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Final Report

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Hellenistic to Roman Period (Strata 8–6)

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Editors of the Tall Zirā'a Final Reports

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LIST OF ABBREVIATIONS

Abbreviated Journals, Series and Collective Works

AA	Archäologischer Anzeiger	JNES	Journal of Near Eastern Studies
AASOR	The Annual of the American Schools of Oriental Research	JNSL	Journal of Northwest Semitic Languages
ADAJ	Annual of the Department of Antiquities of Jordan	JRA	Journal of Roman Archaeology
AfO	Archiv für Orientforschung	Levant	Levant. Journal of the British School of Archaeology in Jerusalem and the British Institute at Amman for Archaeology and History
AJA	American Journal of Archaeology	MAA	Journal of Mediterranean Archaeology and Archaeometry
ANRW	Aufstieg und Niedergang der römischen Welt	NEA	Near Eastern Archaeology
AnSt	Anatolian Studies	NEAEHL	New Encyclopaedia of Archaeological Excavations in the Holy Land
AntTard	Antiquité tardive. Revue internationale d'histoire et d'archéologie	PEQ	Palestine Exploration Quarterly
AST	Araştırma Sonuçları Toplantısı	RE	Paulys Realencyclopädie der classischen Altertumswissenschaft
BAR	Biblical Archaeological Review	SHAJ	Studies in the History and Archaeology of Jordan
BASOR	Bulletin of American School of Oriental Research	TIB	Tabula Imperii Byzantini
Bjb	Bonner Jahrbücher des Rheinischen Landesmuseums in Bonn	TMA	Tijdschrift voor Mediterrane archeologie
CBRL	Council for British Research in the Levant Bulletin	ZPE	Zeitschrift für Papyrologie und Epigraphik
DNP	Der Neue Pauly. Enzyklopädie der Antike	ZDPV	Zeitschrift des Deutschen Palästina Vereins
IEJ	Israel Exploration Journal		
IstMitt	Istanbulur Mitteilungen		
JBL	Journal of Biblical Literature		

Abbreviated Coin Literature

BMC Crete	Catalogue of the Greek Coins in the British Museum; Greek Coins of Crete and the Aegean Islands	SC I	Seleucid Coins I
CSE I	Corpus speculorum Etruscorum I	SC II	Seleucid Coins II
RIC VI	The Roman Imperial Coinage VI	SNG Blackburn	Sylloge Nummorum Graecorum, Blackburn Museum
RPC I	Roman Republican Coinage I	SNG Copenhagen	Sylloge Nummorum Graecorum, Danish National Museum
Rouvier	Numismatique des Villes de la Phénicie	SNG Spaer	Sylloge Nummorum Graecorum, Israel I, Arnold Spaer Collection

Abbreviated Ancient Authors and Works

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

General Abbreviations

BAI	Biblical Archaeological Institute Wuppertal	GPIA	German Protestant Institute of Archaeology
DoA	Department of Antiquities of Jordan		

Abbreviations used in the Catalogues

D	Diameter	Obv.	Obverse
g	gram	rem	remaining
H	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 m³ per second flowed through the Wādī al-‘Arab in June 1885, and

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 Zirā'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

1 Schumacher 1890, 110. 142 f. Schumacher visited Tall Zirā'a and described remains of rectangular buildings. His observations are published by Steuernagel 1926, 81.

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 Wādī 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 Wādī 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 Valley with the Mediterranean coast via the northern Jordan ford at Ġisr el-Mağami‘ (Gešer Naharajim), and the plains of Jezreel and Tall al-Ḥiṣn (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, Baġdād in the east and Amman in the south. Since the Yarmūk valley in the north and the Wādī Ziqlāb in the south are too steep and narrow to serve as major transportation routes, the Wādī 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 Wādī al-‘Arab, Tall Zirā‘a dominates the valley. From here, not only Gadara can be seen, but also the narrow entrance of the wādī to the west can be well monitored. The adjacent fertile wādī 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. 0.2 Tall Zirā'a and its geographic location (Source: Ababsa 2013, Fig. 1).



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

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 Šēdūr 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 online 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

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 Umayyad 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:

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/Publikationen/0335.html>> (10.12.2022).

9 Cf. www.tallziraa.de

10 Several authors in: Vieweger – Häser (eds.) 2017.

11 Vieweger 2019.

12 Soenneken 2022.

13 Soenneken in prep.

14 Kenkel 2020; Hoss 2020a; Hoss 2020b.

15 Häser 2024.

16 Soenneken – Leiverkus 2021.

17 Schmidt (ed.) 2022.

18 Cf. the appendices to the present volume.

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.