: "(...) most were made using crude, rudimentary techniques." The bulging eyes can be found in the so-called Israelite figurines: Crowfoot et al. 1957, 76–79, Pl. XI.
- 71 Graeve 1970, Tab. 63, 64.
- 72 Toynbee 1971, 43 f., footnote 117.
- 73 Erlich 2009, 44, Fig. 42 (Tall al-Fuhhār), 78 (Marisa).
- 74 Fischer 1994, Nr. 424, 425, 437, 442, 443, 445, 469, 478, Tab. 43–47: these Greco-Roman terracotta figurines from Egypt date between the third century BC to the second century AD.
- 75 Gropp 2013, 836.
- 76 Erlich 2009, 105.

2.3.1.4. Summary

The re-examination of the pottery material has shown that few clusters of pottery can be discerned within the Hellenistic stratum, except where they concentrate around tabuns, in particular in Complex A 1. On the basis of the pottery and metal finds, this seems to have corresponded to the central room of the respective residential building. This is supported by the fact that only imports and vessels of personal use were found there. The fact that everyday tableware makes up the largest share of finds within the rooms is not surprising, since it was in daily use in all domestic domains.

The imports show the extensive trade relations of the region, from which the inhabitants of Tall Zirā'a also benefited: goods from Antioch, Rhodes and Kos can be discerned among the finds from the Hellenistic period. In addition, they point to a certain degree of prosperity, as these vessels probably had a greater material value than locally/regionally produced goods and cannot be assumed to have been used by the average household. Imitations of Greek vessels demonstrate that contemporary tastes appealed to the inhabitants of the tall, and Greek culture must also have permeated into their eating and drinking habits. Interestingly, the eating and drinking utensils are made up of both imports and local/regional goods, from which it can be concluded that imported tableware was too expensive.

It is interesting that casseroles initially only appear at Phoenician and non-Jewish sites. Since the first few finds can be identified dating to the second century BC, a pagan population can be assumed⁷⁷. Equally, from this time onwards, a higher standard of living can be assumed based on the presumption that the appearance of casseroles means an increased consumption of meat.

Greek influence can also be seen in the vessels for personal use, which are lacking in Jewish Orthodox towns like Jerusalem⁷⁸. The oil lamps, for example, show the influence of Western cultural spheres. Although the terracotta finds still cannot be confidently categorised, they clearly show Egyptian/Ptolemaic and Greek influences. The same can be said of the lagynoi, which are typical Ptolemaic drinking vessels. In view of the finds studied so far, this influence may have been even stronger than initially assumed.

The dating of the pottery finds indicates a settlement peak in the second century BC⁷⁹. There are considerably fewer finds from the third and first centuries BC, and no finds from the fourth century BC can be definitively verified so far⁸⁰.

- 77 Kenkel 2012, 189 f.
- 78 Kenkel 2012, 258.
- 79 Kenkel 2012, 325.
- 80 Kenkel 2012, 68.

2.3.2. Metal Finds

A total of 1344 metal finds were excavated at Tall Zirā'a⁸¹. The finds were irregularly distributed over the three areas: 859 finds were found in Area I, 264 in Area II and 221 in Area III. Since these metal finds also include those of the pre-classical periods, this accumulation is not surprising. In Area I, the excavation has reached the Bronze Age in almost the entire excavation area, whereas the Iron Age has barely been reached in Area II, and in Area III, the Hellenistic-Roman levels have been reached only superficially. Thus, hardly any further metal finds from the classical period are to be expected from Area I, while the other areas may still contain a variety of finds.

The finds from the Hellenistic to Byzantine strata were investigated in the excavation and study seasons of 2010, 2012 and 2014 by S. Hoss⁸². A total of 718 items were found, of which 121 (Area I: 44, Area II: 58, Area III: 19) proved to be identifiable. The 255 nails were only mentioned in summary by S. Hoss⁸³, finds from other strata⁸⁴ as well as the 115 coins are not considered in her work (see *Chaps. 2.3.3.* and *4.3.3.*). The results of her investigations are compiled below and re-evaluated in their respective contexts. The determinable metal finds were divided into nine categories by S. Hoss: personal items (57) include jewellery, cosmetic utensils and brooches, a second group is formed by finds connected with household and furnishings (23), such as keys or locks. Typical objects from the military sector (2) form a separate group. Objects that were used for trade or manufacturing processes (20), such as weights and tools, are included in yet another group. Objects that could not be classified as belonging to one of the above groups were listed in a separate group (19). Typical objects assigned to the spheres of religion, food processing, leisure or transport could not be identified.

Exact dating of metal finds is often difficult, as many of the forms have a particularly long lifespan. Some finds were found in floors or under walls, so that for them a more precise classification is possible. However, the majority of the finds originate from fill layers, which complicates their identification. Nevertheless, an attempt will be made in the following to show the metal repertoire of the various phases of use on the basis of individual examples of finds⁸⁵. This cannot guarantee the actual use of the corresponding objects in the respective period, but it can nevertheless provide an overview.

81 The total number of metal pieces is around 1540, which also includes finds that were broken into several pieces but counted as one find number. In the present work, only the find numbers are counted (not the individual pieces belonging to them).

82 Hoss 2020a.

- 83 Hoss 2020a, 393.
- 84 An exception are five pieces from older layers, which, according to S. Hoss, could be clearly identified as belonging to the classical periods.
- 85 All finds are listed in detail by S. Hoss.



2.3.2.1. Distribution of Metal Finds

Fig. 2.49 Stratum 8: distribution of metal finds (Source: BAI/GPIA).

Within the Hellenistic stratum, 52 metal finds were located, all exclusively in Area II (Fig. 2.49). Within the stratum, a concentration of metal finds occurred only in Room C 1. Within the room there were three hooks, the shaft of a hairpin or cosmetic instrument, seven nails, a metal handle TZ 111652-005 (Fig. 2.20, No. 1), a Ptolemaic coin TZ 112168-001 (Appendix 11.5) and two knife blades including TZ 112206-001 (Fig. 2.20, No. 2). These finds all came from fill layers. Nevertheless, the concentration within this space is interesting, since the distribution of the metals-as in the Roman strata-can otherwise be described as uniform, or even more as scattered. In conclusion, it can be assumed that the finds were, for example, trapped under a collapsed roof. An accidental concentration during subsequent deposition seems rather unlikely.

2.3.2.2. Repertoire of Shapes

In terms of shapes, personal objects such as elbow brooch TZ 112197-001 (*Fig. 2.50* and *Fig. 2.51*)⁸⁶ can be identified, which were found at floor level, so that a use in this period can be considered certain.

Also, several cosmetic spatulas (fragments) like TZ 112022-001 (*Fig. 2.52*)⁸⁷ and metal objects intended for home furnishing such as latch-lifter keys TZ 111382-001 (*Fig. 6.18*)⁸⁸ and the mirror frag-

- 86 Hoss 2020a, 394. 403; Fig. 3.2; See Fortner 2008, 64 and further comparisons in Fn. 363.
- 87 Hoss 2020a, 396. 409; See Crowfoot et al. 1957, 444. 446 fig. 104, 7.
- 88 Hoss 2020a, 397. 414; Fortner 2008, 71; Crowfoot et al. 1957, 446 fig. 105, 6.



Fig. 2.50 Elbow brooch TZ 112197-001; Stratum 8, Square AX 129, Context 10329 (Source: BAI/GPIA).



Fig. 2.51 Drawing of elbow brooch TZ 112197-001; Stratum 8, Square AX 129, Context 10329 (Source: BAI/ GPIA).

ment TZ 112182-001 (*Fig. 6.17*)⁸⁹ were likely used in the Hellenistic period⁹⁰.

2.3.2.3. Regarding the Potential for Interpreting Nails and their Usage

With 255 pieces, the large number of nails $(\tilde{\eta}\lambda o_{\zeta} \text{ or } \text{clavus})^{91}$ is very noticeable among the metal finds Of these nails, 23 (11 of which were complete) were found within the Hellenistic stratum and were distributed across rooms A 1, A 3, C 1, C 11, C 12 and C 13. This group of finds has so far received little attention in publications on these excavations, although a number of functions can be deduced from certain shapes and only a limited repertoire of designs is present. Their primary use involves connecting two objects (*e.g.* wood, metal, bricks) and as curved hooks for load bearing⁹². Nails are usually found in large numbers during excavations, as they were the only metallic fastening element before the invention of the screw and were therefore indispen-



Fig. 2.52 Cosmetic spatula TZ 112022-001; Stratum 7 c, b, a, also 06 c, b, a, Square AW 129, Context 11162 (Source: BAI/GPIA).

sable for various types of work⁹³. Nails were used, among other things, in constructing houses (roofs and intermediate floors) and ships, but also in furniture (chests, boxes, chairs, benches, tables), clothing (shoes) and tools, as well as, for example, in collars for hunting dogs or in climbing gear⁹⁴. Nails were also used in doors, as an example from the Tall Zirā'a itself illustrates: More than 61 nails were used in a wooden door from Area III found in Stratum 2.

Of the remaining 194 nails, the material for ten has not been identified, the others consist almost exclusively (178) of iron (σίδηρος). Bronze nails (χαλκός) were also recovered from Tall Zirā'a (six pieces), but they originate from Strata 14 to 10 (Late Bronze Age to Iron II C) and thus correspond to the typical nails of the time, which had already been in use since the end of the fourth millennium BC⁹⁵. Iron nails had been in use since the second millennium BC. However, they were only used on a larger scale from the Archaic period onwards⁹⁶ and were later produced in increasing numbers in Roman workshops⁹⁷.

- 89 Hoss 2020a, 396. 408; See Crowfoot et al. 1957, 446 f. fig. 106, 3.
- 90 Compare Fortner 2008, 71; Crowfoot et al. 1957, 446 fig. 105, 6.
- 91 RE (1935) 1576–1578. s. v. Nail (A. Hug).
- 92 Peltz 2011, 5; RE (1935) 1577. s. v. Nail (A. Hug).
- 93 Peltz 2011, 6.
- 94 For more details see Pelz 2011 and RE (1935) 1576–1578.s. v. Nail (A. Hug).
- 95 Müller-Wiener 1988, 56.
- 96 Müller-Wiener 1988, 57.
- 97 RE (1935) 1577. s. v. Nail (A. Hug).



Fig. 2.53 Nail (hinge pin) TZ 002303-001; Stratum 3 b, a, Square AQ 119, Context 533 (Source: BAI/GPIA).



Fig. 2.55 Nail (hook) TZ 112212-001; Stratum 8, Square AW 128, Context 11295 (Source: BAI/GPIA).



Fig. 2.54 Nail TZ 001197-001 with round head; Stratum 7 c, b, a, Square AM 119, Context 73 (Source: BAI/GPIA).

The nails found at Tall Zirā'a, with an average length of 6–10 cm and a diameter of about 1–3 cm, are more likely to nails with a universal use, because they were too small for load-bearing structural elements and (with the exception of one example from Stratum 2) were evidently not applied for ornamental purposes either⁹⁸. The majority of nails have a round shaft with a round head. Much rarer are angular shafts with angular, round or oval heads⁹⁹. One object even features a triangular shaft, although the use is unclear. The state of preservation is mostly rudimentary. For over 100 objects,

- 98 TZ 111612-001 features a spherical head, which probably had less of a practical than an ornamental use.
- 99 According to S. Hoss in personal notes: "Iron nails with a pin with square sections and a squarish to round head are typical. The square pin is characteristic of forged rather than drawn nails."

only the shaft is preserved, while 69 are completely or almost completely preserved.

Of the 23 nails found in Stratum 8, and thus certainly dating from the Hellenistic period, 11 are almost complete, two had rectangular and four had curved shafts, the others were most probably all with round shafts, but they were difficult to discerned due to the unrestored condition. The different sizes and shapes are particularly striking among the nails and raises the question of their use.

An example of an early nail type used at Tall Zirā'a is TZ 002303-001 (Fig. 2.53)¹⁰⁰. It has an oval head and a round shaft, the diameter of the head being only slightly larger than that of the shaft, which at 2.3 cm is one of the larger examples. According to the ration of shape and size between head and shaft, it may have been a hinge pin¹⁰¹. The tear running through the middle of the nail also suggests this, possibly originating from the typical hole at the end of a hinge pin into which a splint could be inserted to connect a movable structure¹⁰². Nails were used on lids of chests and boxes, but also in door and window hinges. As the nail is relatively large, its use on a small object would appear to be out of the question; it is more likely to have been used in a door or a large chest.

Another type found is nail TZ 001197-001 (*Fig. 2.54*), with a round head. The large flat head, which can be slightly convex or flat, is characteristic. This shape is typical of the most frequently

- 100 This find originates from Stratum 3. The examples chosen represents a type that can also be found in other strata, but this one was more suitable for illustration purposes.
- 101 Peltz 2011, 14 Abb. 38, Typ Si1, 224–233.
- 102 Peltz's type Sil 232 looks similar, but it is not possible to say whether this is also a tear.



Fig. 2.56 Nail TZ 015370-001; Stratum 07 c, b; Square AW 129; Context 5272 (Source: BAI/GPIA)

produced ornamental nails, which were found in various sizes and commonly used¹⁰³.

Another example for the use of nails is TZ 112212-001 (*Fig. 2.55*). The 6.5 cm long and 0.8 cm thick nail is bent at a 90 degree angle, which is why it could be considered a hook. The fact that nails were also repurposed as hooks is shown by the interior of an Attic bowl from the Berlin Collection of Classical Antiquities. There, on the wall to the left of the hetaera, one can clearly see just such a converted nail on which a flute case was hung¹⁰⁴. A use as a door nail would also be possible, as an example from Bethsaida suggests¹⁰⁵. However, it is also known that nails were bent over at the ends of boards, for example, to ensure greater stability¹⁰⁶.

Finally, a probable nail blank TZ 015370-001 (*Fig. 2.56*) also appears among the nails from Tall Zirā'a. An unfinished nail is recognised as being a square rod on which hammer marks indicate the unfinished state of the object, as is the case on this specimen from the tall. Chisel marks testify to the cutting off from a larger blank, as indicated by the straight cut-off at one end of the nail¹⁰⁷. Further processing was done under heat with hammer, tongs and anvil. The blank may, in fact, have been scrap metal, as it has several cracks and was no longer usable in this form.

Considering the number of nails—even though it may be small—in the individual strata, it is noticeable that the distribution is relatively even or corresponds to the density of population¹⁰⁸. The rather low total number per stratum suggests that the nails were being reused¹⁰⁹.

Finally, the absence of particularly large nails (roofing nails) must be pointed out. Of course, these large nails could have been reused or melted down and reworked, but their complete absence is nevertheless striking. A simple explanation here could be that no nails were used in the construction of roofs at Tall Zirā'a, but instead there was recourse to the traditional form of construction, which used wood, mud and plant fibres to build flat roofs and accordingly did not require roofing nails.

In this subject area, a closer look at the finds might be worthwhile and reveal more about the furnishings. The question of whether there is more evidence of blacksmithing at Tall Zirā'a could also be investigated in this manner.

2.3.2.4. Summary

The repertoire of metal finds makes it clear that the inhabitants of Tall Zirā'a used metal objects that were common for the time and that there were even items of precious jewellery, as evidenced by a brooch and mirror fragment.

It also seems reasonable to assume that flat roofs were used during the Hellenistic (and also the Roman) period due to the lack of roofing nails.

However, all statements must be considered in light of the fact that nails—like all other metal objects—were probably reused, which also explains the small number of nails (in relation to their importance) in the individual strata.

It is interesting that in the spaces postulated as courtyards (C 4, C 8, C 9) no nails or other metal finds were discovered (they contained almost exclusively pottery), which again seems to support the hypothesis of courtyards, as little use for this category of finds might be expected in these parts of a house.

- 103 Peltz 2011, 9, Type S2 with flat underside; Further to the spread of this nail type: Peltz 2011, 10, Fn. 64.
- 104 Peltz 2011, 15 Pl. 43.
- 105 Fortner 2008, 72 Tab 87 No. 1470: the interpretation of this example was based on the context of the find as two nails of this type were found in an entrance area and a key was also found in the adjacent room.
- 106 Note in personal correspondence with S. Hoss of 28 October 2016.
- 107 Peltz 2011, 18, 28, Chap. 4, Fig. 80.
- 108 Stratum 6: 30 pieces, Stratum 7: 14 pieces, Stratum 8: 23 pieces.
- 109 This is also assumed by Peltz with a low number of finds: Pelz 2011, 6.

2.3.3. Coins

On Tall Zirā'a 121 coins were recovered in Areas I, II and III¹¹⁰. Their identification was largely carried out by K. Dahmen, of the Münzkabinett der Staatlichen Museen in Berlin¹¹¹. The individual objects can be viewed online on the Tall Zirā'a website with a short description, bibliographic references and photos¹¹².

Of the 121 coins, 61 were found to belong to the Hellenistic-Roman periods. Twelve others could not be identified due to their poor state of preservation, but likely also belong to these periods. The clear majority among the classical coins, with 51 pieces, are the objects belonging to the Hellenistic period (*Fig. 2.57*).



Fig. 2.57 Coins of the classical periods found at Tall Zirā'a (Source: BAI/GPIA).



Fig. 2.58 Hellenistic coins from Tall Zirāʿa (Source: BAI/GPIA).

The Hellenistic coins are unevenly distributed over the three areas: 26 coins were found in Area I and 19 in Area II, six more originate from Area III. However, the excavations in Area II have not yet reached the classical strata throughout, and in Area III no definite Hellenistic or Roman strata have been recorded so far, except a large Roman cistern below the Byzantine building. Therefore, future work on both areas is expected to yield further specimens. The large number of coins from Area I-in which there were no structures from the Hellenistic period-can most probably be explained by the fact that the objects found their way into this area during (demolition and) levelling work prior to the construction of new buildings. Area II, on the other hand, is the most densely built-up area, but was heavily disturbed by the many constructions of later epochs, which may explain the lower number of coins found. No statement can yet be made about Area III; further excavations remain to be carried out here, although the extensive construction of the Byzantine to Mamluk periods already suggests a strong disturbance of the strata below¹¹³.

Among the Hellenistic mints, the large number of Hasmonean objects is particularly striking. A total of 33 pieces can be attributed to the Hasmoneans, 19 of which can be attributed to Alexander Jannaeus (*Fig. 2.58*).



- 110 So far, only twelve coins have been found in Area III, and they are included in the analysis. However, this only applies to this type of find. All other finds from Area III remain largely unstudied and will be published separately at a later date.
- 111 Other contributors are indicated at relevant points.
- 112 Not listed in the coin database are the objects TZ 002532-002, TZ 010007-001, TZ 012870-001, TZ 110417-001, TZ 110132-001 and TZ 310428-001: http://muenzen.tallziraa.de/index.php?filtertype=reset (29.03.2015).
- 113 Rothe et al. 2017, esp. 261-264.

2.3.3.1. Ptolemaic Coins

Among the earliest coins found at Tall Zirā'a are the Ptolemaic coins. Three specimens can be attributed with certainty to this period (301–198 BC). Two of them were found in Area I, another one in Area II.

Object TZ 112168-001 (*Pl. 11.5*) shows on the obverse the head of Zeus Ammon with head band and on the reverse an eagle with the inscription IITOAEMAIOY – BAΣIAΩEΣ. The eagle is known to represent the heraldic animal of the Ptolemies and is to be understood as a symbol of royal power¹¹⁴. A more precise indication of the particular king in question cannot be discerned on the coin, but, based on the inscription and symbolism, Ptolemy II to Ptolemy V are possible candidates and therefore the coin would date to around 280–200 BC¹¹⁵.

The second coin, TZ 010325-001 (*Pl. 5.5*), likewise depicts Zeus Ammon with head band on the obverse, on the reverse two seated eagles facing left. The inscription $\Pi T[OAEMAIOY BA\Sigma IAE\Omega\Sigma]$ also indicates that this coin belongs to the Ptolemies. Another inscription to the left of the eagle can no longer be deciphered. Since the symbolism used on this object only occurs under one king, the coin can be clearly assigned to Ptolemy VI Philometor. The dating can therefore be narrowed down to 180–145 BC. Cyprus¹¹⁶ and, according to K. Dahmen, also Alexandria may be considered as minting sites.

In the case of a third coin, TZ 008877-001 (*Pl. 5.3*), heavy corrosion prevents a more precise determination. The obverse again shows a head, the reverse again an eagle, and thus it can be assumed to belong to a Ptolemaic ruler. However, the time range from c. 300 to 30 BC is very broad.

Two more coins, TZ 006993-001 (*Pl. 5.1*) and TZ 110058-001 (*Pl. 9.1*), could be either Ptolemaic or Seleucid, but their state of preservation does not allow a more accurate classification. According to K. Dahmen, only the slanted edges indicate that both these coins should be placed in these periods.

2.3.3.2. Seleucid Coins

Four objects from the Seleucid period were reliably identified. Two coins originate from Area I, and one each from Areas II and III.

TZ 010007-001 (*Pl. 5.4* drawing) can be attributed to Antiochus VII Euergetes and thus falls into the period between 138 and 128 BC¹¹⁷. Depicted on

the obverse is a bust of Eros facing right and on the reverse an Isis Crown with the inscription $[BA(\Sigma)]$ $I(L)E(O\Sigma)$] / ANTIOX[OY] / EYEP(G)[E]TO[Y]. A date and a monogram in the lower part of the coin are no longer visible, but can be assumed. The coin was most likely minted in Antioch¹¹⁸. The second coin TZ 011213-001 (Pl. 5.6) can be attributed to Antiochus IV Epiphanes (175-164 BC). The obverse depicts a portrait of the king with a radiant crown facing right and the reverse depicts Apollo seated on an omphalos with an arrow in his raised right hand and a bow resting on the ground in his left. The inscription BA $\Sigma I \Lambda E \Omega \Sigma / ANTIOXOY$ runs along both sides of the god¹¹⁹. The coin probably originates from the mint in Ake-Akko¹²⁰. The third Seleucid coin, TZ 112023-001 (Pl. 11.2), shows a (king's) head on the obverse and a palm tree on the reverse, with the inscription $[...]ANTI[...]^{121}$. An Antiochus of the second century BC can be assumed as the mint master. Tyros is likely to have been the minting site. The last Seleucid coin, TZ 310469-001 (Pl. 12.5), shows on the obverse a double bust of the Dioscuri facing right. The reverse shows a cornucopia surrounded by the inscription ANTIOXE[Ω N] / T Ω [N] / [EN Π T]OAE[MAI Δ I]. The coin was minted in Akko-Ptolemais and dates to the reign of Cleopatra Thea and Antiochus VIII between 125 and 121 BC122.

- 114 Christ 1967, 37; Noeske 2000, 20.
- 115 Ptolemy II: See Svoronos 1904, Pl. XIII, 18–26; SNG Blackburn, 1160, 1161; Ptolemy III: Compare SNG Blackburn, 1163–1170; Ptolemy IV: See SNG Blackburn, 1173, 1174.
- 116 Alexandria: See SNG Kopenhagen, 319–320; SNG Blackburn, 1181; Svoronos 1904, 1426–1427; Cyprus: See Svoronos 1904, Pl. XLVIII, 9.
- 117 No photos are available. However, it was identified by K. Dahmen.
- 118 See SNG Spaer, 1900–1905, 1911–1927, 1932–1937, 1939–1943, 1945–1950, 1953–1970, 1980–1983.
- 119 Antiochus IV was the first Seleucid to include the radiant crown in his coins' pictorial repertoire, as a reference to the sun god Helios and to legitimise his rule: See SC II, 46; The reverse with Apollo on the omphalos equipped with bow and arrow had already been a frequently used motif since Antiochus I: Christ 1967, 37.
- 120 See SC II, 1486
- 121 See SC I, 1081; SC II, 1462, 1470, 1580 (Antiochus IV, V, VII).
- 122 See CSE I, 810.

2.3.3.3. Hasmonean Coins

Among the Hasmonean coins at Tall Zirā'a one coin was minted by Hyrcanus I, 19 coins can be attributed to Alexander Jannaeus and 13 pieces can be described as Hasmonean, without being precisely identifiable¹²³.

Hyrcanus I (134–104 BC), following the death of Antiochus VII and the subsequent independence of Judea, extended his dominion to the borders of Galilee in the north and over parts of Transjordan in the east¹²⁴. The coin TZ 015292-001 (*Pl. 8.2*) dates from this period. It shows a Paleo-Hebrew inscription in a wreath on the obverse and a double cornucopia with a pomegranate on the reverse¹²⁵. The coin can be placed in the period between 128 and 104 BC¹²⁶.

With 19 specimens, the coins of the time of Alexander Jannaeus (104–76 BC) form the largest group within the Hasmonean coins found. In the Levant in general, the coins of Alexander were most common among the Hasmonean coins. He continued his father's minting with inscription and double cornucopia, but in the course of his reign he also had entirely new designs made, which differed from those of Hyrcanus I¹²⁷. According to the grouping by Y. Meshorer, the Jannaean coins found at the tall can be assigned to the following groups:

Group A, C or D: Coin TZ 012753-001 (*Pl. 6.1*) depicts on the obverse an anchor in a circle with an inscription [BA Σ IAE $\Omega\Sigma$ AAE Ξ AN Δ POY] surrounding it on the outside. The reverse is stamped, only a circle of dots is still clearly visible¹²⁸.

Group K: The coins of this group belong to those with the mentioned innovations. The obverse shows an anchor surrounded by the inscription $BA\Sigma IAE\Omega\Sigma AAE\Xi AN\Delta POY$. On the reverse is an eight-pointed star with a diadem and between the rays is written a Paleo-Hebrew inscription: YH-WNTN HMLK. Coins TZ 015288-001 (*Pl. 8.1*), TZ 015442-001 (*Pl. 8.5*) and TZ 310595-001 (*Pl. 13.2*) can be assigned to this group¹²⁹.

Group L: The majority of the Jannaean coins can be attributed to Group L. These include: TZ 012759-001 (*Pl.* 6.3), TZ 012939-001 (*Pl.* 6.4), TZ 014110-001 (*Pl.* 6.6), TZ 014111-001 (*Pl.* 6.7), TZ 014196-001 (*Pl.* 7.1), TZ 014196-002 (*Pl.* 7.2), TZ 014196-003 (*Pl.* 7.3), TZ 015285-001 (*Pl.* 7.7), TZ 015301-001 (*Pl.* 8.3), TZ 015346-001 (*Pl.* 8.4) and TZ 018689-001 (*Pl.* 8.6). The obverse features an anchor in a circle surrounded by the inscription BAΣIΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ. On the reverse is an eight-pointed star surrounded by a circle of dots. In addition, an Aramaic inscription reads "The King Alexander Year 25", corresponding to the year 78 BC¹³⁰. This type of coin is the only type

- 123 Hasmonean coins are known for their long inscriptions, which are particularly striking in comparison to their small size. In some cases, up to 26 letters of about 1 mm in size can be found on the coins. Aside from Aramaic inscriptions from the 25th year of Alexander Jannaeus' reign and some lead coins, the coins bore Paleo-Hebrew, but also Greek inscriptions. The Paleo-Hebrew script and language had long since fallen into disuse and there is no doubt that a large part of the population was unable to read these inscriptions. When minting the coins, the patrons probably wanted to revive the glorious days of the Jewish kingdom from the time of the First Temple. The shape of the letters deviates in part from their origins, which is attributable to the ignorance of the mint worker and the method of transcription (particularly also under Alexander Jannaeus): Meshorer 2001, 48, L4–L17.
- 124 Schäfer 2010, 82 f.
- 125 No coins of Hyrcanus I were minted before 128 BC. The wreath is to be regarded as a symbol of rulership and as a form of crown, which belongs only to the ruler: Meshorer 2001, 35 f.; The double cornucopia is a symbol of Demeter, the Greek goddess of fertility. The goddess was frequently depicted holding a double horn of plenty. This was usually filled with a pomegranate, poppy seeds and grapes. The combination of the two symbols is a Hasmonean innovation. It is conceivable that they symbolise the flourishing of the land under the Hasmoneans: Meshorer 2001, 33 f.
- 126 See Kaufman 1995, 23, SC-67 although with a different script.
- 127 Meshorer 2001, 37.
- 128 Meshorer 2001, 42–44, Meshorer Group A (lily), C (star) or D (title block).
- 129 Anchor and star are well-known symbols adopted from the Greek sphere of influence and according to Y. Meshorer also adorn the coins of groups L and M. The combination of star and diadem, however, was an innovation. Since Alexander Jannaeus did not allow portraits of himself wearing a ruler's crown due to the ban on images, he employed the diadem and the star to symbolise his royalty. Y. Meshorer considers a connection to the song of Balaam: "A star rise from Jacob, A scepter comes forth from Israel". The star would then stand for Alexander Jannaeus himself, his name and title can be read in Hebrew as "HMLK YHWNTN" between the rays, the crown (diadem) frames the whole picture: http://www.muenze-und-macht.at/showcases/ showcase4 (retrieved 19.11.2015); Meshorer 2001, 37 f.
- 130 Meshorer 2001, 39 f.

that shows a specific year among the Hasmonean mintings. It is also the most frequently minted type for this ruler. Coin TZ 014196-004 (*Pl. 7.4*) could also belong to this group, but because of the poor state of preservation it is also possible to assign it to Y. Meshorer's Group M, which has an Aramaic inscription without a star on the reverse.

Group N: Coin TZ 310592-001 (*Pl. 12.6*) shows an anchor with a diadem on the obverse and a lily on the reverse.

Group P, Q, R or S: The last group again shows different symbols with a double cornucopia/pomegranate on the reverse. On coin TZ 110417-001 (*Pl. 9.3* drawing) the four-line Hebrew inscription [YHWNTN] / [HK]HN[HGDL] / WHBR[H] / YHDY (Yehonatan the High Priest and the Council of the Jews) can be seen on the obverse¹³¹. Like-wise, TZ 310594-001 (*Pl. 13.1*) probably belongs to this group¹³².

The Hasmonean coins include 13 further specimens, which, however, cannot be categorised more precisely and can only be attributed to the period on the basis of rudimentary remains of images and inscriptions as well as the form of the metal: TZ 008604-001 (*Pl. 5.2*), TZ 012754-001 (*Pl. 6.2*), TZ 014450-001 (*Pl. 7.5*), TZ 015214-001 (*Pl. 6.2*), TZ 110311-001 (*Pl. 9.2*), TZ 111202-001 (*Pl. 10.1*), TZ 111244-001 (*Pl. 10.2*), TZ 111245-001 (*Pl. 10.3*), TZ 111278-001 (*Pl. 10.4*), TZ 111331-001-011 (*Pl. 10.5*), TZ 112170-001 (*Pl. 12.1*), TZ 112683-001 (*Pl. 12.2*) and TZ 310428-001 (*Pl. 12.3*).

2.3.3.4. Unspecified Hellenistic Coins

A total of eight coins can be described as Hellenistic, but cannot be further identified due to their respective state of preservation. As far as can be discerned, they show very diverse images and symbolism and cannot be grouped together.

Coin TZ 013110-001 (*Pl. 6.5*) shows on the obverse probably a double (?) bust facing right and on the reverse possibly a standing figure. The dating according to K. Dahmen is 200–30 BC.

Another coin TZ 110664-001 (*Pl. 9.4*) depicts a head facing right on the obverse, the reverse is no longer discernible. Here, too, a dating between 200 and 30 BC is suggested by K. Dahmen. The front prompts no speculation whatsoever, as it is a style of image that occurs too frequently.

Coin TZ 110981-001 (*Pl. 9.5*) shows on the obverse a beardless Heracles with lion's skin facing

right. The reverse is not preserved. Remains of legends are visible on both sides.

Another Hellenistic coin TZ 111017-001 (*Pl. 9.6*) shows the head of Apollo or Artemis facing right on the obverse. The reverse shows a palm tree flanked on both sides by the Greek letters Δ and H. This indicates that the coin was minted in Delos, which means that it must have been minted before 167 BC¹³³.

Coin TZ 111953-001 (*Pl. 11.1*) shows a head facing right with a radiant crown on the obverse and an inscription with two lines on the reverse. According to K. Dahmen, it could be a Hellenistic royal mint. The dating thus falls between 300 and 100 BC.

Another coin TZ 112163-001 (*Pl. 11.3*) is an Aes 3, which according to K. Dahmen also falls into the period between 300 and 30 BC. However, the obverse and reverse are so badly corroded that images can no longer be discerned.

On coin TZ 112166-001 (*Pl. 11.4*), a head of Helios facing right can be seen on the obverse. The reverse is again completely corroded. According to K. Dahmen, the dating can again be placed between 300 and 30 BC. Likewise, TZ 111551-001 (*Pl. 10.6*) and TZ 310429-001 (*Pl. 12.4*) can be classified as being of the same date.

2.3.3.5. Summary

A look at the Hellenistic coins clearly shows a relatively unbroken minting pattern from 280–200 BC to 78–76 BC (*Fig. 2.59*). Coin TZ 112168-001 is the earliest issue found, but it cannot be attributed with certainty to a Ptolemaic ruler and therefore the third century BC more generally is the earliest discernible date. It is likely that a new foundation was established at Gadara after the Iron Age city (or a Persian settlement?). This would go hand in hand with the discoveries made at Gadara, where the earliest settlement on the hilltop identified so far dates to the second half of the third century BC¹³⁴. Gadara

- 131 The object was identified by H. Gitler; Cf. Meshorer 1982, 125, No 39, Pl. 11 (different denomination of legends); Gitler 1998, 265.
- 132 See Kaufman 2004, 60. 125, Typ IA-31, Pl. 59.
- 133 See BMC Crete, 99, 1 (Apollo), 2 (Artemis) though on both coins the head faces to the left.
- 134 Bührig 2012, 237.

Ptolemies	Mint master	Dating
TZ 112168-001	Ptolemy II–V	280–200 BC
TZ 010325-001	Ptolemy VI	180–145 BC
Seleucids		
TZ 011213-001	Antiochus IV	175–164 BC
TZ 010007-001	Antiochus VII	138–128 BC
TZ 310469-001	Antiochus VIII	125–121 BC
Hasmoneans		
TZ 015292-001	Hyrcanus I	128–104 BC
a.o. TZ 015288-001	Alexander Jannaeus	104–76 BC
a.o. TZ 012759-001	Alexander Jannaeus	78 BC

Fig. 2.59 Overview on the dating of the Hellenistic coins.

and Tall Zirā'a were situated in the border region between the Seleucids in the north and the Ptolemies in the south¹³⁵. Hostilities in the region only ended with Antiochus III's victory at the Battle of Paneion in 200 BC and the final seizure of control by the Seleucids¹³⁶. The Ptolemaic garrison on the hilltop at Gadara, assumed by A. Hoffmann to be protecting the border, would therefore have to date from before the peace treaty¹³⁷. A fortified settlement at Tall Zirā'a in this period would thus not be out of the ordinary. Seleucid coins from the second century BC indicate that the settlement continued to exist after the conquest by Antiochus III and, as the pottery shows, flourished just as it did-on a much larger scale-at Gadara. Contact across the region was extensive, as the coins from Tyros (TZ 112023-001) and possibly Delos (TZ 111017-001) show¹³⁸.

Coins of Alexander Jannaeus were found in the fill layers of the Hellenistic period of Tall Zirā'a (i.e. above the occupation layer) as well as in larger numbers in the overlying strata. The discovery of four coins clumped together (TZ 014196-001-TZ 014196-001-004) in an extensive ash layer in Area I can be interpreted as evidence of a fire. Three of the coins date to 78 BC, the fourth remains without a date. Under what circumstances they were exposed to this heat is difficult to determine. The feature from which the coins originate is considered as a fill layer (Strata 10 to 6) and cannot be clearly assigned to one stratum. On the one hand, the era of Alexander would give every reason to assume a fire as a result of military action, since he conquered and destroyed many sites in the region. On the other hand, the conquest took place well before 78 BC (conquest of Gadara 101 BC). This results in

the following hypothesis: the Hellenistic settlement also fell in the course of the conquests. The coins with years ascribed to Alexander Jannaeus would therefore have to belong to a later destruction layer. This is indicated by their particularly long lifespans. A comparable example are silver coins from Pompeii, 68 % of which were over 100 years old at the time of the eruption of Vesuvius. D. Syon has also made it clear that coins, especially by Alexander Jannaeus, originate from Herodian contexts in unusually high numbers¹³⁹. However, this cannot be conclusively determined due to the difficult stratigraphy, even though the Early Roman finds offer ample grounds for this hypothesis.

A closer look at the coin assemblages of other sites is also telling. At Gadara, a total of 1441 coins have been found since 1974 (as of 2013), of which only 24 have remained undetermined. Thirteen objects can be attributed to the Ptolemies, 78 to the Seleucids, 36 to the Hasmoneans/Herodians/ Nabataeans and 168 to the Romans. A similar picture emerges from Gerasa (Jerash): only one Ptolemaic coin has been found, eight from the Seleucids, 34 from the Hasmonean/Herodian/Nabataean period and 134 coins from the Roman period¹⁴⁰. From the nearby tall settlement of Bethsaida on the Sea

- 135 Bührig 2012, 237; Kuhnen 1990, 32–36 esp. 34; On Gadara in the Hellenistic era: Weber 2002, 59–64.
- 136 Mittmann 2006, 26-28; Weber 2002, 60-64, esp. 62.
- 137 Hoffmann 2000, 189-191, 228.
- 138 On the Phoenician influence on the region: Lichtenberger 2003, 258 f.
- 139 Syon 2015, 44-47.
- 140 Noeske 2013, 136 Tab. 1.

of Galilee, 50 Ptolemaic coins have come to light, proving occupation at the site in the third century BC (often coins of Ptolemy II Philadelphus 285–246 BC). Among the 100 Seleucid coins, Antiochus III Megas (223–187 BC) is particularly prominent. The Hasmonean mints begin with John Hyrcanus I, who, however, was also the first to mint Hasmonean coins generally. Only seven coins of Herod I and eight coins of his sons have been found¹⁴¹. The sites all clearly show an increase in coins from the Ptolemaic to the Seleucid era.

At Tall Zirā'a, three Ptolemaic and four Seleucid coins can be attributed with certainty. A noticeable increase in the number of coins can only be observed in the Hasmonean period with 33 specimens. The earliest coin dates from the times of Ptolemy II to Ptolemy V, while one specimen is certain to originate with Ptolemy VI in the second century BC. For the Seleucid period, one coin each can be attributed to Antiochus IV, Antiochus VII and Antiochus VIII with certainty, after which there exist continuous finds up to the Roman period. From Gadara, on the other hand, coins of Antiochus III are already found with the beginning of the Seleucid rule after the battle of Paneion¹⁴².

The small number of Ptolemaic and Seleucid coins makes definitive statements difficult, but in connection with the pottery, which shows a peak in the second century BC, there is also a continuous rise in the finds at Tall $Zir\bar{a}$ (a, in line with surrounding sites.

Of the 51 coins that can be considered Hellenistic, six originate from the Hellenistic stratum, five others from fill layers of Strata 10 to 6. Only three of the coins found within Stratum 8 can be identified more precisely: the coins TZ 111278-001 (Alexander Jannaeus) and TZ 112683-001 (Alexander Jannaeus) were found within Complex A, the earliest coin TZ 112168-001 (Ptolemy II–V) was found within Room C 1.

Judging by the coin finds and in view of the surrounding sites, a settlement may have been founded at Tall Zirā'a as early as the Ptolemaic period, but it is much more likely that the architectural remains displayed here date from the Seleucid period. The findings of D. Syon on the Jannaean coins and the extensive Early Roman settlement, as well as the other groups of finds, make it evident that the settlement, like Gadara, may have been abandoned or destroyed at the end of the second century BC in the course of the conquests of Alexander Jannaeus. Since coin finds from the period between Salomon Alexandra and Aristobulus II are missing, there seems to have been no or only minor occupation during this time. It was not until Herod I that settlement activity began again.

141 Kuhn 2015, 156. 170.

142 Noeske 2013, 138 f. Tab. 4, 5.

2.3.4. Glass Finds

All the glass finds from the excavation were processed by S. Hoss¹⁴³. Here, her results are summarised and the finds are reclassified and evaluated within the revised stratigraphy. In total, there were 664 diagnostic glass sherds out of 3696 total pieces for all periods at Tall Zirā^{\cdot}a¹⁴⁴. The majority of the glass was found in the Hellenistic to Umayyad strata.



2.3.4.1. Distribution of Glass Finds

Fig. 2.60 Distribution of diagnostic glass finds from Stratum 8 in Area II (Source: BAI/GPIA).

Of the 3696 total finds, only 2.2 % (85) can be determined as undoubtedly Hellenistic and of these, 1.7 % (65) were found within Hellenistic Stratum 8. The other sherds are distributed through the strata from the Iron Age I to the colluvium. Of the sherds from Hellenistic Stratum 8, only 23 have been determined as diagnostic sherds. Of these, only one sherd comes from Area I, while the other pieces are distributed in Area II within Rooms C 1, C 12 and in Area A 3 (*Fig. 2.60*). Given their low number, the distribution of the finds within Stratum 8 is not particularly revealing

143 Hoss 2020b, 227–392.144 Hoss 2020b, 231.

2.3.4.2. Repertoire of Shapes

The mould-made bowls of S. Hoss' groups 1-4 represent the entire spectrum of Hellenistic glass found. They are considered characteristic of the Hellenistic period and are often encountered in large numbers (especially groups 1-3)¹⁴⁵. Hoss' groups consist of the following forms:

- Group 1 (*Pl. 14.1, 2*) Conical bowls
- Group 2 (*Pl. 14.3*) Hemispherical bowls
- Group 3 (Pl. 15.1) Ovoid bowls
- Group 4 (*Pl. 15.2*) Petal-decorated bowls

These forms are mainly found from the middle of the second century BC to the middle of the first century AD^{146} . An exception are the two pieces of decorated bowls (Group 4), which may have a lifespan ranging from the third century BC to the early first century AD (*Fig. 2.65*)¹⁴⁷.

These shapes exclusively represent drinking vessels, which were intended to expand the available pottery repertoire¹⁴⁸.

The colour spectrum of the glass fragments found within Stratum 8 varies from white, blue (*Fig. 2.64*), turquoise, brown-yellow (*Fig. 2.62*) to various shades of green (*Figs. 2.61, 2.63* and 2.65)¹⁴⁹. The large amount of greenish glass, appears to mimic bronze vessels¹⁵⁰. This may be an indication of the tall inhabitants' preference for this type of vessel¹⁵¹.

The shapes are typical of the Decapolis, but also show influences from Galilee, which can be explained with the tall's location on the border of both regions¹⁵². Comparable archaeological material was found both within the Decapolis and in Galilee, in places with a partially Hellenised population¹⁵³. Thus, close ties to these two regions in particular become visible here, as does the Hellenistic influence.

In addition, it can be argued that the inhabitants of the tall had also gained a certain prosperity, as it was very costly to import such drinking vessels¹⁵⁴.

- 145 Hoss 2020b, 234; Grose 2012, 8. 28 (on Groups 1–3).
- 146 Hoss 2020b, 234; Grose 2012, 29 (on Groups 1–3); Burdajewicz 2009, 168 (on Group 1).
- 147 Hoss 2020b, 235.
- 148 Hoss 2020b, 258.
- 149 Hoss 2020b, 236 Graph. 2.2.
- 150 Grose 2012, 29 (on Group 1).
- 151 Hoss 2020b, 238.

2.3.4.3. Summary

In her publication, S. Hoss spoke of an astonishingly high number of glass finds in comparison to the size of the settlement¹⁵⁵. However, the interpretation of the stratigraphy was far from complete at that time, and the full dimensions of the settlement could not yet be discerned. In the light of the latest findings, this number is no longer at all surprising, as the settlement is much more extensive than initially assumed. Nevertheless, it cannot be ruled out that most of the finds probably belong to the Early Roman period (see *Chap. 4.3.4.*). The strong Hellenistic influence, however, is once again clearly evident, as is the wealth of at least some of the inhabitants of the tall¹⁵⁶.

- 152 Hoss 2020b, 257.
- 153 Hoss 2020b, 234-236, 257.
- 154 Hoss 2020b, 258.
- 155 "(...) the quantity of vessels is fairly high for such a small settlement, prompting questions on the sources of the wealth of its population." Hoss 2020b, 258.
- 156 Hoss 2020b, 272



Fig. 2.61 Conical bowl TZ 110313-001; Stratum 6, and 5, Square AX 130, Context 10348: blue-green translucent glass; calcified; three incised grooves on the inner side (Source: BAI/GPIA).



Fig. 2.62 Conical bowl TZ 110313-002; Stratum 6, and 5, Square AX 130, Context 10348: honey-brown translucent glass; calcified; tapering towards the top (Source: BAI/GPIA).



Fig. 2.63 Hemispherical bowl TZ 016699-003; Stratum 10, Square AR 121, Context 4936: olive green translucent glass; two incised grooves on the inside (Source: BAI/ GPIA).



Fig. 2.64 Ovoid bowl TZ 016681-001; Stratum 6 c, b, a, Square AR 123, Context 4616: light blue translucent glass; below the lip there is an incised groove (Source: BAI/ GPIA).



Fig. 2.65 Decorated bowl TZ 010840-001; Stratum 3 b, a, Square AF/AG 115, Context 2517: green translucent glass; riblike leaf pattern (Source: BAI/GPIA).

2.3.5. Animal Bones

The bone finds were identified and published by N. Benecke¹⁵⁷. Information on animal species, number and bone type is available for the entire repertoire of finds. Even though the excavations have by no means reached the full extent of the Hellenistic settlement and the assemblage of bones is comparatively small, we can already show some trends. Within the contexts of Stratum 8, 401 bones were recovered, of which 123 specimens were unidentifiable due to poor preservation.

2.3.5.1. Distribution of Bone Finds

Despite the considerably lower number of features in Area I, 45.9 % (184 pieces) of the bones were found in the extensive fill layers in AQ/AR 123, AQ 118 and AP 120. The majority of specimens (87 pieces), however, could no longer be identified due to the poor state of preservation. Worth mentioning is a camel bone found in context 5281 (AQ 123), which is the only find of this animal species in this stratum.



Fig. 2.66 Stratum 8, Area II: distribution of bone finds (Source: BAI/GPIA).

In Area II, a total of 217 bones were found, centred within a few room sections (*Fig. 2.66*). Twenty-three bones were found as filling material in walls¹⁵⁸. Twenty-eight bones come from layers of collapse and 14 from a tabun fill or pit. Particularly striking is the concentration around the tabuns in Complex A 3, which is also where the only ev-

- 157 Benecke 2019; at the time of publication, work on the stratigraphy was ongoing, so the numbers from the two works do not match exactly.
- 158 Since the assignment of the finds in these walls was not clear, they could also be bones from the interior of the room, which is why they were included in the statistics.

idence of domestic pigs and fallow deer has been found. Within Complex C, bones were only found in Room C 1, even areas around tabuns were devoid of bone finds. Sheep and goat bones clearly predominate. Bones of domestic fowl were only found in Complex A and thus in the outskirts of the settlement. Apart from that, the animal species were evenly distributed, as they were in Area I.

The fact that a large number of bones were found in fill layers around the tabuns in Area II Complex A is hardly surprising, since food was prepared in this area and the bones were subsequently disposed of in the surrounding pits. Bones of sheep, goat, cattle, domestic fowl, fallow deer and pig were found in waste pit 10742 (Complex A 3). This indicates a rich food supply, even if only evidenced by this single feature. The lack of finds from rooms C 3 to C 11 is attributable to the state of excavation, which has not yet advanced into the corresponding contexts here. Room C 12 remained without bone material despite numerous excavated contexts and a tabun.

2.3.5.2. Identifying the Bone Finds

The majority of the bones (56.1 %) in both areas are from sheep and goats, although only 4.7 % could be reliably identified as sheep bones and only 1.8 % as goat bones. This is followed by cattle bones with 9.8 % and finally by bones of domestic fowl with only 2 %. Only one fragment each of camel (Area I), domestic pig, gazelle and fallow deer (Area II) could be identified (*Fig. 2.67*).



Fig. 2.67 Comparison of the number of bones by species and area (Source: BAI/GPIA).

Thus, domestic animals such as cattle, sheep and goats are represented most prominently, as well as domestic fowl and pigs to a much lesser extent. In contrast, with only one find each of gazelle and fallow deer, there is almost no evidence of wild game. There are no traces of work animals at all (which may include dogs and horses), only one instance of a camel (1) has been found (*Table 2.6*).

Among the cattle bones, only one reworked piece was found: a weaver's spatula TZ 112242-001 (*Fig. 2.68*).

Compared to the preceding strata of the Bronze and Iron Ages, the diversity of animal species is much smaller. In previous settlement phases, various marine animals were found at least sporadically, such as fish, turtles and crustaceans, as well as a wider variety of animals associated with hunting such as fox, hare, wild boar and red deer. Nevertheless, sheep, goats and cattle were the most common species in those periods too¹⁵⁹.

Sources repeatedly attest to the fact that sheep and goats were the preferred farm animals in an-

159 Soennecken 2017, Tab. 4.1.7 (Stratum 16), Tab. 4.1.15 (Stratum 15), Tab. 4.1.43 (Stratum 14), Tab. 4.1.54 (Stratum 13), Tab. 4.1.63 (Stratum 12), Tab. 4.1.72 (Stratum 11), Tab. 4.1.80 (Stratum 10).

	Animal species	Number of bones			
Farm animals					
	Cattle	40			
Meat, eggs,	Sheep	19 (199 sheep or goat)			
milk, fat, skin bones	Chicken	8			
wool	Goat	7 (199 sheep or goat)			
	Domestic pig	1			
Wild animals					
Meat, fat,	Gazelle	1			
skin, antlers, bones	Fallow deer	1			
Work animals					
Guard ani- mals, means of transport	Camel	1			

Tab. 2.6 Overview of the bones found in Stratum 8.

tiquity¹⁶⁰. The animals were indispensable for rural settlements. Not only did they provide wool and fur for the production of clothing, carpets and other textiles, but their milk, the cheese produced from it, and their meat were also an important resource for existence. Furthermore, they played an important religious role as sacrificial animals for numerous deities¹⁶¹. That sheep and goats had an elevated status is also shown by the fact that the sources mention certain breeds of sheep in detail¹⁶².

The land around the settlement was extremely well suited for animal husbandry¹⁶³. There was enough space here and, thanks to the numerous water sources, there were also sufficient spots for feeding and drinking. What the husbandry at Tall Zirā'a may have looked like in Hellenistic times can no longer be reconstructed. Stables cannot be identified. However, based on current findings, it can be assumed that animals were probably not kept in the houses, as was otherwise quite common in the Middle East, for example as an additional source of heat in winter. Rather, it can be assumed that they were kept outside the settlement in separate enclosures, stables or in the open.

Analyses of bone finds from other sites reveal a similar result. A detailed evaluation is available for the nearby Tel Bet Yerah. There, bone finds for the Hellenistic period amount to 108 specimens, of which 51.8 % are from sheep or goats¹⁶⁴. Cattle are also represented with as much as 9.3 %. However, as C. R. Cope notes, the amount of meat obtained from the slaughter of a cow is ten times that of sheep and



Fig. 2.68 Weaver's spatula TZ 112242-001; Stratum 8, Square AW 128, Context 11295 (Source: BAI/GPIA).

goats¹⁶⁵. Moreover, C. R. Cope's analyses show that sheep were not slaughtered until an advanced age. This leads to the assumption that they were mainly kept for milk and wool, while cattle were kept for food¹⁶⁶. Similar analyses regarding the bones of Tall Zirā'a are not yet available, but comparable practices can be assumed.

2.3.5.3. Summary

In Hellenistic times, livestock was undoubtedly of the greatest importance at Tall Zirā'a. Sheep and goats were predominant, and were mainly needed for milk production and wool or fur, although they were also slaughtered (presumably only at an advanced age). Cattle also served as a source of sustenance, their meat yield per animal being much higher than that of other livestock and thus probably representing the largest source of meat. Domestic fowl were also recorded, but were not among the preferred species. Although domestic pig was also present, it apparently was not one of the preferred animals on the tall either. However, since they do

- 160 Detailed presentation of the literature in Toynbee 1983, 146–150.
- 161 Toynbee 1983, 147 f.
- 162 Toynbee 1983, 146; Strabo, for instance, reports of the Nabataean sheep breed πρόβατα λευκότριχα with white wool: Strab. 16, 4, 26.
- 163 Vieweger Häser 2005, 2.
- 164 Cope 2006, 171, Tab. 8.2.
- 165 Cope 2006, 169.
- 166 Cope 2006. 171, 174.

not serve any other purpose apart from meat production, they also seem to have been part of the inhabitants' diet. The absence of evidence for stables so far does mean that the question of how the animals were kept remains unanswered.

Hunting wild game probably played only a subordinate role in people's everyday life, which speaks for a good level of self-sufficiency or good external supplies. The absence of dog and horse bones, on the other hand, does not necessarily indicate these working animals were not used. Rather, the excavated area seems to have been less suitable for these animals, considering the narrow rooms and the slope directly adjoining Complex A.

The high number of bone finds despite the low number of features from Area I is another indication that the space was used for waste.

2.3.6. Stone Finds

The stone objects from Tall Zirā'a have only been partially studied so far. H.-M. Jakubik has devoted himself to the querns, but his work has not been published¹⁶⁷. Further analyses, for example on flint objects, are in progress, but the results are not yet available¹⁶⁸.



2.3.6.1. Distribution of Stone Finds

Fig. 2.69 Stratum 8, Area II; distribution of stone finds (Source: BAI/GPIA).

One hundred and thirty-three stone objects were excavated in Stratum 8, 33 of which were incorporated into walls as building stones, so they probably originated from older settlement contexts or from the construction period itself (*Fig. 2.69*).

There was a concentration of finds in Room C 12 (13 specimens). This room, so far not very remarkable for its finds, showed almost the entire spectrum of stone tools used in Stratum 8. A larger

- 167 Many thanks to H.-M. Jakubik for his collected material, thoughts and hints on the querns and grinding stones from Tall Zirā'a.
- 168 In preparation: B. Schröder, Die Entwicklung von Steingeräten in Nordpalästina seit den Metallzeiten anhand des Fundmaterials vom Tall Zirā[•]a (working title of thesis).
number of stone finds were also discovered around Complex A 3. Aside from that they occurred rather sporadically.

All the querns (6) originated solely from the space between Complexes A 1 and A 3, but were loosely scattered. Due to the proximity of these finds to each other, the idea that it may have been a room with several hand-driven mills seems reasonable. On the other hand, the upper part of the mill, the grinding stone, was found at Tall Zirā'a only within Complex C.

2.3.6.2. Repertoire of Shapes

Almost half of the stone objects (41) found in the rooms are made of basalt, 52 of flint (47 flakes/ tools) and 18 of limestone. A single object (tile) was made of marble, but was also incorporated into a wall and therefore cannot be safely counted as part of the inventory. Twenty-one pieces have to remain unidentified.

Among the types, rubbing stones (31) account for by far the largest share, the majority of which (19) are made of basalt, like TZ 112381-001 (*Fig. 2.70*), although others are made of limestone (5), like TZ 112466-001 (*Figs. 2.71, 2.72*), and flint $(5)^{169}$. Since these were objects of daily use, it is not surprising that they were evenly distributed over the entire area and could be found in almost all rooms. The small objects were mainly used for fine grinding work in the kitchen area¹⁷⁰.

Mortars are represented by only seven objects and were found mainly in residential Complexes A and C. Here too, the majority (5) of the finds are made of basalt. There are also two mortars, including TZ 111833-001, made of limestone (*Fig. 2.73*). Mortars also found use in the kitchen and were employed, for example, in grinding spices or in the production of remedies¹⁷¹.

- 169 These are already known from Early Bronze Age contexts in the Levant: Müller-Neuhof 2015, 20; due to the occurrence of several objects made of flint in Stratum 8, it can be assumed that they were still made of this material in the Hellenistic period, even if only in small numbers.
- 170 See Fortner 2008, 81: here called small rubbing stones (*kleine Mahlsteine*), Obj. 1521, 1522; whereas 1519, 1520 should be understood instead as grinding stones.

171 Fortner 2008, 81.



Fig. 2.70 Rubbing stone TZ 112381-001; Stratum 8, Square AV 131, Context 11224 (Source: BAI/GPIA).



Fig. 2.71 and Fig. 2.72 Rubbing stone TZ 112466-001; Stratum 8, Square AU 132, Context 11202 (Source: BAI/GPIA).



Fig. 2.73 Mortar TZ 111833-001; Stratum 8, Square AW 127, Context 11081 (Source: BAI/GPIA).



Fig. 2.74 and Fig. 2.75 Pedestal of a tripod bowl TZ 112367-001; Stratum 8, Square AW 128, Context 11295 (Source: BAI/GPIA).

Also among the grinding tools were six grinding stones made of basalt, which were found exclusively in Complex A. Since they served as bases for grinding grain, among other things, limestone was unsuitable as a material, as friction causes considerable wear on this stone¹⁷². Functionally belonging to the grinding stones are the querns, of which three basalt specimens have been found. Together, quern and grinding stone form a so-called hand-driven mill. The lower part (lower grinding stone) functioned as a base on which the upper part (quern) was used to grind by hand. However, these two parts have not been found together in any Hellenistic context.

Five stone vessels are also among the finds: two made of limestone and three made of basalt. They were found in Complex A and in Room C 12. From the section between A 1 and A 2 comes a particularly beautiful piece, TZ 112367-001, which is probably part of a tripod bowl (*Figs. 2.74, 2.75*). The object was perhaps not entirely finished, because only the base of toes/claws can be discerned.

This object is thus probably an indication of stonemasonry at Tall Zirā'a. Its use may have been manifold; an interpretation as a mortar should also be considered¹⁷³.

Part of the repertoire are also three weights, including TZ 111311-001. Judging by its size (9.6 cm x 9.3 cm x 7.1 cm), this may have been part of a loom weight (*Fig. 2.76*). In addition, the find repertoire includes two objects that could be interpreted as game pieces and a whetstone TZ 112696-001 (*Fig. 2.77*).

Among the finds are also four tesserae. However, these do not so much indicate that the dwellings were decorated with mosaics, but rather that these finds probably belong to the overlying layers.



Fig. 2.76 Weight TZ 111311-001; Stratum 8, Square AW 127, Context 10758 (Source: BAI/GPIA).



Fig. 2.77 Whetstone or grindstone TZ 112696-001; Stratum 8, Square AT 128, Context 11471 (Source: BAI/GPIA).

- 172 In contrast to grinding spices, the grinding of grain required more force and the process also took considerably longer. Many thanks to H.-M. Jakubik for this information.
- 173 See Fortner 2008, 81, Obj. 1516.

2.3.6.3. Summary

Overall, the repertoire (*Tab. 2.7*) of stone objects corresponds to that of a rural settlement in which food was ground (rubbing stones, hand mills, mortars), games were played (game pieces), textiles were processed (loom weight) and possibly where stone vessels were produced (tripod/ mortar). Furnishings such as tessera and marble tiles cannot be attributed to the Hellenistic stratum with certainty.

Purpose	Number	Note
Rubbing stones	31	
Basalt	19	2x found in wall
Limestone	5	2x found in wall
Flint	5	1x found in wall
Indefinite	2	
Mortars	7	
Basalt	5	1x found in wall
Limestone	2	
Grinding stones	6	
Basalt	6	
Querns	3	
Basalt	3	1x found in wall
Stone vessels	5	
Basalt	3	
Limestone	2	
Tesserae	4	
Limestone	3	found in wall
Basalt	1	found in wall
Weights	3	
Basalt	1	
Limestone	2	
Game pieces	2	
Basalt	1	
Limestone	1	
Door hinge stone	1	
Basalt	1	found in wall
Tile	1	
Marble	1	found in wall
Whetstone	1	
Indefinite	1	
Flint/Tools	47	
Flint	47	22x found in wall
Function unclear	22	
Basalt	2	1x found in wall
Limestone	4	
Flint	16	

Tab. 2.7 Overview of the stone objects found in Stratum 8.

2.4. Overall Evaluation of the Hellenistic Stratum

There is general scholarly consensus that tall settlements occurred after the Persian period or at the latest as the Hellenistic-Early Roman phase slowly ended, such as, for example, the sites of Tall Waqqāş, Tall Iktanu, Tall al-Mazār, Tall al-Hammeh and Tell Dēr 'Allā, to name but a few¹⁷⁴. At Tall Zirā'a, between the end the Iron Age II C and the Hellenistic period there may have been a settlement gap, however no definitive statement can be made as to its exact duration. Although some Persian sherds were found during the excavations, no associated architecture has been found so far¹⁷⁵, which only suggests a small settlement in an unexcavated area of the tall. Pottery from the fourth century BC cannot be clearly identified, while pottery from the end of the third century BC is documented¹⁷⁶. If coin TZ 112168-001 is to be attributed to Ptolemy II, and not to one of his immediate successors, the beginning of the recolonisation could fall into the first half of the third century BC. It is also this ruler who, in the second quarter of the third century BC, begins to expand the city network in northern Jordan and to whom the foundations of Bethsaida, Philadelphia, Scythopolis and Philoteria, among others, can be attributed¹⁷⁷. Here the main concern of the Ptolemaic ruler seems to have been the military protection of the hard-fought area, against the Seleucids, but also against Arab tribes, which is why the settlements tended to have a fortified character¹⁷⁸. The archaeological evidence for Ptolemaic settlement from the third century BC is so far well documented in Maresha, Philotheria and Tell Bet Shean¹⁷⁹. The small amount of early Hellenistic pottery (e.g. 22 lagynoi) on Tall Zirā'a suggests that although there must have been a settlement on the tall, it was either quite small or completely destroyed by subsequent settlement activity. Nevertheless, the Ptolemies did leave their mark on Tall Zirā'a.

The attempt of the Ptolemies to secure their territory through fortified settlements and garrisons failed because Antiochus III Megas was able to capture the Levant, beginning with the Fifth Syrian War in 217 BC and ending with his victory over Ptolemy V at Panium¹⁸⁰. Under this Seleucid ruler, and especially under his son Antiochus IV, a renewed and extensive expansion of the great cities of the region took place, such as Hippos, Gadara, Abila, Scythopolis, Pella, Dion and Gerasa¹⁸¹. According to the contents of an inscription found on Tall al-Firr (7 km north-west of Beth Shean), this

measure followed relatively soon in the wake of conquering the first territories in 218 and 217 BC¹⁸². Here, the reader is privy to a correspondence from the years 202 to 195 BC between Antiochus III and Antiochus IV with Ptolemy, the governor of Koile Syria and Phoenicia, who was instructed to organise the provisioning of the troops and their accommodation¹⁸³. These measures can also be relatively reliably attested in the archaeological evidence, as the expansion of Gadara at the beginning of the second century BC clearly demonstrates: city walls, pentagonal towers, sanctuaries and a city plan with rectilinear main axes¹⁸⁴ testify to intensive building activity and Greek influence, as can also be observed at other sites¹⁸⁵. At Tall Zirā'a, too, a zenith of habitation can be identified in the second century BC by means of the pottery. F. Kenkel has clearly shown that the imports (drinking vessels, Echinus bowls, fish plates), cooking utensils (cooking pots) and everyday wares (bowls, jars/jugs, pithoi and amphorae) from the Hellenistic stratum predominantly date from the second century BC. Goods from Ephesus, Antioch and Rhodes were identified¹⁸⁶. Local-regional products (mainly tableware) also occurred. From the middle of the second cen-

- 174 Thiel 2003, 223; Thiel 2007, 21, 367.
- 175 Persian sherds are also found in Ptolemais and Maresha, which likewise do not have any architectural features. It can be assumed that the Persian settlements were built elsewhere or were not very extensive: Thiel 2007, 363.
- 176 Kenkel 2012, 68 f. 308. 310.
- 177 Thiel 2003, 224; Thiel 2007, 22. 364 f.; Thiel 2003, 224; Thiel 2007, 22. 364 f.; for further reading see: Tscherikow-er 1927, 64–81. 182–189; Jones 1931, 7–85; Tscherikower 1937, 9–90; Jones 1971, 232–242; Mueller 2006.
- 178 Thiel 2003, 225; Thiel 2007, 366-369.
- 179 Thiel 2007, 366.
- 180 Pol. 4, 37, 1-3; 5, 61-62; 5, 71.
- 181 Thiel 2003, 225 f.
- 182 Thiel 2007, 369; Landau 1966, Fig. 1.
- 183 Thiel 2003, 227.
- 184 The term "hippodamian system" is not used in this context. In this regard, Bührig has clearly stated that Gadara does have a decumanus, but an equivalent cardo is missing, probably due to the topographical location of the city. She describes the structure of the city instead as an "approximately orthogonal system": Bührig 2012, 238.
- 185 Thiel 2003, 226.
- 186 Kenkel 2012, 308.

tury BC, the pottery repertoire was supplemented by Eastern Sigillata A (ESA) bowls and plates¹⁸⁷. Hellenistic coin finds, which mainly date from the second century BC, also confirm this peak of occupation. The fact that the settlement flourished can also be seen in its expansion (Complex A) beyond the boundaries of the fortified outer wall up to the edge of the tall, as can be observed in other places during this period. Expanding beyond the city limits is documented in numerous cities such as Ptolemais, Maresha, Baithsoura, Scythopolis, Pella, Gadara and Abila, especially in the course of the second century BC. However, the heavy mixing of finds does not allow for any refinement of the dating. From Gadara, the tall offers a perfect location for a small settlement in the hinterland: easily visible, agriculturally usable and, due to its elevated position, easily defensible. The establishment of a settlement in the first half of the second century BC can be assumed.

The designation of the Hellenistic settlement on Tall Zirā'a as tetrapyrgos, as made by F. Kenkel, cannot be upheld insofar as a purely military settlement on the tall can be ruled out, since it is predominantly agricultural in character. Furthermore, the attribution of the tower to the Hellenistic stratum has been refuted. The best-known fortress in the vicinity of Tall Zirā'a is Jebel Sartaba (2.2 km south-east of Pella), which, however, according to A. W. McNicoll, was never completed and thus allows for little insight into its actual use, although it was clearly of a military nature¹⁸⁸. Similarly, the large Hellenistic sites of Amathus, Essa and Ragba (c. 45–50 km south of the Tall Zirā'a) were, according to sources, military fortifications and, like Jebel Sartaba, belonged to the Late Hellenistic period¹⁸⁹. Unfortunately, the state of research leaves little scope for more detailed interpretations. However, all fortresses are characterised by several towers, very wide walls (2 m and more) and a narrow builtup area along the outer wall with a free inner area for troop movements. Since the finds on Tall Zirā'a offer no indication of a military fortification, this interpretation seems to be out of the question. Rather, the comparisons with rural settlements and, in the broadest sense, the poleis, indicate that the site at Tall Zirā'a must have been a small, yet fortified settlement in the environs of Gadara.

The rural house types clearly follow the traditional building style of the region with quarry stone masonry and mudbrick structures¹⁹⁰. On the one hand, this may have been due to a shortage of or the procurement price of stone, but it may also have been due to simpler handling of mudbrick the and familiar building techniques. If we assume that occupation actually began with Antiochus IV, a rapid building style and the use of local resources appear to have been the most practical. In addition, a traditional building style appeared more familiar and was perceived as less alien by the population who, as a result of the Ptolemaic era, were already resentful of foreign rule. Not only technique, but also the design of the houses was based on older precedents and featured courtyards with pisé floors and tabuns. Because of a lack of finds, nothing can be said about other furnishings of the houses. However, as other examples from Maresha, Hirbat al-Karak and Tall Istaba show, precious wall panelling in coloured marble, echoing the first Pompeian style, was found even in houses adhering to the local building tradition¹⁹¹. Finds of this kind are, however, completely absent from Tall Zirā'a. The possibility of influence from Phoenician culture can be assumed. The comparison of a wall built using the header and stretcher system like those seen in examples from the Phoenician coast such as Tall al-Fuhhār, and further inland at Maresha and Tall Mubārak, was presented in Chap. 2.2.3.2. There are, however, no other examples in the region to really support this hypothesis. That there are very few remains of upper brickwork on the tall in Hellenistic times also presents a hurdle in this regard.

It is difficult to draw conclusions about the composition of the population at Tall Zirāʿa, despite the detailed study of the finds. Based on the glass and pottery finds as well as the terracotta head, it can be assumed that the inhabitants exhibited a distinct Greek influence¹⁹². A certain prosperity can also be inferred from this, which is supported by the metal finds (brooch, mirrors) and the large number of glass fragments. The emergence of casseroles in the late Hellenistic period and the increased consumption

- 187 Kenkel 2012, 309.
- 188 Jebel Sartaba: Weber 1993, 15; Shatzman 1991, 72 f.; Kuhnen 1990, 49. 51 Fig. 26; McNicoll et al. 1982, 64–67 Fig. 10.
- 189 Amathus, Essa, Ragba: Mittmann 1987, 49-66 Fig. 2. 3.
- 190 Thiel 2007, 373.
- 191 Thiel 2007, 373.
- 192 Hoss 2020b, 258; Kenkel 2012, 258.

of meat, which is attested by the large number of animal bones, also appear to be associated with this.

In addition to daily activities such as the grinding of various foodstuffs and the production of textiles, evidence of stonework has also been found in the form of an unfinished tripod bowl.

Gadara, as well as the fortress of Amathus, were conquered around 100 BC by Alexander Jannaeus after a siege that lasted ten months¹⁹³. Gadara must have been so badly damaged that Flavius Josephus considered the mention of its reconstruction by Pompey relevant, probably also because Pompey proved to be a benefactor and rebuilt the city out of friendship for the freedman Demetrius¹⁹⁴. There is no question that the strategically favourable location and general importance of the city also played a role¹⁹⁵. The extent to which the settlement at Tall Zirā'a was directly affected by these military conflicts cannot be determined conclusively. No concrete destruction layer is detectable on the tall, but a decline in the quantity and variety of pottery types can be observed. It seems probable that during such a long siege, attention might also have been drawn to the tall, which after all lay within sight of Gadara. The large number of year-dated coins by Alexander Jannaeus from the year 78 BC must more likely be placed in the later Herodian context and does not necessarily prove a continuation of the Hellenistic settlement beyond the destruction of Gadara. This has been confirmed by numerous excavations during which a similar phenomenon was found and according to which the coins of Alexander Jannaeus exhibited a particularly long lifespan. On the basis of all available features and finds, the settlement phase of the Hellenistic period excavated at Tall Zirā'a. begins in the first half of the third century at the earliest, but in any case, no later than the second century BC. The destruction or abandonment of the settlement is to be seen either in the context of the conquest of Gadara at the end of the second century BC, or at the beginning/middle of the first century BC. However, the archaeological material (apart from the coins) seems to point to the earlier (late second century BC) abandonment of the settlement.

193 Jos. Ant. Jud. XIII, 356.

194 Jos. Bell. Jud. 1, 7, 7; Jos. Ant. Jud. 14, 4, 4.

195 Pol. V, 71, 3; Kasher 1990, 151 f.

3.1. General Information

The Early Roman levels at Tall Zirā'a are labelled Stratum 7 c, 7 b and 7 a. Architectural remains were found in Area I in the four Complexes A to D (*Fig. 3.1*) and in Area II in two Complexes E and F (*Fig. 3.2*).

In Area I, two phases of reconstruction were identified within Complex D, which are designated b and a. In Area II, there was no rebuilding in this period, which is why Stratum 7 is the sole designation used there (*Tab. 3.1*).

Area I	Area II
7 c – 1. Construction phase	_
7 b – 1st Phase of reconstruction	7
7 a – 2nd Phase of reconstruction	

Tab. 3.1 Table of correlations Area I and II for Stratum 7 (Source: BAI/GPIA).

The features in Area I were in part placed directly on the Iron Age strata, usually not causing extensive damage to the prehistoric features, except in the Squares AP-AT 123. Pits were an exception in this regard. For Area II, no definite statement can be made, as the excavations there only reached pre-classical features in a few places. In contrast, the Early Roman architecture in both areas was severely damaged by later structures, especially by deep building pits from the Byzantine and Umayyad periods. The destruction in Area I was much more extensive and in some parts the architecture there could no longer be discerned. The Early Roman buildings in Area I were seemingly demolished before a new construction phase in the Late Roman-Byzantine period when the entire area was levelled. The features appear to be cut off above floor level, which is why architectural remains were only found in a relatively small area in the north-eastern section of Area I. Square rows AF-AL in Area I had no early Roman constructions, neither did the northernmost square rows AT and AS and square rows 116 and 117, at the edge of the tall. The state of preservation of the architectural remains in Area II was similar, but with the difference that here the deep foundations of the Byzantine and Umayyad buildings (Strata 5, 4 and 3) disturbed the features as well. Nevertheless, due to the extensive building development, the identification of features in this area was less problematic, even though it was not entirely conclusive. In Area II, almost the entire south-eastern area produced no finds.

Unless otherwise stated in the text, all features described as walls are foundation walls. Characteristic is the double-faced wall constructed of irregularly sized field and quarry stones, the spaces between which were filled with soil (partly interspersed with finds) and small stones. The exterior and interior walls either do not differ or differ only slightly from each other. Occasionally, spolia in the form of large ashlars were incorporated, which can be traced back to Hellenistic buildings. Rubbing or grinding stones and other stone tools were also reused.

The description of the features follows the stratigraphic order. Newly established walls and associated floors are therefore described during their first construction phase, while fill or collapse layers are mentioned correspondingly only in the last phase of the room or building (7 a), but are occasionally referred to earlier for purposes of interpretation. The same applies to descriptions of pits without clear stratification, which are attributed to the last phase of a stratum. Room dimensions are given for completely closed or reconstructable rooms, but due to the state of the walls, however, this is restricted almost exclusively to Area II.

Stratum 7 c will be described in detail first. In the following chapters on 7 b and 7 a, only alterations in the corresponding complexes will be discussed. In general, it must be stated that the first construction phase (Stratum 7 c), as well as the following reconstruction phases (Strata 7 b and 7 a), were fraught with a degree of uncertainty when it came to distinguishing phases of development. Although a very meticulous evaluation of finds and features was carried out in an attempt to separate the phases, this did not succeed fully in all places. Complex D clearly showed two alterations within the building, whereas in Complexes A to C it was not possible to distinguish any construction phases due to the poor state of preservation. The find material in these complexes was also too limited to allow a distinction of phases. Based on the finds and the elevation data, however, all complexes presented here clearly belong to Stratum 7.



3.2. Complexes Stratum 7 c: First Construction Phase

Fig. 3.1 Stratum 7 c, Area I: showing context numbers and complexes marked in colour (Source: BAI/GPIA).



Fig. 3.2 Stratum 7 c, b, a, Area II: showing context numbers and complexes marked in colour (Source: BAI/GPIA).



3.2.1. Complex A: House with Olive/Wine Press

Fig. 3.3 Complex A, Stratum 7 c, b, a: remains of a house with a pressing facility (Source: BAI/GPIA).

Complex A extends over Squares AQ/AP 119/120 and AO 119. The complex contains the remains of a room and several installations (*Fig. 3.3*), which were part of a pressing facility. The preserved walls were an average of 0.90 m wide and were preserved to a height of two, in a few places three, courses of stones.

The floor plan cannot be completely reconstructed because of considerable disturbances in this area. The foundations of Strata 5, 4 and 3 lay directly on the Early Roman walls and destroyed the entire interior of A 1. Roman pit 2673 (Stratum 7 a) intersected the remaining wall 2645/2661. At least another dozen pits of the same period were distributed within the complex and in the surrounding squares.

Room Complex A 1 is delimited by wall 2645/2661—running south-west to north-east—and wall 2617 adjoining it to the south-west, which together form a corner and thus the only indication of this being a room. There were no further wall remains (*Fig. 3.4*). The walls were devoid of finds except for a few indeterminate body sherds. No floor could be identified.

Area Complex A 2 extends from Room A 1 into neighbouring Squares AP 120 and AO 119. Several patches of clay floor and installations were found in the centre of the room. The latter consisted of four large, flat stones (*Fig. 3.5*), east of wall 2645/2661. The four stones were dressed, approximately square in shape and formed a group. The northernmost stone 4244 measured 1.15 m

x 1.40 m with a conical depression of 6 cm at its north-western corner. It was located on a solid laver of calciferous clay a few centimetres thick, which indicates that it must have been raised in contrast to the surrounding stones. In the western part of the square, on the walkway to AP 119, another stone (4248) was found, measuring 0.71 m x 1.10 m (Fig. 3.6). Unlike the stone to the north, this one lay on a loose stone layer (4559), which also included part of a lapis pedicinorum TZ 014106-001 (stone blocks on which the press rested; Fig. 3.7). Close by and at a right angle was stone 4326, measuring 0.53 m x 0.87 m. Finally, stone 4245 was found in the south-western part of the square and measured 0.30 m x 0.30 m. However, it seems that it was only part of a larger stone, as the edges were broken off in an irregular manner.

Associated with this stone cluster was channel 1030/1042 (Fig. 3.8) and another channel 4560 (Fig. 3.9). The latter ran in a west-east direction under stone 4326, but remained without finds. From the stretch of channel 1030/1042 in AO 119, which was oriented south-west/north-east, several amphora sherds, a cooking pot fragment and two bowls from the Hellenistic-Early Roman period were recovered from fill 1029 (fill = Stratum 7 a) (Fig. 3.10). The two each channels were 20 cm wide and were preserved over a length of almost 2.00 m to 2.50 m. Following their course, they met at the level of stone 4326 at a 90-degree angle. A channel at Hisban, from Stratum 13 (dated 130-193 AD), was constructed in the same way, and part of it still had its covering preserved¹. This channel is interpreted as a drainage channel.

To the north of stone 4244, there were still parts of a clay floor, 4292, which had several patches of ashy soil, as well as fill layer 4623 (under and around 4244) which also contained remains of ashy material. To the south-east of the floor, at the same level (*i.e.* probably at floor level) was Context 4327, which is a stone weight. On the boundary with Square AP 121 there was also clay layer 4528, interspersed with ash, which probably belonged to floor 4292. In the area between the four stones/installations were fill layers (246 and 4274, which denoted parts of fill layers (Stratum 8) and parts of the floor. In Context 4274, there were also remains of

1 Mitchel 1992, 83 pl. 3.12, 4.13.



3.4 Complex A 1, Stratum 7 c, b, a, Squares AQ/AP 119: room walls and pit 2673 intersecting the feature with two fragments (arrow) of *lapis pedicinorum* (stone blocks that were part of an olive/wine press) TZ 009889-001 / 002 (Context 2664) (Source: BAI/GPIA).



Fig. 3.5 Complex A 2, Stratum 7 c, b, a, Square AP 120: remains of an olive/wine press (Source: BAI/GPIA).



Fig. 3.6 Complex A 2, Stratum 7 c, b, a, Square AP 120: Context 4248 and underneath it collapse 4559; view to the south (Source: BAI/GPIA).



Fig. 3.7 Complex A 2, Stratum 7 c, b, a, Square AP 120: collapse 4559 under 4248; right: part of the (arrow) TZ 014106-001 (Source: BAI/GPIA).



Fig. 3.8 Complex A 2; Stratum 7 c, b, a; Square AP 120: channel 1030/1042 (Source: BAI/ GPIA).



Fig. 3.9 Complex A 2, Stratum 7 c, b, a, Square AP 120: channel 4560 (Source: BAI/GPIA).



Fig. 3.10 Complex A 2, Stratum 7 c, b, a, Square AO 119: Hellenistic-Roman pottery from channel section 1030/1042 (Context 1029); no. 1: TZ 002667-014; no. 2: TZ 002643-002; no. 3: TZ 002667-011; no. 4: TZ 002667-008; no. 5: TZ 002667-010 (Source: BAI/GPIA).



Fig. 3.11 Complex A 2, Stratum 7 c, b, a, Square AP 120, Context 4274: hinge stone TZ 013517-001; cuboid; round depression in the centre; depth of depression: 1.5 cm (Source: BAI/GPIA).



Fig. 3.12 Complex A 2, Stratum 7 c, b, a, Square AP 119: floor 2684 (Source: BAI/GPIA).



Fig. 3.13 Complex A 1/2, Stratum 7 c, b, a, Square AQ 119: 'make-up palette' TZ 009893-001 (Source: BAI/ GPIA).

some dark clay (floor?), as well as a hinge stone TZ 013517-001 (Fig. 3.11), dress pin TZ 014299-001 (Fig. 4.54), two rubbing stones and bones of sheep or goat (24), sheep (2) and cattle (4). Context 4246 contained a mortar bowl, a rubbing stone and also bones of sheep or goat (7) and cattle (6). Between Room A 1 and the stone installations, another floor section 2684 (Fig. 3.12) was visible, which had no finds, but extended to wall 2645, thus proving that Room A 1 and Complex A 2 were clearly related in their use. For this reason, the uppermost course of wall 2645 should be regarded as belonging to its upper brickwork. The particularly striking object TZ 009893-001 (= Context 2681) was found between the installations and Room A 1 (Fig. 3.13). It is a carefully worked plate, presumably made of diorite, which functioned as the lid of a small box or as a make-up pallet².

Even though the area as a whole was in a very poor state of preservation, it is clear that it can be interpreted as an olive or wine press. For a better understanding, it is necessary to consider the destruction layer of the complex (Stratum 7 a). The discovery of stone TZ 014106-001, described as a *lapis pedicinorum*, under installation 4248 in Complex A 2, and of two matching pieces TZ 009889-001 and TZ 009889-002 in pit 2673, which disturbed the complex (= Context 2664) (Fig. 3.14 and Fig. 3.15) give rise to the interpretation and raise the question of how the finds relate to each other. The location of the lapis pedicinorum is very revealing: 4248 seems to have fallen onto it towards the east, and then the surrounding collapse was removed over time, as shown by the reuse of two of its broken parts as edges of pit 2673. The pottery evidence suggests that this pit was constructed in the Early Roman period. Complex A was thus destroyed or abandoned after Stratum 7 a, which is also indicated by the numerous other Early Roman pits in this area.

The mechanical press designs described by Cato were suitable for both the production of wine and

2 I would like to thank L. Tauer, Fachbetreuung Deutsches Natursteinarchiv / Geowissenschaften des Europäischen Fortbildungs- und Kompetenzzentrums für das Steinmetzund Steinbildhauerhandwerk, Wunsiedel, for the remote diagnosis. As the object could unfortunately not be presented to an expert personally, the identification is subject to a certain degree of uncertainty. Diorite is known to have been quarried in the Egyptian Wadi Umm Hussein (Mons Claudianus) in the first and second centuries AD.



Fig. 3.14 Complex A 1/2, Stratum 7 c, b, a, Squares AQ 119 / AP 120: *lapis pedicinorum* consisting of three parts TZ 009889-001, TZ 009889-002 and TZ 014106-001; side view (Source: BAI/GPIA).



Fig. 3.15 Complex A 1/2, Stratum 7 c, b, a, Squares AQ 119/ AP 120: *lapis pedicinorum* consisting of three parts TZ009889-001, TZ009889-002 and TZ 014106-001; top view (Source: BAI/GPIA).

oil³, which is why it is difficult to make a concrete distinction as to its use based on the design⁴. An olive press is suggested for Complex A, because the production of olive oil is frequently documented in the sources and olive (and grape) pits can also be found at Tall Zirā'a⁵. Pliny even praises the quality of olives from the Decapolis⁶. The site is located in an area particularly suitable for olive cultivation⁷. A press from the Islamic period from Tall Zirā'a istelf attests to the use of such presses at the site⁸. Similarly, evidence of extensive olive oil production has been found in the region⁹.

Even today, the olive tree is still the most economically important and widespread tree in Jordan¹⁰. The history of olive cultivation dates back to the Chalcolithic period¹¹. The development reached its peak between the Persian and Byzantine periods¹². Under Roman rule, large, permanently installed presses led to mass production throughout the empire¹³. The great innovation of the Roman period, the so-called lever-and-screw-press, which

- 3 Flach et al. 2005, 347–363; Cato agr. 18; 19.
- 4 Teichner Cervantes 2011, 378.
- Iron Age contexts: 1897, 1996, 2039, 2041, 2115, 2137 (Olive); Byzantine-Umayyad contexts: 30421, 10056 (Olive), 10578 (Grape).
- 6 Plin. nat. 15, 15.
- 7 Ali 2014, Fig. 2: Tall Zirā'a lies in the "light green zone" (semi-arid Mediterranean, warm).
- 8 Kenkel Rothe 2015, 25 Fig. 1.
- 9 Fortner Rottloff 2003b, 133 f.
- 10 Al-Rawashdeh 2013, 156; On climate changes in recent centuries: Aharoni 1979, 3–20.

had been common since the first century AD, cannot be substantiated with the example from the tall¹⁴. It can be assumed that it is a simple lever-and-weight press, as had been in use in Jordan since the Iron Age II¹⁵. However, even in Late Antiquity, when the new presses were already widespread, these older types sometimes occurred in parallel¹⁶.

The functioning of the press at Tall Zirā'a can be described as follows: The olives, which have previously been pitted, are placed in a basket (*fiscina*) and are crushed by means of a clamping bar (*prelum*) and leverage. A wooden disc (*orbis olearius*), or alternatively a flat stone, was placed on the basket to ensure an even pressing process¹⁷. Due to this construction, a *lapis pedicinorum*, as found at Tall Zirā'a, is needed to support the vertical beams (*arbores*) holding the *prelum* and at the same time to protect them from moisture. These stones were used very frequently, whereas simple mounts in a posthole are only attested in smaller domestic, privately used contexts¹⁸. The

- 11 Ali 2014, 338; The first finds of basins in courtyards or houses, as well as examples cut into the rock, initially indicate a simple production intended for a smaller consumer group: Beeri 2008, 159 f.; Dayyeh 2004, 31.
- 12 Ali 2014, 338
- 13 Foxhall 2007, 132.
- 14 Lewit 2012, 137 f.
- 15 Dayyeh 2004, 32.
- 16 Lewit 2012, 141 f.
- 17 Teichner Cervantes 2011, 383.
- 18 Teichner Cervantes 2011, 380.



Fig. 3.16 Floor plan of the house with wine press in Hirbat aš-Šūna aš-Šūna līyah; pressing room (arrow) with stones weight lying in situ (Source: Ali 2014, Fig. 3).

indentations in the stones are rectangular and may provide clues to the size of the entire installation. Finds TZ 009889-001/002 and TZ 014106-001 have two square indentations, each at one end of the stone. Their size suggests two small posts and an associated small lever construction, with which the *plenum* likely had to be pressed down by hand to carry out the pressing process, but which could also be used to attach additional weights, as was made clear by Context 4327.

In addition to collecting the pressed juices into a receptacle, of which hardly any traces can be found due to the material used, basins are often found cut into the ground, which also served to collect fruit juices¹⁹. An impressive example from the Roman period comes from tomb area H in Abila and is carved entirely into the rock²⁰.

The individual structural elements can also be recognised in a Late Hellenistic-Early Roman press from Hirbat aš-Šūna aš-Šamalīyah in the Jordan Valley (*Fig. 3.16*). In contrast to Tall Zirā'a, Hirbat aš-Šūna aš-Šamalīyah has one of these rock-cut collecting basins. The other elements, however, are identical: according to this reconstruction, stone 4244 would correspond to the lower structural element of an anchorage for the *plenum* (*Fig. 3.17*). 4248 and the remains of 4245, in turn, would correspond to the upright stones that were intended to fix the *fiscina* (*Fig. 3.18*). Between the two stones hung the pressing beam, which was pressed onto the basket by hand or with weights. In Hirbat aš-Šūna aš-Šamalīyah, this basket stood in a trough formed by a thick layer of plaster²¹. The juice flowed off from there via a channel and was collected in a basin²².

Although two channel sections 1030/1042 and 4560 were also found in Complex A, it is questionable whether their purpose was actually to collect the extracted liquid, as traces of waterproof hydraulic mortar (*opus signinum*) would be expected. Since there were none, it can be assumed instead that it was a simple water channel that allowed waste water to drain off after the olives had been cleaned²³. Where the channels ultimately led to, however, remains unclear.

On the other side of the Jordan River, at Marisa (*Fig. 3.19*), another type of press construction of the same period was found, but without the need for a *lapis pedicinorum*. The original location of the *lapis pedicinorum* can be assumed in the context of Complex A between 4248 and 4245. A lever construction would have been used to press down the beam to-

- 19 Examples from Ayalon: Hirschfeld 1983, 207–218.
- 20 Mare 1999, 457 f.
- 21 Ali 2014, 345 Fig.10.
- 22 Ali 2014, 344.
- 23 Teichner Cervantes 2011, 418.



Fig. 3.17 Hirbat aš-Šūna aš-Šamalīyah; pressing room; anchorage for the plenum (Source: Ali 2014, Fig. 4).



There is much evidence for olive and wine presses in the vicinity of the tall, but rarely any documented in the context of a settlement. There is no example of a pressing complex without a collecting basin cut into the rock, but this is simply due to a poor state of preservation of these complexes and the state of excavation.

The sources and findings at and around Tall Zirā'a as well as in the surrounding area suggest an interpretation as a house with a press. Even if no similar construction could be found, the various presses, as well as the different materials used, show that a press is always adapted to the conditions of the settlement (like cutting basins into the rock if suitable) and can take on very different forms. The Tall Zirā'a press was rather small, judging by the indentations of the *lapis pedicinorum*, and thus only suitable for personal use. It is no longer possible to reconstruct where the other production processing steps may have taken place.



Fig. 3.18 Hirbat aš-Šūna aš-Šamalīyah; pressing room (Source: Ali 2014, Fig. 8).



Fig. 3.19 Marisa; reconstructed pressing room (Source: Jutta Häser).

The pottery evidence points to the Hellenistic-Roman period, even if only a small number of pieces were found. Following the interpretation as a house with a press, one would not expect the storage or use of everyday or even cooking utensils, bones or other objects in this context, so it is not surprising that there were almost no finds in the entire complex.

24 For a reconstruction of a winch press, see: Teichner-Cervantes 2011, 379 Fig. 3. For a reconstruction of a lever and weight press see: Taxel 2013, Fig. 1.1.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Other	
48	AM 119	Fill layer	A 2 / B 1	-	-	-
72	AM 119	Fill layer	A 2 / B 1	-	\checkmark	-
(640)	AO 118	Pit	A 1 / A 2 / B 1	\checkmark	-	-
(650)	AO 118	Pit	A 1 / A 2 / B 1	<i>✓</i>	_	-
(651)	AO 118	Pit	A 1 / A 2 / B 1	<i>√</i>	_	\checkmark
(827)	AN 119	Pit	A 2 / B 1	-	_	-
(828)	AN 119	Pit filling (tabun 827)	A 2 / B 1	<i>√</i>	\checkmark	\checkmark
(829)	AN 119	Find	A 2 / B 1	\checkmark	_	-
(1028)	AO 119	Fill layer	A 2	<i>√</i>	\checkmark	\checkmark
1029	AO 119	Fill layer	A 2	<i>√</i>	-	\checkmark
1030	AO 119	Channel	A 2	1	-	-
1042	AO 119	Channel	A 2	-	-	-
(1202)	AN 119	Pit	A 2 / B 1	-	\checkmark	-
(1203)	AN 119	Pit	A 2 / B 1	1	1	-
(2022)	AO 119	Pit	A 2	1	\checkmark	\checkmark
2089	"AO / AP 118 / 119"	Fill layer	A 1 / B 1	\checkmark	_	\checkmark
2617	AQ 119	Wall	A 1	-	_	-
(2644)	AQ 119	Fill layer	A 2	<i>√</i>	\checkmark	\checkmark
2645	AQ 119	Wall	A 1 / A 2	<i>✓</i>	_	\checkmark
2661	AQ 119	Wall	A 1 / A 2	-	\checkmark	\checkmark
(2664)	AQ 119	Find	A 2	-	_	\checkmark
(2673)	AQ 119	Pit	A 1 / A 2	-	-	-
(2681)	AQ 119	Pit	A 2	-	\checkmark	-
2684	AQ 119	Floor	A 2	\checkmark	\checkmark	\checkmark
3303	AR 120	Fill layer	A 2 / D 1	\checkmark	\checkmark	\checkmark
3347	AR 118	Pit	A 1	\checkmark	-	\checkmark
(3390)	AQ 120	Pit	A 2 / D 2	\checkmark	\checkmark	\checkmark
(3410)	AQ 120	Pit	A 2 / D 2	<i>✓</i>	\checkmark	\checkmark
(3481)	AR 120	Pit	A 2 / D 2	\checkmark	\checkmark	\checkmark
(3563)	AR 118	Pit	A 1	-	_	_
(3956)	AR 122	Pit	A 2 / D 2	\checkmark	\checkmark	\checkmark
(4045)	AR 122	Pit	A 1 / D 2	\checkmark	\checkmark	\checkmark
(4145)	AT 122	Fill layer	A 2 / D 1	\checkmark	_	\checkmark
(4154)	AS 123	Fill layer	A 2 / D 1	<i>√</i>	\checkmark	\checkmark
(4155)	AT 122	Fill layer	A 2 / D 1	<i>✓</i>	_	\checkmark
(4157)	AT 122	Fill layer	A 2 / D 1	-	_	\checkmark
(4161)	AT 121	Pit	A 2 / D 1	\checkmark	\checkmark	\checkmark
(4179)	AR 122	Fill layer	A 2 / D 2	\checkmark	\checkmark	\checkmark
4180	AR 122	Fill layer	A 2 / D 2	\checkmark	\checkmark	\checkmark
4244	AP 120	Installation; part of the press	A 2	_	\checkmark	_

4245	AP 120	Installation; part of the press	A 2	-	-	-
4246	AP 120	Fill layer	A 2	\checkmark	\checkmark	 ✓
4248	AP 120	Installation; part of the press	A 2	-	\checkmark	-
(4262)	AP 121	Fill layer	A 2 / D 5	\checkmark	\checkmark	\checkmark
4274	AP 120	Fill layer	A 2	\checkmark	\checkmark	\checkmark
4292	AP 120	Floor	A 2	-	-	_
4326	AP 120	Installation; part of the press	A 2	-	\checkmark	_
4327	AP 120	Door hinge stone	A 2	-	\checkmark	_
4348	AQ 121	Fill layer	A 2 / D 3	\checkmark	_	\checkmark
(4360)	AT 123	Fill layer	A 2 / D 1	\checkmark	\checkmark	\checkmark
4528	AP 120	Floor	A 2	-	-	_
4560	AP 121	Channel	A 2	-	\checkmark	-
4600	AQ 122	Fill layer	A 2 / D 2 / D 3	\checkmark	\checkmark	\checkmark
4601	AQ 121	Fill layer	A 2 / D 3	\checkmark	-	_
4602	AQ 122	Fill layer	A 2 / D 2 / D 3	\checkmark	-	\checkmark
4623	AP 120	Fill layer	A 2	\checkmark	-	\checkmark
4680	AQ 122	Fill layer	A 2 / D 3	\checkmark	\checkmark	\checkmark
4909	AR 123	Fill layer	A 2 / D 1	\checkmark	\checkmark	\checkmark
5010	AR 123	Fill layer	A 2 / D 2	\checkmark	-	_
(5081)	AR 121	Pit	A 2 / D 2	-	-	-
5279	AR 123	Fill layer	A 2 / D 1	\checkmark	-	_
(5522)	AR 121	Pit	A 2 / D 2	\checkmark	\checkmark	\checkmark
6110	AR 121	Fill layer	A 2 / D 2	\checkmark	\checkmark	\checkmark
6135	AR 121	Fill layer	A 2 / D 2	\checkmark	-	\checkmark
(6148)	AR 120	Pit	A 2 / D 2	\checkmark	\checkmark	\checkmark

Tab. 3.2 Contexts within Complex A, Stratum 7 c, b, a.

3.2.2. Complex B: House Structure

The remains of the house designated as Complex B are located in Square AM 119, south of channel 1030/1042 in Complex A (*Fig. 3.20*)²⁵.



Fig. 3.20 Complex B, Stratum 7 c, b, a, remains of a house (Source: BAI/GPIA).

Pit 31 from Stratum 6, as well as two further pits without context numbers, had destroyed most of the complex. The walls no longer ran straight, but looked deformed, and there were considerable gaps in some parts, which was attributed to the heavy disturbance of the square. The complex suggests a house with at least three rooms. The type of construction of the *c*. 0.60 m wide walls, consisting of medium to large, unhewn field and quarry stones, laid in two rows with an infill of smaller stones, corresponds to that of the other complexes of the stratum. No direct connection with another complex in the area was clearly discerned.

Room Complex B 1 is formed by walls 41, 52 and 71 to the north, 49 and 70 to the east and 69 to the south (*Fig. 3.21*). Wall 69 was disturbed by two pits without context numbers, but it certainly formed a corner with walls 49 and 70. To the west, walls 41, 52, 71 and 69 were preserved over a length of about 1.00 m to 1.40 m. No wall enclosing the space to the west was found.

Inside, parts of floor 68 were preserved. In addition to two cooking pot sherds and a jug from the Roman period, a part of a glass vessel, a rubbing stone, an Olynthus mill TZ 001150-001 (*Fig. 3.22*) and part of an antler of a fallow deer were also found.

Flat stone 76 was embedded in the clay floor (*Fig. 3.23*). It is dressed on two sides and shows clear signs of wear on the surface. It was presumably used as a base for grinding and is therefore referred to as a worktop or workstone. Based on the finding of the Olynthus mill and the cooking pot, it is possible to assume a food processing area here.

Room Complex B 2 adjoined Room B 1 in the south. Wall 69 forms the northern end of the room, wall 49 the eastern one. The southern wall has not yet been excavated and the wall in the west was not preserved. Part of floor 74 was found in the corner of the room. A stone slab/plate TZ 007744-001 (*Fig. 4.107*) and a glass fragment were found on it. The function of the room cannot be determined due to the rudimentary state of preservation.

Room Complex B 3 adjoined Rooms B 1 and B 2 to the east. Here, wall sections 49 and 70 were preserved as the western wall of the room. That this was a room is inferred from two installations and a floor that were located to the east of this wall.

Tabun 46 was set against wall 70, and it contained a stone bowl with foot base TZ 001241-001 (*Fig. 3.24*). Ash pit 83 was directly adjacent to the tabun. To the south of the tabun, remains of floors 47 and 73 were still visible, on which tabun remains could be detected, as well as a nail and a stone weight. No dateable pottery was found.

The surrounding fill layers 48, 50 and 72 also offered no datable material. The two individual contexts, 75 and 103, are the remains of Iron Age storage jars.

An extended interpretation of the complex is not possible. Subsequent excavations in the east of the site may reveal further parts of the building and their use. The little archaeological material found indicates a dating to the Roman period. In addition to a few bones, collapse 51 also contained an amphora sherd from the first century AD. The extensive ash layer 94 produced no finds. Complex B appears to have been a residential building, as the rooms and their installations suggest.

²⁵ The entire complex was excavated in 2003 and does not have any levelling data.



Fig. 3.21 Complex B 1, B 2 and B 3, Stratum 7 c, b, a, Square AM 119: Room B 1, worktop 76 embedded in the floor can still be seen (Source: BAI/ GPIA).



Fig. 3.22 Complex B 1, Stratum 7 c, b, a, Square AM 119: fragment of the Olynthus mill TZ 001150-001 (Source: BAI/GPIA).



Fig. 3.23 Complex B 1, Stratum 7 c, b, a, Square AM 119: workstone 76 set into the floor (Source: BAI/GPIA).



Fig. 3.24 Complex B 3, Stratum 7 c, b, a, Square AM 119: restored stone bowl TZ 001241-001 (Source: BAI/ GPIA).

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
(31)	AM 119	Pit	B 1	\checkmark	~	-
41	AM 119	"Wall; = 52 and 71"	B 1	-	-	-
46	AM 119	Fire place	B 3 / A 2	-	~	-
47	AM 119	"Floor; = 73"	B 3	\checkmark	-	-
48	AM 119	Fill layer	B 1 / A 2	-	-	-
49	AM 119	"Wall; = 70"	B 1 / B 2 / B 3	-	_	-
50	AM 119	Fill layer	B 3	-	_	_
51	AM 119	Collapse	B 1	\checkmark	1	\checkmark
52	AM 119	"Wall; = Wall 41 and 71"	B 1	-	-	-
68	AM 119	Floor	B 1	\checkmark	~	\checkmark
69	AM 119	Wall	B 1 / B 2	-	_	-
70	AM 119	Wall	B 1 / B 2 / B 3	-	-	-
71	AM 119	"Wall = 52 and 41"	B 1	-	-	-
72	AM 119	Fill layer	B 1 / A 2	-	-	\checkmark
73	AM 119	"Floor; = 47"	B 3	\checkmark	1	-
74	AM 119	Floor	B 2	\checkmark	<i>✓</i>	-
75	AM 119	Find	B 3	\checkmark	_	-
76	AM 119	Insatallation?	B 1	-	 ✓ 	-
83	AM 119	Ash pit	B 3	\checkmark	-	-
94	AM 119	Collapse	B 1	-	_	_
103	AM 119	Find	B 3	\checkmark	_	_
(640)	AO 118	Pit	B 1 / A 1 / A 2	\checkmark	-	-
(650)	AO 118	Pit	B 1 / A 1 / A 2	\checkmark	-	-
(651)	AO 118	Pit	B 1 / A 1 / A 2	\checkmark	_	\checkmark
(827)	AN 119	Pit	B 1 / A 2	-	-	-
(828)	AN 119	Pit	B 1 / A 2	\checkmark	~	\checkmark
(829)	AN 119	Find	B 1 / A 2	\checkmark	-	-
(1202)	AN 119	Pit	B 1 / A 2	-	1	-
(1203)	AN 119	Pit	B 1 / A 2	\checkmark	~	-
(1280)	AL 117	Pit	B / C	\checkmark	~	\checkmark
2089	"AO / AP 118 / 119"	Fill layer	B 1 / A 1	\checkmark	_	\checkmark

Tab. 3.3	Contexts within	Complex B, Stra	atum 7 c, b, a	(Source: BAI/GPIA)
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3.2.3. Complex C: House Structure

Complex C is located in the southern part of Area I in Square AE 114 (*Fig. 3.25*). It consists of the remains of two walls, only fragments of which were preserved. The walls were about 0.60 m wide and made of unworked field and quarry stones. The precise measurements were difficult to determine, however, as part of one wall was still hidden in the profile and the rest was largely destroyed by pit 5483/5484 from Stratum 5.

Complex C consisted of wall 5434 and wall 5398 attached to it, forming **Rooms C 1 and C 2** (*Fig. 3.26*). No floors or installations were uncovered. A casserole and cooking pot from the Roman period were found in the surrounding fill layer 5304. In addition, a quern, a gaming piece, a rubbing stone and a nail were also found.

It is not possible to assign a function to the complex, as too few remains were preserved and the finds were too few. However, the location of the walls indicates that the central part of Tall Zirā'a was not the only one to have been developed, but



Fig. 3.25 Complex C; Stratum 7 c, b, a: remains of a house (Source: BAI/GPIA).



Fig. 3.26 Complex C 1 and C 2, Stratum 7 c, b, a, Square AE 114 (Source: BAI/GPIA).

also the southern area up to the edge of the tall. A similar so-called hillside house was also found at Bēthsaida²⁶.

Fill layer 5375, which lay directly under 5304 and partially enclosed the wall of the complex, contained a lot of Bronze Age material as well as Hellenistic-Roman pottery. It is assumed that before the house was built, surrounding soil was brought in to level the ground. The slope of the tall was possibly unstable, which is why stabilisation and a deeper foundation were necessary. This assumption is supported by the fact that for the Bronze Age²⁷ and for the Roman period, too, several landslides have been documented. It is possible that the reason for this lies in the central spring, which continuously softened the ground.

- 26 Fortner Rottloff 2003b, 139.
- 27 Vieweger Häser 2011, 376.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
5304	AE 114	Fill layer	C 1	\checkmark	\checkmark	\checkmark
5375	AE 114	Fill layer	C 1	\checkmark	\checkmark	\checkmark
5398	AE 114	Wall	C 1 / C 2	-	\checkmark	\checkmark
5434	AE 114	Wall	C 1 / C 2	_	-	-
(5483)	AE 114	Pit	C 2	_	_	_
(5484)	AE 114	Pit	C 2	_	_	_

Tab. 3.4 Contexts within Complex C, Stratum 7 c, b, a (Source: BAI/GPIA).

3.2.4. Complex D: Residential and Farm Building

Complex D is located in the north-eastern part of Area I and extends over Squares AP 122/123 and AQ/ AR 123 (*Fig. 3.27*). It is the best-preserved building in this area and at the same time the one with the larg-

est dimensions. So far, a total of six rooms or parts of rooms have been excavated in Complex D. Since the eastern part of the complex has not been excavated, no room dimensions can be given.



Fig. 3.27 Complex D, Stratum 7 c: remains of a house (Source: BAI/GPIA).

The outer walls of the complex are walls 4765, 4343, 5019 and 4629/4625. The walls were made up of several courses of quarry stones and fieldstones with an average size of 20-50 cm, some of the walls were preserved to a height of five courses. Upper brickwork could be detected in various places, and a door threshold with door socket stone in Room D 3/D 4 was also preserved. The longitudinal axis of the building was aligned south-south-west/north-north-east. The building was only disturbed in a few places by later constructions, due to the fact that the building continued to be used in this form until Stratum 3. Although the complex was rebuilt over time, the ground plan remained almost identical. The older walls continued to be used as foundations and therefore escaped complete destruction. Only in Square AP 122 was there a cut into the preceding feature from Stratum 7.

Room D 1 was the northernmost room of the building, in Square AR 123, with walls 4765 and 4209 forming the south-west corner of the room. 4209 entered into the eastern profile and the course of 4765 could no longer be traced.



Fig. 3.28 Complex D 1, Stratum 7 c, Square AR 123, Context 4765: Herodian oil lamp TZ 020490-001 (Source: BAI/GPIA).

A Roman cooking pot, a Hellenistic-Roman amphora and a Herodian oil lamp were found in wall 4765. The oil lamp TZ 020490-001 had a life span from 37 BC to 135 AD (*Fig. 3.28*).

In Room D 1, there were disturbances from different overlying strata, which is why neither a floor nor installations could be identified during excavation. However, a floor emerged at the same level as



Fig. 3.29 Complexes D 1 and D 2, Stratum 7 c, Square AR 123: floors of the rooms in eastern profile (Source: BAI/GPIA).



Fig. 3.30 Complex D 1 and D 2, Stratum 7, Square AR 123: upper stonework and foundation of wall 4209 (Source: BAI/GPIA).

one in D 2 in the eastern profile (*Fig. 3.29*). Thus, upper stonework could be identified in both Rooms D 1 and D 2. It became clear that the foundation and the upper brickwork were of the same design (*Fig. 3.30*). This was also evident, for example, in the wall contexts of Complex E in Area II.

Room D 2 adjoins D 1 to the south and is formed by walls 4209 to the north, 5508 to the south and 4343 to the west (*Fig. 3.31*). The fourth wall, enclosing the room to the east, has not yet been excavated. A clay floor had been laid in the room, which was still evident in profile (*Fig. 3.29*). In addition, in the south-east, near wall 5508, tabun 5512/5567 had been preserved, and one half of the tabun remains in profile.

From wall 4343 came an ETS bowl dating from 10 BC to 30 AD, and an imitation of one dating from 30 BC to 70 AD. Furthermore, sherds of amphorae, jugs and cooking pots from the Hellenistic-Roman period were found. Backfill 5282 in the north of the room also contained sherds from amphorae, a cooking pot, a casserole and two glass vessels (yellow, colourless). Fill layer 5206 in the south of the room also represented a backfill, which was preserved under the floor of the next building phase (Stratum 7 b). Here too, sherds from casseroles and jugs as well as from a bowl and an oil lamp were recovered. The pottery can be dated to the Hellenistic-Roman period with a focus on the Late Hellenistic-Early Roman period. The concentration of bones of cattle (8), sheep or goats (7) and domestic fowl (2) by the southern wall of the room next to tabun 5512/5567 was striking. This area was likely used for the preparation of food.

Room D 3 adjoins D 2 in the south and is the largest excavated room of the complex. It was formed by walls 5508 in the north, 4906 in the south and 5019 in the west. The eastern wall enclosing the room has not yet been excavated here either. The heavy destruction of wall 5019 meant that a connection with wall 4906 could no longer be discerned, but this is considered certain on the basis of levelling data, alignment and type of construction.

Wall 4906 showed, in addition to the usual quarry and field stones, four c. 35 cm x 50 cm ashlar-shaped stones. The easternmost one has a rec-



Fig. 3.31 Complex D 2, Stratum 7 c, Square AR 123: wall corner 4343 and 4209 (Source: BAI/GPIA).



Fig. 3.32 Complex D 3 and D 4, Stratum 7 c, Square AQ/AP 123: entrance in wall 4906 (Source: BAI/GPIA).

tangular depression of 15 cm x 17 cm x 7 cm and can be interpreted as a door socket stone. With a total width of 1.4 m, this area of the wall can undoubtedly be designated as the entrance (*Fig. 3.32*). The stones thus clearly formed the lowest course of the upper stonework. A Hellenistic-Roman jar fragment was found in wall 5019 and an amphora sherd of the same period in 4906. Inside the room, a stone-built oven 5273/5271 (*Fig. 3.33*) was preserved. It is attached to wall 5508 and opened into the room. Next to it was ash pit 5285. Inside the oven, within fill 5271, a large quantity of pottery was found, as well as bones of cattle (14) and sheep or goat (3). All the pottery, due to its distinct shapes, points exclusively to the Hellenistic-Early Roman period.

Several fill layers were preserved in the room: 5568, 5189, 5205 and 5201. Various everyday objects were found, including rubbing stones, stone



Fig. 3.33 Complex D 3, Stratum 7 c, Square AQ 123: stonebuilt oven 5273 at wall 5508; view to the north-east (Source: BAI/GPIA).



Fig. 3.34 Complex D 3, Stratum 7 c, Square AR 123, Context 5189: plaster TZ 016359-001 (Source: BAI/GPIA).

vessels, glass beads, a knife, a game piece and a piece of furniture fitting TZ 017255-001 (Fig. 4.58) and-very unusually so far away from large bodies of water-a stone weight of a fishing net TZ 017258-001 (Fig. 4.61). A spatula TZ 019545-001 (Fig. 4.88) and a spindle shaft TZ 017202-001 (Fig. 4.90) also came from this room. In addition, a large piece of plaster TZ 016359-001 (Fig. 3.34) was found in the room. Among the pottery finds from the Hellenistic-Roman period, amphorae (from the first century AD, among others) and cooking pots make up the largest part. The few datable pieces point to the period between the second century BC and the second century AD. A special find was bowl fragment TZ 020376-004 from Context 5201, which is to be regarded as Eastern Sigillata D and dates to the Augustan period (Pl. 16.4). Scattered throughout the room, large quantities of cattle (42), goat or sheep (129) and a few domestic pig bones (2) were found, in addition to rarer animal bones: horse (1), dog (1)domestic chicken (12), wild boar (1) and fallow deer (1). Finally, two coins TZ 015292-001 (Pl. 8.2) and TZ 015442-001 (Pl. 8.5), both minted by Alexander Jannaeus, were also among the finds, which can be dated between 128-104 BC and 104-76 BC respectively. A radiocarbon analysis from feature 5201 reinforces this dating and points to a time between 196 BC and 42 BC.

Room D 3 appears to have been the kitchen and/ or the workshop of the house. Judging by the finds, an area where animal carcasses were prepared and food was ground would be conceivable next to the oven, which, though small was well built (*Fig. 3.33*). The bones were probably discarded into baskets or small depressions in the ground (pits), which is why they are found in such large numbers. Although Cato the Elder recommends a general cleaning of the house and a daily cleaning of the hearth (which certainly also means its immediate surroundings)²⁸, the kitchen was probably not particularly hygienic. In archaeological features, the ash from the hearth is often found next to the oven—as is the case with almost every tabun at Tall Zirā'a. In addition, kitchen waste was probably left in the kitchen area and only taken out occasionally. Moreover, and this is also evident on the tall, the floors were made of clay, in which bones and other waste soon became embedded and remained there until the floor was so dirty that a new layer of clay had to be laid²⁹.

Another piece of furniture in Room D 3 could have been a table or a chest to which furniture fitting TZ 017255-001 was attached.

South of D 3 is **Room D 4**, a narrow, long room with an average width of just about 95 cm (*Fig. 3.32*). It consists of walls 4906, 5572 and 4993/5154. The wall to the west no longer existed and was possibly destroyed by major reconstruction of the building in Stratum 6. Only in wall 5154 was a fragment of an amphora from the Hellenistic-Early Roman period found. The floor had not survived, only the backfill layers of the room could still be found (Stratum 7 b).

Room D 4, with its elongated shape, could have functioned as a corridor separating room sections D 1/D 2/D 3 and D 5/D 6 from each other.

To the south-west was **Room D 5**, which consists of walls 4993/5154 to the north, 4996 to the east and 4629/4625 to the west. 4993/5154 and 4996 clearly formed a corner, but this was not certain for the wall to the west. Here, too, interference from rebuilding in Stratum 6 was evident and disrupted the wall (*Fig. 3.35*). However, based on the measurements and alignment, these walls must have constituted a single unit. Wall 4625 may have

- 28 Cato, agr. 143, 2.
- 29 Thüry 2001, 28–30; An impression of an unswept floor can be gained from the well-known Asároten mosaics. The name of the pictorial mosaics already describes the visual theme: food scraps scattered all over the floor and even mice helping themselves to them can be seen. Kuhnen, on the other hand, describes the conditions as an "almost modern understanding of cleanliness", "which is why the older phases of the houses and especially the time when the foundation stone was laid are difficult to grasp in the finds." (Kuhnen 1990, 233).



Fig. 3.35 Complex D 4, D 5 and D 6, Stratum 7 c, Square AP 122/123: excavated features and assumed course of the wall (Source: BAI/GPIA).

Fig. 3.36 Complex D 5 and D 6, Stratum 7 c, Square AP 123, disturbance of Room D 6; top left: disturbance due to rebuilding in Stratum 7 a (Source: BAI/GPIA).

divided the space into two parts, but this would result in an unusually small space in the north, which is why a wall separating the room can be assumed.

Backfill 4675 was in the centre of the room, but contained no finds. 4714—also to be considered as backfill—contained sheep and goat bones (18) and cattle bones (4), a Herodian oil lamp, an Early Roman cooking pot, a stone vessel and a single tessera. This last find is the first evidence of any decoration of the rooms, but it remains an isolated find in this stratum. Whether it belongs to this period therefore remains questionable.

Room D 6 is located directly to the east of D 5. Walls 4993/5154 to the north, 5074 to the south and 4996 to the west bounded the room on three sides. They were disturbed by the overlying rebuilding phase in 7 a (*Fig. 3.36*). No installations or floor were found in Room D 6. Several backfill layers 5114, 5272, 5075, 5269, 5268 and 5186 were found within the room (Stratum 7 b).

Next to Room D 5, outside the building, is silo 4340. This dates from the Iron Age, but was seemingly reactivated in Stratum 7 c (*Fig. 3.37*)³⁰.

A new floor 5998 was laid in the existing but derelict silo and the walls were renewed (*Fig. 3.38*).

This renewed use was also reflected in the finds inside the silo, which from a height of -21.60 m included hardly any Iron Age finds, but much more

30 The same applies to wall 4629 / 4625, whose use in Iron Age II is not certain and was only considered probable according to the elevation data: Soennecken 2017, 633 f.



Fig. 3.37 Complex D, Stratum 7 c, Square AP 121/122: silo 4417 (Source: BAI/GPIA).



Fig. 3.38 Complex D, Stratum 7 c, Square AP 121/122: silo 4417 top layer (Source: BAI/GPIA).

recent material. The silo was probably used once again for the storage of foodstuffs such as grain. A similar silo is also known from Bethsaida³¹. There, a Roman house (Area B) was built against the Iron Age city wall, which it used as a back wall³².

No statements can be made about the total size of the complex. A large part of the building is probably hidden in the walkway between Area I and II. Since Area II remained undeveloped in the south, Complex D could theoretically extend to this area. The building style of the house can be described as traditional. The foundations are several layers deep, but do not differ from the upper stonework. The latter consists of quarry and field stones. A double-faced wall construction is only clearly visible in wall 4906 (D 3/D 4). The majority of the upper stonework of Complex D consists rather of dry masonry with small and medium stones. A distinction between outer and inner walls is not possible. Only one entrance within wall 4906 can be clearly identified, which is a considerable size at 1.64 m wide. This gave rise to the idea that it might not only be an interior door, but even an entrance door, and thus Complex D was not just one building, but two. A division of the complex along D 4 also seems reasonable because of the south-north-aligned walls, which show a strong shift in the northern part of the building. There is also the possibility of a later extension, which, however, could not be differentiated on the basis of the finds, so that it remains addressed as one complex.

- 31 Fortner Rottloff 2003b, 139.
- 32 Fortner Rottloff 2003b, 139.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
(3303)	AR 120	Fill layer	D1/A1	✓	<i>✓</i>	1
(3390)	AQ 120	Pit	D 2 / A 2		<i>✓</i>	1
(3410)	AQ 120	Pit	D 2 / A 2	\$\lambda\$	~	1
(3481)	AR 120	Pit	D 2 / A 2	\$\lambda\$	 ✓ 	~
(3956)	AR 122	Pit	D 2 / A 2	✓	 ✓ 	~
(4045)	AR 122	Pit	D 2 / A 1	✓	\$\lambda\$	~
(4145)	AT 122	Fill layer	D 1 / A 2	\checkmark	-	\checkmark
(4154)	AS 123	Fill layer	D 1 / A 2	<i>√</i>	~	~
(4155)	AT 122	Fill layer	D 1 / A 2	✓	-	~
(4157)	AT 122	Fill layer	D 1 / A 2	-	-	~
(4161)	AT 121	Fill layer	D1/A2	\$\lambda\$	\$\lambda\$	~
(4179)	AR 122	Fill layer	D 2 / A 2	\$\sqrt{1}\$	\checkmark	~
(4180)	AR 122	Fill layer	D 1 / A 2	✓	~	~
4209	AR 123	Wall	D 1	✓	~	~
(4262)	AP 121	Fill layer	D 5 / A 2	✓	\$\lambda\$	~
4340	AP 121	Silo	D 5	\$\lambda\$	-	~
4343	AR 123	Wall	D 2	\checkmark	\checkmark	\checkmark
4348	AQ 121	Fill layer	D 2 / A 2	✓	-	\checkmark
(4360)	AT 123	Fill layer	D 1 / A 2	✓	\checkmark	\checkmark
4600	AQ 122	Fill layer	D 2 / D 3 / A 2	\checkmark	\checkmark	\checkmark
4601	AQ 121	Fill layer	D 3 / A 2	\checkmark	-	-
4602	AQ 122	Fill layer	D 2 / D 3 / A 2	\checkmark	-	\checkmark
4625	AP 122	Wall	D 5	-	-	-
4629	AP 122	Wall	D 5	-	-	-
4675	AP 122	Fill layer	D 5	-	-	-
4680	AQ 122	Fill layer	D 3 / A 2	✓	\checkmark	\checkmark
4714	AP 122	Fill layer	D 5	\checkmark	\checkmark	\checkmark
4765	AR 123	Wall	D 1	✓	✓	-
4906	AP 123	Wall	D 3 / D 4	✓		-
4909	AR 123	Fill layer	D 1 / A 2			 ✓
4993	AP 123	Wall	D 4 / D 5 / D 6		✓	~
4996	AP 123	Wall	D 5	✓	-	-
5010	AR 123	Fill layer	D 2/A 2	✓	-	-
5019	AQ 123	Wall	D 3		\$\lambda\$	-
5074	AP 123	Wall	D 6	-	-	-
(5075)	AP 123	Fill layer	D 6	✓	✓	~
(5081)	AR 121	Pit	D 2 / A 2	-	-	-
(5091)	AP 123	Fill layer	D 5	~	\checkmark	~
(5092)	AP 123	Fill layer	D 4	\checkmark	\checkmark	\checkmark
(5095)	AP 123	Fill layer	D 5	~	~	~
(5111)	AP 123	Fill layer	D 5	\checkmark	-	-

(5114)	AP 123	Fill layer	D 6	\checkmark	-	-
5154	AP 123	Wall	D 4 / D 6	\checkmark	\checkmark	\checkmark
(5155)	AP 123	Fill layer	D 4	\checkmark		\checkmark
(5186)	AP 123	Fill layer	D 6	\checkmark	_	_
(5187)	AP 123	Fill layer	D 4	\checkmark	\checkmark	\checkmark
5189	AQ 123	Fill layer	D 3	\checkmark	\checkmark	\checkmark
5201	AQ 123	Fill layer	D 3	\checkmark	\checkmark	\checkmark
5205	AQ 123	Fill layer	D 3	\checkmark	\checkmark	\checkmark
5206	AQ 123	Fill layer	D 2	\checkmark	\checkmark	\checkmark
(5268)	AP 123	Fill layer	D 6	\checkmark	\checkmark	\checkmark
(5269)	AP 123	Fill layer	D 6	\checkmark	\checkmark	\checkmark
5271	AQ 123	Fill of Oven 5273	D 3	\checkmark	\checkmark	\checkmark
(5272)	AP 123	Fill layer	D 6	\checkmark	\checkmark	\checkmark
5273	AQ 123	Oven	D 3	-	-	-
5279	AR 123	Fill layer	D1/A2	\checkmark	-	_
5282	AR 123	Fill layer	D 2	\checkmark	\checkmark	\checkmark
5285	AQ 123	Ash pit	D 3	\checkmark	-	_
5508	AQ 123	Wall	D 2 / D 3	-	-	_
5512	AP 123	Tabun	D 2	-	-	_
(5522)	AR 121	Pit	D 2 / A 2	\checkmark	\checkmark	\checkmark
5567	AQ 123	Tabun fill (Tabun 5512)	D 2	-	-	-
5568	AQ 123	Fill layer	D 3	\checkmark	\checkmark	\checkmark
5572	AP 123	Wall	D 4	_	-	_
6110	AR 121	Fill layer	D 2 / A 2	\checkmark	\checkmark	\checkmark
6135	AR121	Fill layer	D 2 / A 2	\checkmark	-	\checkmark
(6148)	AR 120	Pit	D 2 / A 2	\checkmark	\checkmark	\checkmark

Tab. 3.5 Contexts within Complex D, Stratum 7 c (Source: BAI/GPIA).



3.2.4.1. Stratum 7 b: First Reconstruction Phase

Fig. 3.39 Complex D; Stratum 7 b; detail of the general plan (surrounding contexts as in Stratum 7 c) (Source: BAI/GPIA).

Reconstruction phases in Stratum 7 were only be detected in Complex D (*Fig. 3.39*). In the other complexes, no structural changes could be detected due to their poor state of preservation. Within complexes A-C, E and F, the whole range of Early Roman pottery was found in the surrounding fill layers.

Complex D remained essentially unchanged in Stratum 7 b, there was no change whatsoever to the spatial layout, but there were some minor changes within the rooms—for example some new flooring (*Fig. 3.40*).

In **Room Complex D 1**, the feature landscape remained unchanged, as disturbances destroyed all features in this section of the room. In profile, too, no further features were visible above the floor identified for Stratum 7 c. In **Room Complex D 2**, a new stone floor 4908/5112 was laid, which rendered tabun 5512/5567 from Stratum 7 c inoperable and was preserved mainly in the southern part of the room (*Fig. 3.41*). There were no finds.

Room Complex D 3 was also had a new floor (5116) laid, which likewise concealed the older installations here. Floor 5116 was particularly rich in finds, suggesting that it was not separated from the overlying fill layer 5270. However, the subsequent floor 5024 from Stratum 7 a provides evidence placing 5116 in this stratum. In addition to a wide variety of pottery already known from Stratum 7 c (including Amphora Type 11 according to F. Kenkel from the first century AD), remnants of plaster were also recovered (see Room D 3 in Stratum 7 c). The room's contents also included a limestone bowl TZ 015385-001/TZ 015386-



Fig. 3.40 Complex D; Stratum 7 b; with elevation data (Source: BAI/GPIA).

001 (*Figs. 3.42* and *3.43*) as well as a small weight made of basalt TZ 015683-001 (*Fig. 3.44*) and a miniature weight made of limestone TZ 015446-001 (*Fig. 3.45*).

In keeping with the weights found, a total of six spatulae were excavated in the south of the room by wall 4906 (Fig. 4.85). Remains of bones from cattle (9), sheep or goat (10), domestic fowl (3) and horse/donkey/mule (1) were also recovered. In addition to two amphora fragments from the first century AD, five casseroles, two oil lamp fragments (one Herodian, one undetermined) and other day-to-day pottery, the overlying fill layer 5270 also contained glass fragments (blue), a finger ring TZ 015302-001 (Fig. 4.52) and again similar bone material. Two coins were found in the fill of the room. The first coin, TZ 015291-001, originates from Herod I and dates between 37 BC-4 BC (Pl. 21.4), the second, TZ 015301-001, is attributed to Alexander Jannaeus (*Pl. 8.3*) and dates to 78 BC.

Room D 3 was remodelled in Stratum 7 b. As late as Stratum 7 c, a clay oven seems to have formed the centre of the room. The pottery found in the room included fine tableware (ESA, casseroles), as well as a weaver's shuttle and a spindle shaft. The new floor in 7 b rendered the older floor inoperative. A clear accumulation of features from the context of a loom was now noticeable. Likewise,



Fig. 3.41 Complex D; Room D 2; Stratum 7 b; AQ 123; Floor remains 4908 / 5112 (Source: BAI/GPIA).

rich pottery finds emerged, which further point to a certain prosperity of the house's owner.

No conversions could be detected for corridor-like Room Complex D 4. Among the finds from fill 5155 of the western part of the room were a spatula TZ 016620-001 (Fig. 4.87), a bead and isolated bones of cattle (1), sheep or goat (5) and domestic fowl (2). The pottery can be regarded as Hellenistic-Roman; a cooking pot dating from the first century BC to first century AD is noteworthy. In the centre of the room, fill layer 5092 contained a large amount of pottery, including an oil lamp TZ 020223-001 from the first century BC-50 AD (Figs. 3.46, 3.47), jars, amphorae, a cooking pot, an Echinus bowl, a pithos, a small beaker and seven rubbing stones (Fig. 3.48). Within fill layer 5187 another part of an ESA bowl from the period 180 BC-70 AD was found. Furthermore, bones of cattle (1), sheep or goat (1) and horse (1) and fragments of three stone vessels as well as a metal spatula TZ 017252-001 (Fig. 4.56) were recovered.

Room Complex D 5 also remained without alterations, but here too the infill material can be evaluated, which was preserved under the features of Stratum 7 a in a clearly recognisable manner. Fill



Fig. 3.42 Complex D, Room D 3, Stratum 7 b, AQ 123, Context 5116: limestone bowl fragments TZ 015385-001 / TZ 015386-001 (Source: BAI/GPIA).



Fig. 3.43 Complex D, Room D 3, Stratum 7 b, AQ 123, Context 5116: reconstructed limestone bowl TZ 015385-001 / TZ 015386-001 (Source: BAI/GPIA).



Fig. 3.44 Complex D, Room D 3, Stratum 7 b, AQ 123, Context 5116: weight TZ 015683-001, basalt (Source: BAI/GPIA).



Fig. 3.45 Complex D; Room D 3; Stratum 7 b; AQ 123; TZ 015446-001; Miniature loom weight; Limestone; 2.1 cm x 2.1 cm x 1.2 cm (Source: BAI/GPIA).



Fig. 3.46 Complex D, Room D 4, Stratum 7 b, Context 5092: location of oil lamp TZ 020223-001 (Source: BAI/ GPIA).



Fig. 3.47 Complex D, Room D 4, Stratum 7 b, Context 5092: oil lamp TZ 020223-001; snout is attached to the round body and has not been smoothed over well; a small groove can be seen at the transition from the body of the vessel to the rim, which may have served as a means of hanging the lamp (Source: BAI/GPIA).



Fig. 3.48 Complex D, Room D 4, Stratum 7 b, Context 5092: TZ 015780-001; one of seven rubbing stones from the room's contents (Source: BAI/GPIA).

layers 5091, 5095 and 5111 were rich in archaeological material. In addition to Hellenistic-Roman jar and amphora fragments, glass, a door hinge stone, a stone tile and bones of sheep or goat (29), sheep (1), goat (3), cattle (13), domestic pig (1) and domestic fowl (1), there were all manner of remarkable finds. These included an ETS imitation dating between 30 BC–70 AD, as well as another ETS bowl dating 125 BC–50 AD. In addition, an ivory object TZ 016614-001 (*Fig. 4.93*) was found, as well as another spatula, like those already found several times in the complex.

An interpretation of the room is not possible despite—or perhaps because of—the broad spectrum of finds.

Room Complex D 6 also yielded some finds from the fill layers within the room. Context 5075 represented the largest part of the room fill. In addition to the typical pottery repertoire found throughout the complex, an Echinus bowl and an ETS bowl from the period 80 BC-50 AD were also found. This was joined by two stone vessels, a loom weight and two glass fragments (light green, light blue), as well as bones of cattle (1), sheep or goat (6) and domestic fowl (1). Contexts 5114, 5186, 5268, 5269 and 5272 also formed parts of the room fill, but did not produce any new archaeological material. Hellenistic-Early Roman amphorae and bowls, Roman cooking pot sherds and the lip of a casserole were found, as well as several glass fragments. Only one pottery sherd TZ 020433-001 (Context 5269) of a cooking pot could be dated more precisely to the first century BC-first century AD, as well as the sherd of a small jug TZ 020436-006 (Context 5272), which dates to the second century BC to first century AD. Even after examining the finds, a more detailed interpretation of the room is not possible.

Complex D remained essentially unchanged in Stratum 7 b. The archaeological material appeared richer, although this could be regarded as a misconception due to the higher number of finds within the rooms' fill layers. The alteration of Rooms D 2 and D 3 can be interpreted as a simple replacement of the flooring, even if old installations were abandoned (tabun in Room D 3). Evidently, the function of the rooms was not altered in the process.
Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
4908	AQ 123	Floor	D 2	-	-	-
5075	AP 123	Fill layer	D 6	1	~	-
5091	AP 123	Fill layer	D 5	✓	\checkmark	1
5092	AP 123	Fill layer	D 4	✓	~	1
5095	AP 123	Fill layer	D 5	1	~	1
5111	AP 123	Fill layer	D 5	1	_	1
5112	AQ 123	Floor	D 2	-	-	-
5114	AP 123	Fill layer	D 6	 ✓ 	_	-
5116	AQ 123	Floor	D 3	1	~	1
5155	AP 123	Fill layer	D 4	1	~	-
5186	AP 123	Fill layer	D 4	✓	-	-
5187	AP 123	Fill layer	D 4	~	~	1
5268	AP 123	Fill layer	D 6	~	~	1
5269	AP 123	Fill layer	D 6	~	~	1
5270	AQ 123	Fill layer	D 3	~	~	1
5272	AP 123	Fill layer	D 6	1	1	1

Tab. 3.6 Contexts within Complex D, Stratum 7 b (surrounding contexts as in Stratum 7 c) (Source: BAI/GPIA).



3.2.4.2. Stratum 7 a: Second Reconstruction Phase

Fig. 3.49 Complex D, Stratum 7 a, Area I: with context numbers and colour-coded complexes (Source: BAI/GPIA).



Fig. 3.50 Complex D, Stratum 7 a: with elevation data (Source: BAI/GPIA).

The second reconstruction phase of Stratum 7 was also only detectable in Complex D (*Figs. 3.49* and *3.50*).

No statement can be made about **Room Complex D 1** in this stratum either.

In Room Complex D 2, no new floor or other alteration could be detected during this phase of rebuilding. However, overlying backfill layer 5070 gave insight into the material of the most recent phase of the house in this stratum. The pottery material was consistently Hellenistic-Early Roman and included jars, casseroles, cooking pots, amphorae and a table amphora. Several pieces can be more accurately dated to between the first century BC and the first century AD. Two glass fragments (turquoise, light green) can also be attributed to the inventory of the room as well as bones of sheep or goat (5), sheep (1), cattle (4), domestic pig (2) and domestic fowl (1). There was also a special find, a shell, TZ 016456-001, the whorl of which was carved in the shape of an eagle's head and was probably used as a make-up palette (Figs. 4.94 and 4.95, Chap. 4.3.5.). Another find was a needle made of bone (TZ 017207-001; Fig. 4.83).

Room Complex D 3 also underwent reconstruction during this phase. Once again, a new clay floor (5024) was laid. A limestone tile TZ 015985-



Fig. 3.51 Complex D 3, Stratum 7 a, Square AQ 123, Context 5024: limestone tile TZ 015985-001 (Source: BAI/ GPIA).



Fig. 3.52 Complex D 3, Stratum 7 a, Square AQ 123, Context 5024: limestone tile TZ 015985-001, detailed view (Source: BAI/GPIA).

001 was found thereon (*Figs. 3.51* and *3.52*), on which—due to the soft material of the tile—the imprint of a vessel can still be seen. It cannot be assumed that the entire room was lined with such tiles, as it would probably have become obsolete after only a short period of use. It was therefore presumably only intended as a coaster, perhaps for a heavy storage vessel.

Fragments of jars, cooking pots, amphorae, bowls and glass vessels were also found on the floor, as well as bones of cattle (3), sheep (1), sheep or goat (10), horse (1) and domestic fowl (2). The high number of metal objects (6) is striking, mainly flat objects that can be interpreted as fittings or sheet metal, as well as a nail (*Fig. 3.55*). In this stratum, too, limestone vessels appear again within the complex. Among them are a vessel and three cups (*Figs. 3.53* and *3.54*). Backfill 5025 in the south of room D 3 shows similar pottery and glass material as well as a dog bone.



Fig. 3.53 Complex D 3; Stratum 7 a; Square AQ 123; Context 5024; Limestone bowl TZ 017234-001 (Source: BAI/GPIA).



Fig. 3.54 Complex D 3, Stratum 7 a, Square AQ 123, Context 5024: limestone cup TZ 017235-001 (Source: BAI/GPIA).



Fig. 3.55 Complex D 3, Stratum 7 a, Square AQ 123, Context 5024: metal finds: fittings and nails (Source: BAI/GPIA).

Backfill 5113 in the centre contains similar pottery material, plus a sherd from an unguentarium. Here, too, two metal objects were found, including a latch-lifter key with ring handle TZ 015269-001 (*Fig. 4.57*) and a knife blade TZ 015373-001 (*Fig. 4.60*).

A quern and a rubbing stone were also found. Only one glass fragment (light blue) originated from backfill 5115, which can be presumed to have belonged to the room.

While items used for weaving could be clearly detected in Stratum 7 b, there was no longer any evidence of such activity in the final phase of the room, nor was there any other clear indication of its function. The singular find of a bone needle from Room D 2 could indicate that textile work was now taking place in this area.

For the first time in this stratum, a floor (5071) was recognisable—in **Room Complex D 4**—on which a Roman cooking pot fragment and one bone each from cattle and domestic pig were found. On the floor, both in the north-east and in the north-west, layers of stone collapse were visible in Contexts 5000, 4998 and 4995. These contexts, however, did not contain any finds.

In Room Complex D 5, the most extensive reconstructions of the stratum can be seen. Intermediate wall 4996 from Stratum 7 c and b was taken out of use and a new room was created on the area of the former D 5 and D 6 (Fig. 3.56). The southern wall was seemingly also rebuilt on the foundations of former wall 5074. The new walls of the room were now 4993/5154 to the north, 4873 to the east, 5072 to the south, and probably 4625/4629 to the west. Workspace 4994 was placed against wall 4993/5154 (Fig. 3.57). It was a semi-circular wall made of a row of elongated stones. Tabun 4838/4869 was placed at the western end of the wall. The closure of the western end of the southern part of the room must remain an open question, however no structure could be seen here in the profile.

Wall 5072 contained a Hellenistic-Roman oil lamp, amphora fragments, a casserole, a cooking



Fig. 3.56 Complex D 5, Stratum 7 a, Square AP 123: reconstruction phase (Source: BAI/ GPIA)



Fig. 3.57 Complex D 5, Stratum 7 a, Square AP 123: installation 4996/4994 (Source: BAI/ GPIA)

pot, a table amphora and worked stone TZ 015982-001 (*Fig. 3.58*). Between the former wall 5074 and 5072 was layer 5073, which was a thin layer of soil. A table amphora sherd from the first century BC to the first century AD was found in it, as well as a cooking bowl from the second to the fourth century AD, which, however, as a single find, can also be attributed to an overlooked disturbance.

Installation 4994 contained an ESA bowl from AD 50–100, an amphora to be classified as Hellenistic-Roman, a bowl and a cooking pot. In the attached tabun (4838/4869) an Early Roman cooking pot and a Hellenistic-Early Roman amphora were found. Two more tabuns 4821/4822 and 4806/4807 were built in the western part of the room (*Fig. 3.59*).



Fig. 3.58 Complex D 5, Stratum 7 a, Square AP 123: worked stone TZ 015982-001 (Source: BAI/GPIA).



Fig. 3.59 Complex D 5, Stratum 7 a, Square AP 122: tabun 4806/4807 (Source: BAI/ GPIA).



Fig. 3.60 Complex D 5, Stratum 7 a, Square AP 122: cooking pot TZ 006802-002 (Source: BAI/GPIA).

A Roman bowl and a Late Bronze Age cylinder seal were found in the northernmost of the two tabuns³³. In the second tabun, there were two almost completely preserved cooking pots TZ 006802-001/002 from the Roman period (*Fig. 3.60*). In the east and in the centre of the room, pisé floors were found in Contexts 5044 and 5020. Among other things, an amphora sherd from the first century AD and Hellenistic-Roman jars or jugs, casseroles, cooking pots and glass fragments were recovered from these floors.

A series of fill layers within the room represented backfill and thus the final phase of the room: 4769, 5012, 5026, 5030, 4989 and 4999. In addition to amphorae from the first century AD, cooking pots, casseroles, jars/jugs, an unguentarium, early Roman oil lamps and glass fragments (light green, light blue, turquoise, cobalt blue, yellow), a small jug, fish plates, a pithos, limestone vessels, a rubbing stone, rubbing plate, a quern, a door hinge stone, a spatula TZ 016619-001 (*Fig. 4.86*), a tessera, an Echinus bowl and bones from cattle (11), sheep or goat (25), sheep (2), domestic fowl (2) and gazelle (1) were also found.

Room D 5 had a very unusual shape in Stratum 7 a. There are no parallels for installation 4994, but it can probably be seen as a cooking area, and the entire room can be interpreted as a kitchen, due to the three additional tabuns.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
4769	AP 123	Fill layer	D 5	\checkmark	1	1
4806	AP 122	Tabun	D 5	-	_	-
4807	AP 122	Tabun fill	D 5	\checkmark	_	-
4821	AP 122	Tabun fill	D 5	\checkmark	1	1
4822	AP 122	Tabun	D 5	-	_	-
4838	AP 123	Tabun	D 5	-	_	-
4869	AP 123	Tabun fill	D 5	\checkmark	1	1
4873	AP 123	Wall	D 5	-	_	-
4989	AP 123	Fill layer	D 5	\checkmark	1	1
4993	AP 123	Wall	D 5	\checkmark	1	1
4994	AP 123	Installation	D 5	\checkmark	-	-
4995	AP 123	Collapse wall 4993	D 4	\checkmark	_	-
4998	AP 123	Collapse wall 4993	D 4	-	_	-
4999	AP 123	Fill layer	D 5	\checkmark	_	1
5000	AP 123	Collapse wall 4906	D 4	\checkmark	_	1
5012	AP 123	Fill layer	D 5	\checkmark	1	1
5020	AP 123	Floor	D 5	\checkmark	1	1
5024	AQ 123	Floor	D 3	\checkmark	1	1
5025	AP 123	Fill layer	D 3	\checkmark	\checkmark	1
5026	AP 123	Fill layer	D 5	\checkmark	1	1
5030	AP 123	Fill layer	D 5	\checkmark	_	1
5044	AP 123	Floor	D 5	\checkmark	-	-
5070	AQ 123	Fill layer	D 2	\checkmark	1	1
5071	AP 123	Floor	D 4	\checkmark	-	-
5072	AP 123	Wall	D 5	\checkmark	\checkmark	1
5073	AP 123	Fill layer between 5072 and 5074	D 5	\checkmark	_	-
5113	AP 123	Fill layer	D 3	\checkmark	1	1
5115	AQ 123	Fill layer	D 3	_	1	_
5154	AP 123	Wall	D 5	\checkmark	1	1

Tab. 3.7 Contexts within Complex D, Stratum 7 a (surrounding contexts such as Stratum 7 c) (Source: BAI/GPIA).

3.2.4.3. Comparable Domestic Developments

It has already been mentioned that Complex D existed in the same place and with a similar ground plan for several centuries. This phenomenon is addressed by H. P. Kuhnen, among others: "[there is] *enormous durability and high locational constancy of most of these settlements*"³⁴, L. El-Khouri takes a similar view: "*Almost all the excavated Roman houses were occupied in the Byzantine and Islamic periods; they were either rebuilt or reused by adding rooms, or building stone walls to divide big rooms or provide more space* [...]"³⁵. H. P. Kuhnen sees demolition of dwellings only as a result of natural disasters—and there were many of these in the first century BC³⁶—or in the course of destruction by conquest or large-scale new construction³⁷.

Complex D in Area I has not been excavated in its entirety and its classification therefore carries a degree of uncertainty. The excavated residential building with a total of six rooms had a rather irregular external form. This is only true if walls 4625/4629 actually belonged to this stratum, which is assumed here. Rooms of relatively angular shape, irregular in size and arranged in a row, were discernible. In the construction method, foundations one to two courses deep could be identified in a few places (4209), but they were not wider than the upper stonework. The walls consisted of irregularly sized field and guarry stones laid without mortar. There was no significant difference between outside and inside walls. An entrance could only be detected in one place (4906). The narrow space at the front, D 4, functioned either as a corridor or perhaps even as a small alley between two houses. The floors were—as far as they were preserved—mostly made of clay, only in Room D 2 in Stratum 7 b and D 3 in 7 a were stones laid, although the finds were minimal. It is difficult to determine the exact use of these rooms. However, kitchen areas (D 3) can be recognised from finds (bones) and installations. In Stratum 7 c and 7 a, installations were found in the form of tabuns (D 2 and D 5). A workroom with a loom can be assumed on the basis of rich find material in Room D 3 (Stratum 7 b). The silo outside the complex could be linked with all phases of rebuilding. Decorative elements cannot be assigned to a room in any phase of the house. Only mortar finds (D 3) indicate plastered walls. Nevertheless, the finds (tableware, eagle shell) suggest a high standard of living. There were no indications of a cistern or water channels, nor were there any indications of a second storey. A rebuilding of the house with a traditional flat roof—as was already the case in the Hellenistic period—seems plausible³⁸, especially since (as in the other strata) no roof nails were found.

The sources on residential houses since Herod I are reasonably rich, so that it is possible to get an idea of their structure³⁹. Several excavations offer insights into residential developments of the time.

As in the Hellenistic period, house shapes with a regular interior layout can be found, which exhibit a clear, rectangular ground plan⁴⁰. The buildings reveal a main room in a prominent position and with appropriate decoration. This form of house is found above all in Hellenised cities⁴¹. The ground plans of the houses in Insulae I-VIII at Capernaum are among the best preserved of this type⁴². Walls and floors of the houses are built of local, unworked basalt rock. No significant foundations were laid. Gaps were filled with small stones and soil, without the help of mortar: "Fairly regular courses were levelled with small pebbles and soil, but with no help of strong mortar, at least in the Hellenistic and Roman periods [...]"43. Roofs consisted of a mixture of wood, soil and straw. The rooms were grouped around a large open courtyard with workstones and tabuns. Sewers or cisterns were not found, which can be explained by the building's location facing a lake⁴⁴. The rooms were accessible through the courtyards via stone stairs⁴⁵. The buildings at Capernaum date from the second half of the first century to the beginning of the second century AD, based on a Herodian oil lamp⁴⁶.

- 34 Kuhnen 1990, 233. 236.
- 35 El-Khouri 2008, 80 f.
- 36 Amiran 1994, esp. 265. 287.
- 37 Kuhnen 1990, 233 f.
- 38 Kuhnen 1990, 247.
- 39 Kuhnen 1990, 233.
- 40 Kuhnen 1990, 234; Japp 2000, 39: S. Japp focuses on Judea in her paper, although the statements are also true for other regions.
- 41 Japp 2000, 39.
- 42 Kuhnen 1990, 237.
- 43 Loffreda 1985, 20.
- 44 Loffreda 1985, 21 f.
- 45 Loffreda 1985, 20.
- 46 Loffreda 1985, 57; further examples are found in Meron and Beth-Šə'arim: Kuhnen 1990, 239.



Fig. 3.61 Ramat Rahel (Source: Lipschits et al. 2012, fig. 1).

In addition to the house type found at Capernaum, there were also types of houses that had irregular interior layouts and no recognisable boundaries between individual houses⁴⁷. Fireplaces and cisterns remain typical for these houses⁴⁸. The buildings hardly show any decorative elements and are closely related to indigenous house designs of the pre-Hellenistic period. The functions of individual rooms can rarely be identified with any certainty. Kitchens, living and sleeping quarters, pantries or workshops can only be determined in rare cases⁴⁹. A striking example of this type is found at Råmat Råhel (Fig. 3.61). The settlement underwent a drastic change in the Hellenistic-Roman period. The formerly fortified settlement was abandoned in favour of a rural settlement⁵⁰. Stratum IVa dates to the end of the second century BC/beginning of the first century BC to the first century AD51. A Herodian house from the first century AD is found in the eastern part of the excavation area. It is a residential house with small rooms and an irregular room layout as well as very narrowly laid outer walls. According to Y. Aharoni, such houses must be attributed to the less affluent population, such as farmers or craftsmen. A very similar building can also be found in the south-western part of the area (Square $17-20)^{52}$.

The development in Complex D most closely follows the types of houses already found in Stratum 8 within the fortified settlement—following local traditions—although the incomplete overall floorplan of the house means that a definitive designation cannot be made. According to S. Japp, the two building types say less about the status of the inhabitants and much more about the tradition of the houses or the town⁵³. Although the ground plan of the house shows little influence from Roman architecture, Roman influence is already clearly recognisable from the finds, as is a certain prosperity.

- 47 Kuhnen 1990, 234; Japp 2000, 39.
- 48 Kuhnen 1990, 237.
- 49 Japp 2000, 39.
- 50 Lipschits et al. 2011, 37.
- 51 Lipschits et al. 2011, 9.
- 52 Aharoni 1962, 17.
- 53 Japp 2000, 39.

3.2.4.4. Additional Features from Stratum 7 Area I

In addition to the features directly associated with the complexes, numerous fill layers were found marking the outer area of the buildings (*Figs. 3.1* and 3.49). Due to the lack of architecture, it is only possible to assign the contexts to Stratum 7 on the basis of elevation data and find composition.

Among the fill layers are:

AQ 119: 2644, 2674 AP 118/119: 2089 AO 119: 1028 AR 120: 3303 AR 121: 6110, 6135 AQ 121: 4348, 4601 AP 121: 4262 AP 122: 4471 AQ 122: 4600, 4602, 4680 AT 122: 4145, 4155, 4157 AR 123: 4909, 5279, 5010 AT 123: 4360

The archaeological material was very mixed and in part still contained much Iron Age pottery (1028, 2644, 2674 [find], 4145, 4262, 4348, 4471, 4680), as well as much Hellenistic-Roman material. A few finds deserve special mention, among them find TZ 018179-001 from Context 6110, which is thought to be the base of a column (*Fig. 3.62*). Three querns and a stone weight also originated from this context. Several coin finds were made, including a Hasmonean coin TZ 014450-001 (*Pl. 7.5*) from Context 4600 and four coins of Alexander Jannaeus TZ 014196-001 to TZ 014196-004 (*Pls. 7.1–7.4*) from Context 4262 and another (TZ 015346-001; *Pl. 8.4*) from 5279. Context 4262 yielded the tip of a dagger (TZ 015171-001; *Fig. 3.63*).

Context 4680 was particularly rich in metal finds, including four objects of unclear function and two nails. All contexts are to be regarded as backfill layers, which must be seen in connection with the abandonment or destruction in Stratum 7 a and the reconstruction in Stratum 6. An indication of the destruction of Complexes A and D probably by fire is the occurrence of four coins by Alexander Jannaeus mentioned above, which were baked together. A destruction layer could not be identified, and only a few stone assemblages, which could not be identified in detail, can be interpreted as collapse: 51 (Complex B), 5460 and 5459 (Complex D).



Fig. 3.62 Complex A/D, Stratum 7 c, b, a, Square AR 121: 'column base' TZ 018179-001 (Source: BAI/GPIA).



Fig. 3.63 Complex A/D, Stratum 7 c, b, a, Square AR 123, Context 4262: tip of dagger TZ 015171-001 (Source: BAI/GPIA).

Another exciting context, also indicating the end of the stratum, was 4045 (Figs. 3.64 and 3.65). Located between complexes A and D, this feature contained 75 loom weights made of clay, positioned next to each other and partly blackened (destroyed by fire?), indicating the location of a loom as well as a former building. Seventy-four of the objects are of pyramidal shape with an angular outline and are horizontally perforated, and another object was too destroyed to determine its shape. In the region, this type of clay weight is mainly known from Iron Age II C and the Persian period, but was also used until the Roman period; before the 'vertical two-beam loom' replaces looms with weights in the Levant in the first century AD and these disappear from the find contexts⁵⁴. Pyramidal woven weights from





Fig. 3.65 Complex A/D, Stratum 7 c, b, a, Square AR 122: loom weights (Source: BAI/GPIA).

Hellenistic-Roman contexts have been found at Tel Ănafă, Tel Ašdod (Stratum 3a), Tall Sandaḥanna, Masada, Samareia-Sabasțiya and Pella⁵⁵.

In the north of the area there were several fill layers and ash pits contained bones of sheep and goat (2), red deer (1) and cattle (2).

Numerous pits could also be identified between Complexes A, B and D.

The pits include:

AL 117: 1280 AR 118: 3347, 3563 AO 118: 640, 650, 651 AQ 119: 2673 with find 2664 AO 119: 2022 AN 119: 827, 828, 829, 1202, 1203 AR 120: 3481, 6148 AQ 120: 3390, 3410 AR 121: 5081, 5522 AT 121: 4161 AR 122: 3956

Pit 2673 is the only one that can be stratigraphically assigned to Stratum 7 a without any doubt (Room A 2). All other pits are to be assigned to Stratum 6 before the reconstruction of Complex D, without a more precise stratification being possible. A re-

55 Boertien 2013, 180.



Fig. 3.66 Complex A/D, Stratum 7 c, b, a, Square AQ 120, Context 3410: TZ 011780-001 / 002, TZ 011781-001 / 002 and TZ 011782-001 (Source: BAI/GPIA).

markable find is 829, which was found inside pit 827/828. This is an almost completely preserved oil lamp (TZ 002495-001) from the second to first cen-

tury BC⁵⁶. Furthermore, six Echinus bowls, two of them almost complete, were found in the same pit alongside all kinds of Hellenistic-Roman pottery. The discovery of unprocessed glass in pit 3347 is also worth mentioning. However, since this find is unique for the Early Roman period it is more likely to belong to an older period, also because other finds of unprocessed glass come exclusively from earlier strata for which glass production could be proven at Tall Zirā[°]a⁵⁷. The same applies to the discovery of a calcite cylinder seal in pit 348158. Pits 3390 and 3410 are also remarkable, they stand out due to their size, on the one hand, but also because they are the only two pits that were partially clad out with stone. Pit 3410 contained five beads TZ 011780-001/002, TZ 011781-001/002 and TZ 011782-001, which were made of stone (Fig. 3.66), another of glass and one of metal TZ 012513-001 (Fig. 4.53). A glass bead was also found in pit 3390. Some pits contained a lot of Iron Age pottery, the rest contained little archaeological material.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
640	AO 118	Pit	A 1 / B 1	~	-	-
650	AO 118	Pit	A 1 / B 1	~	-	-
651	AO 118	Pit fill	A 1 / B 1	~	-	1
827	AN 119	Pit	A 2 / B 1	-	-	-
828	AN 119	Pit fill 828	A 2 / B 1	~	1	1
829	AN 119	Fund in 828	A 2 / B 1	~	-	-
1028	AO 119	Channel fill	A 2	~	1	1
1202	AN 119	Pit	A 2 / B 1	-	1	-
1203	AN 119	Pit fill	A 2 / B 1	1	1	-
1280	AL / AM 117	Pit	В	1	1	1
2022	AO / AP 119	Pit	A 2	~	1	1
2089	"AO / AP 118 / 119"	Fill layer	A 1 / A 2	~	-	1
2644	AQ 119	Fill layer	A 1 / A 2	~	1	1
2664	AQ 119	Find	A 1 / A 2	-	1	-
2673	AQ 119	Pit	A 1 / A 2	-	-	-
2674	AQ 119	Find	A 1 / A 2	1	-	-

56 Kenkel 2012, 266 f., Type La8, Appendix 50.

- 57 Soennecken 2017, 327 (Stratum 14), 558 (Stratum 12), 611 (Stratum 11).
- 58 The cylinder seal belongs to a temple complex in Stratum 14, in which a total of 36 of the 38 cylinder seals from Tall

Zirā'a were found. The large-scale construction activities in this area have led to a great deal of mingling of finds: Soennecken 2017, 314–323.

3303	AR 120	Fill layer	A 1/ D 1	\checkmark	\checkmark	\checkmark
3347	AR 118	Pit	А	~	~	_
3390	AQ 120	Pit	A 1/ D 1	\checkmark	\checkmark	\checkmark
3410	AQ 120	Pit	A 1/ D 1	\checkmark	\checkmark	\checkmark
3481	AR 120	Pit	A 1/ D 1	\checkmark	\checkmark	\checkmark
3563	AR 118	Pit	А	-	-	-
3956	AR 122	Pit	A 1/ D 1	\checkmark	\checkmark	\checkmark
4045	AR 122	Loom	D 2 / A 2	\checkmark	\checkmark	\checkmark
4262	AP 121	Fill layer	A 2/ D 5	\checkmark	\checkmark	\checkmark
4348	AQ 121	Fill layer	A 2/ D 3	\checkmark	-	\checkmark
4471	AP 122	Silo 4340 fill	D 5	\checkmark	\checkmark	\checkmark
4559	AP 120	Collapse	A 2	\checkmark	\checkmark	\checkmark
4600	AQ 122	Fill layer	A 2/ D 3	\checkmark	\checkmark	\checkmark
4601	AQ 121	Fill layer	A 2/ D 3	\checkmark	\checkmark	\checkmark
4602	AQ 122	Fill layer	A 2/ D 3	\checkmark	-	\checkmark
4680	AQ 122	Fill layer	A 2/ D 3	\checkmark	\checkmark	\checkmark
4909	AR 123	Fill layer	A 2 / D 1	\checkmark	\checkmark	\checkmark
5010	AR 123	Fill layer	A 2 / D 1	\checkmark	\checkmark	\checkmark
5081	AR 121	Pit	A 2 / D 1	_	_	_
5279	AR 123	Fill layer	A 2 / D 1	\checkmark	\checkmark	\checkmark
5459	AQ 122	Collapse	A 2/ D 2	\checkmark	-	\checkmark
5460	AQ 122	Collapse	A 2/ D 2	\checkmark	\checkmark	\checkmark
5522	AR 121	Pit	A 2 / D 1	\checkmark	\checkmark	\checkmark
6110	AR 121	Pit	A 2 / D 1	\checkmark	\checkmark	\checkmark
6135	AR 121	Fill layer	A 2 / D 1	\checkmark	\checkmark	\checkmark
6148	AR 120	Pit	A 2 / D 1	~	~	~

Tab. 3.8Contexts between the complexes, Stratum 7 c, b, a.

3.2.5. Complex E: Farmstead



Fig. 3.67 Complex E, Stratum 7, Excavation Areas I (only the northern section) and II, in 2012. Complex E (reconstructed) is shown in red (Source: BAI/GPIA).

Complex E is located in the north of Area II (Fig. 3.67) and covers Squares AY 127-131, AX 126-132, AW 126-132, AV 126-130, AU 126-127 and AT 126–127 (Fig. 3.2). This is the largest complex from Stratum 7, with 22 excavated rooms or parts of rooms (Fig. 3.68) and potentially two further rooms, E 23/E 24. The complex extended almost across the entire width of the area. It was completely covered by the overlying strata (Fig. 3.69), which led to considerable disturbance and left hardly any room untouched. Nevertheless, it allowed for a reasonably comprehensive reconstruction of the original plan of the walls, bar a few exceptions (E 18, E 23, E 24). On the entire north-western to north-eastern sides of Tall Zirā'a, the course of the walls was disturbed. Here the excavation area extended to the edge of the tall. The walls had been partially broken off at these points and were possibly destroyed in a landslide. In the south-east, the course of the walls (apart from Squares AW/ AV 130/131) is largely known and preserved without major breaches. In the west, the outer walls of the complex are still hidden in the space between Areas I and II. The geomagnetic survey of 2014 was unsuccessful in bringing them to light⁵⁹.

The state of preservation of the complex was, however, sufficient to allow for some conclusive statements. The complex had an elongated projection to the north, as well as two square ones to the south and an elongated, narrow projection in the centre. All in all, the existing outer walls produced an almost symmetrical ground plan, which made the reconstruction of the missing wall structures easier.

Almost all preserved walls of the complex were foundations, which is why it was not possible to determine any entrances. Their height was often only one or two courses and did not allow a distinction to be made between outside and inside walls in terms of their construction type. The walls were on average between 0.30 m and 0.70 m wide. Exceptions were those in the eastern part of the building, which were noticeably wider at 0.90 m on average. Most of the foundations consisted of quarry and

⁵⁹ Rassmann - Reiter 2017, 193-196.



Fig. 3.68 Complex E, Stratum 7: architectural remains of the farmstead (Source: BAI/GPIA).



Fig. 3.69 Complex E, Stratum 7: excavation contexts with disturbances by Stratum 6 and Stratum 4; (Early) Roman disturbance (Stratum 6) only in AY 130, AX 130, AX 132 affecting the reconstruction of the eastern projection (Source: BAI/GPIA).

field stones, but some worked stones (for instance in wall 11329) and finds such as grinding stones (like in wall 11414) were also incorporated. It is plausible that material from the Hellenistic settlement, which may still have been partially visible or collapsed at the time of construction, was reused here as spolia.

Various parts of the complex, such as possibly double wall 10806/11048 or the diagonally indented walls 11391 and 10443, indicate several phases of the building, but cannot be differentiated with certainty. They are therefore all assigned to a single phase. In addition, only a few wall corners or joints were preserved, since it was precisely at these points that later additions usually intersected the foundations, so that no definitive statements can be made about additions or extensions to an original core complex. An exception was the reconstruction of the eastern projection (Stratum 6). Here, a reconstruction phase could be clearly established. A destruction layer and successive floors were also preserved. Floors (consisting mainly of clay and stone

3.2.5.1. Considerations on Reconstruction

The existing remains allow a comprehensive reconstruction of Complex E for Stratum 7. This assessment assumes as its starting point that ground plan of the building was approximately symmetrical, which is suggested by the existing outer wall sections and which is often be seen in comparative examples. In addition, natural conditions as well as the surrounding buildings prevent any initial expansion of the complex, which supports the theory of a symmetrical ground plan. Towards the north and north-east there was hardly any more building space-even without a presumed landslide-which is why it can be assumed that the complex could not have extended further, at least in these directions. In the east, too, there could be no further series of rooms connected to Rooms E 17, E 21 and E 22. If this is applied to the other side of the complex (Rooms E 1, E 2, E 4), then (assuming a symmetrical plan) there could be no further sequence of rooms there either. The was certainly the possibility of expanding to the west, in terms of available land area, although it probably would have been limited to only one row of rooms due to Building D in Area I. The reconstruction of the eastern projection (E 20/E 22) is based on the assumption that there were no further rooms to the west or the east. Here,

paving) were found only at a few places aside from this section. The extensive reconstruction across this area certainly contributed to their destruction. In some places, however, extensive occupation layers with inserted tabuns and fireplaces were found, making it possible to interpret the room's function.

The archaeological material in the entire complex is relatively evenly mixed, because it was mainly preserved in backfill layers. Different phases of use cannot be identified with certainty from the finds, although an attempt was made to differentiate between the few unambiguous features. Since the building seems to have partially collapsed after it was abandoned (Stratum 6 collapse layers) or was completely levelled before the rebuilding in Stratum 5, many interpretations of the rooms' functions are only possible for Stratum 6. There, the material is evaluated that was in use at the end of the phase of occupation. From this, in turn, conclusions can be drawn for Stratum 7, since, if a room remains largely unchanged, an equivalent use of the room can be assumed.

the foundations of Room E 20 were almost completely preserved and it is assumed that the dimensions of Room E 22 were similar. The latter is only preserved in small parts, adjoins E 20 to the east and together with it forms the eastern projection. The same assumption about their dimensions applies to Rooms E 19 and E 21. This would result in a width of approximately 8.10 m from south-west to northeast for this projection. These dimensions are also assumed for the western projection (E 4/E 5). Room E 4/E 5 is the only place where there is still the possibility of confirming this assumption in future excavations. Here, the continuation of wall 10985 is still hidden under the foundations from Strata 4 and 3 and could provide more data on the western end of the building without excavating the space between Areas I and II. However, since in all other places the foundations of Stratum 7 have been fully breached by directly overlying walls, the chance of this endeavour succeeding is rather slim. In order to determine the only possible extension of the complex to the west, the only solution may lie in the 15-m wide walkway between Areas I and II. The reconstruction of the northern projection E 6 is no less speculative. It was probably placed directly at the edge of the slope and centrally at the rear of the building. It is precisely its expansive view that gave this room its advantage.



Fig. 3.70 Complex E, Stratum 7: suggested reconstruction; walls that can be reconstructed with certainty (dark grey) and with less certainty (light grey); orange = assumed courtyards (Source: BAI/GPIA).

If the width of Room E 22 is changed, the building would be compressed or stretched, assuming it is symmetrical, but the basic shape would remain the same. The possibility of the building having an asymmetrical ground plan still remains, of course, and would allow for a variety of room sizes and shapes.

The plan showing the overall reconstruction of Complex E (*Fig. 3.70*) shows which walls can be reconstructed with certainty (dark grey) and which must remain uncertain (light grey). The dimensions resulting from this assumed reconstruction are given in the following section, although they can of course only be potential room dimensions. How the reconstruction of each room was arrived is mentioned below where appropriate, but one should always bear in mind the issues outlined above.

3.2.5.2. Room Descriptions

The following room descriptions refer exclusively to the contexts and relevant finds (datable pottery, coins or finds of particular significance for the evaluation) from floors and walls. Finds from walls are discussed at their first occurrence. The finds are discussed in detail following the description of the stratum, so that initially only the strictly stratigraphic aspects are examined here. The layers of collapse in the complex, and therefore also the contents of the rooms, are not discussed until Stratum 6, as they cannot be allocated to the earlier stratum with certainty. For the same reason, interpretations of the rooms will also be given, where possible, with the discussion of Stratum 6.

Room Complex E 1, in Square AX/AW 126, consisted of walls 10806 to the north, a short but clearly recognisable unnamed wall section to the south-east and wall 11049 to the south. The western end of the room is still hidden in the walkway between Areas I and II (*Fig. 3.71*). It was probably the north-west corner of the farmstead. The room measured 4.90 m x 5.10 m to 5.30 m.

Whether the room was open to neighbouring Room E 7 or the small wall foundation remnant (unnamed) originally ran through the entire room cannot be said with certainty, since the centre of the room was disturbed by two walls from Stratum 4. The southern part of the room was also disturbed. Here, there were two large pits, which completely destroyed almost half of the room. Only in the northern part was there a well-preserved pisé floor,



Fig. 3.71 Complex E 1, Stratum 7, Square AW 126: wall 11049; view of the western profile (Source: BAI/GPIA).

Fig. 3.72 Complex E 2, Stratum 7, Square AV 126: remains of pavement 10853 and uppermost layer of wall 11049; view to the east (Source: BAI/GPIA).

10837, with a partially preserved stone foundation, which, however, produced no finds.

Room Complex E 2 adjoined Room E 1 to the south, occupying all of Square AV 126 as well as the baulk to AV 127. It was bounded by walls 11049 to the north, 10741 and 10843 to the east, and the continuation of 10835 to the south. The western wall has not yet been excavated and is located in the walkway between Areas I and II. Like Room E 1, this was probably an outer room.

The exact course of wall 10835 is unclear. One possibility is that it was only a short wall that divided the room leaving the area towards Room E 3 open. Another possibility is that wall 10835

extended south-west to the western outer wall, thereby creating an approximately rectangular room. However, since the Hellenistic wall extending below the room did not seem to be disturbed in the west (Complex B, Stratum 8), where it would have to have been intersected by an extended wall 10835 (like 11145 in E 4/E 5), it appears to have been an open room. Its dimensions along wall 10843 amount to *c*. 2.50 m in width and *c*. 5 m in length, along wall 11049.

In the central northern part of the room, remains of former stone floor 10853 were still visible (*Fig. 3.72*). The few finds from this floor included four glass fragments (gold, greenish, bluish, reddish).



Fig. 3.73 Complexes E 3 and E 5, Stratum 7, Square AV/AU 127: ashlar within wall 11143; Hellenistic repurposing (?); view to the east (Source: BAI/GPIA).

The fill of wall 10843 yielded a few finds, including amphora sherds and the sherd of an Eastern Sigillata bowl, which can be dated between 30 BC and 70 AD.

The rectangular Room section E 3 adjoined Rooms E 2 and E 8 to the south and was in Square AV 126/127. As already discussed for E 2, it was probably open towards E 3. With a width of 1.60 m, it is one of the narrower rooms in the complex. The room was bounded by walls 10835 to the north, 11265 to the east and 10840 and 11143 to the south. In wall 10835 a door socket stone was used as a spolia and a Hellenistic-Early Roman amphora sherd was found. The foundation of wall 10840 was separated from an overlying and slightly offset wall as the excavation progressed and therefore contained several younger finds, which are disregarded here. Wall 11143 contained a cooking pot from the first century BC to the first century AD as well as Hellenistic-Roman table amphora sherds. Two finds from the second to the fourth century AD could have come from overlying backfill layer 11125 (Stratum 5 as well as 4). In 11143, two carefully dressed stones (Fig. 3.73) and a quern were reused in the lower part of the foundation.

Room Complex E 4 designates the room in the south-western projection of the farmstead, which extended over Squares AU/AT 126. E 4 was bounded by walls 11145 to the east and 10985 to the south, the western end is still hidden in the walkway between Areas I and II, and in the south-west possibly still partly under the overlying strata. The short wall (11145) in the north-eastern part of Square AU 126 was striking; it turned at a right angle from 11143 and broke off after about 1 m. Wall 11145, which had just one course and was only 0.40 m wide, cut Hellenistic wall 10836 (Stratum 8) (*Figs. 3.74* and *3.75*). The course of the wall was disturbed by the installation of overlying buildings and can no longer be traced, but it probably divided Rooms E 4/E 5.

The western wall enclosing Room E 4 could be reconstructed according to the same principle as applied to Rooms E 1 and E 2 and an approximately rectangular room of c. 3.50 m x c. 2.40 m emerged.

Two Byzantine and early Islamic finds came from wall foundation 10985, but these are to be attributed to the large-scale disturbances.

In the north-western part of the room, fragmentary floor 11014 had survived, but had not been separated from the overlying fill layer. A small pit (11316/11317) was embedded in the floor, but was devoid of finds.

Room Complex E 5 adjoined E 4 to the east and extended across Squares AU/AT 127. These two rooms formed the south-western projection of the farmstead. Room E 5 was bounded to the north by wall 11143, to the west by an unnamed wall, to the south by 11373 and to the west by 11145. It was also an approximately rectangular room of c. 3.50 m x c. 2.40 m. No floor was found, but the floor level was indicated by fireplace 11354 in the southern part of the room, which contained no finds. Pit 11323, located directly next to the fireplace, was filled with 210 snail shells. A sim-



Fig. 3.74 Complexes E 3 and E 5, Stratum 7, Square AU 127: wall 11143; the incorporation into the Hellenistic wall (Stratum 8) can be seen; view from the east (Source: BAI/GPIA).



Fig. 3.75 Complexes E 3 and E 5, Square AU 127: wall 11143; view to the west (Source: BAI/GPIA).

ilar find was made in Room E 20 in pit 11375 $(Fig. 3.76)^{60}$.

Room Complex E 6 adjoined Room E 1 to the north-east and ran the entire length of Rooms E 7, E 9, E 12, E 14 and a part of Room E 17, on their

north side. The room was formed by walls 10982 to the north, 10806, 11048, 10995, 10996, 11400 to the south and 10822 to the west. The walls were particularly disturbed in Square AY 127. The entire northern area was also built over along the length of AY 127–129 (*Fig. 3.77*). The eastern end of the room and most of the northern wall are still partly in the excavation area or were destroyed during a presumed landslide.

The long rectangular Room E 6 represented a distinct shape in the complex. The location on the outer edge of Tall Zirā'a and the unusual long, narrow shape with a view towards the wadi and Gadara lead to this projection being interpreted as a vantage point⁶¹. Assuming that the projection was placed centrally on the northern side of the building and judging by the even distance to the outer corners of the complex, this would result in a room length of approximately 19 m.

Double wall 10806 and 11048 (*Fig. 3.78*) could be indicative of a remodelling phase of the building, but it is equally possible that walls were doubled at this point in a planned manner to provide a decorative projection. To preserve the symmetry of the building, another double wall is presumed

- 60 Note in pers. correspondence with N. Benecke dated 04.09.2017: "In both cases (collections) they are shells of the genus Helix ("Vineyard snail"). Probably the species Helix engaddensis."
- 61 Perhaps a kind of portico would also be conceivable. On the characteristics of a portico: Nünnerich-Asmus 1994, 25–27; Smith 1997, 130–143.



Fig. 3.76 Complex E, Stratum 7, Squares AU 127 and AW 132: snail shells (Vineyard snail) from pits 11323 and 11375 in Room E 5 (left) and E 20 (right) (Source: BAI/GPIA).



Fig. 3.77 Complexes E 9 and E 6, Stratum 7, Square AY 127: surrounding disturbances; view to the west (Source: BAI/ GPIA).



Fig. 3.78 Complexes E 6 and E 7, Stratum 7, Square AX 126/127: double wall; view to the north-east (Source: BAI/ GPIA).



Fig. 3.79 Complexes E 2, E 3, E 7, E 8 and E 10, Stratum 7, Squares AW/AV 127/128: view to the west (Source: BAI/GPIA).

in AY 129, but unfortunately disturbance by the younger strata is present there. The width of the room would be 2 m in the corners and 1.20 m along the rest of its length. The walls did not produce any finds. Unfortunately, no floor was found either.

Room Complex E 7 was located to the south of Room E 6, to the west of Room E 9, to the north of Room E 8 and to the east of Room E 1. The room lay on the baulk between AX/AW 126/127 and was formed by walls 10806 to the north, 10807 and 10755 to the east, 10738 to the south and an unnamed wall to the west, which was only preserved in very small parts due to later installations. Unfortunately, most of the interior was also lost due to these very installations. Of the eastern wall, just one face of wall 10807 and two stones of 10755 were preserved, which, however, were presumably all part of the same wall given they were all in the same alignment. A trapezoidal room shape emerged, narrowing slightly towards the north. Overall, the room was 5.20 m long, 1.90 m wide at the narrowest point and 2.70 m at the widest point.

The room was furnished with a pisé floor (10831), which was still well preserved and undisturbed only in the northern part of the room, whereas the corresponding floor (10740) in the south could only be recognised on the basis of soil rich in stones and clay. The walls and also the foundation trench identified for 10738 had no finds. The twelve finds from wall 10755 have to be disregarded, as it is unlikely that all of them came from a wall of which only two stones have survived. These finds are more likely to be attributed to the later infilling of

the room. On the preserved floor (10831) there were some Hellenistic-Roman pottery sherds, including parts of a bowl and several amphora sherds. The foot of a stone vessel TZ 111684-001 (Fig. 4.106), a rubbing stone and a stone weight were also found. Floor 10740 in the south produced considerably more finds, but the floor was not separated from the overlying fill layer, nor from the underlying backfill layer. The latter can be interpreted as a levelling layer as part of the levelling carried out prior to the construction of Complex E. In the deepest part of the layer under the floor, recognisable thanks to survey data-and thus clearly attributable to the backfill layer-a coin TZ 111245-001 (Pl. 10.3) was found, which was poorly preserved, but can be interpreted as Hasmonean and can be dated between 104 and 40 BC. Typologically it can likely be attributed to Alexander Jannaeus, for whose coins the design—a wreath with writing on the obverse and a double cornucopia and pomegranate on the reverse-is typical. Some bones-mainly from sheep and goats (17)-were also found. Two glass fragments (pale green, rich green) of a relief bowl from the second century BC to 50 AD were also found, but no survey data are available for these finds, so that an exact classification is not possible. In addition, as in floor 10831, rubbing stones and various Hellenistic-Roman cooking pottery were found. The fragment of an unguentarium dates from the second to the first century BC, that of a cooking pot from the first century BC to the first century AD. As already mentioned, however, it cannot be determined whether these pieces date from the time



Fig. 3.80 Complexes E 9, E 11 and E 13, Stratum 7, Square AX 128: wall corner 11391/11419 under the disturbance; view to the west (Source: BAI/GPIA).

of the construction of the house or the infilling of its rooms.

Room Complex E 8 was south of Room E 7 (*Fig. 3.79*). It was formed by walls 10738 to the north, 10743 and 10834 to the east, 10835 to the south, and 10741 and 10843 to the west. The room was almost square, measuring 2.60 m x 2.80 m.

The northern wall was destroyed by several pits from Strata 5 to 1, otherwise the room was spared from disturbances.

The remains of a metal fitting were found in wall 10743, otherwise the wall, like 10834, was devoid of finds. Although the room appeared to be largely undisturbed, no occupation layer was found.

Room Complex E 9 represented a large, centrally located room that adjoined Rooms E 6, E 12, E 13, E 11, E 10 and E 7. It was bounded by walls 10806 and 11048 to the north, 11021 and 11414 to the east, 11419 and 10783 to the south, and 10807 and 10755 to the west. All the walls were badly damaged. Wall 11414, for instance, was destroyed by two graves from the Ottoman period. Wall 11419 was particularly notable because of its east-west orientation, which differed from that of other walls (Fig. 3.80). It is possible that this was a later addition, although it is no longer possible to determine an exact date for it. The reconstruction of this corner of the room is difficult and can be modified in a number of ways. In any case, the room had an irregular shape. From west to east it measured 5 m, from north to south 4.40 m at the narrowest point and 5.70 m at the widest point.

In the centre was floor 11036, which had a conspicuous number of inclusions of ash. These were due to the presence of tabun 11413, which had a diameter of $0.64 \text{ m} \times 0.40 \text{ m}$ and was inserted into the floor in the south-east of the room.

The tabun was cut exactly in the middle by a later wall and destroyed. It contained a thick layer of ash and two sherds of pottery, with one fragment of a bowl dating from the latter half of the first century BC to the first half of the first century AD.

In wall 11414, three querns were repurposed. In wall 10783, a single tessera and part of a mortarium from the second to fourth centuries AD were found. It can be assumed that these finds are attributable to a pit that destroyed the wall. Bone fragments (16) of sheep or goat were found in floor 11036. The pottery found was limited to amphorae, a casserole, a cooking pot and a pithos. A fragment of a glass vessel from the fourth to the sixth centuries AD can also be attributed to one of the numerous disturbances.

Within this room, another floor was laid in Stratum 6, which rendered tabun 11413 inoperative. Between the floor from Stratum 7 and that from Stratum 6, a thin fill layer, 11018 and 11019, was preserved, which represented the time immediately before the new floor was laid. Unfortunately, 11019 had no finds. In 11018, in addition to a Hellenistic-Roman casserole, amphorae and an Echinus bowl were found, as well as another part of a relief bowl made of glass (gold), dating from the second century BC to 50 AD.

The remarkable size of the room, its position in connection to numerous other rooms and also the



Fig. 3.81 Complex E 12, Stratum 7, Square AX 128: lowest position of wall corner 11328/ 11329; view to the east (Source: BAI/GPIA).

tabun, indicate that it was used as a central room. Since the tabun probably produced a large amount of smoke and there were hardly any possibilities for extraction due to the central location in the complex, an opening in the ceiling can be assumed. An interpretation as a courtyard is also possible, as well as a direct passage to E 6. This would also give the complex an additional source of light, as the rooms located in the centre would otherwise have no natural lighting.

Room Complex E 10 was in Squares AW 127/ 128 and consisted of walls 10783 to the north, 11266 and 10019 to the east, 11261 to the south, 10834 and 10743 to the west. It bordered on Rooms E 8, E 9 and E 11, was rectangular in shape and measured 1.80 m x 2.40 m. All walls were heavily disturbed and only one course was poorly preserved.

Another spolia in the form of a rubbing bowl was found in wall 10019, as well as a cooking pot fragment and another sherd of a mould-made glass bowl (green-brown), both of which can be dated to the second century BC to first century AD. Floor 10085 was identified in the south-east corner, but could not be separated from the overlying backfill layer. In the rest of the room, only backfill 10757 was preserved (Stratum 6).

Room Complex E 11 was an L-shaped room in Squares AW/AV 128, which consisted of walls 11266 to the north-west, 11419 to the north, 11318 and 11391 to the east, 11475 and 10840 to the south, 11265 to the south-west and 11261 and 10019 to the west. The southern part of the room measured 3.90 m x 1.70 m, and the north part measured 7 m x 1.50 m to 2.60 m.

Only the corner of the wall to the south-west was preserved. Here 11265 was clearly attached to wall 10840. All other walls were heavily destroyed by later installations, as was the southern part of the room. A striking feature was wall 11391/11318, the course of which deviated from the other walls of the complex, which all ran roughly in a southeast-northwest direction. Wall 11391/11318, however, ran in a north-south direction. Like wall 11419, this could again be a later installation. However, this cannot be determined with certainty, since the corners of the wall were not preserved. The neighbouring Courtyard E 13 was possibly much larger in a first construction phase and was reduced in size by the addition of 11391/11318. Wall 11419 was set at right angles to 11318, and thus protruded into Room E 9.

Within Room E 11, the remains of a clay floor were preserved in the form of contexts 10069 and 10014. Unfortunately, the floor contexts were not separated from the overlying backfill of the room, so that they cannot be evaluated in this stratum.

Room Complex E 12 bordered Rooms E 6, E 14, E 13 and E 9 and was in Squares AY/AX 127/128. It was bounded by walls 10995/10996 and 11400 to the north, 11403/11328 to the east, 11329 to the south and 11021 and 11414 to the west. Both 11328 and 11329 as well as 11021 and 10995 formed a corner (*Fig. 3.81*). The room was rectangular and measured 4.70 m x 2.70 m. A floor could not be made out, as only one foundation course was still visible (*Fig. 3.82*).

Against the eastern wall of the room, the remains of three tabuns of equal size—11401, 11416



Fig. 3.82 Complex E 12, Stratum 7, Square AY 128: wall 11400 (Source: BAI/GPIA).

and a tabun without designation—were discovered, thus at least indicating the occupation layer. The tabun shapes were recognisable from ash and clay remains on an area of about 0.50 m x 0.40 m each. Finds could not be assigned due to the poorly preserved contexts.

Wall 11329 again contained three dressed stones (perhaps from the Hellenistic wall). All other walls remained largely without finds.

Among the archaeological material from fill layer 11386 in the interior of the room below the floor from Stratum 6 were 82 pottery finds, at least 25 of which were amphora sherds. Unfortunately, the context was not separated from the underlying backfill layer (which concealed the Hellenistic tabuns), so that finds from Strata 8 and 7 were mixed here. The earliest datable sherds are three Rhodian amphorae, which can be dated between 240 and 146 BC. The other amphora sherds can be dated to the Hellenistic-Roman period. In addition, two fish plates from the second to first quarter of the first century BC and an imitation of an ETS bowl were found, which can be dated to the period between 80 BC and 50 AD.

The pottery repertoire consists mainly of amphorae and cooking ware, supplemented by a fish plate and an ETS imitation. The room may have had a special status due to its prestigious position between possible Courtyards E 9 and E 13 as well as its central position along E 6.

Complex E 13 was the largest space and was the central courtyard of the farmstead and adjoined Rooms E 9, E 12, E 14, E 17, E 18, E 19, E 15, E 16

and E 11, as well as the presumed Rooms E 23 and E 24. It had an elongated shape with two projections to the south-west and south-east. To the north, the courtyard was probably open towards Room E 14 (*Fig. 3.83*).

The foundations of the overlying strata did not reach Stratum 7 at this point and have left the foundations almost intact, which is why it was clear that Rooms E 13 and E 14 were seemingly not separated by another wall. However, the eastern end of the courtyard was again partially destroyed by the overlying building. In view of the remaining rooms in the complex, it seems rather unlikely that wall 10443 (E 18/E 19), running from south-southwest to north-northeast, extended much further into Room E 13, since, it would destroy tabun 10478 and give the courtyard a completely irregular shape. The most logical form of reconstruction is one with the fewest corners and as many straight lines as possible. If the western wall of Room E 20 (11183/11379, 11167) was extended parallel to 10686/10682 (E 20/E 22), then it would have met 10443 as well as 10229 (E 17/E 18) to the north without disrupting the mentioned tabun (10478), the tabun 10306 further to the north and without affecting the shape of the courtyard. In addition, this would have maintained the symmetry of the complex, as the walls continued to be relatively parallel to each other.

According to this reconstruction, the courtyard was enclosed by the following walls: 11329 to the north-west, 10229 to the north, 10365 to the south-east, 11426, 11395, 11108 and 11160 to the south,



Fig. 3.83 Complexes E 12, E 13 and E 14, Stratum 7, Square AX/ AY 128: wall corner 11328 and 11329; view to the west (Source: BAI/GPIA).



Fig. 3.84 Complex E 13, Stratum 7, Square AX 129: part of the preserved clay wall from 11160 in the southern profile (Source: BAI/GPIA).

11112 to the south-southwest, 11391 to the southwest, and 11318, 11414 to the west. Its dimensions from west to east were about 9.70 m, the western projection from north to south about 9.10 m, the eastern projection about 6.60 m, and in the centre it measured 4.40 m.

The upper masonry of wall 11160 had a distinct layer of clay that could still be seen in profile (*Fig. 3.84*), which is unique for Stratum 7 in Area II.

The finds from wall 10358 cannot be taken into account, as its upper part was originally interpreted as a pit (which was not numbered), and the find material was collected and attributed to context 10358 over a larger area. A separation of the two features (wall and pit) is no longer possible retrospectively. Wall 11160 contained a rubbing stone, part of an Echinus bowl from the third century BC to the first century AD and a shell pendant. All other walls had no finds. Fortunately, the floor had survived almost throughout the room. In addition, there were a total of six tabuns, which were seemingly arranged in a regular pattern. In the centre of the room were three tabuns 10254, 10305 and 10252/10251, which were placed centrally in front of wall 11160 (*Fig. 3.85*). Of these, 10254, with a diameter of 0.45 m, was the smallest tabun and had no finds. The other two tabuns measured 0.65 m in diameter. Both were walled with stones and contained pottery, charcoal remains and bones of sheep or goat (15) and cattle (2). The pottery consisted of sherds from amphorae,



Fig. 3.85 Complex E 13, Stratum 7, Square AX 129: tabun layer (Source: BAI/GPIA).

a cooking pot and a jug and suggested the Hellenistic-Roman period. In front of tabun 10305 a larger, worked stone was found on the floor, which can be interpreted as a mortar⁶².

Centrally placed in front of the south-eastern projection was tabun 10478 with a diameter of 0.55 m, which, however, also contained no finds. In front of the south-western projection was tabun 10078, which contained three Hellenistic-Roman amphora sherds (*Fig. 3.86*).

A cooking pot sherd has to be attributed to the Byzantine-Umayyad period, but can be explained by wall 10009 intersecting the courtyard from this later period. In the western projection an extensive ash pit 10046 was also found, probably due to the presence of tabun 10078, with small quantities of Hellenistic-Roman pottery, again consisting of sherds of amphorae, cooking pots and jars. Another small ash pit 11157 was found in the south-east corner of the projection. Finally, a sixth tabun 10306 was excavated somewhat off to the north-east corner of the courtyard, which also had a diameter of about 0.55 m, but contained no finds. The arrangement of the tabuns within the courtyard was very striking: the four tabuns 10078, 10252/10251, 10305 and 10478 formed a straight line, oriented towards wall 11160, and seemed to have been set in a planned manner due to their central position in front of the projections or the central wall.



Fig. 3.86 Complex E 13; Stratum 7; Square AW 128: tabun 10078 in profile (Source: BAI/GPIA).

In several places in the courtyard, remains of a clay floor were found such as, among others, 10070 (with an overlying backfill layer). The soil in this part of the south-west projection of the courtyard was streaked with black ash lenses, indicating the use of tabun 10078. In the north-western part of the courtyard was Context 10450, also a part of the

⁶² The find was wrongly attributed to feature 10251, but is to be regarded as separate.

clay floor. A sherd from a Hellenistic-Roman jug was excavated here. Context 10312 was also part of the floor, located directly around the three central tabuns. A large number of bones were recovered, including sheep and goat (22) and cattle (3). The pottery again included sherds of Hellenistic-Roman amphorae and cooking pots. A clay floor had also survived in the south-east, Context 10366, which, however, was not separated from the underlying backfill layer (Stratum 8).

In Courtyard E 13, the rebuilding dating from Stratum 6 was easily detectable. The backfill layers between the floors laid down in the two strata could also be identified, at least in the western area, in the form of 11211 and 11162, and offered an insight into the period from the end of Stratum 7 and the construction phase of Stratum 6. Layer 11162 extended over a large area through the entire western excavation area. It was one of the richest in finds in this complex, with over 260 finds from the Hellenistic-Roman period (two Byzantine finds can be disregarded due to disturbances). The pottery and glass finds matched those of the other rooms in the complex. In addition to cooking pot fragments and jugs/jars, a large number of amphora sherds were recovered (at least 50 pieces plus several matching pieces), including, yet again, Rhodian amphora. Sherds of casseroles (3), bowls, including an ESA bowl, Echinus bowls (11) and mould-made glass bowls (light blue, golden brown) were again among the finds. In addition, the find repertoire included pans (15), table amphorae (2), a lagynoi, an Early Hellenistic plate/dish, stone vessels (4), a loom weight, a stone weight and rubbing stones. For the first time, there were also metal finds in larger numbers, including nails, a cosmetic spatula, a ring and fittings. In addition, a large number of bones came to light, most of which were from sheep or goats (39), but there were also bones from domestic fowl (2), cattle (12) and pigs (1). Worth mentioning are several sherds of what was obviously local handmade pottery (see Chap. 4.3.1.3.). Backfill layer 11211, on the other hand, was unfortunately almost without finds. In the centre and in the east of the room, no backfill layers had survived; here the rebuilding in Stratum 6 disturbed the underlying layer.

Apart from this abundance of finds and the number of tabuns in the room, the shape and location alone allow some conclusions to be drawn. The designation as a courtyard seems unambiguous, as the operation of six tabuns in one enclosed space is hardly conceivable. The entire space was seem-

ingly paved with a clay floor, which could still be recognised in all sections, at least to some extent. In addition, the courtyard is located in the centre of the complex and adjoins nine to twelve rooms of the complex. Even without sufficient finds, it is clear that this must have been a central space that served on the one hand to provide access to the rooms, and on the other hand as a central cooking and work area. The careful arrangement of the four tabuns in a row suggests a certain demand for aesthetics and possibly also a division into different work areas. The western projection is particularly striking because of the large oven and the wealth of finds, although the impression here should not be misleading, as much has been lost in the rest of the room due to later alterations. The western projection of the courtyard can be interpreted as a storage place for amphorae, maybe a kind of pantry. The original contents of just over half of the amphorae can no longer be identified. Judging by the other half-even if it only reflects a frequent, not definite use of the vessels-numerous amphora sherds (21) were for storing and transporting fish products (type Am2.2., Am2.3, Am2.4), including the popular fish sauce (type Am3.2)63. In addition, wine was also stored to a lesser extent (3 objects) (type Am1, RAm12, RAm17)⁶⁴. Finally, the shape of the courtyard is also noteworthy, as it reflects the outer contours of the farmstead.

Room Complex E 14 was located in Squares AY 128/129 and bordered rooms E 6, E 17, E 13 and E 12. Preserved walls of the room were 11344 to the north, 10219 to the east and walls 10358, 10432 and 11328/11403 to the west. The south end of the room was probably open to Courtyard E 13. A separation from E 13 was nevertheless made, as this area was part of the row of Rooms E 1, E 7, E 9, E 12, and E 17. As already suspected for Room E 6, there could again have been a double wall on the northern side of the room. According to this reconstruction, the room measured 4 m x 3 m.

The finds from the fill of wall 10219 consisted of everyday pottery from the Late Hellenistic-Early Roman period as well as a rubbing stone and the remains of a stone bowl. Fill layer 11337 in the northern part of the room could be recognised as the backfill of Stratum 7, as it was located under the rebuilding phase (Stratum 6) of the complex.

⁶³ Kenkel 2012, 216 f.

⁶⁴ Kenkel 2012, 61. 63 f. 216.

The most significant find from the room was a soapstone mould TZ 112153-001 (Figs. 4.119 and 4.120). It is a rectangular plate measuring 14.3 cm x 7.5 cm and 2.5 cm thick, with five depressions for beads and four depressions for intricate wires. Two depressions in the corners were probably used to fix the counter plate in place. Moulds of this type were also used for other jewellery, for example, a beautiful mould made of slate for making rings was found in the homestead at Oalandiya (Fig. 4.121)65. Also found within the fill layer were two fish plates dating from the third century BC to first half of the first century BC or second century BC to first quarter of the first century BC, an Echinus bowl dating from the third century BC to first century AD, a casserole dish dating from the first century BC to third century AD and a cooking pot dating from the first century BC to first century AD. In addition, a spindle whorl, an iron nodule, two rubbing stones, worked flint as well as amphora and cooking ware sherds were found, all of which can be considered Hellenistic-Roman. A single Byzantine find can be attributed without reservations to a disturbance or adjacent layer.

The spectrum of finds thus differed significantly from those in Courtyard E 13. Amphora sherds and cooking pots still make up the majority of pottery finds. For the first time, tableware was represented by more than one sherd (E 9, E 12, E 13). Although only a few finds of higher quality have been found, they stand out in contrast to the finds from the surrounding areas. The location by E 6 and the view of the courtyard probably made the room more prestigious.

Room Complex E 15 adjoined Courtyard E 13 in Squares AW/AX 129 to the south and was directly centred behind tabuns 10251/10252 and 10305. The room was formed by walls 11160 to the north, 11395 to the east, 11426 to the south and 11108 to the west. Wall 11426 very likely extended to the west-southwest and connected with wall 11108. This produced a rectangular room measuring 3.10 m x 1.50 m. An L-shaped room like E 11 is also possible. The room was disturbed by a wall (10008/10304) from Stratum 4 (also 3) running across it, which was also the reason for the lack of wall connections to the north and south.

The few finds from wall 11426 can be attributed to the infilling of the room, as during the excavation the rudimentary wall was initially thought to be a stone pavement. A clay-limestone layer 0.10 m thick abutted the wall to the north. Although the function as a wall became clear during the course of the excavation, it was no longer possible to separate the floor from the wall finds. The clay floor was interspersed with pottery and charcoal. From this it can be concluded that it was possible to reach Courtyard E 13 from this small room and that the presence of tabuns 10252/10251 and 10305 was reflected in the fill layers here. The pottery material can again be classified as Hellenistic-Roman.

Due to the size and location, the room could be interpreted purely as a passageway from Courtyard E 13 to E 16 or—in view of the three tabuns in E 13—also as a small storage room from which one could easily fetch necessary materials, for example to prepare meals.

Room Complex E 16 adjoined Room E 15 to the south and probably formed the middle of the three southern projections of the complex together with E 23. The room was bounded by wall 11426 to the north, wall 10261 to the east and 11108 to the west, to the south there was no wall enclosing the room. The wall to the east (extension of 10261) may still be revealed in the course of future excavations, as its level has not vet been reached. The northern end of the room, by the extension of wall 11426, has already been discussed above for Room E 15. Western wall 10261 also very probably extended to the north to meet 11426. The southern end of the room must remain unresolved, since no wall remains were found. However, based on comparative examples, it can be assumed that the projection die not exceed the two outer ones in length⁶⁶. In the southern section, clay floor 10259 was preserved.

Room Complex E 17 was in Square AY 129, although this was only its south-western corner, 10219/10229 (*Fig. 3.87*). Most of the room was probably destroyed in a landslide. The existing part was intersected on all sides by the building from Stratum 4 (also 3).

The room adjoins E 6, E 18, E 21, E 13 and E 14. Although only preserved in small parts, the original shape of the room can nevertheless be easily reconstructed. Wall 10219 would have extended to the north and met the back of Room E 6. Wall 10229 will have continued to the east until it met the extension of wall 10682 (E 19/E 21), and then continued to the east to meet the outer wall of Room E 21. According to this reconstruction,

⁶⁵ Magen 2004, 102 Fig. 143.

⁶⁶ Cf. Chap. 3.2.5.4.



Fig. 3.87 Complexes E 13, E 14 and E 17, Stratum 7, Square AY 129: wall corner 10219 and 10229; view to the west (Source: BAI/GPIA).

Fig. 3.88 Complex E 17, Stratum 7, Square AY 129: view to the south (Source: BAI/GPIA).

Room E 16 would have had the considerable dimensions of about 8.50 m x 3.90 m. The possibility of its division into two rooms seems plausible given the sizes of the other rooms adjoining E 6. It is also clear from these findings that E 14 and E 13 were not separated from each other by a wall, since wall 10229 did not continue to the west (*Figs. 3.83* and 3.87).

A very well-preserved pisé floor 10246 with a foundation of small stones was found adjacent to walls 10219 and 10229. The floor or foundation contained ten finds, including two Echinus bowls TZ 100245-005 and TZ 100245-007 and an oil lamp, which can be dated from the second to first century BC. In addition, an amphora with a Greek

stamp was found, dating between 210 and 175 BC. Based on the location, these finds can be dated to the time of the building's construction.

In contrast to the walls discussed so far, the foundations of 10219 and 10229 were preserved relatively deeply, with three and a half courses (elsewhere the wall foundations are only one, or a maximum of two courses high). The floor started at about the midpoint of the highest stone course (*Fig. 3.88*).

Room Complex E 18 emerged between Courtyard E 13, and Room E 17 and E 19 in Squares AY 129/130. It was a trapezoidal room that became narrower towards the north-east. The extension of wall 10229 enclosed the room to the north, 10443



Fig. 3.89 Complexes E 19, E 21 and E 22, Stratum 7, Square AX 131; view to the north-east (Source: BAI/GPIA).

formed one of the room walls to the south, the other walls were no longer preserved. In the area of the assumed course of the walls, several disturbances were found due to later installations, so that there would be no further wall finds even with continued excavation. According to this reconstruction, the room would measure about 3.80 m from south-west to north-east. At the widest point 2.0 m and in the north-east at the narrowest point only about one metre. Just like Room E 15, E 18 was a small room connected to Courtyard E 13, directly in front of which was tabun 10306. This combination also led to the assumption that there was a second room of this type. There were no finds in the room, despite a recognised backfill layer (10445).

Room Complex E 19 was located in the eastern part of the complex in Squares AY/AX 130/131 and, together with the three following rooms, belonged to the eastern projection (E 19, E 20, E 21, E 22). The outer and inner walls were noticeably wider than those of the rest of the building, and the layout of the rooms was clearer. The size of the rooms was also interesting, as all of them were generally larger than those elsewhere in the building. Room E 19 was bounded by walls 10443 to the north-west, 10682 to the north-east and 10684 to the south-east (*Fig. 3.89*).

The south-western wall was missing, which was partly due to the overlying constructions, but also to the fact that Square AX 131 has not yet been excavated to the appropriate depth, which is why most of the southern side of the room is also unexcavated. It is very likely, however, that wall 11183/11379, 11167 continued to the north-west and thus formed the south-western side of the room. In the north-eastern part of the room, a backfill layer from the time before or during the rebuilding of the farmstead in Stratum 6 was found. Context 10325 contained a few bones of sheep or goat (3) and cattle (1) as well as the typical Hellenistic-Roman everyday pottery also found in the other rooms, as well as an ESA sherd, which can be dated from 80 BC to 50 AD. In Context 10477, only one rubbing stone was found. The fill layers 10444 and 10484 had no finds.

Room Complex E 20 adjoined E 19 to the south-east. Walls 10684 to the north, 10686 to the north-east, 10603/11078 to the south and 11167, 11183/11379 to the south-west delimited the room (*Fig. 3.90*). Only the north-western wall foundation was not completely preserved and it is possible that it is still partly under the overlaying Byzantine house. The room measured 5.60 m x 2.50 m. Wall 10603 incorporated a few worked stones.

The walls remained empty of finds except for 10686. Here a Hellenistic-Roman amphora fragment and seven glass shards (light blue, greenish, dark blue) were found, one of which can be identified as a relief bowl. Across the entire room, except for the unexcavated north-western part (AX 131), clay floor 11371 had survived right up to the walls. A stone bowl with a base was recovered, but otherwise there were no finds. Pit 11387 was set into the floor in the middle of the room, but it too contained no finds. In the southern corner of the room (11167/10603), as in Room E 5, there was a pit (11375), which contained 155 snail shells



Fig. 3.90 Complex E 20, Stratum 7, Square AX/AW 132: walls and modification from Stratum 6; view to the east (Source: BAI/GPIA).

(*Fig. 3.76*). Directly on the floor, a very thin but extensive layer of ash (11349) was still visible, which extended through the entire room. This could be an indication of a destruction layer. A fire may have broken out in this part of the building. Backfills 11348 and 10604 (directly under the floor of Stratum 6), which lay on top of the ash layer, offered no further finds apart from a cooking pot sherd of the second to first century BC and stone tools.

Rooms Complex E 21 and E 22 formed the north-eastern end of the complex. Nothing of them survived except for the western foundations facing Rooms E 19 and E 20 (*Fig. 3.89*). Only wall 10684 indicated that two more rooms adjoined to the north-east, as it extended beyond walls 10682 and 10686 in this direction.

The size of the rooms can only be speculated upon. They may have been approximately the same size as Rooms E 19 and E 20. No further evaluation of the rooms will be possible, since wall 10684 had already broken off at the edge of the tall, victim to a landslide, as were the contents of the room and all the associated walls.

Room Complex E 23 adjoined Room E 16 in the west, and it's existence is assumed purely on the basis of floor 10090^{67} . Together with E 16, the room possibly formed the central projection of the

farmstead. Unfortunately, the fill was not separated from the overlying backfill layer, so that finds from here cannot be taken into account. Nevertheless, the assumption of another room at this point seems justified and is consistent with the overall reconstruction. In addition, the floor, which extends westward for about half the length of the square, gives an indication of the possible length of the central projection.

Room Complex E 24 was in the southern part of the complex and is a second presumed room, based exclusively on an assumed symmetry. It bordered Rooms E 13, E 19, E 20, E 15 and E 16 and was bounded by 11426/10365 to the north and 11183/11379 to the east and the assumed extension of wall 10261 to the west. The southern wall was not found, but might be revealed in the course of future excavations, since the level of the complex has not yet been reached in Squares AW/AV 130. A wall running from 10261 to 11183/11379 can be assumed, at the same level and in horizontally mirrored alignment as 11143/10840/11475/11112. No remains of the interior of the room have survived.

Outside the complex, several fill layers and remains of floors were found that can be attributed to Stratum 7:

> AW 131: 11231 AW 132: 10607, 11087, 10588 AV 132: 11134 AU 129: 11467 AT 127: 10988, 11270, 11271 AS 126: 11283, 11324

⁶⁷ Since this floor was placed directly on the enclosing wall of the Hellenistic stratum, it can indeed be assumed that the buildings of the Hellenistic period were at least partially visible when the homestead was built.



Fig. 3.91 View from Room E 6 to Gadara (Source: BAI/GPIA).

Outside of Complex E, only a few features could be assigned to Stratum 7. Among them were two patches of floor (10607 and 11270). The features in the south-western squares (10988, 11271, 11283) were in part heavily disturbed and contained many late Roman-Byzantine finds. Among the finds, however, was a terracotta figurine TZ 101402-002 (*Pl. 20.4*).

After examining the features from Stratum 7, a fairly clear picture of the settlement structure emerges. The shape of Complex E could not be clearly verified during the excavations, instead several building structures were assumed. Only in the course of the stratigraphic work did the form of a farmstead become apparent, even if the plan is not completely certain in parts, as mentioned in the explanation of the reconstruction and in the descriptions of the rooms. According to the ground plan, this was a farmstead with two to three projections at the front and one at the back. The building was constructed using the local building tradition, as indicated by the preserved part of the upper masonry in Room E 13 and also by the courtyard⁶⁸.

Complex E was the identifiable centre of the settlement (Complexes A to F) and can be interpreted as the main building. The whole building covered about 600 m². The extent of the overlying Byzantine-Umayyad building clearly shows that it was built within the present area of the tall, while the walls of the farmstead had broken off beyond it, at the edge of the slope. An explanation for this would be a landslide before the construction of the building in Stratum 4, in which a part of the walls (E 6, E 14, E 17, E 21, E 22) disappeared.

The interior layout of the building follows relatively regular lines and therefore it can be assumed that it was laid out as a single, planned process. There is also evidence of a recognisable external symmetry.

Architecturally, several sections can be discerned. First of all, the projection E 6 at the back of the building, on the north side: not only was it deliberately placed on the edge of the slope to allow a wide view, but the six or seven rooms adjoining it (if E 17 is indeed two rooms) are of a relatively similar shape and are aligned in a row along the projection. An interpretation as a prestigious and private part of the house seems likely here. Room E 12 in particular, but also E 14, stand out due to their prominent position next to Room E 6 and the central Courtyard E 13. Interpreting them as main rooms remains merely a vague assumption, not least because of the lack of floors and upper masonry.

It is not possible to decide here what function can be assigned to which specific room, since it was not possible to determine the exact location of the complex entrance nor were there complete room inventories that could provide information about the function of the individual rooms.

The southern projections at the front of the building form another architectural unit and give the building its particular shape. The two outer projections stand out 4-6 m from the main part of the building towards the south. The extent of the central projection can no longer be accurately determined, but it is unlikely to have extended more than 4 m forwards, since there are no known examples with a central projection extending beyond the outer projections. The eastern projection stands out in particular. Here were not only the only rooms without a connection to a courtyard, but also the walls were noticeably thicker. While the wall foundations in the rest of the building averaged between 0.30 m and 0.70 m, they measured 0.90 m in the eastern projection. One explanation for this could be the location of the farmstead on Tall Zirā'a itself. To the north and north-west, the building was protect-

68 The Palace of Jericho also shows this type of construction technique. The foundations are of rough hewn quarry stones, the upper masonry probably consisted of mud bricks: Kuhnen 1990, 170.

ed by the steep slope of the tall, while to the west and south it was open to the top of the tall. To the east, on the other hand, was the less steep access of Tall Zirā'a and the general approach to the settlement was probably located here. Accordingly, the building on this side was not protected by natural features and perhaps had to be secured by thicker walls. A possibility of retreat in case of attacks by raiders or the like is conceivable, however, as an effective fortification it seems rather too insignificant. A more massive foundation for a second storey might also be considered, and if so, it would indicate that a strong fortification was not considered necessary at the time of the construction of the farmstead. No perimeter wall around the farmstead was found, which tends to support the theory of a second storey. The projections not only formed a separate unit externally, the overall plan also clearly shows that they were separated from the rest of the building, as was typical for rural estates of similar form⁶⁹. Another special feature was the large Courtyard E 13, which can be considered as a farmyard and it was at the heart of the building. It had a particularly interesting shape, which reflected the external outline of the farmstead. The tabuns in the courtyard also appeared to be deliberately aligned (10078, 10251/10252, 103051, 10478). In addition, the courtyard served as an outlet to the surrounding rooms. Two further courtyards were Rooms E 9 (based on the presence of a large tabun) and E 2/E 3 (the only paved room). Thus, most of the rooms had a connection to one of the courtyards, the only exceptions were Rooms E 20, E 21 and E 22 in the eastern projection.

Finally, the south-western part of the building remains, which, in contrast to the rest of the building mentioned so far, appears relatively disorganised (E 2, E 3, E 4, E 5, E 8, E 10, E 11). This part can be characterised as workspace, which was separated from the rest of the building by the L-shaped corridor E 11^{70} . Courtyard E 2 can be recognised as the core of this part of the building.

The farmstead is interesting due to its particular external shape, the large central courtyard, an open and light-filled building form, as well as its adaptation to the conditions of the tall (slope, orientation), something that occurs in a large number of rural Roman buildings⁷¹.

- 69 Smith 1997, 118.
- 70 The definition of the L-shaped room as a corridor is also found in other examples: Smith 1997, 70–76 Fig.71.
- 71 On the integration of nature: Schneider 1995, 1.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
10014	AW 128	Floor and fill layer	E 11	\$\lambda\$	\checkmark	 ✓
10019	AW 128	Wall	E 10 / E 11	 ✓ 	~	1
10046	AW 129	Ash pit	E 13	 ✓ 	-	1
10069	AW 128	Floor and fill layer	E 11	~	1	 ✓
10070	AW 128	Floor and fill layer	E 13	 ✓ 	\checkmark	 ✓
10078	AW 128	Tabun	E 13	\$\lambda\$	-	-
10085	AW 128	Floor	E 10	\checkmark	-	\checkmark
10090	AV 129	Floor and fill layer	E / F	\checkmark	-	\checkmark
10219	AY 129	Wall	E 14 / E 17	~	~	 ✓
10229	AY 129	Wall	"E 13 / E 14/ E 17 / E 18"	\checkmark	_	~
10246	AY 129	Floor	E 17	\checkmark	\checkmark	\checkmark
10251	AX 129	Tabun	E 13	\checkmark	\checkmark	\checkmark
10252	AX 129	Tabun fill (Tabun 10251)	E 13	\checkmark	-	\checkmark
10254	AX 129	Tabun	E 13	-	-	-
10259	AV 130	Floor	E 16	-	-	-
10261	AV 130	Wall	E 16	-	-	-
10305	AX 129	Tabun	E 13	\checkmark	-	\checkmark
10306	AY 129	Tabun	E 13	\checkmark	-	-
10312	AX 129	Floor and fill layer	E 13	\checkmark	-	\checkmark
10325	AY 130	Fill layer	E 19	~	-	\checkmark
10358	AY 128	Wall	E 14	\checkmark	\checkmark	\checkmark
10365	AX 130	Wall	E 13 / (E 24)	-	-	-
10366	AX 130	Floor	E 13	\checkmark	\checkmark	\checkmark
10432	AX 129	Wall	E 14	-	-	-
10443	AY 130	Wall	E 18 / E 19	-	-	-
10444	AY 130	Fill layer	E 19	-	-	-
10445	AY 130	Fill layer	E 18	-	-	✓
10450	AX 129	Floor	E 13		-	-
10477	AY 130	Fill layer	E 19	\checkmark	\checkmark	-
10478	AY 130	Tabun	E 13	-	-	-
10484	AY 130	Fill layer	E 19	-	-	-
10588	AW 132	Fill layer	E 20 / F	\checkmark	\checkmark	\checkmark
10603	AW 132	Wall	E 20	\checkmark	-	\checkmark
10604	AW 132	Fill layer	E 20	\checkmark	\checkmark	\checkmark
10607	AW 132	Fill layer	E / F	\checkmark	-	-
10682	AY 131	Wall	E 19 / E 21	-	-	_
10684	AY 131	Wall	"E 19 / E 20 / E 21 / E 22"	-	-	-
10686	AX 132	Wall	E 20 / E 22	~	\checkmark	-
10738	AW 127	Wall	E 7 / E 8	 ✓ 	\checkmark	 ✓

10740	AW 127	Floor and fill layer	E 7	\checkmark	\checkmark	_
10741	AW 127	Wall	E 2 / E 8	\checkmark	~	-
10743	AW 127	Wall	E 8 / E 10	-	-	\checkmark
10755	AW 127	Wall	E 7 / E 9	\checkmark	-	\checkmark
10783	AW 127	Wall	E 9 / E 10	\checkmark	~	\checkmark
10806	AW 126	Wall	"E 1 / E 5 / E 6"	\checkmark	-	-
10807	AX 127	Wall	E 7 / E 9	_	-	-
10822	AX 126	Wall	E 6	-	-	-
10831	AX 126	Floor	E 7	\checkmark	~	-
10834	AV 127	Wall	E 8 / E 10	_	_	-
10835	AV 127	Wall	E 2/ E 3 / E 8	\checkmark	\checkmark	\checkmark
10837	AX 126	Floor	E 1	_	_	_
10840	AV 127	Wall	E 3	\checkmark	\checkmark	-
10843	AV 127	Wall	E 2 / E 8	\checkmark	~	-
10853	AV 126	Floor	E 2	\checkmark	\checkmark	\checkmark
10982	AY 127	Wall	E 6	_	-	-
10985	AY 127	Wall	E 4	\checkmark	-	-
10988	AT 127	Fill layer	E / F	\checkmark	~	\checkmark
10995	AX 127	Wall	"E 6 / E 9 / E12"	-	-	-
10996	AY 127	Wall	"E 6 / E 9 / E12"	_	-	-
11014	AU 126	Floor	E 4	-	~	-
11018	AX 127	Fill layer between floor 11036 and 10938 (Stratum 6)	Е 9	\checkmark	\checkmark	-
11019	AX 127	Fill layer between floor 11036 and 10938 (Stratum 6)	E 9	-	_	-
11021	AY 121	Wall	E 9 / E 12	\checkmark	-	-
11036	AX 127	Floor	E 8	\checkmark	✓	\checkmark
11048	AX 127	Wall	E 6 / E 9	-	-	-
11049	AW 126	Wall	E 1 / E 2	\checkmark	-	-
11078	AW 132	Wall	E 20	_	-	-
11087	AW 132	Fill layer	E / F	\checkmark	-	\checkmark
11108	AW 129	Wall	"E 13 / E 15 / E 16"	-	-	-
11112	AV 129	Wall	E 13 / (E 23)	-	-	-
11134	AV 132	Fill layer	E / F	\checkmark	\checkmark	\checkmark
11143	AV 126	Wall	E 3/ E 5	\checkmark	-	\checkmark
11145	AV 126	Wall	E 4 / E 5	-	-	-
11157	AW 128	Ash pit	E 13	-	-	-
11160	AW 129	Wall	E 13 / E 15	\checkmark	\checkmark	\checkmark
11162	AW 129	"Fill layer between Stratum 7 and 6"	E 13	\checkmark	\checkmark	\checkmark
11167	AW 131	Wall	E 20	_	-	-
11183	AW 131	Wall = 11379	E 20	-	-	-
11211	AW 129	"Fill layer between Stratum 7 and 6"	E 13	\checkmark	_	\checkmark
11231	AW 131	Fill layer	E / F	\checkmark	✓	-
11261	AV 128	Wall	E 10 / E 11	-	-	-
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11265	AV 128	Wall	E 3 / E 11	-	-	-
11266	AW 128	Wall	E 10 / E 11	-	-	-
11270	AT 127	Floor	E / F	_	-	-
11271	AT 128	Fill layer	E / F	\checkmark	\checkmark	 ✓
11283	AS 126	Fill layer	E / F	\checkmark	\checkmark	\checkmark
11316	AU 126	Pit fill (Tabun 11317)	E 4	\checkmark	\checkmark	\checkmark
11317	AU 126	Pit (fill 11316)	E 4	-	-	-
11318	AW 128	Wall	E 11 / E 13	-	-	-
11323	AU 127	Pit	E 5	-	-	\checkmark
11324	AS 126	Fill layer	E / F	-	-	-
11328	AY 128	Wall	E 12 / E 14	\checkmark	\checkmark	\checkmark
11329	AX 128	Wall	E 12 / E 13	-	-	-
11337	AY 128	Fill layer	E 14	\checkmark	\checkmark	-
11344	AY 128	Wall	E 14	-	\checkmark	-
11348	AX 132	Fill layer	E 20	\checkmark	\checkmark	-
11349	AX 132	Ash	E 20	-	-	-
11354	AU 127	Fire place	E 5	-	-	-
11371	AX 132	Floor	E 20	-	\checkmark	-
11373	AU 127	Wall	E 5	\checkmark	\checkmark	\checkmark
11375	AX 132	Pit	E 20	-	-	✓
11379	AX 132	Wall = 11183	E 20	-	✓	-
11386	AX 128	Fill layer	E 13	~	✓	✓
11387	AX 132	Tabun	E 20	-	-	-
11391	AV 128	Wall	E 11 / E 13	_	-	-
11395	AX 130	Wall	E 13 / E 15	~	✓	✓
11400	AY 128	Wall	E 6 / E 12	-	-	-
11401	AY 128	Tabun	E 12	-	✓	-
11403	AY 128	Wall	"E 6 / E 12 / E 14"	_	-	_
11413	AX 123	Tabun	E 9	-	\checkmark	-
11414	AX 128	Wall	"E 9 / E 12/ E 13"	_	\checkmark	_
11416	AX 128	Tabun	E 12	_	1	-
11419	AW 128	Wall	E 9 / E 11	_	_	_
11426	AW 130	Wall	"E 13 / E 15 / E 16 / (E 24)"	\checkmark	\checkmark	~
11467	AU 129	Fill layer	E / F	_	_	_
11475	AV 128	Wall	E 10	_	_	_

Tab. 3.9 Contexts within Complex E, Stratum 7 (Source: BAI/GPIA).

3.2.5.3. Farmsteads in the Region of Israel and Jordan

As early as the Iron Age, there was a wide network of farmsteads in Israel and Jordan. In the Hellenistic and Roman periods, part of the complexes that already existed continued to be used, as was also common with other dwelling structures, but there were also some newly founded ones, atop their Iron Age predecessors (in part following the same layout)⁷². In survey reports in particular, there are repeated references to "rural estates", "economic facilities", "farms", "manors" and "isolated farmhouses", terms that can all also be seen as synonymous with the term "farmstead", the term chosen in this work. Fortified walls and courtyards with cisterns surrounded by utility rooms with pressing facilities, magazines and living quarters were characteristic of early farmsteads in the countryside⁷³. During the Hellenistic-Roman period there was also a dense occupation of the rural landscape, as evidenced by numerous surveys. So far, however, only a few such settlement sites have been excavated.

The sources also provide little information about the hinterland of cities. An idea of the density of habitation in neighbouring Galilee is given by Flavius Josephus, who reports 206 towns and villages in the region⁷⁴. For Josephus, the designation κώμαι does not refer to individual complexes like the farmstead at Tall Zirā'a, but instead the term άγρός does, as he calls his estate near Jerusalem⁷⁵. Regardless of the designation, there would still have been a large number of olive oil production facilities around the towns and villages, which considerably increases the number of 206 settlements mentioned by Josephus and provides at least an impression of the density of the population. Regarding settlements around Gadara, one has to be content with passing mentions, such as the plundering of nearby villages in the course of the Jewish War⁷⁶.

Surveys have so far mainly concentrated on the immediate vicinity of Tall Zirā'a and in the rural areas around the town of Gadara. The list of sites by S. Mittmann alone shows a dense network of archaeological sites, a dense development which has been confirmed by the survey carried out by K. Soennecken and P. Leiverkus⁷⁷. Among them are numerous mentions of pressing facilities in connection with extensive individual buildings. Clear demarcations of different types of settlements are difficult due to the methodology used. The data collected by L. El-Khouri for north-western Jordan

even prove that there were as little as 100 m to a few kilometres between individual settlements that were designated as Roman⁷⁸.

Although conditions under Herod I and the Romans up to the Bar Kokhba revolt were not noticeably more peaceful than they had been under Seleucid and Hasmonean rule, the archaeological record at least shows a decline in the proportion of fortified construction measures within the public building sector in this period—in favour of prestigious palaces, forums and street complexes, but also thermae and hydraulic structures⁷⁹. Given that an upswing can be observed within the cities, the same can possibly be assumed for the rural areas, although here, too, at least minor defence measures can be assumed due to their isolated location.

The extensive building programme of Herod I, especially from the last quarter of the first century BC onwards, did not only spread Roman culture in his territory, which also included Tall Zirā'a⁸⁰, but his efforts were also specifically directed towards the development of rural settlements in addition to the cities⁸¹. Flavius Josephus reports that Herod I sought to expand agriculture in order to ensure, among other things, an adequate supply of

- 72 Japp 2000, 76. A similar phenomenon can be seen at Tall Zirā'a in Complex D (residential building). Even though the building was first established in the Early Roman period, it was oriented on pre-existing building plans of the Iron Age and was rebuilt several times on the same spot and with an almost identical ground plan until the Byzantine period.
- 73 Japp 2000, 77.
- 74 Jos. vita, 235.
- 75 Jos. vita, 422; Whereas he refers to his land holdings in Judea as χώρα: Jos. vita, 429.
- 76 Jos. Bell. Jud. II, 18. 1.
- 77 Mittmann 1970, Appendix map; Soennecken Leiverkus 2021.
- 78 El-Khouri 2008, 73, 79, Fig. 2.
- 79 Kuhnen 1990, 132.
- 80 Lichtenberger 1999, 177; However, the founding of cities and their expansion must also be viewed critically in the context of subordination to Roman rule, whereas the decoration of his private buildings may also reflect his own taste or an adaptation to the customs of the Greco-Roman upper class in the empire. His attachment to the Hellenistic presentation of power is also reflected in this: Lichtenberger 1999, 186 f.
- 81 Japp 2000, 16.

basic provisions. Something that appeared to be necessary especially after the famines of 24 BC and 21 BC⁸². For this purpose, land was given to veterans, among other measures, in order to open up new areas of land⁸³. S. Japp assumes that more than 70 % of the arable land was indeed cultivated. The cultivation of commercially beneficial products such as dates and balm of Gilead was specifically encouraged. According to Pliny, these were cultivated in royal domains such as 'En Bogeg, Jericho and 'En Gedi and exported in their raw state⁸⁴. This reflects the aforementioned process of urbanisation, which in practice required the establishment of rural settlements as a result of a higher demand for food⁸⁵. Given this, the numerous records from surveys⁸⁶ and individual excavations⁸⁷ are not surprising. However, since little attention has been paid to rural facilities-despite their important functionthe only option is to look for parallels further away from Tall Zirā'a⁸⁸.

S. Dar presents some well researched farmsteads in his treatment of Samaria⁸⁹. These include Farm 61 at **Um-Rihan** (about 50 km south-west of Tall Zirā'a) (*Fig. 3.92*). The building, with an asymmetrical layout, has a central courtyard of 15 m x 10 m, which forms the main part of the complex. A residential complex adjoins the courtyard to the east and storage rooms to the west.

- 82 Jos. Ant. Jud. 15, 9, 1–2; Japp 2000, 6. 17.
- 83 Japp 2000, 16; Applebaum 1977, 367 f.
- 84 Japp 2000, 17; Plin. nat. 13, 44.
- 85 Dar 1986a, 34.
- In addition to those mentioned in this text, there are many 86 examples in a publication concerning research in the West Bank, in which all the sites found between 1967 and 2007 were recorded. Although these are hardly more than nominal mentions of sites, e.g. with presses and a few architectural remains, they again indicate the density of the sites. Where available, further literature on the individual sites is given: Greenberg - Keinan, 2009; Potential archaeological sites (criteria are "Roman" and "with press" or similar) are No. 3, 5 (Farm 61 Um-Rihan), 8, 12 (Qaşr el-Lejjah), 13, 26, 27, 60, 69, 85, 92, 137, 143, 147, 149, 164, 165, 169, No. 176, No. 189, 195, 201, 210, 229, 243, 247, 259, 312, 332, 350, 358, 370, 376, 388, 392, 405, 408, 412, 421, 428, 442, 445, 447, 448, 451, 456, 459, 462, 479, 486, 716, 737, 747 ('En Ya'el), 774, 782, 785, 795, 814, 839, 878, 888, 904, 905, 929, 935, 959.



Fig. 3.92 Um-Rihan (Source: Dar 1986b, Fig. 10).

Eight towers, terraces and wine and oil presses were also found in this agriculturally favourable area. The farmstead dates from around first century BC to first century AD⁹⁰ and can be regarded as an example of the survival of indigenous building traditions.

Only 4 km to the south-east of Um-Rihan lies the homestead of **Qaşr el-Lejjah**⁹¹. The commanding elevated position, surrounded by a tributary of the Wādī el-Hasab and on the road to Um-Rihan, offers favourable settlement conditions. The site is 26.5 m x 36.0 m in size, completely preserved in its basic features and still standing 2 to 3 m high. The homestead includes one integrated tower and another outside the building⁹². Access to the courtyard

- 87 The results of the excavations by the Madaba Plains Project (about 100 km south of Tall Zirā'a) are interesting: The discovery of a mikvah here leads to the assumption that it belonged to a rural estate (here interpreted as a Roman villa) with Jewish inhabitants: Herr 2011, 40; at Tall al- 'Umērī, which was excavated by the project, there were also indications of a possible Early Roman ("at the turn of the era") complex. A ritual bath was excavated, which probably belonged to the Early Roman villa, of which, however, no further traces were found: <http://www.madabaplains.org/ umayri/research.htm> (17.06.2016).
- 88 The following examples are ordered from north to south according to their distance from Tall Zirā ʿa.
- 89 On the definition of a farm: Dar 1986a, 1. In order to distinguish it from the *villae rusticae* used later as comparative examples, S. Dar notes that a villa belongs to only one Italic settler and is in this way different from the rural buildings of the indigenous population: Dar 1986a, 33.
- 90 Dar 1986a, 8 f.; Hirschfeld 1995, 40.
- 91 Dar 1986a, 10.
- 92 Dar 1986a, 10. 12.

of the house was through an entrance 2 m wide. In addition to living quarters, an oil press and storage rooms were also discovered. In total, there were three cisterns in the complex: two outside and one in the central courtyard⁹³. Judging by the archaeological material, the building was constructed in the first century BC and remained in use until the first century AD. In contrast to Um-Rihan, the building is square and belonged to a more affluent owner⁹⁴.

distinctly different structure prompted This Y. Hirschfeld to assign it to the "Early Roman manor houses", which occur in Herodian Judea⁹⁵. Although all the complexes of this type differ in size, plan and position, they feature a tower, living guarters, agricultural installations, dimensions of several hundred square metres, an elevated position and, in addition, they would all be destroyed in the course of the First Jewish War in 70 AD96. The archaeological material at all sites consists of limestone vessels and mainly regional wares, which were occasionally supplemented by imports⁹⁷. These compounds are particularly interesting, although they differ in many respects from Complex E at Tall Zirā'a, with the integrated tower being a particular distinguishing feature. These buildings were undoubtedly homesteads of wealthy owners. Structurally, they are part of a long tradition of Hellenistic tower farmsteads, and they have been particularly well researched in Asia Minor, where they are typical representatives of the late Hellenistic-Early Roman period98. Located only a few kilometres north-west of Um-Rihan is Ramat Ha-Nadiv. The L-shaped farmstead from the first century BC to first century AD is surrounded on all sides by a strong enclosure wall bounding an area of 2800 m².

Access to the extensive courtyard was through the 2-m wide entrance on the east side. This courtyard, in addition to a wine and oil press, also contains a threshing floor and a cistern. In addition to living quarters, storage rooms, animal shelters and a tower, a mikvah and a plastered bathtub were also identified within a bathhouse complex⁹⁹. This example also has the typical guard or residential tower as well as a protective perimeter wall enclosing all the economic installations within the farmstead. However, the mikvah clearly indicates that Jewish inhabitants are to be assumed as owners of the complex. The foundations consist of limestone blocks with an average size of 0.3 m x 0.5 m, although a few blocks measuring 0.9 m were also



Fig. 3.93 Hirbet Basatin (Source: Dar 1986b, Fig. 23).

found. The stones are roughly worked and were constructed using the double-faced wall method. In well-preserved places, ashlars of the upper masonry still remain¹⁰⁰. The high standard of the complex is also visible in the associated finds, as evidenced by a heart-shaped column base¹⁰¹. The complex also includes two cisterns, one located in the courtyard of the building itself and one outside¹⁰², as well as pressing facilities. In addition to the typical ground plan, based on older building traditions, it can be assumed that the upper masonry was made of stone.

Another farmstead is that of **Hirbet Basātīn**, situated in a gorge on the bank of the Wādī Qānā (*Fig. 3.93*). Several buildings here extend over an

- 93 Dar 1986a, 11; Hirschfeld 1995, 52.
- 94 Dar 1986a, 12.
- 95 Overview of located houses of this type: Hirschfeld 1998, Fig. 1; 13 b.
- 96 Hirschfeld 1998, 162-164.
- 97 Hirschfeld 1998, 164.
- 98 Particularly detailed research can be found on the area of the settlement site of Kyaneia in Lycia: Kolb 2008; for a summary including further literature on the subject see Schütz 2014, 181 f.
- 99 Hirschfeld 1995, 54; Japp 2000, 153; Hirschfeld 2000, 15.
- 100 Hirschfeld 2000, 16.
- 101 Hirschfeld 2000, 17 f.
- 102 Hirschfeld 2000, 30.

area of 53 m x 45 m and were surrounded by a study enclosing wall¹⁰³.

An entrance, which can also be driven through, forms the entry point to the complex on the west side. In the centre is a 10 m x 8 m tower (No. 1), which is still preserved up to a height of 2.5 m. In addition to residential (No. 5) and storage buildings (No. 4), a pressing facility (No. 2) and possibly even a bathhouse (No. 3) also belong to the farmstead. The threshing floors found during a survey near the farmstead may also have belonged to it. Cisterns provided an adequate water supply (Nos. 6, 9). Further buildings are probably attributable to later construction phases¹⁰⁴. This farmstead most closely resembles the so-called Streuhofanlagen (farmsteads with scattered buildings), typical for the western provinces, which are also characterised by a tower inside the complex.

Further south lies Tell Abū Şarbūt. This tall is located only 3 km west of Tall Der 'Alla in the eastern central Jordan Valley and thus belongs to the hinterland of the Decapolis of Pella (about 48 km from Tall Zirā'a). New excavations since 2012 have been dedicated to the Early Roman period of the first century BC to the first century AD¹⁰⁵. The pottery is described as simple and no finds of higher-quality tableware are recorded. Limestone vessels were also found. The contexts and finds so far indicate a settlement in the period between the second/first century BC and second/third century AD. There were ('kitchen') rooms with cooking installations, a courtyard with several ovens (Square H and N) and other smaller rooms. The tall was probably abandoned after an earthquake or large fire, as indicated by an extensive burn layer. The results seem promising, although it remains to be seen, once they are published. Further information on the Chora of Pella was obtained by the Pella Hinterland Survey. Three fortified Early Roman buildings were identified, which so far remain without associated agricultural installations¹⁰⁶. Although P. Watson does not indicate a specific function, fortified structures could also be interpreted as farmsteads, as evidenced by the occurrence of integrated towers seen in the previous examples. However, without detailed investigations and evidence for agricultural use, this remains merely conjecture.

There is another farmstead at **Qalandiya** in the mountains north of Jerusalem, which dates from the third century BC to 70 AD. In addition to a residential section in the north, the complex has a clearly separated economic section for the processing of

wine and olives, as well as storage rooms, which extend along three sides of an extensive courtyard. A bathing area with a mikvah and two basins was also found in this farmstead. A tower is once again found set in the courtyard, approximately in the centre of the farmstead. A second, smaller adjoining part of the building in the south possesses its own small central courtyard with surrounding living quarters¹⁰⁷. The integrated tower and mikvah are again noticeable in this farmstead. In addition, there is a clear separation of living quarters and utility rooms.

Also in the hinterland of Jerusalem, about 8 km west of the Old City (107 km south-west of Tall Zirā'a), G. Edelstein discovered the remains of a luxuriously furnished, single complex at Ein Yael during a survey in the 1980s, which he refers to as a Roman villa and which was excavated on a small scale from 1982 to 1984 and intensively researched from 1986 onwards. The site is built on a limestone terrace with a wide view. In a cave on the slope there is a spring, which has its source at the south end of the complex. Since the villa was only partially excavated, the total area is unknown, but is estimated by the excavator to be about 3000 m². The preserved part of the villa consists of a main building in the south and a bathhouse 3 m further north. Of the main building, three room sections protruding westwards are still preserved. The first in the south is a risalit of three rooms, one of which can be considered a triclinium. The room has a long entrance mosaic showing the goddess Thetis. This is followed by another, smaller mosaic showing two mermen and merwomen, some fish and two fish-riding cupids. Wall remains with floral decoration and frescoes indicate a richly decorated room; stucco or fine mortar with similar decorations was also found. From the triclinium, one reaches a hallway

- 103 In S. Dar, one of two complexes described as "farmsteads resembling Roman villas": Dar 1986a, 24.
- 104 Dar 1986a, 24 f.
- 105 N. Mulder-Hymans J. Boertien M. L. Steiner, Report of the 2015 Excavation Season, https://tellabusarbut.wordpress.com/renewed-excavations/ (17.04.2016); Steiner 2013, 38–44.
- 106 Watson 1996, 67, Fig. 4, whereby evidence for pressing facilities could certainly be found, but remain without chronological assignment.
- 107 Hirschfeld 1995, 51 f.; Japp 2000, 153.

with a seasonal mosaic and another square room whose centre is decorated with another mosaic. To the north of the three rooms are two narrow rooms. which are only recognisable by small wall sections. This is followed by a small two-room bath complex and an annexe that is assumed to be a pool. Towards the east there is possibly a large paved courtvard. in which parts of an olive press were found. The dating of the villa is not entirely certain. Some of the roof tiles found had a stamp of Legio X Fretensis, which was stationed in Jerusalem between the first and third centuries AD. The discovery of a coin of Alexander Severus (the only coin found) proves that it was used until the middle of the third century AD, before an earthquake destroyed the site. Based on these two features and the pottery, oil lamps and mosaic style, the excavator estimates that the villa was built in the second century AD108. Its date of inception is also underlined by the fact that "not until the Romans imposed direct rule over Judea could there be a Roman villa on the outskirts of Jerusalem."109 The aerial photographs mentioned by Edelstein would be interesting; they are said to show a "number of additional farm units in the vicinity of Ein Yael."110

Early Roman sites are also found further south, on the border with the Nabataean Empire. **'Ēn Boqeq**, on the south-western shore of the Dead Sea (160 km south-west of Tall Zirā'a), lies in a small but fertile delta fed by two springs. From here there is also access to the Judean mountains, making this a strategically favourable location¹¹¹. In its centre lies a small farmstead from the Herodian period¹¹². The heart of the 20 m x 20 m building is formed by a small courtyard, surrounded by a series of rooms with tabuns and a threshing floor¹¹³. Via the only entrance on the south side, one enters a *vestibulum*

- 108 Edelstein 1990, 32-42.
- 109 Edelstein 1990, 42.
- 110 Edelstein 1990, 33.
- 111 Keel Küchler 1982, 401.
- 112 Gichon 1993b, 396. Possibly a settlement since Alexander Jannaeus is also conceivable: Gichon 1993a, 17.
- 113 The assumption that the tower (Room 1) in the south-west, which is part of the complex, dates from the Hasmonean period is uncertain: Gichon 1993b, 396.
- 114 Japp 2000, 151.
- 115 Gichon 1993a, 17.
- 116 Japp 2000, 151.
- 117 Gichon 1993a, 17.

with surrounding benches, from which the tower belonging to the building as well as all the service rooms could be reached. The individual rooms were furnished individually so that a specific use for each could be determined¹¹⁴. The installations and numerous botanical finds led the excavator to call it a "cosmetic-pharmaceutical factory" or officina¹¹⁵. In addition to storage facilities, separate areas for crushing or grinding, drying and cooking were discovered, offering a unique insight into the production processes involved in the manufacture of ointments and essences¹¹⁶. The spectrum of coins ranges from Alexander Jannaeus to Hadrian¹¹⁷. This can be seen as evidence of the promotion of medical and pharmaceutical products by Herod I¹¹⁸.

While, after reviewing the known examples, no parallels could be found for the farmstead with projections found at Tall Zirā'a, a rich repertoire of shapes is seen in individual buildings in rural areas, which is also the case in other provinces. The simultaneous survival of traditional buildings alongside the already heavily Romanised cities is by no means unusual. Research in Galilee has shown that this coexistence had already begun in the Hellenistic period¹¹⁹. Late Hellenistic or Early Roman examples usually have a tower or a surrounding wall. They still reflect Hellenistic building traditions.

Characteristic of the majority of the farmsteads mentioned are a non-rectangular ground plan, a single entrance (except Qalandiya) and a division into a separate living and economic area. A central courtyard is found in all the farmsteads. In addition, enclosing walls and integrated towers can be observed¹²⁰. There are also examples with a square ground plan ('Ēn Boqeq, Qaşr el-Lejjah) as well

- 118 Gichon sees Én Boqeq as an extension of the domain of En Gedi and as a possibly state-owned enterprise: Gichon 1993a, 17.
- 119 "Recent excavations have shown that Galilee still offers many surprises. The biggest of them, perhaps, is the simultaneous existence of a seemingly very traditional rural world next to strongly urbanized centers of Hellenism beginning already in the 2nd century BCE (Magdala) and continuing well into the 1st century CE (Tiberias).": <http://www.magdalaproject.org/WP/?p=3784&langswitch> (retrieved 07.10.2014).
- 120 Hirschfeld 1995, 54 f.

as complexes with scattered buildings (so-called Streuhofanlagen such as Hirbet Basātīn). Baths were found at four sites (Ramat Ha-Nadiv, Hirbet Basātīn, Qalandiya, Ein Yael), two of which also included a mikveh, indicating Jewish inhabitants (Ramat Ha-Nadiv, Oalandiya). The economic component includes an oil or wine press in all homesteads except that of 'En Bogeq. The positioning of the buildings varies according to geographical features, being found both in flat plains or valleys (Um-Rihan, 'En Bogeg, Hirbet Basatin) and on elevations (Qaşr el-Lejjah, Tell Abū Şarbūt). An exception is Ein Yael, which occupies a special position as a luxurious villa and has been listed here to show the range of possible rural buildings. According to the current state of research, neither fortified buildings (tower, enclosure wall) nor an economic section have been found at Ein Yael, so that for the moment it is only possible to speak of a residential building, the villa urbana, which must undoubtedly have belonged to a wealthy owner.

It is still too early to draw conclusions for the rural settlements of the Decapolis. A typological analysis is also not yet possible. These explanations must suffice for the time being to classify the farm-stead at Tall Zirā'a and provide evidence for early farmsteads in very different forms that occur everywhere in Israel and Jordan.

3.2.5.4. Farmyards and Projections – Architectural Features

Still, the question of finding parallels for the building shape at Tall Zirā'a remains. The projections in particular give Complex E a striking form. Already in the Hellenistic world, so-called risalites are found on prestigious buildings, which possibly find their predecessors in the early Greek stoae¹²¹. Even if no comparative examples can be found among the rural

- 121 Apt examples would be the stoa of the sanctuary of Athena in Lindos, the Thalamegos of Ptolemy IV or the Bactrian Oxos Temple: Brands 1996, Fig. 9.2, 10.2; Pitschikjan 1996, Fig. 3.
- 122 Lauter 1998, 21.
- 123 North Africa: Rind 2009; North-West Provinces: Rind 2015
- 124 Overview literature on Asia Minor: Belke Restle 1984;
 Çevik et al. 2007, esp. 299–304; Doğan 2008, esp.1–20;
 Hailer Şanlı 2004, esp. 211–248; Hild Restle 1981;
 Hoffmann 1993; Lampe 2008; Lohmann 1999; Lohmann 2005; Rossiter 1989.

estates in Israel and Jordan, it is possible to recognise parallels with the Roman villa prevalent further west in the Roman Empire, which were found in almost all provinces. Roman villas have been extensively studied across much of the Roman Empire: both luxurious and purely agricultural examples. The Roman villa itself is a complex system with various social and economic factors. It should be understood as a product of Italic society from the late Republic and Imperial period¹²². In addition to the Italic villas, extensive archaeological reports are available for the north-western provinces in particular, as well as for North Africa, so that a large number of villa types are known from these regions alone¹²³. In contrast, research on the eastern provinces is incomplete. Comprehensive documentation can be found for Asia Minor, with the provinces of Asia and Lycia in particular offering well researched examples¹²⁴. Syria is also well researched and has numerous archaeological sites¹²⁵. The literature on the ancient remains of Israel, on the other hand, contains very few references to villas¹²⁶, and hardly any material can be drawn on concerning Jordan. At times it is stated that Roman villas were not widespread in Jordan or that due to political unrest they did not become common before the First Jewish War¹²⁷. The term villa refers exclusively to the more luxurious residences (see Ein Yeal)¹²⁸. A villa in the more western provinces is defined as a building that is located outside of towns and settlements and forms a stand-alone complex (of one or more buildings). This could be a purely agricultural building (villa rustica), a purely urban building (villa urbana, villa otium) or a residence as well as a farm building (villa rustica with villa urbana)¹²⁹. J. Percival had stated that a villa must either be visually modelled on the Roman models and/or correspond to them in its function $(economy)^{130}$. The projections seen in the farmstead at Tall Zirā'a can almost be described as typical for villae rusticae, especially in the west of the Roman Empire. Risalites

- 125 Especially Tchalenko 1953.
- 126 Japp 2000, 77, 151-153.
- 127 Edelstein 1990, 42.
- 128 Anderson 1995, 452; Dar 1986a, 34, 249: "[...] that so few buildings of the villa rustica type have been investigated here. [...]".
- 129 DNP 12/2 (2002) 210 s. v. Villa (C. Hö).
- 130 Percival 1976, 14.



Fig. 3.94 Madalic Adasi (Source: Hoffmann 1993, Fig. 3B).

in combination with a portico, integrated into a rural, commercially used building, are to be regarded as an innovation of Roman culture and thus, in their spread throughout the provinces, also as a cultural marker, and so the portico villa with corner risalites stands out in particular here¹³¹. R. Smith has listed two other reasons besides the cultural aspect that turn risalites into exceptional building elements: On the one hand, there are the aesthetics, which give the building an imposing and well-balanced façade, on the other hand there is a social component, representing the elevated position of its owner that made such a building (financially) possible in the first place¹³². Risalites are usually symmetrical, both in their outer form and their inner structure. However, asymmetrical risalites occasionally occur¹³³. Their use was as varied as their appearance: They served as components of bathing facilities as well as towers and living quarters or were equipped with tabuns or mosaic floors134.

An equally striking element of Complex E is Room E 6, which formed the northern projection of the building on the slope of Tall Zirā'a. The location relative to the building and the shape of the room,

- 131 The literature of the second half of the 20th century was already unanimous in this respect: "*Thus Collingwood spoke* of 'the dwelling of people, somewhat Romanized in manners', while Richmond connected villas with 'the adoption of Roman standards in greater or lesser degree by natives of substance." Percival 1976, 14.
- 132 Smith 1997, 117.
- 133 Smith 1997, 120; e.g. Fig. 1: Ludwigsburg-Pflugfelden;Fig. 5: Grémecy.

though only poorly preserved, are comparable to the porticoes of Roman villas that were fashionable in the Roman and Byzantine periods and can be found in numerous buildings¹³⁵. They probably developed from the Hellenistic portico¹³⁶, but unlike the latter, they were not detached, but integrated into the building¹³⁷. The classical porticoed villa was characterised above all by a column arrangement at the front. Occasionally, porticos and/or risalites at the front and rear are also known (*Fig. 3.94*), as are three risalites at the front.

The last significant building element to be mentioned is the farmyard. Farmyards are known from Ur since the second millennium BC. They continued to exist in the Roman period with an economic function. This was initially a simply designed courtyard without pillars¹³⁸. Although farmyards are also found in the examples from Israel and Jordan mentioned above, the unusual form of the courtyard in Complex E remains without parallel within the comparative examples listed, or in villa architecture more generally. Square or rectangular courtyards are usually the norm, but irregular, rhombic or cruciform shapes are occasionally found, although no shape corresponds

- 134 Smith 1997, 129; e. g. Fig. 11: Mansfield Woodhouse (Hearth); Fig. 21: Sarmentsdorf (Bath); Fig. 34: Bristol-Kingsweston (Mosaic).
- 135 Hirschfeld 1995, 99.
- 136 Vitr. V.I.1.
- 137 Nünnerich-Asmus 1994, 25.
- 138 Hirschfeld 1995, 57.

to that of Complex E¹³⁹. In the case of upscale villas, peristyles are a common occurrence, through which the former economic character gave way to purely impressive luxury (peristyle villas), but they too are a regular shape. The unusual arrangement of the ovens in the central courtyard (E 13) has already been pointed out in the stratigraphic evaluation. No sweeping statements can be made about the arrangement of tabuns and hearths in the facilities in Israel and Jordan. Within villa complexes, R. Smith has illustrated, through several examples, that they frequently occur opposite the entrance¹⁴⁰. Multiple hearths are by no means rare and can are found elsewhere, sometimes even with different qualities of construction coexisting¹⁴¹. However, no multiple hearths were found in Complex E.

It has been shown that the Tall Zirā'a farmstead has several features in common with the *villae rusticae*. It has also emerged that the ground plan of the farmstead is close to that of a so-called portico villa with corner risalites. This type of villa is mainly known from the north-western Roman provinces¹⁴², and it is not found in Italy itself¹⁴³. Different types developed in the various provinces¹⁴⁴. Nevertheless, the buildings have a largely identical basic structure, consisting of a portico, at least one risalit, and a large central courtyard. Likewise, successive rooms can typically occur¹⁴⁵. This type of villa is to be understood as an innovation of Roman culture and thus as a marker of Romanisation in the provinces¹⁴⁶. The Tall Zirā'a farmstead with its prominent

- 139 Smith 1997, 45; e.g. Fig. 7: Mansfield-Woodhouse.
- 140 Smith 1997, 29; e.g. Fig. 1: Serville and Mayen.
- 141 Smith 1997, 31; *e.g.* Fig. 2: Mamer-Gaschtbierg (1 walled oven); Fig. 3: Stowey Sutton-Chew Park; Fig. 4: Blieskas-tell-Atheim
- 142 DNP 12/2 (2002) 214 s. v. Villa (C. Hö): as an example, the villa of Nenning from the second century AD is depicted; Smith 1997, 117; Rind 2015, 72.
- 143 Mielsch 1987, 57; Rind 2015, 72.
- 144 Where exactly the portico villas with corner risalites first appear or what they are inspired by cannot be clearly determined. Early examples can already be found on Pompeian wall paintings: Swoboda 1919, App.1-4. Roman barracks and the Cottage House, which is found in Britain, are also possible role models. Whether the villa type, as H. Mielsch suggests, is an original development of the north-western provinces, since they are found very frequently there, cannot be said: Mielsch 1987, 57 f.

projections cannot be unequivocally identified with the western examples, as there is some uncertainty about the reconstruction and function of a large part of the building due to its condition. Nevertheless, it cannot be denied that there are parallels between this and other farmsteads in Israel and Jordan and Roman villas, as is also often revealed in the literature on the region¹⁴⁷. More research is needed here, however, to elaborate developmental processes and types and to shed light on the seemingly deep-rooted adoption of architectural forms far beyond the individual provinces¹⁴⁸. Future excavations at Tall Zirā'a may also provide further insights into the shape and classification of Complex E.

3.2.5.5. Summary

Complex E at Tall Zirā'a is a farmstead located in the Chora of the town of Gadara, which has a clear economic component in its large farmyards (E 2/E 9/E 13) and its connection with Complex A (oil or wine press). The surrounding fertile land (*ager*) probably also belonged to the compound and offered plenty of space for farming, and possibly also for animal husbandry. Since the tall is only a few kilometres from Gadara, it would have been possible for the owners to commute within a day between their rural residence and a workplace or further accommodation in the city, much as Columella considered desirable for comparable Roman villas in the west of the Roman Empire¹⁴⁹.

- 145 Rind 2015, 72.
- 146 Smith 1997, 117: "[...] that was the badge of Romanisation in most of the European provinces."
- 147 "... farmsteads resembling Roman villas": Dar 1986a, 23; S. Japp also recognises the parallels, but rules out a designation as villa rustica itself the lack of peristyle courtyards, bathing facilities and a separation of working and living areas: Japp 2000, 77. 151–154; On the problem of naming using the example of Roman villas in Asia Minor: Schütz 2014, 181–189.
- 148 Evidence for this thesis can be found, for example, in the form of the villa of Antandros on the west coast of Asia Minor, which corresponds to the pattern of Tripolitan villas: Schütz 2014, 184; Rind 2009, 86.
- 149 Colum. I, 18/19.

Evidence from surveys and soil research has shown that numerous farmsteads in the hinterland of cities in Israel and Jordan can be dated to as early as the Early Roman period. However, the few known floor plans are not yet sufficient to allow conclusive statements to be made. As has been shown, the majority of these are mostly built according to traditional models with simple ground plans. The unusual shape of Complex E must therefore remain without comparison in the region, even if its particular form suggests a wealthier owner.

In general, an increased number of farmsteads can be seen in the Early Roman period. In the north-western provinces, too, it has been shown that agriculture was flourishing in the newly conquered territories as early as the Augustan period¹⁵⁰, and the appearance of new homesteads is closely related to the infrastructure already in place¹⁵¹. Their utility is vital here, especially in more militarily influenced areas that depended on a supply of food for the troops. Food also had to be supplied to the growing cities. The farmstead at Tall Zirā'a will also have served supply purposes and can be seen in connection with the expansion of rural settlements in the course of Herod I's extensive building programme.

Overall, the architecture of the Tall Zirā'a farmstead and its proven agricultural use suggest that it was an early example of a farmstead with both residential and agricultural buildings that, while architecturally distinct from indigenous examples of rural construction, continued to use many indigenous elements where they were appropriate. Customary elements of the buildings of the time can certainly be recognised:

• The courtyard of the complex was at the centre of daily life.

• A water source in the centre of Tall Zirā'a provided a steady supply of water for the building.

· Air-dried clay bricks were used in some cases.

• Residential and commercial areas are interlinked¹⁵².

150 Dar 1986a, 34.

- 151 Rind 2015, 248.
- 152 Kuhnen 1987, 31-34.

3.2.6. Complex F: Building Structure

The second complex from Area II is located in Square AS 132 (*Fig. 3.95*). It is composed of walls 11066/11067 and 11056, which formed the only recognisable room, **Room Complex F1** (*Fig. 3.96*).

The two walls would originally have formed a corner and were part of a building. The area to the east of the walls has not yet been excavated to the appropriate depth, so associated structures may still be revealed here. No installation or floor was found within the assumed room. The walls contained no finds.



Fig. 3.95 Complex F. Stratum 7 c, b, a (Source: BAI/GPIA).



Fig. 3.96 Complex F 1, Stratum 7 c, b, a, Square AS 132 (Source: BAI/GPIA).

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
11056	AS 132	Wall	F 1	-	-	-
11066	AS 132	Wall = 11067	F 1	-	-	-
11067	AS 132	Wall = 11066	F 1	-	_	_

Tab. 3.10 Contexts within Complex F, Stratum 7 c, b, a.

4. Stratum 6 C, 6 B, 6 A: (Early) Roman Period

4.1. General Information

The (Early) Roman stratum is recorded as Stratum 6 c, 6 b and 6 a at Tall Zirā'a. Architectural remains were found in both Area I (*Fig. 4.1*) and Area II (*Fig. 4.2*). In Area I, as previously in Stratum 7, two reconstruction phases were identified within Complex D (*Figs. 4.13* and *4.18*), which were designated as b and a respectively. In Area II, again no alterations were carried out in this time period, so only the designation Stratum 6 is used here (*Tab. 4.1*).

Area I	Area II
6 c – 1. Construction Phase	
6 b – 1. Reconstruction Phase	6
6 a – 2. Reconstruction Phase	

Tab. 4.1 Correlation table for Area I and II for Stratum 6 (Early) Roman (Source: BAI/GPIA).

Complexes A to C in Area I were abandoned or destroyed in Stratum 6. Complex D was rebuilt in the same location, and some of the new construction severely disturbed the underlying features, while other parts continued to use existing walls as foundations. Compared to Stratum 7, Complex D remained almost unchanged in its dimensions. Only in the north of the area in AT 123 was a new part added to the building (D 6). This limits the traces of settlement to Squares AP–AT 122/123. In the other squares of the area, only isolated pits were found. Complex E in Area II remained largely unchanged, but underwent small alterations, especially in the eastern part of the building. Complex F remained unchanged within Stratum 6.



4.2. Complexes Stratum 6 c: First Construction Phase

Fig. 4.1 Stratum 6 c, Area I, with context numbers as well as colour-coded Complexes D (green) and D 6 (purple) (Source: BAI/GPIA).



Fig. 4.2 Stratum 6 c, b, a; Area II, with feature numbers and colour-coded Complexes E (orange) and F (turquoise) and overlying disturbances (Source: BAI/GPIA).

4.2.1. Complex D: Living Quarters

In Stratum 6 c, Complex D from Stratum 7 was abandoned and a new building was built over it, the orientation, dimensions and interior layout of which were based on that of its predecessor. The older walls from Stratum 7 were partly used as foundations and therefore escaped complete destruction. A few walls such as 4765, 4343 and 4209 were reused and partly repaired or supported with new walls, creating double walls in the northern part of the complex.

The new Complex D in Stratum 6 c was found in the north-east part of Area I and extended over Squares AP 122/123 and AQ/AR 123 (*Fig. 4.3*). So far, five, perhaps six (D 6) rooms or parts of rooms have been identified. The eastern part of the complex is still in the space between Areas I and II in this stratum. Only for Room D 4 were all four sides of the room identified and the room dimensions measured.

The outer, western, walls of the complex consisted of wall sections 4768/4358, 4344, 4509, 4702, 4667 and 4643, altogether running the entire length of the building. As in Stratum 7, the walls consisted of up to five courses of quarry stones and fieldstones with an average size of 20–40 cm. The walls in Room D 4 were more severely affected by later reconstruction than elsewhere, being only rudimentarily preserved in parts (*Fig. 4.4*). Upper masonry could be detected in various places, a door sill was identified in Room D 3/D 4 as well as a staircase in Room D 4.

Room Complex D 1 in this phase was only detectable thanks to one wall corner. It was in Square AR 123 and consisted of double wall 4768/4358 and 4765 to the west as well as repurposed wall 4209 from Stratum 7 to the south (*Fig. 4.5*). Wall 4765 was a reused or renewed wall (without a new feature number), which was reinforced on the outside by wall 4768.

Only one Hellenistic-Roman pottery sherd was found within newly laid wall 4358. Fill layer 4744, located under the wall, contained Hellenistic-Roman pottery and a tile, which, however, represents a unique find in Strata 8 to 6¹.

Room Complex D 2 adjoined the south side of Room D 1, in Square AQ/AR 123. It was delimited by walls 4616, 4343, 4344 to the west, 4209 to the north and 4788 to the south (*Fig. 4.6*).

Wall 4209, from Stratum 7, was reused, as already mentioned. Wall 4343 was also known from Stratum 7, but judging from an anti-capillary layer that



Fig. 4.3 Complex D, Stratum 6 c, new building: Complex D (green) and extension D or new Complex D 6 (pink) (Source: BAI/GPIA).

was placed directly on the foundations of the old wall (*Fig. 4.7*), it was obviously rebuilt in Stratum 6 c^2 .

- A total of 51 tiles (roof tiles, floor tiles or wall tiles) were made, which were distributed from Stratum 15 to Stratum 0 (surface).
- 2 The elevation of this wall, which was not renumbered, ranges from -21.27 m to -22.33 m. Thus wall, as well as wall 4209, seems to have unusually deep foundations, in contrast to the other walls of this complex. It is likely that 4209 also had a second construction phase, but that this was not recognised during the excavation.



Fig. 4.4 Complex D, Stratum 6 c: aerial photograph, spring 2009 (grey = disturbance; green/purple = Stratum 6 c) (Source: BI/GPIA).



Fig. 4.5 Complex D 1 and D 2, Stratum 6 c, b, a, Squares AR/AQ 123: new constructions on top of the building with continuing usage from Stratum 7 (green) and newly added walls from Stratum 6 (Source: BAI/GPIA).



Fig. 4.6 Complex D 2, Stratum 6 c: the three walls, 4616, 4343 and 4344, built side by side are clearly visible; view to the west (Source: BAI/GPIA).

This would seem to indicate that wall 4343 was rebuilt and at the same time a new outer wall was added along the entire length of the building, which is numbered 4344 in AQ 123. Another narrow wall (4616) was also added to the interior of the room. Under wall 4344, fill layer 4764 (adjacent to 4939) was identified. It contained exclusively Hellenistic-Roman pottery, including an Early Roman oil lamp, several casseroles from the first century BC to third century AD, and a table amphora dated from the first century BC to second century AD. Within walls 4616, 4344 and 4788, only Hellenistic-Roman pottery was found, as well as a sherd of a relief bowl made of glass (light blue) of the same period. Thin soil layer 4939 under wall 4509 contained only Hellenistic-Roman amphorae, including a late Hellenistic amphora dating from 175–146 BC. The finds from the adjacent wall (4343) can now be better assessed, since it is clear that there were two phases to the wall. The archaeological material found can also be considered Hellenistic-Roman, although the Roman finds clearly predominate and



Fig. 4.7 Complex D 2, Stratum 6 c, b, a: continued use and new construction of wall 4343; view to the west (Source: BAI/GPIA). (Source: BAI/GPIA).

Fig. 4.8 Complexes D 2 and D 3, Stratum 6 c, Square AQ 123: pavement 4870 runs under the wall from Stratum 6 b marked in grey; continuation of 4509 to the north has already been eroded; view to the west (Source: BAI/GPIA).

probably belong to the second phase of the wall's lifespan. These include a Roman cooking pot and an ETS bowl fragment TZ 006107-002 from the period 10 BC to 30 AD.

Inside the room, there were some remains of a stone pavement (4860), which, however, contained no finds. The surrounding fill layer 4861 was interspersed with ash lenses and is interpreted as collapse, but at the same time also as a fill layer under the floor. A subsequent separation of the finds is no longer possible. In addition to bones of domestic pigs (6), sheep or goats (8), goats (1), and domestic fowl (10), Hellenistic-Roman pottery sherds were found, including two fragments of an ESA bowl TZ 006869-005/ TZ 020042-009 of the Claudian-Neronian period as well as 14 glass sherds (light green, yellow-brown, light blue, clear).

Due to the rebuilding in Stratum 6 b, backfill layer 4627 was also identified, which, however, contained no finds.

Room Complex D 3 adjoined Room D 2 to the south and occupied most of Square AQ 123. The room was formed by walls 4509 to the west, 4788 to the north and 4671 (anti-capillary layer 4986) to the south, its eastern end remained hidden in the unexcavated area. In the centre of the room, an undisturbed stone pavement (4870) was found across the entire surface, which was still intact beneath the wall of Stratum 6 b that disturbed the room (*Fig. 4.8*). A passage between Rooms D 3 and D 4 was visible in the southern wall 4671.



Fig. 4.9 Complexes D 4 (and D 5), Stratum 6 c, Square AP 123: the western end of walls 4702 and 4667 as well as parts of the southern wall have been eroded (Source: BAI/GPIA).

Within wall 4509 only one glass sherd was found, which can be dated to the fourth to fifth centuries AD, but has to be attributed to the overlying strata. Wall 4671 (anti-capillary layer 4986) contained Hellenistic-Roman pottery, including a cooking pot sherd from the first century BC to first century AD. A metal shaft was found on floor 4870 that could have belonged to a hairpin, spatula or ear pick. A mortar bowl was also found. The layers of collapse (4976 and 4977) between the overlying floor of the first phase of reconstruction (Stratum 6 b) and 4870 contained no finds. In the clay-rich fill layers 4941, 4945 and 4988 under the south-western part of floor 4870 (c. 5 cm thick), a small number of Hellenistic-Roman amphora and unguentaria sherds, a bone needle, a metal spatula, a tessera and some glass sherds (colourless, light blue to turquoise) were found, in addition to an ETS bowl dating from 125 BC to 50 AD and a cooking pot dating from the first century BC to first century AD or second to first centuries BC. Soil layer 4907 underneath the anti-capillary layer (4986) contained no finds.

Room Complex D 4 adjoined Room D 3 to the south, in Square AP 123. It was formed by walls 4702, 4667 to the west, 4671 (anti-capillary layer 4986) to the north, 4816/4818 to the east and 4330/5027 to the south (*Fig. 4.9*).

Inside the room, stone pavement 4857 had been preserved in the western part, as well as three steps (4856) inside wall 4330/5027 that once led to an upper floor of the building. The foundation trench for wall 4330/5027, which was a few centimetres wide on either side of the wall and was clearly visible, was recorded as features 4872, 4858, 4859 and 4817 on the north side of the wall and 5028, 5029, 4875, 4787, 4991, 4992 and 4997 on the south side of the wall. The contents were particularly revealing, as they represented material from the time of the wall's construction and before the laying of the first stone floor (4857). The large amount of pottery is noteworthy, some of which was so dense that it was, in effect, a pottery layer. In addition to Hellenistic-Roman cooking pots, amphorae and jars/jugs, amphora fragments from the first century AD were also found in the northern foundation trench. Furthermore, several Early Roman ETS bowls, including one from the Claudian-Neronian period, as well as two fragments that can be dated between 50 and 100 AD were recovered here. A calcite vessel fragment was also among the finds. Five finds date from the second century AD to fourth/fifth centuries AD, but no great significance needs to be attached to them, as the overlying walls of Stratum 4 rested directly on the foundations of the room. The southern foundation trench also contained sherds almost exclusively of Hellenistic-Roman relief cups, table amphorae, casseroles, amphorae, cooking pots, cooking jugs and jars/jugs. Two bowls from the period 70 to 120 AD were also found and a large number of cooking pot and amphora fragments from the first century AD. Here, too, a few later finds were identified, again to be dated to the second century AD to seventh century AD. A white tessera was also found in the backfill.

Wall 4667 contained two Late Hellenistic-Roman pottery fragments. Wall 4816 to the east con-



Fig. 4.10 Complex D 4, Stratum 6 c, b, Square AP 123: staircase 4856 in wall 4330 / 5027; the western tabun from Stratum 7 is completely built over; view to the south (Source: BAI/GPIA).

Fig. 4.11 Complex D 5, Stratum 6, Square AP 123: tabun 4638/ 4639 with three phases of use; stone rim 4642 can still be seen in parts; view to the east (Source: BAI/GPIA).

tained Hellenistic-Roman pottery material, including several sherds from the first century AD. The pottery from wall 4330 can also be considered Hellenistic-Roman. Only one Roman cooking pot sherd was found on floor 4857.

The most striking feature of the room was undoubtedly the staircase built into wall 4330/5027 (*Fig. 4.10*).

The staircase was located directly opposite the entrance to Room D 3 and was only slightly wider than the entrance itself. In front of the well-preserved steps, a flat stone was placed on the east side at the level of the lowest step. This gives the impression that the staircase was laid out in a counter-clockwise direction leading upwards (*Fig. 4.10*). **Room Complex D 5** adjoined D 4 to the south. Its western end was marked by wall 4643, the northern end was formed by 4330/5027 (*Fig. 4.9*). The rest of the room was in the unexcavated area. The few contents included tabun 4638/4639, 70 cm in diameter, whose *c*. 3-cm-wide rim and stone frame 4642 were still clearly visible. The rim of the tabun also contained a Hellenistic-Roman amphora sherd (*Fig. 4.11*).

Three phases of use could clearly be distinguished: first phase 4645/4646, second phase 4647, third phase 4668/4665. These were layers of ashy soil material and reddish soil with a high clay content. There were no finds. It is unclear what the function of the room may have been. At least part of the room must have been obstructed by the adjacent staircase.



Fig. 4.12 Complex D 6, Stratum 6 c, b, a, Square AT 123: the tower foundation to the west intersects the feature (Source: BAI/GPIA).

A final room (**Room Complex D 6**) was located a few metres to the north of Room D 1, in the northern part of Square AT 123. It consisted of two walls 4156 and 4212/4363 (*Fig. 4.12*). The structure was intersected by the massive tower foundation in Area I. There were no finds from within the walls. Within the assumed room, which, following the structure of the building, must have extended to the north and east, there were no finds either.

The stratigraphic sequence and height of the wall remains led to the conclusion that they belonged to Complex D in Stratum 6. The two walls indicate that the building in Stratum 6 was not only rebuilt, but had probably been enlarged towards the north as early as the Roman period. This assumption is based on the known floor plan of the building in Stratum 4, which also extended to AT 123. Although there is no direct connection between the two walls of D 6 and the rest of the complex, the continuity of the building and its extension into the younger strata suggests a link.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Other	
4156	AT 123	Wall	D 6	-	-	-
4209	AR 123	Wall	D 1 / D 2	\checkmark	\checkmark	\checkmark
4212	AT 123	Wall	D 6	\checkmark	_	_
4330	AP 123	Wall	D 4 / D 5	\checkmark	\checkmark	\checkmark
4343	AR 123	Wall	D 2	\checkmark	\checkmark	\checkmark
4344	AR 123	Wall	D 2	\checkmark	-	-
4358	AR 123	Wall	D 1	\checkmark	\checkmark	_
4363	AT 123	Wall	D 6	-	_	_
4509	AQ 123	Wall	D 3	-	-	-
4616	AR 123	Wall	D 2	\checkmark	\checkmark	\checkmark
4627	AQ 123	Fill layer	D 2	-	-	-
4638	AP 123	Tabun	D 5	\checkmark	_	_
4639	AP 123	Tabun fill (Tabun 4638)	D 5	\checkmark	\checkmark	\checkmark
4642	AP 123	Tabun	D 5	-	-	-
4643	AP 122	Wall	D 5	_	-	-
4645	AP 123	Oven (earlies phase)	D 5	_	_	\checkmark

4646	AP 123	Oven fill (2. phase)	D 5	-	-	-
4647	AP 123	Oven (2. phase)	D 5	-	-	-
4665	AP 123	Oven fill (oldest phase)	D 5	-	-	-
4667	AP 122	Wall	D 4	\checkmark	~	1
4668	AP 123	Oven	D 5	-	_	_
4671	AQ 123	Wall	D 3 / D 4	\checkmark	\checkmark	\checkmark
4702	AP 122	Wall	D 4	-	\checkmark	-
4744	AR 123	Fill layer under wall 4358	D 1	\checkmark	\checkmark	\checkmark
4764	AR 123	Fill layer under wall 4344	D 2	\checkmark	\checkmark	\checkmark
4765	AR 123	Wall	D 1	\checkmark	\checkmark	-
4768	AR 123	Wall	D 1	-	-	-
4787	AP 123	Pit	D 5	\checkmark	\$\lambda\$	\checkmark
4788	AQ 123	Wall	D 2 / D 3	\checkmark	\checkmark	\checkmark
4816	AP 123	Wall	D 4	\checkmark	\checkmark	\checkmark
4817	AP 123	Pit	D 4	\checkmark	\checkmark	\checkmark
4818	AP 123	Wall	D 4	-	-	-
4856	AP 123	Stairs	D 5	-	_	-
4857	AP 123	Floor	D 4	\checkmark	\checkmark	\checkmark
4858	AP 123	Pit	D 4	\checkmark	\checkmark	\checkmark
4859	AP 123	Pit	D 4	\checkmark	\checkmark	\checkmark
4860	AQ 123	Floor	D 2	-	-	-
4861	AQ 123	Fill layer	D 2	\checkmark	\checkmark	\checkmark
4870	AQ 123	Floor	D 3	-	\checkmark	\checkmark
4872	AP 123	Pit	D 4	\checkmark	-	\checkmark
4875	AP 123	Pit	D 5	\checkmark	\checkmark	\checkmark
4907	AQ 123	Fill layer	D 4	\checkmark	-	-
4939	AQ 123	Fill layer	D 3	\checkmark	\checkmark	\checkmark
4941	AQ 123	Fill layer	D 3	\checkmark	\checkmark	\checkmark
4945	AQ 123	Fill layer	D 4	\checkmark	-	-
4976	AQ 123	Collapse	D 3	-	-	-
4977	AQ 123	Collapse	D 3	-	-	-
4986	AQ 123	Wall foundation	D 3 / D 4	\checkmark	\checkmark	_
4988	AQ 123	Fill layer	D 3	\checkmark	\checkmark	\checkmark
4991	AP 123	Pit	D 4 / D 5	\checkmark	\checkmark	\checkmark
4992	AP 123	Pit	D4/D5	\checkmark	\$\lambda\$	1
4997	AP 123	Pit	D4/D5	\checkmark	\checkmark	\checkmark
5027	AP 123	Wall	D 4 / D 5	_	_	_
5028	AP 123	Pit	D 5	\checkmark	_	_
5029	AP 123	Pit	D 5	\checkmark	_	\checkmark

Tab. 4.2 Contexts in Complex D, Stratum 6 c (Source: BAI/GPIA).



4.2.1.1. Stratum 6 b: First Reconstruction Phase

Fig. 4.13 Complex D, Stratum 6 b: part of the general plan (surrounding buildings are like those in 6 c) (Source: BAI/GPIA).

The first phase of reconstruction of Stratum 6 comprised few structural changes, which can be summarised in Rooms D 2, D 3 and D 4 (*Fig. 4.13*). The outer shape of the complex and the room layout remained unchanged (*Fig. 4.14*). **Room Complex D 2** was extended towards the south by replacing wall 4788 with a new room-enclosing wall 4631 (anti-capillary layer 5093). This was placed on floor 4870 (Room D 3, Stratum 6 c), exactly adjoining 4788 (*Fig. 4.15*) and extended in



Fig. 4.14 Complex D, Stratum 6 b, with elevation data (Source: BAI/GPIA).

the uppermost layer over this and the adjoining walls (4509, 4344, 4343 and 4616). According to this, the new room was composed of walls 4616/4343/4344 to the west, 4209 to the north and 4631 to the south.

The stone floor in Room D 2 from Stratum 6 c was abandoned in Stratum 6 b and replaced by clay floor 4186, which covered over the old wall 4788 (*Fig. 4.16*).

In wall 4631, in addition to Hellenistic-Roman amphora sherds, there were also a fragment each of

a casserole, a cooking pot, an ointment pot, a jar/ jug and two glass vessels (light blue, light green) as well as another casserole from the third to seventh centuries AD and a glass bowl from the third to fourth centuries AD, which can, however, be attributed to the disturbances.

In **Room Complex D 3**, the aforementioned construction of the new wall 4631 also meant that the stone floor there was abandoned and was covered with a new rammed earth floor, traces of which







Fig. 4.16 Complexes D 2 and D 3, Stratum 6 b, Square 123: new room layout with the covered-over wall 4788 marked by the dashed line; view to the north (Source: BAI/GPIA).

were found in the overlaying layers of collapse (Stratum 6 a). These traces consisted of ash and clay lenses indicating a destroyed floor, directly above the old stone floor.

The close succession of layers became clear from the mixed finds: at least 33 finds date from the late Roman-Byzantine period, including a coin of Constantine II (355–361 AD), making it difficult to assign finds with certainty. However, due to the quantity of finds from the Hellenistic-Roman period, also in the other rooms and the following reconstruction phase, it is assumed that the later finds reached the older layers during the reconstruction of the building in Stratum 4 (also 3) as well as through a large Byzantine pit that was cut into the middle of the room.

In Room Complex D 4, the stone pavement was also abandoned and a pisé floor 4770 was laid throughout the room (Fig. 4.17). Unfortunately, the feature was not separated from the overlying backfill layer, as can be deduced from the 188 finds made in the layer. Due to the subsequent reconstruction, the finds can nevertheless be assigned to Stratum 6 b. A special find was the fragment of an anthropomorphic figurine (Isis?) TZ 006790-001 (Pl. 20.2). In addition, much Hellenistic-Roman pottery was found, including ETS bowls and the amphora forms typical of Roman strata from the first century AD, as well as cooking pots from the first century BC to first century AD. There were also two tesserae in black and white (0.9 cm x 0.9 cm x 0.7 cm) and several glass fragments (blue, green).





In the other layers (4790, 4940 and 4990) in the room were a metal spatula and bracelet, Hellenistic-Roman ETS bowl fragments and an ointment pot, as well as glass fragments (yellow, pale blue, turquoise). In addition, typical Hellenistic-Roman pottery was found, as already increasingly represented in Stratum 6 c by amphora types dating to the first century AD. In a small, almost completely preserved jar TZ 020062-041 (*Fig. 6.11; Pl. 18.5*) remains of figs (*ficus*) were also found³. Few bones of cattle (2), sheep or goat (9), horse (2), domestic fowl (4) and three other tesserae were also recovered. In addition, there are about 15 Late Roman-Byzantine sherds, once again from later phases.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
4186	AQ 123	Floor	D 2	\checkmark	\checkmark	\checkmark
(4188)	AQ 123	Floor and fill layer	D 3	\checkmark	\checkmark	\checkmark
4631	AQ 123	Wall	D 2 / D 3	\checkmark	\checkmark	\checkmark
4770	AP 123	Floor	D 4	\checkmark	\checkmark	\checkmark
4789	AQ 123	Floor and fill layer	D 3	\checkmark	\checkmark	\checkmark
4790	AP 123	Fill layer	D 4	\checkmark	\checkmark	\checkmark
4940	AP 123	Fill layer	D 4	\checkmark	\checkmark	\checkmark
4990	AP 123	Fill layer	D 4	\checkmark	\checkmark	\checkmark
5093	AQ 123	Wall	D 2 / D 3	_	_	_

Tab. 4.3 Contexts within Complex D, Stratum 6 b (surrounding features like those in 6 c) (Source: BAI/GPIA).



4.2.1.2. Stratum 6 a: Second Reconstruction Phase

Fig. 4.18 Stratum 6 a, Area I, with context numbers and colour-coded Complexes D and D 6 (green/purple) (Source: BAI/GPIA).

In the last phase of reconstruction, there was a major remodelling of Room D 4 (*Fig. 4.18*). The other rooms remained in the form they had in Stratum 6 b (*Fig. 4.19*), and the backfill and collapse layers can now be evaluated in the individual rooms.

In **Room Complex D 1**, a fill layer 4208 was found, but it did not yield any finds. Context 4900, which was either an ash pit or collapse, contained Late Hellenistic-Early Roman amphora fragments, an ETS imitation from the first half of the first century AD, as well as a glass bowl fragment from the third to seventh century AD. However, the classification of all finds is uncertain, as the dense succession of walls and fill layers in this room made it difficult to determine their origin.

Room Complex D 2 contained floor 4186, which yielded a few bones of cattle (1), sheep or goats (10) and domestic pigs (1), as well as Hellenistic-Roman sherds of casseroles, cooking pots, amphorae, oil lamps and fragments of a small jug, an Echinus bowl and a unguentarium. In addition, a fragment of a balsamarium made of glass (blue-green), a tessera, a metal needle, a nail, three pieces of slag and part of a glass lamp from the Byzantine to Mamluk periods were found. Within this floor, at least seven finds can be attributed to the third century AD. Layer 4210, situated on the floor, contained Hellenistic-Roman pottery, including a casserole from the first century BC to third century AD.

Almost 200 finds were made in **Room Complex D 3** within the presumed floor 4789 and the overlying fill layer 4188, including six tesserae, fragments of Hellenistic-Roman jugs/jars, cooking pots, cooking bowls and table amphorae. Amphora sherds from the first century AD were found, as well as an ETS imitation from the first half of the first century AD. Furthermore, a terracotta fragment TZ 006819-016 (*Pl. 20.1*), a spindle whorl made of bone TZ 016617-001 (*Fig. 4.91*) as well as several glass fragments (light green, light blue) belonging to a relief bowl, were among the other finds.

In **Room Complex D 4**, new wall 4280/4780 was inserted on floor 4770, which obstructed the staircase and divided the room into two parts (*Figs. 4.20* and *4.21*)⁴. The entrance to the first storey can therefore be assumed to have been located



Fig. 4.19 Complex D; Stratum 6 a; with elevation data (Source: BAI/GPIA).

elsewhere in the house during this phase. Furthermore, a new wall (3920) was built on the foundations of the old wall 4671/4986 (Stratum 6 c, b) and the former entrance was abandoned, which became obscured by new wall 4280/4780. On both sides of the new wall of the room, remains of new clay floors 4742 and 4766 were found. In addition to glass finds (light green, light blue), two mural painting fragments TZ 016352-001 (*Fig. 4.126*), a door socket, a metal bracelet TZ 015198-001 (*Fig. 4.63*) and Hellenistic to Late Roman-Early Byzantine pottery were associated with the floors.

⁴ Context 4280 refers to the uppermost layer of the wall, which broke away between summer 2008 and spring 2009 and was subsequently recorded as Context 4780.

Fig. 4.20 Complex D, Stratum 6 a, Square AP 123: reconstruction within Room D 4; lowest 'layer' of wall 4280/4780 on floor 4766 (Stratum 6 b) and possible course of the wall (Source: BAI/GPIA).





Fig. 4.21 Complex D, Stratum 6 a, Square AP 123: reconstruction within Room D 4; uppermost preserved layer of wall 4280/4780 below the overlying disturbances (grey) (Source: BAI/GPIA).

The pottery material from the new room-dividing wall consisted of Hellenistic-Roman cooking pots, amphorae, jars/jugs, oil lamps and two unguentarium fragments, as well as a piece of red-painted wall plaster. In Context 4280 (top layer of the wall), seven Late Roman finds were also found, and four in the lower part of the wall. However, the heavily destroyed wall and the total of 76 finds cast doubt on the direct affiliation of the finds. New wall 3920 between Rooms D 4 and D 3 contained a Hellenistic-Roman jar/pot and several amphora sherds as well as fragments of a Roman cooking pot, a Roman-Byzantine amphora and a cooking bowl. In backfill layer 4283 in the western section of the room, three more beige, red and white wall plaster fragments (TZ 016353-001 [red,

white] and TZ 016531-001 [beige]), a terracotta figurine TZ 006678-041 (*Pl. 20.3*) and another tessera (beige) were found. The pottery material increasingly dates to Roman-Early Byzantine (23 of 66) and consisted mainly of cooking bowls (exclusively Roman-Early Byzantine), and Hellenistic-Roman cooking pots and amphorae.

Fill layer 4277 in the south of the room contained an ETS imitation from the first half of the first century AD, as well as nine Late Roman and Byzantine finds.

The layers of collapse (4282, 4781, 4735, 4873 and 4278) contained a large number of loose stones as well as small fragments of wall plaster, tesserae and Hellenistic-Roman pottery. In addition to two coins from the fourth century,

there were again some Late Roman to Byzantine pottery sherds.

In **Room Complex D 5**, fill layer 4641 was found in the vicinity of the tabun, containing exclusively Hellenistic-Roman pottery from the second century BC to first century AD. **Room Complex D 6** remained unchanged. Solely collapse 4234, located in the west, could be assigned to Stratum 6 a. It was characterised by several loose stones close to the walls of the room.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
3920	AQ 123	Wall	D 3 / D 4	1	-	1
4188	AQ 123	Fill layer	D 3	~	1	1
4208	AR 123	Fill layer	D 1	-	-	-
4210	AR 123	Fill layer	D 2	<i>√</i>	-	-
4234	AT 123	Collapse	D 6	-	-	-
4277	AP 123	Fill layer	D 4	1	1	1
4278	AP 123	Collapse	D 4	1	1	1
4280	AP 123	Wall = 4780	D 4	<i>√</i>	1	1
4282	AP 123	Collapse	D 4	-	-	-
4283	AP 123	Fill layer	D 4	1	1	1
4641	AP 123	Fill layer	D 5	1	-	1
4735	AP 123	Collapse	D 4	\checkmark	-	1
4742	AP 123	Floor	D 4	~	1	1
4766	AP 123	Floor	D 5	<i>√</i>	1	1
4780	AP 123	Wall = 4280	D 4	1	1	1
4781	AP 123	Collapse	D	1	1	1
4789	AQ 123	Floor	D 3	1	1	1
4873	AP 123	Collapse	D 4	-	-	-
4900	AR 123	Pit	D 1	✓	1	~
4991	AP 123	Fill layer	D 5	 ✓ 	1	1

Tab. 4.4 Contexts within Complex D, Stratum 6 a (Source: BAI/GPIA).

4.2.1.3. Additional Contexts from Stratum 6 Area I

In addition to the contexts in Complex D, a number of other features were found in the area, which have no architectural connection, but which can be attributed to this stratum on the basis of their elevation data and find composition. These are to be differentiated into fill layers (with installations), pits, and layers of collapse, and will be evaluated collectively.

The fill layers consist of:

AQ 118: 2613, 2619 AR 119: 3304 AQ 119: 2614, 2631 AO 119: 1000 AN 119: 822 AP 120: 4229 AS 121: 4462 AR 121: 4320, 4531, 4532 AQ 121: 4217 AP 121: 4603 AS 122: 4179, 4203, 4205, 4202, 4201, 4268, 4196, 4253 AR 122: 4180 AQ 122: 4457 AP 122: 4628, 4454 AS 123: 4154 AR 123: 4181, 4355, 4342 AQ 123: 4763, 4681



Fig. 4.22 Metal bracelet TZ 009732-001; Stratum 6 c, b, a, Square AQ 119, Context 2631: smooth surface, flat oval cross-section; bracelet is open, small part broken off (Source: BAI/GPIA).



Fig. 4.23 Stone weight TZ 006934-001; Stratum 6 c, b, a, Square AO 119, Context 1000: basalt, coil-shaped (Source: BAI/GPIA).



Fig. 4.24 Writing tablet (?) TZ 007083-001; Stratum 6 c, b, a, Square AN 119, Context 822: clay; 7 cm x 5.5 cm x 2.5 cm; rounded corners, on front and back edges vertical and horizontal carvings (Source: BAI/GPIA).



Fig. 4.26 Bead TZ 014632-001; Stratum 6 c, b, a, Square AQ 123, Context 4681: glass; 2 cm long (Source: BAI/ GPIA).



Fig. 4.25 Spindle whorl TZ 013375-001; Stratum 6 c, b, a, Square AR 123, Context 4181: ferrous stone; diameter 2.6 cm; convex; pierced cylindrically (Source: BAI/ GPIA).

The fill layers were scattered widely over the area, some of them containing a great deal of Iron Age pottery (2614, 4229, 4253, 4462, 4320, 4532, 4180) or pottery from the overlying strata (4628, 822). In addition, pottery forms of the Hellenistic to Roman periods already known from Complex D were found. Some finds deserve to be highlighted, among them a metal bracelet TZ 009732-001 (*Fig. 4.22*) from Context 2631, a coil-shaped stone weight TZ 006934-001 (*Fig. 4.23*) from Context 1000, a find from Context 822 referred to as a writing tablet (?) TZ 007083-001 (*Fig. 4.24*), a spindle whorl TZ 013375-001 (*Fig. 4.25*) from context 4181 and bead TZ 014632 (*Fig. 4.26*) from Context 4681.



Fig. 4.27 Loom weight TZ 014095-001; Stratum 6 a, Square AP 121, Context 4431: clay; 6.5 cm x 4.8 cm; diameter of opening 1.6 cm to 7.3 cm (Source: BAI/GPIA).

When examining the archaeological material, it is also noticeable that, in comparison to earlier strata, more and more glass finds (mould-made bowls) are discovered, mainly in shades of brown, but also in green.

Special attention should be paid to the group of Contexts 4203, 4205, 4202, 4201, 4268 and 4196 in AS 122 as well as the Contexts 4531 and 4532 in AR 121. Here the sparse remains of three tabuns (4202, 4205/4203, 4532) and three ash pits (4201, 4268, 4531) as well as the remains of a floor (4196) were identified. Although there were no clear indications of architecture—apart from the small layers of collapse 4211, 4195-it can be assumed that the features represented at least two work areas. Due to the lack of architectural remains, it can be assumed that the stones were removed/reused or that the building was made of wood. The latter possibility is suggested by Context 4351 in AP 121. It was a burnt layer that had wood-like structures over an area of 25 cm x 25 cm.

The following layers of collapse were identified:

AP 120: 4185 AP 121: 4433, 4434, 4431 (loom weight found in collapse), 4351 AS 122: 4211, 4195 AP 122: 4781, 4735, 4511 AT 123: 4234 AR 123: 4497

These layers were mainly characterised by loose accumulations of stones. There were only a small number of finds. Worth mentioning is a loom



Fig. 4.28 Eye bead TZ 015310-001; Stratum 6 a, Square AT 123, Context 5350: 1.6 cm to 2.2 cm (Source: BAI/GPIA).

weight TZ 014095-001 in Context 4431 (*Fig.* 4.27) and a few remains of wall plaster in Context 4781. In the latter context, a large number of Roman-Byzantine pottery sherds were also recovered but given that the context may have been contaminated, they could not be assigned to it with certainty. Contexts 4234, 4735, 4497, 4511 were clearly identified as the collapse of Complex D/D 6.

Several pits were also found: AH 116: 2526

AG 116: 2108, 2138 AP 118: 2609, 2628, 2669 (find in pit) AQ 119: 2646 AP 119: 2053 AM 119: 31, 665 (find in pit 31), 675 (find in pit 31) AO 118: 625, 626 AS 122: 4232 AT 123: 5350 AR 123: 4341, 5514

The information gained from the pits was disappointing, some even contained no finds (2526, 2053, 2646). The features located away from the complexes often had a lot of Iron Age pottery (2108, 2138, 2609, 2628). Where finds were recovered, they were mainly pottery body sherds. Worth mentioning is an eye bead TZ 015310-001 (*Fig. 4.28*) from pit 5350, which also contained a Hellenistic lagynos, pithos and fish plate sherd as well as Roman amphora and cooking pot sherds. In pit 4232, some turquoise beads TZ 013253-001 (*Fig. 4.29*)



Fig. 4.29 Beads TZ 013253-001; Stratum 6 a, Square AS 122, Context 4232: faience, quartz frit and stone; 0.2 cm to 0.6 cm long; turquoise (Source: BAI/GPIA).

were also found, which together probably formed an almost complete necklace.

Pit 31 in particular stood out due to its size and large number of finds. The pit partially destroyed Complex B in Stratum 7. The find composition was exclusively Hellenistic-Roman, including a table amphora from the first century BC to first century AD, which, among other indicators, led to the as-



Fig. 4.30 Architectural element (?) TZ 009890-001; Stratum 6 c, b, a, Square AP 118, Context/Find 2669: limestone; 29 cm x 28 cm x 17 cm; oval shape, irregularly worked (?) steps (Source: BAI/GPIA).

sumption that this pit could not have been created later than Stratum 6 and that Complex B was therefore no longer used in Stratum 6.

Finally, the find/context TZ 009890-001/2669 from pit 2628 needs to be mentioned (*Fig. 4.30*). It is a worked (?) limestone with an unusual shape, the function of which has not yet been determined.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
31	AM 119	Pit	D	\checkmark	\checkmark	-
625	AO 118	Pit fill (pit 626)	D	-	\checkmark	1
626	AO 118	Pit	D	-	_	-
665	AM 119	Find	D	\checkmark	_	_
675	AM 119	Find	D	-	\checkmark	-
822	AN 119	Fill layer	D	\checkmark	\checkmark	\checkmark
1000	AO 119	Fill layer	D	\checkmark	\checkmark	\checkmark
2053	AO / AP 119	Pit	D	-	_	-
2108	AG 116	Pit	D	\checkmark	_	\$\sqrt{1}\$
2138	AG 116	Collapse	D	\checkmark	\checkmark	 ✓
2526	AH 116	Pit	D	\checkmark	\checkmark	-
2609	AP 118	Pit	D	\checkmark	\checkmark	 ✓
2613	AQ 118	Fill layer	D	\checkmark	\checkmark	~
2614	AQ 119	Fill layer	D	\checkmark	\checkmark	~
2619	AQ 118	Fill layer	D	\checkmark	-	\checkmark
2628	AP 118	Pit	D	\checkmark	\checkmark	 ✓
2631	AQ 119	Fill layer	D	\checkmark	~	
2646	AQ 119	Pit	D	-	_	-
2669	AP 118	Find	D	-	~	-

3304	AR 119	Fill layer	D	<i>✓</i>	<i>√</i>	-
4154	AS 123	Fill layer	D1/D6	<i>√</i>	<i>√</i>	√
4179	AS 122	Fill layer	D	\checkmark	✓	✓
4180	AR 122	Fill layer	D	\checkmark	\checkmark	\checkmark
4181	AR 123	Fill layer	D	\checkmark	\checkmark	\checkmark
4185	AP 120	Ash	D		_	✓
4195	AS 122	Collapse	D	-	-	_
4196	AS 122	Floor	D	\checkmark	-	✓
4201	AS 122	Ash pit	D	-	-	-
4202	AS 122	Tabun	D	-	-	-
4203	AS 122	Part of tabun 4205	D	-	-	-
4205	AS 122	Tabun	D	-	-	-
4211	AS 122	Collapse	D	-	-	-
4217	AQ 121	Fill layer	D	\checkmark	\checkmark	\checkmark
4229	AP 120	Fill layer	D	\checkmark	\checkmark	\checkmark
4232	AS 122	Pit	D	\checkmark	\checkmark	-
4234	AT 123	Collapse	D	-	-	-
4253	AS 122	Fill layer	D	\checkmark	-	-
4268	AS 122	Ash pit	D	\checkmark	\checkmark	\checkmark
4320	AR 121	Fill layer	D	\checkmark	\checkmark	\checkmark
4341	AR 123	Pit	D	\checkmark	-	-
4342	AR 123	Fill layer	D	\checkmark	\checkmark	\checkmark
4351	AP 121	Fill layer	D	-	-	-
4355	AR 123	Fill layer	D	-	-	-
4431	AP 121	Find	D	-	\checkmark	_
4433	AP 121	Collapse	D	1	✓	-
4434	AP 121	Collapse	D	_	_	_
4454	AP 122	Fill layer	D	\checkmark		1
4457	AQ 122	Fill layer	D	\checkmark		1
4462	AS 121	Fill layer	D	\checkmark	 ✓ 	1
4497	AR 123	Collapse	D	\checkmark	_	 ✓
4511	AP 122	Floor (?)	D	_	_	_
4531	AR 121	Installation	D	_	_	_
4532	AR 121	Tabun	D		_	
4603	AP 121	Fill layer	D			
4628	AP 122	Fill layer	D			
4681	AQ 123	Fill laver	D	✓	1	1
4735	AP 123	Collapse	D	✓	_	✓ <i>✓</i>
4763	AQ 123	Fill layer	D	✓	\checkmark	✓ <i>✓</i>
4781	AP 123	Collapse	D	\checkmark	✓	✓ <i>✓</i>
5350	AT 123	Pit	D	✓	\checkmark	\checkmark
5514	AR 123	Fill laver	D1/D6			
	1					· ·

Tab. 4.5 Contexts outside Complex D, Stratum 6 (Source: BAI/GPIA).

4.2.1.4. Summary

Following the reconstruction of Complex D in Stratum 6, the building was still preserved in its form, construction technique and approximate room layout, and thus the insights already gained for Stratum 7 continue to apply.

An enlargement of the building to the north (Room D 6) is assumed, but cannot be addressed definitively as an associated part of the space. The construction of a second, separate house to the north is possible and could be explored by further work between Areas I and II.

A second storey can be assumed with certainty after the discovery of a staircase within Room D 4, even if this could no longer be reached from Room D 4 in Stratum 6 a. It is possible that another staircase was introduced elsewhere or that this was relocated to the newly created part of Room D 4, which can be interpreted as a stairwell, at least in terms of its appearance. However, the features do not provide any further information in this regard.

Apart from the external, apparently almost unaltered form, the function of the rooms had changed completely. After an economic character for the rooms was postulated in Stratum 7 with ovens, rich finds related to textile processing and many bone remains that pointed to a kitchen area, this aspect had completely disappeared in Stratum 6. Only in Room D 5 was a large tabun (4638), at least 70 cm in diameter, found, none of the other rooms had any traces of such installations. Similarly, there is a lack of bone finds across all phases. In Stratum 7, more than 200 bones were recovered in Room D 3 alone. For Stratum 6, only a small number of finds were recovered in Room D 2 in Stratum 6 c and Room D 4 in Stratum 6 b, which also emphasises a changed function of the rooms. Worked bones from a weaving context were also only rarely found, as were the limestone vessels that were still common in Stratum 7. The finds were much more limited to pottery and a few fragments of glass and metal. In contrast to Stratum 7, the pottery can often be dated to a later period, but still points to the Early Roman period⁵.

The many disturbances and the close succession of walls within the building repeatedly contained Late Roman and Byzantine pottery, making it difficult to stratify finds precisely.

It is hardly possible to identify the function of the rooms due to the limited number of finds and the significant mixing of layers. Only the new, more refined furnishings allow some conclusions to be drawn. The first observation that stands out is that in the first construction phase all rooms were equipped with stone floors (Stratum 6 c), and then all of them were refurbished with pisé floors as early as in the first reconstruction phase (Stratum 6 b), which in turn were retained until the building was abandoned (Stratum 6 a). The finds from Stratum 6 b in Room D 4 are remarkable, including two terracotta fragments, which can be attributed to the cult of Isis. The discovery of individual tesserae is also worth mentioning, but only vaguely suggests that the rooms were furnished with mosaic floors. The new decoration of the rooms with mural paintings shows an apparent change of function of the rooms-their former commercial use now seems to be largely missing, but has possibly shifted to another part of the building that has not yet been uncovered.



4.2.2. Complex E: Farmstead

Fig. 4.31 Complex E, Stratum 6, with elevation data (Source: BAI/GPIA).

In the eastern part of Complex E, reconstructions were found dating to as late as the Early Roman period (*Fig. 4.31*), before the building was finally abandoned following Stratum 6. The reason for assigning these alterations to a new stratum was their large scale and the fact that new constructions in Area I may have taken place at about the same time, according to the later pottery types found there. In addition, changes were also noted regarding the function of the rooms, as well as in the characteristics of the furnishings.

There were no changes in construction methods in the new stratum; the traditional method with stone foundation and clay wall was probably still employed. The state of preservation of the walls also corresponded to that of the previous stratum, as features continued to be intersected, and sometimes even more so, by overlying ones (*Fig. 4.2*).

Below follows another description of each room, although for Rooms E 1 through E 12, only the new flooring and backfill are discussed, as the room layout in this section did not change from the previous stratum. From Room E 13 onwards, a detailed description of the room follows because concrete structural changes were identified here.

4.2.2.1. Room Backfill E 1 – E 12

Room Complex E 1 can no longer be completely reconstructed, as was already the case in Stratum 7. Numerous walls and graves disturbed the interior of the room here. Only in sections of the former floor (10837) of Stratum 7—along wall 10806—could a backfill layer (with the same context number) be identified⁶, which, however, contained no finds. An evaluation of the room or a conclusive interpretation cannot be given due to the sparse findings.

6 Since the floor and the overlying backfill layer were not separated during the excavations, it follows that in the plan of Stratum 7 the feature is marked as floor and in Stratum 6 as fill layer (yellow and brown). This will be applied continuously for all corresponding contexts.
In **Room Complex E 2** the condition of the features was only marginally better. However, an extensive backfill layer 10851 was found throughout the room and it contained much archaeological material. In addition to bones of sheep or goat (23), domestic fowl (2), gazelle (1), and cattle (9) as well as a rubbing stone, finds included an iron knife blade tip TZ 111389-001 (*Fig. 4.32*) and a hatchet TZ 111387-001. The backfill material also contained a high proportion of Hellenistic-Roman amphora sherds as well as fragments of cooking pots, jugs/jars, a pithos and a small jug as well as a relief bowl.

Local-regional tableware was also represented with sherds from a fish plate and bowls. For the first time, an unguentarium (Hellenistic-Early Roman) was also found in the complex, which can be interpreted as an object for residents of higher rank due to its use as a storage vessel for ointments or perfumed oils. A total of six sherds (four of which belong together) are from the Byzantine period and, given the extent of the layer, can probably be attributed to an overlying layer.

Judging by the find material of the fill layer in this room, it could possibly be interpreted as a small courtyard. Stone floor 10853 (Strata 7 and 6), which was found only here, seemed to be an indication of this. Its central position in the western part of the building also suggests a courtyard. The discovery of tools (knife, axe) as well as rich pottery and bone finds also point to this conclusion.

Room Complex E 3 was filled with Context 10845. The few finds again reflected the known spectrum of finds with Hellenistic-Roman amphorae from, among others, the first century AD, cooking pots and jars. Two bones of sheep or goat were also found in the room. More detailed statements about the use of the room are not possible.

The fill of **Room Complex E 4** consisted of Contexts 11009 and 11014 in the northern area and 11226 in the south. Among the few pottery finds were sherds from a bowl as well as jugs/jars, cooking pots, bowls and amphorae. Part of an ETS bowl (first century BC to early second century AD) and two jug fragments were also recovered. Fragments of a Late Roman pan and casserole from Context 11009 can be attributed to the overlying stratum. The metal finds consisted of three fittings and six nails, along with a metal needle TZ 111609-001 (*Fig. 4.67*) from Context 11014⁷ and a knife blade and a sickle TZ 112223-001 (*Fig. 4.66*). Bones of sheep or goat (51) and cattle (1) as well as six glass



Fig. 4.32 Tip of a knife blade TZ 111389-001; Stratum 6, Square AV 126, Context 10851: iron; 7.0 cm x 2.0 cm x 1.3 cm (Source: BAI/GPIA).



Fig. 4.33 Gold-coloured glass fragments TZ 111805-001; Stratum 6, Square AU 126, Context 11013: one rim sherd with throd cut grooves on the inner side 0.5 cm below the rounded rim; so-called mould-made bowl; second century BC onwards; peak 50 BC to 50 AD (Source: BAI/GPIA).

fragments (gold, blue, green) (*Fig. 4.33*) were also recovered. The two fill layers 11359 and 11137 revealed a coin TZ 112163-001 (*Pl. 11.3*), which is probably Hellenistic, although it was completely corroded. Due to the comparatively high number of metal finds and the low occurrence of pottery, the function of the room possibly indicates a workshop area.

The fill of **Room Complex E 5** was particularly rich in archaeological material. Fill layers 11142 and 11284, in the northern part of the room, were heavily intermixed with Late Roman-Byzantine finds. It is likely that a pit was overlooked

⁷ Of 134 needles made of metal, only ten pieces were found in Strata 7 to 0. 124 originate from Strata 22 to 10.



Fig. 4.34 Bracelet TZ 112320-001; Stratum 6, Square AU 127, Context 11246: dark blue glass; diameter: c. 0.5 cm; bracelet diameter: 5.0 cm; outside decorated with ribbing, inside smooth (Source: BAI/GPIA).

here during excavation; the finds can hardly be explained otherwise, judging from the thickness of the layer. In the southern adjoining layer 11246, there were eleven finds from the Late Roman to the Umayyad period. The remaining archaeological material consisted of Hellenistic-Early Roman amphorae as well as cooking pots, jugs and bowls, among which were two fragments of an amphora type dating to the first century AD⁸. A piece of an ETS bowl, dating to between 80 BC and 50 AD, an ESA imitation, which can be dated between 10 BC and 50 AD, and finally a sherd of a fish plate from the third to first quarter of the first century BC were also among the finds. In addition, two oil lamp fragments were recovered, one of which can be safely assigned to the so-called Herodian type. Besides 31 glass fragments (mainly green, also blue, colourless, yellow), the finds from this stratum also included jewellery made of glass for the first time in the form of a bracelet TZ 112320-001 (Fig. 4.34) and a small glass bead.

Contexts 10976 and 11002, located in the centre of the room, probably represent part of the room's fill, however, they were even more interspersed with later contexts than those mentioned above. Only with the underlying Context 11310—except for one Byzantine find—was another homogeneous layer containing Hellenistic-Roman pottery reached.

Sherds of amphorae, cooking pots, bowls, a table amphora and jugs were found here. A ribbed mould-made glass bowl (colourless) is new to the repertoire of finds and can be dated to the period 50 BC to 50 AD⁹. Notable finds include a piece of copper casting residue TZ 112175-001 (*Fig. 4.35*),



Fig. 4.35 Cast residue TZ 112175-001; Stratum 6 c, b, a, Square AU 127, Context 11310; copper (Source: BAI/GPIA).

which indicates metalworking, and part of a potter's wheel TZ 112398-001.

This archaeological material allows initial conclusions to be drawn about the function of the room. The copper casting residue in particular suggests artisanal activity related to metalwork. The collapse of the room was reflected in Context 11343. Several loose stones along wall 11143 testified to its destruction.

Room Complex E 6 was filled with Context 10883 in its western part. Two Hellenistic-Roman pottery sherds were recovered from it as well as some stone tools including a rubbing stone, a quern, a hammering stone, a spindle whorl as well as a shell pendant. A door socket stone also discovered here could have belonged to the entrance area of either Room E 7 or E 9. In the south-western part of the room an extensive layer of stone collapse was found, Contexts 10852 and 10873. This does not

- 8 61 sherds of pottery type Am 21.1 were identified on Tall Zirā'a. The distribution in the strata is as follows: Strata 14 / 11: 2 pieces; Stratum 8: 0 pieces; Stratum 7: 6 pieces; Stratum 6: 7 pieces; Strata 5 to 0: 46 pieces. Statistics show that this pottery type is not found in Stratum 8 and only appeared for the first time in Stratum 7 a (second reconstruction phase Area I) to a lesser extent, before it was present in Stratum 6 in both areas, with a higher proportion in Area I.
- 9 Of just 10 finds of this type, 6 objects came from Stratum 6 in Area II. Two finds came from the surface (Stratum 0 Area I), one sherd from Stratum 1 (Area II) and one find from Stratum 13/12 (Area I), but it can be attributed to a disturbance there. Thus, this type can clearly be attributed to the Early Roman stratum, even if only in small numbers.

impact the interpretation of the room's function (see *Chap. 3.2.5.2*. Room E 6).

The majority of Room Complex E 7 contained no fill layers, most of the contents of the room, possible further floors, and any backfill having been destroyed by two Late Roman-Early Byzantine pits located directly on top of floor 10831, with the original floor seemingly having been used as the base of the pit. However, in the southern part was Context 10740, a fill layer rich in finds (floor in Stratum 7). The coin recovered could be reliably assigned to Stratum 7 thanks to survey data. Furthermore, a wide range of Hellenistic-Roman pottery was found in the form of amphorae, a cooking pot, bowls, jugs/ jars, an unguentarium and two glass fragments from the second century BC to 50 AD (green). Bones of sheep or goat (17) and cattle (1) were also found. In the south-western corner of the room a small pit 10765 with Roman pottery was discovered. The function of the room is unclear. Along southern wall 10738 layers of stone collapse (10767 and 10784) were identified, which point to the destruction of the wall.

Room Complex E 8 contained two fill layers 10758 and 10839. A wide range of pottery finds consisting of Hellenistic-Roman amphorae, bowls, cooking pots, an ETS imitation dated between 80 BC and 50 AD, Hellenistic Echinus bowls and a fish plate were found. The finds also included a nail, bones of sheep or goat (12), sheep (4) and cattle (3), and a stone weight. Three Byzantine sherds were also recovered.

A new clay floor 10938 was inserted in Room Complex E 9 in Stratum 6, which rendered tabun 11413 from Stratum 7 inoperative. In addition to the pottery forms already known from Stratum 6, another sherd of an unguentarium was found as well as a krater fragment. Four Byzantine sherds can be assigned to the overlying fill layer. Fill layer 10994 in the northern part of the room again contained fragments of amphorae, cooking pots and cooking jugs. A remarkable find was a piece of window glass, which can be dated from the Flavian period up to the first half of the third century¹⁰. Fill layer 11017 further to the south contained a similar repertoire of pottery, including two ESA sherds and an unguentarium. For the first time an elbow brooch TZ 111559-001 (Fig. 4.62) also among the finds¹¹. An oil lamp, a mortar and a quern also came from this fill. In the south of the room was fill layer 10756, which contained, among other things, an Echinus bowl from the second century BC to first century

AD. The fill layers also contained some loose stones 11012 and 11306 in the north-east and south-east respectively, which indicated the collapse of wall 11021 and 11414. Due to the more luxurious finds in this space, it gave the impression of being rather more special than the previous rooms. Structurally, E 9 stands out due to its location in the centre of the sequence of Rooms E 1, E 7, E 12, E 14, E 17. Many of the finds from the fill layers are of higher quality than those recovered in the south-western part of the building (E 2 to E 5, E 8, E 10, E 11). The assumption that, in Stratum 7, E 9 was a courtyard, based on the presence of the massive tabun, cannot be maintained for this stratum. Although it might still have been a courtyard, it would have lost its economic character (without a tabun). However, the many disturbances make it impossible to say this with certainty.

In Room Complex E 10 fill 10757 covered most of the room. In addition to 21 bones, mainly from sheep or goats, the bottom of a stone vessel and several cooking pot sherds were found. From the fill layer above floor 10085 in the south-east corner came a fragment of a tabun as well as sherds of amphorae and cooking pots, a fish plate and an Echinus bowl. Very little archaeological material survived in this area of the house, so that it is not possible to make concrete statements about the use of the room. However, it can be interpreted as part of an economic area in connection with the surrounding rooms. Like adjacent Room E 8, it did not contain any metal finds or tools. The small number of finds, as well as the structure of the two rooms, suggest a connection.

Room Complex E 11 contained layers of fill and collapse (10014, 10042, 10052, 11086 and 10069) almost 50 cm thick, which contained a large number of finds (more than 400). The largest groups of finds were amphorae, partly from the first century AD, and cooking pots. Among the other finds were other types of utilitarian pottery, which included unguentaria (also found elsewhere in this stratum), small jars, six ESA sherds from the period between 80 BC and 50 AD, two fish plates, five Echinus bowls, five casseroles, four oil lamp-

- 10 In total, only 17 pieces of window glass have been recovered from Tall Zirā'a, 15 of them from Strata 5 to 1. Very likely, therefore, the piece belonged to a younger stratum, even if window glass was already known in this period.
- 11 Both elbow brooches found on the tall were found in the Hellenistic-Roman strata.

fragments, one pithos, and four glass fragments (yellow, green). The large number of stone tools and vessels was astonishing. Three mortars were part of the contents of the room, as well as five rubbing stones and three stone vessels. Six finds came from later layers. Context 11262 was probably also a fill layer, which, however, contained no finds. Bones of cattle (13), domestic pig (3), sheep or goat (52), sheep (7), goat (4), camel (1), gazelle (2), and domestic fowl (2) were found only in the south-eastern corner in layer 11086. This unusually large quantity of material, concentrated in one area, suggests a waste pit.

Room Complex E 12 had a new floor installed, 11355, which put tabuns 11401, 11416 and one without designation (Stratum 7) out of operation. The overlying material can be dated as late Hellenistic-early Roman and consisted of sherds from amphorae, cooking pots, a bowl, a fish plate and a dish. Four glass fragments (blue, green) were also found, among them again fragments of a ribbed mouldmade bowl. Within fill layers 11332 and 11152, sherds of cooking pots, a plate, a jug/jar as well as a small jug were found, as well as sherds of bowls, amphorae, a fish plate and an Echinus bowl. Furthermore, the rim of a stone bowl and a remarkable number (eight) glass fragments (blue, yellow, clear, green, brown) were part of the finds.

As in Room E 9, the tabuns were rendered completely inoperative and no traces of new ovens were found. However, the relatively large amount of glass was unusual. The location of this room adjacent to the central Courtyard E 13 has already been emphasized in Stratum 7. Thus, for this stratum too, it is suggested that the abandonment of the tabuns and the presence of more sophisticated finds (glass) indicate that the function of the room had changed in a more prestigious direction.

4.2.2.2. Reconstruction and Room Filling E 13 - E 26

Courtyard Complex E 13 was affected by major reconstruction. The entire tabun layer from Stratum 7 was abandoned and covered with new walls and floors. The space did not completely lose its original shape as a result, but was reduced in size to the benefit of Rooms E 15, E 18, E 19 and E 20. First, the new northern wall 10212 of Room E 15 replaced the three central tabuns of Stratum 7. From this northern wall, another wall (10295) branched

off in a north-easterly direction and seemingly terminated in the middle of the room (*Fig. 4.36*). To the west, part of the eastern projection was reconstructed (E 18, E 19, E 20), destroying tabun 10306. Therefore, the new enclosing walls of E 13 comprised walls 11329 to the north-west, 10229 to the north, 10273 and 10350/10364/10460 to the northeast, 11426, 11395, 11108, and 10212 to the south, 11112 and 11391 to the south-west, and 11318 and 11414 to the west.

The two newly constructed walls 10212 and 10295 revealed only a few finds, including some bones, an Echinus bowl, cooking pot and amphora fragments, and a quern. A cooking pot sherd dates from between the second and fifth century AD.

In the newly formed corner 10212/10295 a solitary tabun (10209) was erected, although it was very small and only preserved in fragments. From it came only one pottery sherd, which can be assigned to a cooking pot type from the second to the first centuries BC. To the west of the tabun, part of a new floor 10213 had survived, running over the old tabun from Stratum 7. Once again, the known pottery of the complex was identified, among the finds were also fragments of an Echinus bowl and a glass fragment (clear). The layer was not clearly separated from the overlying soil layer of Stratum 5, so that there was much contamination. Likewise, three graves (10210, 10203, 10201) from the Ottoman period disturbed the context. Fill layer 10292 was located in the centre of the room and contained bones of sheep or goat (7), cattle (1) and domestic fowl (1) as well as a fragment of a glass hemispherical bowl like those already known from Stratum 8 (green). Another fill layer, 10303, in the western part of the room contained one completely preserved Hellenistic and one Roman oil lamp dated between the first and the second century AD, cooking pots and amphorae, as well as bones of sheep or goat (21), cattle (2), red or fallow deer (4), and domestic pig (3). Fill layer 10420 in the north-western part of the room contained Hellenistic-Roman pottery and a coin TZ 110417-001 (Pl. 9.3) (separate Context 10424) from Alexander Jannaeus. Fill layer 11357 contained a rubbing stone and a quern.

In the eastern projection, there were no preserved features in most of the room, as pavement 10016 from Stratum 4 (also 3) covered almost the entire area and destroyed the underlying stratum. Only the layers between floors 10070 (recognized from Stratum 7) and the disturbance were preserved and were interpreted as backfilling of the room. The



Fig. 4.36 Complex C 3 and C 5, Stratum 8, Square AU 128: wall 11474 (Source: BAI/GPIA).

rich archaeological material found in the backfill of 10070 (with the same context number) consists of sherds from amphorae, cooking pots and jugs. In addition, there are cooking jugs and a bowl, which can be described as part of a tableware set. Five cooking pots can be dated between the second to the first century BC, and another between the first century BC and the first century AD. In the southern part of the room, fills 11212, 10045, 11211, and 11110 were identified. Several sherds of tableware were also found in this area, dating between the third/second and the first century BC. Additional finds include a large number of Hellenistic-Roman amphora, cooking pot and jug sherds as well as a fragment of an oil lamp. In the northern part of the projection in fill layer 11146, bones of cattle (4), sheep or goat (29), sheep (4), goat (4) and fallow deer (1) were found as well as eight glass sherds (blue, green) among them also one ribbed mouldmade bowl, which is a new type occurring in the stratum. One ring and one bracelet made of metal are interesting finds.

The courtyard also contained several obvious layers of collapse, some of which were interspersed with stones. Firstly, Context 10475, located beside wall 10273 to the east, is worth mentioning, was heavily interspersed with charcoal. Contexts 10347 and 10348 represented the collapse in the south-eastern part of the courtyard area, and five rubbing stones, various typical utilitarian pottery types and five glass fragments (blue, brown green, yellow) were found there. Some bones, mostly of sheep and goat, were also recovered. The collapse

of wall 10212 was recognized in Contexts 10211 and 10279 and contained, among other things, a fragment of amphora type 11 (according to F. Kenkel's definition) dated to the first century AD. A Byzantine jar sherd probably belonged to the upper layers. Also to the west Context 11392 was a collapse layer of wall 11391, and likewise 11109 and 11111 were the collapse of wall 11112.

As with Rooms E 9 and E 12, it is again noticeable that the tabuns in this stratum were built over and no replacements were found. The relatively clear, albeit unusual, structure of the courtyard was changed and reduced in size, and now appeared convoluted. Therefore, the question arises of whether the area continued to be used as a courtyard. Moreover, this space also lost its economic character. The spectrum of finds shows some distinctive objects (ring, bracelet, glass), but does not allow a more precise interpretation of the space.

In **Room Complex E 14** a new floor 11335 was also created in Stratum 6, which, however, contained no finds. Fill layer 10293 in the south-western part of the room was also largely without finds except for a cooking pot sherd, five bones of gazelle and sheep or goat, three rubbing stones and a mortar. Fill layer 10328 above the new floor contained no finds except for a few body sherds and a cattle bone.

Since the room was still open to courtyard (?) E 13, the assumption remains that it was a more prestigious room.

The reconstruction of **Room Complex E 15** has been discussed above with E 13. The remodelling of Courtyard E 13 and the newly inserted wall 10212



Fig. 4.37 Complex E 17, Stratum 6, Square AY 129: installation of walls 10461/10470 into wall 10229 (also Stratum 7); view to the west (Source: BAI/ GPIA).

increased the size of the room. This reconstruction destroyed the area with tabuns 10251/10252, 10254 and 10305. The newly created room was bounded by wall 10212 to the north, 11395 to the east, 11426 to the south, and 11108 to the west. In the southeast, fill layer 11107 was preserved, which can be regarded as the room's fill in Strata 7 and 6. Amphora and cooking pot sherds, again an unguentarium fragment of the form known for Stratum 6, and a cooking jug fragment were found here. The pottery dates to the Hellenistic-Early Roman period except for one piece from the second to the fifth centuries AD. Seventy-four bones, mainly from sheep and goats, were also found in this layer. It is not possible to give an interpretation of the room's function.

Room Complex E 16 was not affected by the reconstruction in Stratum 6. Room fill 10259 above floor 10259 (in Stratum 7) in the south and another one (10095) in the northern part of the room contained no finds. An interpretation of the room is not possible.

Room Complex E 17 also underwent structural changes in Stratum 6. Here, wall 10461/10470(both without finds) now partly intersected the old wall 10229 (*Fig. 4.37*). Layer 10471, a few centimetres thick, between the two features was filled with small stones. In addition, the newly placed wall tapered slightly at the edge of the tall towards the east, perhaps to preserve the shape of Room E 18. Judging by the overall plan, it seemed to make sense to leave the old walls in place at this point. In this way the room kept its approximately rectangular shape. According to this proposition, the new walls enclosing the room were 10219 to the west and 10229, 10461 and 10470 to the south. The other walls of the room were not preserved.

In Room E 17, there was a thin fill layer 10228 above floor 10246 (Strata 7 and 6), which contained parts of a Hellenistic-Roman oil lamp, two Roman cooking pots (one dated from the first century BC to first century AD), and bones of sheep or goat (4).

The room fills and walls were located particularly high and were only a few centimetres below the colluvium. An interpretation of the room is not possible. Collapse layer 10469 already contained a lot of Byzantine material, but also several loose stones, which probably indicated the destruction of wall 10461/10470.

As in the stratum before, **Room Complexes E 18 to E 22** belong to the eastern projection, the dimensions of which were essentially preserved. Towards the south, the projection was extended somewhat and the internal and external arrangement was restructured. While the division in Stratum 7 consisted of two equally shaped rooms, E 19 and E 20, the composition in Stratum 6 changed in favour of three almost equally sized rooms, which include the smaller Room E 18 from Stratum 7.

The initial small **Room Complex E 18** was replaced by a new, larger, square room that occupied almost all of Square AY 130 (*Fig. 4.38*). It was formed by walls 10461/10470 to the north-west, a wall without a designation to the north-east, 10317 and 10343 to the south-east, and 10273 to the southwest. To the north, not all of the room walls have



Fig. 4.38 Complex E 18, Stratum 6, Square AY 130: view to the north (Source: BAI/GPIA).

been preserved due to a landslide. For the first time in this area, a door sill was detected, which was inserted into the south-east corner of the room in wall 10273. Thus, upper masonry was also reliably identified in this location, although, as in Area I, it did not differ from the foundations. The new walls of Room E 18 contained no finds. In the middle of the room a clay floor was detectable as Contexts 10407 and 10410. Context 10410 contained no finds.

Context 10407, on the other hand, again contained the usual utilitarian pottery consisting of a few fragments of Hellenistic-Roman amphorae, cooking pots and jars, a stone weight and a key TZ 110496-001 (*Fig. 4.68*)¹². To have a Late Byzantine find from within this context was not surprising due to the shallow depth of the layers. In the south-western part of the room was pit 10429, which contained only three fragments of cooking pots, with one fragment dated from the first century BC to the first century AD.

Context 10405, in the north-east of the room, was a layer of soil and collapse, heavily interspersed with ash, which contained a fragment of a glass relief bowl (green-brown), as well as sherds of Hellenistic-Roman cooking pots, amphorae, an Echinus bowl and a fragment of a quern. Fill layer 10327 contained exclusively pottery from the second century BC to the second century AD, including again cooking pots, casseroles and amphorae. A pottery sherd from Context 10341 dates probably from the Islamic period although its classification and dating are uncertain. Fill layer 10367 contained Hellenistic-Roman pottery, a nail, a glass fragment (green) and bones of sheep or goat (13), cattle (1), domestic fowl (2), and sheep (1). The other layers in the room (10297, 10302, 10310, 10311, 10314, 10322, 10342, 10316, 10315, 10340, 10406, 10408, 10409, 10413, 10414) were smaller fill layers and layers of collapse interspersed with stones. Due to the walls from overlying strata their affiliation was not always clear, and the finds were also very mixed. An interpretation of the room is not possible.

Due to the rearrangement and enlargement of E 18, **Room Complex E 19** became narrower. The reconstruction only affected the south-eastern walls, the other Stratum 7 walls continued in use. The new room extended over parts of Squares AY 130 and AY/AX 131 and was formed by walls 10343 and 10317 to the north-west, 10682 to the north-east, 10684 to the south-east and 10350, 10364 and 10460 to the south-west. The south-western wall was only partially preserved. Wall 10350 contained a Roman casserole and a cooking pot sherd.

The contents of the room were no better preserved than in Stratum 7. In the western corner, part of the fill was preserved (10477 and 10479) and contained a rubbing stone, two parts of an Echinus bowl from the third to the first centuries BC, and sherds from an amphora, a glass bowl (dark green), and a cooking pot from the Hellenistic-Early Roman period.

12 The object was kindly restored by Naif Zaban as part of the "ACOR Conservation Cooperative" (ACC).





Room Complex E 20 from Stratum 7 also underwent extensive alterations and was subdivided into three new room sections (E 20, E 25, E 26). The rectangular shape of the room completely changed (Fig. 4.39). Outer walls 11183/11167 to the southwest and 10603/11078 to the south-east (Stratum 7) were abandoned and overbuilt by new structures, but the separating walls to E 19 and E 22 showed no interference at all. The first of the three new rooms was Room E 20, which occupied the north-western part of the former room from Stratum 7. It was formed by walls 10684 to the north-west, 10686 to the north-east and 11191/11383 to the south-east. The end of the room to the south-west must remain undefined, but could have been formed by the extension of walls 10350, 10364, 10460 (E 19).

It was not possible to determine the content of the room at this point, since the area was completely built over. Two layers of collapse were identified as 11325 and 11360. Part of a Hellenistic-Early Roman Echinus bowl and another piece of pottery associated with tableware, as well as five rubbing stones were found in 11325 and 11360. With the abandonment of the room's shape, a change in the use of the room may also be considered, which, however, can no longer be determined for Room E 20. For **Room Complexes E 21 and E 22** no new insights were gained, neither new finds nor features could be identified. The same applies to **Room Complexes E 23 and E 24**. Since no major alterations took place in these sections, it is assumed that they continued in their previous location and role. Above floor 10090 a fill layer (with the same number) was found, which, however, only contained one sherd each of a Late Hellenistic-Roman amphora, a cooking pot and a cooking jug. This fill layer also included Context 10081, in which a rubbing stone, two amphora sherds and an Echinus bowl of the Hellenistic-Roman period were found.

New **Room Complex E 25** was located in the southern part of Square AX 132 and was bounded by walls 11191/11383 to the south-west and north-west, 10686 to the north-east, and 10559 to the south-east (*Fig. 4.39*).

Tabun 11308 was found in the western corner. Floor 11327 was traceable throughout the room. It extended to the tabun and to wall 11191/11383, but not beyond the area of wall 10559, so it is assumed that the room was closed to E 26 at this point. New wall 11191/11383 contained no finds. Wall 10559 contained one cooking pot sherd and one jar sherd of the Hellenistic-Roman period as well as one stone tile. The tabun contained one amphora sherd and one cooking pot sherd each of the Late Hellenistic-Roman period and two Late Roman-Byzantine sherds. The pottery material on the floor consisted of Hellenistic-Roman pottery, including three Echinus bowl fragments and a bowl base. A mirror fragment TZ 112181-001 (*Fig. 4.65*) was a distinctive find. In addition, a Late Roman sherd was also found here, and so it must be pointed out once again that the layers in this square densely succeed one another and that a mixture of finds is by no means surprising. The room was filled above the floor with collapse layers 11303, 11340, 11368, 11369, and 11384, all of which, however, contained no finds.

Room Complex E 26 formed the last newly created room of the complex. It was formed by walls 10559 to the north-west, 10686 to the north-east and 10543 to the south-west. The south-eastern end was not preserved. With this new room, the eastern projection extended southwards beyond the old one from Stratum 7, but how far is unclear. Wall 10543 contained a door socket stone and a rubbing stone as well as two jar fragments, also belonging to the Hellenistic-Roman period. The interior of the room was not preserved.

The two new rooms (or parts of rooms) E 25 and E 26 did not provide any indications of a specific usage, however, the thickness of their newly built walls clearly differed from those of Stratum 7. The Stratum 7 walls of the eastern projection were noticeably wider than those of the rest of the building, but the walls of the new rooms in Stratum 6, of which at least 10543 is to be interpreted as an outer wall, were the same width as those of the rest of the complex. Therefore, for this stratum, it is no longer possible to consider this part of the building as a fortification or assume the construction of wider walls in order to build another storey.

4.2.2.3. Summary

The overall structure of the complex changed only marginally in Stratum 6. The general shape of the farmstead with its projections was preserved. The western section remained unchanged and was only renovated with new clay floors (E 9). Thus, floor 10853 (Room E 2) continued to represent the only stone floor of the complex. The archaeological material from the fill layers suggests that the area continued to be used for economic purposes. A large number of tools made of metal (knives, axes) and

stone (rubbing stones, rubbing bowls, querns, hammering stones) were concentrated in Rooms E 2, E 4, E 5, E 7, E 10, and E 11 and stand in clear contrast to finds from the eastern section of the farmstead.

The sequence of rooms (E 1, E 7, E 9, E 12, E 14, E 17) forming the rear (northern) projection remained unchanged even after the reconstruction of the eastern projection, although contexts in Room E 17 remain unclear. A new floor level was also detected in Room E 12. As a result of the reconstruction, both E 9 and E 12 lost their substantial tabuns in this stratum, and were not replaced. It is not possible to clarify the question of a possible new function of the rooms, but it is assumed only due to the absence of tabuns.

The eastern projection underwent the largest reconstruction measures. This reconstruction significantly reduced the size of the central Courtyard E 13. All six ovens from Stratum 7 were destroyed and replaced only with small tabun 10209. The shape of the courtyard became unstructured and was visually divided in two by new wall 10295. However, the section leading to Room E 14 was probably still open. In front of the newly restructured eastern projection (E 18, E 19, E 20, E 21, E 22, E 25, E 26) a small forecourt was created. The rooms in the projection proper underwent a redivision in the preserved area. The formerly small Room E 18 was rebuilt in favour of a larger square room, equal to the new Room E 19. The only entrance to the complex was detected in this room. Room E 20 was subdivided into three parts and enlarged towards the south, although the exact dimensions could no longer be determined. The archaeological material of the rooms along the rear projection and those in the eastern part of the building differed from that in the western section through to the increased number of tableware finds and significantly fewer tools. Thus, a division into living and working areas seems very probable. Overall, in Stratum 6 the general function of the rooms did not change. However, more precise interpretations are not possible as yet due to numerous disturbances. As with Complex D, the new rooms were built within the existing dimensions of the old rooms and thus the outer form of the building remained almost unchanged.

It can be clearly seen that the former courtyards from Stratum 7 seem to have lost their relevance. Although the spaces possibly continued to function as courtyards, they no longer showed any traces of tabuns, which represent significant features of houses of this time period. The only tabuns in the entire complex were 10209 in Courtyard E 13 and 11308 in Room E 25, both of which, however, were much smaller than the tabuns of Stratum 7. The economic character, formerly of the entire facility, was now only detectable in the archaeological material from the western part of the building. It is possible that economic activities were shifted to another part of the building. Also, given that the reconstructions of the eastern projection during Stratum 6 were found very close to the surface, it is conceivable that other tabuns may have existed but were not preserved here. Another possibility would be that the tabuns were placed in a different building or outside the farmstead and may yet be found there. These reconstructions are particularly interesting when considered together with those of Complex D, which also lost its economic character and was perhaps transformed into more richly furnished rooms with mosaics (?) and mural paintings. Reasons for the reconstruction of Complex E can only be guessed at, although they should probably be considered in conjunction with new construction measures in Area I.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
10014	AW 128	Fill layer	E 11	~	1	1
(10042)	AW 128	Fill layer	E 11	~	1	1
10045	AW 129	Fill layer	E 13	1	1	~
(10052)	AW 128	Fill layer	E 11	-	-	-
10069	AW 128	Fill layer	E 11	~	1	1
10070	AW 128	Fill layer	E 13	~	1	1
10081	AV 129	Fill layer	E 23	~	1	~
10085	AW 128	Fill layer	E 10	1	-	~
(10090)	AV 129	Fill layer (floor stratum 7)	E 23	~	-	1
10095	AV 129	Fill layer	E 16	1	-	1
10209	AX 129	Tabun	E 13	1	1	~
10211	AX 129	Collapse	E 13	1	1	~
10212	AX 129	Wall	E 13	~	1	1
10213	AX 129	Floor and fill layer	E 13	~	1	1
(10228)	AY 129	Fill layer	E 17	~	1	1
(10259)	AV 130	Fill layer (floor stratum 7)	E 16	-	-	-
10273	AY 129	Wall	E 13	-	-	-
10279	AX 129	Collapse of wall 10212	E 15	~	1	1
(10292)	AX 129	Fill layer	E 13	~	1	1
10293	AY 129	Fill layer	E 13	~	1	1
10295	AX 129	Wall	E 13	~	-	1
(10297)	AY 130	Fill layer	E 18	\checkmark	-	1
10299	AY 130	Wall	E 22 / E 25	\checkmark	-	1
(10302)	AY 130	Fill layer	E 18	\checkmark	-	-
(10303)	AX 130	Fill layer	E 13	~	1	1
(10310)	AY 130	Fill layer	E 18	~	1	~
(10311)	AY 130	Fill layer	E 18	~	-	1
(10314)	AY 130	Fill layer	E 18	~	~	~
10315	AY 130	Collapse	E 18	~	~	
10316	AY 130	Collapse of wall 10343	E 18	1	-	1

10317	AY 130	Wall = 10343	E 18/ E 19	_	-	-
(10322)	AY 130	Fill layer	E 18	-	-	-
(10327)	AY 130	Fill layer	E 18	\checkmark	\checkmark	\checkmark
10328	AY 129	Fill layer	E 14	\checkmark	-	\checkmark
10340	AY 130	Collapse	E 18	\checkmark	\checkmark	-
10341	AY 130	Find	E 18	\checkmark	-	-
(10342)	AY 130	Fill layer	E 18	\checkmark	-	\checkmark
10343	AY 130	Wall = 10317	E 18 / E 19	-	-	-
10347	AX 130	Collapse	E 13	\checkmark	-	-
10348	AX 130	Ash	E 13	\checkmark	\checkmark	\checkmark
10350	AX 130	Wall = 10364	E 13 / E 19	\checkmark	\checkmark	\checkmark
10364	AX 130	Wall = 10350	E 13 / E 19	-	-	-
10367	AY 130	Fill layer	E 18	\checkmark	\checkmark	\checkmark
10405	AY 130	Ash	E 18	\checkmark	\checkmark	\checkmark
10406	AY 130	Collapse	E 18	\checkmark	-	-
10407	AY 130	Floor	E 18	\checkmark	\checkmark	\checkmark
10408	AY 130	Collapse	E 18	\checkmark	-	\checkmark
10409	AY 130	Collapse	E 18	-	-	-
10410	AY 130	Floor	E 18	-	-	-
10413	AY 130	Collapse	E 18	-	-	-
10414	AY 130	Collapse	E 18	\checkmark	\checkmark	-
10420	AX 129	Fill layer	E 13	\checkmark	-	\checkmark
10424	AX 129	Find	E 13	-	\checkmark	-
10429	AY 130	Pit	E 18	\checkmark	-	-
10460	AY 130	Wall	E 13 / E 19	-	-	_
10461	AY 130	Wall = 10470	E 17 / E 18	_	-	_
10469	AY 130	Collapse	E 17	✓	-	_
10470	AY 130	Wall	E 17	-	-	-
10471	AY 130	Wall fill (wall 10470)	E 17	\checkmark	\checkmark	\checkmark
10475	AY 130	Collapse	E 13	_	-	\checkmark
10479	AY 130	Fill layer	E 19	\checkmark	\checkmark	\checkmark
10543	AW 132	Wall	E 26	\checkmark	-	\checkmark
10559	AW 132	Wall	E 25 / E 26	~	\checkmark	\checkmark
10740	AW 127	"Fill layer (floor stratum 7)"	E 7	~	\checkmark	\checkmark
10756	AW 127	Fill layer	E 9	\checkmark	_	\checkmark
10757	AW 127	Fill layer	E 10	~	✓	\checkmark
10758	AW 127	Fill layer	E 8	✓	✓	✓
10765	AW 126	Pit	E 7	✓	-	\checkmark
10767	AW 127	Collapse	E 7	_	-	_
10784	AW 127	Collapse	E 7	-	-	-
10837	AX 126	"Fill layer (floor stratum 7)"	E 1	_	-	-
10839	AV 127	Fill layer	E 8	\checkmark	\checkmark	_
10845	AV 127	Fill layer	E 3	\checkmark	\checkmark	\checkmark

10051	11/10/	D:11 1	F 20	,	,	
10851	AV 126		E 20	V	V (V
10852	AX 126		EO	V (-
10853	AV 126	Floor	E 2	V		✓
108/3	AX 126	Collapse	E 6	V	V	-
10883	AX 126	Fill layer	E 6	✓ 	<i></i>	✓
10938	AX 127	Floor	E 9	∕		_
(10976)	AU 127	Fill layer	E 5	∕	∕	✓
10994	AX 127	Fill layer	E 9	\checkmark	\checkmark	-
(11002)	AU 127	Fill layer	E 5	✓	✓	\checkmark
11009	AU 126	Fill layer	E 4	✓	✓	\checkmark
11012	AY 127	Collapse	E 9	-	-	-
11014	AU 126	"Fill layer (floor stratum 7)"	E 4	-	\checkmark	-
11017	AX 127	Fill layer	E 9	\checkmark	\checkmark	\checkmark
(11086)	AV 128	Fill layer	E 11	\checkmark	\checkmark	\checkmark
(11107)	AW 129	Fill layer	E 15	✓	<i>✓</i>	\checkmark
11109	AV 129	Collapse	E 13	✓	✓	\checkmark
(11110)	AV 129	Fill layer	E 13	\checkmark	\checkmark	\checkmark
11111	AV 129	Collapse	E 23	-	-	-
11137	AV 126	Fill layer	E 4	\checkmark	-	\checkmark
11142	AV 127	Fill layer	E 5	\checkmark	\checkmark	\checkmark
(11146)	AX 129	Fill layer	E 13	\checkmark	\checkmark	\checkmark
(11152)	AX 128	Fill layer	E 12	~	-	 Image: A start of the start of
11191	AW 132	Wall = 11383	E 25	-	-	-
11211	AW 129	Fill layer	E 13	\checkmark	-	\checkmark
11212	AV 129	Fill layer	E 13	✓	\checkmark	\checkmark
(11226)	AT 126	Fill layer	E 4	<i>√</i>	\checkmark	\checkmark
11246	AU 127	Fill layer	E 4	<i>✓</i>	1	\checkmark
11262	AW 128	Collapse	E 11	_	-	-
11284	AU 127	Fill layer	E 4	✓	1	\checkmark
11303	AX 132	Wall	E 22 / 25	<i>✓</i>	_	_
11306	AX 128	Collapse	E 9	_	_	_
11308	AX 132	Tabun	E 25			\checkmark
11310	AU 127	Fill layer	E 5	<i>√</i>	 ✓ 	\checkmark
11325	AX 132	Collapse	E 20		_	_
11327	AX 132	Floor	E 25	✓		
11332	AX 128	Fill layer	E 12	✓		
11335	AY 128	Floor	E 14	_	_	_
11340	AX 132	Collapse	E 25	_	_	_
11343	AU 127	Collapse of wall 11143	E 5	_		_
11355	AX 128	Floor	E 12	✓ <i>✓</i>	✓	
11357	AX 128	Fill layer	E 13	_	✓ <i>✓</i>	\checkmark
11359	AU 126	Fill laver	E 4		 	
11360	AX 132	Collapse	E 20			
				· ·	· ·	*

11368	AX 132	Collapse	E 25	_	_	_
11369	AX 132	Collapse	E 25	\checkmark	-	\checkmark
11383	AX 132	Wall = 11191	E 25	-	-	_
11384	AX 132	Collapse	E 25	_	_	_
11392	AW 128	Collapse of wall 11391	E 13	\checkmark	\checkmark	_

Tab. 4.6 Contexts within Complex E, Stratum 6 (Source: BAI/GPIA).

4.2.3. Complex F: Residential Structure

The second complex from Area II in Square AS 132 remains unchanged. For Stratum 6, only the contents of **Room Complex F 1** (Context 11020) could be determined. In addition to a lot of Hellenistic-Roman pottery such as cooking pots, bowls, jugs/jars, a lagynos and an ointment dish, the excavation also found a large number of Early Roman pottery sherds from jugs and cooking pots from the first century BC to the first century AD and ampho-

rae from the first century AD as well as a few later finds, such as a mortarium from the second to the fourth centuries AD and casseroles from the first century BC to the third century AD. Only four finds from the Byzantine to Islamic periods were found in the context. Bones of sheep or goat (8), cattle (2) and domestic fowl (1) as well as numerous glass and stone finds, including an axe, belong to the find repertoire.

Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
11020	AS 132	Fill layer	F 1	\checkmark	\checkmark	\checkmark

Tab. 4.7 Features within Complex F, Stratum 6.

4.2.3.1. Further Contexts from Stratum 6 in Area II

Between Complexes E and F there were a large number of fill layers:

AS 126: 11269, 11309 AT 127: 10964, 10975, 10983, 11377, 11378 AS 127: 11215, 11278 AV 128: 10071 AT 128: 10625, 10627, 11462, 11463, 11461, 11043 AU 128: 11246 AU 129: 10621, 11449 AV 129: 10089 AU 130: 10620 AV 130: 11370 AT 129: 11034 AW 131: 11171, 11154, 11151, 11138, 11184 AW 132: 10611 AV 132: 11083, 10613, 10651, 11082

Most of the layers were heavily mixed with overlying layers (Strata 5 and 4), which is why a clear identification cannot be made. Among the finds, two fragments of ETS bowls and an ETS imitation from the first century BC to the first century AD stand out. In Context 10621, a stone tile TZ 110912-001 and a sickle TZ 110965-001 were found, however, this context was also heavily disturbed, as evidenced by a large amount of later pottery and two coins dating to the fourth century AD. The same applies to potter's wheel TZ 111630-001 found in Context 11034 (*Fig. 4.47*). Coins were also found in Context 11449: TZ 112682-001 (*Pl. 24.3*) and TZ 112684-001. The latter is dated to the fourth century AD, the dating of the former is unclear.

Coin TZ 110965-001 from Context 10625 (*Pl. 21.6*), which can be attributed to Herod Antipas and dates to 29–30 AD, was found in the same context as 206 fragments of mural painting. The fragments measured on average 5 cm x 5 cm and were 1.3 cm thick. In addition to monochrome, mainly white, fragments, some decorations were also found: a green-red garland on a beige background and a dark brown stripe on a black background¹³.

Despite the large dimensions of the building, only a few layers of collapse were detected:

AU 131: 11293, 11228 AT 132: 10879 AW 131: 11182, 11168, 11150 AW 132: 10553

The contexts were mainly marked by loose accumulations of stones and contained few finds. Contexts 11168, 10553, 11150 and 11182 represent the collapse of the eastern projection of Complex E.

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13 Cf. Chap. 4.3.7.
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Context	Square	Description/Interpretation	Complex	Artefacts		Ecofacts
				Pottery	Others	
(10071)	AV 128	Fill layer	E / F	~	1	~
(10089)	AV 129	Fill layer	(E 23)	_	1	-
10553	AW 132	Collapse of wall 10559	E / F	_	-	-
10611	AW 132	Fill layer	E / F	~	1	1
10613	AV 132	Fill layer	E / F	_	-	-
10620	AU 130	Fill layer	E / F	~	-	~
(10621)	AU 129	Fill layer	E / F	~	1	~
10625	AT 128	Fill layer	E / F	~	1	~
(10627)	AT 128	Fill layer	E / F	~	1	1
10651	"AV 133 / AW 133"	Fill layer	E / F	~	1	-
10879	AT 123	Collapse	E / F	-	-	-
(10964)	AT 127	Fill layer	E / F	-	-	-
(10975)	AT 127	Fill layer	E / F	<i>√</i>	1	1
(10983)	AT 127	Fill layer	E / F	1	1	1
(11034)	AT 129	Fill layer	E / F	1	1	1
(11043)	AT 128	Fill layer	E / F	1	1	1
(11082)	AV 132	Fill layer	E / F	\checkmark	1	1
11083	AV 132	Fill layer	E / F	✓	1	_
11138	AW 131	Fill layer	E / F	 ✓ 	1	✓
11150	AW 131	Collapse	E / F	_	_	_
11151	AW 131	Fill layer	E / F	_	-	_
11154	AW 131	Fill layer	E / F	 ✓ 	1	1
11168	AW 131	Collapse	E / F	_	1	_
11171	AW 131	Fill layer	E / F		1	√
11182	AW 131	Collapse	E / F	 ✓ 	1	1
11184	AW 131	Fill layer	E / F	\checkmark	-	1
11215	AS 127	Fill layer	E / F	_	_	_
11228	AU 131	Collapse	E / F	✓	-	_
11246	AU 127	Fill layer	E / F	1	1	1
11269	AS 126	Fill layer	E / F	_	-	_
(11278)	AS 127	Fill layer	E / F	1	1	1
11293	AU 131	Fill layer and collapse	E / F	✓	1	 ✓
11309	AS 126	Fill layer	E / F	_	-	_
11370	AV 130	Fill layer	E / F	 ✓ 	1	1
(11377)	AT 127	Fill layer	E / F	_	1	-
(11378)	AT 127	Fill layer	E / F	~	~	~
11449	AU 130	Fill layer	E / F	~	~	~
(11461)	AT 128	Fill layer	E/F	~	~	~
(11462)	AT 128	Fill layer	E / F	_	-	-
(11463)	AT 128	Fill layer	E / F	\checkmark	_	~

Tab. 4.8 Additional contexts in Area II, Stratum 6.

4.2.4. Geomagnetic Surveys

In 2014, geomagnetic surveys were carried out in three areas (Area A, B and C) at Tall Zirā'a (*Fig. 4.40*)¹⁴. In an initial evaluation, an attempt was made to link the results with the contexts from Strata 4 and 3, and it became clear that the assumed course of the walls—based to their orientation—did not match the excavated walls in these strata¹⁵.



Fig. 4.40 Geomagnetic plan (detail) together with the plans of Area I (Complex D) and II (Complex E) Stratum 6. For illustration purposes, in Area II the overlying structures from Strata 4 and 3 are also included (Source: BAI/GPIA, K. Rassmann – S. Reiter).

Now, however, with the latest results from Strata 7 and 6, it became clear that some of these fit very well with the picture that has been created. Several possibilities for these complexes can be clearly derived from the resulting geomagnetic plan:

- A large part of Complex D may still exist in the western part of Area A (under the walkway between Complex D and E). One or more buildings (or parts thereof) with rooms arranged in rows would be possible. The structures would almost reach Complex E. Due to the continuous use of the building, the walls visible in the geomagnetic survey may also belong to one of the overlying strata. Nevertheless, because of this very continuity, they give an indication of the appearance of the building in Strata 7 and 6.
- 2. Complex (Room) D 6 could be both part of a long building (Complex D) or even part of the building structures found in the north-west of Area A. The same caveats apply here as for point 1.
- No further assertions can be made about Complex E.
- 4. Complex F in Area II can be correlated with the structures in the south and east of Area A. The only aspect that matches the geomagnetic plan in Complex F is the orientation of the walls in Strata 7 and 6. According to this, Complex F was probably a very extensive complex and forms a U-shaped settlement structure with Complexes D and E.
- 5. Area B and Area C do not allow any conclusions to be drawn for the strata treated here.

14 Rassmann - Reiter 2017, 193 Fig. 3.59.

15 Rassmann - Reiter 2017, 195.

4.3. Evaluation of Finds from Strata 7 and 6

A separation of the finds from Strata 7 and 6 was almost impossible, which is why the individual find categories are discussed collectively and only trends—such as new types or increased occurrences—are highlighted. The two areas and strata are compared as well as possible, but such comparison of the finds to this end has crucial shortcomings: the quantity of finds differs greatly in the two strata, which can be explained by the fact that Stratum 6 also includes backfill and collapse layers that are usually richer in finds. Though this is particularly applicable to pottery, to a degree it holds true for all other types of finds. Reconstruction phases were

4.3.1. Pottery

To evaluate the entire collection of pottery and to create repertoires for the strata, attention must also be paid to those pieces that can be dated to the Roman period but were found outside of complexes or in fill layers of other strata¹⁶. This is in addition to the pottery finds already mentioned in the stratigraphic description within the complexes. The allocation to the context of the farmstead and its outbuildings (Complexes A-D in Area I and Complexes E-F in Area II) is unambiguous in this case, since no other features of this period have been recorded at Tall Zirā'a so far, and the excavation of Complex E revealed the main building of the farmstead. The following is a summary of the results of F. Kenkel on pottery from the Early Roman and Middle Roman periods¹⁷, expanded and evaluated according to the latest findings.

4.3.1.1. Distribution of Pottery Finds

Due to the reasons mentioned above, in order to obtain a meaningful picture, it makes sense to consider both strata together with regards to the distribution of pottery (*Figs. 4.41* and *4.42*) within the buildings. In Complex A, only a few features contained any pottery finds at all, which were, moreover, strongly intermixed with Iron Age pottery that can be attributed to the particularly dense sequence

- 16 For general notes on pottery from Tall Zirā'a, see *Chap. 2.3.1.*
- 17 Kenkel 2012; Kenkel 2020.

only detectable in Complex D in Area I and in the eastern part of Complex E in Area II and were otherwise occasionally present in the form of newly laid floors. Even layers that were identified between two floors contained, in part, highly mixed material from the Hellenistic to the Roman period or beyond. The fill of Stratum 6, in turn, contained archaeological material from the overlying strata. The emergence of new types—if recognisable—or of particularly striking finds has already been explicitly mentioned in the description of the features, but will be revisited in the following section and also evaluated with regard to a more precise dating.

of features at this site. Thus, only eight sherds from the southern channel area could be considered for statistical purposes.

Likewise, only a few sherds were found in Complexes C, B, and F. These sections are too small and too disturbed to allow for clear delineations of features. Thus, the analysis of the distribution is mainly limited to relevant features that are, like in Stratum 8, the floors, fill layers between floors, fills of rooms and installations. Room E 6 yielded only two sherds, which is why the statistics here are somewhat confusing. The same applies to Room E 20, where only four sherds were found. These two rooms are therefore not really informative.

First of all, with regard to the distribution of pottery in general, it can be stated that in Complexes D and E the proportion of amphorae and cooking utensils is particularly high. Amphorae did not make up the largest proportion of pottery in only a few rooms (B 1, D 4 Stratum 6, D 5/D 6 Stratum 7 a, E 3, E 7, E 10, E 20, E 25 and F 1Stratum 6). Among the cookware, it is noticeable that Complex D, in contrast to Complex E, had a large number of casseroles. In Complex E, sherds of this pottery type were found only in Rooms E 2, E 5, E 9, E 11, E 12, E 13, E 18 and E 25, with only Room E 5 having a larger number (17 sherds). In Complex D, in turn, casserole sherds were found in all phases and rooms. Room E 5 also contained an unusual amount of cookware (36), although here, as in other rooms, a large number of amphorae (34) was also found.

The local-regional tableware was found both in Areas I and II, but was clearly more abundant



Fig. 4.41 Strata 7 and 6, Area I: distribution of pottery (Source: BAI/GPIA).

in Complex E, where it was distributed more frequently in the rooms to the north and east of the farmstead.

Vessels for personal use were found in Rooms E 2, E 7, E 8, E 9, E 11, E 13, E 15, E 18 as well as in Room B 1 and throughout Complex D. Imports were also found in all rooms of Complex D, whereas they were only found in Rooms E 9, E 11 and E 19 of the farmstead.

Particularly rich in finds were Rooms D 4 (Stratum 6), D 5/D 6 (Stratum 7 a) and E 5, E 9, E 11, E 12 and E 13 (Stratum 6). These include, except for Room E 3, the presumed courtyards of the farmstead (E 13 and E 9) and the central work areas (D 5/D 6 and E 5).

The particular importance of Complex D can again be emphasized on the basis of the pottery distribution. Not only the quantity of pottery is striking here, but also the finds that can be regarded as of higher quality, such as those for personal use, terracottas and imports. Within Complex E, the richness of finds is especially noticeable in the central space E 13 and the western projection, where the more luxurious pottery of Complex D was found.

4.3.1.2. Repertoire of Shapes

The most informative group of pottery for the Early Roman period is formed by the **imports**. Here they consist predominantly of Eastern Sigillata A (ESA)¹⁸. Only one piece of Cypriot Eastern

18 Classification according to F. Kenkel: ETS 1 dated to 180 BC–70 AD: TZ 005843-009, TZ 020797-001, TZ 006790-097, TZ 101586-020, TZ 020042-008, TZ 101515-008, TZ 005948-052, TZ 101466-012; ETS 7 dated to first half of first century BC: TZ 006621-084, TZ 100642-033; ETS 8 dated to 125 BC–50 AD: TZ 006072-002, TZ 006621-075, TZ 101358-012, TZ 001035-005, TZ 020261-001, TZ 020593-001, TZ 100359-019, TZ 100598-022, TZ 101127-001, TZ 002930-007, TZ 006678-036, TZ 020080-074, TZ 100278-037, TZ 101093-011, TZ 101133-016, TZ 101302-061, TZ 101353-013, TZ 101419-005, TZ 002063-121, TZ 004147-003, TZ 004305-022, TZ 004907-066, TZ



Fig. 4.42 Strata 7 and 6, Area II: distribution of pottery (Source: BAI/GPIA).

005688-028, TZ 005715-014, TZ 005878-003, TZ 020091-010, TZ 020342-022, TZ 100561-004, TZ 101030-003, TZ 101031-011, TZ 101126-026, TZ 101133-015, TZ 101305-003, TZ 020508-023, TZ 101556-050;

ETS 9 dated to 80 BC–50 AD: TZ 020376-004, TZ 005197-008, TZ 003964-031, TZ 004561-003, TZ 101410-006, TZ 101510-001;

ETS 10 dated to 80 BC–50 AD: TZ 100659-013, TZ 004954-001, TZ 005843-006, TZ 002789-007, TZ 100545-001, TZ 002775-020, TZ 004224-007, TZ 005806-002, TZ 100077-015, TZ 100325-007, TZ 005815-018, TZ 020376-009, TZ 100525-014, TZ 100650-015, TZ 101358-013, TZ 101398-013, TZ 003211-003, TZ 006222-020, TZ 100027-001, TZ 100027-002, TZ 100027-003;

ETS 11 dated to 40 BC–50 AD: TZ 006736-051, TZ 101491-014, TZ 005882-008, TZ 005916-011, TZ 006736-041, TZ 100059-004, TZ 100803-025, TZ 100278-043, TZ 101252-002;

ETS 12 dated to 30 BC-70 AD: TZ 004561-001, TZ 100650-014, TZ 100927-001, TZ 004121-025, TZ 004326-001, TZ 004722-011, TZ 006825-040, TZ 101178-007, TZ 100008-004, TZ 100048-008, TZ 101398-012;

ETS 13 dated to 30 BC-70/100 AD: TZ 005815-005, TZ 003149-002, TZ 003183-011, TZ 005805-001, TZ 006825-027, TZ 006869-005, TZ 020042-009, TZ 020042-014, TZ 020093-023, TZ 020242-006, TZ 101228-001);

ETS 14 dated to 40 AD-70 AD: TZ 006790-099, TZ 101572-013;

ETS 15 dated to late first century BC–Augustan-Tiberian: TZ 100583-002, TZ 0100213-007, TZ 101093-012, TZ 0101157-007;

ETS 16 dated to 50-100 AD: TZ 020320-001, TZ 006825-004, TZ 006825-013,

ETS 18 dated to 10 BC-30 AD or second half of first century-early second century AD: TZ 006107-002, TZ 020369-010;

In addition, there are forms with a very broad dating:

ETS 3 dated to 130 BC–180 AD: TZ 002823-057, TZ 004305-002, TZ 004305-014, TZ 006837-011, TZ 101603-004, TZ 101612-010;

ETS 5 dated to 125 BC–100 AD: TZ 003547-002, TZ 020042-013, TZ 100403-003.



Fig. 4.43 Bowl TZ 003149-002; Stratum 3 b, a, Square AG 115, Context 1659: according to F. Kenkel: ETS 13.2 (Source: BAI/GPIA).

Sigillata D (ESD)19 (Pl. 16.4) and one piece of Terra Sigillata (TS)²⁰ (Pl. 16.5) were found, the latter probably from the western provinces, possibly from a workshop in southern Gaul. The ESA represents fine tableware for daily use in the Eastern Mediterranean. A total of 278 pieces of this type of pottery were found at Tall Zirā'a—151 of them diagnostic sherds-which date predominantly from the Early Roman period. The repertoire of forms consists exclusively of plates (Pl. 16.1) and bowls (*Pl. 16.2*), in addition there are some jar fragments from Area II (Pl. 16.3). Only 7.7 % of the ESA date from the Late Hellenistic period-from the second century BC to the middle of the first century BC. Examples from the period between 50 AD and the second century AD are even rarer. The clear majority are objects from the mid-first century BC to mid-first century AD (Fig. 4.43). The body sherd of Terra Sigillata TZ 100048-007 dates from the second half of the first century AD and thus already post-dates the main phase of ESA use at Tall Zirā'a (Fig. 4.44). It is clear that there was an increase in imports from the Hellenistic to the Roman period²¹.

- 19 These are two fragments of a plate TZ 020376-004: Kenkel 2012, 77, ETS 9.1. The find comes from Stratum 7 c from a fill layer within Complex D.
- 20 TZ 100048-007 probably belongs to type Dragendorf 29 and dates to the Claudian-Neronian period. It shows a burning altar as well as the base of an arm, which probably indicates a scene of incense offering: Kenkel 2012, 81 f., TS 1. The find came from Stratum 4 c, b, a, also Stratum 3 b, a from a fill layer of a pavement.



Fig. 4.44 Terra Sigillata TZ 100048-007; Stratum 4 c, b, a, also Stratum 3 b, a, Square AW 128, Context 10041: according to F. Kenkel: TS 1; pictorial motif recognisable: bowl with rising smoke and relief band of circles and carvings as well as an arm at the left edge (Source: BAI/GPIA).

Complementing the imports is the local-regional tableware, which is composed of 969 diagnostic sherds of plates/dishes, bowls (Pl. 17.1) and drinking vessels (Pl. 17.2)²². At the end of the Hellenistic period and the beginning of the Roman era, the share of tableware doubled to 54.3 %, while small bowls declined in favour of drinking vessels. The number of jars also increased to 178 objects, with 37 examples from the Hellenistic period (*Pl. 17.3*)²³. In addition, in the first century AD, ETS imitations appeared for the first time, albeit on a small scale with a total of 27 specimens (Pl. 16.6)²⁴ and were found in increased numbers (10) in Stratum 6. The dating of this type of pottery does not go beyond 70 AD. Local-regional tableware also reaches its peak at Tall Zirā'a in the Early Roman period, then peters out in the first half of the second century AD²⁵.

Regarding **cooking vessels**, as was the case in the Hellenistic period, there were a large number of cooking pots (*Pl. 17.6*) in addition to the casseroles (*Pl. 17.4*), especially of the "Galilean bowl" type

- 21 Kenkel 2012, 91.
- 22 Kenkel 2012, 146.
- 23 Kenkel 2012, 147.
- 24 Kenkel 2012, 82, 147. The sherds were distributed across the strata as follows: Strata 14 to 10: 3 pieces; Stratum 8: 2 pieces; Stratum 7: 3 pieces; Stratum 6: 10 pieces; Stratum 5: 1 piece; Stratum 4: 1 piece; Stratum 3: 3 pieces; Stratum 0: 4 pieces.
- 25 Kenkel 2012, 148 f.

(*Pl. 17.5*), which had been in use since the second century BC²⁶. For the features from Stratum 6, it was determined that the cooking pot forms Kt16.2²⁷ and Kt16.3²⁸ were especially frequent; the latter form in particular was found in greater numbers in Stratum 6. The dating of cooking pot types is mainly restricted to the first century BC and the first century AD. They first appeared in Stratum 7 a. All finds of the type in earlier strata (13–7) were found only within backfill layers. For both casseroles and cooking pots, however, an increase in diversity can only be detected from the latter half of the second century AD onwards, and thus after the time period discussed here. In the Byzantine period they are rarely among the pottery finds²⁹.

Even in the Roman period **everyday vessels** are dominated by amphorae. The intended use of the Early Roman amphora types was proven to be the transport and storage of wine, although others for fish sauces and water were found as well³⁰.

By developing the stratigraphy, it was possible to highlight that amphora type Am21.2 (*Pl. 17.7*), which dates to the first century AD, is new to the pottery repertoire in Stratum 7 a³¹. There it occurred exclusively within Complex D (only 14 sherds). In Stratum 6 c alone, 26 amphora type Am21.2 sherds were recovered within the different foundation trenches of the walls for Complex D. The type became increasingly rare in Stratum 6 b (16) and 6 a (8). This type could originate from Egypt, Antioch or Cyprus³². Type Am11 (*Pl. 17.7*), which also dates from the first century AD, was also identified as an innovation in the two Roman Strata (7 c, more likely Stratum 7 a)³³.

- 27 108 sherds of this cooking pot type were identified at Tall Zirā'a. The sherds were distributed over the strata as follows: Strata 13-10: 15 pieces; Stratum 8: 8 pieces; Stratum 7 a: 7 pieces; Stratum 6: 16 pieces; Stratum 5: 8 pieces; Stratum 4: 11 pieces; Stratum 3: 18 pieces; Stratum 2: 1 piece; Stratum 1: 14 pieces; Stratum 0: 10 pieces. The sherds were evenly distributed over both areas.
- 83 sherds of this cooking pot type were identified at Tall Zirā'a. The sherds a we distributed across the strata as follows: Stratum 10: 21 pieces; Stratum 8: 2 pieces; Stratum 7: 8 pieces; Stratum 6: 24 pieces; Stratum 5: 4 pieces; Stratum 4: 6 pieces; Stratum 3: 7 pieces; Stratum 2: 0 pieces; Stratum 1: 3 pieces; Stratum 0: 8 pieces. 70 % of the finds were from Area I, 30 % from Area II.
- 29 Kenkel 2012, 188.
- 30 Kenkel 2012, 216 f. 245.

Jugs and jars (*Pl. 18.1*) form the second largest pottery group. Bowls, kraters, sieve vessels and phitoi (*Pl. 18.2*) appear as well. Everyday tableware shows the greatest variety and quantity in this period and increased until the second century AD, before these types also noticeably declined³⁴.

Vessels for personal use include containers for ointments and oils, such as amphoriskoi (*Pl. 18.3*), unguentaria (*Pl. 18.4*), small single-handled jars (*Pl. 18.5*), and ointment pots (*Pl. 18.6*). All vessels found date from the Hellenistic-Early Roman period. Compared to the Hellenistic period, unguentaria were found significantly more often. Altogether, however, there are too few examples to be able to make meaningful statements. Type U7.1 was found exclusively in Stratum 6, although there were only five examples³⁵.

Roman **oil lamps** are represented by 191 specimens and make up the bulk of all oil lamps found at Tall Zirā'a, with Herodian lamps in turn being most prominent (44 finds) (*Fig. 4.45*). This type of lamp was in circulation from 37 BC to the first half of the second century AD; an exact dating is not yet possible (*Pl. 19.1*). With the beginning of the Roman period, besides wheel-thrown lamps (*Pl. 19.2*), the mould-made lamps (*Pl. 19.3*) with floral and geometric patterns appear (*Fig. 4.46*).

This category also shows a downward trend after the Early Roman period. There are no Roman picture lamps at Tall Zirāʿa, but this may be due to their presumably fragmentary state of preservation³⁶.

The last and smallest group is represented by the **terracottas**. Nine objects can be assigned to the

- 31 117 sherds of this type were identified at Tall Zirā'a. The sherds were distributed over the strata as follows: Strata 12 to 10 (all from pits): 10 pieces; Stratum 8 (backfill): 1 piece; Stratum 7 c (in collapse): 2 pieces; Stratum 7 a: 14 pieces; Stratum 6: 51 pieces; Strata 5-1: 39 pieces. Only three finds within Strata 7 and 6 were from Area II.
- 32 Kenkel 2012, 226.
- 45 sherds of this type were identified at Tall Zirā'a. The sherds were distributed over the strata as follows: Strata 14/11: 2 pieces; Stratum 7: 5 pieces; Stratum 6: 7 pieces; Stratum 5: 2 pieces; Stratum 4: 6 pieces; Stratum 3: 15 pieces; Stratum 1: 4 pieces; Stratum 0: 4 pieces.
- 34 Kenkel 2012, 244 f.
- 35 Two examples come from back layers of Stratum 10, directly underneath the Early Roman walls.
- 36 Kenkel 2012, 289.

²⁶ Kenkel 2012, 188.



Fig. 4.45 Herodian oil lamp TZ 101204-033; Stratum 5, Square AT 132, Context 10927: according to F. Kenkel: La 39 (Source: BAI/GPIA).

Roman period. F. Kenkel³⁷ and A. Gropp³⁸, were not able to place these objects in their stratigraphic context, which, however, is at least in part possible now. Three examples could be reliably identified within Stratum 6. The first fragment TZ 006819-016 (Pl. 20.1) was found in fill 4789 of Room D 3 (Stratum 6 a). Another terracotta fragment TZ 006790-001 (Pl. 20.2) was found on floor 4770 in Room D 4 (Stratum 6 b). A third TZ 006678-041 (Pl. 20.3) was found in fill 4283 of the same room (Stratum 6 a). In addition, terracotta fragment TZ 101402-002 (Pl. 20.4), which can probably be assigned to the Roman period, was found in a fill layer in Area II, but is only fragmentarily preserved. The two fragments from Room D 4 were attributed to the mother goddess Isis by F. Kenkel, the other pieces are too small for an identification. Nevertheless, a household cult can be assumed for Complex D on the basis of these findings. All other fragments were recovered in Strata 4 and 3. However, the fragment of a dolphin TZ 005930-001 (Pl. 20.5), a part of a horned altar TZ 101180-005 (Pl. 20.6) and a terracotta base TZ 101118-018 (Pl. 20.7) clearly refer to the Hellenistic-Early Roman period. The other fragments TZ 100607-005 (Pl. 20.8) and TZ 101070-022 probably belong to the same period, but due to their fragmentary condition it was not possible to be more precise³⁹. The three stratifiable pieces suggest that the other finds can likely be assigned to the household cult of the Roman period. Two of the unidentified fragments were found in the immediate vicinity. One came from a wall of Complex D's successor building, another from the fill layer in the same structure. They most likely entered the upper strata during the construction of the new house.



Fig. 4.46 Mould-made lamp TZ 101658-001; Strata 4 to 2, Square AT 132, Context 11390: according to F. Kenkel: La 58; egg and dart decoration on shoulder; base with maple leaf-like decoration (Source: BAI/GPIA).

4.3.1.3. Pottery Wheels (Bearings) and Handmade Pottery

The bearings of potter's wheels found in Stratum 6 are significant. Both objects come from Area II. TZ 111630-001 was found in a fill layer outside the farmstead, whereas TZ 112398-001 was excavated in a fill laver of Room E 5. The former seems to have been initially intended as a bearing and eventually converted to a support (Fig. 4.47)⁴⁰. Additionally, some pottery found within Complex E in Courtyard E 13 appears to have been locally made (Fig. 4.48) and can be characterized as misfired. The term can be used to describe pottery "[...] during shaping, drying and firing [...] of which the quality may be impaired, or, in the worst case, the products may be totally lost"⁴¹. This is indicated, for example, by small air bubbles, which already occur during the preparation of the clay, mainly due to insufficient kneading and external inclusions, which then burn in the kiln. Usually, such bubbles or irregularities can be seen before the firing process and can be repaired accordingly, provided a trained eve and a certain amount of experience are involved. Similarly, long air pockets (fire cracks), which seem to divide the sides of the pottery were also found.

- 37 Kenkel 2012, esp. 301–307.
- 38 Gropp 2013, 739-743.
- 39 Kenkel 2012, 300–307.
- 40 Reconstruction of potter's wheels: Soennecken 2017, fig. 4.1.259, 4.1.260.
- 41 Hupka 2011, 87.



- Fig. 4.47 Bearing of a potter's wheel TZ 111630-001; Strata 7 and 6 (between Complex E and F), Square AT 129, Context 11034.; D 15 cm; chipped on two sides; top and bottom flat; on upper side a 5 depression cm wide and 3.5 cm deep; on lower side a peg (Source: BAI/GPIA).
- Fig. 4.48 Misfired specimens; Room E 13, Stratum 7 and 6, Square AW 129. No. 1: TZ 101321-045 - air inclusions and slanted shape; No. 2: TZ 101321-010/ 048/ 063 - slanted shape; Nos. 3 and 4: TZ 101309-056 and TZ 101295-016 - slanted shape and improperly finished bottom (Source: BAI/GPIA).



In this case, the clay was kneaded properly, but then laid flat again and folded over so that it did not have sufficient cohesion and the two superimposed layers separated from each other during the firing process⁴². At the same time, several bases show unclean finishes, some bowls even have a very slanted shape.

Overall, the sherds as well as the two potter's wheels can be interpreted as an indication that pottery was produced on a smaller scale. At the same time, the appearance of these ceramics indicates that an inexperienced inhabitant of the tall may have been at work. At least it seems improbable that such pieces of pottery would have been sold

42 Working with clay and different reactions of various materials and clay compositions to the firing process was carried out by the author in an experiment in Tonstudio Mainz in a Nabertherm top-loading kiln. After a drying time of one week, the pottery (simple bowls) was fired at 960 degrees. The temperature of the kiln rose continuously by 100-150 or bought on a market⁴³. Alongside weaving (loom, Complex D), sewing (needles), various cooking-related activities (hand-driven mills, mortars etc.) and possibly fishing (fishing net weights), these finds attest to another craft.

4.3.1.4. Summary

A representative pottery repertoire can be identified for the Early Roman phase of Tall Zirā'a. The tableware was mainly composed of ESA, but was supplemented by TS and ESD. It seems that in the Early Roman period almost all the tableware (es-

degrees per hour and remained at maximum temperature for 20 minutes before the slow cooling process began. The total firing process lasted approx. 15 hours.

43 Hupka does not exclude the possibility that such "second choice" goods were not also available commercially: Hupka 2011, 87.





pecially plates, bowls and jugs) was made up of imported items⁴⁴. In addition, imitations of local-regional wares were used, which is proven for the first time in the first century AD. The tableware was supplemented by small bowls, cups, table amphorae, small jugs and jars. In everyday life, common forms of cooking pots, cooking jugs and casseroles, especially of the 'Galilean bowls' type, were used. In addition to the familiar forms of bowls, jugs/jars, amphorae and pithoi from the Hellenistic period, there were also kraters, unguentaria and small single-handled mugs. Among the oil lamps, the Herodian types are the main ones to be found.

Sites exhibiting small jars were often located near Greek-Phoenician trade routes and often founded in the Herodian period. Moreover, these small jars are mostly absent from Orthodox Jewish sites⁴⁵. This conclusion fits in well with the picture presented by Tall Zirā'a in the Roman period, when it was part of an extensive trade network and, judging by the pottery, had a population peak in Strata 7 and 6, visibly reflected in the other find categories as well. A subsequent settlement (Stratum 5) with a less prestigious character can also be determined on the basis of the pottery. For the period from the first century BC to the first century AD a clear increase in pottery forms and quality is noted. The connection drawn by F. Kenkel to the flourishing city of Gadara seems logical.

The tableware—both imports and regional wares—indicates that the inhabitants of Tall Zirā'a adopted Greek and Roman customs. The terracotta in the shape of the mother goddess Isis suggest a cultural connection with Hellenistic Greece and Egypt. The dolphin as a sign of Aphrodite is attributable to Roman influence⁴⁶ and can be traced back to a long Hellenistic tradition. Furthermore, a kiln was possibly present in the vicinity and therefore the additional demand for simple pottery by the inhabitants of the tall was covered by private production.

After the middle of the second century AD at the latest, the pottery repertoire changed noticeably (Fig. 4.49), but there is no evidence of an abandonment of the settlement. Rather, it appears that after the abandonment of the farmstead and its outbuildings-and a subsequent short, perhaps initially unoccupied period—a new settlement or repurposing took place in short order, which, however, seems to have been less extensive. This can be assumed from the lack of ceramic tableware and pottery for personal use. The lack of tableware is replaced with cooking and everyday vessels. Oil lamps continued to appear, but they were no longer handmade, but produced in moulds, although without the pictorial motifs typical for the period⁴⁷. With regard to the period up to the third century AD, it is possible that the settlement was only inhabited on a seasonal basis, that it consisted of wood, or that the settlement area was relocated to another, as yet unexplored part of the tall.

The attempt to separate Strata 7 and 6 and to establish different pottery types and dating criteria was only partially successful. Although it was, indeed, possible to identify some forms that occur more frequently in Stratum 6, the attempt faltered from the outset due to the different number of finds and the fact that there were, in fact, hardly any undisturbed features. Thus, the conclusions drawn by F. Kenkel are still valid.

- 44 Kenkel 2012, 82. 148.
- 45 Kenkel 2012, 258; Fortner 2008, 33.
- 46 Kenkel 2012, 306 f.
- 47 Kenkel 2012, 316

4.3.2. Metal Finds

The metal finds are generally difficult to date and the examples listed here are to be seen as representatives of objects used at Tall Zirā'a in the Early Roman period, even if some of them were found in other strata. A total of 179 metal finds were found within Strata 7 and 6, of which 53 were nails⁴⁸ and 25 coins⁴⁹. Thirty-seven finds remain unidentified due to their poor state of preservation. The remaining 64 finds are evaluated below and supplemented by those that can be assumed to have occurred in the Roman period⁵⁰.



Fig. 4.50 Stratum 7: distribution of metal finds in Areas I and II (Source: BAI/GPIA).

48 Cf. Chap. 2.3.2.3.

49 Cf. Chap. 4.3.3.

50 For general comments on metal finds, see Chap. 2.3.2.



Fig. 4.51 Stratum 6: distribution of metal finds in Areas I and II (Source: BAI/GPIA).

4.3.2.1. Distribution of Metal Finds

Looking at the distribution of all metal finds within Areas I and II in Strata 7 and 6, it becomes clear that, with few exceptions, they originated from Complexes A, D and E, with the clear majority scattered across Complex D (Rooms D 3 and D 4) (Figs. 4.50 and 4.51). What is striking is that in Stratum 7 the metal finds were made almost exclusively in Area I, only one coin and one nail came from Area II. The concentration of the finds is also remarkable: 6 out of 23 (26 %) were found in Room D 3 of Stratum 7, which was already singled out as the main room in the evaluation of the complex due to the tabun and the brick oven as well as the abundance of finds. The majority of the finds in Stratum 6 were also found in this room. Within Complex D, only items of personal use were found, including bracelets, cosmetic spatulas and parts of cosmetic utensils that could not be further specified. The large number of finds in Area I is rather surprising, as the majority

of finds would have been expected to come from Complex E. Qualitatively, there are no discernible differences between the complexes.

In Area II, the metal finds from Stratum 6 testify to a possible separation between a private area and a work area: the objects of personal use were found exclusively in the eastern part of the building, whereas tools were found only in postulated cooking and working areas in the western part of the building.

4.3.2.2. Repertoire of Shapes

In Stratum 7, objects of personal use include a finger ring TZ 015302-001 (*Fig. 4.52*), which, due to its small size, could have been worn by a child or adorned the upper part of an adult's finger⁵¹. The find was made in Room D 3 in Context 5270 and

51 Hoss 2020a, 395. 406; on ring sizes: Furger 1990, 49–51.



Fig. 4.52 Finger ring TZ 015302-001; Stratum 7 b, Context 5270; round-barred ring with bulge (?) on top; bronze/copper (Source: BAI/GPIA).



Fig. 4.54 Garment pin TZ 014299-001001; Stratum 7, Context 4274; bronze/copper (Source: BAI/GPIA).

lay under the new floor of Stratum 7 a. According to S. Hoss, this shape occurs more frequently in the Byzantine period and has been found in ' $\bar{E}n$ Boqeq, among other places⁵².

Personal items also include a metal bead TZ 012513-001 (*Fig. 4.53*), which was probably used as a pendant for an earring or necklace. The find was recovered from Roman pit 3410. A simple garment pin TZ 014299-001 was also found (*Fig. 4.54*).

Cosmetic utensils were also found. Tweezers have been known since Augustan times and were also used on the tall, as TZ 111384-001 attests (*Fig. 4.55*)⁵³. No tweezers were found within the Roman strata, the find mentioned here comes from a fill layer of Strata 5/4 in Area II. However, a Roman find from nearby Bēthsaida also proves their earlier use in the region⁵⁴. The use of spatulas for cosmetic or medicinal purposes is confirmed by TZ 017252-001 (*Fig. 4.56*), which was recovered in Room D 4 in Stratum 7 b⁵⁵. Comparative specimens from Bēthsaida are also available for this item⁵⁶.



Fig. 4.53 Bead / pendant TZ 012513-001; Stratum 7, Context 3410; bronze/copper (Source: BAI/GPIA).



Fig. 4.55 Tweezers TZ 111384-001001; Strata 5 and 4c, Context 10733; bronze/copper (Source: BAI/GPIA).



Fig. 4.56 Spatula TZ 017252-001; Stratum 7 b, Context 5187; bronze (Source: BAI/GPIA).

- 52 Gichon 1993a, 434 App. 60, No. 17.
- 53 Hoss 2020a, 396, 408, Fig. 3.16.
- 54 Fortner 2008, 68 App. 82, No. 1349.
- 55 Hoss 2020a, 397. 410.
- 56 Fortner 2008, 68, App. 82, No. 1435–1438.



Fig. 4.57 Latch-lifter key TZ 015269-001; Stratum 7 a, Context 5113; with ring handle and right-angled protruding bit; bit largely broken off; iron (Source: BAI/GPIA).



Fig. 4.59 Hook TZ 017304-001; Stratum 7 a, Feature 5522; bronze/copper (Source: BAI/GPIA).



Fig. 4.61 Fishing net weight TZ 017258-001; Stratum 7 c, Context 5189; elongated lead sheet folded over lengthwise; lead (Source: BAI/GPIA).

Items relating to buildings and furnishings include latch-lifter key TZ 015269-001 (*Fig. 4.57*), which was found in fill layer 5113 in Room D 3, under the reconstruction from Stratum 6^{57} . The type can be assigned to the so-called elbow keys. A whole set of keys of this type was preserved in the so-called Cave of Letters at the Dead Sea from the



Fig. 4.58 Fitting TZ 017255-001; Stratum 7 c, Context 5189; angle-shaped bronze fitting with corroded iron nail on the inside; bronze (Source: BAI/GPIA).



Fig. 4.60 Knife blade TZ 015373-001; Stratum 7 a, Context 5113; iron (Source: BAI/GPIA).

time of the Bar-Kokhba Revolt⁵⁸, but, the partially visible ornamentation on those was not found on the example from Tall Zirā[°]a⁵⁹.

Remains of door and furniture fittings were also found and were in use in the Early Roman period, as evidenced by find TZ 017255-001, which possibly belonged to a small box (*Fig. 4.58*)⁶⁰. This was found on a preserved portion of the floor of Room D 3.

A simple hook TZ 017304-001 was also part of the inventory (*Fig. 4.59*), although this find originated from a pit.

Various tools also came from Stratum 7, including two knife blades such as TZ 015373-001 (*Fig. 4.60*).

A very special find is a fishing net weight TZ 017258-001 (*Fig. 4.61*). Just five such finds have been made at Tall Zirā'a. The object was used for fishing in shallow waters. There are numerous

- 57 Hoss 2020a, 397. 413; Fortner 2008, 70 f. App. 86, No. 1461.
- 58 Yadin 1963, 94-100, Fig. 34-37; Fortner 2008, 71.
- 59 The object was kindly restored by Naif Zaban within the scope of the ACOR Conservation Cooperative (ACC).



Fig. 4.62 Elbow brooch TZ 111559-001; Stratum 6, Context 11017; bronze (Source: BAI/GPIA).



Fig. 4.64 Mirror fragment TZ 110531-001; Stratum 6; Context 10310; bronze/copper (Source: BAI/GPIA).

comparisons from Bēthsaida⁶¹. The Jordan River is about 8 km away from Tall Zirā'a as the crow flies, Bēt Yeraḥ on the southern shore of the Sea of Galilee 13 km, both waters are documented to have had extensive fishing activities⁶². It can thus be assumed that the inhabitants of the tall supplemented their food supply by fishing.

Forty-eight metal finds were made within Stratum 6 and thus more than twice as many as were made in Stratum 7. However, too much weight should not be attached to this number, since Stratum 6 also includes fill and collapse layers and therefore contains a larger number of features, as well as contexts with a greater number of finds (fill layers).

Among the objects of personal use was elbow brooch TZ 111559-001 (*Fig. 4.62*). This type was in use from Iron Age II until the Hellenistic-Roman period and was worn by both men and women⁶³. The brooches are decoratively wrapped with bronze wire at the ends of the loops. Similar objects from a Hellenistic-Roman context are known from Samareia-Sabasțiya and Bēthsaida⁶⁴.



Fig. 4.63 Bracelet TZ 015198-001; Stratum 6 a, Context 4742; flat, narrow, curved strip with a transverse eye or hook at one end; bronze (Source: BAI/GPIA).



Fig. 4.65 Mirror fragment TZ 112181-001; Stratum 6, Context 11327; bronze (Source: BAI/GPIA).

In addition to brooches, a bracelet TZ 015198-001 (*Fig. 4.63*) was also found⁶⁵. Two mirror fragments TZ 110531-001 (*Fig. 4.64*) and TZ 112181-001 (*Fig. 4.65*) can be attributed to the Early Roman period. The two undecorated mirror fragments probably belonged to round mirrors, like those known from Hisbān⁶⁶.

Two sickles were among the tools, including TZ 112223-001 (*Fig. 4.66*), although both came from fill layers and so could also belong to younger

- 60 Hoss 2020a, 398. 414; Fortner 2008, 71 f. App. 87, No. 1464.
- 61 Fortner Rottloff 2003b, 144 Fig. 246.
- 62 Fortner Rottloff 2003b, 132 f.
- 63 Hoss 2020a, 394. 403.
- 64 Crowfoot et al. 1957, 441, Type C and D, Fig. 102 No. 4, 5; Fortner 2008, 64, App. 81, No. 1418.
- 65 Hoss 2020a, 394. 404.
- 66 Hoss 2020a, 396. 408 Fig. 3.15.



Fig. 4.66 Sickle TZ 112223-001; Stratum 6 (also 5, 4), Context 11226; iron (Source: BAI/GPIA).



Fig. 4.68 Key TZ 110496-001 with five teeth; Stratum 6, Context 10407; iron (Source: BAI/GPIA).

layers. Their use in a Roman context is attested in Bēthsaida⁶⁷.

Simple needles such as TZ 111609-001 (*Fig. 4.67*) are also part of the repertoire and, like those made of bone, were probably in use in the Early Roman period⁶⁸. In general, however, metal needles seem to have played a small role compared to the finds from other layers. Only two metal needles were found for the Roman period, in addition to five bone needles⁶⁹.

Key TZ 110496-001 is again documented among items belonging to the household furnishings (*Fig. 4.68*)⁷⁰. It originates from Room E 18 in Complex E and, like the example from Stratum 7, belongs to the type of so-called elbow keys⁷¹.

4.3.2.3. Summary

The repertoire of metal finds does not seem to have changed from Stratum 7 to Stratum 6. The unchanged inventory between the two strata can be interpreted as a sign of a stable composition of inhabitants. This is hardly surprising given the com-



Fig. 4.67 Needle TZ 111609-001; Strata 7 and 6, Context 11014; bronze (Source: BAI/GPIA).

paratively short occupation phase of the complexes. Nevertheless, an increase in metal finds can be detected in Stratum 6, even though this statement is qualified by the risk posed by disrupted features due to the layers of collapse and fill and the superimposed new constructions in Stratum 5.

Based on the metal finds, the function of Complex D appears to have been as continuously significant as the building itself. The main room(s) (in Stratum 7 Room D 3, in Stratum 6 Room D 3/D 4) take on a special importance here. Room D 2 did not contain any 'prominent' finds in either phase. For Complex E, too, it can be stated that ornamental finds came mainly from the northern and eastern parts of the building, which were postulated to be private rooms. They testify to a certain prosperity of the tall's inhabitants. Tools, on the other hand, are a good indication of economic activities, which, judging by the distribution of the finds, were concentrated especially in Complex D in Stratum 7 and in the western part of the farmstead (Complex E). Even if no exact dating is possible from the metal finds, the needle, axe, knife and fishing net weight testify to various occupations and crafts at Tall Zirā'a. The discovery of a fishing net weight possibly testifies to contacts or regular stays in the area around the Sea of Galilee, for example.

It was also established that due to the absence of roof nails, flat roofs can be assumed for the Hellenistic and also the Roman period.

- 67 Fortner 2008, 69 App. 84.
- 68 Hoss 2020a, 397. 412; Fortner 2008, 77 App. 91.
- 69 In total, only 134 metal needles were recovered on the tall, from Stratum 22 to Stratum 0.
- 70 Hoss 2020a, 397, 413 Fig. 3.24; Fortner 2008, 70 f. App. 86 No. 1461.
- 71 Yadin 1963, 94-100 Fig. 34-37; Fortner 2008, 71.

4.3.3. Coins⁷²

A total of ten coins were found at Tall Zirā'a that can be reliably assigned to the Early Roman period. Three of them can be attributed to Herod I and another to his son Herod Antipas. The attribution of one coin is uncertain; it belongs either to the time of Herod I or Herod Antipas. In addition, a coin each of Emperor Tiberius and Emperor Hadrian was found; three further coins are to be regarded as Early Roman—without further dating—and another three as Late Roman. In addition, there are a large number of indeterminate coins whose dating may range from the Hellenistic to the Late Roman period (*Pls. 23–25*). For the sake of providing a complete picture of the finds, these are added to the appendix and catalogue section.

4.3.3.1. Herodian Coins

Three coins from the time of Herod I can be reliably identified. A prutha, TZ 008880-001 (Pl. 21.1), shows the inscription $BA\Sigma IAE \Omega \Sigma HP \Omega \Delta OY$ on the obverse, which runs around a diadem. The reverse shows a three-legged table, which is a well-known motif on the reverse of Herodian coins. There is probably a shallow bowl on top of the tripod⁷³. Jerusalem is the only likely minting site⁷⁴, and the coin dates to between 40 and 4 BC. The second Herodian coin TZ 015261-001 is less well preserved (Pl. 21.3). Both casting rims are still present. It probably bore the royal title and name of Herod I $[BA\Sigma IAE \Omega\Sigma HP \Omega \Delta OY]$ around the obverse. On the reverse, part of the anchor in a circle can still be seen, typical for these coins⁷⁵. The minting site was probably also Jerusalem. The dating is limited to the period between 37 and 4 BC. The third coin TZ 015291-001 (Pl. 21.4) shows an anchor on the

obverse, probably surrounded by the royal title and the name [HPWAOY BACIAE] of Herod I. The reverse is adorned by a double cornucopia with a caduceus in the centre. This type of coin is one of the best known and most common from the time of Herod I. It establishes a connection with his benefactor, the politician and general Mark Antony, who in 40 BC also had coins minted (albeit of silver) with a double cornucopia and a caduceus in the centre⁷⁶. Connecting it with the anchor, already known from earlier rulers, is a successful (political) combination of symbolism to represent the continuation of Hasmonean traditions and the new connection to the Roman Empire. This type of coin also appears under Herod Archelaus, but there an "N" is set above the caduceus, which cannot be seen on coin TZ 015291-00177. A fourth coin TZ 018690-001 (Pl. 21.5) may show an anchor on the obverse. The reverse is minted with a pomegranate in a double cornucopia. This type is known only from Herod I and Herod Antipas. A period from 37 BC to 6 AD thus plausible as a possible date. Jerusalem is also assumed to be the minting site⁷⁸.

There is also a coin record for the son and successor of Herod I, Herod Antipas. TZ 110965-001 (*Pl. 21.6*) shows the inscription [HPW Δ OY T] ETPA[PXOY] on the obverse. The title of tetrarch can only be attributed to Herod Antipas; his brother Herod Archelaus bore the title of ethnarch, which corresponded to a higher position⁷⁹. A palm branch can be seen in the centre, as well as an L - $\Lambda\Gamma$ on both sides, which corresponds to the exact date of the 33rd year of the king's reign⁸⁰. On the reverse one can still see a rudimentary two-line inscription in a wreath, which probably reads [TIBE/PIAC]. Tiberias can thus be named as the place of minting. The date of the coin is assumed to be 29 or 30 AD.

- 72 For general remarks on the coins see *Chap. 2.3.3*.
- 73 <http://www.muenze-und-macht.at/coins/coin6_1A?ref= showcases/showcase6> (24.10.2015). The table is an important symbol for the cult in the Temple of Jerusalem, more precisely for the daily sacrifice which was offered on one of 13 tables in the Temple. With Herod's accession to power, he also began his own propaganda, a central theme of which was the rebuilding of the Jerusalem Temple: Meshorer 2001, 66 f. No. 53; Meshorer 1982, 236 App. 2, 12a.
- 74 Meshorer 1982, 236, App. 2, 12 a; Meshorer 2001, Nr. 53; RPC I No. 4906 (there with cross in the middle of the diadem).
- 75 Meshorer 2001, 223 No. 61 (?).
- 76 Meshorer 2001, No. 59.
- 77 Meshorer 2001, No. 59.
- 78 Meshorer 2001, No. 59 and 68.
- 79 Meshorer 2001, No. 81.
- 80 The palm branch is to be understood as an important object in Jewish ceremonies: Meshorer 2001, 82.

4.3.3.2. Early Roman Imperial Coins

The only Early Roman imperial coin is TZ 010811-001 (*Pl. 21.2*). On the obverse is the head of Tiberius turned to the right, framed with the inscription [TI]BEPIW KAICAPI. On the reverse one can still read $\Gamma A\Delta APEIC - L \ UB$, which assigns the place of minting to Gadara. In the centre the head of Tyche can be seen facing to the right⁸¹. The coin is a typical representative of mints from the cities of the Decapolis, where bronze coins were minted from the time of the conquest by Pompey—and thus the beginning of Roman rule—until Gordian III. The depiction of gods or sanctuaries on the reverse is a distinctive feature of these coinages⁸². The mention of year 92 after the beginning of Roman rule makes it possible to date the coin to the year 28 or 29 AD.

A single coin TZ 002532-001 (*Pl. 22.1*), which can be attributed to Emperor Hadrian and dates to around 119 or 120 AD, testifies to a further use or resettlement of the tall⁸³.

4.3.3.3. Summary

There are just ten Roman coins, in contrast to 50 Hellenistic ones. Judging by the gap in coinage between Alexander Jannaeus and Herod I, settlement activity resumes in the time of Herod the Great, but declines again after a short time with Herod Antipas and Tiberius. However, it has already been suggested above⁸⁴ that the coinages of Alexander Jannaeus—especially those bearing the year 78 BC—were more likely to have been in circulation in the Early Roman period. D. Syon has demonstrated that coins of this Hasmonean ruler in particular occur in Herodian or later contexts (up to the First Jewish War)⁸⁵. The state of preservation of all coins of the Hellenistic and Early Roman periods is, however, altogether too poor to carry out analyses of their wear and tear and quanti-

- 82 Lichtenberger 2003, 1.
- 83 Rosenberger 1977, 65, No. 13.
- 84 Cf. Chap. 2.3.3.5.
- 85 Syon 2015, 45-47; Ahipaz 2013, 174.
- 86 Noeske 2013, 140 Tab. 6.
- 87 Noeske 2013, 142 Tab. 9.
- 88 Noeske 2013, 141.

tatively too low to make any conclusive statements. The find contexts of some coins are more revealing in this regard. Within feature 5270 in Room D 3, in Complex D, one coin each of Herod I TZ 015291-001 (Pl. 21.4) and Alexander Jannaeus TZ 015301-001 (Pl. 8.3) were recovered. Another coin of Alexander Jannaeus TZ 015442-001 (Pl. 8.5) was found in the same room. In addition, coin TZ 015288-001 (Pl. 8.1) was found directly under wall 4996 of Complex D (Room D 5/D 6 in Stratum 7). The finds clearly show that coins of Alexander Jannaeus were used both before the construction of Complex D and afterwards, with the simultaneous find of a coin of Herod I attesting to their use up to the Herodian period. This fits in with D. Syon's theory on the long lifespan of the Jannaean coins.

It is interesting to note that of the most represented coins at Tall Zirā'a (those of Alexander Jannaeus), just eight were found at Gadara, and of Herod the Great, only ten⁸⁶. This shows the great economic importance of the settlement site, which flourished especially in the Herodian period. It is also interesting that a coin of Tiberius that was clearly minted at Gadara was found at the tall. No other city of the Decapolis had its own coinage during this period. The earliest coinage in the Decapolis is that of Caligula at Scythopolis and Canatha⁸⁷. It is clear that Gadara was one of the most important minting sites in the region⁸⁸, but also that it formed its relationship with Tall Zirā'a very early on. This again supports the early importance of the site.

Coin TZ 012760-001 under Elagabal (218 to 222 AD) (*Pl. 22.2*) can be dated to the Late Roman period⁸⁹, a ruler's coin TZ 110312-001 from Antioch by Diocletian to *c.* 297 AD (*Pl. 22.4*)⁹⁰ and another coin (TZ 014115-001) of Licinius I to 312 or 313 AD (*Pl. 22.3*)⁹¹. A small settlement (perhaps only seasonally inhabited) in the second/third centuries AD can be assumed, but architectural remains have not yet been found. This assumption is also confirmed by the pottery finds.

- 89 Dating according to K. Dahmen 200–250 AD. Author suggestion: Probably a portrait of the youthful Elagabal. A suitable comparison is a coin from Orthosia with a depiction of a temple and stairs leading down, which can also be seen on TZ 012760-001. There are also doors in the side niches, which could also be depicted on this coin: Rouvier 880. This type of coin is also found under Severus Alexander, but without the stairs, again minted in Orthosia: Rouvier 885.
- 90 RIC VI No. 62 a (?).
- 91 RIC VI No. 160 a.

⁸¹ RPC I No. 4812.

4.3.4. Glass Finds⁹²

All glass finds from this excavation were worked on by S. Hoss⁹³. Here, her results are summarised and the finds are reclassified and evaluated within the revised stratigraphy.

4.3.4.1. Distribution of Glass Finds

Of the 3696 total finds, 26 % (953) can be assigned to the Roman Strata 7 and 6. Of these finds, 30 % were found in very mixed layers outside the complexes (mainly fill layers). As a result, they cannot be clearly stratified and do not play a role in the distribution of glass finds, as this amount would affect overall statistics.

Considering the glass distribution under these aspects, it becomes clear that the proportion of glass finds in Area I is considerably higher than in Area II. In Stratum 7, there are 190 finds from Area I, compared to only 13 finds from Area II (*Fig. 4.69*).



Fig. 4.69 Distribution of glass finds (incl. all indeterminate finds) in Areas I and II in Strata 7 and 6 (Source: BAI/GPIA).

A look at the distribution of glass finds by square in areas and strata illustrates these figures. The findings outside the complexes are deliberately omitted here in order to illustrate the distribution within the complexes (without paying attention to the phases of reconstruction). Thereby it becomes particularly clear that hardly any glass finds can be identified in Stratum 7 in Complexes A, B and C (without finds), whereas a large number were found in Complex D (D 4/D 5) (more than 120). In Complex E, again, there were hardly any finds (9). In Stratum 6, the number of finds from Complex D remains similarly high, whereas in Area II the number of finds increases considerably, with a concentration in the In total, the glass finds comprise 664 diagnostic sherds out of 3696 total finds for all periods at Tall Zirā'a⁹⁴. The majority of the glass finds came from the Hellenistic to Umayyad strata.

south-west of the complex and in Courtyard E 13 (more than 120).

However, this distribution presented here has crucial weaknesses. On the one hand, there were significantly more pits in Area I, the contents of which often contained a large number of finds. On the other hand, this analysis also includes body sherds of which the dating is uncertain. Since the evaluation of the stratigraphy has shown that the features were partly (heavily) disturbed, it is worth taking a closer look at the diagnostic sherds, which only account for 133 pieces in the Roman strata. An examination of these shows, in contrast to the previous distribution, a clear increase in glass finds in both areas in Stratum 6, especially in Area II (Fig. 4.70). The distribution of the diagnostic sherds in the complexes underlines the conclusions drawn so far about the development of the settlement and the importance of the areas.



Fig. 4.70 Distribution of the glass finds (only diagnostic sherds) in Areas I and II in Strata 7 and 6 (Source: BAI/GPIA).

Still in Stratum 7, both areas yielded only bowls, in low numbers (*Fig. 4.71*). By Stratum 6, the number of finds increases in both areas, as does the array of forms: aside from bowls, cups, flasks, also pots and

- 92 For general remarks on the glass finds, see Chap. 2.3.4.
- 93 S. Hoss divides the finds into Early Roman (63 BC to 50 AD) and Middle Roman (50–150 AD).
- 94 Hoss 2020b, 231.



Fig. 4.71 Stratum 7: distribution of glass finds (Source: BAI/GPIA).



Fig. 4.72 Stratum 6: distribution of glass finds (Source: BAI/GPIA).

cosmetic vessels were identified (*Fig. 4.72*), that were not found in the preceding stratum.

As the core of glass find comparisons, it can be stated that a stable proportion of glass finds were identified in Area I. In Area II, on the other hand, the number of glass finds is considerably lower in Stratum 7, and it increases markedly in Stratum 6, accompanied by a richer repertoire of shapes.



Fig. 4.73 Ribbed mould-made bowl TZ 016727-001; Strata 13 and 12, Square AQ 122, Context 5101; colourless transparent glass (Source: BAI/GPIA).



Fig. 4.75 Linear cut bowl TZ 016748-001; Stratum 12; Square AR 123, Context 5280; light green translucent glass; brown iridescence (Source: BAI/GPIA).

4.3.4.2. Repertoire of Shapes

For the Early Roman period, the following forms predominate in the repertoire, according to S. Hoss:

- Group 5 (*Pl. 26.1*) Ribbed mould-made bowls
- Group 6 (*Pl. 26.2*) Linear-cut bowls

According to S. Hoss' overall analysis of the glass finds, only a few types of mould-made bowls were found across the entire tall for the period from the middle of the first century BC to the middle of the first century AD, which is in contrast to other excavations in the region⁹⁵. The ribbed mould-made bowls (*Figs. 4.73, 4.74*), of which only 11 specimens were identified with certainty (*Pl. 26.1*), were very common, especially elsewhere in the Decapolis in the Early Roman period⁹⁶.

No exact number of pieces (between two and 64 specimens) can be determined for the linear cut



Fig. 4.74 Ribbed mould-made bowl TZ 111816-001; Strata 6 and 5, Square AT 128, Context 11043; rich green translucent glass; off-white iridescence (Source: BAI/GPIA).



Fig. 4.76 Linear cut bowl TZ 016684-001; Stratum 7, Square AQ 122, Context 4680; translucent light brown (Source: BAI/GPIA).

bowls (*Pl. 26.2, Figs. 4.75* and *4.76*). If all pieces of uncertain form were linear cut bowls, then these would form the leading type at Tall Zirā'a in the Early Roman period. A large quantity of linear cut bowls is characteristic of the Decapolis, Judea, Galilee, Samaria and the coastal region from the mid-first century BC to the mid-first century AD⁹⁷, but must remain uncertain for Tall Zirā'a.

According to the evaluation by S. Hoss, there is a 'glass gap' at Tall Zirā' a from the late first century

- 96 Hoss 2020b, 259: Also interesting is the fact that in the north-western provinces of the Roman Empire such vessels were recovered in connection with settlements of a strong military character, dating to the Julian-Claudian to Flavian periods.
- 97 Hoss 2020b, 259.

⁹⁵ Hoss 2020b, 259.



Fig. 4.77 Beaker TZ 111765-001; Strata 7 and 6; Square AX 132, Context 10686; blue translucent glass (Source: BAI/GPIA).



Fig. 4.78 Balsamarium TZ 111801-001; Stratum 6, Square AX 127, Context 10994; blue-green translucent; narrow neck (Source: BAI/GPIA).

BC to the first half of the first century AD⁹⁸. However, there was no settlement gap or even a lower level of occupation during this period. Lack of prosperity, equally, does not seem to be the explanation for the absence of glass finds, because pottery finds clearly show that even a certain degree of wealth (and a good infrastructure) must have prevailed at the tall, as the Eastern Sigillata A and other tableware indicate. Of course, the state of preservation of the delicate glassware plays a not inconsiderable role here, especially since the succession of strata is so dense and thus leads to severe destruction of the underlying layers. At the current state of research, it can therefore be assumed that glass vessels supplemented the repertoire of ceramic drinking vessels⁹⁹.

For the period from the middle of the first century AD to the middle of the second century AD, new types appear, even if they can only be traced in small numbers here. The range of shapes of bowls becomes more extensive, and cups (*Pl. 26.3*) and jugs expand the repertoire (*Fig. 4.77*). In addition, small containers for oil or cosmetic articles are found for the first time in this period (*Pl. 26.4*, *Fig. 4.78*)¹⁰⁰. Even two aryballoi were identified, which are rarely found in the eastern Mediterranean region¹⁰¹.

In addition, other forms of bowls and dishes can be found that have a particularly long period of use (first century AD to Late Roman/Byzantine)¹⁰². Even though the range of types is becoming broader, the number of finds is still low compared to other settlements. This is unexpected, especially in this period, since from the middle of the first century AD onwards glass became more and more affordable and thus more accessible even to the less affluent and, therefore, the concentration of glass finds would be expected to increase in this period¹⁰³. Insights gained from stratigraphic analysis corroborate that, at least in Stratum 6, both numbers and shapes are indeed increasing, though, as stated above, less than at other sites.

One explanation for the almost complete absence of glass vessels may be that drinking vessels were simply made from a different material – possibly metal. Silver and bronze were popular materials for drinking vessels among the upper classes in the Early Roman period. The material could have been melted down and repurposed¹⁰⁴. Although a rich occurrence of metal finds can be demonstrated, traces of vessels, however, are missing. It is interesting to note that the percentage of bronze-like colours (olive, green, amber and yellow) in the Roman-dated glass finds amounts to 62 % overall, which is very high in comparison to other excavations in the Decapolis and in southern Syria (upwards of 33 %)¹⁰⁵.

- 98 Hoss 2020b, 260.
- 99 Hoss 2020b, 230.
- 100 Hoss 2020b, 262, 323.
- 101 Hoss 2020b, 262.
- 102 According to S. Hoss, these forms are specifically: "bowls with everted rims on tapering walls" (Group 10), "bowls with straight walls and a short 'curly' outfold" (Group 14), "bowls with convex walls and a short, outfolded, notched rim" (Group 15) and "bowls with an outfolded rim hanging over the edge" (Group 19).
- 103 Hoss 2020b, 263.
- 104 Hoss 2020b, 261.
- 105 Hoss 2020b, 261.
If we consider only the diagnostic sherds from Strata 7 and 6, then as many as 88 % of the datable glass shards can be assigned to these colours. In this respect, it would be conceivable that drinking vessels were preferentially made of metal and that the glass vessels—as a supplement—sought to imitate them¹⁰⁶. The Early Hellenistic glass finds showed the preference of the inhabitants for bronze-coloured glass, perhaps this trend continued with the use of metal vessels in the Early Roman period. However, this too can only remain conjecture. A final hypothesis for the absence of glass would be that it was repurposed, which was quite common in this period and is attested since the Neronian-Flavian period¹⁰⁷.

According to the current state of excavations, it can be said with certainty that no glass was produced on Tall Zirā'a itself, as no findings of glass manufacture have been made so far (at least for the Roman period). It can be assumed that the inhabitants bought their goods in Gadara¹⁰⁸. However, the majority of the glass finds from Gadara are still not published and can therefore not be drawn upon as a comparison. In particular, the repertoire, as well as the colouring, would be informative here.

4.3.4.3. Summary

The lack of glass finds within Complexes A, B and C in Stratum 7 in Area I is hardly surprising. Complex A has already been shown to have been a building with an olive press, in which hardly any glass finds would be expected. The assumption that the other two complexes were also outbuildings with a possible economic character is confirmed here.

Complex D in Area I shows a large number of glass finds, which is considerably greater in Rooms D 4 and D 5 than in other squares. The particular importance of the complex is also reflected here.

In Complex E in Area II, on the other hand, there were hardly any glass finds in Stratum 7. Considering the size of Complex E and the generally large number of finds, this result is initially rather surprising. The repertoire of forms consists mainly of moulded bowls with colours imitating bronze (blue-green tones).

A change within the glass finds for Stratum 6 can be noted in both areas. Complex D in Area I continues to stand out with an almost consistently high number of finds. The glass repertoire in this stratum seems to have expanded to include beakers, pots and flasks, although this can only be verified on the basis of the few finds from rooms in Complex D. Complex E in Area II now also has considerably more finds than in Stratum 7, although these are concentrated in the south-western projection and in Courtyard E 13. In Area II, there is also evidence of the use of cosmetic vessels, although only outside the complex.

106 Hoss 2020b, 238.107 Hoss 2020b, 229. 231.108 Hoss 2020b, 230.

4.3.5. Animal Bones

The bone finds were identified by N. Benecke¹⁰⁹. Information on animal species, number and bone type is available for all the material. Within the contexts of Stratum 7 and 6, 5125 bones were recovered, of which 1674 pieces could no longer be identified due to poor preservation.

4.3.5.1. Distribution of Bone Finds

Only 22.2 % (1138 pieces) of the bones came from Area II. The remaining finds were distributed over Area I and came mainly from pits and surrounding fill layers. Only 2.5 % (130 pieces) were recovered from wall foundations where they were used as fill material. As shown in the description of the building development, there were many pits and backfill layers between the buildings, but also in the undeveloped section in the west. The fact that this section was a waste area is also clear from the distribution of finds. It is possible that food waste from Area II was dumped to the west of Area I-in the uninhabited part. Based on the large number of finds, it seems that the waste was not poured down the slope, but remained in place to rot. A use of the surrounding areas of the tall as pasture or living space could have been the reason for this.

The distribution of the bones found in Complex E allows some—albeit uncertain—conclusions to be drawn about the functions of individual rooms. Bones were found mainly in six rooms (E 2, E 8, E 12, E 13, E 16, E 19). The majority of them originated from E 13, which is hardly surprising in view of the several, probably simultaneously active tabuns in this room. The bones were mostly found in the area around the three central tabuns, while no bones were found in areas around the other tabuns.

Also worth mentioning are the 210 and 155 snail finds from one pit each in Rooms E 4 and E 19. Although snail shells were also found in other rooms, they were isolated finds and not found in such large quantities. It is therefore reasonable to assume that the two pits in question were waste pits.

4.3.5.2. Assessment of the Bone Material

Of the total determinable bone material from Areas I and II, it was possible to assign 2327 of them only to the broader categories of sheep or goat (2310),

	Animal species	Number of bones		
Farm animals				
E.g. meat, eggs, milk, fat, skin, feathers, bones, wool, fur; also sacrificial animals	Cattle	611		
	Sheep	193 (2310 sheep or goat)		
	Domestic fowl	89		
	Goat	111 (2310 sheep or goat)		
	Domestic pig	57		
Wild animals/game				
E.g. meat, fat, antlers, bones, skin	Gazelle	16		
	Fallow deer	11 (8 red or fallow deer)		
	Red deer	4 (8 red or fallow deer)		
	Wild boar	5		
Work animals				
E.g. guard animals, means of transport, meat	Dog	7		
	Horse	12 (9 horse, donkey or mule)		
	Camel	8		

Tab. 4.9 Overview of the bones found in Strata 7 and 6.

red or fallow deer (8) and horse, donkey or mule (9) (*Tab. 4.9*).

From the 3451 identified bones (*Fig. 4.79*), three categories of animals were identified. The first category, with 97.6 %, consists of farm animals, which include cattle, sheep, domestic fowl, goats and domestic pigs. These are domesticated animals that grazed on the lands around the tall and provided a steady source of food thanks to husbandry. Even though the majority of goat and sheep bones were indistinguishable, the figures make it clear that these two animal species made up the majority of farm animals kept or eaten in Strata 7 and 6, at 77.5 %. Farm animals in general were not only a source of food (meat, eggs, milk, fat) but were also kept for wool (sheep), natural fertiliser, leather production or feathers. In addition, the bones (es-

109 Benecke 2019. At the time of the publication, work on the stratigraphy was on-going, so the numbers from the two works do not match exactly.



Fig. 4.79 Comparison of number of bones by species and area; Strata 7 and 6.

pecially cattle) could be used as cosmetic spatulae or the like.

The second and much smaller category, at 1.3 %, consists of wild animals. These include gazelle, fallow deer, red deer and wild boar. These animals were hunted or, as would be possible for farm animals, bought at a market.

The last category, 1.1 %, is made up of work animals. These are animals that took on specific tasks. Besides some dog bones, bones of horse/donkey/ mule and camel were also found. They were mainly used as a means of transport, for example to trade in Gadara or to pay visits elsewhere. The steep and arduous way up from the tall to Gadara was far easier to negotiate with animal transport than, for example, with a handcart¹¹⁰. The earliest finds of camel bones in the region are known from Tell Jemmeh from Iron Age II, a few further finds come from Pella, 'Egron and Tall al-Qādī, with these sites sharing a favourable connection to trade routes¹¹¹. Since the camel is not represented at all in Stratum 7-and in Stratum 6 Area II with only eighth specimens-it does not seem to have been the preferred work animal. Finds from Pella show that the animals only increased in popularity from the second century AD onwards¹¹². The presence of dog bones (7) indicates that they were used as watchdogs on the tall to warn of intruders, look after livestock or assist in the hunt.

4.3.5.3. Worked Bones

Five needles made of bone were found within the Roman strata: TZ 016613-001 (*Fig. 4.80*), TZ 017205-001 (*Fig. 4.81*), TZ 017206-001 (*Fig. 4.82*), TZ 017207-001 (*Fig. 4.83*) and TZ 112241-001 (*Fig. 4.84*)¹¹³. Four of them were from Stratum 6, one from Stratum 7. Except for needle TZ 112241-001, all were from Complex D Room D 3 in Area I. Only one complete object is preserved and is 11.3 cm long. The average diameter of the needles ranges from 0.4 to 0.6 cm.

Needle TZ 017207-001 has three eyelets. A similar example is known from Hisbān and was "used for decorative thread" to embroider different thread colours or materials at the same time and in this way apply patterns or embellishments¹¹⁴. The two needles TZ 016613-001 and TZ 112241-001 have two holes, the end of the remaining two objects is not preserved. Needles for sewing were made of metal, bone or ivory, although the latter is not represented on the tall.

Spatulae are also part of the repertoire of finds. They were usually made from the large, flat ribs of cattle¹¹⁵, as evidenced by all specimens from the tall.

A total of ten specimens were found in the Early Roman strata¹¹⁶, all of which come from Area I. Only one complete spatula TZ 016619-001 (*Fig. 4.86*) with a total length of 20 cm, a width of 3 cm and a thickness of 0.5 cm is preserved. The

- 110 The same can be assumed for Pella: Smith 1987, 56.
- 111 Collins 2002, 472.
- 112 Smith 1987, 56.
- 113 In total, only ten needles made of bone could be recovered on the tall. Another 134 pieces were made of metal. Of the total 144 needles, 126 were from Strata 22 to 10.
- 114 Ray 2009, 180 Fig. 11.10.14, 11.11.1–2.
- 115 Ray 2009, 175 f.
- 116 In total, only 13 bone spatulae were found at the tall: Stratum 14: one piece; Stratum 7: ten pieces; Stratum 4: one piece; Stratum 3: one piece.



Fig. 4.80 Bone needle TZ 016613-001; Stratum 6 c, Square AQ 123, Context 4988 (Source: BAI/GPIA).



Fig. 4.82 Bone needle TZ 017206-001; Stratum 6 c, Square AQ 123, Context 4941 (Source: BAI/GPIA).



Fig. 4.84 Bone needle TZ 112241-001; Stratum 6 c, b, a, Square AU 127, Context 11284 (Source: BAI/GPIA).





Fig. 4.81 Bone needle TZ 017205-001; Stratum 6 c, Square AQ 123, Context 4788; find from a wall (Source: BAI/GPIA).



Fig. 4.83 Bone needle TZ 017207-001; Stratum 7 a, Square AQ 123, Context 5070 (Source: BAI/GPIA).

Fig. 4.85 Spatulae; No. 1: TZ 017208-001, No. 2: TZ 017209-001, No. 3: TZ 017211-001, No. 4: TZ 017213-001, No. 5: TZ 17212-012 und No. 6: TZ 017210; Stratum 7 b, Square AQ 123, Context 5116 (Source: BAI/GPIA).



Fig. 4.86 Spatula TZ 016619-001; Stratum 7 a, Square AP 123, Context 4999 (Source: BAI/GPIA).



Fig. 4.88 Spatula TZ 01945-001; Stratum 7 c, Square AQ 123, Context 5201 (Source: BAI/GPIA).

nearly complete spatula TZ 016620-001 was probably a similar size (Fig. 4.87). The length of the other objects, such as TZ 019545-001 (Fig. 4.88), can no longer be determined, as some of them are only preserved in very small pieces. They are between 0.9 cm and 3.3 cm wide and 0.2 cm to 0.9 cm thick. A find of no less than six spatulae TZ 017208-001, TZ 017209-001, TZ 017210-001, TZ 017211-001, TZ 017212-001 and TZ 017213-001 (Fig. 4.85) within Context 5116 in Room D 3 in Stratum 7 b led, in connection with the other finds, to the interpretation of this being a room with at least one loom. The function of the small bone tools involves the separation of warp threads on a loom, which is why they characteristically have a narrow tip¹¹⁷. Spatulae are found from the Iron Age to the Late Islamic period and have been found in many places such as Hisban, 'En Gedi, Tel Ašdod, Mizpa¹¹⁸ and Bethsaida¹¹⁹. An early find from Jabesh shows that spatulae may have been in use in the Jordan Valley as early as the Early Bronze Age, coinciding with the appearance of the first clay loom weights¹²⁰.

A weaver's shuttle was identified with TZ 019543-001 in Room D 5 Stratum 7 b (*Fig. 4.89*). It has a deep indentation 1.6 cm below each end of the rib but is otherwise unworked.

Generally, there are hardly any comparative finds. J. Boertien sees the reason for this as being



Fig. 4.87 Spatula TZ 016620-001; Stratum 7 c, b, Square AP 123, Context 5155 (Source: BAI/GPIA).



Fig. 4.89 Weaver's shuttle TZ 019543-001; Stratum 7 b; Square AP 123; Context 5095 (Source: BAI/GPIA).

that either such objects were either hardly ever used or they have been unrecognised by excavators. A single example, albeit from the Iron Age, comes from Tell $D\bar{e}r$ 'All \bar{a}^{121} .

Spindle shaft TZ 017202-001 (*Fig. 4.90*) from Room D 3 Stratum 7 c also belongs to the group of objects used to produce textiles. The object, made from a tubular cattle bone, has a length of 21.8 cm and a diameter of 0.7 cm and was possibly part of a hand spindle. The shaft is thickened in the middle and has four notches at the end 0.3 cm below the tip, which are typical for spindle shafts. A similar example was found in Tiberias, where the object was called a pin or weaving needle¹²².

Two spindle whorls belonging to a hand spindle were also found, which were functionally connected to a spindle shaft. Spindle whorl TZ 016617-001 has a diameter of 2.8 cm and an approximately square hole in the centre with four raised rings on the edge of the surface (*Fig. 4.91*). The underside is

- 117 Ray 2009, 175 f.
- 118 Ray 2009, 176.
- 119 Fortner 2008, 75 f. Appendix 89. 1483-1486.
- 120 Boertien 2013, 73.
- 121 Boertien 2013, 74, Fig. 3.10.
- 122 Vincenz 2008, 191, App. 6.1:1.



Fig. 4.90 Spindle shaft TZ 017202-001; Stratum 7 c, Square AO 123, Context 5201 (Source: BAI/GPIA).



Fig. 4.91 Spindle whorl TZ 016617-001; Stratum 6, Square AQ 123, Context 4789 (Source: BAI/GPIA).



Fig. 4.92 Spindle whorl TZ 017203-001; Stratum 7 c, Square AQ 123, Context 5201 (Source: BAI/GPIA).

flat. The find comes from Room D 3 in Stratum 6. The second spindle whorl (TZ 017203-001) has a diameter of 2.6 cm and a round hole in the centre with concentric rings around it (*Fig. 4.92*). Like the spindle shaft, this piece comes from Room D 3 in Stratum 7 c. A comparable piece with raised concentric circles around the central opening is known from Tiberia¹²³.

Finally, a find made of ivory TZ 016614-001 (*Fig. 4.93*) should be mentioned. Although its function is not clear, it could also be seen in the context of weaving (picking up individual threads?)



Fig. 4.93 TZ 016614-001; Stratum 7 c, b; Square AP 123, Context 5095; two matching fragments of a wedgeshaped object; one narrow side worked into a bulge with a notch, the opposite bulge is broken off; 12.0 cm x 1.8 cm x 1.2 cm; ivory (Source: BAI/GPIA).

4.3.5.4. A Falcon-headed Shell in the Style of the Tridacna Clams

Object TZ 016456-001, unique among objects from Tall Zirā'a, resembles the known group of worked clams of the species *Tridacna*. These large clams are native to the Indo-Pacific Ocean (including the Red Sea) and were fished there and traded in the Mediterranean region and far to the east¹²⁴. They were often extensively engraved: besides human heads¹²⁵, birds' heads, stylised or, as in the case of the Tall Zirā'a shell, finely carved, are particularly common¹²⁶. Examples with engravings on the entire surface of the outside and/or inside up to the edge of the shell are also known¹²⁷. There are also examples, such as from the Great Temple of 'Ammān, where only the whorl has been worked on¹²⁸.

The find from Tall Zirā'a (shell species unclear) is 9.7 cm wide and 6 cm high. It came from Room D 2 in Stratum 7 a (*Fig. 4.94*). The whorl and the upper left half of the shell's body are preserved. A particularly naturalistically worked head of a falcon can be seen. The wide whorl is formed to resemble the shape of a bird looking to the left.

- 123 Vincenz 2008, 191; App. 6.1:3.
- 124 Reese Sease 1993, 109.
- 125 Reese Sease 1993, Fig. 2, 3, 5.
- 126 Brandl 2001, Fig. 1.
- 127 Brandl 2001, Fig. 5, 6.
- 128 Context dates to Iron Age II: Koutsoukou 1997, 147 f., Fig.185, 186.



Fig. 4.94 Falcon-headed shell TZ 016456-001; Stratum 7 a, Square AQ 123, Context 5070 (Source: BAI/GPIA).

There are no engravings on the preserved part of the outside. On the inside, there are eight concentric circles of equal size on the rim, surrounded by two orthogonal lines. Another pattern (triangles? arrows? zig-zag pattern?), which is probably geometric, is connected to this (*Fig. 4.95*).

No direct comparison could be found for this shell, as all known examples show a head in frontal view. There also seems to be no example with similar minimalist interior engraving, rather the insides were either fully engraved or not engraved at all. The so-called concentric squares motif, on the other hand, was a popular pattern. It is known in connection with Assyrian clothing, but also as a simple decorative design¹²⁹, which was also found on the oil lamps from Tall Zirā'a¹³⁰. The fine elaboration of the head is also without comparison so far.

Shells from datable contexts throughout the Near East (Cyrene, Naukratis, Samos, Arad, Nimrud, Assur, Babylon and Uruk) fall between the end of the seventh century BC and the beginning of the sixth century BC¹³¹. According to B. Brandl, the production of *Tridacna* clams in the Levant region is connected with the Assyrian conquest, which spread the clam species and made it accessible¹³². The fact that the fashioning of shells did not stop after the sixth century BC but continued in various forms is shown by an astonishing example from the Roman period in Hisbān, where a cowrie shell was reworked into a small cosmetic bowl in the shape of a bird¹³³.

The great popularity of shells and large snails from the Red Sea is evident from finds, *e.g.* from Beth Shean, where for the Roman-Byzantine period a large number of different types of shells were found, some of which remained unworked, but were also worn as chain links¹³⁴. Two large spider conchs from the Red Sea were also found in Tiberias, but they too remained unworked¹³⁵. The use of the ob-



Fig. 4.95 Falcon-headed shell TZ 016456-001; Stratum 7 a, Square AQ 123, Context 5070; detailed view of decoration (Source: BAI/GPIA).

ject from the tall was possibly the storage of cosmetics and thus followed the purpose that the popular *Tridacna* clams already had in the seventh-sixth centuries BC¹³⁶.

4.3.5.5. Summary

As in the Hellenistic period, farm animals were given the highest priority in the Early Roman period, with sheep and goats still being the main livestock. There were some cattle and chickens as well as a few pigs. Wild animals continued to play only a subordinate role. Working animals can be proven for the Early Roman period in the form of dog, horse/donkey/mule and camel. They were not found in the Hellenistic context (except for a camel bone), but fit very well with the rural and economic character of the settlement in Strata 7 and 6.

The large number of worked bones for textile production were mainly concentrated in Area I within Complex D, more precisely in Squares AQ/ AP 123. Various activities in the realm of spinning, weaving and sewing can be assumed here, with a clear, if not exclusive, focus in Stratum 7.

- 129 Brandl 1984, 19.
- 130 Typ La32 and La35: Kenkel 2012, 278 Tab. 54.
- 131 Brandl 2001, 58 f.; Koutsoukou 1997, 148.
- 132 Brandl 2001, 60.
- 133 Meyers 1997, 347.
- 134 Bar-Yosef Mayer 2006, 713-717.
- 135 Myers 2008, 201 f.
- 136 Klengel-Brandt 1992, 188.

The discovery of a worked shell in the style of the well-known *Tridacna* clams is quite astonishing. A renaissance of this group of finds in the Early Roman period or a survival of the Assyrian tradition would be just as much an indication of the long continuity of traditions in the region as it would be of the rich influences from diverse cultures.

4.3.6. Stone Finds

The stone objects from Tall Zirā'a have already been partially investigated. H.-M. Jakubik dedicated himself to the querns, although his work has not yet been published¹³⁷. The limestone vessels have been evaluated by A. Gropp, J. Häser and D. Viewe-

4.3.6.1. Distribution of Stone Finds

In Strata 7 and 6, 698 stone objects were found. 297 objects were attributed to Stratum 7, compared to 325 objects from Stratum 6 (76 from the overlapping layers of Strata 7 and 6). Within the complexes, as in other find categories, Rooms D 4 and D 5 are particularly prominent (Figs. 4.96 and 4.97). The majority of all tesserae came from in Room D 5 in Stratum 6 (a total of 93 % from Area I). Likewise, limestone vessels were found predominantly and in large numbers (69 % in total from Area I) inside these rooms in both strata. Even if there are only minor differences in the number, an larger number of finds (dark grey) can be seen in Area II in the squares which correspond to Rooms E 8, E 10, E 11, E 13 and E 14 (which did not have a reconstruction phase). This increased number underlines their prominent and industrial character. Overall, the rooms of the complexes-with the exception of D 4 and D 5-contained an even number of objects without any noticeable concentrations.

Also, all the beads originated from Area I (albeit from pits), as did all the finds assumed to be architectural elements. In Area II, several rubbing stones, as well as frequently found parts of hand-driven mills, were found in almost every room.

Conclusions can also be drawn on the basis of the types of stone. Basalt objects (32 %) make up the largest part of the finds; 24 % of the objects are made of limestone, 31 % are made of flint, although 192 of the flint objects are to be considered as chip-

- 137 Special thanks to H.-M. Jakubik for his collected material, thoughts and references on the querns and grinding stones from Tall Zirā'a.
- 138 Gropp 2013; Vieweger Häser 2014; Häser Vieweger 2015.
- 139 In preparation: B. Schröder, Die Entwicklung von Steingeräten in Nordpalästina seit den Metallzeiten anhand des Fundmaterials vom Tall Zirā'a (Working title of the dissertation).

ger and have been published several times, however only accompanied by provisional stratigraphy¹³⁸. Further studies on flints, among others, are in progress, but results are not yet available¹³⁹.



Fig. 4.96 Distribution of stone finds in Area I in Strata 7 and 6 within Complexes A, B, C and D (Source: BAI/GPIA).



Fig. 4.97 Distribution of the stone finds in Area II in Strata 7 and 6 within Complexes E and F (Source: BAI/ GPIA).



Fig. 4.98 Proportion by type of stone (with reference to chippings/tools) (Source: BAI/GPIA).

ping or tools and other objects made of flint only account for 3 % (*Figs. 4.98* and *4.99*). The finds made of rarer materials such as alabaster, marble or pumice also came from Area I (67 %), and 66 % of all the rubbing stones were found in Area II.

4.3.6.2. Repertoire of Shapes

Among the different types, by far the largest proportion is made up of rubbing stones (137), the majority of which (93) are made of basalt, like TZ 110841-001 (*Fig. 4.100*), but a few objects are made of flint (6), for example TZ 016061-001 (*Fig. 4.101*)¹⁴⁰. Hammer stones—which, in contrast to the rubbing stones, do not have a flat side—such as TZ 111739-001 (*Fig. 4.102*), on the other hand, were increasingly (15) made of flint. These small objects served primarily for fine grinding work, for instance in connection with food preparation¹⁴¹.

Mortars are represented by only six objects, four of the which are made of basalt and two of limestone. Associated are the mortar bowls, which are also almost exclusively made of basalt, like TZ 110157-001 (*Fig. 4.103*). Both were also used in the kitchen and served for the crushing of spices or the production of medicines¹⁴².

The grinding tools also include 35 querns, 34 of which were made of basalt, such as TZ 111699-001 (*Fig. 4.104*). Given that they served as bases for grinding grain and similar substances, limestone would have been an unsuitable material as it would wear too quickly with the strong and long-lasting friction¹⁴³. Functionally related to the querns are the grinding stones, almost all of which were also made of basalt, as shown by TZ 015591-001 (*Fig. 4.105*). Together, the quern and the grinding stone form a so-called hand-driven mill. The lower part (quern) functioned as a base on which the upper



Fig. 4.99 Proportion by type of stone (with reference to chippings/tools) (Source: BAI/GPIA).

part (grinding stone) was rubbed manually on the quern¹⁴⁴.

Among the 69 stone vessels were bowls with pedestals such as TZ 111684-001 (*Fig. 4.106*) or plate TZ 007744-001 (*Fig. 4.107*), which was made of basalt. Bowls with pedestals are frequently found in Bronze and Iron Age contexts, but can also be traced in the Hellenistic and Roman strata from Tēl Ānāfā¹⁴⁵. Next to it, a stone stopper was found (TZ 013542-001; *Fig. 4.108*), which, like a cork, could seal a vessel with a narrow opening.

There was a total of 49 Early Roman limestone vessels. The special nature of the limestone vessels from Tall Zirā'a has already been published several times, and it should be emphasised that they can be regarded as evidence of Jewish families¹⁴⁶. The use of these vessels thrived from the end of the first century BC until the beginning of the second century AD—and thus during the Roman settlement phase at Tall Zirā'a¹⁴⁷. In addition to mugs, bowls,

- 140 Rubbing stones are already known from Early Bronze Age contexts in the Levant: Müller-Neuhof 2015, 20. Due to the occurrence of several objects made of flint, it can be assumed that they were still made of this material in the Roman period, even if only in small numbers.
- 141 Fortner 2008, 81: here addressed as small grinding stones ("kleine Mahlsteine"), Obj. 1521, 1522; whereas 1519, 1520 are rather to be understood as grinding stones. Müller-Neuhof 2015, 20 identifies further possible uses: as a hunting weapon, for grinding plants and for carving stones.
- 142 Fortner 2008, 81.
- 143 In contrast to the grinding of spices, the grinding of grain required more force and the process lasted considerably longer.
- 144 For the pointer on the definition, thanks to H.-M. Jakubik.
- 145 Berlin Herbert 2012, 317, 61-64.
- 146 Vieweger Häser 2014, 137.



Fig. 4.100 Rubbing stone TZ 110841-001; Stratum 7 c, b, a, Square AW 132, Context 10604; basalt (Source: BAI/GPIA).



Fig. 4.101 Rubbing stone TZ 016061-001; Stratum 6 b, Square AP 123, Context 4770; flint (Source: BAI/GPIA).



Fig. 4.102 Hammer stone TZ 111739-001; Stratum 6 c, b, a, Square AX 126, Context 10883; flint (Source: BAI/ GPIA).



Fig. 4.103 Mortar bowl TZ 110157-001; Stratum 7 c, b, a, also 6 c, b, a, 5, Square AW 128, Feature 10069; basalt (Source: BAI/GPIA).



Fig. 4.104 Quern TZ 111699-001; Stratum 6 c, b, a, Square AX 126, Context 10883; basalt (Source: BAI/GPIA).



Fig. 4.105 Grinding stone TZ 015591-001; Stratum 7 c, b, a, Square AE 114, Context 5304; basalt (Source: BAI/ GPIA).



Fig. 4.106 Bowl with pedestal TZ 111684-001; Stratum 7 c, b, a, also 6 c, b, a, Square AX 126, Context 10831; basalt (Source: BAI/GPIA).



Fig. 4.107 Plate or platter TZ 007744-001; Stratum 7 c, b, a, Square AM 119, Context 74; basalt (Source: BAI/ GPIA).



Fig. 4.108 Stone stopper TZ 013542-001; Stratum 6 c, b, a, Square AR 123, Context 4181 (Source: BAI/GPIA).



Fig. 4.109 Mug with handle TZ 015388-001; Stratum 10, Square AQ 122, Context 4737; limestone (Source: BAI/GPIA).



Fig. 4.110 Bowl TZ 015948-001; Stratum 7 c, Square AQ 123, Context 5206; limestone (Source: BAI/GPIA).



Fig. 4.111 Plate TZ 010833-001; Stratum 7 a, Square AL 118, Context 1503; limestone (Source: BAI/GPIA).



Fig. 4.112 Vessel TZ 019513-001; Stratum 7 b, Square AP 123, Context 5095; limestone (Source: BAI/GPIA).

Stratum	Area I	Area II
12	3	_
12, and 11	1	_
11	1	_
10	2	-
09	_	_
09, and 08. 07	_	_
09, and 08. 07. 06	_	_
08	_	3
08, and 07	-	_
08, and 07. 06	_	1
07, and 06	1	3
07	31	1
06	10	1
06, and 05	-	2
05, and 04. 03	_	1
03	3	4
02, and 01	-	2
02, and 01. 00	-	1
01	_	3

Tab., 4.10 Distribution of limestone vessels in all strata; Areas I and II.

plates and pots, there are also basins, cups and barrel-shaped vessels (*Figs. 4.109–4.112*).

D. Vieweger and J. Häser have proposed that the limestone vessels "were used for ritual cleansing, *e.g.* before and after meals—the large water containers (up to 80 litres) may have been used to store cleansing water."¹⁴⁸ This suggestion continues to be put forward here. There is only one addition to be made to the findings from 2014. There are only minor changes in the total numbers, such as three additional limestone vessels in Stratum 7 (still named Stratum 8 in 2014), which can be explained by a closer examination of the construction phases (*Tab. 4.10*)

The distribution within the Roman strata, which could not be anticipated in 2014, is now much more concrete (*Fig. 4.113*). It can be clearly seen that not only is there a decline in limestone vessels from Stratum 7 to Stratum 6, but this trend is also reflected within Stratum 6.

In addition, 43 tesserae were found in the Roman strata¹⁴⁹. Only three pieces came from Area II and only two tesserae were found in Stratum 7. Accordingly, the majority of the tesserae came from



Fig. 4.113 Distribution of limestone vessels Stratum 8 Hellenistic to 6 (Early) Roman; Area I.



Fig. 4.114 Part of the tesserae finds from Areas I and II; Strata 7 and 6 (Source: BAI/GPIA).

Stratum 6 in Area I, specifically from Complex D. The stones are all made of limestone and are white, beige, dark brown, grey and black (*Fig. 4.114*).

Among the five objects that can be regarded as tiles, two were made of marble: TZ 112712-001 and TZ 110839-001 (*Figs. 4.115* and *4.116*). Two of the finds (one marble) came from very deep fill layers, which makes a precise stratification difficult. The occurrence of marble at Tall Zirā'a is impressive in itself, as the foreign material was a very valuable import in the East Bank and illustrates the importance of the site—far beyond a simple rural settlement¹⁵⁰. A flourishing trade in this valuable commodity with local craftsmen is documented for

- 147 Vieweger Häser 2014, 142.
- 148 Vieweger Häser 2014, 143.
- 149 A total of 446 tesserae were found in Areas I and II, distributed over Strata 0 to 12 and three stones from Strata 13 and 15.
- 150 Weber 2002, 282



Fig. 4.115 Marble tile TZ 112712-001; Stratum 7 c, b, a also 6 c, b, a, Square AU 130, Context 11449 (Source: BAI/ GPIA).



Fig. 4.117 Spindle whorl TZ 015332-001; Stratum 7 c, b, a, Square AR 121, Context 5522; limestone (Source: BAI/GPIA).

Gadara only in the second to third centuries AD, as the inscription on the sarcophagus of an individual named Marmarario from this period illustrates¹⁵¹.

Spindle whorls are also part of the repertoire, such as TZ 015332-001 (*Fig. 4.117*), as well as stone weights such as TZ 111686-001 (*Fig. 4.118*), which were used as part of a loom. Of particular note is spindle whorl TZ 018968-001 made of alabaster.

The potter's wheel TZ 111630-001 (*Fig. 4.47*; *Chap. 4.3.1.3.*) has already been discussed. In addition, the find repertoire includes three objects that can be interpreted as game pieces as well as an axe, sling stones and iron nodules. The cylinder seal TZ 012357-011 can be unequivocally assigned to the Late Bronze Age¹⁵².

Casting mould TZ 112153-001 (*Figs. 4.119* and *4.120*) is one of the most remarkable of the stone finds.

It was found in Room E 14 in Stratum 7. The rectangular slab measuring 14.3 cm x 7.5 cm x 2.5 cm is made of soapstone (?) and has five re-



Fig. 4.116 Marble tile TZ 110839-001; Stratum 6 c, b, a, Square AW 132, Context 10559 (Source: BAI/GPIA).



Fig. 4.118 Stone weight TZ 111686-001; Stratum 7 c, b, a, Square AX 126, Context 10831; basalt (Source: BAI/ GPIA).

cesses for beads and four recesses for delicate and ornate wires. Two depressions at the corners can be seen as attachments for a counter plate, which, however, was not found. This find is evidence of another craft that was practised at Tall Zirā'a. A mould for jewellery making was also found in Qalandiya¹⁵³. It is made of slate and has four recesses for rings of different sizes (*Fig. 4.121*)¹⁵⁴. More complex earrings and pendants could also be made in the moulds, as a Hellenistic-Roman example from Jerusalem shows (*Fig. 4.122*)¹⁵⁵.

Another remarkable find is a small plate made of diorite, TZ 009893-001 (*Fig. 3.13*); it could be

- 151 Weber 2002, 301, IS 44, App. 97:C. Another inscription from Hamat Gader is recognised by T. Weber
- 152 Soennecken 2017, 314–323, esp. 321.
- 153 Chap. 3.2.5.3.
- 154 Magen 2004, 102 Fig. 143 Pl. III.
- 155 Rosenthal-Heginbottom 1992, 275-277.



Fig. 4.119 Casting mould TZ 112153-001 (front); Stratum 7 c, b, a, Square AY 128, Context 11337; soapstone (?) (Source: BAI/GPIA).

interpreted as a make-up palette or the lid of a small box.

Among the beads there were five pieces of carnelian, TZ 011780-001/002, TZ 011782-002, TZ 011781-001/002 (*Fig. 3.66*), which were found together in a pit in Area I Stratum 7. In another pit in Area II Stratum 6 a total of 40 turquoise-coloured beads TZ 013253-001 (*Fig. 4.29*) were found.

Two small column drums TZ 111671-001 (*Fig. 4.123*) and TZ 111689-001 (*Fig. 4.124*) are addressed as architectural components. With a diameter of just 10 cm, a decorative function is likely here. The architectural components also include various door socket stones, of which TZ 015363-



Fig. 4.120 Drawing of the mould TZ 112153-001 (Source: BAI/GPIA).



Fig. 4.121 Casting mould TZ 112153-001 (side, backside); Stratum 7 c, b, a, Square AY 128, Context 11337; soapstone (?) (Source: BAI/GPIA).



Fig. 4.122 Mould for earrings and pendants from City of David, Area H; ceramic (Source: Rosenthal-Heginbottom 1992; Photo 223).



Fig. 4.123 Column drum TZ 111671-001; Stratum 6 c, b, a, Square AS 123, Context 11020; basalt (Source: BAI/ GPIA).



Fig. 4.125 Door socket stone TZ 015363-001 from wall 4906; Stratum 7 c, b, a, Square AP 123; limestone (Source: BAI/GPIA).

001 was still in situ in wall 4906 (*Figs. 3.32* and *4.125*).

4.3.6.3. Summary

The distribution is initially surprising, at least in that higher quality materials, as well as finds representing decorative items, would have been expected in Area II, yet they were found in Area I. This again emphasises the importance of Complex D.

The repertoire of forms among the stone finds is wide-ranging (*Tab. 4.11*), with an increasing (relative to earlier strata) number of finds from



Fig. 4.124 Column drum TZ 111689-001; Stratum 7 c, b, a also 6 c, b, ab Square AW 127b Context 10740; basalt (Source: BAI/GPIA).

artisanal domains. Here In Strata 6 and 7, we find primarily everyday objects such as rubbing stones, mortars, hand-driven mills, weight stones and spindle whorls, which constitute evidence of cooking, medicine production and weaving. The rather small number of spindle whorls and stone weights probably indicates that clay weights were used or that a loom that did not need weights, which had appeared in the first century AD, was already in use¹⁵⁶.

Metalworking (moulds) and pottery production (potter's wheels) were also identified, again demonstrating the wide range of artisanal activities that took place at Tall Zirā'a. The main materials among the finds are basalt and limestone (except for beads and chips/tools), and correspond to materials found in the region.

Apart from everyday objects, there were only a few luxury items (beads, alabaster spindle whorls, marble tiles), which were located mainly in Complex D. The number of tesserae and tiles is altogether too small to postulate a decorated room. The architectural elements do not provide any new insights into the furnishings of the complexes either.

It can be established, however, that there must have been a Jewish proportion among the inhabitants during the Roman period, as is shown by the large number of Early Roman limestone vessels.

Purpose	Number
Rubbing stones	137
Basalt	93
Limestone	26
Flint	6
Granite	1
Pumice	2
Indefinite	9
Pounder	21
Basalt	2
Limestone	2
Flint/Silex	15
Indefinite	2
Mortars	6
Basalt	5
Limestone	2
Mortar bowls	23
Basalt	21
Limestone	2
Querns	35
Basalt	34
Hematite	1
Grinding stones	15
Basalt	13
Limestone	2
Spindle whorls	7
Limestone	6
Alabaster	1
Weights	10
Basalt	7
Limestone	3
Casting mould	1
Soapstone (?)	1
Axe	1
Basalt	1
Cylinder seal	1
Limestone	1

Beads	46
Carnelean	6
Indefinite	40
Game pieces	3
Basalt	1
Limestone	2
Stone vessels	69
Basalt	19
Limestone	49
Indefinite	1
Potter's wheel	1
Basalt	1
Tesserae	43
Limestone	43
Door hinge stone	9
Basalt	3
Limestone	5
Indefinite	1
Architectural components	7
Basalt	4
Limestone	3
Tiles	5
Limestone	3
Marble	2
Sling stone	10
Limestone	10
Iron nodules	18
Flakes/Tools	192
Flint	192
Function unclear	37
Basalt	13
Limestone	13
Flint	3
Granite	1
Indefinite	7

Tab. 4.11 Overview of the stone finds and types of stone in Strata 7 and 6; Areas I and II.

4.3.7. Wall Paintings

A total of 213 fragments of wall plaster were recovered from Tall Zirā'a within Stratum 6. Seven fragments came from Area I Complex D and 206 others from Area II. No fragments were recovered *in situ*, they were found exclusively in layers of collapse.

The wall plaster fragments from Area I were found in Contexts 4280, 4283 and 4766 in Square AP 123, all of which were located in Room D 4 within Complex D in Stratum 6 a. Context 4766 was the central floor area of the room, 4280 was a wall placed on top of floor 4766, and 4283 represents the fill of the room. The seven fragments, measuring 1 cm x 2 cm, show only red or white paint, with both colours appearing together on only one piece, where they are in two sections (*Fig. 4.126*). Eighteen tesserae (white, beige, grey) were also found in the room, in Contexts 4280, 4283, 4780, and could indicate that the room was also equipped with a mosaic floor.

The wall-painting fragments from Area II came from Context 10625 in AT 128, directly outside Complex E in the south of the area, and also came from collapse deposits. In addition to the large accumulation of wall paintings, coin TZ 110965-001 of Herod Antipas was found, which dates to 29 or 30 AD (Pl. 21.6). The location under the floor of Strata 5 and 4 leaves no doubt that they all belonged to Complex E. The fragments are between 1 cm x 1 cm and 6 cm x 5 cm in size (for size classification, see Fig. 6.32 including scale). The majority of the fragments have a fine-grained plaster finishing coat which bears the paint; only in a few fragments can the considerably thicker base coat applied to the wall beforehand still be seen (Fig. 4.127), which in turn was applied onto organic material. The colour palette suggests red, yellow, black, green and possibly blue¹⁵⁷. The layer of paint is firmly bonded to the plaster and is water-resistant. From this it can be concluded that it was a frescoed application of paint, which was painted on the damp plaster without the addition of any further binding agents¹⁵⁸.

The wall painting fragments show mainly imitation encrustation, *i.e.* coloured sections marked off by black lines, occurring in red, yellow and white (*Figs. 4.128–4.132*). Black as a section colour is also attested (*Fig. 4.139*; perhaps also *Fig. 4.131*). In addition, several fragments with red-yel-



Fig. 4.126 Wall painting TZ 016352-001; Stratum 6 a, Square AP 123, Context 4766; left: area of red paint; right: two coloured sections in white and red (Source: BAI/ GPIA).



Fig. 4.127 Wall painting TZ 110869-002 (1); Stratum 6 c, b, a, Square AT 128, Context 10625; finish and base coat of plaster (Source: BAI/GPIA).

low marbling were found (*Figs. 4.133* and *4.134*). A few pieces stand out in particular and indicate that, apart from the imitation encrustation, there were probably also floral motifs (*Fig. 4.135*), as suggested by the curved black lines on a yellow ground. One fragment shows traces of a paintbrush, the individual bristle marks can still be identified perfectly (*Fig. 4.136*). This and one other are among the few pieces with green paint (*Fig. 4.137*). There is no evidence of figurative or animal motifs—some

- 157 On the composition of colours for murals using the example of Petra: Shaer 2005, 29–48.
- 158 Thanks for this clue to J. Häser.



Fig. 4.128 Wall painting TZ 110869-002 (11); Stratum 6 c, b, a, Square AT 128, Context 10625; red and yellow separated by a black line (Source: BAI/GPIA).



Fig. 4.129 Wall painting TZ 110869-002 (39); Stratum 6 c, b, a, Square AT 128, Context 10625; red and yellow separated by a black line (Source: BAI/GPIA).



Fig. 4.130 Wall painting TZ 110869-002 (13); Stratum 6 c, b, a; Square AT 128; Context 10625; red and white (Source: BAI/GPIA).



Fig. 4.131 Wall painting TZ 110869-002 (9); Stratum 6 c, b, a; Square AT 128; Context 10625; black and white (Source: BAI/GPIA).



Fig. 4.132 Wall painting TZ 110869-002 (10); Stratum 6 c, b, a, Square AT 128, Context 10625; black and yellow (Source: BAI/GPIA).



Fig. 4.133 Wall painting TZ 110869-002 (6); Stratum 6 c, b, a, Square AT 128, Context 10625; red-yellow marbling (Source: BAI/GPIA).



Fig. 4.134 Wall painting TZ 110869-002 (4); Stratum 6 c, b, a, Square AT 128, Context 10625; red-yellow marbling (Source: BAI/GPIA).



Fig. 4.135 Wall painting TZ 110869-002 (1); Stratum 6 c, b, a, Square AT 128, Context 10625; floral motif on yellow background (Source: BAI/GPIA).



Fig. 4.136 Wall painting TZ 110869-002 (5); Stratum 6 c, b, a; Square AT 128, Context 10625, red and green curved lines on yellow background; traces of paintbrush bristles visible (Source: BAI/GPIA).



Fig. 4.137 Wall painting TZ 110869-002 (23); Stratum 6 c, b, a, Square AT 128, Context 10625; green curved lines on yellow background (Source: BAI/GPIA).



Fig. 4.138 Wall painting TZ 110869-002 (12); Stratum 6 c, b, a, Square AT 128, Context 10625; red and green curved lines on yellow background (Source: BAI/GPIA).



Fig. 4.139 Wall painting TZ 110869-002 (2, 3); Stratum 6 c, b, a, Square AT 128, Context 10625; black (surface area?) (Source: BAI/GPIA).



Fig. 4.140 Fragments of wall paintings from a residential house on the south-western slope of the acropolis at Gadara (Source: Kerner 2002, Fig. 196).

pieces might suggest such motifs though only with a lot of imagination (*Fig. 4.138*)¹⁵⁹.

Comparisons for the encrustation imitation—as well as for the colour palette used and the red-yellow marbling—can be found in a Hellenistic-Roman dwelling on the south-western slope of the acropolis at Gadara (*Fig. 4.140*)¹⁶⁰. Curved yellow and red lines, like those on the Gadara fragments, are also found on fragments from Tall Zirā'a. A significant difference is that, on the Gadara fragments, green lines separate the sections and the coloured sections are limited to white (with green and red lines) and yellow-red marbled. This comparison is a fortunate circumstance because, apart from this example, there are no other known wall paintings in house contexts of the Hellenistic and Roman periods in northern Jordan. Wall paintings in Jordan are more numerous in monumental architecture such as the Hellenistic temple in Gerasa¹⁶¹ and tomb contexts from the second to the third centuries AD such as Abila¹⁶², Pella¹⁶³, Saum¹⁶⁴, Marwa¹⁶⁵ and Capitolias¹⁶⁶, even if these examples only offer a small glimpse into the wall paintings of the time¹⁶⁷. The most recently found wall paintings are from a tomb in Bēt Rās, which has beautiful figurative and animal paintings with short inscriptions¹⁶⁸.

The finds from Tall Zirā'a provide the first evidence of wall painting in the region, which, thanks to the good comparative examples from Gadara, shows that they are in no way inferior to those from a city of the Decapolis. Rural luxury, as well as the strong influence of Roman culture, is once again evident. The almost identical paintings also suggest the taste of the Early Roman period, when imitations of encrustation and marble were obviously very fashionable.

Even if a comparison of the wall paintings from both houses at Tall Zirā'a in Areas I and II has its weaknesses due to a qualitative and quantitative imbalance, one can nevertheless assume that the wall paintings in Complex D were kept rather simple, with simple block-coloured decoration in red and white¹⁶⁹. This contrasts with the much more elaborate paintings in Complex E with the aforementioned imitation and floral motifs. The significance of the two buildings is thus also expressed through the wall paintings, which is a not unimportant characteristic of wall painting itself.

- 159 During the recent excavations on Tall Zirā'a in Area II, over 150 pieces of wall paintings were found. After reviewing the pieces and consulting with B. Jansen, it can be assumed that the majority of those fragments relate to the pieces presented here. Jansen dates the wall painting to the Hellenistic period. Jansen 2022, 82.
- 160 Kerner 2002, 128 f. Fig. 196.
- 161 The painting is purely limited to architectural imitation and floral patterns, there is no figurative painting Eristov et al. 2003, 276–284; Vibert-Guigue 2016, 337 f.
- 162 Painting shows figurative motifs, but also buildings such as temples, as well as portraits of the deceased, flowers and dolphins: Mare 2002, 58 Fig. 82; Vibert-Guigue 2016, 338 Fig. 11.
- 163 A fragment of plastered stucco found during inspection of the site shows decorations in red, yellow and white: Smith 1981, 326 Pl. LXXXVIII.

- 164 Paintings with animals and a sphinx can be found inside a veteran's tomb: Vibert-Guigue 2016, 339.
- 165 Figure seated on a throne: McCown 1936, 2–4; Vibert-Guigue 2016, 339.
- 166 Denes from the Trojan War are depicted: Vibert-Guigue 2016, 338 f. Fig. 12.
- 167 As of 2016, there are 30 sites across Jordan known to have wall paintings: Vibert-Guigue 2016, 330 Fig. 1.
- 168 <https://www.biblicalarchaeology.org/daily/ancientcultures/ancient-near-eastern-world/aramaic-comicsroman-tomb-beit-ras-jordan/> (retrieved 04.05.2019).
- 169 Painting of the same kind as in Complex E is also entirely possible, but cannot be conclusively determined due to the small number of fragments.

4.4. Dating

Here, an attempt is made to work out dating based on clear features/find conditions. To make this more comprehensible, the features on which the dating is based will be presented. These include excavation pits, walls, context-destroying pits, backfill layers between floors, and fill layers directly beneath or between two wall phases, some of which were fortunately identified thanks to detailed documentation during the course of the excavation. Even if a complete separation of finds for Strata 7 and 6 did not seem to be very useful—since the material in the majority of the contexts was very mixed and often room contents only represented the fills of the most recent phase—this approach is nevertheless well suited for a separate examination of the strata. First of all, all relevant contexts are listed followed by a summary of the insights gained, also with regard to the evaluation of the types of finds.

4.4.1. Features Relevant for Dating: Stratum 7

Area I: For **Stratum 7 c** the following finds from Complex D have been taken into account:

- D 1: Herodian oil lamp TZ 020490-001 (37 BC – 135 AD) from wall 4765
- D 2: ETS bowl (10 BC 30 AD) and ETS imitation (30 BC 70 AD) from wall 4343

Area I: For **Stratum 7 b** (first reconstruction phase) the following finds from Complex D have been taken into account:

 D 3: Two coins of Herod I (37 BC – 4 AD) and Alexander Jannaeus (78 BC)¹⁷⁰, two casseroles (first century BC – first century AD), an amphora (first century AD) and an oil lamp (Herodian) from backfill 5270 (under floor of 7 a)

Area I: For **Stratum 7 a** (second reconstruction phase) the following finds from Complex D have been taken into account:

• D 5: ETS sherd (50–100 AD) from wall 4994, which overlay the wall sections from 7 b

Area II: For **Stratum 7 c, b, a** the following finds from Complex E have been taken into account (*Fig. 4.141*):

- E 2: Amphora and ETS bowl (both 30 BC 70 AD) from wall 10843
- E 3: Cooking pot (first century BC first century AD) from wall 11143

- E 7: Coin TZ 111245-001 (104–40 BC [probably Alexander Jannaeus]) under floor 10740 (backfill layer before building of Complex E)
- E 9: Glass bowl (second century BC 50 AD) from Context 11018 (under floor from Stratum 6)
- E 10: Cooking pot and glass bowl (both second century BC – first century AD) from wall 10019
- E 12: Imitation of an ETS bowl (80 BC 50 AD) from Context 11386 (under floor from Stratum 6)
- E 13: Echinus bowl (third century BC first century AD) from wall 11160
- E 14: Two fish plates (first half of first century BC and second-first quarter of first century BC), an Echinus bowl (third century BC first century AD), a casserole (first century BC third century AD) and cooking pot (first century BC first century AD) within Context 11337 (backfill layer under reconstruction in Stratum 6)
- E 14: Cooking pot (second century BC first century AD) from wall 10219
- E 17: Two Echinus bowls (second-first century BC) from pisé floor 10246 (more precisely in the stone foundation of the floor)
- E 19: ESA bowl (80 BC 50 AD) from Context 10325 (under floor from Stratum 6)

170 The continued use of Alexander Jannaeus' coins for up to 100 years has already been pointed out: *Chap. 2.3.3.*



Fig. 4.141 Stratum 7, Area II, Complex E: location of finds relevant to dating (information on the pottery types is based on Kenkel 2012) (Source: BAI/GPIA).

4.4.2. Features Relevant for Dating: Stratum 6

Area I: For **Stratum 6 c** the following finds from Complex D have been taken into account:

- D 2: Early Roman oil lamp, several casseroles (first century BC – third century AD) and a table amphora (first century BC – second century AD) under wall 4344 in the narrow fill layer 4764
- D 2: Two ESA bowls (Claudian-Neronian) in fill layer 4861 (backfill layer below floor and infill Stratum 6 c)
- D 3: Cooking pot (first BC first century AD) in wall 4671 (rolling of wall 4986)
- D 3: ETS bowl (125 BC 50 AD) and two cooking pots (first century BC – first century AD and second – first century BC) in fill layers (under floor 4870)

- D 3: Among others, ETS bowl (first century AD) and bowl (70–120 AD) from the excavation pits in Room D 4
- Outside Complex D: Table amphora (first century BC – first century AD) from pit 31 that destroyed Complex B

Area I: For **Stratum 6 b** (first reconstruction phase) and **Stratum 6 a** (second reconstruction phase) no datable finds have been drawn upon.

Area II: For **Stratum 6 c, b, a** the following find from Complex E has been taken into account:

• E 13: Cooking pot sherd (second–fifth century AD) from wall 10295

4.4.3. Summarising Consideration of the Dating Taking into Account the Evaluation of Finds

To complete the full picture of the dating process, the focus must once again be placed on those categories of finds that are most insightful.

Coins: The Jannaean and Herodian coins showing a year, point to a resumption or new flourishing of settlement in the Herodian period. One coin each from Herod Antipas and Tiberius is followed by a 'coin gap' until Hadrian and another gap until the third century AD¹⁷¹.

→ Dating according to coin finds: Herod to Tiberius or Hadrian

Pottery: On the basis of the pottery, a clear increase in shapes and quality was noted for the period from the first century BC to the first century AD. A large quantity of tableware and its imitations from local-regional wares first appear in the first century AD. Among the oil lamps, it is mainly Herodian forms that have been identified¹⁷². By developing the stratigraphy, it was possible to establish that the amphora types Am11 and Am21.2, which date to the first century AD, appeared in Stratum 7 a (Am11 perhaps already 7 c) as a new addition to the pottery repertoire It is striking that tableware has only been found dating up to the first half of the second century AD. After that, it seems to have disappeared from the finds (*Chap. 4.3.1.1*.).

→ Dating according to pottery finds: first century BC to first century AD (beginning); first half of second century AD (end)

Glass: Shaped bowls (ribbed bowls and cut-line bowls), which date from the second century BC – 50 AD, form the main type of glass items and make up the Early Roman repertoire. They are found in large numbers at Tall Zirā'a, with over 200 finds, and can be assigned to the Roman strata, except for a few pieces (Stratum 8).

→ Dating according to glass finds: second century BC – 50 AD.

Stone: The limestone vessels are typical of the Roman period, even if they do not provide any more specific dating evidence. Almost without exception, they originate from Area 1 (mostly Complex D) and can thus be described as typical for the building in both strata.

 Dating according to limestone vessels found: Peak period first century BC – second century AD.

An attempt to separate strata and reconstruction phases chronologically has only been successful to a limited extent, as the number of finds from suitable features is insufficient, as are the features themselves.

For the whole of Stratum 7, however, a clear chronological classification can be recognised in correlation with the evaluation of finds. According to the features and finds presented above, the buildings were constructed between the end of the first century BC and the first half of the first century AD. The dating of the strata (*Tab. 4.12*) is as follows:

Stratum	Dating
7 c	End of first century BC – first half of first century AD
7 b	First century AD
7 a	First century AD
6 c	First half of second century AD
6 b	First half of second century AD
6 a	Middle (to end) of second century AD

Tab. 4.12 Dating of Strata 7 and 6.

4.5. Overall Evaluation of Roman Strata

The Early Roman remains from Strata 6 and 7 of Tall Zirā'a are particularly valuable for understanding the region's history. For many Roman provinces-especially in the west and south of the Roman Empire-the archaeological remains of rural life have been well researched and are also sufficiently represented in the literature. As already outlined, however, agricultural facilities in Israel and Jordan are significantly less well researched, which is why there is a lack of comparative material-also with regards to the area of the Decapolis¹⁷³. Conclusions about architectural remains can only be drawn on the basis of surveys and a small number of excavations, which is why there is clearly a need for further research and the findings presented here provide an important insight into life in the countryside.

After the destruction or abandonment of the settlement structure from Stratum 8 (end of the second century BC or beginning/middle of the first century BC), a new settlement was founded between the end of the first century BC and the first half of the first century AD. This became tangible in Stratum 7. On the basis of pottery finds, a clear increase in forms and quality was noted for this period. A large amount of tableware and also imitations from local-regional wares are first attested in the first century AD174. Among the coins, mintages of Herod I, Herod Antipas and Tiberius were found. In addition, it was possible to prove that coins of Alexander Jannaeus were also in circulation, typical above all for Herodian or later contexts (up to the First Jewish War)175.

The new settlement in the Roman period (Stratum 7) shows a clear change compared to the previous

- 173 See Chap. 3.2.5.3.
- 174 Kenkel 2012, 82. 147.
- 175 Syon 2015, 45–47; Ahipaz 2013, 174; See *Chap. 2.3.3.5.* and *Chap. 4.3.3.3.*
- 176 In contrast Kuhnen's statement: "According to stratified findings, one gets the impression that the beginning of Roman rule in Palestine was not followed by a comprehensive change in domestic architecture." However, it must be clearly stated that the building technique did not change at all; here, the familiar construction method was used. Likewise, it cannot be ruled out that the individual buildings in Area I continued to follow the design of Hellenistic houses. Only Complex E in Area II represents a clear exception in

settlement phase, the most striking architectural feature of which was the wide enclosing wall (Stratum 8)¹⁷⁶. The newly built settlement consisted of several individual buildings loosely distributed over the tall. Complex E in Area II formed the core of the settlement. The owner's living quarters and official reception rooms are presumed to be located here, as well as an extensive work area for economic activities. The construction method (e.g., quarry stone, door sills made of monoliths), the use of a traditional courtyard and the partly oblique room layout of the walls in the interior point to a continued use of indigenous elements¹⁷⁷. The other buildings fit well into this context. They are to be regarded as outbuildings, with Complex D occupying a prominent position among them. Structurally, the building continues to follow Hellenistic traditions and fits in with the typical houses in the region, such as at Capharnaum or Ramat Rahel¹⁷⁸. The function of this complex cannot be determined with certainty. Although a number of finds point to weaving activity, this does not allow for a more specific interpretation.

Complex A represents a house with a press, in which—as is typical for the region—olive oil was likely to have been produced. Comparative examples mentioned in surveys are numerous¹⁷⁹.

Complexes B, C and F are in too poor a state of preservation to be interpreted. Residential accommodation, as well as storage spaces (especially linked to olive oil production) or stables can be considered.

The almost ideal location of the settlement at Tall Zirā'a and the difficult approach on three sides ob-

its ground plan. Kuhnen also provides an explanation for this: "The fact that the demolition of residential buildings in this period evidently only took place due to force majeure also speaks for the adherence to the inherited building structure" This refers, among other things, to armed conflicts, which probably also provided the reason for abandoning the Hellenistic settlement on the tall: Kuhnen 1990, 234; on the end of the Hellenistic settlement on Tall Zirā'a see *Chap. 2.4.*

- 177 Kuhnen 1990, 61.
- 178 See Chap. 3.2.4.3.
- 179 See Chap. 3.2.1.

viously made an enclosing wall redundant, as no traces of such a wall have been found so far. The architectural remains of what is believed to be a nearby control post suggest that provisions had been made for increased security on the route leading to Gadara. According to current insights, in the Roman period, as was already the case during the Hellenistic period, there was no cistern associated with the settlement. It is assumed that the spring at the centre of the tall was still active and that together with water sources in the wider surroundings supplies were sufficient¹⁸⁰.

As Complex C shows, the settlement was not limited to the northern part of the tall. The placement of the building at the edge of the slope suggests that the surface of the tall was occupied on a much wider area. For Area III, further results can be expected in future, as the last excavation in 2014 had reached Roman layers in a few places, suggesting that the settlement had also extended to cover this part of the tall in the Roman period¹⁸¹. Findings, such as a loom in Context 4045 (Area I), also indicate that the settlement was much larger than previously assumed. A large number of buildings were probably constructed of wood and/or clay, which is why no traces of such perishable structures were found during the excavations¹⁸². The geomagnetic survey has yielded promising results for Complex F in Area II, suggesting an extensive building. To verify this, however, further excavations would be necessary¹⁸³.

Which agricultural products were produced in the surrounding area cannot be said with certainty. The production of olive oil is certain for Stratum 7 (Complex A), and the size of the press indicates that it was only used to cover the household's own needs. The oil was filled into jars and amphorae and partly stored in Complex E (E 13), and a small number of pottery sherds also suggests everyday uses for it, such as cooking and as fuel for lamps¹⁸⁴. There was also evidence for the consumption of figs in the Roman period¹⁸⁵. There are no clear indications for other products such as wheat, raisins, dates or other fruit, but this does not mean that they need be completely excluded. One Talmudic source mentions that the ideal yield of any farm should consist of one third each of grain, olives and wine. However, the archaeological finds and features can only be partially matched to these expectations¹⁸⁶. By contrast, the bones of sheep, goats and cattle seem to indicate that animal husbandry was practised. In addition, there was evidence for various crafts: weaving (spatulae, weaver's shuttles, spindle whorls, weaving weights), metalworking (casting mould) and pottery production (parts of potter's wheels, handmade pottery), but also fishing (fishing net weight)¹⁸⁷.

A separation of the finds from Strata 7 and 6 was only possible in a few places, even if the architectural remains indicated a clear change in habitation and thus allowed at least a few significant changes to the settlement to be identified. Although some layers of collapse were recognisable, building material was also reused, as was the case after Stratum 8. In connection with the events related to the First Jewish War, it seems likely that the buildings in Stratum 7 were partially destroyed and then rebuilt (reconstruction of Complex E). The extensive ash layer the eastern part of Complex E (E 20) may indicate a destruction layer, perhaps the result of looting and devastation in the hinterland of the city of Gadara during the course of the war¹⁸⁸.

In Stratum 6, Complexes A, B and C were abandoned, thus losing one aspect of its economy (oil press). Complex D was extended towards the north (Complex D 6) and partially repaired, but otherwise remained in its basic form and at this time, at the latest, received a second storey (staircase 4856). The structural change was probably accompanied by a functional one: the economic character of Stratum 7 disappeared almost entirely. Instead, Stratum 6 showed more opulent furnishings. Clay floors were replaced by stone floors and coloured wall paintings were found, albeit on a small scale. Similar changes can also be seen in Complex E. The core of the building, the farmyard, was considerably reduced in size and lost its characteristic tabuns. Another

- 180 Leiverkus Soennecken 2016.
- 181 Rothe et al. 2017, 261.
- 182 On Context 4045 see Chap. 3.2.4.4.
- 183 See Chap. 4.2.4.
- 184 Fortner Rottloff 2003a, 133.
- 185 Olsvig-Whittaker 2017, 211 Tab. 3.1.
- 186 Ben-David 1974, 79, Note 41; Fortner Rottloff 2003a, 134.
- 187 For the weaving contexts see *Chap. 4.3.5.3.*; for the mould see *Chap. 4.3.6.2.*; for pottery production see *Chap. 4.3.1.4.*; on fishing net weight see *Chap. 4.3.2.1.*
- 188 Jos. Bell. Jud. II, 18. 1.

significant difference is the conversion of the eastern projection, which loses its fortified character in Stratum 6. The painted wall fragments found to the south of the building would also have belonged to this phase of the building.

The known building forms in the countryside show a rich array of designs¹⁸⁹. Some of them have particularly long phases of use from the Hellenistic to the Roman periods, as the Um-Rihān complex (third century BC to 70 AD) shows¹⁹⁰. In general, an increased occurrence of farmsteads in the Early Roman period can be observed, which can be seen in the expansion of rural settlements in the course of Herod I's extensive building programme¹⁹¹. As has been pointed out, the majority of them were built along traditional lines with a simple ground plan, which adhered to Hellenistic building traditions (for example, tower and enclosing wall). The building plan of Complex E, with its projections at the front and back, remains without comparison in the region. There are similarities with the villae rusticae-especially the so-called portico villas with corner risalites-but this requires further research.

For the Early Roman period, extensive trade contacts are evident. In addition to the typical amphorae, which—as everywhere in the eastern Mediterranean—show intensive mercantile exchange with Greece¹⁹², diorite from Egypt¹⁹³ and a southern Gaulish terra sigillata were also found¹⁹⁴. It can be assumed that a pro-Roman builder erected Complex E at Tall Zirā'a, as evidenced by the untypical building form alone. The tableware-both imports and regional wares-indicates that the inhabitants of Tall Zirā'a adopted Greek and Roman habits¹⁹⁵. At the same time, there were probably also Jewish inhabitants, as indicated by the chalk vessels from Stratum 7¹⁹⁶. In addition, the lack of Roman picture lamps in the find repertoire reinforces this assumption¹⁹⁷. It even seems likely that Complex D served as the central residence for this group, since limestone vessels were found almost exclusively within this complex. After the reconstruction of this building in Stratum 6, however, the number of chalk vessels decreased significantly. This is accompanied by the appearance of terracottas, three of which can certainly be assigned to Stratum 6. Two of the three terracottas were probably connected with the cult of Isis¹⁹⁸ and point to another (new?) demographic group within the complex. Here, too, historical connections with the First Jewish War may offer an explanation, since the killing and capture of the Jewish population in Gadara (and certainly the surrounding area) are reported¹⁹⁹. Judging by the categories of findings, the population decreased steadily in the mid/late second century AD. No destruction layer was found for Stratum 6. Destruction by one of the numerous earthquakes that occurred in the region cannot be ruled out, as is also possible for the transition from Stratum 7 to 6^{200} . There are perhaps traces of such an event in Complex E, where a large part of the eastern projection was destroyed, as shown by the walls of the complex which break off at the slope of the tall²⁰¹.

189 See Chap. 3.2.5.4.

- 190 Sartre 2005, 225; Dar 1986a, 8 f.; Hirschfeld 1995, 40; See *Chap. 3.2.5.3.*; On the longevity and locational consistency of buildings: Kuhnen 1990, 233. 236.
- 191 Japp 2000, 6. 16 f.; Jos. Ant. Jud. 15, 9, 1-2.
- 192 Kenkel 2012; Fortner Rottloff 2003a, 135.
- 193 See Chap. 4.3.6.2.
- 194 Kenkel 2012, 81.
- 195 Kenkel 2012, 148 f.
- 196 Vieweger Häser 2014, 137.

- 197 Kenkel 2012, 282 f.
- 198 Kenkel 2012, 300-307.
- 199 Jos. Bell. Jud. II, 18, 5.
- 200 An overview of earthquakes in the region is provided by Amiran 1994, esp. 245. 287.
- 201 The extension of the subsequent strata extends to the present edge of the tall, without the walls appearing to have been broken off, so that it can be assumed that an earthquake/landslide must have occurred between Strata 6 and 4; see *Fig. 4.2*.

5. CONCLUSION

Tall Zirā'a in northern Jordan is distinguished to this day by its prominent location in the Wādī al-'Arab. It is highly visible, naturally protected by steep slopes, has sufficient space on its plateau for a large settlement, and is surrounded by abundant arable and pasture land. In addition, the tall possesed an artesian spring and had access to nearby trade routes of the ancient world¹. This study has shown that the inhabitants of the tall knew how to exploit these features during the Hellenistic and Roman settlement phases, and that, given its size, built-up area and location, the tall must have been a special settlement site in the region.

The excavations of the Biblical Archaeological Institute Wuppertal and the German Protestant Institute of Archaeology together with this evaluation based on their work have yielded important information on the settlement history of the tall. For this purpose, the first step was to create a stratigraphy for the buildings of the Hellenistic (Stratum 8) and the Early Roman periods (Strata 7 and 6) based on excavation results (*Fig. 5.1*). The finds, most of which have been analysed, filled in the resulting picture, allowing not only architectural conclusions to be drawn, but also to reconstruct the function of some of the buildings.

Moreover, through regional and supra-regional comparisons, the present work provides far-reaching insights into the temporal and spatial context of the Hellenistic-Roman settlement phases and forms in the region of northern Jordan. And with that, insights into the region's historical development under the Ptolemies, Seleucids, Hasmoneans, Herodians and Romans. This is also a first step towards addressing the research desideratum on the significance and use of rural settlements both inside and outside Jordanian cities in the economic

1 See Preface.

- 2 Soennecken 2015, 615–662.
- 3 See Chap. 2.3.1. and Chap. 2.3.3.
- 4 See Chap. 1.3; Chap. 2.4.

region of the southern Levant. The questions posed at the beginning of the work, especially with regard to the settlement history of Tall Zirāʿa, have been answered.

After extensive development on Tall Zirā'a in Iron Age II C², a new settlement was established no later than the Hellenistic period. For the Persian period a few pottery sherds were found, but no architectural remains so far. The earliest resettlement on Tall Zirā'a dates to the first half of the third century BC, as evidenced by the pottery and a coin3. The earliest known settlement in Gadara was also built at this time, therefore it can be assumed that the immediate surroundings-and thus also the tall-were developed at the same time. This occurred in the course of the military consolidation of the Ptolemaic Empire. Thus, here for the first time-and then continuously until the Roman period-direct connections between historical events and the reconstruction phases of the tall can be established, which are also confirmed by the dating of finds⁴.

The fortified settlement identified in Stratum 8 in Area II was probably built only in the second century BC and is to be understood in the context of extensive constructions after the victory of the Seleucids at Paneion⁵. According to the range of finds, the settlement—like Gadara—experienced a peak during this period and flourished, as evidenced by its increasing expansion beyond the settlement walls⁶. Habitation was limited mainly to the highest point of the tall in Area II; Area I, on the other hand, remained almost entirely undeveloped and was used as a waste dump⁷.

The plan of the fortified settlement of this phase is typical for the entire Levant, but unlike the other settlements cited in comparison, it does not have towers⁸. The building types, with farmyards

- 5 See Chap. 2.4.
- 6 See Chap. 2.2.1.
- 7 Area II: see Chap. 2.2.1. to Chap. 2.2.4; Area I: see Chap. 2.2.5.
- 8 See Chap. 2.2.2.



Fig. 5.1 General overview of the strata and areas covered in this volume (Source: BAI/GPIA).

and tabuns, clearly followed local traditions of the pre-Hellenistic period and fit in with the archaeological findings of the region⁹. Only the hypothesised position of the entrance remained without comparison by the conclusion of the present work¹⁰.

Very little can be said about the ethnic composition of the population. However, assumptions are possible based on the combination of architecture, finds and historical context. A clear Greek influence can be detected, as evidenced by pottery and glass finds¹¹ and a small terracotta head, and Egyptian/ Ptolemaic influences are noticeable¹². They can be explained by the regional and historical placement of the tall between the territories of Ptolemaic and Seleucid rulers. Furthermore, due to the documented casseroles, which are rather typical for non-Jewish sites in the region, it can be assumed that the inhabitants were predominantly pagan¹³.

The significance of the site in the Hellenistic period must be understood in light of historical events, especially in the development of Gadara's

- 9 See Chap. 2.2.3.1.
- 10 See Chap. 2.2.4.
- 11 See Chap. 2.3.1.2; Chap. 2.3.4.2.
- 12 See Chap. 2.3.1.3.
- 13 See Chap. 2.3.1.4.

hinterland. The rich range of finds, the pottery in particular, proves there were far-reaching trade relations with Antioch, Rhodes and Kos, among others. It shows that the tall was likely directly or indirectly involved in a large trade network as early as the Hellenistic period and indicates a certain prosperity of the settlement on the tall.

The destruction or abandonment of the Hellenistic settlement cannot be clearly pinpointed. Viewed in its historical context, it was most likely demolished in the course of the conquest of Gadara by the Seleucids at the end of the second century BC, as indicated by the archaeological finds. However, there no layers of collapse or ash were found, so that so far it cannot be assumed that the destruction was deliberate¹⁴.

The settlement structure changed completely in the Roman period. It has been established that in place of the fortified complex of the Hellenistic period, an extensive and unfortified farmstead was built between the end of the first century BC and the first half of the first century AD, probably in connection with the development of rural settlements as part of Herod I's extensive building program¹⁵. The settlement initially extended over both areas (Stratum 7), and Area II was the centre of the settlement, in the form of Complex E. The architectural form of this complex contrasts with the usually rectangular complexes with accompanying tower¹⁶ that are known in Israel and Jordan and correspond to the Hellenistic model. However, there are numerous comparative examples in other provinces, even if these are questionable due to the difficulty of reconstructing the building on Tall Zirā[°]a¹⁷.

The current Arabic name of the hill as "Hill of Agriculture"¹⁸ lived up to its name with the new settlement in the Roman period. Besides the main

building, an olive or wine press¹⁹ illustrates the agricultural character of the settlement. The settlement and its surrounding arable and pasture land can be assumed to have played a role in supplying the population of the Decapolis during this period. It is likely that after the First Jewish War the buildings were partially destroyed and completely abandoned (for instance the oil press in Area I), thus a large part of the settlement's economic character was lost (Stratum 6). Reconstructions of the remaining buildings and new constructions indicate that its (new?) inhabitants enjoyed a certain prosperity, as evidenced by findings (albeit on a small scale) of, for example, wall paintings and marble²⁰.

On the basis of the finds, the ethnic composition of the population cannot really be assessed more accurately for the Roman period than for the Hellenistic period. Judging by the finding of some chalk vessels, there will have been some Jewish inhabitants²¹ (at least in Stratum 7), the numbers of whom presumably declined in Stratum 6 in the context of the First Jewish War.

The end of the settlement seems to have occurred in the middle or end of the second century AD and could be related to the impact of an earthquake or landslide and the collapse of a part of the eastern risalit²².

The present research not only forms an important building block for the settlement history of Tall Zirā'a, but also contributes to the understanding of settlement history in northern Jordan and the southern Levant in general, and of rural areas in particular. It remains to be seen what findings will come to light in the coming years, both in the excavations on Tall Zirā'a itself, but also due to the growing interest in the hinterlands of cities throughout the entire region.

- 14 On the missing collapse, see *Chap. 2.2.2*.
- 15 See Chap. 3.2.5; esp. Chap.3.2.5.3.
- 16 See Chap. 3.2.5.3.
- 17 See Chap. 3.2.5.4.
- تل زرعة Arabic الله 18.

- 19 See Chap. 3.2.1.
- 20 See Chap. 4.3.6.2. (Diorite tiles and slab); Chap. 4.3.7; Chap. 4.3.5.4.
- 21 See Chap. 4.3.6.2; Chap.4.5.
- 22 See Chap. 4.5, Fig. 4.2.

6. PLATES AND CATALOGUE OF FINDS FROM TALL ZIRA'A

The plate and catalogue sections are based on the text, which is why it has been divided into Hellenistic (Stratum 8) and Early Roman (Strata 7 and 6). This order is followed by the plates arranged according to find category with a directly attached catalogue section arranged according to plate number.

For the sake of completeness, the plate and catalogue section for each stratum is followed by a catalogue for pottery, metal, bone, stone finds and wall painting fragments mentioned in the text, which remain without plates. Each section is organised according to their TZ no. The fact that not all finds from the Hellenistic and Early Roman periods are presented in plates or included in the catalogue section is due to the fact that some of the find categories have already been or will be published in full in other volumes of the final Tall Zirā'a publications. Only a selection of finds showing the repertoire of forms for each find category of the Hellenistic and Early Roman periods is presented here.

6.1. Catalogue of Selected Hellenistic Ceramic Finds

TZ 101031-002

Area II; Square AT 134; Context 10903 *Stratum:* 02 also 01; Date of Context: Maml to modern *Figure reference:* Pl. 1.1, Fig. 6.1 *Description:* Ephesian platter *Typology Kenkel:* GP2 *Ware group:* Grey fabric with black glossy slip *Slip:* Black, semi-lustrous *Dating:* 1st century BC to 1st century AD *Reference:* Kenkel 2020, 17 Pl 1.1.

TZ 101533-028

Area II; Square AU 126; Context 11352 Stratum: 08; Date of Context: Hell Figure reference: Pl. 1.2, Fig. 2.20, Fig. 6.2 Description: Kantharos-Handle Typology Kenkel: Sgk1 Ware group: Black glossy slip ware Slip: black, glossy Dating: 3rd to mid 2nd century BC Reference: Kenkel 2020, 17 Pl 1.1.



Fig. 6.1 TZ 101031-002 (Source: BAI/GPIA).



Fig. 6.2 TZ 101533-028 (Source: BAI/GPIA).

TZ 006023-041

Area I; Square AQ 121; Context 4230 Stratum: 05 also 04; Date of Context: L Rom/E Byz to Byz Figure reference: Pl. 1.3, Fig. 6.3 Description: Krater (?) Typology Kenkel: Was1 Slip: black, semi-lustrous with light beige painting Dating: 3rd to 2nd century BC Reference: Kenkel 2020, 18 Pl 1.1.



Fig. 6.3 TZ 006023-041 (Source: BAI/GPIA).

TZ 101531-043

Area II; Square AV 128; Context 11331 Stratum: 08; Date of Context: Hell Figure reference: Pl. 1.4, Fig. 6.4 Description: Bowl Typology Kenkel: Rb7 Ware group: Relief cup Slip: dark-brown to black, semi-lustrous Dating: 2nd to 1st century BC Reference: Kenkel 2020, 19 Pl 1.1.



Fig. 6.4 TZ 101531-043 (Source: BAI/GPIA).

TZ 101531-055

Area II; Square AV 128; Context 11331 *Stratum:* 08; Date of Context: Hell *Figure reference:* Pl. 1.5 *Description:* Amphora *Typology Kenkel:* RAm14 *Ware group:* Cl Amph (Rhodian) *Dating:* c. 240 to 175 BC (Period II-III) *Reference:* Kenkel 2020, 21 Pl 1.2.

TZ 100680-007

Area II; Square AV 133; Context 10641 *Stratum:* 02 also 01; Date of Context: Maml to modern *Figure reference:* Pl. 1.6 *Description:* Amphora *Typology Kenkel:* Amfl *Ware group:* Cl Amph (Koian) *Dating:* 3rd to 1st century BC *Reference:* Kenkel 2020, 21 Pl 1.3.

TZ 101511-028

Area II; Square AX 129; Context 10329 Stratum: 08; Date of Context: Hell Figure reference: Pl. 2.1, Fig. 6.5 Description: Platter/Plate Typology Kenkel: Te3 Ware group: S with black glossy slip Dating: 2nd to 1st century BC Reference: Kenkel 2020, 30 Pl 1.8.



Fig. 6.5 TZ 101511-028 (Source: BAI/GPIA).

TZ 005998-001

Area I; Square AQ 123; Context 4187 Stratum: 05; Date of Context: L Rom to E Byz Figure reference: Pl. 2.2 Description: Echinus bowl Typology Kenkel: Sa1.4 Ware group: N/X *Dating:* 3rd to 1st century BC *Reference:* Kenkel 2020, 31 Pl 1.8.

TZ 100346-012

Area II; Square AX 128; Context 10331 Stratum: 02 also 01.00; Date of Context: Maml to modern Figure reference: Pl. 2.3 Description: Fish plate Typology Kenkel: Sa2.1 Ware group: S with black glossy slip Dating: 3rd to 2nd century BC Reference: Kenkel 2020, 35 Pl 1.9.

TZ 101282-019

Area II; Square AW 131; Context 11138 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Pl. 2.4, Fig. 6.6 Description: Juglet or Lagynos Typology Kenkel: Tg5.1 Ware group: U/V with red, semi-lustrous slip Slip: red, matte-glossy Dating: 2nd to 1st century BC Reference: Kenkel 2020, 43 Pl 1.12.



Fig. 6.6 TZ 101282-019 (Source: BAI/GPIA).

TZ 100608-003

Area II; Square AW 132; Context 10577 Stratum: 03 b; Date of Context: Um Figure reference: Pl. 2.5, Fig. 6.7 Description: Casserole Typology Kenkel: Kas2.1 Ware group: O Dating: 1st century BC to 3rd century AD Reference: Kenkel 2020, 48 Pl 1.15.



Fig. 6.7 TZ 100608-003 (Source: BAI/GPIA).

TZ 100294-006

Area II; Square AX 129; Context 10212 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Pl. 2.6, Fig. 6.8 Description: Cooking pot Typology Kenkel: Kt2.1 Ware group: O Dating: 2nd century BC to 1st century AD Reference: Kenkel 2020, 53 Pl 1.18.



Fig. 6.8 TZ 100294-006 (Source: BAI/GPIA).

TZ 006188-019

Area I; Square AT 121; Context 4242 *Stratum:* 10; Date of Context: EZ II C *Figure reference:* Pl. 3.1 *Description:* Bowl *Typology Kenkel:* Sü3 *Ware group:* F *Dating:* 3rd to 1st century BC *Reference:* Kenkel 2020, 65 Pl 1.22.

TZ 006386-009

Area I; Square AT 120; Context 4414 Stratum: 00; Date of Context: modern Figure reference: Pl. 3.2 Description: Krater Typology Kenkel: Kra3 Ware group: Like coarse ware 1/V Dating: L Hell Reference: Kenkel 2012, LIX Pl 30.

TZ 100333-015

Area II; Square AX 129; Context 10283 Stratum: 01; Date of Context: Ott Figure reference: Pl. 3.3 Description: Jug Typology Kenkel: Kru4 Ware group: like W with medium brown, matt slip Slip: black, brown, matt Dating: 3th century BC to 7th century AD Reference: Kenkel 2020, 71 Pl 1.26.

TZ 005761-013

Area I; Square AS 123; Context 4008 *Stratum:* 03 b, a; Date of Context: Um *Figure reference:* Pl. 3.4, Fig. 6.9 *Description:* Amphora *Typology Kenkel:* Am1 *Ware group:* L *Dating:* 3rd century BC to 1st century AD *Reference:* Kenkel 2020, 74 Pl 1.28.



Fig. 6.9 TZ 005761-013 (Source: BAI/GPIA).

TZ 100619-003

Area II; Square AU 130; Context 10590 Stratum: 04 c; Date of Context: Byz Figure reference: Pl. 3.5 Description: Pithos Typology Kenkel: Pi2 Ware group: Coarse ware 4 Dating: 3rd to 1st century BC Reference: Kenkel 2020, 91 Pl 1.35.

TZ 021571-001

Area I; Square AR 120; Context 6148 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Pl. 3.6, Fig. 6.10 Description: Amphoriskos Typology Kenkel: Ak1 Ware group: V/L Dating: 2nd to 1st century BC Reference: Kenkel 2020, 95 Pl 1.38.



Fig. 6.10 TZ 021571-001 (Source: BAI/GPIA).

TZ 100277-009

Area II; Square AY 130; Context 10290 Stratum: 05; Date of Context: L Rom to E Byz Figure reference: Pl. 3.7 Description: Unguentarium Typology Kenkel: U3 Ware group: J Dating: 3rd century BC to 1st century AD Reference: Kenkel 2020, 96 Pl 1.38.

TZ 020062-041

Area I; Square AP 123; Context 4940 Stratum: 06 c; Date of Context: (E) Rom Figure reference: Pl. 4.1, Fig. 6.11 Description: Juglet Typology Kenkel: Pk1.1 Ware group: V
Dating: 2nd to 1st century BC *Reference:* Kenkel 2020, 97 Pl 1.38.



Fig. 6.11 TZ 020062-041 (Source: BAI/GPIA).

TZ 020184-007

Area I; Square AQ 123; Context 4631 *Stratum:* 06 b, a; Date of Context: (E) Rom *Figure reference:* Pl. 4.2, Fig. 6.12 *Description:* Small pot *Typology Kenkel:* St3 *Ware group:* like X/Coarse ware 4 *Dating:* 200 BC to 1st century AD *Reference:* Kenkel 2020, 98 Pl 1.38.



Fig. 6.12 TZ 020184-007 (Source: BAI/GPIA).

TZ 020720-007

Area I; Square AQ 123; Context 5103 Stratum: 11; Date of Context: IA A/B (younger) Figure reference: Pl. 4.3, Fig. 6.13 Description: Oil lamp, nozzle Typology Kenkel: La4 Ware group: X Dating: 3rd century BC to 1st century AD Reference: Kenkel 2020, 100 Pl 1.39.



Fig. 6.13 TZ 020720-007 (Source: BAI/GPIA).

TZ 100344-001

Area II; Square AX 130; Context 10303 *Stratum:* 06 c, b, a also 05; Date of Context: (E) Rom to L Rom to E Byz *Figure reference:* Pl. 4.4, Fig. 6.14 *Description:* Oil lamp, complete *Typology Kenkel:* La14 *Ware group:* V *Dating:* 3rd century BC to 1st century AD *Reference:* Kenkel 2020, 102 Pl 1.40.



Fig. 6.14 TZ 100344-001 (Source: BAI/GPIA).

6.2. Catalogue of Hellenistic Coins

TZ 006993-001

Area I; Square AM 119; Context 1040 Stratum: 08; Date of Context: Hell Figure reference: Pl. 5.1 Obv.: Head with diadem (?) to the right Rev.: Corroded Dating: c. 300–30 BC (Seleucid or Ptolemaic) Material: Bronze Dimensions: D 1.3 Weight: 1.85 g Remark: Bevelled edge

TZ 008604-001

Area I; Square AG 115/116; Context 1977 *Stratum:* 11; Date of Context: IA II A/B *Figure reference:* Pl. 5.2 *Obv.:* Anchor in a circle (?), remains of a legend Ancient ruler's issue *Dating:* 1st century BC *Material:* Bronze *Dimensions:* D 1.3 *Weight:* 0.87 g *Remark:* Only partially preserved

TZ 008877-001

Area I; Square AI 117; Context 2094 Stratum: 04 a; Date of Context: Byz Figure reference: Pl. 5.3 Obv.: Head to the right Rev.: Eagle to the left Ancient ruler's issue Dating: c. 300–30 BC (Ptolemaic?) Material: Bronze Dimensions: D 1.3 Weight: 2 g Remark: Heavily corroded; coin image barely preserved

TZ 010007-001

Area I; Square AE 116; Context 2711 *Stratum:* 04 a; Date of Context: Byz *Figure reference:* Pl. 5.4 Antiochos VII Euergetes *Period of rule:* Seleucid king, 138–128 BC *Obv.:* Bust of Eros to the right *Rev.:* Isis crown with inscription [*BA(S)I(L)E(OS)]/ ANTIOX[OY]/EYEP(G)[E]TO[Y]*, date and monogram at the bottom or in the left field not preserved Ancient ruler's issue *Dating:* 138–128 BC Material: Bronze Dimensions: D 1.9 Weight: 6.63 g Die-axis: 12 h Mint: Antiochia

TZ 010325-001

Area I; Square AP 118; Context 2832 Stratum: 08; Date of Context: Hell Figure reference: Pl. 5.5 Ptolemaios VI Philometor Period of rule: 180-145 BC Oby.: Head of Zeus Ammon with beard and hair band to the right *Rev.:* $\Pi T[OAEMAIOY BASIAEQS]$, two eagles turned to the left, inscription in the left field is no longer recognizable Ancient ruler's issue Dating: 180-145 BC Nominal: Aes Material: Bronze Dimensions: D 1.8 *Weight:* 4.06 g Die-axis: 12 h Mint: Alexandria or Cyprus

TZ 011213-001

Area I; Surface; Context 0 Stratum: 00; Date of Context: modern Figure reference: Pl. 5.6 Antiochos IV Epiphanes Period of rule: 175-164 BC Oby.: Head of Antiochos IV with aureole and diadem to the right Rev.: Apollo sitting on omphalos to the left; in his right hand holding a bundle of arrows, his left hand holding the bow resting on the ground; monogram recognizable in the left field: BASIAEQS/ANTIO-XOY. Ancient ruler's issue Dating: 175-164 BC Material: Bronze Dimensions: D 1.4 Weight: 2 g Die-axis: 1 h Mint: Ake-Akkon or Askalon

TZ 012753-001

Area I; Surface; Context 0 *Stratum:* 00; Date of Context: modern Figure reference: Pl. 6.1 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle with Greek inscription $[BA\Sigma IAE\Omega\Sigma AAE\Xi AN\Delta POY]$. Rev.: Embossed, only part of a circle of dots are recognizable Ancient ruler's issue Dating: 104–76 BC Material: Bronze Dimensions: D 1.1 to 1.4 Weight: 0.69 g Remark: With cast pin; attribution is possible to three types; with lily on the back with star or with pure inscription field

TZ 012754-001

Area I; Surface; Context 0 Stratum: 00; Date of Context: modern Figure reference: Pl. 6.2 Obv.: Illegible, multi-line Hebrew legend in wreath Rev.: Circle of dots Ancient ruler's issue Dating: 104–40 BC (Hasmonean) Material: Bronze Dimensions: D 1.4 Weight: 1.32 g Remark: Double cornucopia

TZ 012759-001

Area I; Square AP 122; Context 3827 Stratum: 04 a; Date of Context: Byz Figure reference: Pl. 6.3 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle; on both sides are the remains of a legend Rev.: Star with circumferential circle of dots Ancient ruler's issue Dating: 78 BC Material: Bronze Dimensions: D 1.2 Weight: 0.63 g

TZ 012939-001

Area I; Square AQ 121; Context 3941 Stratum: 03 b, a; Date of Context: Um Figure reference: Pl. 6.4 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle; on both sides are the remains of a legend *Rev.:* Star, scattered points Ancient ruler's issue *Dating:* 78 BC *Material:* Bronze *Dimensions:* D 1.2 *Weight:* 0.79 g

TZ 013110-001

Area I; Square AO 118; Context 4104 *Stratum:* 15; Date of Context: LB (repair layer) *Figure reference:* Pl. 6.5 *Obv.:* Double(?) bust to the right *Rev.:* Standing or sitting figure to the left *Dating:* 2nd to 1st century BC (?) *Material:* Bronze *Dimensions:* D 1.1 *Weight:* 1.08 g *Die-axis:* 12 h

TZ 014110-001

Area I; Square AT 120; Context 4221 Stratum: 04 b, a also 03 b, a; Date of Context: Byz to Um Figure reference: Pl. 6.6 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle; on both sides are the remains of a legend Rev.: Star with circumferential circle of dots Ancient ruler's issue Dating: 78 BC Material: Bronze Dimensions: D 1.3 Weight: 0.76 g

TZ 014111-001

Area I; Square AR 123; Context 4496 Stratum: 03 b, a; Date of Context: Um Figure reference: Pl. 6.7 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle; on both sides are the remains of a legend Rev.: Three rays of a star Ancient ruler's issue Dating: 78 BC Material: Bronze Dimensions: D 1.3 Weight: 0.58 g

TZ 014196-001

Area I; Square AP 121; Context 4262 Stratum: 10 also 09.08.07 c, b, a.; Date of Context: IA IIC to E Rom Figure reference: Pl. 7.1 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle; on both sides are the remains of a legend Rev.: Star with circumferential dots Ancient ruler's issue Dating: 78 BC Material: Bronze Dimensions: D 1.2 Weight: 0.9 g Remark: One of four coins baked together

TZ 014196-002

Area I; Square AP 121; Context 4262 Stratum: 10 also 09.08.07 c, b, a; Date of Context: IA II C to E Rom Figure reference: Pl. 7.2 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle; on both sides are the remains of a legend Rev.: Three rays of a stars (?) Ancient ruler's issue Dating: 78 BC Material: Bronze Dimensions: D 1.3 Weight: 0.59 g Remark: One of four coins corroded together

TZ 014196-003

Area I; Square AP 121; Context 426 Stratum: 10 also 09.08.07 c, b, a; Date of Context: IA II C to E Rom Figure reference: Pl. 7.3 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle; on both sides remains of a legend Rev.: Star with circumferential dots Ancient ruler's issue Dating: 78 BC Material: Bronze Dimensions: D 1.1 Weight: 0.55 g Remark: One of four coins corroded together

TZ 014196-004

Area I; Square AP 121; Context 4262 Stratum: 10 also 09.08.07 c, b, a; Date of Context: IA IIC to E Rom Figure reference: Pl. 7.4 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle Rev.: Smooth Ancient ruler's issue Dating: 104–76 BC (78 BC?) Material: Bronze Dimensions: D 1 Weight: 0.49 g Remark: One of four coins corroded together

TZ 014450-001

Area I; Square AQ 122; Context 4600 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Pl. 7.5 Obv.: Circle Ancient ruler's issue Dating: 1st century BC (Hasmonean) Material: Bronze Dimensions: D 1.2 Weight: 0.31 g

TZ 015214-001

Area I; Square AQ 121; Context 4666 Stratum: 10; Date of Context: IA II C Figure reference: Pl. 7.6 Obv.: Illegible Hebrew legend Ancient ruler's issue Dating: 1st century BC (Hasmonean) Material: Bronze Dimensions: D 1.3 Weight: 0.83 g

TZ 015285-001

Area I; Square AR 123; Context 5005 Stratum: 10; Date of Context: IA II C Figure reference: Pl. 7.7 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle, remains of a legend Rev.: Eight-ray star with circumferential dots (?) Ancient ruler's issue Dating: 78 BC Material: Bronze Dimensions: D 1.3 Weight: 1.06 g TZ 015288-001 Area I; Square AP 123; Context 5204 Stratum: 08: Date of Context: Hell Figure reference: Pl. 8.1 Alexander Jannaios Period of rule: 104-76 BC Obv.: $AA[E \equiv AN \Delta POY B] A \sum I \Delta \Omega E \sum$; anchor in a circle Rev.: Eight-ray star, between the rays the Paleo-Hebrew legend Yehonathan the king Ancient ruler's issue Dating: 104-76 BC Material: Bronze Dimensions: D 1.6 Weight: 1.35 g Die-axis: 6 h

TZ 015292-001

Area I; Square AQ 123; Context 5201 Stratum: 07 c; Date of Context: E Rom Figure reference: Pl. 8.2 Johannes Hyrkanos I Period of rule: 134–104 BC Obv.: Illegible Paleo-Hebrew legend in wreath Rev.: Double cornucopia with pomegranate Ancient ruler's issue Dating: c. 128–104 BC Material: Bronze Dimensions: D 1.4 Weight: 1.51 g Die-axis: 12 h

TZ 015301-001

Area I; Square AQ 123; Context 5270 Stratum: 07 b, a; Date of Context: E Rom Figure reference: Pl. 8.3 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle, remains of a legend Rev.: Eight-ray star with circumferential dots (?) Ancient ruler's issue Dating: 78 BC Material: Bronze Dimensions: D 1.3 Weight: 0,76 g Remark: Cast pin

TZ 015346-001

Area I; Square AR 123; Context 5279 *Stratum:* 06 c; Date of Context: (E) Rom *Figure reference:* Pl. 8.4 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle in a Circle Rev.: Eight-ray star with circumferential dots Ancient ruler's issue Dating: 104–76 BC Material: Bronze Dimensions: D 1.5 Weight: 0.91 g Remark: On both sides are the remains of a legend

TZ 015442-001

Area I; Square AQ 123; Context 5189 Stratum: 07 c; Date of Context: E Rom Figure reference: Pl. 8.5 Alexander Jannaios Period of rule: 104–76 BC Obv.: $[AAE\XiAN\Delta POY \ BA\Sigma IA\Omega E\Sigma]$; anchor in a circle Rev.: Eight-ray star; between rays the Paleo-Hebrew legend Yehonathan the king Ancient ruler's issue Dating: 104–76 BC Material: Bronze Dimensions: D 1.5 Weight: 1.09 g Die-axis: 6 h

TZ 018689-001

Area I; Square AO 119; Context 5884Stratum: 21; Date of Context: EB IV/MB IFigure reference: Pl. 8.6Alexander JannaiosPeriod of rule: 104–76 BCObv.: Anchor in a circle, circumferential legend[AAEΞANΔPOY BAΣIΛΕΩΣ]Rev.: Eight-ray star with circumferential dots, Ara-maean legend King Alexander, year 25Ancient ruler's issueDating: 78 BCMaterial: BronzeDimensions: D 1.2Weight: 0.94 g

TZ 110058-001

Area II; Square AW 129; Context 10038 *Stratum*: 04 c, b, a also 03 b, a; Date of Context: Byz to Um *Figure reference*: Pl. 9.1 *Rev.*: The lower part of a *s* can be recognized Ancient ruler's issue *Dating*: c. 200–30 BC (Seleucid or Ptolemaic) *Material*: Bronze Dimensions: D 1.8 Weight: 5.97 g Remark: Bevelled edge

TZ 110311-001

Area II; Square AY 129; Context 10288 Stratum: 03 a; Date of Context: Um Figure reference: Pl. 9.2 Obv.: Illegible five-line (?) Hebrew legend in wreath Rev.: Double cornucopia around pomegranate Ancient ruler's issue Dating: c. 104–40 BC (Hasmonean) Material: Bronze Dimensions: D 1.2 Weight: 0.75 g Remark: Clipped Hasmonean coin; after 134/104 (Johannes Hyrkanos) and before 40 BC

TZ 110417-001

Area II; Square AX 129; Context 10424 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Pl. 9.3 Alexander Jannaios Period of rule: 104-76 BC Obv.: Four lines of Hebrew legend in wreath: /YH-WNTN] Yehonatan/[HK]HN[HGDL] the High Priest/WHBR[H] and the Council/YHDY of the Jews Rev.: Double cornucopia around pomegranate Ancient ruler's issue Dating: 104-76 BC Material: Bronze Dimensions: D 1.4 Weight: 1.63 g Die-axis: 12 h

TZ 110664-001

Area II; Square AT 131; Context 10538 *Stratum:* 02 also 01.00; Date of Context: Abb/Maml to modern *Figure reference:* Pl. 9.4 *Obv.:* Head to the right *Dating:* c. 200–30 BC *Material:* Bronze *Dimensions:* D 1.3 *Weight:* 1.56 g

TZ 110981-001

Area II; Square AU 132; Context 10664 *Stratum:* 04 c, b, a also 03 b, a; Date of Context: Byz to Um *Figure reference:* Pl. 9.5 *Obv.:* Head of beardless Herakles with lion skin scalp to the right *Dating:* c. 300–30 BC *Material:* Bronze *Dimensions:* D 2 *Weight:* 4.23 g Remark. On both sides are the remains of an illegible legend

TZ 111017-001

Area II; Square AW 129; Context 10000 Stratum: 01; Date of Context: Ott Figure reference: Pl. 9.6 Obv.: Head of Apollon or of Artemis to the right Rev.: Palm tree, on both sides Δ -H City coinage Dating: Before 167 BC Material: Bronze Dimensions: D 1.1 Weight: 0.73 g Die-axis: 3 h Mint: Delos

TZ 111202-001

Area II; Square AW 126; Context 10722 Stratum: 03 a; Date of Context: Um Figure reference: Pl. 10.1 Obv.: Multiline Hebrew legend in wreath (?) Rev.: Double cornucopia around pomegranate (?), over struck (?) Ancient ruler's issue Dating: 104–40 BC (Hasmonean) Material: Bronze Dimensions: D 1.4 Weight: 0.90 g Remark: Type is mainly known from Alexander Jannaios

TZ 111244-001

Area II; Square AS 128; Context 10731 *Stratum:* 04 b, a; Date of Context: Byz *Figure reference:* Pl. 10.2 *Obv.:* Illegible multiline Hebrew legend in wreath *Rev.:* (Half of a) Double cornucopia around a pomegranate Ancient ruler's issue *Dating:* 104–40 BC (Hasmonean) *Material:* Bronze *Dimensions:* D 1.1 *Weight:* 0.79 g City coinage *Remark:* Fragment; Type is mainly known from Alexander Jannaios

TZ 111245-001

Area II; Square AW 127; Context 10740 Stratum: 08 also 07 c, b, a, 06 c, b, a; Date of Context: Hell to (E) Rom Figure reference: Pl. 10.3 Obv.: Multiline Hebrew legend in wreath Rev.: Double cornucopia around pomegranate (?) Ancient ruler's issue Dating: 104–40 BC (Hasmonean) Material: Bronze Dimensions: D 1.4 Weight: 1.87 g Die-axis: 8 h Remark: Type is mainly known from Alexander Jannaios

TZ 111278-001

Area II; Square AW 126; Context 10795 Stratum: 08; Date of Context: Hell Figure reference: Pl. 10.4 Obv.: Illegible, multiline Hebrew legend in wreath Rev.: Double cornucopia around Pomegranate Ancient ruler's issue Dating: 104–40 BC (Hasmonean) Material: Bronze Dimensions: D 1.3 Weight: 1.40 g Die-axis: 10 h or 4 h Remark: Type is mainly known from Alexander Jannaios

TZ 111331-001/111331-011

Area II; Square AX 127; Context 10801 Stratum: 05 also 04 c; Date of Context: L Rom/E Byz to Byz Figure reference: Pl. 10.5 Obv.: Illegible, multiline Hebrew legend in wreath Rev.: Double cornucopia around pomegranate in circle of dots Ancient ruler's issue Dating: 104–40 BC (Hasmonean) Material: Bronze Dimensions: D 1.2 Weight: 2.06 g Die-axis: 1 h Remark: Coin broken in two fragments; type is mainly known from Alexander Jannaios

TZ 111551-001

Area II; Square AY 127; Context 10926 Stratum: 02 also 01, 00; Date of Context: Abb/ Maml to modern Figure reference: Pl. 10.6 Dating: c. 300–30 BC Material: Bronze Dimensions: D 1.4 Weight: 1.54 g Remark: Heavily corroded; coin image barely preserved

TZ 111953-001

Area II; Square AV 127; Context 11142 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Pl. 11.1 Obv.: Head radiate (?) to the right Rev.: Remains of a two lines legend Dating: c. 300–100 BC Material: Bronze Dimensions: D 2 Weight: 5.67 g Remark: Heavily corroded; coin image barely preserved

TZ 112023-001

Area II; Square AT 128; Context 11165 *Stratum:* 02 also 01, 00; Date of Context: Abb/ Maml to modern *Figure reference:* Pl. 11.2 *Obv.:* (Kings-)Head to the right *Rev.: [...]ANTI[...]*, Palm tree City coinage *Dating:* 198–133 BC (Seleucid) *Material:* Bronze *Dimensions:* D 1.4 *Weight:* 1.76 g *Die-axis:* 12 h *Mint:* Tyros (Sur) *Remark:* Seleucid mint with the name of a king Antiochos from the 2nd century BC

TZ 112163-001

Area II; Square AU 126; Context 11359 *Stratum:* 07 c, b, a; Date of Context: E Rom *Figure reference:* Pl. 11.3 Ancient ruler's issue *Dating:* c. 300–30 BC *Nominal:* Aes 3 *Material:* Bronze *Dimensions:* D 2 *Weight:* 4.4 g *Remark:* Heavily corroded; image barely preserved

TZ 112166-001

Area II; Square AU 127; Context 11353 Stratum: 08; Date of Context: Hell Figure reference: Pl. 11.4 Obv.: Head of Helios (?) to the right Dating: c. 300–30 BC Material: Bronze Dimensions: D 2.7 Weight: 6.14 g

TZ 112168-001

Area II; Square AU 126; Context 11244 Stratum: 08; Date of Context: Hell Figure reference: Pl. 11.5 Ptolemaios II to V Period of rule: c. 280–200 BC Obv.: Head of Zeus Ammon with beard and with headband to the right Rev.: [$\Pi TOAEMAIOY - BA\Sigma IA\Omega E\Sigma$]; eagle to the right Ancient ruler's issue Dating: c. 280–200 BC Material: Bronze Dimensions: D 2.3 Weight: 8.29 g Die-axis: 12 h

TZ 112170-001

Area II; Square AS 127; Context 11221 Stratum: 05 also 04 c, b, a; Date of Context: L Rom/E Byz to Byz Figure reference: Pl. 12.1 Obv.: Illegible, multiline Hebrew legend (?) Rev.: (Half of a) double cornucopia around pomegranate Ancient ruler's issue Dating: c. 104–40 BC (Hasmonean) Material: Bronze Dimensions: D 1.6 Weight: 2.42 g Remark: Corroded; type is mainly known from Alexander Jannaios

TZ 112683-001

Area II; Square AW 128; Context 11277 *Stratum:* 08; Date of Context: Hell *Figure reference:* Pl. 12.2 Ancient ruler's issue *Dating:* c. 104–40 BC (Hasmonean) *Material:* Bronze *Dimensions:* D 1.3 *Weight:* 0.80 g

TZ 310428-001

Area III; Square X 126; Context 30094 Stratum 02; Date of Context: Abb/Maml *Figure reference:* Pl. 12.3 *Obv.:* Wreath, with legend (?) Ancient ruler's issue *Dating:* 104–40 BC (Hasmonean) *Material:* Bronze *Dimensions:* D 1.4 *Weight:* 2,10 g

TZ 310429-001

Area III; Square W 128; Context 30107 Stratum 02; Date of Context: Abb/Maml *Figure reference:* Pl. 12.4 Ancient ruler's issue *Dating:* 300–30 BC *Material:* Bronze *Dimensions:* D 1 *Weight:* 0.68 g

TZ 310469-001

Area III; Square W 128; Context 30037 Stratum 00; Date of Context: modern Figure reference: Pl. 12.5 Cleopatra Thea and Antiochos VIII Period of rule (together): 125-121 BC Oby.: Dioskures with each one star over the forehead Rev.: $ANTIOXE[.\Omega N]/T\Omega[N]/[EN$ ΠΤΙΟΛΕΙ- $MAI\Delta I$] Ancient ruler's issue Dating: 125-121 BC Material: Bronze Dimensions: D 1.5 Weight: 2.62 g Die-axis: 12 h Mint: Ake-Ptolemais

TZ 310592-001

Area III; Square Y 125; Context 30421 Stratum 04, 03 b; Date of Context: Abb/Maml Figure reference: Pl. 12.6 Alexander Jannaios Period of rule: 104–76 BC Obv.: Anchor in a circle with the legend $[AAE\XiAN\Delta POY BA\Sigma IA\Omega E\Sigma]$ Rev.: Lily with Paleo-Hebrew legend Yehonathan the king Ancient ruler's issue Dating: 104–76 BC Material: Bronze Dimensions: D 1.2 Weight: 0.94 g Die-axis: 6 h

TZ 310594-001

Area III; Square AA 125; Context 30341 Alexander Jannaios *Figure reference:* Pl. 13.1 *Period of rule:* 104–76 BC *Obv.:* Paleo-Hebrew legend in wreath *Rev.:* Double cornucopia with pomegranate; *A* recognizable (?) Ancient ruler's issue *Dating:* 104–76 BC *Material:* Bronze *Dimensions:* D 1.5 *Weight:* 1.5 g *Die-axis:* 6 h

TZ 310595-001

Area III; Square Surface; Context 0 Stratum 00; Date of Context: modern Figure reference: Pl. 13.2 Alexander Jannaios Period of rule: 104–76 v, Chr. Obv.: $[AAE]\Xi AN \Delta POY BA[\Sigma I \Lambda \Omega E \Sigma]$, anchor in a circle Rev.: Eight-ray star; between rays the Paleo-Hebrew legend Yehonathan the king Ancient ruler's issue Dating: 104–76 BC Material: Bronze Dimensions: D 1.5 Weight: 1.3 g Die-axis: 6 h

6.3. Catalogue of Selected Hellenistic Glass Finds

TZ 111479-001

Area II, Square AV 126; Context 10850 Stratum: 01; Date of Context: Ott Figure Reference: Pl. 14.1, Fig. 6.15 Colour: Colourless, transparent Typology Hoss: Group 1 Description: Grooved bowl Dimension: D (max.) 17 Dating: 2nd century BC to 50 AD Reference: Hoss 2020b, 275 Pl. 2.2.



Fig. 6.15 TZ 111479-001 (Source: BAI/GPIA).

TZ 112312-002

Area II, Square AV 131; Context 11224 Stratum: 08; Date of Context: Hell Figure Reference: Pl. 14.2 Colour: Deep green, transparent Typology Hoss: Group 1 Description: Grooved bowl Dimension: D (max.) 17 Dating: 2nd century BC to 50 AD Reference: Hoss 2020b, 263. 275 Pl. 2.2.

TZ 016699-003

Area I, Square AR 121; Context 4936 Stratum: 10; Date of Context: IA IIC Figure Reference: Pl. 14.3, Fig. 2.68 Colour: Olive green, transparent Typology Hoss: Group 2 Description: Hemispherical bowl Dimension: D (max.) 11 Dating: 2nd century BC to 50 AD Reference: Hoss 2020b, 276 Pl. 2.3.

TZ 010045-001

Area II, Square AE 116; Context 2711 Stratum: 04 a; Date of Context: Byz Figure Reference: Pl. 15.1, Fig. 6.16 Colour: Deep yellowish-green, transparent Typology Hoss: Group 3 Description: Egg-shaped bowl Dating: 2nd century BC to 50 AD Reference: Hoss 2020b, 236. 276 Pl. 2.3.



TZ 112312-003

Area II, Square AV 131; Context 11224 Stratum: 08; Date of Context: Hell Figure Reference: Pl. 15.2 Colour: Deep green, transparent Typology Hoss: Group 4 Description: Decorated bowl Dimension: D (max.) 13 Dating: 2nd century BC to 50 AD Reference: Hoss 2020b, 277 Pl. 2.4.

Fig. 6.16 TZ 010045-001 (Source: BAI/GPIA).

6.4. Catalogue of Selected Metal Finds (Repertoire of forms, Stratum 8) (without plates)

TZ 001197-001

Area I; Square AM 119; Context 1197 *Stratum:* 07 a, b, c; *Date of Context:* E Rom *Figure reference:* Fig. 2.54 *Description:* Umbrella nail; Fragment, head almost completely preserved *Dimensions:* L 3.8; D 2.5 *Material:* Iron *Reference:* —

TZ 002303-001

Area I; Square AO 119; Context 533 Stratum: 03 a, b; Date of Context: Um Figure reference: Fig. 2.53 Description: Hinge pin; complete, oval head, round shaft Dimensions: L (shaft) 4; D (top) 2.3 Material: Iron Reference: —

TZ 015370-001

Area II; Square AW 129; Context 11162 Stratum: 07 b, c; Date of Context: E Rom Figure reference: Fig. 2.56 Description: Nail blank; almost square nail shaft; hammer marks, several cracks Dimensions: L (shaft) 6.4; D 1.7 *Material:* Iron *Reference:* —

TZ 111652-005

Area II; Square AU 126; Context 11015 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.20.1 Description: Handle Dimensions: D 0.8; L 8.2; W 4.2 Weight: 18.7 g Material: Iron Reference: —

TZ 112022-001

Area II; Square AW 129; Context 11162 *Stratum:* 07 a, b, c also 06 a, b, c; *Date of Context:* E Rom to (E) Rom *Description:* Almost complete cosmetic spatula with copper coating; remains of a flat spoon base *Figure reference:* Fig. 2.52 *Dimensions:* L 5.9; W 0.7 *Material:* Bronze/Copper *Dating:* Pers to Maml *Reference:* Hoss 2020a, 397. 409.

TZ 112182-001

Area II; Square AW 128; Context 11295 *Stratum:* 08; *Date of Context:* Hell *Figure reference:* Fig. 6.17 *Description:* Mirror; two matching triangular fragments with a rounded side *Dimensions:* (larger fragment) L 2.6; W 2.9; H 0.3; (smaller fragment) L 2.8; W 2.1; H 0.3 *Material:* Bronze/Copper *Dating:* Hell to Rom *Reference:* Hoss 2020a, 408.



Fig. 6.17 TZ 112182-001 (Source: BAI/GPIA).

TZ 112194-001

Area II; Square AU 126; Context 11352 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.20.4 Description: Hook; almost complete; right-angled Dimensions: L 4.6; D 0.7 Weight: 8.6 g Material: Iron Reference: Hoss 2020a, 401. 423.

TZ 112197-001

Area II; Square AX 129; Context 10329 *Stratum:* 08; *Date of Context:* Hell *Figure reference:* Fig. 2.50; 2.51 *Description:* Bent fibula; fragment (4), wrapped with bronze wire at the upper and lower end of the bow; traces of the pin and bow preserved *Material:* Bronze/Copper *Dating:* IA to Hell/Rom *Reference:* Hoss 2020a, 394. 403 Fig. 3.1.

TZ 112206-001

Area II; Square AU 126; Context 11352 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.20.2 Description: Knife blade; two fragments Dimensions: L 6; W 1.9; H 0.5 Material: Iron Dating: Hell to Byz Reference: Hoss 2020a, 401. 422.

TZ 112212-001

Area II; Square AW 128; Context 11295 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.55 Description: bent nail (hook) Dimensions: L 5.9; W 0.7 Material: Bronze/Copper Dating: Rom to Maml Reference: Hoss 2020a, 401. 423.

TZ 112205-001

Area II; Square AU 126; Context 11352 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.20.5 Description: Knife blade; fragment Dimensions: L 7.8; W 2.4; H 0.9; Weight: 41.9 g Material: Iron Dating: Hell to Byz Reference: Hoss 2020a, 401. 421 Fig. 3.42.

TZ 111382-001

Area II; Square AV 126; Context 10874 Stratum: 08; Date of Context: Hell Figure reference: Fig. 6.18 Description: Lifting-sliding key with three teeth Dimensions: L 7 Weight: 22.2 g Material: Iron Dating: Hell-Rom Reference: Hoss 2020a, 397. 414.



Fig. 6.18 TZ 111382-001 (Source: BAI/GPIA).

6.5. Catalogue of Selected Bone Finds (Stratum 8) (without plates)

TZ 112242-001

Area II; Square AW 128; Context 11295 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.68 Description: Weaver's shuttle Dimensions: L 11.5; W 2.4; H 0.2 Material: Cattle, rib

6.6. Catalogue of Selected Stone Finds (Stratum 8) (without plates)

TZ 111311-001

Area II; Square AW 127; Context 10758 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.76 Description: Weight; triangular base, rounded corners; one side flattened; drilled hole on one side Dimensions: L 9.6; W 9.3; H 7.1 Weight: 1072 g Material: Limestone

TZ 111833-001

Area II; Square AW 127; Context 11081 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.73 Description: Fragment of rim and base; irregular base Dimensions: L 19.8; W 16.8; H 18; D (opening) 30; depression inside 8 Weight: 2400 g Material: Limestone

TZ 112367-001

Area II; Square AW 128; Context 11295 Stratum: 08; Date of Context: Hell Figure reference: Pl. 2.74, Fig. 2.75 Description: Foot of a tripod bowl; foot with cross bar Dimensions: H 12.4 Weight: 476 g Material: Basalt

TZ 112381-001

Area II; Square AV 131; Context 11224 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.70 Description: Rubbing stone; completely preserved, small hollows on the upper and lower sides Dimensions: L 7.2; W 6.4; H 4.4 Material: Basalt

TZ 112466-001

Area II; Square AU 132; Context 11202 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.71, 2.72 Description: Rubbing stone; completely preserved, oval ground plan, irregular upper surface, flat bottom Dimensions: L 8.5; W 5.7; H 2.7 Material: Limestone

TZ 112696-001

Area II; Square AT 128; Context 11471 Stratum: 08; Date of Context: Hell Figure reference: Fig. 2.77 Description: Whetstone Dimensions: L 11.5; W 4; H 2.5 Weight: 197 g Material: unknown

6.7. Catalogue of Selected Early Roman Ceramic Finds

TZ 005197-008

Area I, Square AI 117; Context 3469 Stratum: 13; Date of Context: IA I Figure reference: Pl. 16.1, Fig. 6.19 Ware group: Eastern Sigillata A Typology Kenkel: Eastern Terra Sigillata 9.2 Description: Plate Dimensions: D (max.) 28 Dating: 80 BC–50 AD Reference: Kenkel 2020, 23 Pl. 1.4



Fig. 6.19 TZ 005197-008 (Source: BAI/GPIA).

TZ 100659-013

Area II, Square AT 128; Context 10624 Stratum: 04 c; Date of Context: Byz Figure reference: Pl. 16.2 Ware group: Eastern Sigillata A Typology Kenkel: Eastern Terra Sigillata 10.1 Description: Bowl Dimensions: D (max.) 14 Dating: 80 BC–50 AD Reference: Kenkel 2020, 23 Pl. 1.4

TZ 005815-005

Area I, Square AT 122; Context 4047 Stratum: 00; Date of Context: modern Figure reference: Pl. 16.2, Fig. 6.20 Ware group: Eastern Sigillata A Typology Kenkel: Eastern Terra Sigillata 13.1 Description: Bowl Dimensions: D (max.) 14 Dating: 30 BC–100 AD Reference: Kenkel 2020, 25 Pl. 1.5





Fig. 6.20 TZ 005815-005 (Source: BAI/GPIA).

TZ 006790-099

Area I, Square AT 122; Context 4770 Stratum: 00; Date of Context: modern Figure reference: Pl. 16.2, Fig. 6.21 Ware group: Eastern Sigillata A Typology Kenkel: Eastern Terra Sigillata 14 Description: Bowl Dimensions: D (max.) 23 Dating: 40–70 AD Reference: Kenkel 2020, 25 Pl. 1.5





Fig. 6.21 TZ 006790-099 (Source: BAI/GPIA).

TZ 100583-002

Area II, Square AU 129; Context 10522 Stratum: 01; Date of Context: Ott Figure reference: Pl. 16.3 Ware group: Eastern Sigillata A Typology Kenkel: Eastern Terra Sigillata 15.1 Description: Flask *Dimensions:* D (max.) 5 *Dating:* Middle 1st century BC to beginning of 1st century AD *Reference:* Kenkel 2020, 25 Pl. 1.5

TZ 020376-004

Area I, Square AQ 123; Context 5201 Stratum: 07 c; Date of Context: E Rom Figure reference: Pl. 16.4 Ware group: Eastern Sigillata D Typology Kenkel: Eastern Sigillata D Description: Bowl Number: 2 Dimension: Th 0.4 Dimensions: D (max.) 16 Dating: Augustan (31 BC to 14 AD) Reference: Kenkel 2020, 23 Pl. 1.4

TZ 100048-007

Area II, Square AW 128; Context 10041 Stratum: 04 c, b, a also 03 b, a; Date of Context: Byz to Um Figure reference: Pl. 16.5, Fig. 4.44 Ware group: Gaulish Terra Sigillata Typology Kenkel: TS 1 Description: Picture bowl (Krater?) Dimensions: Th 0.45 Dating: Second half of 1st century AD Reference: Kenkel 2020, 26 Pl. 1.6

TZ 006026-019

Area I, Square AP 123; Context 4277 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Pl. 16.6 Ware group: S Typology Kenkel: Eastern Terra Sigillata-Imi 1 Description: Bowl Dimensions: D (max.) 16 Dating: 10–50 AD Reference: Kenkel 2020, 40 Pl. 1.11

TZ 100077-002

Area II, Square AW 128; Context 10069 Stratum: 07 c, b, a also 6 c, b, a 05; Date of Context: E Rom to L Rom/E Byz Figure reference: Pl. 16.6 Ware group: S/V Typology Kenkel: Eastern Terra Sigillata-Imi 4 Description: Bowl Dimensions: D (max.) 36 Dating: 80 BC–50 AD Reference: Kenkel 2020, 40 Pl. 1.11

TZ 101439-007

Area II, Square AU 127; Context 11246 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Pl. 16.6, Fig. 6.22 Ware group: like U Typology Kenkel: Eastern Terra Sigillata-Imi 5 Description: Bowl Dimensions: D (max.) 35 Dating: 10 BC–50 AD Reference: Kenkel 2020, 41 Pl. 1.11



Fig. 6.22 TZ 101439-007 (Source: BAI/GPIA).

TZ 100822-001

Area II, Square AW 126; Context 10713 Stratum: 02 also 01; Date of Context: Abb/Maml to Ott Figure reference: Pl. 17.1, Fig. 6.23 Ware group: Q/R Typology Kenkel: Sa 14 Description: Bowl Dimensions: D (max.) 14 Dating: E Rom (?) Reference: Kenkel 2020, 40 Pl. 1.10



Fig. 6.23 TZ 100822-001 (Source: BAI/GPIA).

TZ 100642-013

Area II, Square AT 128; Context 10571 Stratum: 03 a; Date of Context: Um Figure reference: Pl. 17.2, Fig. 6.24 Ware group: C Typology Kenkel: Tg 3.1 Description: Table amphora Dimensions: D (max.) 9 Dating: 1st century BC to 1st century AD Reference: Kenkel 2020, 42 Pl. 1.12





Fig. 6.24 TZ 100642-013 (Source: BAI/GPIA).

TZ 100609-005

Area II, Square AU 130; Context 10589 Stratum: 03 a; Date of Context: Um Figure reference: Pl. 17.3 Ware group: S Typology Kenkel: Tg 11.1 Description: Small Jug Dimensions: D (max.) 7 Dating: L Hell-Rom Reference: Kenkel 2020, 45 Pl. 1.13

TZ 100818-003

Area II, Square AS 129; Context 10724 Stratum: 03 a; Date of Context: Um Figure reference: Pl. 17.3 Ware group: S Typology Kenkel: Tg 12.1 Description: Small Jug Dimensions: D (max.) 3 Dating: E Rom Reference: Kenkel 2020, 46 Pl. 1.14

TZ 100374-017

Area II, Square AX 129; Context 10381 Stratum: 03 a; Date of Context: Um Figure reference: Pl. 17.4 Ware group: J Typology Kenkel: Kas 2.2 Description: Casserole Dimensions: D (max.) 24 Dating: 1st century BC to 3rd century AD Reference: Kenkel 2020, 48 Pl. 1.15

TZ 101635-005

Area II, Square AT 130; Context 10631 Stratum: 04 c, b, a also 03 b, a; Date of Context: Byz to Um Figure reference: Pl. 17.5 Ware group: G Typology Kenkel: Gb 2 Description: Cooking bowl Dimensions: D (max.) 17 Dating: Cooking tray Reference: Kenkel 2020, 52 Pl. 1.17

TZ 100389-004

Area II, Square AY 130; Context 10408 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Pl. 17.6 Ware group: P Typology Kenkel: Kt 16.2 Description: Cooking pot Dimensions: D (max.) 10 Dating: 1st century BC to 1st century AD Reference: Kenkel 2020, 56 Pl. 1.19

TZ 100402-003

Area II, Square AY 130; Context 10429 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Pl. 17.6 Ware group: O Typology Kenkel: Kt 16.3 Description: Cooking pot Dimensions: D (max.) 10 Dating: 1st century BC to 1st century AD Reference: Kenkel 2020, 56 Pl. 1.19

TZ 100297-005

Area II, Square AY 130; Context 10311 Stratum: 06 c, b, a also 05; Date of Context: (E) Rom to L Rom-E Byz Figure reference: Pl. 17.7 Ware group: L (coarse) Typology Kenkel: Am 21.2 Description: Amphora Dimensions: D (max.) 8 Dating: Rom Reference: Kenkel 2012, Pl. 40

TZ 100600-005

Area II, Square AU 131; Context 10585 Stratum: 03 b, a; Date of Context: Om Figure reference: Pl. 17.7 Ware group: K Typology Kenkel: Am11 Description: Amphora Dimensions: D (max.) 10 Dating: Hell-E Rom Reference: Kenkel 2020, 81 Pl. 1.30

TZ 100216-029

Area II, Square AW 130; Context 10214 Stratum: 02 also 01; Date of Context: Abb-Maml to modern Figure reference: Pl. 18.1, Fig. 6.25 Ware group: F Typology Kenkel: Kru 5.1 Description: Jug Dimensions: D (max.) 10 Dating: E Rom Reference: Kenkel 2020, 71 Pl. 1.26



Fig. 6.25 TZ 100216-029 (Source: BAI/GPIA).

TZ 100624-001

Area II, Square AU 129; Context 10584 Stratum: 03 a; Date of Context: Um Figure reference: Pl. 18.1, Fig. 6.26 Ware group: D with light beige, semi-lustrous and thin outer slip Typology Kenkel: Kru 13.3 Description: Pilgrim's flask Dimensions: D (max.) 1.2 Dating: Hell-Rom Reference: Kenkel 2020, 73 Pl. 1.27



Fig. 6.26 TZ 100624-001 (Source: BAI/GPIA).

TZ 100528-002

Area II, Square AW 132; Context 10536 Stratum: 01; Date of Context: Ott Figure reference: Pl. 18.2, Fig. 6.27 Ware group: Coarse Ware 4 Typology Kenkel: Pi 3.1 Description: Pithos Dimensions: D (max.) 28 Dating: Hell-E Rom Reference: Kenkel 2020, 91 Pl. 1.35



Fig. 6.27 TZ 100528-002 (Source: BAI/GPIA).

TZ 020223-010

Area I, Square AP 123; Context 5092 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Pl. 18.2, Fig. 6.28 Ware group: F Typology Kenkel: Pi 6 Description: Pithos Dimensions: D (max.) 15 Dating: Hell-E Rom Reference: Kenkel 2020, 91 Pl. 1.35





Fig. 6.28 TZ 020223-010 (Source: BAI/GPIA).

TZ 021571-001

Area I, Square AR 120; Context 6148 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Pl. 18.3, Fig. 6.29 Ware group: V/L Typology Kenkel: Ak 1 Description: Amphoriskos Dimensions: D (max.) 2.1 Dating: 2nd to 1st century BC Reference: Kenkel 2020, 95 Pl. 1.38



Fig. 6.29 TZ 021571-001 (Source: BAI/GPIA).

TZ 002619-001

Area I, Square AM 119; Context 712 Stratum: 10; Date of Context: IA IIC Figure reference: Pl. 18.4 Ware group: S with black Slip Typology Kenkel: U 7.1 Description: Unguentarium *Dimensions:* D (max.) 2.3 *Dating:* 1st century BC to 1st century AD *Reference:* —

TZ 020062-041

Area I, Square AP 123; Context 4940 Stratum: 06 c; Date of Context: (E) Rom Figure reference: Pl. 18.5 Ware group: V Typology Kenkel: Pk1.1 Description: Small one-handed Jug Dimensions: D (max.) 2 Dating: 2nd century BC to 1st century AD Reference: Kenkel 2020, 97 Pl. 1.38

TZ 020184-007

Area I, Square AQ 123; Context 4631 Stratum: 06 b, a; Date of Context: (E) Rom Figure reference: Pl. 18.6 Ware group: like X/Coarse Ware 4 Typology Kenkel: St 3 Description: Small pot Dimensions: D (max.) 4 Dating: 200 BC to 1st century AD Reference: Kenkel 2020, 98 Pl. 1.38

TZ 101204-033

Area II, Square AT 132; Context 10927 Stratum: 05; Date of Context: L Rom-E Byz Figure reference: Pl. 19.1, Fig. 4.45 Ware group: S Typology Kenkel: La 39 Description: Oil lamp, complete Dating: E Rom Reference: Kenkel 2020, 106 Pl. 1.43

TZ 020223-001

Area I, Square AP 123; Context 5092 Stratum: 07 c, b; Date of Context: E Rom Figure reference: Pl. 19.2 Ware group: S/V (brown) Typology Kenkel: La 31 Description: Oil lamp, complete Dating: Late 1st century BC to 1st century AD Reference: Kenkel 2012, Pl. 53

TZ 100279-001

Area I, Square AY 129; Context 10280 Stratum: 05; Date of Context: L Rom-E Byz Figure reference: Pl. 19.3, Fig. 6.30 Ware group: S with brown semi-lustrous slip Typology Kenkel: La 44 *Description:* Oil lamp, fragment *Dating:* L Hell *Reference:* Kenkel 2020, 107 Pl. 1.44



Fig. 6.30 TZ 100279-001 (Source: BAI/GPIA).

TZ 006819-016

Area I, Square AQ 123; Context 4789 Stratum: 06 b; Date of Context: (E) Rom Figure reference: Pl. 20.1 Ware group: TC Description: Terracotta fragment Dimension: Th 0.7 Dating: Hell-Rom Reference: —

TZ 006790-001

Area I, Square AP 123; Context 4770 Stratum: 06 b; Date of Context: (E) Rom Figure reference: Pl. 20.2 Ware group: TC fine Typology Kenkel: TC 1 Description: Terracotta fragment Dimension: Th 0.3 Dating: Hell-Rom Reference: Kenkel 2020, 112 Pl. 1.48

TZ 006678-041

Area I, Square AP 123; Context 4283 Stratum: 06 a; Date of Context: (E) Rom Figure reference: Pl. 20.3 Ware group: TC fine Typology Kenkel: TC 2 *Description:* Terracotta fragment; base *Dimension:* Th 0.5 *Dating:* Hell-Rom *Reference:* Kenkel 2020, 112 Pl. 1.48

TZ 101402-002

Area II, Square AT 127; Context 10988 Stratum: 07 c, b, a also 06 c, b, a 04 c, b, a; Date of Context: E Rom to Byz Figure reference: Pl. 20.4 Ware group: TC fine Typology Kenkel: TC 6 Description: Fragment Dating: Rom-L Rom Reference: Kenkel 2020, 113 Pl. 1.48

TZ 005930-001

Area I, Square AS 123; Context 4199 Stratum: 04 b; Date of Context: Byz Figure reference: Pl. 20.5 Ware group: TC medium Typology Kenkel: TC 4 Description: Terracotta fragment; Dolphin Dating: Hell-L Rom Reference: Kenkel 2020, 113 Pl. 1.48

TZ 101180-005

Area II, Square AU 131; Context 10628 Stratum: 04 c, b, a; Date of Context: Byz Figure reference: Pl. 20.6 Ware group: TC fine Typology Kenkel: TC 5 Description: Terracotta fragment; Fragment of a horned altar Dimensions: L 5.6, H 4.2cm Dating: 1st century BC to 1st century AD Reference: Kenkel 2020, 113 Pl. 1.48

TZ 101118-018

Area II, Square AS 132; Context 11001 Stratum: 05 also 04 c; Date of Context: L Rom/E Byz to Byz Figure reference: Pl. 20.7 Ware group: TC buff Typology Kenkel: TC 3 Description: Fragment of a base with foot Dating: Hell-L Rom Reference: Kenkel 2020, 112 Pl. 1.48

TZ 100607-005

Area II, Square AT 128; Context 10571 *Stratum:* 03 a; *Date of Context:* Um

Figure reference: Pl. 20.8 *Ware group:* TC fine *Typology Kenkel:* TC 8 *Description:* Terracotta fragment; base Number: 2 Dimension: Th 0.4 Dating: Rom-L Rom Reference: Kenkel 2020, 113 Pl. 1.48

6.8. Catalogue of Selected Early Roman Ceramic Finds (without plates)

TZ 002643-002

Area I, Square AO 119; Context 1029 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.10.2 Ware group: Cl Red2Br with grey core Typology Kenkel: Am 4.9 Description: Amphora Dimensions: D (max.) 15 Dating: Rom Reference: —

TZ 002667-008

Area I, Square AO 119; Context 1029 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.10.4 Ware group: Cl Buff Typology Kenkel: Am 6.4 b Description: Amphora Dimensions: D (max.) 8 Dating: Hell-E Rom Reference: —

TZ 002667-010

Area I, Square AO 119; Context 1029 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.10.5 Ware group: Cl Red CP 2 Typology Kenkel: Kt 18.1 Description: Cooking pot Dimensions: D (max.) 8 Dating: Rom Reference: —

TZ 002667-011

Area I, Square AO 119; Context 1029 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.10.3 Ware group: Cl Bu2Br, soft Typology Kenkel: Sa 1.9 Description: Echinus bowl (?) Dimensions: D (max.) 8 Dating: Hell-E Rom Reference: —

TZ 002667-014

Area I, Square AO 119; Context 1029 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.10.1 Ware group: Cl Buff Typology Kenkel: Am 6.4 b Description: Amphora Dimensions: D (max.) 8 Dating: Hell-E Rom Reference: —

TZ 003149-002

Area I, Square AG 115; Context 1659 Stratum: 03 b, a; Date of Context: Um Figure reference: Fig. 4.43 Ware group: Eastern Sigillata A Typology Kenkel: Eastern Terra Sigillata 13.2 Description: Bowl Dating: Era from Claudius to Nero

TZ 006802-002

Area I, Square AP 122; Context 4807 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 3.60 Ware group: Cl Red CP 2 Typology Kenkel: Kt 18.2 Description: Cooking pot Number: 41 Dimension: Th 0.5 Dating: Rom Reference: —

TZ 007083-001

Area I, Square AN 119; Context 822 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.24 Description: Tablet (?) Material: Clay Dimension: L 7; W 5.5; Th 2.5 *Remark:* Flat tablet with rounded corners; vertical and horizontal incisions on the front and on the narrow edges of the reverse side *Reference:* —

TZ 020223-001

Area I, Square AP 123; Context 5092 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 3.46 Ware group: Cl Bu2Br-f Typology Kenkel: La 31 Description: Oil lamp Dating: E Rom Reference: —

TZ 020490-011

Area I, Square AR 123; Context 4765 Stratum: 07 c; Date of Context: E Rom Figure reference: Fig. 3.28 Ware group: Cl Bu2Br-f Typology Kenkel: Gruppe 10 Description: Oil lamp Dimension: Th 0.3 Dating: E Rom Reference: —

TZ 101295-016

Area II, Square AW 129; Context 11162 *Stratum:* 07 c, b, a also 6 c, b, a; *Date of Context:* E Rom to (E) Rom *Figure reference:* Fig. 4.48.4 *Ware group:* Cl Bu2Br *Typology Kenkel:* Kru71 *Description:* Jug *Dating:* Hell-Rom *Reference:* —

TZ 101309-056

Area II, Square AW 129; Context 11162 *Stratum:* 07 c, b, a also 6 c, b, a; *Date of Context:* E Rom to (E) Rom *Figure reference:* Fig. 4.48.3 *Ware group:* Cl Grey *Typology Kenkel:* Kru74 *Description:* Jug *Dating:* Hell-Rom *Reference:* —

TZ 101321-010/048/063

Area II, Square AW 129; Context 11162 *Stratum:* 07 c, b, a also 6 c, b, a; *Date of Context:* E Rom to (E) Rom *Figure reference:* Fig. 4.48.2 *Ware group:* Cl Red Buff *Typology Kenkel:* Sa3.2 *Description:* Bowl *Dating:* L Hell-E Rom *Reference:* —

TZ 101321-045

Area II, Square AW 129; Context 11162 *Stratum:* 07 c, b, a also 6 c, b, a; *Date of Context:* E Rom to (E) Rom *Figure reference:* Fig. 4.48.1 *Ware group:* Cl Chal Red *Typology Kenkel:* Sa3.3 *Description:* Bowl *Dating:* L Hell-E Rom *Reference:* Kenkel 2020, 37.

TZ 101658-001

Area II; Square AT 132; Context 11390 Stratum: 04 b, a, 03 b, a also 02; Date of Context: Byz to Abb/Maml Figure reference: Fig. 4.46 Ware group: Cl Bu2Br, soft Typology Kenkel: La 58 Description: Oil lamp Remark: The shoulder of the oil lamp is set off with a circumferential ridge and an 'egg-bar' like decoration around it; in the mirror area are 'knobs' which presumably once ran all the way round it; the base of the lamp has a flat base ring (approx. 0.3 cm wide) with a 'maple leaf' like decoration; the individual leaf elements are divided by indicated 'leaf veins'; there are remnants of light brown, blotchy and translucent slip on the outside as well as traces of soot around the wick hole Dimension: Th 0.3

Dating: Rom

Reference: Kenkel 2020, 108 Pl. 1.44.

6.9. Catalogue of Early Roman Coins

TZ 008880-001

Area I; Square AI 117; Context 2136 Stratum: 05 also 04 c, b, a; Date of Context: L Rom/E Byz to Byz Figure reference: Pl. 21.1 Herod I Period of Rule: 40–4 BC *Obv.*: BAΣIΛEΩΣ HPΩ Δ OY; legend around diadem *Rev.*: Three-legged table Ruler's coinage Dating: 40-4 BCE Nominal: Prutah Material: Bronze Dimensions: D 1.6 Weight: 2.19 g Die-axis: 10 h Mint: Jerusalem

TZ 010811-001

Area I; Square AF/AG 115; Context 3028 Stratum: 04 c; Date of Context: Byz Figure reference: Pl. 21.2 Tiberius Period of Rule: 14–37 AD Obv.: [TI]BEPIW KAICAPI; head of Tiberius to the right Rev.: $\Gamma A \Delta A PEIC - L \ U \ B \ [Year 92]$. Head of Tyche to the right Dating: 28–29 AD Material: Bronze Dimensions: D 1.8 Weight: 4.88 g Die-axis: 12 h Mint: Gadara

TZ 015261-001

Area I; Square AR 123; Context 5005 Stratum: 10; Date of Context: IA IIC Figure reference: Pl. 21.3 Herod I Period of Rule: 40–4 BC Obv.: $[BA\Sigma IAE\Omega\Sigma HP\Omega \Delta OY]$. King's title and name circumferential Rev.: Anchor Ruler's coinage Dating: 40–4 BCE Material: Bronze Dimensions: D 1.5 Weight: 0.78 g Mint: Jerusalem

TZ 015291-001

Area I; Square AO 123; Context 5270 Stratum: 7 b; Date of Context: E Rom Figure reference: Pl. 21.4 Herod I Period of Rule: 40-4 BC Obv.: [HPWAOY BACIAE]; Anchor. King's title and name circumferential Rev.: Double cornucopia, Hermes' staff between them (kerykeion). Ruler's coinage Dating: 37-4 BC Material: Bronze Dimensions: D 1.4 Weight: 1.1 g Die-axis: 6 h Mint: Jerusalem

TZ 018690-001

Area I; Square AR 123; Context 6070 Stratum: 13; Date of Context: IA I Figure reference: Pl. 21.5 Herod or Herod Archelaos Period of rule: 37 BC–6 AD Obv.: Anchor (?) Rev.: Pomegranate in Double cornucopia Ruler's coinage Dating: 37 BC–6 AD Material: Bronze Dimensions: D 1.2 Weight: 1.17 g Die-axis: 6 h Mint: Jerusalem

TZ 110965-001

Area II; Square AT 128; Context 10625 Stratum: 08 also 07 c, b, a. 06 c, b, a 05; Date of Context: Hell to L Rom-E Byz Figure reference: Pl. 21.6 Herod Antipas Period of Rule: 4 BC–39 AD Obv.: [HPW Δ OY T]ETPA[PXOY]; Palm branch, on both sides L – $\Lambda\Gamma$ (= year 33) Rev.: [TIBE/PIAC]; two-line city name in wreath Ruler's coinage Dating: 29–30 AD Material: Bronze Dimensions: D 1.5 Weight: 2.27 g Mint: Tiberias

6.10. Catalogue of Middle and Late Roman Coins

TZ 002532-001

Area I; Square AO 119; Context 607 Stratum: 04 a; Date of Context: Byz Figure reference: Pl. 22.1 Hadrian Period of Rule: 117-138 AD Oby.: AVT TPA AAPIANW [KAIC CEB], draped bust of Hadrian with laurel wreath to the right, dotted circle *Rev.*: [T]IB-EP -[K] Λ AV[Δ], left-hand field L, right-hand field AP = year 101 (= 119/120 AD) city goddess (Tyche) with sceptre and bust of emperor (?) in her hands, foot on ship's bow, to the left Ruler's coinage Dating: 119-120 AD Nominal: Aes Material: Bronze Dimensions: D 2.1 Weight: 7.89 g Die-axis: 12 h Mint: Tiberias

TZ 012760-001

Area I; Square AP 122; Context 3827 Stratum: 04 a; Date of Context: Byz Figure reference: Pl. 22.2 Elagabal (?) Period of Rule: 218–222 AD (?) Obv.: Head to the right

Rev.: Temple-like architecture (broken pediment under tympanon) with a small figure (Tyche?) in a central arched niche; a further niche with a rectangular pattern on either side; some stairs can be recognized

City coinage Dating: 218–222 AD (?) Material: Bronze Dimensions: D 2.4 Weight: 6.33 g Die-axis: 12 h Mint: Orthosia

TZ 014115-001

Area I; Square AP 118/119; Context 2729 Stratum: 14 d, c, b, a also 13; Date of Context: LB (also IA I) Figure reference: Pl. 22.3 Licinius I Period of Rule: 308–324 AD Obv.: C LIC LICINNIVS P F AVG [sic!]; Head of Licinius I with laurel wreath to the right Rev.: GENIO - AVGVSTI // ALE [E round]; Genius, on the head a Modius, standing in front view, head to the left; in the right hand a Serapis-head, in the left a cornucopia; in the left field above a star, below a branch; in the center an N, in the right field an A Ruler's coinage Dating: 312–313 AD Nominal: Nummus Material: Bronze Dimensions: D 2.1 Weight: 4.31 g Die-axis: 12 h

TZ 110312-001

Mint: Alexandria

Area II; Square AY 129; Context 10287 Stratum: 03 a also 02.01; Date of Context: Um to Ott Figure reference: Pl. 22.4 Diocletianus Period of Rule: 284–305 AD Obv.: IMP C C VAL DIOCLETIANVS P F AVG; Draped armoured bust of Diocletianus with radiate crown in the chest view to the right Rev.: CONCORD[IA MILI]-ITVM // Crescent ANT; the armoured emperor left and Jupiter with sceptre in his left hand right on both sides of a tripod; the god hands a small Victoria to the emperor Ruler's coinage Dating: around 297 AD Nominal: Nummus Material: Bronze Dimensions: D 1.9 Weight: 2.06 g Die-axis: 12 h *Mint:* Antiochia (Antakya)

6.11. Catalogue of Indefinite Coins

TZ 007080-001

Area I; Square AP 119; Context 1102 Stratum: 01; Date of Context: Ott Figure reference: Pl. 23.1 Dating: c. 250–450 AD Material: Bronze Dimensions: D 1.1 Weight: 0.28 g Remark (after Dahmen): Probably Late Antique coin or inflation money of the middle to late 3rd century AD

TZ 015443-001

Area I; Square AQ 123; Context 5507 Stratum: 12; Date of Context: IA II A/B Figure reference: Pl. 23.2 Material: Bronze Dimensions: D 1.2 Weight: 0.48 g Remark (after Dahmen): State of preservation does not allow any determination; but does not appear to be Hellenistic or Hasmonean.

TZ 110016-001

Area II; Square AW 129; Context 10017 Stratum: 02 also 01; Date of Context: Abb to Ott Figure reference: Pl. 23.3 Dating: c. 100 BC–500 AD Material: Bronze Dimensions: D 1 Weight: 0.69 g

TZ 110954-001

Area II; Square AT 129; Context 10612 Stratum: 04 c; Date of Context: Byz Figure reference: Pl. 23.4 Dating: c. 200 BC–500 AD Material: Bronze or Silver Dimensions: D 1.2 Weight: 1.07 g

TZ 111246-001

Area II; Square AX 126; Context 10737 Stratum: 03 b, a; Date of Context: Ott Figure reference: Pl. 23.5 Material: Bronze Dimensions: D 1.3 Weight: 1.55 g Remark: Probably L Rom.

TZ 111381-001

Area II; Square AS 133; Context 10821 Stratum: 03 b, a; Date of Context: Um Figure reference: Pl. 23.6 Dating: c. 300 BC – 500 AD Material: Bronze Dimensions: D 0.8 Weight: 0.38 g

TZ 111600-001

Area II; Square AS 132; Context 11001 Stratum: 05 also 04 c; Date of Context: L Rom/E Byz to Byz Figure reference: Pl. 23.7 Ruler's coinage Dating: c 300 BC–300 AD Material: Bronze Dimensions: D 1.1 Weight: 1.15 g Remark (after Dahmen): Probably Hell or L Roman

TZ 112037-001

Area II; Square AU 132; Context 11202 Stratum: 08; Date of Context: Hell Figure reference: Pl. 24.1 Obv.: Double cornucopia (?) Dating: c 100 BC–500 AD Material: Bronze Dimensions: D 1.5 Weight: 1.12 g Remark: Heavily corroded

TZ 112167-001 (Pl. 24.2)

Area II; Square AS 126; Context 11283 *Stratum:* 08 also 07 c, b, a; *Date of Context:* Hell to (E) Rom *Material:* Bronze *Dimensions:* D 1.8 *Weight:* 1.08 g *Remark:* Heavily corroded

TZ 112682-001

Area II; Square AU 129 Context 11449 Stratum: 07 c, b, a also 06 c, b, a.05; Date of Context: E Rom to L Rom-E Byz Figure reference: Pl. 24.3 Obv.: Emperor's bust to the right Rev.: Standing figure in circle of dots; Libertas (?) Ruler's coinage Dating: Rom or Byz (?) Material: Bronze Dimensions: D 1.1 Weight: 1.49 g Die-axis: 12 h Remark: Inscription is illegible; conspicuously thick scabbard; uncertain, whether late antique or provincial Roman

TZ 310587-001

Area III; Square AA 125; Context 30416 Stratum: 04; Date of Context: Byz Figure reference: Pl. 24.4 Ruler's coinage Obv.: Armoured bust of an emperor with diadem to the right Dating: c. 300–500 AD Material: Bronze Dimensions: D 1.5 Weight: 1.12 g Die-axis: 12 h Remark: Heavily corroded

TZ 310588-001

Area III; Square Y 125; Context 30421 *Stratum:* 04 also 03 b; *Date of Context:* Byz to Um *Figure reference:* Pl. 24.5 *Dating:* c. 100 BC–500 AD *Material:* Bronze *Dimensions:* D 1.1 *Weight:* 0.29 g *Die-axis:* 12 h *Remark:* Heavily corroded

TZ 310589-001

Area III; Square Y 125; Context 30421 Stratum: 04 also 03 b; Date of Context: Byz to Um Figure reference: Pl. 24.6 Ruler's coinage Obv.: Armoured bust of an emperor with diadem to the right Rev.: Cross on globe Dating: 300–600 AD Material: Bronze Dimensions: D 1 Weight: 3.9 g Die-axis: 12 h Remark: With damages, one small additional fragment

TZ 310590-001

Area III; Square Y 125; Context 30421 *Stratum:* 04 also 03 b; *Date of Context:* Byz to Um *Figure reference:* Pl. 25.1 *Obv.:* Bust of an emperor to the right *Dating:* 300–500 AD *Material:* Bronze *Dimensions:* D 1.3 *Weight:* 1.42 g *Die-axis:* 12 h *Remark:* Small coin of the 4th/5th century AD

TZ 310591-001

Area III; Square Y 125; Context 30421 Stratum: 04 also 03 b; Date of Context: Byz to Um Figure reference: Pl. 25.2 Obv.: Head to the right Rev.: Standing figure Dating: 300–500 AD Material: Bronze Dimensions: D 1.2 Weight: 0.62 g Die-axis: 12 h Remark: Over struck, small coin of the 4th/5th century AD

TZ 310593-001

Area III; Square AA 125; Context 30362 Alexander Jannaios *Figure reference:* Pl. 25.3 *Period of Rule:* 104–76 BC *Obv.:* Paleo-Hebrew legend in the wreath *Rev.:* Double cornucopia with pomegranate; on the right-hand side a Λ (?). Ruler's coinage *Dating:* 104–76 BCE *Material:* Bronze Dimensions: D 1.5 *Weight:* 1.50 g *Die-axis:* 6 h

TZ 310596-001 (Pl. 25.4)

Area III; Square: Surface; Context 0 Stratum 00; *Date of Context:* modern *Figure reference:* Pl. 25.4 Ruler's coinage *Rev.:* Standing figure (?) *Dating:* c 300–500 AD *Material:* Bronze Dimensions: D 1.1 *Weight:* 0.51 g *Die-axis:* 12 h

6.12. Catalogue of Roman Glass

TZ 112312-003

Area II, Square AV 131; Context 11224 Stratum: 8; Date of Context: Hell Figure reference: Pl. 26.1 Colour: Emerald green, transparent Typology Hoss: A 21 Description: Ripped bowl Dimension: D (max.) 13 Dating: 3rd century BC to 1st century AD Reference: Hoss 2020b, 277 Pl. 2.4.

TZ 016748-001

Area I, Square AR 123; Context 5280 Stratum: 12; Date of Context: IA IIA/B Figure reference: Pl. 26.2 Colour: Light green, transparent Typology Hoss: A 27 Description: Linear bowl Dimension: D (max.) 15 Dating: 1st century BC to mid 1st century AD Reference: Hoss 2020b, 278 Pl. 2.4.

TZ 016678-002

Area I, Square AQ 123; Context 4186 Stratum: 06; Date of Context: (E) Rom Figure reference: Pl. 26.3 Colour: Translucent light blue, transparent Typology Hoss: D 13 Description: Mug Dimension: D (max.) 17 Dating: 1st to 8th century AD Reference: Hoss 2020b, 293 Pl. 2.14.

TZ 016707-001

Area I, Square AP 123; Context 4990 Stratum: 06 c; Date of Context: (E) Rom Figure reference: Pl. 26.4 Colour: Translucent light blue-green, transparent Typology Hoss: P 11 Description: Balsamarium Number: 12 Dimension: D (max.) 3.7 Dating: 1st to 4th century AD Reference: Hoss 2020b, 315 Pl. 2.23.

6.13. Catalogue of Selected Metal Finds (Repertoire of forms, Strata 7 und 6) (without plates)

TZ 009732-001

Area I; Square AQ 119; Context 2631 Stratum: 06 a; Date of Context: E Rom Figure reference: Fig. 4.22 Description: Fragment of smooth bracelet; flat oval in cross-section, c. one fifth missing Dimension: D 5.5; Th 0.5 Weight: 8 g Material: Bronze/Copper Dating: Hell to Isl Reference: Hoss 2020a, 394, 403 Fig. 3.3.

TZ 012513-001

Area I; Square AQ 120; Context 3410 Stratum: 07 b; Date of Context: E Rom Figure Reference: Fig. 4.53 Description: Bead/Pendant; two parts Dimension: D 1.5; D (opening) 0.8; Th 0.7 Weight: 1.5 Material: Bronze/Copper Reference: Hoss 2020a, 395. 407 Fig. 3.13.

TZ 014299-001

Area I; Square AP 120; Context 4274 Stratum: 7 c, b, a; Date of Context: E Rom Figure reference: Fig. 4.54 Description: Cloak pin; hook-shaped and curved with a slight thickening at one end Dimension: L 2.1; W 1.3; D 0.6 Weight: 1.1 g Material: Bronze/Copper Reference: —

TZ 0015171-001

Area I; Square AP 121; Context 4262 Stratum: 10 also 9, 8, 07 c, b, a; Date of Context: IA II to E Rom Figure reference: Fig. 3.67 Description: Dagger; only point preserved Dimension: L 4.7; W 4.5 Material: Bronze/Copper Reference: —

TZ 015198-001

Area I; Square AP 123; Context 4742 *Stratum:* 06 a; *Date of Context:* (E) Rom *Figure reference:* Fig. 4.63 *Description:* Bracelet; flat, narrow curved strip with a transverse eyelet or hook at one end *Dimension:* L 4.8; D 0.7 *Weight:* 2.2 *Material:* Bronze/Copper *Reference:* Hoss 2020a, 394. 404.

TZ 015269-001

Area I; Square AQ 123; Context 5113 Stratum: 7 a; Date of Context: E Rom Figure reference: Fig. 4.57 Description: Lifting-sliding key; with ring handle and right-angled protruding bit; bit mostly broken off Dimension: L 5.6; W 1.9; D 1.7 Weight: 13.9 g Material: Iron Reference: —

TZ 015302-001

Area I; Square AQ 123; Context 5270 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 4.52 Description: Finger ring Dimension: D 1.6; Th 0.25 Weight: 0.4 g Material: Bronze/Copper Reference: Hoss 2020a, 395. 405.

TZ 015373-001

Area I; Square AQ 123; Context 5113 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 4.60 Description: Knife blade; two fragments of a trapezoidal blade Dimension: L 9.8; W 3.7; H 1.6 Material: Iron Reference: Hoss 2020a, 401. 421 Fig. 3.41.

TZ 017252-001

Area I; Square AP 123; Context 5187 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 4.56 Description: Spatula; two matching fragments Dimension: L 9.1; D 0.4 Weight: 25 g Material: Bronze/Copper Reference: Hoss 2020a, 397. 410.

TZ 017255-001

Area I; Square AQ 123; Context 5189 Stratum: 07 c; Date of Context: E Rom Figure reference: Fig. 4.58 Description: Fitting; angular with corroded iron nail on the inside Dimension: L 29; W 2.4; H 1.8 Weight: 9.9 g Material: Bronze/Copper Reference: Hoss 2020a, 398. 414.

TZ 017258-001

Area I; Square AQ 123; Context 5189 Stratum: 07 c; Date of Context: E Rom Figure reference: Fig. 4.61 Description: Net weight; elongated sheet, folded over lengthwise Dimension: L 3.6; W 0.9; H 0.5 Weight: 8 g Material: Lead Reference: —

TZ 017304-001

Area I; Square AR 121; Context 5522 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 4.59 Description: Hook; rolled up on one side Dimension: L 3.2; W 1.6; H 1.2 Weight: 6.2 g Material: Bronze/Copper Reference: Hoss 2020a, 414.

TZ 110496-001

Area II; Square AY 130; Context 10407 Stratum: 06; Date of Context: (E) Rom Figure reference: Fig. 4.68 Description: Lifting-sliding key, four fragments Dimension: L 10.5; D 1.8 Weight: 72.2 g Material: Iron Reference: Hoss 2020a, 397. 413 Fig. 3.24.

TZ 110531-001

Area II; Square AY 130; Context 10310 Stratum: 06; Date of Context: (E) Rom Figure reference: Fig. 4.64 Description: Mirror; four fragments Dimension: L 4; W 2.5; Th 0.3 Weight: 5.5 g Material: Bronze/Copper Reference: Hoss 2020a, 396. 408 Fig. 3.15.

TZ 111384-001

Area I; Square AX 127; Context 10733 Stratum: 05 also 4 c; Date of Context: LRom to Byz Figure reference: Fig. 4.55 Description: Fragment of Tweezers Dimension: L 4.4; W 0.5 to 0.7; H 0.4 Weight: 36 g Material: Bronze/Copper Reference: Hoss 2020a, 396. 408 Fig. 3.16.

TZ 111387-001

Area II; Square AV 126; Context 10851 Stratum: 06 c, b, a; Date of Context: (E) Rom Description: Axe Dimension: L 12; W 5.2; H 2.7 Material: Iron Reference: Hoss 2020a, 400. 419 Fig. 3.36.

TZ 111389-001

Area I; Square AV 126; Context 10851 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.32 Description: Knife blade Dimension: L 7; W 2; H 1.3 Weight: 21.3 g Material: Iron Reference: Hoss 2020a, 401. 421.

TZ 111559-001

Area II; Square AX 127; Context 11017 Stratum: 06; Date of Context: (E) Rom Figure reference: Fig. 4.62 Description: Bent fibula; with ornament Dimension: L 4.4 Material: Bronze/Copper Reference: Hoss 2020a, 394. 403.

TZ 111609-001

Area II; Square AU 126; Context 11014 *Stratum:* 07 also 06; *Date of Context:* (E) Rom *Figure reference:* Fig. 4.67 *Description:* Needle; three matching fragments, part of the eyelet preserved *Dimension:* L 9.2; D 0.6 *Weight:* 7.7 g *Material:* Bronze/Copper *Reference:* Hoss 2020a, 397. 412.

TZ 112175-001

Area II; Square AU 127; Context 11310 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.35 Description: Casting residue Dimension: L 3.7; W 1.2; H 0.3 Weight: 3.3 g Reference: —

TZ 112181-001

Area II; Square AX 132; Context 11327 Stratum: 06; Date of Context:(E) Rom Figure reference: Fig. 4.65 Description: Mirror; triangular fragment Dimension: L 4.6; W 4.2; H 0.3 Weight: 12.4 g Material: Bronze/Copper Reference: Hoss 2020a, 396. 408.

TZ 112223-001

Area II; Square AT 126; Context 11226 *Stratum:* 06 c, b, a also 05, 04; *Date of Context:* (E) Rom to Byz *Figure reference:* Fig. 4.66 *Description:* Sickle; was restored as part of the "ACOR Conservation Cooperative" (ACC) *Dimension:* L 24; W 6; H 0.5 *Weight:* 4005 g *Material:* Iron *Reference:* Hoss 2020a, 400. 420 Fig. 3.39.

6.14. Catalogue of Selected Bone and Mollusc Finds (Strata 7 and 6) (without plates)

TZ 016456-001

Area I; Square AQ 123; Context 5070 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 4.94, 4.95 Description: Cosmetic bowl; moulded in the shape of an eagle's head with adjoining wing; round dots on the inside of the wing Dimension: L 6; W 9.7; H 1.8 Material: Shell

TZ 016613-001

Area I; Square AQ 123; Context 4988 Stratum: 06 c; Date of Context: (E) Rom Figure reference: Fig. 4.80 Description: Needle; three matching fragments, eye with two superimposed perforations Dimension: L 11.3; D 0.4 Weight: 1.7 g Material: Species not determinable; long bone

TZ 016614-001

Area I; Square AP 123; Context 5095 *Stratum:* 07 c, b; *Date of Context:* E Rom *Figure reference:* Fig. 4.93 *Description:* Two matching fragments of a wedgeshaped object *Dimension:* L 12; W 1.8; H 1.2 *Weight:* 21 g *Material:* Ivory

TZ 016617-001

Area I; Square AQ 123; Context 4789 Stratum: 06 b, a; Date of Context: (E) Rom Figure reference: Fig. 4.91 Description: Spindle whorl; upper side slightly convex, underside flat; perforation slightly angular Dimension: H 0.6; D 2.8; D (opening) 0.5 Weight: 3.7 g Material: Species not determinable; long bone

TZ 016619-001

Area I; Square AP 123; Context 4999 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 4.86 Description: Spatula; two adapting fragments, one side tapered, the other side narrower and slightly rounded; curved in cross-section Dimension: L 20; W 3; H 0.5 *Weight:* 13.4 g *Material:* Bovine, rib

TZ 016620-001

Area I; Square AP 123; Context 5155 Stratum: 07 c, b; Date of Context: E Rom Figure reference: Fig. 4.87 Description: Spatula; four matching fragments Dimension: L 16; W 2.5; H 0.6 Weight: 8.2 g Material: Bovine, rib

TZ 017202-001

Area I; Square AQ 123; Context 5201 Stratum: 07 c; Date of Context: E Rom Figure reference: Fig. 4.90 Description: Spindle shaft; five matching fragments, four incised horizontal lines Dimension: L 21.8; D 0.7 Weight: 11.5 g Material: probably Bovine; long bone

TZ 017203-001

Area I; Square AQ 123; Context 5201 Stratum: 07 c; Date of Context: E Rom Figure reference: Fig. 4.92 Description: Spindle whorl with concentric, profiled rings around the perforation Dimension: H 0.4; D 2.7; D (opening) 0.7 Weight: 2 g Material: Species not determinable; long bone

TZ 017205-001

Area I; Square AQ 123; Context 4788 Stratum: 06 c; Date of Context: (E) Rom Figure reference: Fig. 4.81 Description: Needle; point missing; a small decoration recognizable at the end Dimension: L 6.9; D 0.4 Weight: 1.4 g Material: Species not determinable; long bone

TZ 017206-001

Area I; Square AQ 123; Context 4941 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 4.82 Description: Needle; broken off on both sides Dimension: L 6.6; D 0.6 *Weight:* 3.3 g *Material:* Species not determinable; long bone

TZ 017207-001

Area I; Square AQ 123; Context 5070 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 4.83 Description: Needle; tip and rear end missing; two pinholes on one side, the upper one broken off Dimension: L 8.2; D 0.5 Weight: 2.4 g Material: Species not determinable; long bone

TZ 017208-001

Area I; Square AQ 123; Context 5116 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 4.85.1 Description: Spatula; five matching fragments, pointed at the front, rounded at the back Dimension: L 13.8; W 3.3; H 0.2 Weight: 10.7 g Material: Bovine, rib

TZ 017209-001

Area I; Square AQ 123; Context 5116 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 4.85.2 Description: Spatula; front part Dimension: L 12.3; W 2.3; H 0.9 Weight: 8.2 g Material: Bovine, rib

TZ 017210-001

Area I; Square AQ 123; Context 5116 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 4.85.6 Description: Spatula; front part Dimension: L 3.1; W 1.8; H 0.2 Weight: 1.6 g Material: Bovine, rib

TZ 017211-001

Area I; Square AQ 123; Context 5116 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 4.85.3 Description: Spatula; centre part Dimension: L 5.5; W 1.6; H 0.2 Weight: 1.4 g Material: Bovine, rib

TZ 017212-001

Area I; Square AQ 123; Context 5116 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 4.85.5 Description: Spatula; front part Dimension: L 4.5; W 0.9; H 0.2 Weight: 0.9 g Material: Bovine, rib

TZ 017213-001

Area I; Square AQ 123; Context 5116 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 4.85.4 Description: Spatula; front part Dimension: L 5.4; W 1.7; H 0.2 Weight: 2.5 g Material: Bovine, rib

TZ 019543-001

Area I; Square AP 123; Context 5095 *Stratum:* 07 c, b; *Date of Context:* E Rom *Figure reference:* Fig. 4.89 *Description:* Weaver's shuttle; three fragments, two of them adapting, almost complete *Dimension:* L 19.5; W 3.1; H 0.8 *Material:* Bovine, rib

TZ 019545-001

Area I; Square AQ 123; Context 5201 Stratum: 07 c; Date of Context: E Rom Figure reference: Fig. 4.88 Description: Spatula; centre part Dimension: L 6.8; W 1.8; H 0.2 Material: Bovine, rib

TZ 112241-001

Area II; Square AU 127; Context 11284 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.84 Description: Needle; two matching fragments; eye of needle preserved Dimension: L 6; W 0.6; H 0.2 Material: Species not determinable

6.15. Catalogue of Selected Stone Finds (Strata 7 and 6) (without plates)

TZ 001150-001

Area I; Square AM 119; Context 68 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.25 Description: Olynthus mill Dimension: L 19; W 15; H 14 Weight: 5600 g Material: Basalt

TZ 001241-001

Area I; Square AM 119; Context 46 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.27 Description: Bowl; Circular, restored Material: Basalt

TZ 006934-001

Area I; Square AO 119; Context 1000 Stratum: 06 a; Date of Context: (E) Rom Figure reference: Fig. 4.23 Description: Weight; spool-shape Dimension: L 10.5; D 6.2 Weight: 711 g Material: Basalt

TZ 007744-001

Area I; Square AM 119; Context 74 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 4.107 Description: Plate/platter; rectangular base Dimension: L 13; W 7.5; H 4 Weight: 210 g Material: Basalt

TZ 009893-001

Area I; Square AQ 119; Context 2681 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.13 Description: Cosmetic palette; rectangular; rounded corners; black and white stone Dimension: L 8; W 8; H 2 Material: Diorit

TZ 009889-001/002

Area I; Square AQ 119; Context 2664 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.14, 3.15 Description: Fragment of lapis pedicinorum; rectangular, two tapered recesses on each side; belongs to TZ 014106-001 *Dimension:* L 82; W 28; H 22 *Material:* Basalt

TZ 009890-001

Area I; Square AP 118/AP 120; Context 2669 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.30 Description: Architectural element Dimension: L 29; W 28; H 22 Material: Limestone

TZ 010833-001

Area I; Square AL 118; Context 1503 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 4.111 Description: Plate; round base; two fragments, two fine, horizontal incisions 1.5 mm below the rim Dimension: H 1.6; Th 0.5 to 0.8; H (base) 0.5; D 9.6 Material: Limestone

TZ 011780-001/002, TZ 011781-001/002, TZ 011782-001

Area I; Square AQ 120; Context 3410 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.70 Description: Beads; conical Dimension: L 2.2 to 2.3; D 0.9 to 1.3; D (opening) 0.2 Material: Carnelian

TZ 013253-001

Area I; Square AS 122; Context 4232 Stratum: 06 a; Date of Context: (E) Rom Figure reference: Fig. 4.29 Description: Bead; turquoise coloured Dimension: H 0.2; D 0.2 Material: Unknown

TZ 013375-001

Area I; Square AR 123; Context 4181 Stratum: 06 a; Date of Context: (E) Rom Figure reference: Fig. 4.25 Description: Spindle whorl; convex; cylindrically perforated; greenish Dimension: H 1.5 Weight: 15.6 g

TZ 013517-001

Area I; Square AP 120; Context 4274 *Stratum:* 07 c, b, a; *Date of Context:* E Rom *Figure reference:* Fig. 3.11 *Description:* Hinge stone; cuboid; round depression in the centre *Dimension:* L 19; W 14.4; H 5 *Weight:* 2500 g *Material:* Basalt

TZ 013542-001

Area I; Square AR 123; Context 4181 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.108 Description: Lid; round ground plan Dimension: H 2.8; D 1.8

TZ 014106-001

Area I; Square AP 120; Context 4559 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 3.14, 3.15 Description: Fragment of lapis pedicinorum, rectangular Dimension: L 26; W 23; H 32 Material: Basalt

TZ 014632-001

Area I; Square AQ 123; Context 4681 Stratum: 06 a; Date of Context: (E) Rom Figure reference: Fig. 4.26 Description: Bead Dimension: L 2; D 0.7; D (opening) 0.2

TZ 015310-001

Area I; Square AT 123; Context 5350 Stratum: 06 a; Date of Context: (E) Rom Figure reference: Fig. 4.28 Description: Bead; black/white Dimension: H 32; D 1.8

TZ 015332-001

Area I; Square AR 121; Context 5522 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 4.117 Description: Spindle whorl Dimension: H 2.4; D 3.7; D (opening) 0.8 Material: Limestone

TZ 015363-001

Area I; Square AP 123; Context 4906 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 4.125 Description: Hinge stone; polygon, rectangular depression (17 x 14/13) Dimension: L 54; W 42 Material: Limestone

TZ 015385-001/15386-001

Area I; Square AQ 123; Context 5116 Stratum: 7 b; Date of Context: E Rom Figure reference: Fig. 3.46 Description: Bowl; eight fragments Dimension: H 3.5; D (opening) 15; D (foot) 7.5 Material: Limestone

TZ 015388-001

Area I; Square AQ 122; Context 4737 Stratum: 10; Date of Context: IA IIC Figure reference: Fig. 4.109 Description: Cup with handle; steep wall Dimension: H 9.8; D (opening) 13.2; Th 0.3-0.7 Material: Limestone

TZ 015446-001

Area I; Square AQ 123; Context 5270 Stratum: 7 b, a; Date of Context: E Rom Figure reference: Fig. 3.49 Description: Miniature loom weight; half preserved Dimension: H 2.1; W 2.1; H 1.2 Material: Limestone

TZ 015591-001

Area I; Square AE 114; Context 5304 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 4.105 Description: Lower grinding stone Dimension: L 14.6; W 14; H 5.1 Weight: 1590 Material: Basalt

TZ 015683-001

Area I; Square AQ 123; Context 5116 Stratum: 7 b, a; Date of Context: E Rom Figure reference: Fig. 3.48 Description: Weight; ring-shaped, pierced from two sides in a conical shape Dimension: H 3.7; D.: 12 Weight: 756 g Material: Basalt

TZ 015780-001

Area I; Square AQ 123; Context 5092 Stratum: 7 b; Date of Context: E Rom Figure reference: Fig. 3.52 Description: Rubbing stone; shoe-shaped, top and bottom flat Dimension: H 5.5; W 5; H 3.9 Weight: 169 g Material: Basalt

TZ 015948-001

Area I; Square AQ 123; Context 5206 Stratum: 07 c; Date of Context: E Rom Figure reference: Fig. 4.110 Description: Round bowl; 1 cm high, slightly inwards curved base Dimension: H 4.2; D foot 8 Material: Limestone

TZ 015982-001

Area I; Square AP 123; Context 5072 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 3.62 Description: Fragment; cuboid Dimension: H 19; W 6.3; H 5.3 Material: Limestone

TZ 016061-001

Area I; Square AP 123; Context 4770 Stratum: 06 b; Date of Context: (E) Rom Figure reference: Fig. 4.101 Description: Rubbing stone; spherical; bottom side only slightly curved outwards with rubbing marks Dimension: D 6.9 Weight: 400 g Material: Flint/Silex

TZ 015958-001

Area I; Square AQ 123; Context 5024 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 3.55, 3.56 Description: Tile; a slightly recessed circle in the centre Dimension: L 16; W 17; H 2.1 Material: Yellow Limestone

TZ 017234-001

Area I; Square AQ 123; Context 5024 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 3.57 Description: Bowl; turned on a lathe, flat rim Dimension: D 16 Material: Limestone

TZ 017235-001

Area I; Square AQ 123; Context 5024 Stratum: 07 a; Date of Context: E Rom Figure reference: Fig. 3.58 Description: Cup; two matching fragments; handmade; chisel marks on the outside; carefully smoothed inside Dimension: H 10 Material: Limestone

TZ 018179-001

Area I; Square AR 121; Context 6110 Stratum: 07 c, b, a; Date of Context: E Rom Figure reference: Fig. 3.66 Description: Architectural element; on two sides recognizably processed Dimension: L 58; W 45; H 24 Material: Basalt

TZ 018968-001

Area I; Square AR 120; Context 6148 Stratum: 07 c, b, a; Date of Context: E Rom Description: Spindle whorl; conical, slightly slanted perforation Dimension: H 0.8; D 3.2; D (opening) 0.8 Weight: 7 g Material: Alabaster

TZ 019513-001

Area I; Square AP 123; Context 5095 Stratum: 07 b; Date of Context: E Rom Figure reference: Fig. 4.112 Description: Stone vessel; turned on a lathe, a very fine groove on the flat rim, a groove directly below the rim and a bead with a groove approx. 1.3 cm below the rim Dimension: H 3; D (opening) 14; D 16; Th 0.5 to 0.9 Material: Limestone

TZ 110157-001

Area II; Square AW 128; Context 10069 *Stratum:* 7 c, b, a, also 6 c, b, a, 5; *Date of Context:* E Rom to L Rom/E Byz *Figure reference:* Fig. 4.103 *Description:* Mortar bowl; round floor plan; poorly finished *Dimension:* L 23; W 17; H 9.5 *Weight:* 3971g *Material:* Basalt

TZ 110839-001

Area II; Square AW 132; Context 10559 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.116 Description: Tile Dimension: L 11.5; W 10.9; H 2.4 Material: Marble

TZ 110841-001

Area II; Square AW 132; Context 10604 *Stratum:* 07 c, b, a; *Date of Context:* E Rom *Figure reference:* Fig. 4.100 *Description:* Rubbing stone; base approximately triangular; corners rounded; upper side curved outwards; underside slightly curved outwards *Dimension:* L 10.6; W 6.8; H 5.3 *Weight:* 631 *Material:* Basalt

TZ 112712-001

Area II; Square AU 130; Context 11449 *Stratum:* 7 c, b, a, also 6 c, b, a; *Date of Context:* E Rom to (E) Rom *Figure reference:* Fig. 4.115 *Description:* Tile; flat top and bottom; no original rim preserved *Dimension:* L 8.9; W 6.2; H 1.3 *Weight:* 119 g *Material:* Marble

TZ 111630-001

Area II; Square AT 129; Context 11034 Stratum: 7 c, b, a, also 6 c, b, a; Date of Context: E Rom to (E) Rom

Figure reference: Fig. 4.47

Description: Potter's wheel; originally round in base; chipped on two sides; flat top and bottom; a 5 cm wide and 3.5 cm deep hollow on the top; an unfinished tenon on the bottom; possibly originally intended as a top and failed and then reworked as a bottom *Dimension:* L 15; W 12.2; H 11.3 *Weight:* 3000 g

Material: Basalt

TZ 111671-001

Area II; Square AS 132; Context 11020 Stratum: 6 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.123 Description: Column drum; oval in plan, cylindrical in elevation, flat on top and bottom, similar to TZ 111689-001 Dimension: L 11; W 8; H 10.5 Weight: 2100 g Material: Basalt

TZ 111684-001

Area II; Square AX 126; Context 10831 Stratum: 7 c, b, a, also 6 c, b, a; Date of Context: E Rom to (E) Rom Figure reference: Fig. 4.106 Description: Bowl with stand and a heel on the outside Dimension: L 12; W 6.5; H 11; Th 2.2 Weight: 798 g Material: Basalt

TZ 111686-001

Area II; Square AX 126; Context 10831 *Stratum:* 07 c, b, a; *Date of Context:* E Rom *Figure reference:* Fig. 4.118 *Description:* Weight; ring-shaped, upper side curved outwards, base not completely worked out, cylindrical perforation *Dimension:* H 5.1; D 11.5; D (opening) 3.3 *Weight:* 842 g *Material:* Basalt

TZ 111689-001

Area II; Square AW 127; Context 10740 *Stratum:* 7 c, b, a, also 6 c, b, a; *Date of Context:* E Rom to (E) Rom *Figure reference:* Fig. 4.124 *Description:* Column drum; round in plan, almost conical, top and bottom flat, similar to TZ 111671-001 *Dimension:* H 120; D 107 *Weight:* 3200 g *Material:* Basalt

TZ 111699-001

Area II; Square AX 126; Context 10883 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.104 Description: Quern Dimension: L 25.8; W 15.6; H 8 Weight: 5294 Material: Iron

TZ 111739-001

Area II; Square AX 126; Context 10883 *Stratum:* 06 c, b, a; *Date of Context:* (E) Rom *Figure reference:* Fig. 4.102 *Description:* Hammer stone; flattened on top and bottom; barrel-shaped *Dimension:* H 7.5; D 8 *Weight:* 625 g *Material:* Flint /Silex

TZ 112153-001 (Fig. 4.119, 4.120)

Area II; Square AY 128; Context 11337 Stratum: 07 c, b, a; Date of Context: E Rom Description: Mould; rectangular plate with five indentations for pearls and four indentations for filigree wires; two indentations in the corners probably for fixing the counter plate Dimension: L 14.3; W 7.5; H 2.5 Material: unknown

6.16. Catalogue of Selected Wall Paintings (Strata 7 and 6) (without plates)

TZ 016352-001

Area I; Square AP 123; Context 4766 Stratum: 06 a; Date of Context: (E) Rom Figure reference: Fig. 4.126 Description: Wall painting; painted white and red Dimension: L 2.5; W 2.2; H 0.7

TZ 110869-002 (1)

Area II; Square AT 128; Context 10625 *Stratum:* 06 c, b, a; *Date of Context:* (E) Rom *Figure reference:* Fig. 4.135 *Description:* Wall painting *X-ray fluorescence (p-XRF):* dark colour probably carbon black; light colour contains iron

TZ 110869-002 (2)

Area II; Square AT 128; Context 10625 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.139 Description: Wall painting; single colour black

TZ 110869-002 (3)

Area II; Square AT 128; Context 10625 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.139 Description: Wall painting; single colour black

TZ 110869-002 (4)

Area II; Square AT 128; Context 10625 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.134 Description: Wall painting; yellow background with red marbling

TZ 110869-002 (5)

Area II; Square AT 128; Context 10625 *Stratum:* 06 c, b, a; *Date of Context:* (E) Rom *Figure reference:* Fig. 4.136 *Description:* Wall painting; yellow background with red and green curved lines, individual pencil bristles recognizable *X-ray fluorescence (p-XRF):* green colour probably green iron fragment, no copper

TZ 110869-002 (6)

Area II; Square AT 128; Context 10625 *Stratum:* 06 c, b, a; *Date of Context:* (E) Rom *Figure reference:* Fig. 4.133 *Description:* Wall painting; yellow background with red marbling

TZ 110869-002 (9)

Area II; Square AT 128; Context 10625 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.127, 5.32 Description: Wall painting; black surface, bordered with white/light grey surface (frame?)

TZ 110869-002 (10)

Area II; Square AT 128; Context 10625 *Stratum:* 06 c, b, a; *Date of Context:* (E) Rom *Figure reference:* Fig. 4.132, 5.32 *Description:* Wall painting; yellow surface adjoins black surface, straight and sharp dividing line between the surfaces *X-ray fluorescence (p-XRF):* dark colour probably carbon black

TZ 110869-002 (11)

Area II; Square AT 128; Context 10625 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.128, 5.32 Description: Wall painting; yellow and red areas separated by a straight black band X-ray fluorescence (p-XRF): dark colour probably carbon black; yellow colour and red-brown colour contain iron

TZ 110869-002 (12)

Area II; Square AT 128; Context 10625 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.138, 5.32 Description: Wall painting; beige background, black lines on it; remnants of green colour at the edges

TZ 110869-002 (13)

Area II; Square AT 128; Context 10625 *Stratum:* 06 c, b, a; *Date of Context:* (E) Rom *Figure reference:* Fig. 4.130, 6.31 *Description:* Wall painting; flat red colour, adjacent to white line (frame?) *X-ray fluorescence (p-XRF):* red brown colour contains iron



Fig. 6.31 TZ 110869-002 (13) (Source: BAI/GPIA).

TZ 110869-002 (23)

Area II; Square AT 128; Context 10625 Stratum: 06 c, b, a; Date of Context: (E) Rom Figure reference: Fig. 4.137 Description: Wall painting; green colour

TZ 110869-002 (39)

Area II; Square AT 128; Context 10625 *Stratum:* 06 c, b, a; *Date of Context:* (E) Rom *Figure reference:* Fig. 4.129 *Description:* Wall painting *X-ray fluorescence (p-XRF):* dark colour probably carbon black
PLATES

Plate	Туре	Inv. No.	Square	Context	Context Date	Pottery Date
1.1	plate	TZ 101031-002	AT 134	10903	Mamluk to modern	Late Hellenistic – Augustean
1.2	kantharos	TZ 101533-028	AU 126	11352	Hellenistic	3rd – mid 2nd cent. BC
1.3	kantharos	TZ 006023-041	AQ 121	4230	Late Roman-Early Byzantine to Byzantine	3rd – 2nd cent. BC
1.4	bowl	TZ 101531-043	AV 128	11331	Hellenistic	2nd – 1st cent. BC
1.5	Rhodian Amphora	TZ 101531-055	AV 128	11331	Hellenistic	240 – 175 BC
1.6	amphora from Kos	TZ 100680-007	AV 133	10641	Mamluk to modern	3rd – 1st cent. BC

Pl. 1 Hellenistic pottery from Tall Zirā'a – imports (Source: BAI/GPIA).

Imports 1. Ephesian plate





Plate	Туре	Inv. No.	Square	Context	Context Date	Pottery Date
2.1	plate	TZ 101511-028	AX 129	10329	Hellenistic	2nd – 1st cent. BC
2.2	bowl	TZ 005998-001	AQ 123	4187	Byzantine	3rd – 1st cent. BC
2.3	fishplate	TZ 100346-012	AX 128	10331	Mamluk to modern	3rd – 2nd cent. BC
2.4	jug	TZ 101282-019	AW 131	11138	(Early) Roman	2nd – 1st cent. BC
2.5	casserole	TZ 100608-003	AW 132	10577	Byzantine to Umayyad	1st cent. BC – 3rd cent. AD
2.6	cooking pot	TZ 100294-006	AX 129	10212	(Early) Roman	2nd – 1st cent. BC

Pl. 2 Hellenistic pottery from Tall Zirā'a – table wares, cooking vessels (Source: BAI/GPIA).



Plate	Туре	Inv. No.	Square	Context	Context Date	Pottery Date
3.1	bowl	TZ 006188-019	AT 121	4242	Iron Age II C	Hellenistic
3.2	krater	TZ 006386-009	AT 120	4414	modern	Late Hellenistic
3.3	jug	TZ 100333-015	AX 129	10283	Ottoman	Hellenistic – Byzantine
3.4	amphora	TZ 005761-013	AS 123	4008	Umayyad	Hellenistic-Roman
3.5	pithos	TZ 100619-003	AU 130	10590	Byzantine	Hellenistic
3.6	amphoriskos	TZ 021571-001	AR 120	6148	Early Roman	2nd – 1st cent. BC
3.7	unguentarium	TZ 100277-009	AY 130	10290	Late Roman-Early Byzantine	Hellenistic-Early Roman

Pl. 3 Hellenistic pottery from Tall Zirā'a – everyday vessels, vessels for personal use (Source: BAI/GPIA).



Plate	Туре	Inv. No.	Square	Context	Context Date	Pottery Date
4.1	juglet	TZ 020062-041	AP 123	4940	(Early) Roman	2nd cent. BC – 1st cent. AD
4.2	small pot	TZ 020184-007	AQ 123	4631	(Early) Roman	200 BC - 1st cent. AD
4.3	oil lamp	TZ 020720-007	AQ 123	5103	Iron Age A/B (Early)	Hellenistic
4.4	oil lamp	TZ 100344-001	AX 130	10303	Roman to Late Ro- man-Early Byzantine	Hellenistic

Pl. 4 Hellenistic pottery from Tall Zirāʿa – vessels for personal use, oil lamps (Source: BAI/GPIA).







Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
5.1	coin (Ptolemaic or Seleucid)	TZ 006993-001	AM 119	1040	Hellenistic	300 – 30 BC
5.2	coin (Hasmonean)	TZ 008604-001	AG 115/116	1977	Iron Age II A/B	1st cent. BC
5.3	coin (Ptolemaic)	TZ 008877-001	AI 117	2094	Byzantine	300 – 30 BC
5.4	coin (Antiochus VII)	TZ 010007-001	AE 116	2711	Byzantine	138 – 128 BC
5.5	coin (Ptolemy VI)	TZ 010325-001	AP 118	2832	Hellenistic	180 – 145 BC
5.6	coin (Antiochus IV)	TZ 011213-001	surface	0	modern	175 – 164 BC

Pl. 5 Hellenistic coins from Tall Zirā'a (Source: BAI/GPIA).



Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
6.1	coin (Alexander Jannaeus)	TZ 012753-001	surface	0	modern	104–76 BC
6.2	coin (Hasmonean)	TZ 012754-001	surface	0	modern	104–40 BC
6.3	coin (Alexander Jannaeus)	TZ 012759-001	AP 122	3827	Byzantine	78 BC
6.4	coin (Alexander Jannaeus)	TZ 012939-001	AQ 121	3941	Umayyad	138 – 128 BC
6.5	coin	TZ 013110-001	AO 118	4104	Late Bronze Age repair layer	200 – 30 BC
6.6	coin (Alexander Jannaeus)	TZ 014110-001	AT 120	4221	Byzantine to Umayyad	78 BC
6.7	coin (Alexander Jannaeus)	TZ 014111-001	AR 123	4496	Umayyad	78 BC

Pl. 6 Hellenistic coins from Tall Zirā'a (Source: BAI/GPIA).

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Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
7.1	coin (Alexander Jannaeus)	TZ 014196-001	AP 121	4262	Iron Age II C to (Early) Roman	78 BC
7.2	coin (Alexander Jannaeus)	TZ 014196-002	AP 121	4262	Iron Age II C to (Early) Roman	78 BC
7.3	coin (Alexander Jannaeus)	TZ 014196-003	AP 121	4262	Iron Age II C to (Early) Roman	78 BC
7.4	coin (Alexander Jannaeus)	TZ 014196-004	AP 121	4262	Iron Age II C to (Early) Roman	104 – 76 BC
7.5	coin (Hasmonean)	TZ 014450-001	AQ 122	4600	Early Roman	1st cent. BC
7.6	coin (Hasmonean)	TZ 015214-001	AQ 121	4666	Iron Age II C	1st cent. BC
7.7	coin (Alexander Jannaeus)	TZ 015285-001	AR 123	5005	Iron Age II C	78 BC

Pl. 7 Hellenistic coins from Tall Zirā'a (Source: BAI/GPIA).

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Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
8.1	coin (Alexander Jannaeus)	TZ 015288-001	AP 123	5204	Early Roman	104–76 BC
8.2	coin (Hyrcanus I)	TZ 015292-001	AQ 123	5201	Early Roman	128 – 104 BC
8.3	coin (Alexander Jannaeus)	TZ 015301-001	AQ 123	5270	Early Roman	78 BC
8.4	coin (Alexander Jannaeus)	TZ 015346-001	AR 123	5279	Early Roman	78 BC
8.5	coin (Alexander Jannaeus)	TZ 015442-001	AQ 123	5189	Early Roman	104–76 BC
8.6	coin (Alexander Jannaeus)	TZ 018689-001	AO 119	5884	Middle Bronze Age I/ Early Bronze Age IV older Stratum	78 BC

Pl. 8 Hellenistic coins from Tall Zirā'a (Source: BAI/GPIA).



Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
9.1	coin (Ptolemaic or Seleucid)	TZ 110058-001	AW 129	10038	Byzantine to Umayyad	200 – 30 BC
9.2	coin (Hasmonean)	TZ 110311-001	AY 129	10288	Umayyad	104 – 40 BC
9.3	coin (Alexander Jannaeus)	TZ 110417-001	AX 129	10424	(Early) Roman to Late Roman-Early Byzantine	104 – 76 BC
9.4	coin	TZ 110664-001	AT 131	10538	Abbasid-Mamluk to modern	200 – 30 BC
9.5	coin	TZ 110981-001	AU 132	10664	Byzantine to Umayyad	300 – 30 BC
9.6	coin (Delos)	TZ 111017-001	AW 129	10000	Ottoman	before 167 BC

Pl. 9 Hellenistic coins from Tall Zirā'a (Source: BAI/GPIA).



Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
10.1	coin (Hasmonean)	TZ 111202-001	AW 126	10722	Umayyad	104–40 BC
10.2	coin (Hasmonean)	TZ 111244-001	AS 128	10731	Byzantine	104–40 BC
10.3	coin (Hasmonean)	TZ 111245-001	AW 127	10740	Hellenistic to (Early) Roman	104–40 BC
10.4	coin (Hasmonean)	TZ 111278-001	AW 126	10795	Hellenistic	104–40 BC
10.5	coin (Hasmonean)	TZ 111331- 001/011	AX 127	10801	Late Roman-Early Byzantine to Byzantine	104 – 40 BC
10.6	coin	TZ 111551-001	AY 127	10926	Abbasid-Mamluk to modern	300 – 30 BC

Pl. 10 Hellenistic coins from Tall Zirā'a (Source: BAI/GPIA).



Scale 2 : 1

Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
11.1	coin	TZ 111953-001	AV 127	11142	(Early) Roman	300 – 100 BC
11.2	coin (Seleucid)	TZ 112023-001	AT 128	11165	Abbasid-Mamluk to modern	198 – 133 BC
11.3	coin	TZ 112163-001	AU 126	11359	Early Roman	300 – 30 BC
11.4	coin	TZ 112166-001	AU 127	11353	Hellenistic	300 – 30 BC
11.5	coin (Ptolemy II–V)	TZ 112168-001	AU 126	11244	Hellenistic	280 – 200 BC

Pl. 11 Hellenistic coins from Tall Zirā'a (Source: BAI/GPIA).



Scale 2 : 1

Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
12.1	coin (Hasmonean)	TZ 112170-001	AS 127	11221	Late Roman-Early Byzantine to Byzantine	104–40 BC
12.2	coin (Hasmonean)	TZ 112683-001	AW 128	11277	Hellenistic	104–40 BC
12.3	coin (Hasmonean)	TZ 310428-001	X 126	30094	Byzantine	104–40 BC
12.4	coin	TZ 310429-001	W 128	30107	Byzantine	300 – 30 BC
12.5	coin (Cleopatra Theas and An- tiochus VIII)	TZ 310469-001	W 128	30037	modern	125 – 121 BC
12.6	coin (Alexander Jannaeus)	TZ 310592-001	Y 125	30421	Byzantine to Umayyad	104 – 76 BC

Pl. 12 Hellenistic coins from Tall Zirāʿa (Source: BAI/GPIA).



Scale 2 : 1

Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
13.1	coin (Alexander Jannaeus)	TZ 310594-001	AA 1275	30341	-	104–76 BC
13.2	coin (Alexander Jannaeus)	TZ 310595-001	surface	0	modern	104–76 BC

Pl. 13 Hellenistic coins from Tall Zirā'a (Source: BAI/GPIA).

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Scale 2 : 1

Plate	Туре	Inv. No.	Square	Context	Context Date	Glass Date
14.1	bowl	TZ 111479-001	AV 126	10850	Ottoman	2nd cent. BC - 50 AD
14.2	bowl	TZ 112312-002	AV 131	11224	Hellenistic	2nd cent. BC – 50 AD
14.3	bowl	TZ 016699-003	AR 121	4936	Iron Age II C	2nd cent. BC – 50 AD

Pl. 14 Hellenistic glass from Tall Zirā'a (Source: BAI/GPIA).



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Plate	Туре	Inv. No.	Square	Context	Context Date	Glass Date
15.1	bowl	TZ 010045-001	AE 116	2711	Byzantine	2nd cent. BC – 50 AD
15.2	bowl	TZ 112312-003	AV 131	11224	Hellenistic to Early Roman	2nd cent. BC – 50 AD

Pl. 15 Hellenistic glass from Tall Zirāʿa (Source: BAI/GPIA).





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Plate	Туре	Inv. No.	Square	Context	Context Date	Pottery Date
16.1	plate	TZ 005197-008	AI 117	3469	Iron Age I	80 BC – 50 AD
16.2	bowl	TZ 100659-013	AT 128	10624	Byzantine	80 BC – 50 AD
	bowl	TZ 005815-005	AT 122	4047	modern	30 BC – 100 AD
	bowl	TZ 006790-099	AT 122	4770	modern	40 – 70 AD
16.3	flask	TZ 100583-002	AU 129	10522	Ottoman	mid 1st cent BC – early 1st cent. AD
16.4	plate	TZ 020376-004	AQ 123	5201	Early Roman	Augustean
16.5	bowl	TZ 100048-007	AW 128	10041	Byzantine to Umayyad	2nd half 1st cent. AD
16.6	bowl	TZ 006026-019	AP 123	4277	(Early) Roman	10 – 50 AD
	bowl	TZ 100077-002	AW 128	10069	Early Roman to Late Roman-Early Byzan- tine	80 BC – 50 AD
	plate	TZ 101439-007	AU 127	11246	(Early) Roman	10 BC – 50 AD

Pl. 16 Roman pottery from Tall Zirā'a – imports, table wares (Source: BAI/GPIA).

Imports



Plate	Туре	Inv. No.	Square	Context	Context Date	Pottery Date
17.1	bowl	TZ 100822-001	AW 126	10713	Abbasid-Mamluk to Ottoman	Early Roman?
17.2	table amphora	TZ 100642-013	AT 128	10571	Umayyad	1st cent. BC – 1st cent. AD
17.3	juglet	TZ 100609-005	AU 130	10589	Umayyad	Late Hellenistic – Roman
	juglet	TZ 100818-003	AS 129	10724	Umayyad	Early Roman
17.4	casserole	TZ 100374-017	AX 129	10381	Umayyad	1st cent. BC – 3rd cent. AD
17.5	cooking bowl	TZ 101635-005	AT 130	10631	Byzantine to Umayyad	1st – 3rd cent. AD
17.6	cooking pot	TZ 100389-004	AY 130	10408	(Early) Roman	1st cent. BC – 1st cent. AD
	cooking pot	TZ 100402-003	AY 130	10429	(Early) Roman	1st cent. BC – 1st cent. AD
17.7	amphora	TZ 100297-005	AY 130	10311	(Early) Roman to Late Roman-Early Byzan- tium	Roman
	amphora	TZ 100600-005	AU 131	10585	Umayyad	Hellenistic-Early Roman

Pl. 17 Roman pottery from Tall Zirā'a – table wares, cooking vessels, everyday vessels (Source: BAI/GPIA).



Plate	Туре	Inv. No.	Square	Context	Context Date	Pottery Date
18.1	jug	TZ 100216-029	AW 130	10214	Abbasid-Mamluk to modern	Early Roman
	jug	TZ 100624-001	AU 129	10584	Umayyad	Hellenistic-Roman
18.2	pithos	TZ 100528-002	AW 132	10536	Ottoman	Hellenistic-Early Roman
	pithos	TZ 020223-010	AP 123	5092	Early Roman	Hellenistic-Early Roman
18.3	amphoriskos	TZ 021571-001	AR 120	6148	Early Roman	2nd – 1st cent. BC
18.4	unguentarium	TZ 002619-001	AM 119	712	Iron Age II C	1st cent. BC – 1st cent. AD
18.5	juglet	TZ 020062-041	AP 123	4940	(Early) Roman	2nd cent. BC – 1st cent. AD
18.6	small pot	TZ 020184-007	AQ 123	4631	(Early) Roman	200 BC – 1st cent. AD

Pl. 18 Roman pottery from Tall Zirā'a – everyday vessels, vessels for personal use (Source: BAI/GPIA).


0 5cm

Plate	Туре	Inv. No.	Square	Context	Context Date	Pottery Date
19.1	oil lamp	TZ 101204-033	AT 132	10927	Late Roman-Early Byzantine	Early Roman
19.2	oil lamp	TZ 020223-001	AP 123	5092	Early Roman	Late 1st cent. BC – 1st cent. AD
19.3	oil lamp	TZ 100279-001	AY 129	10280	Late Roman-Early Byzantine	Late Hellenistic

Pl. 19 Roman pottery from Tall Zirā'a – oil lamps (Source: BAI/GPIA).



Plate	Туре	Inv. No.	Square	Context	Context Date	Pottery Date
20.1	terracotta	TZ 006819-016	AQ 123	4789	(Early) Roman	Hellenistic-Roman
20.2	terracotta	TZ 006790-001	AP 123	4770	(Early) Roman	Hellenistic-Roman
20.3	terracotta	TZ 006678-041	AP 123	4283	(Early) Roman	Hellenistic-Roman
20.4	terracotta	TZ 101402-002	AT 127	10988	(Early) Roman – Byz- antine	Roman-Late Roman
20.5	terracotta	TZ 005930-001	AS 123	4199	Byzantine	Hellenistic-Late Roman
20.6	terracotta	TZ 101180-005	AU 131	10628	Byzantine	Early Roman
20.7	terracotta	TZ 101118-018	AS 132	11001	Late Roman-Early Byzantine – Byzantine	Hellenistic-Late Roman
20.8	terracotta	TZ 100607-005	AT 128	10571	Umayyad	Roman-Late Roman

Pl. 20 Roman terracotta figurines from Tall Zirāʿa (Source: BAI/GPIA).



















Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
21.1	coin	TZ 008880-001	AI 117	2136	Late Roman-Early Byzantine to Umayyad	40 – 4 BC
21.2	coin	TZ 010811-001	AF/AG 115	3028	Byzantine to Umayyad	28 – 29 AD
21.3	coin	TZ 015261-001	AR 123	5005	Iron Age II C	40 – 4 BC
21.4	coin	TZ 015291-001	AQ 123	5270	Early Roman	37 – 4 BC
21.5	coin	TZ 018690-001	AR 123	6070	Iron Age I	37 BC – 6 AD
21.6	coin	TZ 110965-001	AT 128	10625	Hellenistic to Late Ro- man-Early Byzantine	29 – 30 AD

Pl. 21 Early Roman coins from Tall Zirā'a (Source: BAI/GPIA).



Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
22.1	coin	TZ 002532-001	AO 119	607	Byzantine	119–120 AD
22.2	coin	TZ 012760-001	AP 122	3827	Byzantine	200 – 250 AD
22.3	coin	TZ 014115-001	AP 118/119	2729	Late Bronze Age 1st Stratum 1st–4th Phase (also Iron Age I)	312-313 AD
22.4	coin	TZ 110312-001	AY 129	10287	Umayyad to Ottoman	297 AD

Pl. 22 Middle-Late Roman coins from Tall Zirā'a (Source: BAI/GPIA).



Scale 2 : 1

Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
23.1	coin	TZ 007080-001	AP 119	1102	Ottoman	250–450 AD
23.2	coin	TZ 015443-001	AQ 123	5507	Iron Age A/B	300 BC – 500 AD
23.3	coin	TZ 110016-001	AW 129	10017	Abbasid-Mamluk to Ottoman	100 BC – 500 AD
23.4	coin	TZ 110954-001	AT 129	10612	Byzantine	200 BC – 500 AD
23.5	coin	TZ 111246-001	AX 126	10737	Umayyad	300 – 500 AD
23.6	coin	TZ 111381-001	AS 133	10821	Umayyad	300 BC – 500 AD
23.7	coin	TZ 111600-001	AS 132	11001	Late Roman-Early Byzantine to Byzantine	300 BC - 300 AD

Pl. 23 Unspecified coins from Tall Zirā'a (Source: BAI/GPIA).



Scale 2 : 1

Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
24.1	coin	TZ 112037-001	AU 132	11202	Hellenistic	100 BC – 500 AD
24.2	coin	TZ 112167-001	AS 126	11283	Hellenistic to (Early) Roman	indefinable
24.3	coin	TZ 112682-001	AU 130	11449	Early Roman to Late Roman-Early Byzan- tine	indefinable
24.4	coin	TZ 310587-001	AA 125	30416	Byzantine	300 – 500 AD
24.5	coin	TZ 310588-001	Y 125	30421	Byzantine to Umayyad	100 BC – 500 AD
24.6	coin	TZ 310589-001	Y 125	30421	Byzantine to Umayyad	300 – 600 AD

Pl. 24 Unspecified coins from Tall Zirā'a (Source: BAI/GPIA).



Scale 2 : 1

Plate	Туре	Inv. No.	Square	Context	Context Date	Coin Date
25.1	coin	TZ 310590-001	Y 125	30421	Byzantine to Umayyad	300 – 500 AD
25.2	coin	TZ 310591-002	Y 125	30421	Byzantine to Umayyad	300 – 500 AD
25.3	coin	TZ 310593-001	AA 125	30362	Byzantine to Umayyad	100 BC – 500 AD
25.4	coin	TZ 310596-001	surface	0	modern	300 – 500 AD

Pl. 25 Unspecified coins from Tall Zirā'a (Source: BAI/GPIA).



Scale 2 : 1

Plate	Туре	Inv. No.	Square	Context	Context Date	Glass Date
26.1	bowl	TZ 112312-003	AV 131	11224	Hellenistic	3rd cent. BC – early 1st cent. AD
26.2	bowl	TZ 016748-001	AR 123	5280	Iron Age II A/B	1st cent. BC – middle 1st cent. AD
26.3	beaker	TZ 016678-002	AQ 123	4186	(Early) Roman	1st – 8th cent. AD
26.4	unguentarium	TZ 016707-001	AP 123	4990	(Early) Roman	1st – 4th cent. AD

Pl. 26 Roman glass from Tall Zirāʿa (Source: BAI/GPIA).







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