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THE HISTORY AND ARCHAEOLOGY OF JAFFA 1

EDITED BY

MARTIN PEILSTÖCKER AND AARON A. BURKE

MONUMENTA ARCHAEOLOGICA 25

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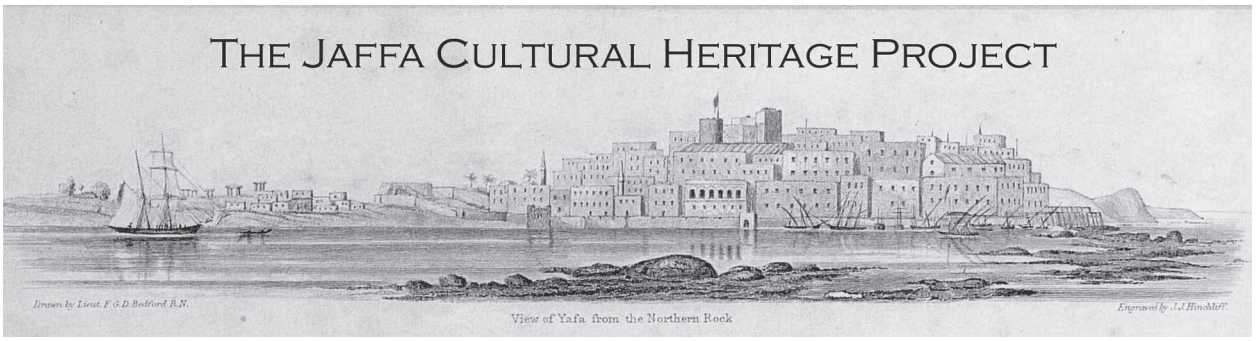

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In memoriam

Jacob Kaplan (1910–1989)

Municipal Archaeologist of Tel Aviv-Jaffa,
1950–1975

Photograph from the Kaplan Archive.

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Preface

Few projects with the scope or ambition of the Jaffa Cultural Heritage Project (JCHP) have been undertaken in Mediterranean and Near Eastern archaeology, and this is no coincidence. The energy required to launch such a project is staggering, the bureaucracy encountered bewildering, and the labor never ending. In light of these observations, the accomplishments embodied in the publication of this volume are all the more profound. It is the first in the Jaffa Cultural Heritage Project Series, published by the Cotsen Institute of Archaeology Press within its Monumenta Archaeologica series. Although many of the contributions included here were in progress at the initiation of the project, the volume is the product of just two seasons of research and work by a dedicated core of members of the JCHP, which was established in January 2007. Given the usual pace of archaeological publication, that this volume has been so rapidly produced constitutes a remarkable achievement. The directors of the JCHP hope the volume will remain a hallmark of publication efforts related to Jaffa.

This volume is also a milestone as the first published volume to be exclusively dedicated to the scientific publication of archaeological research on Jaffa. Despite 60 years of exploration and more than 100 excavation permits, no single research volume addresses Jaffa's archaeological and historical contributions. For their remarkable promptness, patience, and expediency, we thank the many authors who contributed to this volume. The editors thank George Pierce for the GIS plans produced for this volume. We also thank the Cotsen Institute of Archaeology for the financial investment that such a volume requires and for its willingness to publish this series. Special thanks are owed to Shauna Mecartea, chief editor of the institute's press, who oversaw production of the volume, and to Eric Gardner, who is responsible for its final appearance.

A number of additional individuals are also to be thanked for assisting this fledgling project in achieving such a rapid launch. The Israel Antiquities Authority (IAA) has provided the bulk of logistical support for the project to date and greatly facilitated its needs. In particular, we thank Gideon Avni, director of excavations and surveys, for his encouragement and support of this initiative and for his faith in the potential for fruitful collaborations between the IAA and foreign research institutions such as UCLA. Likewise, we thank Shuka Dorfman, general director of the IAA, who has extended to the project, especially to Martin Peilstöcker, the latitude and support for an undertaking that constitutes an entirely new approach to urban archaeology in Israel. For the support of those in the Tel Aviv offices of the IAA, the directors thank Yossi Levy, Moshe Ajami, and Diego Barkan. For providing the means for our research in the Jaffa Museum, we also thank Yaron Klein (CEO) of the Old Jaffa Development Corporation (OJDC) and Naama Meirovitz (director), also with the OJDC at the Jaffa Museum. Special thanks are also owed to Arie Rochman-Halperin and Silvia Krapiwko in the archives of the IAA in the Rockefeller Museum for their extensive assistance with the records of excavations in Jaffa by P. L. O. Guy and the Kaplans. Similarly, we would like to thank Ziva Simon of the Eretz Israel Museum and Yael Barshak of the IAA Photograph Archive for their permission to access other elements of the Kaplan excavations archive.

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We would like to especially thank Orit Tsuf, whose early work on Jacob Kaplan's excavations broke the ground on a much-needed study of these excavations; she has greatly assisted our early efforts to prepare the Kaplan materials for the fullest publication possible.

The Cotsen Institute of Archaeology under the direction of Charles Stanish has provided critical seed funding for the initial phases of the project and underwritten the publication of the current volume and plans for the Jaffa Cultural Heritage Project Series. This is an impressive commitment to an archaeological project codirected by a faculty member, and we are grateful for the institute's unwavering support. We would also like to thank other members of the UCLA academic community who have contributed to the project's success, including William Schniedewind, an associate director of the project and chair of the Near Eastern Languages and Cultures Department at UCLA at the time of the project's inception. His advice and his willingness to provide financial support from the Kershaw Chair of Ancient Eastern Mediterranean Studies at UCLA have proved instrumental in the project's early accomplishments. Thanks are likewise extended to the recent chair of the Near Eastern Languages and Cultures Department, Elizabeth Carter, for her enthusiasm and support for the project, including the facilitation of participation by UCLA graduate students. Additional support for the project in 2009 was provided by a grant from the UCLA International Institute.

In addition to the supporting institutions, a core of the project's staff has been instrumental in its inception. From UCLA this core includes graduate students Kyle Keimer and George Pierce, as well as Katherine S. Burke, Cotsen Institute of Archaeology research associate. (The UCLA team would like to thank Sandra Schloen, although not present on site, for assistance with the implementation of the OCHRE database used by the JCHP.) Wolfgang Zwickel (Johannes Gutenberg-Universität, Mainz) has faithfully supported our field school efforts and aided in the development of European involvement in the project. For their dedication to Jaffa and support of the project's aims, we thank Yoav Arbel, Amit Reem, and Elie Haddad (all IAA personnel).

The directors also wish to thank the JCHP's advisory group for its assistance in many aspects of the project. In addition to Charles Stanish and Gideon Avni, mentioned above, the group includes Timothy Harrison (University of Toronto), Ronny Reich (University of Haifa), and Tzvi Shacham (Eretz Israel Museum). Their collective advice and support have been instrumental in helping us navigate the complicated waters of such a project. We also wish to thank the American Schools of Oriental Research, with which the project became affiliated in early 2009, for its support and interest.

Finally, work related to the present volume has been funded by a number of different agencies and institutions. In addition to the Cotsen Institute of Archaeology, the Humanities Division at UCLA, the UCLA International Institute, and the IAA, we thank the Max van Berchem Foundation and the Shelby White-Leon Levy Program for Archaeological Publication.

Martin Peilstöcker and Aaron A. Burke, codirectors
Jaffa Cultural Heritage Project
August 2010

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Abbreviations

Alon	*Yearbook of the Department of Antiquities*. Israel Department of Antiquities and Museums, Israel
ANET	*Ancient Near Eastern Texts Relating to the Old Testament*, ed. Pritchard, James B. 3rd ed. (Princeton: Princeton University, 1969)
An.	Arrian, *Anabasis*
Antig. *Mir.*	Antigonus Carystius, *Historiarum Mirabilium Collectio*
App., *BC*	Appianus, *Bella Civilia*
App. *Syr*.	Appian, *Syriak*
BIES	*Bulletin of the Israel Exploration Society*
BMH	*Bulletin of the Museum of Haaretz*
CAD	*The Assyrian Dictionary of the Oriental Institute of the University of Chicago,* eds. A. Leo Oppenheim and Erica Reiner (Chicago: University of Chicago, 1956–)
Curt.	Curtius Rufus
D.C.	Dio Cassius
D.S.	Diodorus Siculus
D.P.	Dionysisus Periegeta
EA	El-Amarna Letters
EAEHL	*Encyclopedia of Archaeological Excavations in the Holy Land*, ed. Michael Avi-Yonah. 4 vols. (Jerusalem: Israel Exploration Society, 1975–1978)
Eus. *Hist. eccl.*	Eusebius, *Historia ecclesiastica*
Eus. *Onom.*	Eusebius, *Onomasticon*
H.	*horvat* (Heb. "ruins")
HA	*Hadashot Arkhaeologiyot*
IAA	Israel Antiquities Authority
IEJ	*Israel Exploration Journal*
IDAM	Israel Department of Antiquities and Museums
J. *AJ*	Josephus, *Antiquitates Judaicae* [Antiquities of the Jews]
J. *BJ*	Josephus, *Bellum Judaicum* [Wars of the Jews]
J. *Vit.*	Josephus, *Vita* [Life of Josephus]
JCHP	Jaffa Cultural Heritage Project
JQR	*Jewish Quarterly Review*
Just. *Apol*.	Justin Martyr, *Apologia*
Just. *Epit.*	Justinus, *Epitome*
KRI	*Ramesside Inscriptions: Historical and Biographical,* K. A. Kitchen (Oxford: Blackwell, 1975–1990)
Kh.	*khirbet* (Ar. "ruins")
MR	Map reference number (Palestine/Israel Grid)
N.	Nahal
NEAEHL	*New Encyclopedia of Archaeological Excavations in the Holy Land,* ed. E. Stern, 4 vols. (New York: Simon and Schuster 1993), vol. 5 supp. (2008)
NRSV	*The New Oxford Annotated Bible.* New Revised Standard Version (New York: Oxford University Press, 1991)
OJDC	Old Jaffa Development Corporation, Ltd.
Paus.	Pausanias, *Description of Greece*
Plb.	Polybius
Pliny. *H.N.*	Pliny, *Historia Naturalis*
Plu. *Ant.*	Plutarch, *Antonius*

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Plu. *Alex*	Plutarch, *Alexander*
Qad	*Qadmoniot*
RB	*Revue Biblique*
Solin.	Solinus, *Collect.*
T.	Tell (Ar.) or Tel (Heb.)
TA	Tel Aviv
TAU	Tel Aviv University
UCLA	University of California, Los Angeles
Vitr.	Vitruvius, *De Architectura*

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PART I

The Jaffa Cultural Heritage Project and Archaeological Research in Jaffa

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Chapter 1

The Jaffa Cultural Heritage Project:

Objectives, Organization, Strategies, and Implementation

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Yafo, ancient Jaffa (Gk. Joppa; Ar. Yafa), is situated south of the modern city of Tel Aviv on the coast of Israel between Caesarea and Gaza, about 60 km northwest of Jerusalem. The site consists of an ancient tell built on a kurkar sandstone ridge overlooking the Mediterranean Sea and during various periods also included a sprawling lower city (see Figure 3.1). As Jaffa is a major tell and port along the coast of the southern Levant, its occupation reflects nearly every major period from the Middle Bronze Age through the present (see Chapter 2, "History of Archaeological Research"). Therefore, Jaffa joins a select number of sites that shared extensive connections not only with neighboring sites in the coastal plain but also with distant maritime commercial centers throughout the Mediterranean in many periods.

Establishment and Organization

Given the site's significance, it is surprising that no long-term research project has been established at the site since Jacob and Haya Kaplan's excavations. For this reason, the Jaffa Cultural Heritage Project (JCHP) was established in January 2007 by Martin Peilstöcker of the Israel Antiquities Authority (IAA) and Aaron A. Burke of the University of California, Los Angeles (UCLA). The project serves, fundamentally, as the coordinating institution for archaeologists and researchers who share the goals of revealing, researching, preserving, and presenting Jaffa's cultural heritage. Since Jaffa is a large archaeological site embedded within a living town with a diverse cultural heritage, the coordination of the project's efforts and resources is a monumental task requiring the constant attention of its partner institutions. In addition to the founding institutions mentioned above, the project is designed to accommodate participation by any number of interested scholars and institutions, both public and private, whether driven by research or cultural development. Among these institutional partners are the Old Jaffa Development Corporation (OJDC) and the Johannes Gutenberg-Universität in Mainz (Germany), led by Wolfgang Zwickel. The JCHP, therefore, is divided into a number of projects; their activities, resources, and results are coordinated, shared, and disseminated through the project's member institutions.

While reflecting the initial accomplishments of the JCHP following its launch in 2007, this volume represents the beginning of a long-term interdisciplinary cultural heritage project focused on the study of the archaeology and history of Jaffa from its earliest phases until the formation of the state of Israel in 1948. The objectives of the JCHP are outlined in this contribution, as are the needs out of which this project was born. As demonstrated here, the JCHP is most appropriately characterized as an institutional framework and is best regarded as an institution in its own right rather than as

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a traditional archaeological project, which is inherently expeditionary and characterized by short-term goals and a relatively selective investment of it resources. This article deals with the problems that this project seeks to address; its objectives, scope, and organization; and strategies for the implementation of its initiatives. Wherever possible, reference is made to relevant scholarly contributions in this volume.

Research Opportunities

Despite decades of archaeological research in Jaffa (see Chapter 2, "History of Archaeological Research"), there remain scores of unanswered questions concerning Jaffa, which without doubt justify the establishment of a cultural heritage project dedicated to long-term research of Jaffa's archaeology and history. These questions include: What was Jaffa's raison d'être and how did this role change over time? While the dominant hypothesis is that Jaffa functioned as a port of call along a maritime route between Lebanon and Egypt, this notion remains to be further explored (see Chapter 6, "Early Jaffa"). Similarly, when was Jaffa first settled and to what was its earliest continuous occupation connected? Despite the evidence for some Early Bronze Age I occupation at the site, continuous occupation appears to have begun only during the Middle Bronze Age, as was also the case at many tells throughout Israel. Nevertheless, the question remains: During which phase of the Middle Bronze Age was Jaffa first settled? Related to this is the fundamental question of the ethnicity of the settlement's first inhabitants. By whom was the site first settled and how did this earliest settlement relate to historical developments during that period? Fundamental to Jaffa's settlement history are questions of the environmental conditions and local ecology around Jaffa. For instance, how did these change and how did this change affect Jaffa's inhabitants? What was the nature of the diachronic development of Jaffa's port and to what extent did it employ existing topographical features? What ethnic groups made up the population of the city during different periods, what archaeological evidence have they left, and how does this inform our understanding of historical developments in this region? That these and many other important questions remain to be answered alone justifies renewed exploration of Jaffa on whatever scale is possible. Essays in Part II of this volume provide the most recent studies of "Jaffa's Historical and Regional Setting."

Another avenue of research in Jaffa concerns the urban development of the town over time (Peilstöcker 2007). Because Jaffa was almost continuously inhabited from the Middle Bronze Age until the present, the archaeology of Jaffa offers the opportunity to consider the extent of continuity during different periods, whether considering the ethnic makeup of Jaffa's population, the use of space, or urban planning (the port, its streets, fortifications, infrastructure, and so forth). Few towns in the Levant (e.g., Aleppo, Damascus, Beirut, Jerusalem, Jaffa) are available for such studies, and fewer still (e.g., Jaffa, Jerusalem) are in any great way accessible to archaeological excavations in both their upper/outer and lower/inner towns.[1] Of these, Jaffa remains the site with the most reasonable size in which such a cultural heritage research project can be reasonably undertaken, although this task continues to pose numerous problems.

Impediments to Archaeological Research in Jaffa

Despite the greatest of aspirations, considerable challenges remain a part of studying the archaeology and history of Jaffa. Indeed, such impediments have kept at bay most efforts to establish a long-term research project at the site. In the opinion of the authors, at least three major barriers have conspired to limit archaeological research in Jaffa to date. These include the site's substantial size, its long and complicated occupational history, and its modern development.

Although Jaffa appears as a fairly small tell of approximately 3 ha in size, if its lower town is added, it nearly triples in size (see Figure 3.1). In addition, this measurement does not account for the possibility that during the earliest phases of its settlement, in the Bronze and Iron Ages, there may have existed a substantial off-tell settlement around the shore of an estuary to the east of the site that has completely disappeared after being filled from at least the Roman period (see Chapter 6, "Early Jaffa"). The exploration of Jaffa's urban development is further complicated by the need for a study of its port facilities, which incorporated the rocky outcrops to the west of the site, surrounded by a marshy landscape throughout much of its history. Recent strides have been made to further elucidate the Bronze and Iron Age ports of

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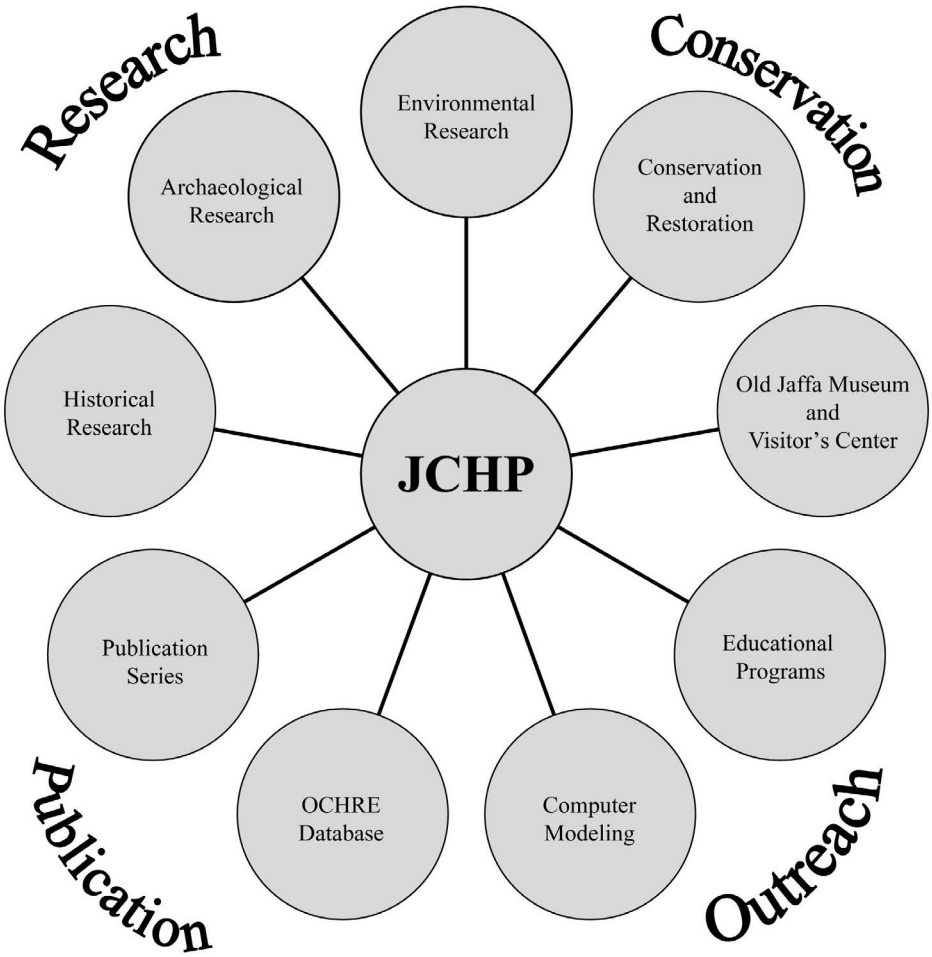

Figure 1.1. Organizational framework of JCHP activities.

Sidon (Marriner et al. 2006), Tyre (Marriner et al. 2005; Marriner, Morhange and Carayon 2008), and Beirut (Marriner, Morhange and Saghieh-Beydoun 2008), addressing similar deficiencies in our understanding (Marriner and Morhange 2005).

As a hindrance to attracting scholarly research, the problem of Jaffa's size is compounded by its complex occupational history. Archaeological sites such as Jaffa have traditionally been avoided by foreign research teams, primarily because of the difficulty of isolating a single period that can be intensively explored.[2] The University of Leeds, for example, was stymied in its efforts to identify Iron Age remains in Jaffa after choosing to excavate within P. L. O. Guy's excavation area (Bowman et al. 1955). Certainly, the overwhelming evidence from the Medieval and Ottoman, not to mention Classical, periods poses a considerable challenge to the exclusive study of Bronze and Iron Age remains. Nevertheless, as noted above, sites with limited occupational sequences do not offer opportunities for diachronic study, which are integral to research in the humanities and the funding available for it. For the JCHP, Jaffa's long occupational history is therefore viewed as an advantage that offers ample opportunities for interdisciplinary and diachronic studies.

While the research questions that can be asked about Jaffa's development are many (for other recent examples, see Part III), the complicated nature of the exploration and conservation of Jaffa is compounded by the pace of urban development in Jaffa in recent years (see Chapter 4, "Conservation Projects"). This situation has necessitated extensive salvage archaeology in Jaffa since the late 1990s, when the process of urban renewal and gentrification that is evident today began in this part of Tel Aviv, although strictures have been placed on the construction of new buildings upon what have been defined, if quite artificially, as the limits of the tell (see

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Chapter 3, "Cultural Heritage Management"). Although these laws preserve the tell area from invasive construction, the lower town is relegated to a lesser status, with fewer protections of its archaeological remains, and in recent years enormous construction projects have been undertaken after colossal salvage excavations (see Chapter 2, "History of Archaeological Research"). Even though the remains in the lower town are covered by current antiquities law, which mandates at least salvage excavation by the IAA prior to construction and development, the incredible extent of the excavations that have been necessary, as apparent during the 2007 season (see Chapter 14, "Preliminary Report for the 2007 Ganor Compound Excavations"), reveals the need for the types of resources that are available only through partnerships between a number of institutions.

Despite the recognition of Jaffa's historical importance (see contributions in Part II), until recently nearly no attention has been paid to the development of an overarching strategy for the systematic study of Jaffa and the management of its cultural heritage. Over the course of more than 60 years of archaeological research in Jaffa and the issuing of more than 100 excavation permits (primarily for salvage work), the lack of a strategy means that there exists not a single final report or synthesis addressing the findings made during these soundings. Although there is a limited awareness of the results of earlier soundings by those who have worked at the site since P. L. O. Guy initiated his excavations in 1948,[3] the absence of published archaeological reports has meant that each new excavation on a different part of the site has been undertaken, to one or another extent, without the benefit of the knowledge gained during earlier soundings at the site.

Objectives of the JCHP

Particular aspects of Jaffa as an archaeological site offer an opportunity to address archaeological and historical problems by means of ongoing excavations and the management of cultural heritage. Among these unique aspects are: (1) Jaffa's status as the most historically important port of the southern Levantine coast; (2) its nearly continuous occupation from the Middle Bronze Age until modern times; (3) substantial yet mostly unpublished exploration prior to the establishment of the JCHP; and (4) the central importance of preserving its remaining monuments as well as its archaeological remains. It is with such considerations in mind that in 2007 four overarching initiatives were defined for the project, with a focus on research, publication, conservation, and public outreach (Figure 1.1).

Research Program

Under its auspices, the interdisciplinary nature of the JCHP permits a variety of research projects to be conducted and supported. Its research activities may be characterized as primarily historical in nature (whether examining Jaffa's political, social, economic, or cultural history), with heavy emphasis on the employment of archaeological data. Nevertheless, many research projects may emphasize one methodology over another, such that JCHP research projects may be characterized as primarily archaeological, historical, or environmental.

Archaeological Research. Because of the diversity of environments represented by Jaffa's context, archaeological research in Jaffa must include the integration of terrestrial and marine archaeological excavations, environmental analyses, and Geographic Information Systems (GIS) mapping of archaeological and architectural remains. Excavations conducted under the auspices of the JCHP fall under the categories of both research and salvage excavations, and in this respect the JCHP's organizational framework is the first of its kind in Israel to place emphasis on the integration of these disparate data sources. While the JCHP's primary mandate is the exploration of Jaffa, exploration of second- and third-tier archaeological sites and cemeteries within Jaffa's hinterland, such as Abu Kebir, may be undertaken in the future. As in many archaeological projects, such sites can shed light on Jaffa's relationship to its hinterland during different periods.

As evident throughout Israel in recent years, the vast majority of archaeological excavations are now salvage in nature. For this reason, research archaeologists must increasingly make efforts to incorporate these findings in their own work, despite the differences in the mandate and intensity with which salvage work must be undertaken. One of the primary objectives of the JCHP's archaeological research in Jaffa is to model the integration of research and salvage excavations to maximize the recovery of information from both archaeological contexts. For very apparent reasons, a lack of effort to do so effectively diminishes our understanding of the remains

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encountered during these different undertakings. The integration of these two varied approaches is, however, the product of several structural characteristics of this project. First, the project models the integration of staff, such that staff from research institutions will accompany work on salvage excavations, as was first done in 2007, and staff from the IAA will actively participate in research excavations initiated by member institutions of the JCHP. Specialist staff will also participate in the analysis and conservation of archaeological remains from both types of excavations. Second, the data from these two types of excavations will be integrated within a single database environment (see the discussion of OCHRE, below). Finally, the publication of the results of both types of excavations will be made available within a single publication series (as with the present volume), which will permit the use of shared terminology and contexts while leaving room for individual interpretations of the data.

As the project develops, researchers and research institutions interested in conducting specialized archaeological research within the context of the project will be asked to uphold these essential guidelines. Such research may include a new excavation area, maritime excavations, environmental studies, and geomorphological and geophysical analyses, to name but a few examples. The scope and duration of these research projects will be defined by the researchers undertaking them in consultation with the JCHP's directors. The opportunities inherent in such a framework provide rich ground for potential M.A. and Ph.D. research.

Historical Research. Despite the importance of archaeological research to historical inquiries concerning Jaffa, historical sources, travelers' accounts, maps, artwork, and photos provide rich sources for the study of Jaffa's history during many periods. These sources also facilitate interpretations of the archaeological, architectural, and occupational history of the site. Thus historical research of the site in all periods is instrumental to properly understanding the cultural and environmental evolution of Jaffa. A number of essays in the current volume reflect the potential of such research (see Part III and especially Chapter 20, "Two Monumental Doorjambs").

An ample corpus of materials will permit a variety of historical studies. Among these are maps in various collections (see Chapter 13, "Jaffa in Historical Maps") and archives such as the Ustinoff Collection in Oslo (Pedersen 1928; Skupinska-Løvset 1976, 1978), the archives of the Vatican, the Palestine Exploration Fund, the archive of the French army, and the records of the Ottoman Empire now housed in the Directorate of Ottoman Archives of the Prime Ministry General Directorate of State Archives in Turkey, among others. Although such studies can and have on occasion been conducted in the absence of a framework like that of the JCHP, the unique potential for precise correlations between the historical and archaeological records for Jaffa will provide significant impetus for historical studies that should whenever possible consider relevant archaeological data.

Environmental Research. Like historical research, study of Jaffa's changing environment can provide a better understanding of the factors that governed the site's selection as both a settlement and a major port along the coast of the southern Levant. Although ports are selected for their locations, and therefore maintain their importance in many periods, environmental conditions change. Therefore, seeking to understand the changes that occurred in the environment and ecology of Jaffa and the surrounding region is also critical to understanding changes in the history of Jaffa. Moshe Sade's preliminary analysis of faunal remains from the Ganor Compound and Flea Market (see Chapter 4, "Cultural Heritage Management") reveals the need for such analysis for understanding the local ecology.

Publication Program

At the heart of the problem of archaeological research related to Jaffa is a lack of publication of archaeological excavations at the site and the scattered publication of select elements of its cultural heritage.[4] To address this problem, the JCHP has developed a detailed publication strategy. This program addresses previous excavations, notably those undertaken by Jacob and Haya Kaplan (from 1955 to 1982),[5] salvage excavations by the IAA (since 1985), and, of course, the publication of renewed research excavations under the auspices of the JCHP (since 2007). The first two projects outlined below constitute the largest publication endeavors to date. The extensive plans outlined here for the publication of Jaffa's cultural heritage would be lost, however, without the support of its member institutions. For this reason, the Cotsen Institute of Archaeology Press will publish the Jaffa Cultural Heritage Project Series, within the Monumeta Archaeologica series, in support of UCLA's participation in this project. The dedication of this series

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to this project is a critical step toward the fulfillment of a long-term commitment to publish Jaffa's archaeological remains in a timely and efficient manner.

Kaplan Excavations Publications. The publication of the excavations of Jacob and Haya Kaplan in Jaffa are divided into two major divisions, which also include a number of specialist studies (see Chapter 21, "Kaplan Excavations Publication Initiative"). The first part of this corpus consists of Middle Bronze Age to Iron Age remains. It will be published by Aaron Burke and Martin Peilstöcker and is being funded by a grant from the Shelby White-Leon Levy Program for Archaeological Publications.[6] This work was initiated in 2007 and is now well under way (see Part IV). It will include a small section devoted to the publication of the Islamic-, Crusader-, and Ottoman-period remains excavated by Kaplan, which will be published by Katherine S. Burke. The initial phase of analyzing these materials began in 2007 with a systematic cataloging of all the Kaplan records so they could be added to a single database (see the discussion of OCHRE, below).[7] The second part of the corpus consists of the Persian, Hellenistic, Roman, and Byzantine remains that will be published by Orit Tsuf (see Chapter 25, "The Jaffa-Jerusalem Relationship during the Early Roman Period"). Initiated in 2004, this work has also received funding from the White-Levy Program for Archaeological Publications.

IAA Publications. Because of the amount of salvage archaeological work undertaken in Jaffa since 1985, and especially since 1997, special efforts must be dedicated to the large quantity of materials generated by these excavations (see reports in Part III). A series of excavation reports for these remains have been outlined by Martin Peilstöcker and Yoav Arbel, who will oversee this part of the publication program. While this work is already largely supported through the activities of the IAA, the partnerships created by the JCHP reveal the potential for expanding this publication program beyond the limits traditionally imposed upon such publication programs by the IAA's budget. Katherine S. Burke, for instance, has assumed responsibility for the large corpus of Islamic and Crusader ceramics that now exist for Jaffa, and this arrangement will permit more than the usual attention to be given to this large and unique corpus (see Chapter 17, "Islamic and Crusader Pottery from Jaffa"). Furthermore, appeals will be made through the project's members for researchers interested in undertaking studies that are not routinely undertaken as part of the publication of salvage excavation materials.

Research Excavation Publications. The last facet of the archaeological publication program defined by the JCHP consists of research excavations undertaken by collaborations among the JCHP's member institutions, which will vary over the life of the project. This publication program is at present coordinated by Aaron Burke and Martin Peilstöcker and will initially consist of joint UCLA-IAA excavations in Jaffa.

Historical Publications Program. Finally, it is worthwhile to consider the publication of historical studies, particularly those with intensive cultural heritage components, as part of the initiatives supported by the cooperative framework of the JCHP. Such studies will include works such as the present volume, consisting of collections of historical studies; archaeological reports; and individual studies related to the JCHP's research initiatives. This subseries is appropriately identified as the History and Archaeology of Jaffa and will be subsumed within the Jaffa Cultural Heritage Project Series.

Data Management. The collaboration and publication efforts of project members are facilitated by use of the Online Cultural Heritage Research Environment (OCHRE), developed by J. David and Sandra Schloen at the University of Chicago.[8] Employing this database for the JCHP offers several unique advantages (Burke forthcoming). First and foremost, this application allows access to the database by multiple researchers via the Internet while safeguarding the database by enabling nuanced levels of access for each user (including a view-only level of access). This system is extremely important to large multinational archaeological projects such as the JCHP. Second to this advantage is OCHRE's robust integration of varied types of data, ranging from traditional item-based datasets to images, videos, drawings, 3D models, documents, and GIS data.

While the advantages of such integration are obvious for the project on a day-to-day basis, the net effect is a more rapid dissemination of data among project members that require access to at least subsets of the data for their research. Such an application provides them with not only the minimum subset of the data they require but also the opportunity to explore its context. Fundamentally, however, the greatest advantage of the use of OCHRE by project researchers will be a more complete publication of the project's datasets. Since Jaffa already poses a problem

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of scale with regard to the quantity of data generated by excavations over the years, the usual response to this problem is a highly selective approach to the publication of data, with overwhelming datasets being reduced to but a few representative examples of artifacts and relevant stratigraphic contexts. Although this will certainly remain the case for the publication of the volumes described above, online publication through OCHRE will permit the publishing of large datasets without additional cost by means of its potential for generating Web-based presentations following the completion of analysis of data for publication. Such a supplement to volume publication will rapidly make a large quantity of data from Jaffa available, which to some extent will compensate for the limitations inherent to the available records from earlier excavations. As with the various publication programs, the implementation of OCHRE will proceed in phases, with earliest work focusing on the creation of new datasets (for Kaplan's excavations and new research excavations), followed by the conversion of existing databases—for example, from IAA salvage excavations.

Conservation Program

The conservation needs of Jaffa are extensive, and for this reason it is unrealistic to assume that they can be addressed by the resources of any single governmental or private institution. Among these needs are the preservation and conservation of both the artifacts exposed during excavations in Jaffa and the architectural monuments in and around old Jaffa. For these reasons, the JCHP seeks to create partnerships for addressing the needs of individual conservation projects within the project. The first of these projects is the conservation of archaeological artifacts unearthed by Jacob Kaplan and stored today in the Jaffa Museum. A program for their conservation is defined as part of the publication program associated with these artifacts. An ongoing initiative to pursue funding, support, and institutional participation for the conservation of Jaffa's remains will remain a central part of our funding goals (see discussion below).

Public Outreach Program

The various initiatives outlined above contribute to the final pillar of the project's activities in Jaffa—namely, public outreach. The goal of public outreach is the development of an awareness and appreciation of Jaffa's cultural heritage throughout its long history. While this work is usually a limited part of traditional archaeological projects, primarily with an interest in cultivating excavation volunteers, it is inevitable that younger generations will assume responsibility for the stewardship of Jaffa and its cultural heritage. Furthermore, support for the project, as with many, is largely to be found from foundations, organizations, and governmental agencies concerned with the development and presentation of cultural heritage. Thus such a program not only benefits the community in which it works but also benefits the project by guaranteeing its viability and ensuring its long-term potential to achieve its objectives.

Setting aside the fact that an extensive publication program serves to disseminate the results of the project to the public, means are already in place for accomplishing this objective. Among them are visits to the site and the archaeological excavations by schoolchildren as part of programs intended to create awareness of Jaffa's cultural heritage. There remains, however, a serious need for the improvement of presentations, especially in light of the closure of the Jaffa Museum in recent years and its reorganization away from a focus on Jaffa's archaeological remains. The outreach programs of the JCHP are supported by the following institutions and programs: the Jaffa Museum of Archaeology, run by the OJDC, and the IAA Education Programs. Also under way is the development of the Jaffa Visualization Project at UCLA, which will contribute to both on-site and online presentations of Jaffa's archaeological and architectural remains (discussed below).

Field School. One of the primary avenues for the integration of the JCHP's various initiatives and for fulfillment of its outreach objectives is its archaeological field school. The field school is not only a venue for training future archaeologists in field methods but also an important source of volunteer participation and public education regarding the project's work in Jaffa. Individual projects that can be integrated into this program will also permit active student participation in the research of Jaffa's cultural heritage. Student and volunteer participation also alleviate the intensive funding and human resource needs of a project such as this. While archaeological fieldwork, analysis, and publication will constitute the backbone of the field school program, potential exists for the integration of conservation studies as well.

Annual Open House. In 2007 the JCHP initiated an annual open house for the month of July. This event is concerned with the regular dissemination of information on the

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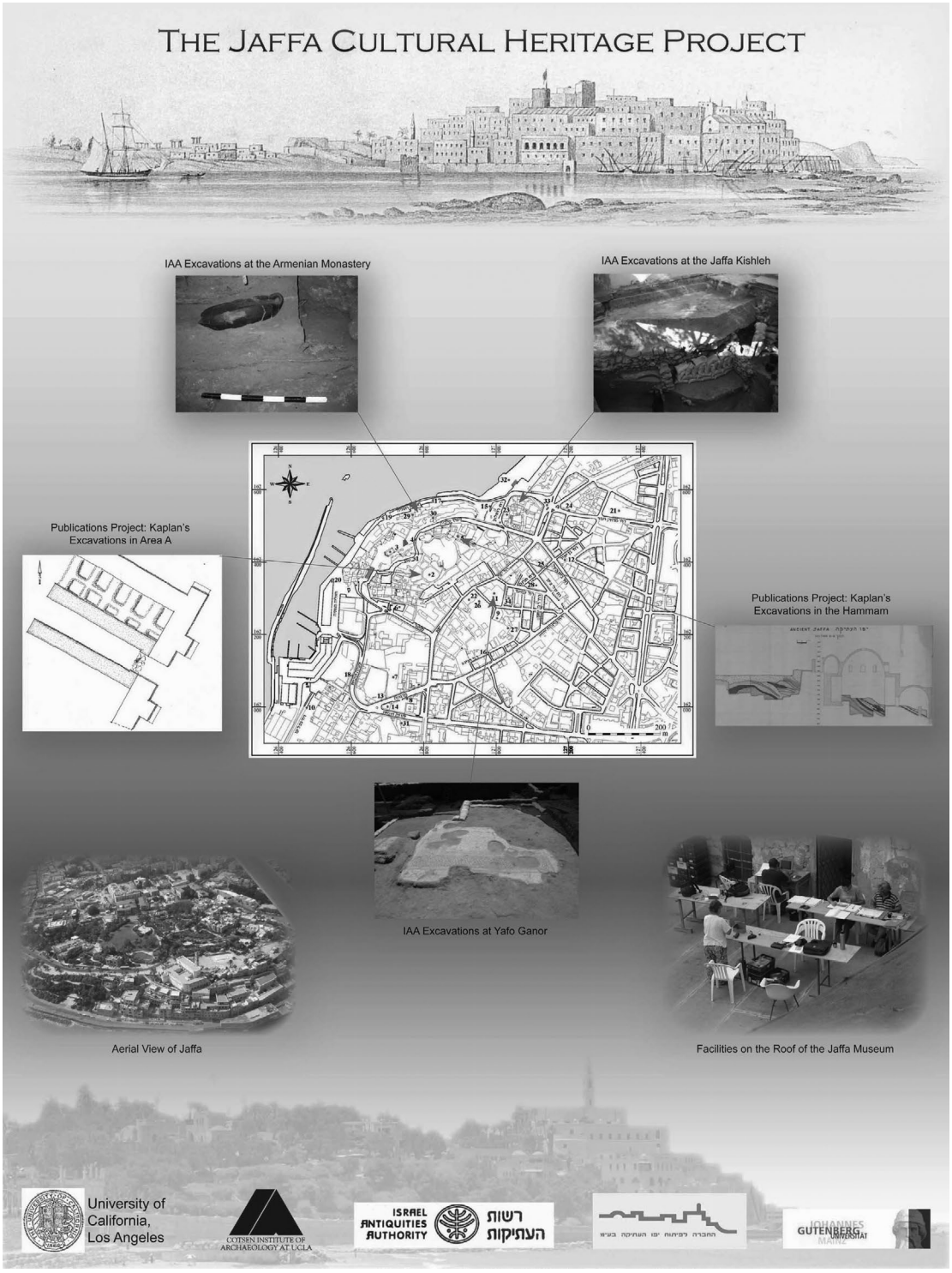

Figure 1.2. 2007 poster for the first annual JCHP Open House. *Design by Kyle Keimer.*

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project's progress on various initiatives, with a primary focus on ongoing archaeological research (Figure 1.2). While the open house is open to the public and will be publicly advertised via a number of avenues (see the discussion of online resources below), the program is especially timed to permit visits by professional archaeologists and researchers from both Israel and abroad who are traditionally engaged in archaeological field projects during this period. Holding the open house as a scheduled event will both maximize potential involvement and reduce interruptions during the period of peak project research and activity.

Computer Modeling. A long-term plan is in place for the development of a robust virtual reality model of Jaffa. The use of archaeological, historical, municipal, and archival records encourages the development of such a model as part of both the publication and presentation agendas of the JCHP. The resources and staff of UCLA's Experiential Technologies Center, in conjunction with graduate student researchers, will make this possibility a reality, as will the incorporation of such developments within individual publication agendas, such as the Kaplan Excavations Publication Initiative (see Chapter 21). Furthermore, interest in such projects for their touristic value by the municipality and the OJDC provides the potential for additional extramural funding of such initiatives.

Online Resources. With the existence of a variety of digital media for the dissemination of information concerning the project's activities, the JCHP maintains an intensive online presence. In addition to individual Web pages by member institutions,[9] venues such as Facebook are used to advertise the project's ongoing activities and accomplishments.[10]

Planning and Implementation Strategies

In addition to articulating a structure that encourages the establishment of partnerships with academic institutions and independent scholars, a number of strategies are central to the overall success of the project. Among these are the pursuit of a wide range of funding options across a spectrum of disciplines, the sharing of resources and data via online databases, research projects by M.A. and Ph.D. students with implicit publication rights, and the centralization of publication efforts underway by a variety

Figure 1.3. Elie Haddad provides an overview of 2007 excavations of Jaffa's port during the JCHP Open House. *Photo by Aaron Burke.*

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of scholars and institutions. A few of these topics require further elaboration.

Project Affiliations and Membership

As noted at the beginning of this article, although Jaffa is not an enormous site, the intensity and duration of archaeological work in Jaffa, which has seen little publication, coupled with the site's historical breadth and complex environment, require an investment of resources in excess of the means of a single institution, public or private.[11] For this reason, membership affiliation with the JCHP must be organically defined, namely, by the individual contributions of its member institutions and research associates. Nevertheless, for such a structure to achieve the goals outlined for the project, the project's directors and affiliated members must agree to a set of general principles.

Scholars, institutions, and agencies participating in the JCHP must agree to the following principles to be considered members of the project. Individual participants and institutional members of the JCHP agree to: (1) openly exchange the results of their research involving Jaffa with all affiliated members of the project prior to publication; (2) coordinate with the directors and relevant members of the project their research projects and publication or presentation of any research related to Jaffa until the completion of a project; (3) make explicit their affiliation, past or present, with the project when publishing or presenting their findings in those instances when research has been supported materially or otherwise by the efforts of any of the institutions or scholars affiliated with the project; (4) honor the publication rights of other members of the project as they have been granted by the directors of the project in writing or may already exist; and (5) provide accurate information regarding their institutional affiliations and any changes thereafter during participation as members of the project. Likewise, the JCHP and its directors agree to: (1) facilitate, in an appropriate manner and within the means of the project, the research activities of any member who has agreed to the principles outlined above; (2) provide members with information regarding relevant research by other members within the project; (3) honor the academic freedoms and publication rights of members of the project, including allowing them to publish their findings where they see fit; and (4) support the opportunity to publish findings in the Jaffa Cultural Heritage Project Series as often as possible.

Research Opportunities

While many of the JCHP's professional staff members will be drawn from the central institutions involved in the project, creating opportunities for graduate student research under the oversight of the project's directors permits undertaking a broader range of research initiatives. M.A. and Ph.D. studies will permit more research and more rapid publication of studies related to Jaffa, which might otherwise not be taken up for many years to come. This system is already modeled in the current volume (see contributions by Kyle Keimer, George Pierce, and Alice Mandell with Aaron Burke). Inherent to such a model of participation, whether by graduate students or outside researchers (see Chapter 25, "The Jaffa-Jeruslem Relationship during the Early Roman Period"), is the assumption that funding will be applied for by the individual researcher with necessary support from the project's codirectors and relevant staff. Thus the personal contribution of individual participants in the project extends beyond the research itself to include individual investments in the overall success of the project. While this arrangement encourages the career development of individual researchers, it also permits a broad-spectrum approach to funding such a large project, which is considered by the directors to be vital to the project's long-term health (see discussion below).

Excavation Strategies

In light of the challenges posed by an urban archaeological site such as Jaffa, the project must be continually prepared for the emergence of new and unforeseen opportunities to explore the site. Such opportunities have occurred on an annual, if not monthly, basis in recent years. This preparation requires not only a flexibility of resources and personnel but also the definition of a hierarchy of urgency. From most to least urgent, these strategies include a focus on the following categories of work in Jaffa. The first of these are ongoing salvage excavations, with a more limited investment in research excavations until this activity abates (e.g., Ganor Compound excavations; see Chapter 14, "Preliminary Report for the Ganor Excavations").[12] Of second priority is the identification of areas threatened by the plans of future development initiatives, where regular research excavations might be conducted in advance of the need for salvage excavations. This process would permit the excavations to be conducted under preferred

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circumstances, providing the time necessary to deal with unforeseen events that inevitably hamper the execution of salvage excavations, which are usually conducted under intense constraints of both time and resources. If areas with planned development can be identified prior to the need for salvage excavations, these excavations can be conducted in line with traditional research excavations, thus inviting the consideration of particular research questions during the course of these excavations.[13] Such a strategy should appeal to local developers; making land accessible for research excavations prior to development costs less than salvage excavations. Success in either of these two priorities will largely depend on coordination with municipal agencies and local institutions such as the OJDC, which recognizes the importance of Jaffa's cultural heritage, is a project member, and has already supported the project's activities through the use of its facilities and the coordination of efforts.

Of less immediate urgency in the hierarchy of cultural heritage management in Jaffa is research excavation where possible within open areas such as the archaeological garden atop the mound. Perhaps because of the protected status of these areas (see Chapter 3, "Cultural Heritage Management"), their excavation must remain a lower priority for the project, if for no other reason than that such space is a limited resource that should not be excavated without a thorough analysis of the results of earlier excavations at the site. Furthermore, efforts to excavate such areas should be undertaken only within the context of careful preparation for the management of the remains that are likely to be encountered in these areas. The large number of excavations conducted in Jaffa since 1948 (see Chapter 2, "History of Archaeological Research") provides ample opportunities for scrupulous selection of excavation areas based on the stratigraphic sequences already encountered.

Despite the challenges of conducting archaeological work within an urban environment such as Jaffa, a number of options remain for traditional research excavations. In addition to the obvious areas atop the mound in what is known as the archaeological garden, these opportunities include excavations in garden areas adjacent to existing structures (e.g., gardens outside the Jaffa Museum), excavations within the ruins of standing buildings (e.g., the Demiani Soap Factory), and maritime excavations. Such fields, which fall within the protected limits of the tell, are potentially as large as most areas excavated by ongoing expeditions at a number of well-known archaeological sites (e.g., Ashkelon, T. es-Safi, and Gezer). To these may be added soundings in open lots throughout the lower city to the north and east of the tell, which can provide important data concerning not only the settlement history of this area but also the existence of the port and estuary posited in this location (see the discussion in Chapter 6, "Early Jaffa").

Funding and Support Strategies

To date, various activities of the JCHP have been funded by a number of institutions, agencies, grants, and individual donors, and this foundation continues to grow as the project matures. One of the greatest strengths of the structural organization of the JCHP is its potential for appealing to what we refer to as a broad spectrum of funding possibilities. Whether funds are designated specifically for research, publication, digital humanities, public education, conservation, or touristic development, to name but a few examples, the JCHP's flexible structure and far-reaching agendas can accommodate a wide range of funding sources that are increasingly earmarked for specific projects. An example of the application of this approach includes funds received from the White-Levy Program for Archaeological Publications.[14] In this respect, we feel that the JCHP models one approach to increasing the funds available to cultural heritage projects from a variety of funding agencies with different requirements.

In addition to a wide range of funding applications, excavation funds are also provided by the JCHP's member institutions. Central to this agenda is the foundation provided by the IAA through the management of funding for salvage excavations, along with contributions of its varied resources to projects within Jaffa that fulfill the IAA's mandate. As with funding applications, funding from UCLA has been possible through a number of nontraditional means, thanks again to specific agendas related to the quality of graduate education, opportunities for cultivating diversity, and the like. To date, funds have been provided by the Cotsen Institute of Archaeology, the Kershaw Chair of Ancient Eastern Mediterranean Studies (presently held by William Schniedewind), the Near Eastern Languages and Cultures Department, the Humanities Division, and the International Institute at UCLA. Thanks to the support of student involvement in research projects, UCLA graduate students are able

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to participate extensively in the project at various levels, including its publication.

In addition to the above pursuits, the perpetuation of the project by members outside the IAA will largely depend on the endowment of various project activities such that they can be carried on in perpetuity, even if on a small scale. Support from nonprofit organizations such as the Israel Exploration Society will free the project from many of the bureaucratic limitations inherent to its individual member institutions. Nevertheless, in the end, the broad-spectrum funding strategy has already demonstrated itself as a successful strategy, allowing the project to accomplish its objectives.

Conclusion

For a number of years leading up to the establishment of the JCHP, the IAA recognized the need for partnerships with research institutions that would permit the undertaking of projects with the scope of the JCHP as outlined here. Since the aims of the JCHP are not characteristic of many archaeological research projects, it has been necessary to develop an organizational structure that is able to accommodate varied research strategies and the participation of both individual researchers and research institutions. Our hope is that the net effect of the structure defined by the directors for the JCHP will be the recognition of the JCHP as an institution in its own right, which despite inevitable changes among its members will remain committed to the management of Jaffa's cultural heritage for years to come.

Notes

1. The towns listed here are among those where occupational sequences range from the Bronze Age (if not earlier) through the Ottoman period. While medieval sites such as 'Akko have Bronze and Iron Age tells nearby, they are for all intents and purposes separate sites, the locations of which were not necessarily selected for the same reasons during these periods.

2. For many years, this factor kept Ashkelon, for example, from being excavated and ultimately contributed to its being excavated by a foreign team from Harvard University led by Lawrence E. Stager.

3. The small archive of these excavations is housed at the Rockefeller Museum.

4. For the most complete bibliography of excavations, see Chapter 2, "History of Archaeological Research."

5. Proper publication of the salvage excavations conducted by P. L. O. Guy (1948–1949) and the research excavations of the University of Leeds (1952) is also necessary. Unfortunately, there are serious concerns about the viability of publishing these records given their age and a lack of information concerning the location of both the records and artifacts.

6. Official permissions for this project were received from the IAA in January 2007.

7. For an example of the data and potential results, see Chapter 23.

8. See http://ochre.lib.uchicago.edu to download the application and view sample datasets, including those of the JCHP.

9. These include member Web pages for the IAA (http://www.antiquities.org.il/jaffa), UCLA (www.nelc.ucla.edu/jaffa), and Johannes Gutenberg-Universität in Mainz (http://jaffa.theol.uni-mainz.de).

10. See www.facebook.com and the group page for the Jaffa Cultural Heritage Project.

11. It is reasonable to suggest that not a single archaeological project in Israel to date has possessed an operating budget that would be sufficient to meet the needs of Jaffa's exploration, conservation, and publication.

12. The 2007 season of JCHP excavations comprised the single-most intensive season of excavation seen in Jaffa's history. A number of other infrastructure developments scheduled for the coming years will require the continuation of intensive salvage excavations.

13. This was the strategy of the excavations undertaken in 2008 in the vicinity of Qedumim Square, where some OJDC renovation of nearby facilities is under way.

14. In May 2008, Aaron Burke and Martin Peilstöcker received the first of such funds in support of the publication of the Bronze and Iron Age remains associated with the Kaplan Excavations Publication Project (see Chapter 23). Orit Tsuf has received previous funding from the White-Levy Program for the publication of the Persian to Byzantine remains of Kaplan's excavations. (For an outgrowth study, see Chapter 25.)

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Chapter 2

The History of Archaeological Research in Jaffa, 1948–2009

Martin Peilstöcker
Israel Antiquities Authority

During the spring of 1903, the first archaeological excavation in Jaffa was carried out in an area east of the old city. Directed by G. A. Barton, director of the American School of Archaeology in Jerusalem (later renamed the American Schools of Oriental Research), the excavation intended to demonstrate that the Solomonic harbor was located on the east side of Jaffa. Unfortunately, the only published information about this operation are two short notes in the *Palestine Exploration Fund Quarterly Statement* (Hanauer 1903a, 1903b). The importance of Jaffa as an archaeological site had long been known, and inspectors of the mandatory British government visited the site many times between 1917 and 1947. However, only the open areas created as a result of Operation Anchor, carried out by the British army in 1936 (see Figure 4.1), and subsequent destruction resulting from the war of 1948 have made archaeological exploration in Jaffa possible, since until those events it was a densely built-up urban environment. Forty-five years after Hanauer's excavations, P. L. O. Guy initiated the first archaeological excavation program on the ancient mound of Jaffa in 1948. From then through December 2009, the Israel Department of Antiquities (IDAM) and its successor, the IAA, issued more than 110 licenses, although the number of excavations undertaken was actually greater, since additional areas were excavated under the continuation of "general" licenses through the early 1980s. The history of archaeological investigations can be divided into three general periods, noting that from the beginning, salvage work has constituted the greatest portion of the archaeological exploration of Jaffa.

Early Excavations (1948–1981)

The earliest archaeological excavations at the site were part of the first projects of the newly established IDAM and were carried out in 1948 by P. L. O. Guy. These excavations, as well as other projects mentioned below, benefited from the large open areas on the summit of the hill, in particular opposite St. Peter's Church, which was a result of the ongoing destruction of the nearly deserted old city of Jaffa.[1]

Work under the direction of P. L. O. Guy, assisted by J. Ory and J. Pinkerfield, started on November 1, 1948 (Table 2.7). Only two short seasons were carried out, and the work has never been published. The excavations were mentioned, however, in the *Bulletin of the Department of Antiquities of the State of Israel* (*Alon* 1, p. 22; *Alon* 2, p. 23) and were referred to in a brief report of Isserlin, who thought there was some potential for excavations once the modern dump covering the tell could be removed (Isserlin 1950). The main aim of these early excavations was to find the remains of the Iron and Bronze Age settlements. To achieve this goal, several

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long trenches and an area opposite St. Peter's Church measuring roughly 20 x 15 m were investigated. Already seriously ill for some time, P.L.O. Guy passed away in 1952, and it is uncertain that he intended to continue his excavations.

The excavations were resumed by Bowman, Isserlin, and Rowe in 1952 on behalf of the University of Leeds (England) in the same excavation area (Bowman et al. 1955). This work was obviously intended to continue as a long-term project, as is evident from a map of the city on which a line divides the mound in two (Figure 2.1). On November 3, 1953, each half of the map was signed by a representative; on one side by Jacob Kaplan, on the other side by Isserlin on behalf of Leeds. The

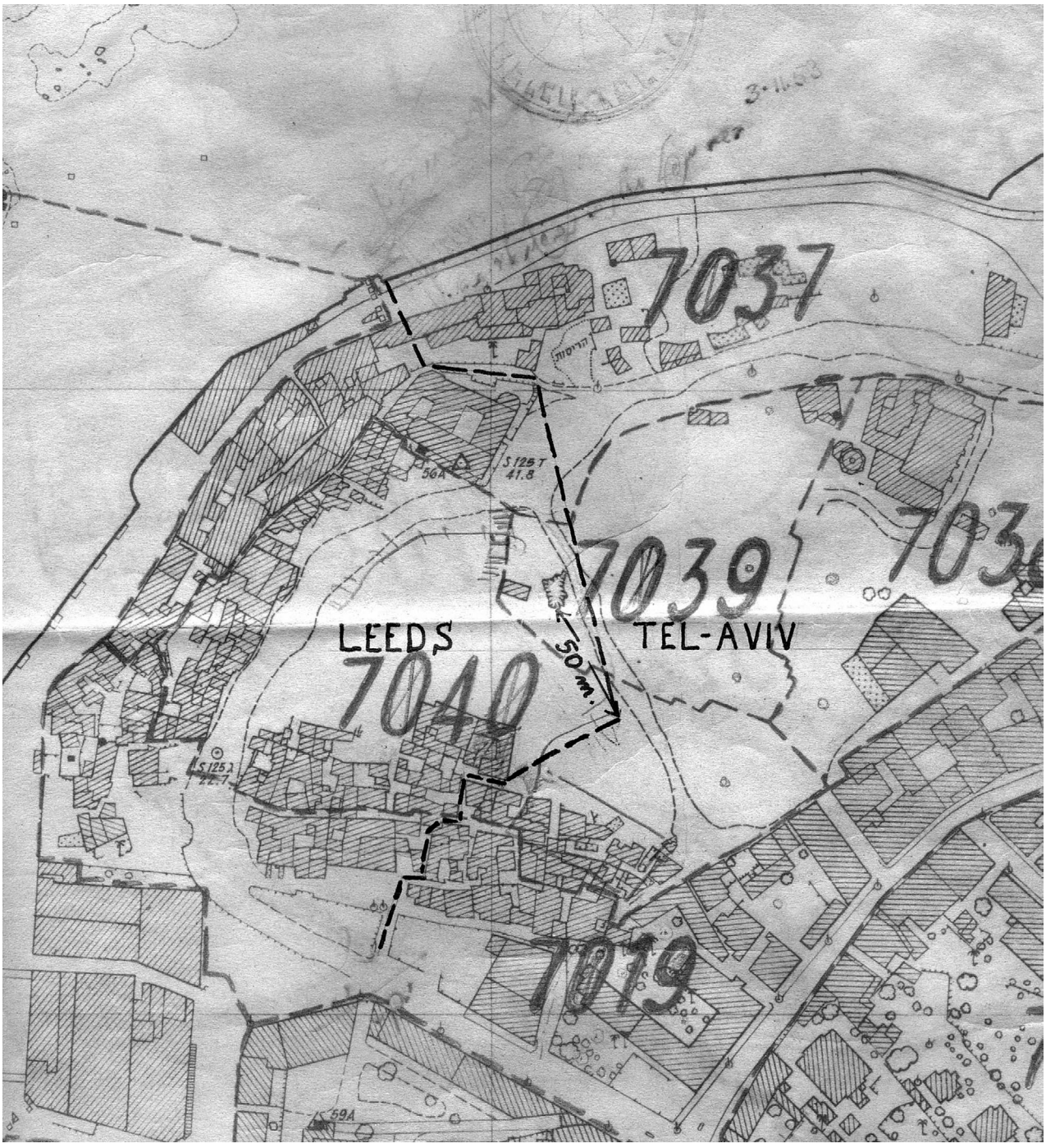

Figure 2.1. Signed map illustrating the division of the tell between the IDAM and the University of Leeds in 1950. *Kaplan Archive*.

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document received official recognition with the signature of Shemuel Yeivin, the IDAM's director. It turned out, however, that the area within the Leeds expedition's concession was largely devoid of remains datable to the biblical period (i.e., the Bronze and Iron Ages). Since these remains were of primary interest to the excavators, the excavations by University of Leeds were never resumed (Table 2.7).[2]

Only in 1955, after Kaplan received his Ph.D. from Hebrew University in 1954 (Kaplan 1958), did he begin to work in Jaffa (Table 2.8). The site became the center of his archaeological research while he also worked throughout the coastal plain (see Chapter 22, "Bibliography of Jacob Kaplan and Haya Ritter-Kaplan"). Although Kaplan dug at various locations throughout Jaffa (Table 2.1), his main efforts were concentrated in three excavation areas: A, B-D, and C. In Area A, located on the eastern part of the tell's summit, he exposed remains of the city's citadels and their gates, mainly dating to the Late Bronze Age, the Iron Age, the Persian period, and the Hellenistic period (Table 2.2). In Area C, located toward the west and opposite St. Peter's Church (in Qedumim Square), Kaplan unearthed remains of the Roman and Byzantine periods (Table 2.3). In Area B-D, located inside and adjacent to an old bathhouse (the Hammam) in the vicinity of the Jaffa Museum, he exposed a section of the site's earthen rampart of the Iron Age and presumably of the Middle Bronze Age below that (see Chapter 23).

In an early stage of his work, Kaplan worked on behalf of the IDAM, from which he received excavation permits (Table 2.8). On some occasions his work was carried out seemingly without an excavation permit. In 1960, for example, he worked within various areas while focusing primarily on Area B (Kaplan 1961b),[3] even though no permit was issued by the IDAM for these other excavations. This example illustrates, to some extent, the freedom that Kaplan was granted as the archaeologist of the municipality of Tel Aviv. Kaplan obtained funding from the municipality of Tel Aviv, which also provided him with a storage facility and laboratory space, where in 1961 he established the Jaffa Museum of Archaeology. This institution was part of the Haaretz Museum, so his later excavations were conducted on behalf of this municipality-owned museum.

In addition to his activity in Jaffa, Kaplan carried out numerous excavations throughout the greater Tel Aviv area, where he also tried to protect archaeological sites. In Jaffa he initiated the "archaeological reserve" system, which remains in place to the present day and prohibits any excavations for development purposes (salvage excavations) on the tell (see Chapter 3). Through 1977 Kaplan continued to work at various sites, still being issued permits (see Bar-Nathan 2002). From at least 1979, however,

Table 2.1. Jacob Kaplan's excavations by area and years excavated.

Area	Years	Location/Remarks
A	1955, 1956, 1958, 1960, 1962, 1970–1974	Main area on the tell (Ramesses Gate); now an archaeological garden
B	1959–1960	Within Hammam adjacent to the Jaffa Museum (Kaplan 1960c:122)
X	1961–1962	Opposite St. Peter's Church and below OJDC kiosk in Qedumim Sq.; designated Pit X
C	1961, 1965	On the tell opposite St. Peter's Church; now a subterranean visitor's center below Qedumim Sq.
Y	1962, 1964, 1968	Opposite St. Peter's Church on what is now Mifratz Shlomo St.
T	1962	Clock Tower Sq.
D	1963	Extension of Area B where Middle Bronze Age rampart was encountered
F	1964	Mifratz Shlomo St., close to the Demiani Soap Factory; described as "opposite St. Peter's Church" (Kaplan 1964b:285–286)
G	1964	Located south of Area D excavations; an attempt to find the Middle Bronze Age rampart (Kaplan 1964b:286)
H	1964	"in the vicinity of the street of Simon the Tanner" (Kaplan 1964b:286)
Be'eri School	1965	"about 500 m north-east of the mound of Jaffa" (Kaplan 1966b:282); salvage excavation on the school compound, numbered 3488
J	1970 (Jan.)	"within the limits of the Jaffa citadel on the slope from area C to Area A . . . 40 meters eastward to Area A" (Kaplan 1970:225)
HaTsorfim St.	1972	Excavations for the construction of a parking lot east of Area A along HaTsorfim St. (Kaplan 1974d)
Namal Yafo	1978 (Jan.)	Jaffa harbor
P	1981	Pasteur St.

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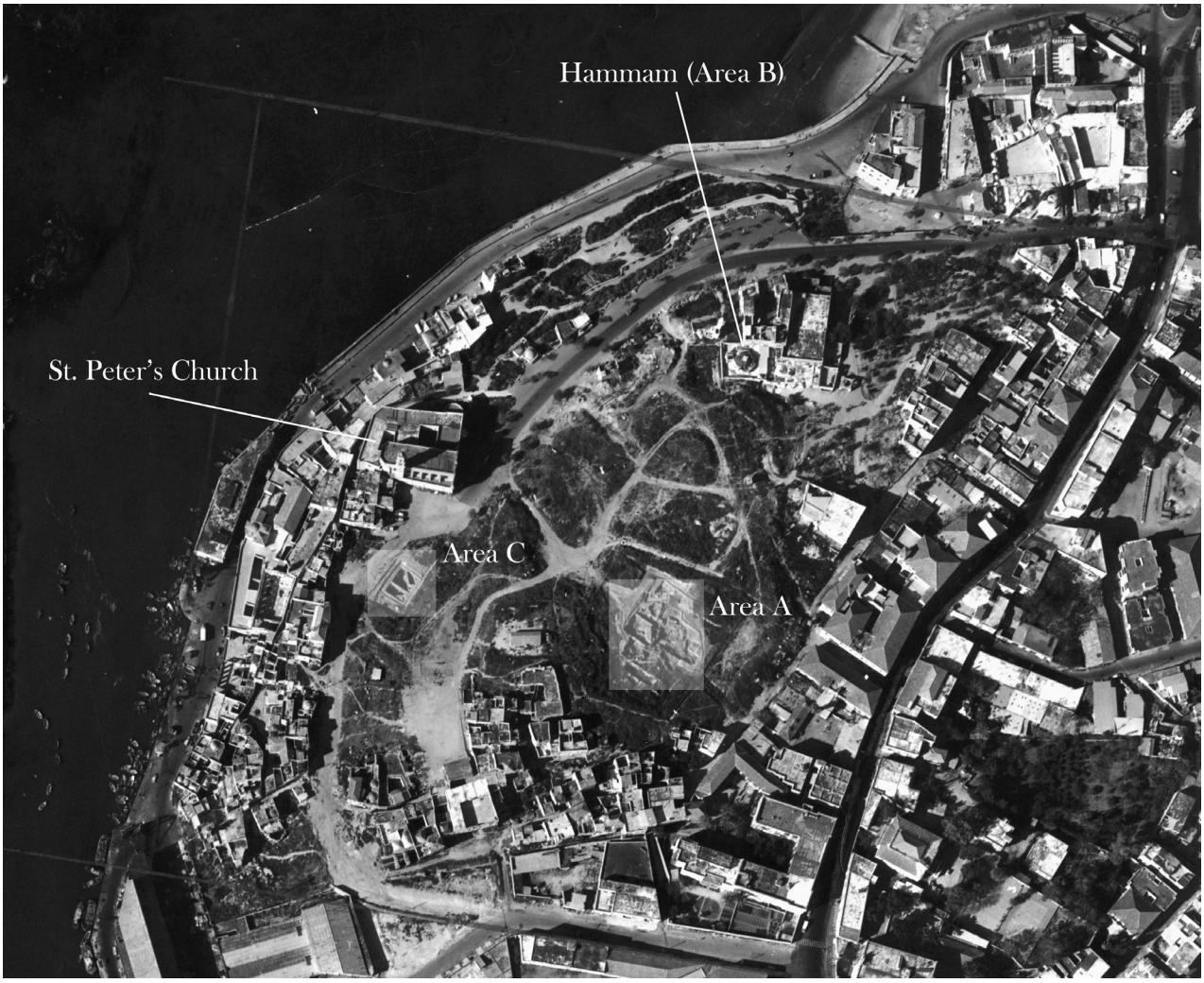

Figure 2.2. Aerial view of Jaffa in 1964. Note Kaplan excavation areas. *Photo courtesy of IAA Archives.*

it is clear that he worked largely in conjunction with his wife, Haya Ritter-Kaplan, in whose name alone excavation permits were granted. It should be noted that Kaplan completed his excavations on the tell in 1974 in Area A, and no further excavations were conducted until 1978 (in the port) and again in 1981 along Pasteur Street, under the aegis of Haya Ritter-Kaplan.

The prolific archaeological work in which Kaplan was engaged suggests why his *NEAEHL* contribution (Kaplan and Ritter-Kaplan 1993) is the most up-to-date publication available on his excavations in Jaffa, revealing the need for a final and comprehensive publication of his work (see Chapter 21, "Kaplan Excavations Publication Initiative"). Jacob Kaplan passed away in 1989. He was an accomplished excavator who pioneered archaeological research in Tel Aviv, worked at Beth She'arim and Tel Qasile with Benjamin Mazar, and published on both specific archaeological and historical problems (see Chapter 22, "Bibliography of Jacob and Haya Ritter-Kaplan"). Despite the constraints of resources and time that Kaplan certainly experienced and that may have contributed to the limited publication record for Jaffa, he did establish a stratigraphic sequence for the main areas of his excavations, as well as for Area Y (Table 2.2, Table 2.3, and Table 2.4). With respect to excavations in Area A, for which he provided an overview of his stratigraphic understanding (Kaplan and Ritter-Kaplan 1993), it is noteworthy that although he observed and recorded Roman-, Byzantine-, Islamic-, and Ottoman-period remains in Area A, these periods were not included as part of his stratigraphic summary of his excavations.

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Table 2.2. Stratigraphy of areas A, B, and Y according to Jacob Kaplan (Kaplan and Ritter-Kaplan 1993:656–658).

Level	Phase	Area	Period	Date (B.C.E.)	Notable Finds
I	A	A	Hellenistic	2nd–1st cent.	
	B	A, Y		3rd–2nd cent.	A: "fortress"
II	A	A, Y	Persian	5th cent.	A: Sidonian wall
	B	A		pre-5th cent.	
III	A	A, B	Iron II	8th cent.	Area A east
	B	A	Iron I	11th cent.	Area A west: Philistine sherds
IV	A	A	LB IIB	13th cent.	A: gate lintel, hinge; burned
	B	A		13th cent.	A: Ramesses II Gate; burned
V		A	LB IIA	14th cent.	
VI		A	LB I	16th–15th cent.	Y: kilns
VII		A, B, Y	MB IIB–C	17th–16th cent.	Y: tombs
VIII			MB IIB		unexcavated

Table 2.3. Area C stratigraphy according to Jacob Kaplan (Kaplan and Ritter-Kaplan 1993:656–658).

Level	Period	Date (C.E.)
1	Byzantine	6th–7th cent.
2	Byzantine	5th cent.
3	Roman/Byzantine	4th cent.
4	Roman	3rd cent.
5	Roman	2nd cent.
6	Roman	1st cent.

Table 2.4. Area Y stratigraphy according to Jacob Kaplan (Kaplan and Ritter-Kaplan 1993:656–658).

Level	Period	Date
1	Modern	
2	Roman	1st cent. (C.E.)
3	Roman	3rd cent. (B.C.E.)
4	Persian	4th cent. (B.C.E.)
5	LB	
6	MB IIB	
7	MB IIA	

Later Excavations (1982–1992)

During the 1980s, only two excavations were undertaken in Jaffa (Table 2.8 and Table 2.9). With Kaplan's retirement from his position as director of the Jaffa Museum in 1982, his fieldwork came to an end. Neither Kaplan nor his wife continued excavations in Jaffa, although they expressed their desire to stay involved in Jaffa (Tzvi Shacham, personal communication, 2007). Funding for excavations by the municipality stopped, and only the museum continued its activities by exhibiting finds from Jaffa and other sites in the Tel Aviv area and making some preparations for the publication of Kaplan's materials, which included photographs and illustrations of objects. Nevertheless, in 1985, during preparation of Kaplan's excavations in Area A, to be included in an archaeological garden, Yossi Levy excavated a small trench in the area of the Ramesses Gate on behalf of the IAA (1999). Additional excavations in Jaffa were carried out on the perimeter of Area C within Qedumim Square in 1992 by Etty Brand (Brand 1994). The purpose of these excavations was to prepare the area for the construction of a roof over the archaeological remains in Area C, which included well-preserved building remains of the Hellenistic and Roman periods. Despite such excavations, no research expedition would return to Jaffa until nearly 25 years after Kaplan's last excavations in Area A in 1974.

Recent and Ongoing Excavations (1992–Present)

From the early 1990s, the city of Jaffa, which had been neglected for decades, benefited from a sudden increase in development projects, both public and private (Table 2.9). Although the upper tell is still a restricted area for construction and building works, in the area outside the Ottoman city walls, development projects were possible only after an intensive archaeological investigation as defined by the Law of Antiquities (see Chapter 3), namely by means of salvage excavations. These salvage excavations are an example par excellence of urban archaeology. They are carried out according to the field methods commonly accepted in Israeli archaeology (Aharoni 1973), including the employment of 5-x-5-m squares and the use of the Locus-Basket system. The location of excavation areas in

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a densely populated environment must, on the one hand, take into consideration a number of nonarchaeological restrictions on the work. The entrances to buildings, existing sewage systems, and modern traffic are but a few of these considerations. On the other hand, the location of the excavated areas, which depends on development and not on research considerations, provides an opportunity to randomly sample the archaeological remains of the site, which otherwise would probably never be excavated.

Since 1992 more than 50 such excavations have been conducted at the site, primarily under the auspices of the IAA (see Table 2.9). The largest projects include (see Figure 2.3):

- The Andromeda Project or Southern Cemetery to the south of the old city of Jaffa (Avner-Levi 1998), excavated from 1993 through 1997
- The Ganor Compound Project, east of Yefet Street on the eastern slopes (Peilstöcker 1998a, 2000a; Peilstöcker and Burke 2009), excavated from 1994 to 2007
- The Flea Market and Clock Tower Square Refurbishment and Conservation Project (Arbel 2008; Peilstöcker et al. 2006), excavated from 2002 to 2008 (Peilstöcker 2009)
- The Armenian Compound and Seawall Project along the sea promenade (Arbel 2010; Peilstöcker 2006a:100–101; Peilstöcker et al. 2006). Several excavations were undertaken on the remains of the seaside fortifications of Jaffa between 1997 and 2007, and the project was later continued in the harbor area (see below).
- The harbor. Already in 1978 (Ritter-Kaplan 1978) and again in 1997 (Peilstöcker and Priel 2000), excavations revealed remains of the earlier harbor. As a result, extensive archaeological excavations were begun prior to infrastructure upgrades within the harbor area. The excavations were directed by Elie Haddad on behalf of

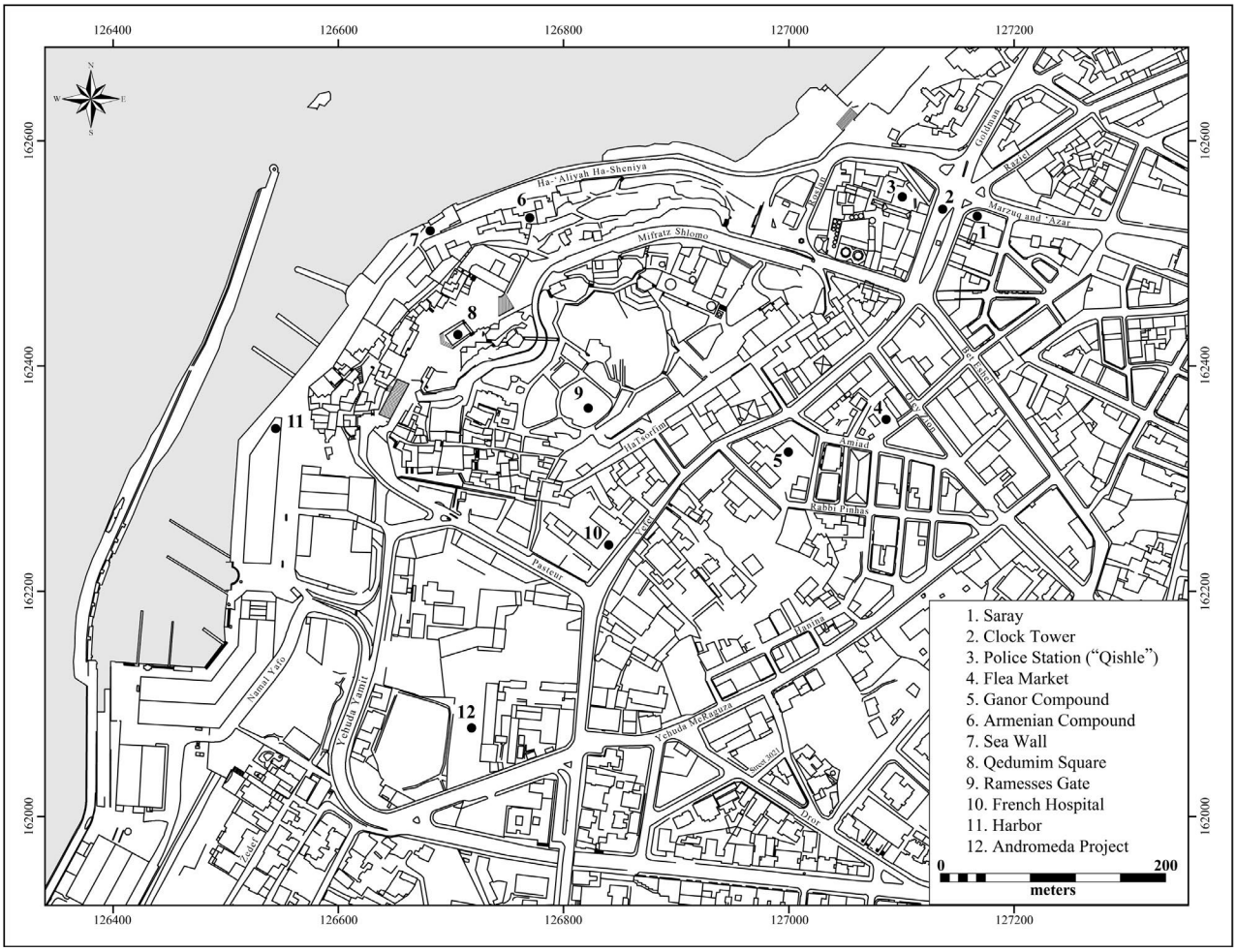

Figure 2.3. Locations of recent excavations in Jaffa. *JCHP plan.*

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the IAA and concentrated on the quay area in the center of the harbor from 2007 to 2008 (Haddad 2009a).[4]

- The Police Station, or Qishle, 2007. Directed by Yoav Arbel on behalf of the IAA, this project investigated the grounds on which the late-nineteenth-century police station was built. Inside the rooms of buildings, which are being restored, and in the open courtyards of the complex, earlier remains dating to the Hellenistic through Ottoman periods were unearthed (Arbel 2009a, 2009c; Arbel and Talmi 2009). Inter alia the remains of the late Ottoman northern fortress, as known from maps, were revealed.
- The French Hospital was excavated from 2007 to 2009. Another IAA project, this excavation was undertaken under the direction of Amit Reem within the compound of the former French Hospital at the corner of Yefet and Pasteur streets. In addition to remains of the southern fortresses of the Ottoman and Crusader periods, Late Bronze Age, Iron Age, Hellenistic, and Early Islamic remains were unearthed.
- HaTsorfim Street and the Jerusalem Gate were excavated in 1995 and from 2008 to 2009 (Arbel 2009b, in press; Arbel and Rauchberger forthcoming). In contrast to other salvage excavations on the eastern slopes of the upper tell, this project is only about 100 m from Kaplan's Area A and his excavations on the west side of HaTsorfim Street in 1972. Since the excavation reached only the level of the modern sewage system, which had to be replaced, only remains dating to the Ottoman period were revealed.
- Along Yehuda Yamit Street, excavation was necessary due to plans for the replacement of the water main and sewage system by the municipality (Kapitaikin 1999). Under the direction of Elie Haddad and on behalf of the IAA, an area from the southern entrance to the harbor up to MeRagoza Street was investigated from 2008 to 2009 (Haddad 2009b).

Although some of these excavation projects are ongoing (the Flea Market, HaTsorfim Street, and the French Hospital), a preliminary stratigraphic sequence can be provided for certain projects (Table 2.5 and Table 2.6).

In addition to IAA work, Ze'ev Herzog of Tel Aviv University excavated in 1997 and 1999 in the Ramesses Gate area in an attempt to resume research undertaken by Jacob Kaplan in Area A. During these excavations, the gate area was cleaned and additional remains of the former excavations were reexposed. In some spots, the excavation penetrated into new layers, and a small amount of Early Bronze Age pottery was recovered, which suggests some settlement during that period (Herzog 2008).

The most recent archaeological project, the JCHP, was established in 2007 with the goal of inaugurating a new approach to the investigation of Jaffa (see Chapter 1). In June 2007, a team under the direction of Aaron A. Burke from UCLA participated in one of the most recent seasons of salvage work in the Ganor Compound, which was already in progress under the direction of Martin Peilstöcker. In 2008 and 2009, this was followed by the first two seasons of joint UCLA-IAA research excavations within the visitor's center in Qedumim Square, resuming Kaplan's excavations in Area C with the goal of clarifying stratigraphy in this area and preparing the area for renovations and upgrades to the visitor's center (Burke and Peilstöcker 2009a).

Table 2.5. Preliminary stratigraphic sequence for the Flea Market, Armenian Compound, and Ganor Compound excavations.

Stratum	Period	Dates	Remarks
0	Modern	post-1947	
I	British Mandate	1917–1947 C.E.	
II	Ottoman	1517–1917 C.E.	
III	Mamluk	1250–1517 C.E.	Tombs only
IV	Crusader	1099–1250 C.E.	
V	Early Islamic	638–1099 C.E.	
VI	Byzantine	324–638 C.E.	
VII	Roman	63 B.C.E.–324 C.E.	Tombs only
VIII	Hellenistic	332–63 B.C.E.	
IX	Iron Age	1200–332 B.C.E.	
X	Late Bronze Age	1530–1200 B.C.E.	

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Table 2.6. Stratigraphy of IAA excavations.

Area/Stratum		0	I	II	III	IV	V	VI	VII	VIII	IX	X
Amiad St.		X	X	X		X	X	X		X*		
Rabbi Yohanan St.		X	X	X		X	X	X		X*		
Rabbi Hanina St.				X		X						
Oley Zion St.	I	X	X	X		X	X	X				
	II	X	X	X		X	X	X				
	III	X	X	X		X	X	X		X		
Ben Yair St.		X	X	X		X	X	X				
MeRaguza St.				X								
Bet Eshel St.	A			X	X	X	X	X		X*		
	B			X	X	X	X	X				
	C			X		X	X	X				
	D			X		X	X	X				
Clock Tower Sq.	I	X	X	X	X	X	X	X		X	X	
	II	X	X	X	X	X	X	X		X		
	III	X	X	X	X	X	X			X*		
Ganor '95**				1		2	3, 4	5		6, 7	8	9
Ganor '04						X	X	X	X	X	X	
Armenian Compound				X		X	X			X	X	X*

* Pottery only
** According to local stratigraphy

Conclusion

The lengthy and extensive excavation history of Jaffa demonstrates, above all, the wide recognition of Jaffa's historical importance as a port. With well-known biblical connections, a track record for producing important finds from early periods, and robust evidence of later periods, Jaffa's attraction for establishing a long-term research project is easy to understand. Nevertheless, as the history of its excavation reveals, at no point since the earliest excavations in Jaffa began has the process of establishing a successful excavation project been a simple matter. Only by understanding past efforts to explore the site, the problems encountered, and solutions implemented is it possible to plan for future archaeological research in Jaffa.

Notes

1. About the process of destruction, see Raz Kletter (Kletter 2006) and Chapter 14, this volume.

2. It should be noted, however, that in subsequent years, Kaplan carried out a number of excavations in this area, in particular within Area C, and was also successful in identifying a substantial phase of Middle and Late Bronze Age occupation in Area Y. Kaplan's other excavation areas within the old Leeds concession included areas H, J, and X.

3. This observation is made on the basis of pottery bucket tags from excavations in 1960, which included cleanup work in Area A (last excavated in 1958) after winter rains and limited soundings in Area F (which revealed no discernible stratigraphy), in addition to the continuation of excavations in Area B.

4. For report on an IAA underwater survey, see Sharvit and Galili (2002).

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Appendix 1: Excavation Licenses and Permits Issued for Jaffa between 1948 and 2009

All licenses issued by the IDAM and IAA since 1948 are listed in the three tables below. Jaffa appears as site 823 in the registry of the IAA. The area protected as an antiquities site covers, according to the Old Israel Grid, the coordinates 1260 (length, south-west), 1274 (length, north-east), and 1615 (width, south-west), 1629 (width, north-east). The coordinates according to the New Israel Grid are (same order): 175999.842, 177399.883 and 661500.163, 662900.163. In the tables below, the coordinates are listed as they appear on the excavation permits, since the end of 2006 the new grid is used. Most of the excavation permits were issued for only a small portion of the site. Two coordinates, those of the northwest and southeast corners, are listed in the table below to indicate the location and extent of the area licensed for excavation. For prefered spelling of excavation areas and place names, see volume appendix.

Table 2.7. Excavations in Jaffa before 1955.

Excavator	Season and License No.	MR Coordinates	Location and Reference(s)
Guy (IDAM)	3/1948-&	A: 126650/162280 B: 126630/162330 main dig: 126780/162430	On tell opposite St. Peter's Church
Guy (IDAM)	6/1949-&	Same as above	
Bowman, Isserlin, and Rowe (Leeds)	Aug. 4–Sept. 5 (C-10/1952)	Same as above. 70 m east of St. Peter's Church	Univ. of Leeds (Bowman et al. 1955); see also Figure 2.1

Table 2.8. Excavations and related work in Jaffa by Jacob and Haya Ritter-Kaplan from 1955 to 1981.

Season	License No.	Area	Preliminary Reports
1955 (1st Season)			
Oct. 7–Nov. 6	39/1955-&	Area A	Unpublished
1956 (2nd Season)			
April 12–June 27	9/1956-&	Area A	*IEJ* 6 (Kaplan 1956b) = *BIES* 20 (Kaplan 1956a); *RB* 64 (Kaplan 1957)
1958 (3rd Season)			
Aug. 3–Nov. 27	33/1958-&	Area A	*IEJ* 10 (Kaplan 1960c) = *BIES* 24 (Kaplan 1960d); *RB* 67 (Kaplan 1960b)
1959 (Study)		—	*BMH* 2 (Kaplan 1960a)
1960 (4th Season)			
April 28–Aug. 10, '60	[No license]	Area A	*IEJ* 11 (Kaplan 1961b) = *RB* 69 (Kaplan 1962b); *BMH* 3 (Kaplan 1961a)
Dec. 28, '59–Aug. 10, '60		Area B	
April 26–27, '60		Area F	
1961 (5th Season)			
Aug. 1–Oct. 15	27/1961-&	Area C	*IEJ* 12 (Kaplan 1962d) = *BMH* 4 (Kaplan 1962c); *HA* 2 (Kaplan 1962a); *RB* 70 (Kaplan 1963d); *JQR* 54 (Kaplan 1963c);
Dec. 1960–1961(salvage)		Area X	
Nov. 21–29		Area T	Not reported.
1962			
Mar. 13–21		Area T	*BMH* 5 (Kaplan 1963a)
Mar. 27–May 4	?	Area A	
Aug. 1–Oct. 15	33/1962-&	Areas C	
		Area Y	
1963 (6th Season)			
July 14–Sept. 1, Oct. 14–29	C-79/1963	Area D	No *IEJ* report; *RB* 72 (Kaplan 1965c:553) = *BMH* 6 (Kaplan 1964a); *HA* 8 (Kaplan 1963b)
Oct. 27–30		Area F	

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Table 2.8. (cont.)

Season	License No.	Area	Preliminary Reports
1964 (7th Season)			
Aug. 4–30	A-26/1964	Area G	*IEJ* 14 (Kaplan 1964b) = *HA* 13 (Kaplan 1965a); *RB* 72 (Kaplan 1965c:554); *BMH* 7 (Kaplan 1965d)
Sept. 17–Oct. 8		Area H	
July 16–Sept. 1	A-27/1964	Area Y	
1965 (8th Season)			
Mar. 2–Nov. 1	C-79/1965	Area C	*IEJ* 16 (Kaplan 1966b) = *HA* 17 (Kaplan 1965b); *RB* 74 (Kaplan 1967); *BMH* 8 (Kaplan 1966a)
July 6–15		Beeri School	
1966	C-79/1966		Permit issued, unclear if excavations were carried out
1967			*BMH* 10 (Kaplan 1968b)
1968			
Feb. 29–Mar. 4		Area H	
Mar. 1–May 28	A-159/1968	Areas Y	*HA* 27 (Kaplan 1968a) = *BMH* 11 (Kaplan 1969)
1970			
May 31–June 24	A-243/1970	Area J	*IEJ* 20 (Kaplan 1970) = *RB* 80 (Kaplan 1973); *BMH* 13 (Kaplan 1971)
Sept. 16–Oct. 30	C-28/1970	Area A	
1971			
May 19–Aug. 13	G-7/1971	Area A	*HA* 41–42 (Kaplan 1972b) = *BMH* 14 (Kaplan 1972a); also *Qad* 25 (Ritter-Kaplan 1982)
Mar 9–24		Mazal Dagim St 3	Small operation in a gallery off Qedumim Sq.
1972			
Feb.		Hatsorfim St.	*IEJ* 24 (Kaplan 1974d)
Sept. 5–Nov. 29	G-32/1972	Area A	*IEJ* 24 (Kaplan 1974c) = *HA* 48–49 (Kaplan 1974b); *RB* 82 (Kaplan 1975); *BMH* 15–16 (Kaplan 1974a)
1973			
June 3–Sept. 19	G-28/1973	Area A	
May 15–Nov. 10		Area J	
1974			
July 2–Sept. 23	G-40/1974	Area A	*IEJ* 25 (Kaplan and Kaplan 1975); *RB* 83 (Kaplan and Kaplan 1976)
1977	A-714/1977		Permit granted for salvage work; no evidence for excavations undertaken
1978			
Jan. 8–Mar. 5	[No license]	Area T	*HA* 65/66 (Ritter-Kaplan 1978)
May 8–17		Area C	
1981	A-1041/1981	Pasteur St.	Undertaken by H. Ritter-Kaplan

Table 2.9. Excavations in Jaffa from 1985 to the present. Institutional affiliation is IAA, unless otherwise noted.

Excavator	License/Year	MR Coordinates	Location and Publications
Levy (IDAM)	A-1355/1985-01	12816/16236	Ramesses Gate (Levy 1999)
Brand	A-1890/1992	12816/16236	Qedumim Sq. (Brand 1994)
Ginzburg	A-2074/1993	126750/162020	Southern Cemetery, 3022 St. (Ginzburg 2000)
Avner-Levi	A-2085/1993	126000/161500 127400/162900	Southern Cemetery (Avner-Levi 1996, 1998; Avner and Eshel 1996)
Feldstein	A-2118/1994	127100/162300 127200/162400	Ganor Compound trial excavation (Feldstein 1996, 1998)
Avner-Levi	A-2243/1995		Southern Cemetery (Avner-Levi 1996, 1998)
Levy, Ayash	A-2270/1995	126821/162331	10 HaTsorfim St. (Ayash 1999)
Ayash, Bushnino	A-2288/1995	126000/161500 127400/162900	Southern Cemetery: Yefet and Pasteur Sts. (Ayash and Bushnino 1999); April 1995
Barshad	A-2376/1995	126650/162250 126750/162300	The Israel Experience, Pasteur St (Barshad 2000)
Yannai	A-2389/1995	1260/1629	Southern Harbor (Yannai 1999a)

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Table 2.9. (cont.)

Excavator	License/Year	MR Coordinates	Location and Publications
Peilstöcker	A-2374/1995	126920/162190 127030/162350	Ganor Compound (as Area E in Peilstöcker 1998a, 2000a)
Peilstöcker	A-2374-1/1995	126920/162190 127030/162350	Bet Eshel St. (Peilstöcker 2000b)
Peilstöcker	A-2466/1996	126700/162050	Southern Cemetery: MeRaguza St. (Peilstöcker 1998b)
Ayash	A-2626/1997	126821/162331	MeRaguza and Yehuda Yamit St. Intersection
Peilstöcker	A-2629/1997	A: 12700/16219, 12702/16216, B: 12700/16216, 1290/16206	Hanina and MeRaguza Sts., Areas: A and B (Peilstöcker 1999, 2000d)
Kapitaikin	A-2677/1997	126581/162166	Pasteur St./Southern Cemetery (Kapitaikin 1999)
Peilstöcker	A-2728/1997	126650/162400 126800/162550	Sea Wall, Ha-'Aliya Ha-Sheniya St. (Peilstöcker and Priel 2000)
Yannai	A-2777/1997	126810/162560	Northern Harbor (Yannai 1999b)
Herzog (TAU)	G-3/1997	126500/162000 125000/162700	Area A
Peilstöcker	A-2848/1998	126584/162404 126602/162427 126896/162576 126909/162584	Sea Wall/Harbor, two areas
Priel	A-2876/1998	126769/162528 126760/162549 126929/162567 126937/162573	Sea Wall, two areas (Peilstöcker and Priel 2000)
Peilstöcker	A-2956/1998	127310/162520 127340/162524	Marzuq and 'Azar St. (Peilstöcker 2000c)
Kletter	A-3016/1999	126650/162600 126750/162600	Roslan St. (Kletter 2004)
Kletter	A-3018/1999	12695/16265	Marzuq and 'Azar St. (Kletter 2001)
Billig	A-3063/1999	127182/162414 127251/162455	
Peilstöcker	A-3093/1999	/127182/162414 127251/162450	Ben Yair St.
Peilstöcker	A-3135/1999	126920/162190 127030/162350	Ganor Compound: *The Body* movie location
Peilstöcker	A-3163/1999	126800/162190 /127200/162450	Ganor Compound: Bet November
Peilstöcker	A-3175/1999	126666/162020	MeRaguza St. tomb (Peilstöcker 2006b)
Herzog, Paz (TAU)	G-44-1999	126500/162000 127000/162700	Area A (Herzog 2000)
Peilstöcker	A-3197/2000	127030/162193 127060/162218	Ganor Compound: Bet HaKeshatot
Peilstöcker	A-3285/2000	127090/162335 127155/162415 127146/162375 127281/162023	Two areas in Ben Yair St.
Vladnetzki	A-3291/2000		Ben Yair St.
Fantalkin (TAU)	B-211/2000	126900/162240 127000/162285	Ganor Compound: Rabbi Pinhas St. (Fantalkin 2005)
Bordowitz (Bar-Ilan)	B-223/2000	126680/161907 126722/161966	
Peilstöcker, Re'em	A-3740/2002	127070/162308 127124/162386	Flea Market (Peilstöcker et al. 2006)
Peilstöcker	A-3751/2002	127004/162100/ 127195/162342	Flea Market (Peilstöcker et al. 2006)
Peilstöcker, Volinsky	A-3775/2002	126600/162600 126770/162540	Armenian Compound (Volinsky and Arbel in press)

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Table 2.9. (cont.)

Excavator	License/Year	MR Coordinates	Location and Publications
Fantalkin (TAU)	B-245/2002	126900/162240 127000/162285	Ganor Compound: Rabbi Pinhas St. (Fantalkin 2005)
Re'em, Peilstöcker	A-3876/2003	127072/162307 127120/162318	Flea Market (Peilstöcker et al. 2006)
Peilstöcker, Gorzelczany	A-3908/2003	126700/162260 127115/162280	Ganor Compound: Areas D, H
Peilstöcker, Volinsky	A-4015/2003	126600/162600 126770/162540	Armenian Compound
Peilstöcker, Re'em	A-4034/2003	127070/162380 127124/162386	Flea Market (Peilstöcker et al. 2006)
Bushnino, Peilstöcker	A-4164/2004	127632/162612 127042/162622	Northern Sea Promenade
Kanias, Peilstöcker	A-4175/2004	126800/162515 126830/162535	Mifratz Shlomo St. (Peilstöcker 2005)
Peilstöcker, Volinski	A-4241/2004	126770/162600 126600/162540	Armenian Compound
Peilstöcker	A-4312-2005	127230/162700 126850/162400	Clock Tower Sq. (Peilstöcker 2009)
Peilstöcker	A-4430/2005	126830/162530 126800/162510	Mifratz Shlomo St. (Peilstöcker 2005)
Peilstöcker, Re'em	A-4597/2005	126770/162600 126600/162540	Armenian Compound (cont.): church
Peilstöcker, Re'em	A-4620/2005	126770/162600 126600/162540	Armenian Compound: church (cont.) (Arbel 2010)
Peilstöcker, Arbel	A-4675/2005	127070/162380 127124/162386	Flea Market: Yohanan Hanina South, Pinhas, Goldman Sts. (Arbel 2008)
Peilstöcker, Re'em	A-4697/2006	126770/162600 126600/162540	Armenian Compound, church
Dagot	A-4746/2006	177038/662289 177033/662290	8 Rabbi Aha St. (Dagot 2008)
Gorzalczany, Peilstöcker	A-4751/2006	126700/162260 127115/162280	Ganor Compound, Area H (Gorzalczany 2008)
Arbel and Eder'i	Not issued	127070/127124 162308/162386	Roslan St. (Arbel and Eder'i 2008)
Re'em, Peilstöcker	A-5014/2007	176500/662300 176750/662500	Armenian Compound (cont.): church (Arbel 2010)
Rauchberger	A-5016/2007	177396/662498 177401/662503	Marzuq and 'Azar St. (Rauchberger 2009)
Arbel	A-5037/2007	177076/662605 177154/662667 (new grid)	Qishle/Police Station (Arbel 2009c)
Peilstöcker, Burke	A-5084/2007	176806/661962 177189/662380	Ganor Compound, Area E (Peilstöcker and Burke 2009; see also Chapter 14)
Re'em, Gendelman	A-5170/2007	176775/662206 176863/662296	French Hospital (Hotel Eden Project) (Re'em 2010)
Haddad	A-5198/2007	176503/662194 176705/662545	Harbor Area (Haddad 2009a)
Talmi	A-5280/2007	177155/662529 177170/662549	Saray on Clock Tower Sq. (Talmi 2010)
Sion	A-5322/2007	177151/662565 177480/662743	Raziel St.
Arbel	A-5378/2008	176811/662313 177132/662577	HaTsorfim St.
Burke, Peilstöcker (UCLA-IAA)	G-35/2008	176676/662387 176768/662453	Qedumim Sq./Kaplan Area C (Burke and Peilstöcker 2009b)
Elisha, Re'em	A-5389/2008	176775/662206 176863/662296	French Hospital (cont.)

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Table 2.9. (cont.)

Excavator	License/Year	MR Coordinates	Location and Publications
Haddad	A-5365/2008	176649/661901 177257/662012	Yehuda Yamit St.
Barkan	A-5455/2008	177182/662196 177320/662329	Flea Market (cont.): Bet Eshel St.
Yekuel	A-5456/2008	177385/661924 177404/661984	Jerusalem Blvd.
Segal	A-5463/2008	177047/662222 177065/662266	Private construction at Rabbi Pinhas St.
Haddad	A-5514/2008	177312-661900 177341-661923	Yehuda Yamit St. (cont.) (Haddad 2010)
Re'em, Elisha	A-5522/2008	176775/662206 176863/662296	French Hospital (cont.)
Dagot	A-5537/2008	177316/661818 177322/661824	Dante Compound
Yekuel	A-5565/2008	177371/661915 177505/662954	Jerusalem Blvd. (cont.)
Arbel	A-5577/2009	176812/662315 177136/662575	HaTsorfim St (cont.)
Rauchberger	A-5590/2009	177394/662588 177410/662611	Post Compound (Rauchberger in press)
Haddad	A-5606/2009	176632/661898 177357/662013	Yehuda Yamit St. (cont.)
Rauchberger	A-5627/2009	177365/662674 177384/662620	Post Compound
Arbel	A-5634/2009	177252/661898 177356/661926	Yehuda Yamit St. (cont)
Segal	A-5640/2009	177177/662048 177389/662868	Oley Zion St. (East)/Oley Zion
Arbel	A-5651/2009	177016/662475 177132/662581	Qishle/Police Station (cont.) (Arbel and Talmi 2009)
Yekuel	A-5656/2009	177009/662268 177028/662338	Ganor Compound (Area E)
Elisha	A-5684/2009	176763/662207 176880/662313	French Hospital, within building
Rauchberger	A-5715/2009	177280/662552 177454/662699	Post Compound
Yekuel	A-5719/2009	177315/662603 177384/662648	Shomon Ben Shetah St. (Post Compound)
Burke, Peilstöcker (UCLA-IAA)	G-50/2009	176676/662387 176768/662453	Qedumim Sq./Kaplan Area C
Volinsky	A-5743/2009	176676/662387 176768/662453	Qedumim Sq./Kaplan Area C accompanying conservation work
Talmi	A-5744/2009	176775/662206 176863/662296	Tabitha School Compound (Yefet St.)

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Chapter 3

Cultural Heritage Management:

The Flea Market and Clock Tower Square Excavations

Moshe Ajami
Israel Antiquities Authority

The Ministry of Tourism made a plan to develop the industry in Israel by focusing on historical cities such as Jerusalem, ʻAkko, and Jaffa. As part of the implementation of this plan, intensive renovation and modernization work had to be carried out in Jaffa, particularly in the eastern and southeastern parts of the city known as the Clock Tower Square and Flea Market Complex (Peilstöcker et al. 2006) and subsequently in the area of the northern sea promenade and the harbor. Part of this refurbishment consisted of the replacement of drainage and water pipes, as well as telephone and electricity cables. In addition, numerous historical buildings had to be treated with conservation programs. The work was carried out by private firms under the oversight of the Jaffa Governance (Mishlama le-Yafo), a bureau of the municipality of Tel Aviv-Jaffa. This article illustrates the legislative work of the IAA in Jaffa in this project as a case study for the special requirements of urban archaeology in general (Peilstöcker 2007).

In Jaffa, the Tel Aviv bureau of the IAA has the statutory responsibility for the implementation of the Law of Antiquities (see Appendix 3.1).[1] Three regional offices—the Tel Aviv, Haifa, and Center bureaus—form the Central District of the IAA. Tel Aviv office archaeologist works with two subdistrict inspectors. The subdistrict of Rehovot covers the region south of Tel Aviv, whereas the Tel Aviv subdistrict comprises the city and its suburbs. In each subdistrict, a number of antiquities inspectors carry out archaeological investigations such as surveys and trial excavations. They also monitor development and construction work at archaeological sites in their regions. In addition, these inspectors serve as area supervisors in larger salvage excavations and direct small and midsize excavations. All the inspectors are professional archaeologists, and their authority is based on the regulations in the Law of Antiquities (see Appendix 3.1).

The IAA drafted a document defining policies concerning Jaffa that divides the area into three zones. The first zone is the ancient tell in the heart of the city. Policies regarding this zone are the strictest. The second zone is a buffer zone surrounding the ancient tell; policies for this zone are less strict. The third zone consists of the area that according to the Antiquities Law is identified as an archaeological site. Policies for this zone are identical to policies regarding archaeological areas as stated in the Antiquities Law (see Appendix 3.2 and Figure 3.1).

Excavations in the streets of Jaffa became necessary for the implementation of the above-mentioned replacement of infrastructure. Since Jaffa is an ancient city with continuous settlement for thousands of years, the IAA requested archaeological excavations in order to document all archaeological discoveries before proceeding with the infrastructure replacement. In certain cases, the original infrastructure plans had to be changed to protect findings of extraordinary importance or historical

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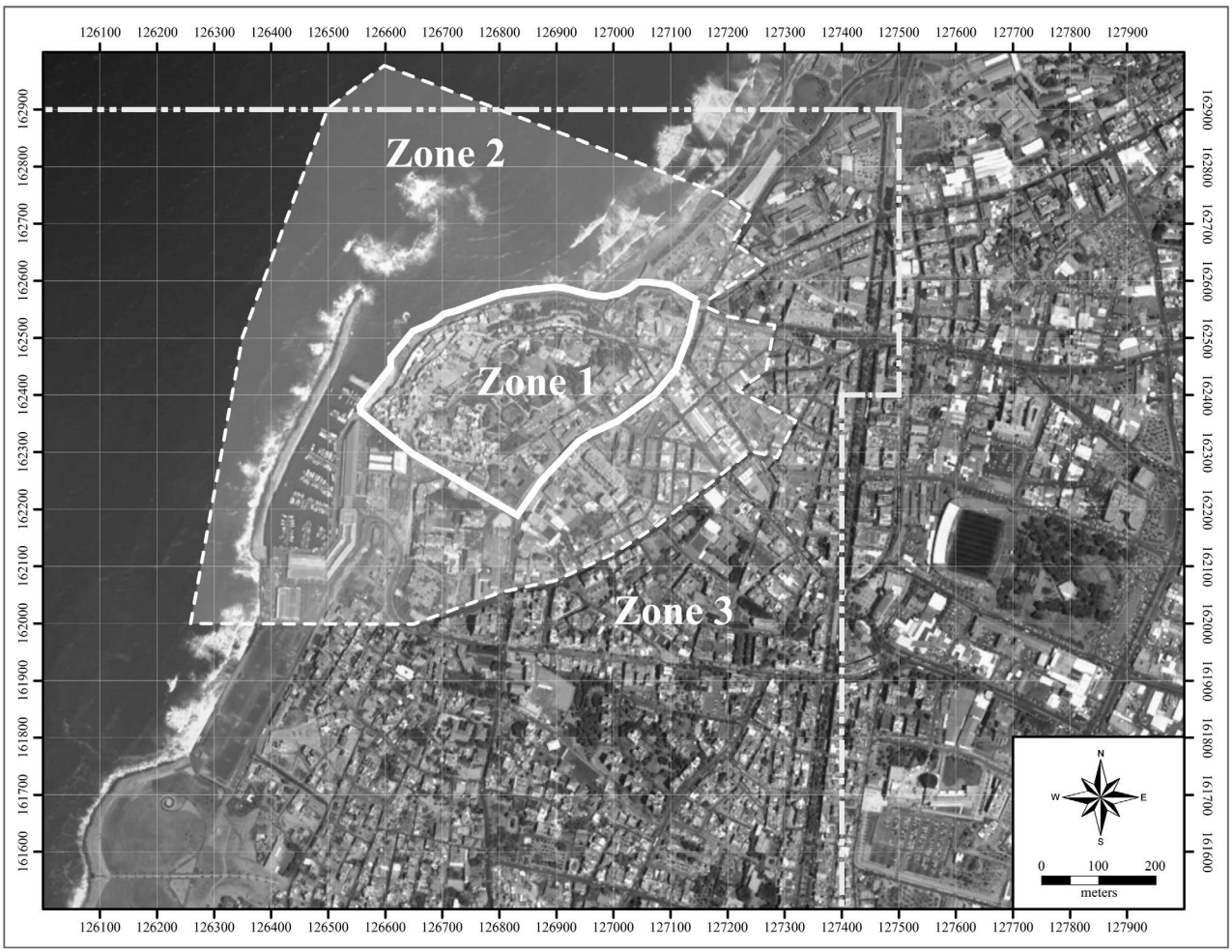

Figure 3.1. Satellite image showing archaeological zones of Jaffa. Zone 1 is the tell; Zone 2 represents a buffer zone around the tell; Zone 3 includes areas outside zones 1 and 2 to the east and south.

buildings. The IAA carried out archaeological excavations according to contracts signed with the Ministry of Tourism and the Jaffa Governance, indicating that the excavations were salvage excavations by definition (Braun 1992).

Preparations for Excavations

As a first step, representatives of the municipality notified residents and businesses in the proposed excavation areas about the beginning of the archaeological activities, traffic changes, and other restrictions necessary for the work of the IAA. Initially, people expressed their opposition to the planned project. However, in most cases, illustrating the benefits of the planned work helped gain their cooperation. After the municipality completed all the necessary preparations, an archaeologist started excavation work by removing the modern asphalt using mechanical tools. Further layers covering the archaeological deposits, to a large extent, were removed with mechanical tools as well.

At the same time, an IAA administrator prepared the area according to the logistical and safety needs of the excavation. These preparations included fencing, arrangements to remove excavated soil, shading in the summer, and "greenhouse" roofing for winter excavations. In particular, roofing excavation areas for the rainy season turned out to be problematic because the width of the excavation areas did not allow the use of standard equipment. In addition, the drainage had to be improved using PVC tubes and other equipment to prevent flooding of the excavation squares. All the preparation processes, as well as the excavations themselves, were overseen by a safety specialist, who provided the necessary advice to prevent endangering people or buildings during the excavation work.

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The Excavations and Problems during Fieldwork

For each salvage excavation carried out in Israel, an excavation license is issued in the name of the excavation director. This license is signed by the director of the IAA based on the recommendation of a licensing committee that has examined whether the archaeologist meets the requirements of the specific project. The excavation director and the district archaeologist then assemble an excavation team according to the requirements of the excavation and the available budget. The excavation team consists of professional archaeologists working as area supervisors and other specialists (such as surveyors, photographers, and anthropologists). Fieldwork itself is carried out by laborers. Work begins only after the team is complete and the excavation areas are ready. Although this process is mostly the same for all IAA excavations, some site-specific problems occurred during fieldwork in Jaffa.

The Merchants

The population of the project area consisted of a large number of tradesmen running small businesses. Many of these businesses suffered economically as a result of the excavations and the blocking of streets and traffic. More than once, the anger of the merchants resulted in harsh discussions with the archaeologists and even vandalism in a few instances. Usually a solution was found during meetings with representatives of the municipality and the merchants.

Narrow Streets and Existing Infrastructures

Since the excavations took place in a living city, the existing buildings dictated the width of the excavation squares. In most cases, the areas were narrow and did not allow excavations in the traditional 5-x-5-m grid. Existing cables, pipes, and tubes posed another problem. In many instances, these structures had to be protected and strengthened during fieldwork, limiting the excavation area even further.

Safety Problems

The depth of the excavations and problems caused by the surrounding environment presented the two most important safety concerns. In an attempt to understand the stratigraphy of the site, archaeologists often made the excavation trenches several meters deep to reach the earlier strata under hundreds of years of cultural remains. In an attempt to avoid collapse of the adjacent areas and not endanger existing buildings, they constructed supports and excavated stepped trenches, which further limited the excavated space.

Outside the excavation area, the curiosity of pedestrians endangered both the excavation workers and the pedestrians themselves, particularly in the summer when a large number of tourists attempted to enter the excavation areas. To avoid accidents, the archaeologists improved fencing and provided basic information concerning ongoing archaeological work. In areas closed to moving traffic, concrete barriers were put up to protect work and workers in the excavation.

Winter Excavations

Excavations during the rainy season placed additional pressure on the excavation staff. As mentioned above, staff needed to make preparations, such as installing roofing, to enable fieldwork that time of year. The excavation trenches were naturally the deepest spots in the area, and rainwater from the streets and the roofs of adjacent buildings flowed toward the excavation areas. In spite of all the preparations, in more than one instance, water penetrated excavated areas and needed to be pumped out. These events damaged the archaeological findings and delayed work. To minimize the damage, excavators tried to create one deeper spot in every area into which the water would flow.

Dump Removal

Archaeological excavations produce a large amount of refuse soil, which in many cases is used as backfill once the excavations are completed. In open areas, the spoil heap is frequently removed by trucks with minimal interference with ongoing excavations. In the narrow streets of Jaffa, the dump had to be collected in open containers, which were replaced by empty ones once they were full. Every delay in replacement, sometimes caused by traffic that did not allow dump trucks to approach the area, caused a halt in the excavations.

Tombs

In every historic city, excavations reveal human bones and tombs. According to Israeli law, imposed due to the pressure of politicians and religious circles, human bones are not defined as antiquities. This regulation poses problems on almost every excavation. When a tomb or a structure that could be a tomb is revealed, excavation work is stopped

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and a representative of the Ministry of Religious Affairs is informed. Since excavation of burials is not permitted, this representative then tries to find a solution concerning the intended development plan along with the owner of the plot or the initiator of the excavation that does not involve the excavation of the tombs. It is the legal right of this person to permit the IAA to excavate even against the will of the representative of the ministry, which for political reasons usually does not happen. In the case of the Jaffa project, the initiator, the Jaffa Governance, ordered the excavation of burials in some cases while stopping work after tombs were found in other cases. When tombs were excavated, the human remains were then entrusted to the Ministry of Religious Affairs for reinterment.

Post-Excavation Procedures

After the completion of documentation (plans, sections, photographs), the excavated areas were reopened to continue the necessary development work. In some cases, however, such as the discovery of a wine press in Oley Zion Street, archaeological findings were moved to a different location for public display. Then the excavated remains were covered using a thin layer of sand and CLSN, a concretelike material that allows excavation of narrow trenches for cables or tubes.

Conclusion

Despite all the obstacles described above, an enormous amount of archaeological information was generated by this project, attracting the attention of the research community in Israel and abroad. This success justifies the adoption of an approach that permits the excavation of as much material as possible, even under difficult conditions. Moreover, working processes developed during this project have since been applied to other excavations in Jaffa and other urban environments.

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Appendix 3.1: Law of Antiquities

The activities of the IAA are based on three laws and regulations:

1. The Antiquities Law of 1978
2. The IAA law from 1989
3. Antiquities statutes from 2000

The IAA is responsible for all the country's antiquities, including underwater finds. Thus the IAA is authorized to excavate, preserve, conserve, and administrate antiquities when necessary. The above-mentioned laws explain these responsibilities in a very detailed way. Concerning the work in Jaffa, some paragraphs, such as those dealing with the definition and declaration of antiquities sites, are of major importance:

> § 28 (Law of Antiquities): (a) The Director may declare a particular place to be an antiquity site. The declaration shall be published in Reshumot. (b) When the director declares as aforesaid, a note to such effect shall be entered in the Land Register and notice shall be given to the owner and the occupier of the place, if their identity or addresses are known, and to the District Planning and Building Commission.

Jaffa was already declared an antiquity site during the time of the British mandate. Subsequently, the State of Israel published this declaration again, so the various articles of the law, such as Section 29 of the Law of Antiquities, are imposed:

> § 29 (Law of Antiquities): (a) A person shall not carry out, or allow to be carried out, any of the following on an antiquity site, save with the written approval of the Director and in accordance with the conditions thereof: (1) building, paving, the erection of installations, quarrying, mining, drilling, flooding, the clearing away of stones, ploughing, planting, or interment; (2) the dumping of earth, manure, waste or refuse, including the dumping thereof on adjoining property; (3) any alteration, repair or addition to an antiquity located on the site; (4) the dismantling of an antiquity, the removal of part thereof or the shifting thereof; (5) writing, carving or painting; (6) the erection of buildings or walls on adjoining property; (7) any other operation designated by the Director in respect of a particular site.

The paragraph illustrates the power the IAA has to protect sites by not allowing the listed activities. The legislation also defines consequences for those not acting according to the law:

> § 31 (Law of Antiquities): A person who has carried out one of the operations specified in section 29 without approval or in contravention of the conditions of the approval, shall take action, in accordance with the directions of the Director, to restore the antiquity site of the antiquities situated thereon to its or their former condition; but the Director may, after giving the person written notice, himself take all the steps required for that purpose and recover from him the expenses incurred.

The rights and responsibilities are described in detail in the law of the IAA from 1989:

> § 5 (Law of the IAA): (b) The Authority may, with respect to the antiquities and sites, undertake any activity to discharge its functions, including (1) the uncovering and excavation of sites; (2) the preservation, restoration and development of sites; (3) the administration, maintenance and operation of sites and their supervision; (4) the preservation and restoration of antiquities; (5) establishing supervision over archaeological excavations; (6) the administration of the State's treasures for antiquities, their supervision and control; (7) setting in motion supervision with respect to offences under the Antiquities Law; (8) preparing archaeological investigations and furthering their progress; (9) preparing, administering and maintaining a scientific library of the archaeological history of Israel and her neighbors; (10) the centralization, documentation and cataloguing of archaeological data; (11) the establishment and advancement of educational activities in the field of archaeology; (12) the establishment of international, scientific contacts in the field of archaeology.

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Appendix 3.2: The Policy of the Israel Antiquities Authority for Jaffa

This document was formulated after consultations with institutions engaged at the site, in particular with the archaeological community active there. This document does not intend to interfere with the rights and responsibilities of the Israel Antiquities Authority (henceforth IAA) as defined in the Law of Antiquities from 1978 (henceforth the Law). Requests for construction or development that are presented to the director of the IAA will be dealt with case by case.

Background

The old city of Jaffa and its harbor, the tell with the remains of the biblical periods, and close-by neighborhoods are declared an antiquity site. Old Jaffa is a large and complicated site, including the historical city and the occupational and maritime remains of about 5,000 years. The reason for the importance of the city is its position at one of the branches of the old Via Maris and its function as a permanent station for maritime trade. A first settlement was founded in the Early Bronze Age (ca. 3400–2200 B.C.E.) and grew into a city in the Middle Bronze Age (ca. 2000–1550 B.C.E.). According to historical sources and the archaeological finds, the city flourished during the Late Bronze Age (ca. 1550–1200 B.C.E.). In this period, Jaffa was an administrative center of the Egyptian Empire. A fortress of this empire with a gate bearing an Egyptian inscription (Ramesses Gate) has been uncovered. In biblical texts, Jaffa is mentioned in the context of the import of timber for the temple in Jerusalem. In Iron Age I (ca. 1200–1000 B.C.E.), Jaffa was located in the territory of the Philistines; remains have been found in excavations at the tell, the Armenian Compound, and Mifratz Shlomo Street. During the Iron IIB–C (ca. 1000–586 B.C.E.) and during the Persian period, the settlement covered an area larger than the limits of the tell proper. In the Roman and Byzantine periods, the harbor was important for the trade of Jerusalem; during the Early Islamic period, the harbor served the city of Ramla and was used for the exchange of prisoners. In the Mamluk period, the city was destroyed, and only in the Ottoman period was the city reestablished.

Excavations

Large-scale excavations have been carried out on the summit of the tell and in the adjacent areas by different expeditions. A large area of excavations is located in Qedumim Square, where remains dating to the Roman and Hellenistic periods were uncovered. In the area known as Ramesses Gate Park, the remains date to the Early Bronze Age until the Persian period. In another area, remains of Middle Bronze Age fortifications have been excavated. The eastern slopes of the tell were investigated in 1995–1996 and again from 2003 to 2008; the remains found there cover a span of time from the Late Bronze Age until the Crusader period. In the area of the northeastern entrance to the harbor and within the Armenian Compound, remains of the Crusader and Ottoman seawall have been unearthed. South of the tell, a cemetery serving the inhabitants of Jaffa from the Late Bronze Age until the Byzantine period was found. In the area of harbor maritime surveys carried out due to renovation of the breakwater, sunken vessels have been found offshore.

Tel Yafo (Zone 1 on Figure 3.1)

A protected archaeological site. This area in the heart of the urban center of old Jaffa will be treated according to regulations of the IAA for the main archaeological tells. This means prohibition of every kind of excavation or interference in the existing compound except for archaeological excavations, conservation, and restoration works in consultation with the IAA and based on an approved plan by a professional conservator. In certain cases, construction of installations that serve the maintenance of the site will be allowed, as will public visits and other activities that benefit the inhabitants, as long as they do not disturb the antiquities and the uniqueness of the compound of Jaffa. All these activities require a permit issued by the director of the IAA, with the planned works described in detail.

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Buffer Zone (Zone 2 on Figure 3.1)

An area for archaeological investigations; the harbor and the seaside. In general, development and construction activities will not be allowed in this area, except in exceptional cases that will be evaluated by the director of the IAA.

Building Conservation

Any activity can be carried out only after plans have been approved by the director of the IAA. For each activity, a survey has to be carried out, and documentation has to define the value and level of planned interference. Conservation works have to promise the sustainability of the building in terms of shape and culture. Conservation must prevent any change in the present shape of buildings and must try to prevent decay. This means that additions and removal of later additions are forbidden without permission, except for consolidations that are necessary for conservation purposes or activities intended to reconstruct precisely the former site or building as it existed at an earlier time. Such activities can include the removal of parts that disturb the character of the building, the reconstruction of collapsed parts by using materials present at the site, and completion of elements that have been destroyed in the past.

Ruined Buildings; Buildings That Will Be Destroyed or May Collapse in the Future

In general, no new building will be erected on ruins of collapsed or destroyed buildings. In special cases in which a destroyed building can be reconstructed in accordance with the character of the buildings of the old city by keeping the general assemblage intact, reconstruction will be permitted. The building's dimensions and height will be decided according to the impact of the construction on the environment.

Addition of Buildings

Additional building construction for conservation will be permitted only after survey and documentation, including an evaluation of the impact of the addition on the building and issuance of a license from the IAA. The addition will be built according to the character of the antique building.

Horizontal Line and Height of Buildings

It is the intention of this policy to provide a legal framework limiting new construction to a height that keeps the traditional characteristics of the skyline and maintains the relationship between the heights of dwellings and characteristic points of the city and its vicinity. Each request for additions that will change the horizontal line requires a detailed survey and documentation to investigate the impact on the environment and to decide to what extent an addition will be allowed.

Area of the Declared Antiquities Site (Zone 3 on Figure 3.1)

In areas that are beyond the buffer zone, the developers have to fulfill the following:

1. Requests for construction and development have to be approved by the director of the IAA as defined by the Law for declared antiquity sites.
2. The IAA does not permit construction to a height that disturbs the existing landscape. Each request will be examined separately.

Issuing Permits for Development and Infrastructure Work

Work in the areas defined in this plan is not allowed except by permission of the director of the IAA, according to the Law.

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Note

1. The work of the IAA is based on two antiquities laws: from 1978 (Antiquities Law 1978) as well as from the IAA in 1989 (Antiquities Law 1989); see also Appendix 3.1. For the history of antiquities legislation in Palestine and Israel, see also Kersel and Kletter (2006).

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Chapter 4

Conservation Projects

Lilah Strul
Israel Antiquities Authority

In the mid-1870s, Jaffa's status as a fortified city was officially repealed (Kark 1990:34); the settlement began to grow beyond its traditional boundaries. The urban development and growth around the old core became especially visible along the roads leading out of the city. The new urban elements differed from the traditional and illustrate the diverse needs, restrictions, and economic interests of different groups, including local inhabitants, visitors, pilgrims, religious followers, artists, and others. Along the coast, for instance, north and south of the old city, domestic units were built on sandy soil that was unsuitable for agriculture. To the north these included Manshiyeh, and toward the south 'Ajami. Toward the northeast, a commercial area close to the former city gate developed into an area of markets, including a large square where three roads met. The first road led east toward Jerusalem and passed through the markets. On this road, called Bet Eshel Street, businesses were established, serving at first pilgrims on their way to Jerusalem. Along the road toward the northeast, leading toward Shechem, hotels were built. In the beginning of the twentieth century, a railroad line passed through town, connecting the railroad station with the port on what today is Raziel Street. The eastern border of the old city was formed by Yefet Street, which led south and was lined by institutional buildings including the French Hospital, churches, and schools.

Over the years, the urban embroidery outside the old city grew. From the beginning of the twentieth century, the developing urban structures absorbed technical and stylistic innovations and changed accordingly. At the same time, the old city was a dense conglomerate of stone buildings and narrow alleys. The English name of the old city—"city fortress" or "citadel"—conveys the dense, narrow, and strategic character of the old city, even though Jaffa is no longer fortified. The early twentieth century was the last peak of construction in the long history of Jaffa, which has been characterized by repetitive cycles of construction and destruction.

In 1936 British forces initiated a phase of destruction of the city that continued until after the foundation of the state of Israel. The first phase of this process was known as Operation Anchor (Gavish 1983). In April 1936, the Arab population initiated a strike, with the goal of bringing the economy to a standstill to pressure the mandatory government to stop Jewish immigration. The workers of the Jaffa port were among the first to go on strike, and they became a symbol for the Arab strike. Since the old city was so densely built up, it gave cover to its inhabitants and made it impossible to identify strikers involved in rioting or snipers who shot at British forces as they tried to enter old city neighborhoods. The inability to control the city led the mandate official in charge of

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this operation to conclude that the situation had to be changed in order to reopen the port and restore British control. In two stages, a plan would be implemented to force open two tracks through the city by demolishing buildings. The first track would lead east-west from the Qishle (Police Station) close to the French Hospital to the Latin Convent, while the second would run north-south from the Turkish prison at the northern entrance to the port through to the southern entrance tracing the topography. In June 1936, these plans were realized after short notice was given to the inhabitants. The action was given legal cover with the claim that it was intended to improve the infrastructure of the city. Dubbed Operation Anchor because of the signature of the demolition (Figure 4.1), the action divided the old city into three parts, with wide roads between them that enabled all kinds of vehicles to pass through the city.

Between 1949 and 1951, a number of buildings in Jaffa were destroyed (Kletter 2006:54–55; Paz 1998). In September 1949, the organized and intentional destruction of houses was initiated by the Jaffa Governance and the Custodian for Absentees' Property. The action was justified on a number of grounds. These included first, the need for security—namely, to prevent strikes by the remaining Arab population—and second, the need for public safety, specifically keeping immigrants from inhabiting abandoned and damaged buildings that were unfit for occupation. The third need was related to sanitation and problems associated with the municipality providing necessary services. Finally, there was the opportunity to clear the area and to develop the neighborhoods between Tel Aviv to the north and the suburbs to the south, such as Holon and Bat Yam.

Shemuel Yeivin of the Antiquities Department (later IDAM) and Eliezer Brutzkus of the Planning Department got involved, which led to several investigations of the ongoing destruction by different committees. The investigations slowed down the destructive processes until 1951. In addition, after protests led by residents, among them artists inhabiting buildings in the city of Jaffa, the decision was made to conserve parts of the old city and to establish a committee to divide the properties among artists, who would use them for community purposes and to permit them to be restored. The center of the city was destroyed; the upper mound (the al-Qal'ah area) and the northern and western slopes turned into empty areas, except for some single buildings. The period from 1875 until the beginning of the 1950s ended, after two major phases of destruction, in a situation in which large portions of the city were turned into open areas.

Figure 4.1. Aerial photograph (1936) showing the effects of Operation Anchor. *Photo courtesy of Israel Antiquities Authority.*

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The Intermediate Period (1950s–1980s)

The intermediate period could also be called the period of "freezing and neglecting," during which the city stepped down from institutional agendas. In April 1950, Jaffa was absorbed by Tel Aviv and became the southern part of the city of Tel Aviv-Jaffa. An "Outline Plan" prohibited any possibility of construction and development in "old Jaffa." The plan, which was developed within the milieu of events of the late 1940s and early 1950s, reflected the extent of knowledge of the historical and architectural-cultural importance of Jaffa. For this reason, with regard to everything concerning the old city, the plan asked for the involvement of institutions that would examine the situation with a wider perspective than that of the inhabitants.

After consolidation of the remains of the traditional buildings that had been abandoned, they were reinhabited. Some archaeological excavations were undertaken (Bowman et al. 1955; see also Chapter 2), open areas were treated, and the city fell into hibernation until the mid-1990s. In the modern parts of the city, the urban complex continued to expand, particularly toward the south, where housing complexes, neighborhoods, and several tall buildings were constructed. The area outside the medieval walls continued to function in part as a market (Ar. *suq*). However, this entire area was characterized by neglected and deserted buildings, including the Greek Suq and buildings along Bet Eshel, Raziel, and Yefet streets.

In 1956 the Taba[1] 606 Plan, with correction number one, was adopted for Outline Plan 479, including most of the old city, approximating 17 ha. The areas that had survived destruction were defined as architectural reservations. The plan established the following: first, the old city was designated to accommodate artist workshops, galleries, and apartments; museums; an "Eastern bazaar"; handicraft workshops; antiques and souvenirs shops; clubs; and restaurants. As it concerned the management of buildings, the following activities were not permissible within this area: except for the necessary maintenance work to conserve buildings, neither construction, plastering, flooring, painting, nor the installation of lighting was permitted, unless approved by the Special Professional Committee, which included representatives of the Local Committee, the Department for Planning in the Ministry of Interior, and the IDAM. The empty area on top of the mound was defined as an area for archaeological excavations. Most of the empty areas on the slope were defined as an open public/private area. Plan 606 restricted construction, building, and inhabitation of the area almost entirely. In addition, by creating the Special Professional Committee, the plan imposed inspection and supervision requirements on all construction activity within this area. Most of the open areas were dedicated to archaeological exploration, with smaller parts left for public gardens and the like.

These proscriptions suggest that this plan was intended to reverse the destruction that had occurred during previous decades. This situation permits, therefore, not only consideration of the processes that have occurred but also preparation for future efforts to restore the city. The plan also reveals the extent of concern for Jaffa's landscape, the will to investigate the site's past, and, above all, the acknowledgement of the broad and diverse cultural heritage of Jaffa. For this reason, the plan stipulated the consultation of professional specialists from outside the local administration.

During this period, a number of positive developments occurred. Archaeological excavations on the top of the mound were directed by Jacob Kaplan (from 1955 to 1974; see also Chapter 2). The extraordinary finds and areas of excavation were later conserved and developed into public attractions, which include the Ramesses Gate (Figure 4.2). Efforts were made to preserve its mudbrick architecture and to erect a replica of the door frame, which bears an inscription found during the excavations (Levy 1999). The surrounding area was also developed as part of the archaeological park. In Qedumim Square, remains dating to the Roman period were roofed over and turned into an underground visitor's center for tourists (Brand 1994). The center showcases finds from the site made by Kaplan, and an audiovisual presentation explains the finds. The roof of this complex and the open space outside are used today as a venue for public events, including concerts (Figure 4.3). Along Razif Ha-'Aliyah Ha-Sheniya Street, which forms the northern entrance of the port, the remains of the seawalls were found during various excavations (Peilstöcker and Priel 2000). Their traces can be seen along the street. They are also designated by black cobblestones along the gray cobblestone street; signs along the quay explain the finds (Figure 4.4).

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Figure 4.2. Ramesses Gate excavation area in 2007. View to the northwest. *Photo by Aaron Burke.*

Figure 4.3. Aerial view of Qedumim Square. View to southwest of stage above the visitor's center; St. Peter's Church in foreground. *Photo by Sky View, courtesy of the Israel Antiquities Authority.*

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Figure 4.4. Photo showing path of the north seawall. From the foreground, it is designated with lighter stone along the sidewalk and surface of Razif Ha-'Aliyah Ha-Sheniya Street. View to the southwest. *Photo by Aaron Burke*

Single buildings in the old city were also conserved, including parts of the old Demiani Soap Factory, which was converted into the Jaffa Museum in 1961 (Kaplan 1962); its lower level continues to be used by an Arabic-Hebrew theater troupe. The Latin Convent in St. Peter's Church was also renovated. Two buildings along Mifratz Shlomo Street were turned into restaurants, including the well-known Abulafia and Aladin restaurants. Nightclubs were established in a number of buildings. In the 1960s and 1970s, they were the center of nightlife in Tel Aviv-Jaffa. These clubs include Khalif on HaTsorfim Street, Ariana on Roslan Street, and the club in Bet November on Yefet Street.

The intermediate period was characterized by the consolidation of the old city's buildings, but a systematic program for their conservation was missing, which became obvious as the social, economic, and physical condition of the city deteriorated. The city became a conglomerate of different ethnic groups with varied religious practices and ways of life. The inhabitants belonged to different socioeconomic levels. The city contained a variety of complexes, monumental buildings, construction styles, and areas with varied functions, such as the port, the old city, neighborhoods, farms, markets, and boulevards—all adding fragrances, colors, and tastes to Jaffa's cultural mosaic.

The overall situation was multifaceted and difficult to comprehend. Since efforts by the municipality primarily concentrated on rapidly growing Tel Aviv, Jaffa was left to its own devices. During these years, municipal neglect became apparent through indicators such as decreasing public safety (e.g., increasing crime, drug sales and use, and prostitution), high unemployment, and the deterioration of many of Jaffa's buildings and monuments, including the abandonment, collapse, and dismantling of buildings, especially in the market area.

Jaffa's Revival (Late 1990s)

A process of urban renewal began in the late 1990s as interest grew in Jaffa's development as a residential area. As a result, individuals invested in and renovated a number of residential buildings, in particular in the 'Ajami neighborhood. In the years since then, public interest in the area has progressively increased. Real estate projects have been developed, and a number of existing buildings have been restored and renovated. The most prominent projects are the large-scale construction of housing units close to the old city; these buildings are relatively large compared to existing complexes.

Examples of large-scale construction in Jaffa include Andromeda, the Israel Experience, and the Ganor Compound. Andromeda Hill is a gated housing complex on the western slope south of the old city. It includes approximately 100 luxury apartments in two main buildings. In archaeological salvage excavations that preceded the construction, parts of a large cemetery dating mainly to the Byzantine period were investigated (Avner-Levi 1998). The Israel Experience is also a gated housing complex. It is on the north side of Pasteur Street, close to the former French Hospital. Approximately 30 luxurious apartments were constructed there after salvage excavations revealed the Crusader ditch surrounding the city and signs of Napoleon Bonaparte's campaign against Jaffa (Barshad 2000). The Ganor Compound, a housing project on the east side of Yefet Street, was a two-phase project preceded by salvage excavations (Figure 4.5). The first stage consisted of approximately 120 well-appointed

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Figure 4.5. Aerial view of Ganor Compound excavations in 2007. *Photo by Sky View, courtesy of the Israel Antiquities Authority.*

Figure 4.6. Aerial view of the Armenian Compound to the southwest. *Photo by Sky View, courtesy of the Israel Antiquities Authority.*

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apartments. Salvage excavations conducted in advance of building for this complex revealed remains dating from the Late Bronze Age through the Ottoman period (Peilstöcker 1998; 2000a). Excavations in the Ganor Compound were resumed in 2007 in advance of the final stage of construction in this area (see Chapter 14).

The renovation of buildings can be observed in particular in the 'Ajami neighborhood south of the old city. Here wealthy individuals bought, renovated, and enlarged buildings. Occasionally smaller, new buildings were added. Projects of this type have included Nicanor Gates, Yafo Talal, and the Arches Building. Nicanor Gates, a residence on the corner of Zedef Street, consisted of the consolidation of an old building and an additional building. Yafo Talal, on the corner of Yehuda Yamit and Yehuda MeRaguza streets, featured the consolidation of an existing building, remodeling of the ground floors into shops, and the addition of a new story with apartments. Two nearby housing complexes at the corner of Yehuda MeRaguza and Dror streets and Street 3021 were also renovated. The Arches Building on Rabbi Pinhas Street was consolidated and enlarged, and three residential stories were added. Archaeological excavations revealed remains dating to the Crusader period (Martin Peilstöcker, personal communication, 2007).

In the Ramesses Gate area, Ze'ev Herzog resumed archaeological excavations during two short seasons in 1997 and 1999, although without any conservation plan other than attempts to protect several features with reconstructed mudbricks. In the old city, planning and preparations for the conservation of buildings and additional construction of high-class apartments have recently started at the Armenian Compound (Figure 4.6) and Casa Nova. The manpower of the OJDC was enlarged to enforce Taba 606 (discussed above), and the Tel Aviv-Jaffa municipality established the Jaffa Governance to oversee development of Jaffa, except the area of the old city proper (the archaeological park).

The revival of Jaffa that began during the late 1990s is slowly having a distinct effect upon the city. The construction of large housing complexes has awakened public interest in Jaffa and increased real estate values. This trend has received expression in the appearance of renovated buildings and new construction initiatives of varying sizes throughout the entire city, but in particular around the old city, with this construction getting ever closer to the old city. Various institutions and the municipal authorities continue to initiate projects to support the city's growth and development, and it appears that the speed of this process is accelerating. The foreign architectural types that have been introduced with these new building complexes appear completely alien to Jaffa's original mosaic. They create "dark patches" that are concealed from the existing urban fabric, hidden from the inhabitants of the city yet projecting above the skyline because of their size. Despite being so conspicuous, these new buildings are largely shut off from the life of the original city and do not even contribute to the city's economic and social vitality with services such as shops, kindergartens, or clinics.

Jaffa in the New Millennium

In the twenty-first century, Jaffa entered a new period of consolidation and construction that is obvious both on the public and private levels. The municipality, with the help of Jaffa Governance, acts energetically to grant building permits, promote construction, and even assist with the clearing of old buildings and the opening of plots for construction. The construction of housing complexes continues with the cleaning and planning of complexes and the consolidation and conservation of empty properties. In 2000, for example, the municipality of Tel Aviv-Jaffa, represented by Jaffa Governance, and the Israel Government Tourist Cooperation (Ministry of Tourism) began the operational stage of a master plan, first prepared in 1997, to develop tourism in Jaffa. From 2001 to 2005, a plan for its implementation was established; the plan included surveys, development work, and conservation in the area of the Flea Market and Clock Tower Square. In 2007 the IAA formulated a document defining its policy for Jaffa, dividing the site into a core zone, a buffer zone, and the periphery (see Chapter 3), and the JCHP was established. Today OJDC continues to work on a new plan to replace Taba 606, with the aim of making additional construction possible.

Smaller projects, which are the products of private initiatives, are also to be seen around the city (Figure 4.7). Since 2000 a number of restoration efforts have been undertaken outside the lines of the old city. In 2000 a program was initiated to return Clock Tower Square to the character of its early-twentieth-century Ottoman construction. The Clock Tower itself was consolidated, the stones were cleaned, the clock was repaired, glass elements were replaced, and the original bell was reinstalled (Figure 4.8). The remaining parts of the Saray

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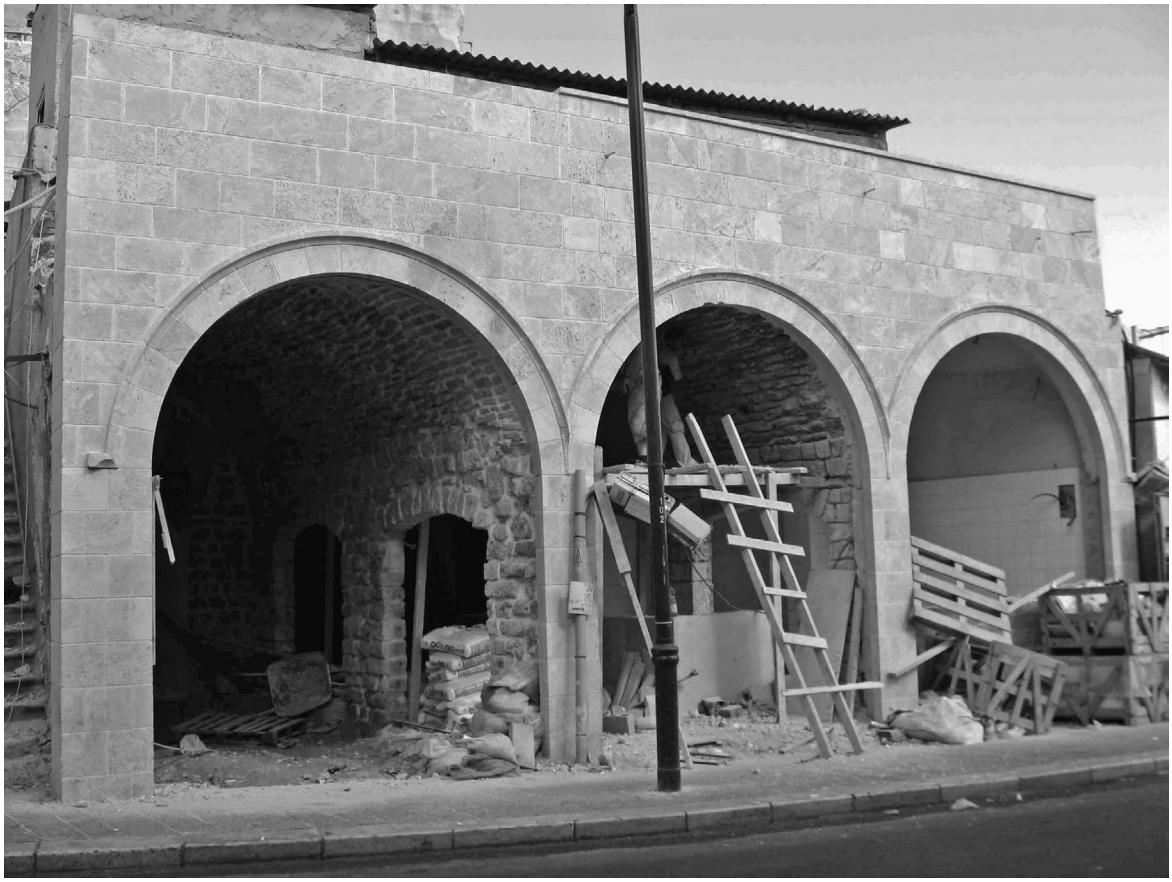

Figure 4.7. Renovation of the facade of a storefront across from Abulafia bakery in 2007. *Photo by Aaron Burke.*

Figure 4.8. Clock Tower and Saray in 2007 following renovations. *Photo by Aaron Burke.*

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(government building), which survived an explosion in January 1948, were consolidated. The front facade was partly reconstructed. In the adjacent building (the so-called Governor's House or *saray*), renovation began and will be completed by the Turkish Embassy, which will use the building as a cultural institute (Figure 4.9). The facades of the buildings around the Clock Tower were standardized and cleared of cables and wires, the stones were cleaned, and the infrastructure was replaced as well. Starting in 2001, work to upgrade the areas outside the old city began in the Flea Market. Infrastructure was replaced, and building facades were cleared of external cables, signs, and other elements. The street cobbles were replaced and unified, and signs were standardized. Some of the work here remains incomplete and continues today.

Efforts have also been made to restore a number of individual buildings. The grounds of the hotel on Bet Eshel Street were excavated in 1995, and archaeological remains dating to the Byzantine and Crusader periods were revealed (Peilstöcker 2000b). The existing building was turned into a hotel after consolidation and conservation work. Because of the archaeological remains, the development plans were altered; the remains were placed under a glass floor so they could be viewed by visitors in the hotel lobby. The building at Khan Manuly, located on Bet Eshel Street, is scheduled to undergo consolidation and conservation work so that it may be converted into new residential units. The roofs of several empty buildings owned by the Amidar Company have been repaired to address safety concerns. Among the more prominent of these buildings are those located in the HaTsorfim Compound on Yefet Street. Restoration work has also been undertaken within the old city. During the summer of 2007, Jaffa Governance, on behalf of the Tel Aviv-Jaffa municipality, initiated a conservation program in the port, similar in nature to the work carried out in the Flea Market and in Clock Tower Square.

For a number of projects, conservation plans have been formulated. These plans are primarily ordered by private investors as part of their renovation efforts. They usually include a survey of the building, a description of its condition and state of preservation, and suggestions for its development. This process is under way at the Khalif Compound,[2] the Old Saray,[3] the Ha-'Aliyah Ha-Sheniyah port,[4] Clock Tower Square,[5] Amiad Street number 1,[6]

Figure 4.9. Ottoman Saray on Clock Tower Square in 2007. View to southeast. *Photo by Aaron Burke.*

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the Armenian Compound,[7] the Khan Manuly,[8] and elsewhere.

A number of individual buildings and compounds have also come under renovation. Mifratz Shlomo 7 features consolidation and reconstruction of a building that was intended to be used as a café, but the owners have received permission for a residential unit. The Khalif Compound Club has been granted permission to function as a venue and bar following conservation work. The amphitheater, situated on the northern slope of the tell, is an open-air theater established in the 1970s. In 2007 and 2008, it was renovated, with a widening of the stage and installation of lightning (Figure 4.10).

The largest part of the Armenian Compound, located on the northwestern part of the mound of Jaffa, was leased for 100 years to a private investor (Figure 4.6). The building was consolidated and renovated; two stories and additional branches were added to accommodate luxury apartments. During archaeological excavations performed in the complex, the city's seawall was exposed among other remains (Volinsky and Arbel in press). The old French Hospital and the former Police Station (Qishle) are both being renovated as boutique hotels, and archaeological excavations were initiated in 2007 in both locations—within the French Hospital under the direction of Amit Re'em, and those in the Qishle directed by Yoav Arbel (Arbel 2009).

In addition to these, salvage excavations were undertaken in the port area by Elie Haddad and in 2008 along HaTsorfim Street by Yoav Arbel. The OJDC has also attempted to undertake projects within the restrictions imposed by Taba 606. Examples include renovations of the open-air theater, identification of buildings and monuments for reconstruction for future use, development of the Qedumim Square visitor's center, and the establishment of a new *taba* for Jaffa.

The large housing projects and tourist projects have brought a boom in conservation and construction activities, with remarkable results in areas such as Clock Tower Square, the Flea Market, the port, and the 'Ajami neighborhood. The tourism development plan has resulted in an infrastructure upgrade to Jaffa's streets. The refurbishment of the Clock Tower has slowly brought about a treatment of the surrounding area, with the re-creation of

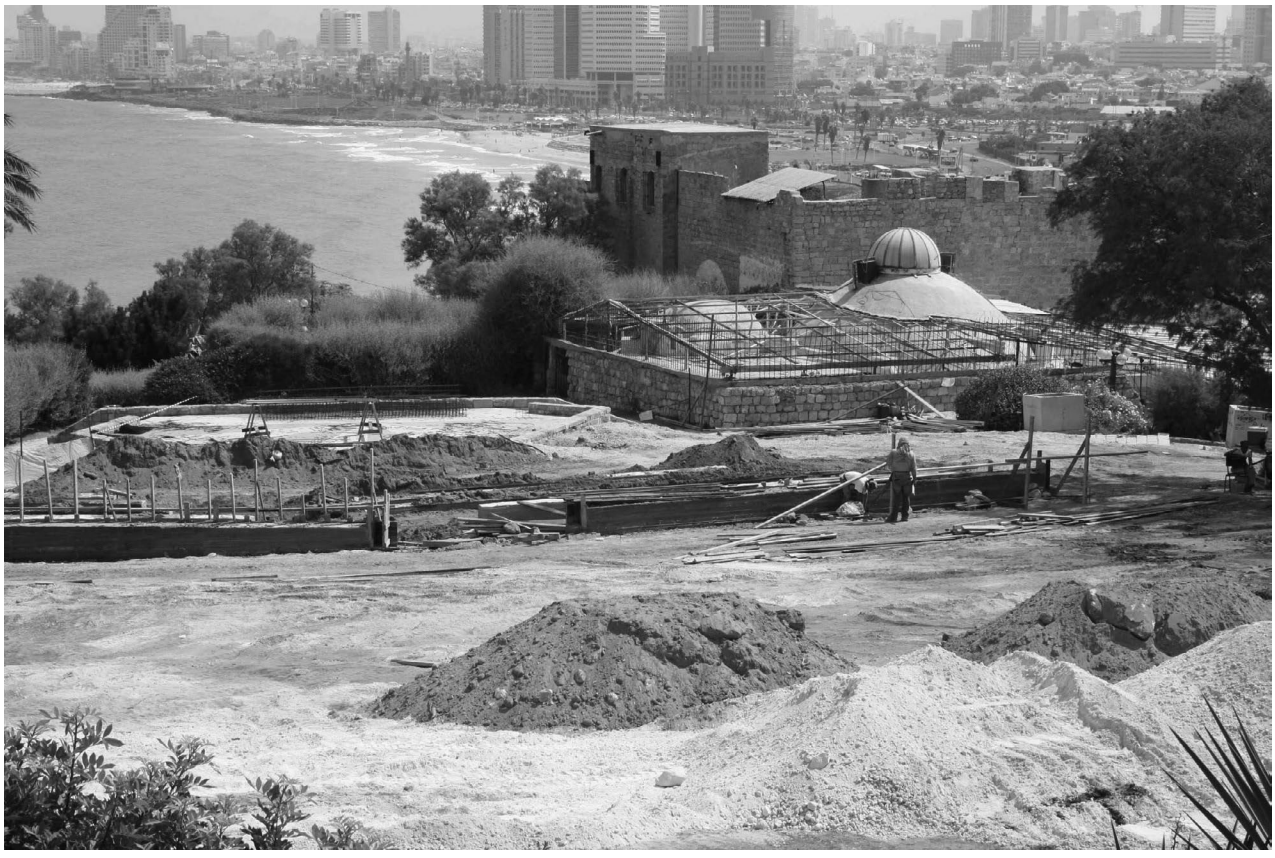

Figure 4.10. Renovation of the outdoor amphitheater in 2007.

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a traffic circle and the opening of shops in its vicinity. A number of monumental buildings have received conservation treatment and will be inhabited in the near future. The seafront has also been cleaned and will be converted into a park, even though the sea promenade already connects with Tel Aviv's promenade.

The values and advantages of a site like Jaffa are clear. Its proximity to the sea, its low skyline, and a process of urban renewal have all attracted real estate investment in Jaffa. It seems, therefore, that everything from building, restoration, conservation, and alterations to the clearing, enlarging, and developing of properties is the result of efforts to generate profit.

Urban Archaeology

Since 2000 numerous archaeological excavations have been carried out in Jaffa as part of large-scale projects, enriching our knowledge of the city during different periods. Archaeology alone arouses public interest; it also stimulates interest in the process of urban renewal. That archaeology plays an important role is evident in the questions that face Jaffa during its urban renewal. Should the municipal institution that issues permits be required to consider archaeological expertise in conservation plans? How can archaeological finds revealed on private property be preserved, developed, and presented to the public?

Discrepancies between all the parties involved in the remodeling of the Armenian Compound—including the owners, the municipality, and the IAA—illustrate the extent of the problem and the potential for development throughout the old city and its vicinity. Since this project, two more remodeling projects—the Qishle and French Hospital projects discussed above—have been prepared and submitted. In each of these three cases, important and impressive monuments that shed new light on the history of Jaffa have been found. They also bear potential for public exhibitions that could play an important role in strengthening public awareness of Jaffa's past.

The situation, similar to the case of the Hotel Bet Eshel (see above), imposes a significant challenge to investors and planners and calls for imagination, flexibility, and foresight. For example, local authorities must have a great amount of flexibility and creativity to absorb the costs of these developments. Likewise, the IAA and JCHP will need to remain flexible to enable a combination of archaeology and development. Is it possible to integrate archaeology into Jaffa's mosaic? The answer is yes, although this process will require a means of dealing with the findings and incorporating them into ongoing development plans.

Epilogue

Jaffa's urban mosaic is the result of a balanced arrangement between the many parties involved: different ethnicities, religions, functions, styles, tastes, smells, habits, and colors. This balance, which grew organically, continues to develop in the years since the city expanded beyond its walls. In the last 10 years, the situation in Jaffa has changed dramatically as the economic potential of the site is recognized. Thus the pace of development increases.

While this work has brought diverse activities, such as development of the sea promenade, cleaning of the site, renewal of its infrastructure, conservation and restoration of buildings and complexes, development of public areas, and new construction, the situation must also be viewed through the eyes of Jaffa's inhabitants. This process is characterized, unfortunately, by a lack of community involvement and cultural integration. For instance, new developments enter as foreign elements that threaten the balance of Jaffa's mosaic. Investors' interest in the city naturally results in a change of the city's character. On the one hand, it seems possible that with the time, the newly renovated compounds and remodeled buildings can be integrated into Jaffa's mosaic, once its inhabitants have become accustomed to them. On the other hand, it is quite possible that this process will result in the loss of Jaffa's most important resource, its native diversity.

Notes

1. *Taba* is Hebrew for "municipal building plan."
2. IAA Conservation Department plan.
3. IAA Conservation Department plan.
4. Plan produced by Eyal Ziv and Eitan Eden.
5. Plan produced by Eyal Ziv.
6. IAA Conservation Department plan.
7. IAA Conservation Department plan.
8. Plan produced by Eyal Ziv.

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Chapter 5

Archaeology and Geographic Information Systems Analysis

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Jaffa is one of the few sites on the Levantine coast that has an almost continuous occupational history from the Bronze Age through the modern era. The unique status of Jaffa as an urban archaeological site is highlighted when the city is compared to other coastal sites with long histories of occupation. For example, Ashkelon witnessed occupation as late as the Crusader period until its destruction in 1270 C.E. by the Mamluk sultan Baybars. The modern town is situated to the north and east of the ancient mound. 'Akko also evinces a disjunction between the ancient site and the modern town, since its Hellenistic occupants moved the city from the tell to the coast. Although Dor was a principal port during its heyday, no modern city overlies the ancient site. One of the few comparable sites on the southern Levantine coast south of the Carmel ridge is Gaza, but the lack of available archaeological data makes any analogy problematic.

A drawback to a site with almost continual occupation such as Jaffa is the lack of preservation for material culture and architecture older than the Ottoman period. Reuse of architectural materials, and construction projects that leveled previous buildings and layers to bedrock, such as those undertaken in the Persian and Hellenistic periods, left few remains from the Bronze and Iron Ages in situ. Further, archaeological excavations have been limited to the area exposed by Operation Anchor, conducted by the British in the 1930s, and narrow exposures in areas under development such as streets and the city market. Even though the plans are fragmentary, the layout and extent of the city can be proposed. GIS provides a digital environment in which to organize the various data diachronically and presents windows into Jaffa's past expansion and contraction through the millennia of occupation.

Plans and Goals

In 2007 the JHCP initiated the development of a geodatabase of Jaffa that integrates modern municipality data with information from excavations since the 1950s, various historical maps dating from 1799 and later, and various other datasets (see Chapter 13 and below). While larger regional projects, such as those associated with the sites of Megiddo and Beth-Shean, have published GIS components to their respective archaeological missions, the JCHP geodatabase seeks a unique approach by focusing not only on the urban center of Jaffa but also on its broader maritime setting on the coastal plain. The JCHP GIS project is not unique in its goals, since similar projects are currently under way for the sites of 'Akko and Jerusalem.

This subproject of the JCHP has five main goals. First, this geodatabase is a means of digitally preserving and presenting the archaeology and history of Jaffa, as expressed by GIS data. Historic maps and plans from previous

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excavations have been digitized as a way of curating the information contained on those sheets. The resulting GIS data can then be disseminated through OCHRE or other electronic means to interested parties who would not otherwise be able to access this data for Jaffa. Second, the GIS will provide a basis for conservation and planning. By examining georectified historical maps compared to modern civil CAD data, previous occupation on areas of the tell scheduled for excavation can be easily identified, as well as areas that should be conserved under the Law of Antiquities (see Chapter 3 and Appendix 3.1). In this manner, the JCHP GIS project is similar to cultural resource management projects proposed for other urban centers such as Vienna (Börner 2001) or Odense, Denmark (Zinglersen 2004). Third, the integration of datasets from excavations, historical maps, and modern civil layouts permits an assessment of continuity and change within Jaffa's urban environment and possible identification of factors influencing decisions in urban planning. For example, strongholds in Jaffa were near the central southern part of the tell in the Late Bronze and Hasmonean periods. During the Crusades, a fortress was built toward the northern part of the tell in view of the sea; it is labeled a castle on a 1799 French, an 1843 British, and an 1880 German map. In the late nineteenth century, the medieval citadel was incorporated into St. Peter's Church, and the principal "fortress" of Jaffa was located on the site of the Ottoman Qishle near Clock Tower Square (for recent work, see Arbel 2009), which also served as a Mandate-period and Israeli police station (see "Case Studies," below). Fourth, Jaffa's hinterland will also be included in the geodatabase, thus facilitating broader investigations into the settlement pattern of sites around Jaffa during various time periods, routes leading to Jaffa, and the land use and carrying capacity for the surrounding agricultural plots. In this manner, the evolution of the city and its expansion and contraction throughout history can be compared to activities of smaller market centers and villages that interacted with the commercial port of Jaffa. Finally, the JCHP geodatabase will provide the means to perform whatever intrasite and intersite spatial analyses researchers may require within the constraints of the data (Conolly and Lake 2006:149–186; see also below). The end product of the JCHP GIS should be an ever-growing and -expanding geodatabase incorporating various datasets from various disciplines that will serve as a tool for analytical and predictive research and

Figure 5.1. Satellite image of Jaffa. *Google Earth.*

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a means to disseminate spatial information about Jaffa's past to scholars and the interested public.

Data Sources

Before any data could be imported into the geodatabase, available spatial data that could provide useful information about the city's extent, its architecture and history, various streets and paths within the city, and routes leading to other urban centers were assessed. Following Conolly and Lake (Conolly and Lake 2006:61), this data can be divided into the subcategories of primary and secondary data. Primary data refers to information gathered in the field that can be directly integrated into a geodatabase, usually without processing. These data types include survey and excavation data collected with a Total Station Theodolite (TST), a handheld GPS device, and remote sensing images such as aerial or satellite photography. Information that has already been processed and interpreted in the form of georectified and digitized paper maps is secondary data.

The primary data for the JCHP geodatabase includes aerial imagery such as photographs taken since World War I. The potential of these photographs lies in examining the urban development of Jaffa since 1918, especially during Operation Anchor, which impacted development on the tell (see Figure 4.1). Satellite imagery such as SPOT, LANDSAT, and Quickbird images are more useful for analysis of Jaffa's hinterland, although urbanization since the beginning of the twentieth century greatly diminishes their utility (Figure 5.1). Recent excavations have utilized TST data combined with digital drawings of architectural features stored as CAD polylines that GIS software can manage without modification. Also, a city plan of Jaffa, drawn during the British mandate and updated during the early years of the state of Israel, was provided by the municipality of Tel Aviv-Jaffa in CAD format and formed the basis by which the historical maps were georectified. Data files created from published archaeological surveys are also incorporated into the JCHP geodatabase to provide a more holistic picture of Jaffa's hinterland. Additionally, oblique or horizontal photographs from recent excavations, while not a true layer of data for potential analysis, can be included as linked images.

The secondary data consists of paper maps that have been georeferenced and digitized as polygons, polylines, or points. Geologic information from soil and geomorphologic maps, produced by the Survey of Israel, serve as a base layer for any analysis of Jaffa's environmental situation. The lithology and soil types were digitized as polygons that could also be converted to raster information by the GIS software for spatial analyses. In addition to the terrestrial maps, the bathymetry of Jaffa's coastline is presented on a French map of soundings from the 1799 campaign and a British map from the nineteenth century. Watercourses and drainages within the area surrounding Jaffa were also digitized as vector polylines from Survey of Israel topographic maps, and the extent of wetlands that have since been drained was acquired by tracing their boundaries from historic maps such as the Survey of Western Palestine and a French military map of 1799 drawn by Pierre Jacotin. The JCHP geodatabase also stores information from older excavations in Jaffa by Jacob Kaplan. This data is derived from top plans of Kaplan's excavation areas on the tell dated between 1955 and 1974 (see below).

Historical maps afford the opportunity to assess the change in the urban layout of Jaffa from the early nineteenth century through the mid-twentieth century. Georectification of the historical maps was based on the modern municipality layout of Tel Aviv-Jaffa in CAD format aligned to the Old Israel Grid (OIG). Since this coordinate system is a recognized standard, all historical maps and archaeological plans were imported and rectified to this grid within the GIS. Whenever possible, every attempt was made to rectify the historical maps according to landmarks and features common between each map and the modern civil layout of Jaffa. The 1970 plan of Jaffa by Sapir (see Figure 13.14) was the first map georectified in the GIS. Because it is an amalgamation of the mid-twentieth-century civil layout and the nineteenth-century fortifications, this map provided key points for georectifying earlier maps, since the streets and buildings of Jaffa had changed due to Ottoman, British, and Israeli building activities. Although the 1880 Baedeker "Plan von Jāfa" may seem largely schematic (see Figure 13.18), the usefulness of this map lies in its presentation of several labeled architectural features and the street layout, which includes blind alleyways. Like the 1970 Sapir map, the Baedeker diagram of the city provides useful points, such as the mosque and water fountain near the main gate and the "Alt Fort" that helped nuance the georectification of older maps. One of the most accurate nineteenth-century

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maps is a ground plan of Jaffa's fortifications prepared by the British engineer Lieutenant Skyring in 1842 and published in 1843 (see Figure 13.13). Combining vertical plans with horizontal sections, this map was also rectified using known points in the cityscape. It provides the identification of paths outside the city, such as a track that would later become Yefet Street (see below) and roads leading away from Jaffa to 'Akko, Ramla and Jerusalem, and Gaza. The georectification of the maps detailing Bonaparte's 1799 campaign drawn by the French surveyor Pierre Jacotin presented a number of difficulties, since the plan of the city is largely schematic (see Figure 13.1). It must be noted that these maps were not intended to be an accurate survey of the city as was Jacotin's plan of Cairo. Instead, the cartographer intended to show the position and movements of French forces during the siege of Jaffa in March 1799. Despite the inaccuracies, these maps prove useful in illustrating the topography of Jaffa and its hinterland, including the "Chateau" and a swampy area to the south labeled "flaque d'eau" that may have been the ancient port (see Hanauer 1903 and Chapter 6). In sum, primary and secondary GIS data are integrated into the geodatabase as a means of performing spatial analyses and cultural resource management, and the potential exists that even more diverse types of data will be added to the JCHP geodatabase in the future.

Kaplan's Excavations and GIS

Integration of previous excavations with recent excavations and historical maps was made possible by georectifying the plans from the Kaplan excavations to the OIG. Kaplan included OIG coordinates on a top plan of the ancient tell overlaid with his excavation grid, which allowed for a straightforward georectification of this map within the GIS. After this map was correctly georectified, the excavation grid of 5-m squares was used to further rectify the top plans of the excavated areas on the mound except for areas B, D, and G. These were the areas of the 1960 excavations inside and around the Hammam, and the modern civil CAD layout was used to correctly orient the top plan.

The process of digitizing each feature on the top plans as a polygon began after the plans were georectified. These polygons represent architectural features such as walls, pits, and plaster floors. Walls were digitized stone for stone, and the outlines of pits and floors were traced. Each feature retains its name from the top plan and is stored as a shapefile (e.g., W.517 is w517.shp), and those features without labels are collectively stored as a group pending future numbering. Heights recorded on the top plan were digitized as 3D points, and work is currently under way to represent the various architectural features with their respective heights in a 3D environment. Additional point and polygon data from the IAA marking excavations in Jaffa prior to 2007 supplemented the geodatabase. Architectural features from the Ganor Compound and Qishle excavations, submitted by the architects as digital polylines in OIG, further augment the available archaeological data for research and presentation. Plans of the 2008 excavations of Qedumim Square, generated as CAD polylines, were also integrated into the overall JCHP geodatabase and supplement the data digitized from Kaplan's final Area C plans of 1965 and Brand's 1994 excavation plans (Brand 1994).

Problems

The integration of various datasets into one GIS project is not without significant difficulties. Common problems include data cleanup, differing projections, locational inaccuracies in georeferencing, "overhangs" and "undershoots" on polyline data, and misaligned or incomplete polygons (Brampton and Mosher 2001:140; Conolly and Lake 2006:84–88). One problem that emerged in the JCHP geodatabase was the reprojection of various datasets in differing map projections. Since most of the data was already in OIG coordinates and this is a standard for archaeology in Israel, data in WGS 84, UTM, and New Israel Grid formats were easily reprojected automatically by the GIS software. In most cases, the "on-the-fly" conversion between map projections worked well, but some data were problematic and required some minor editing to move them into their actual locations on the OIG. In addition, the historical maps proved difficult, but not impossible, to georectify due to the inaccuracies inherent in the original mapping process, warping of paper maps over time, or distortions as a result of the scanning process. As mentioned above, the historical maps are schematized plans of Jaffa based on cartographers' emphasis. While Jacotin focused on the French campaign, Skyring's duties emphasized the fortifications around Jaffa and not the organization of buildings inside the walls, an important observation when vetting this

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data. Rectification of several aerial images from the early twentieth century was not possible due to the oblique angle of some of the photographs and the low resolution of scanned images or negatives.

A preliminary evaluation and critique of the Kaplan plans and sections indicated potential problems with this data, though these hindrances are not insurmountable. To gain a complete picture of the organization of Kaplan's excavations on the tell, one must piece together information such as Jaffa's topography prior to excavations, the size and orientation of the excavation grid, and the location of the various areas from different maps of Jaffa annotated by Kaplan. Several of the excavation plans have handwritten annotations and additional pencil drawings over the inked plans, suggesting that either additional strata were not represented on a separate plan or that the same plans were used for several seasons. Further refinement of the site's stratigraphy should resolve any ambiguity introduced by these additions. In the case of the glacis in the large room of the Hammam, excavated as Area B, it was located in different places on separate plans (see Chapter 23). This discrepancy was noted and corrected in the GIS by examining the excavation photographs in conjunction with the composite plan of areas B, D, and G (see Figure 23.1). Additionally, while Kaplan numbered many of the walls on the plans, several walls and features were not numbered. These numbers may be deciphered at a later time from the excavator's field notebooks. Loci and pottery basket locations are also rarely labeled on the top plans, making analysis of findspots of the various recovered artifacts problematic. As with the walls, this problem may be addressed by examining the excavation records and field notebooks. Each of the preceding difficulties with the GIS datasets presents a challenge to the implementation of the geodatabase, but the results of the case studies presented below show that these obstacles can be overcome, or at least compensated for, in the GIS.

Case Studies

As a proof of concept, two analyses integrating georectified historical maps, CAD plans of the modern city, and the digitized archaeological features were performed during the 2007 excavations of the Ganor Compound and the Ottoman Qishle to predict the location of archaeological features. Salvage excavations were conducted at the Ganor Compound on the south side of Yefet Street in 2007 (see Chapter 14). The proximity of the excavated architecture at Ganor dated to the Crusader period to the city's fortifications was called into question during excavations at that site in 2007. The digital top plans of Ganor were examined in relation to the modern civil plan and the 1843 British engineer's map (Figure 5.2). It can be safely assumed that the later Ottoman fortifications represented on that map followed the same line as the Crusader battlements and possibly reused elements from the earlier walls. The GIS indicated that a trackway along the southern boundary of the city ran along the outside of a ditch that, with the walls and "faussebray," was part of the city's defenses. This path and ditch later became Yefet Street, as indicated by modern city plans. If the location of the Ottoman walls roughly approximated their earlier counterparts, then the Crusader fortifications were likely located on the northern side of Yefet Street and the architecture exposed during the Ganor excavations lay outside the city walls. This situation strongly suggests that the city expanded beyond its fortifications during the Crusader period.

A second investigation afforded by the historical map and modern excavation GIS data centered on the 1799 siege and conquest of Jaffa by Napoleon Bonaparte. Modern development necessitated excavations during the summer of 2007 inside the old Israeli and British mandate police station and Turkish stronghold known as the Qishle. The British 1843 map and nineteenth-century lithographs (such as an 1836 view of Jaffa by J. W. M. Turner) indicated the presence of a multi-angular fortification situated on the northeastern portion of the city walls. Excavations revealed one of the angles of this fort, and georectification of the 1843 map and the modern excavation top plans confirmed this finding.

If the multi-angular redoubt was present, its artillery should have been used to obliquely fire at the assaulting troops of Bon's division, and it is unlikely that the French commanders would have subjected their forces to that fire. The plan of artillery fire drawn up by Napoleon ordered the northern artillery, "Battery Thierry," to fire on the harbor and "the interior of the northern sector of attack." The lack of detail concerning a formidable enemy position such as the fortress is suspicious, since the artillery should have concentrated on that bastion rather than the port. Examination of French maps from the operations in Palestine showed only a semi-circular

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Figure 5.2. Example of GIS rectification of historical plan and civil architectural plans.

tower instead of the multi-angular fort. Spatial analysis revealed that the tower on the French map was not in the same location as the multi-angular redoubt on the British map but was located farther to the west, intimating that the line of fortifications that Napoleon besieged and the defenses drawn by Lieutenant Skyring in 1842 were not the same. The 2007 excavations at the Qishle revealed a round tower and wall to the west of the angled walls belonging to the nineteenth-century fortifications (Arbel 2009). The round tower and wall are in proximity to an early-nineteenth-century mosque built by Mohammed Abu Nabbut. It is the opinion of the excavator that the mosque and the angular fort were built around the same time, and the fortifications were built in better strategic positions after the Napoleonic conquest (Yoav Arbel, personal communication, March 28, 2008).

The siege and ensuing battle between the French and Turkish forces at Jaffa have been described in detail (Gichon 1998), and only an additional point needs to be discussed here. The capture of Jaffa was accomplished by divisions led by generals Lannes and Bon. Lannes conducted the primary assault on the southwestern section of the city, and Bon attacked the northeastern quadrant as a secondary assault and diversion. While much consideration has been given to the breach made in the wall and subsequent infiltration by Lannes, Bon's equally important assault has been overlooked in both contemporary accounts and modern analyses of Bonaparte's campaign. The French map shows Bon's division divided into two halves on opposite sides of the Acre Road prior to the assault, and the description of the battle by Napoleon's chief of staff, Berthier, indicates that the right flank of this division waded into the water and attacked the town from the seaside while the left flank on the east scaled the city walls. The notation on the 1843 British map states that the scarps of the defenses were "low and could be easily escaladed." Bon's division was equipped with ladders for the assault and accomplished this task. The position of Bon's troops was ascertained by georectifying the French map and overlaying it on the more accurate British 1843 defenses map. Bon's right flank assaulted west of the "faussebray" and in the area of the present port. The left flank scaled the walls near the main gate between the bastion and the gate (opposite the present

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Clock Tower). Bon's division seems to have completely bypassed the projecting fortification, where the fortress is indicated on the British map, in its quest to capture Jaffa's harbor. Both parts of the division then secured the harbor.

Conclusion

Despite some drawbacks, several advantages to the creation of the GIS geodatabase are evident. The archaeological information represented on top plans will be preserved in a digital format available for future queries, both predictive and analytical. Furthermore, the plans of architectural features recorded by Kaplan are sufficiently accurate to present acceptable plans of older excavations. Since these plans have been georectified, Kaplan's results could be verified by additional excavations if such an effort is deemed practicable and necessary in the future. Overall plans for larger areas, such as Area A, are possible by combining the top plans from the successive seasons on the site. While an overarching study of city planning for the ancient tell may not be complete, a diachronic localized plan for the various areas is feasible. Data from more recent excavations that already has a spatial reference can be easily incorporated into the geodatabase and permit more comprehensive analyses of Jaffa's past. The ongoing creation of digital data, refinement of Jaffa's stratigraphy, and further integration of old and new excavations will surely provide more insight into Jaffa's cultural heritage and more opportunities to preserve that heritage and present it to future generations.

Editor's Note

The reader is referred to the list of illustrations, especially figures in Part III of this volume, for additional examples of plans produced as result of the author's GIS work for Jaffa and the present initiative.

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PART II

Jaffa's Historical and Regional Setting

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Chapter 6

Early Jaffa: From the Bronze Age to the Persian Period

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Although Jaffa is repeatedly identified as one of the most important ports of the southern Levantine coast during the Bronze and Iron Ages, limited publication of its archaeological remains and equally limited consideration of its historical role have meant that a review of its historical significance is still necessary. Careful consideration of Jaffa's geographic location, its role during the Bronze and Iron Ages, and its continued importance until the early twentieth century C.E. reveal that its emergence as an important settlement and port was no accident. This essay reviews, therefore, the evidence for Jaffa's foundation and subsequent role from the Early Bronze Age through the coming of Alexander at the end of the Persian period.

Jaffa's Geography

Jaffa was well positioned geographically to serve as the main port of the southern coastal plain between Dor and Ashkelon, most likely because of natural features that permitted its use as a port.[1] These features include rocky outcrops that could shelter ships on its northern and western sides and a lagoon or estuary to the east of the site, the remnants of which remained visible until the nineteenth century (see below). Jaffa's most obvious advantage over coastal sites to its south, and one that suggests its comparison to ports to its north, was that it featured a natural, deepwater anchorage along its rocky western side. A natural breakwater is formed by a ridge, located about 200 m from the western edge of the Bronze Age settlement, that can still be seen today.[2]

Although a geomorphological study has yet to be undertaken, a number of factors indicate that an estuary existed to the east of the site and functioned as the early harbor of Jaffa (see Hanauer 1903a, 1903b).[3] The data for this include: (1) a depression that collected water to the south of the American (later German) colony known as the Baasah (Clermont-Ganneau 1874:103; see also Hanauer 1903b:258–260) (see also Figure 13.1 and Figure 13.2); (2) a wall identified as a seawall that was encountered at some depth within this depression (Hanauer 1903b:260); and (3) geological evidence for a shift in the course of the Ayalon River that has since caused it to empty into the Yarkon River (Raban 1985:27). The historical location of the Ayalon is not, therefore, its position today, and in antiquity the Ayalon provided Jaffa with a perennial source of freshwater. To this evidence we may add that the northern and eastern slopes of the kurkar ridge upon which Jaffa was situated were bedrock outcrops, as evident from recent excavations (e.g., Fantalkin 2005). As early as the Late Bronze Age, and perhaps even the Middle Bronze Age, these slopes functioned as an extramural cemetery (Peilstöcker 2000:49*). The overall pattern of Jaffa's selection is consistent with other MB II ports, as shown by Avner Raban

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(1985:14), although it is both unlikely and remains undemonstrated that ships could sail any distance up rivers such as the Ayalon and the Yarkon (contra Raban 1985:14).[4] The selection of such ports is consistent with the principles associated with Phoenician ports of the Iron Age, which, as noted by Maria Aubet (1987:151–155), included natural deepwater rocky anchorages, abundant freshwater, and access to inland markets.

The lack of other coastal settlements with continuous occupation from the MB II through the Iron Age between Dor and Yavneh-Yam supports the identification of Jaffa as the principal port along this stretch of coast (Figure 6.1).[5] While many Canaanite ports emerged as waypoints along the eastern Mediterranean coast, others gained greater importance due to the access they afforded to hinterland markets or natural resources such as timber or mines. Achzib, for example, never achieved great historical import, as it lacked access to major inland routes and resources, with its hinterland identified during the Iron II period as Cabul, which means "good for nothing" (e.g., 1 Kgs 9:13). While Dor provided some access to the northern hill country, it possessed very little territory to support a substantive hinterland population. By contrast, Jaffa and Ashkelon emerged as substantial ports along the southern coastal plain during the Bronze and Iron Ages, in large part because of their coastal situation, the access they provided to inland settlements, and their relationship to routes established for access to inland regions (Ashkelon to the Shephelah and the Negev, and Jaffa to the central hill country). Therefore, from the Middle Bronze Age to the coming of Alexander, Jaffa was largely a product of its geography and thus played a central role on the maritime route connecting the southern Levant with Cyprus, Egypt, and Anatolia. Jaffa's earliest appearance was probably as a rocky promontory projecting to the north and separated from the mainland by the outlet of the Ayalon to the north and an estuary or bay to the east, as suggested above. The etymology of its name, "the Beautiful [Place]," suggests that it was a welcome sight to the earliest sailors who plied this route.

The Early Bronze Age

While debate continues over the character of early Mediterranean sailing practices, which may have involved "coast hugging," it seems likely that during the Early and Middle Bronze Ages (perhaps even through the end of the Late Bronze Age), most, if not all, maritime traffic in the eastern Mediterranean followed the coast closely. Reasons included the regular need for freshwater for crews and animal cargo, the limited distance sailed on average during a day with suboptimal winds, and what at one point must have been a fairly primitive state of celestial navigation. To these factors it must be added that navigating by stars in the eastern Mediterranean during the summer was and is routinely hampered by a marine layer, which often does not dissipate until mid-morning. These factors almost certainly guaranteed that early sailing along the Levantine coast, especially during the Middle Bronze Age, was an enterprise focused on port hopping and that there was no impetus to risk sailing across open water in an effort to reduce the journey by a day or two. Furthermore, putting in at different ports allowed the crew to acquire additional goods and trinkets that could be traded at their final destination, meaning that ships probably were not engaged exclusively in point-to-point trade but were also integrated in down-the-line trade.

Since architectural remains of the Chalcolithic and Early Bronze Age have yet to be encountered at Jaffa and evidence for ceramics from the Early Bronze Age consists of but a few sherds dating to the EB I (Gophna 2002:419 and n. 411), questions regarding the earliest phases of occupation at Jaffa for now remain unanswered. Nevertheless, if historical-archaeological reconstructions are correct (e.g., Stager 2001), Jaffa would have afforded a desirable shelter for ships from the EB III onward, when maritime traffic between Gebal (Byblos) and Egypt intensified (Ben-Tor 1986:20–21; Stager 1992:41).[6] The earliest historical evidence for this process are Egyptian reliefs depicting so-called Kbn ships (i.e., Byblos ships)[7] laden with goods from Byblos bound for Egypt during the Early Bronze III period (Landström 1970:63; Vinson 1994). This activity is also demonstrated by the presence of Egyptian artifacts at Byblos in the northern Levant, if not also those attested at Ebla during the Early Bronze Age, as well as the presence of cedar timbers and Levantine goods in Egypt during the second half of the Old Kingdom (Pulak 2001:27–28). Although at present nothing more can be added regarding Jaffa's role during the Early Bronze Age, it is clear that beginning in the Middle Bronze Age, Jaffa developed into the most important port along the central coastal plain of the southern Levant.

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The Middle Bronze Age

Canaanite is the preferred identification of the Semitic (i.e., Amorite) population of the coast of the southern Levant from the Middle Bronze Age through the Iron Age, and for this reason the term is employed here. The term's relevance is suggested by the occurrence of Amorite names for the rulers of the southern Levant mentioned in the Execration Texts and is demonstrated archaeologically in the shared cultural traits of coastal settlements during the Bronze and Iron Ages. Canaanites constituted, therefore, a regional, specifically coastal, substratum of the larger Amorite ethnic group that inhabited the Levant from the Middle Bronze Age on (from ca. 1900 B.C.E.).[8] The cultural continuity evinced from the Middle Bronze Age through the Iron Age among their coastal settlements also suggests the almost uninterrupted evolution of this population and its material culture. In this essay the term *Canaanite* is used, therefore, to identify Jaffa's population from the Middle Bronze Age through the Iron Age, at which point the Greeks began identifying such populations as Phoenicians, despite the fact that these individuals appear to have identified themselves as Canaani (i.e., Canaanites).[9]

Although the many ports of the southern Levant that would have been frequented by Kbn ships during the EB III are difficult to identify with confidence, from the Middle Bronze Age onward it is possible to identify ports from Gebal (Byblos)[10] south that served as waypoints during a journey that would probably have often

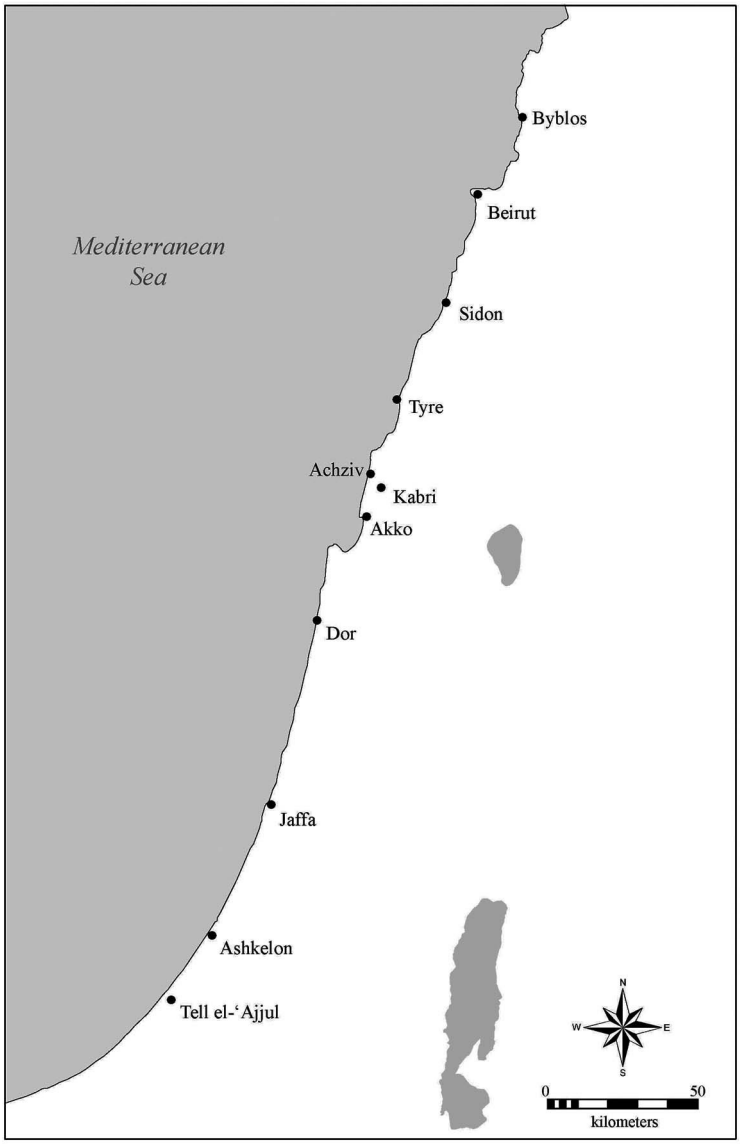

Figure 6.1. Location of Middle Bronze Age ports along the southern Levantine coast.

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required at least a week's sailing. Southward from Gebal, major ports can be identified on the basis of prominent, contemporaneous tell settlements located directly on the ancient coast and affording deepwater anchorages alongside rocky outcrops, and occasionally sheltered bays.[11] These included Biruta ("Hunger"?; i.e., Beirut),[12] Ṣiduna ("Travel Provisions"?; i.e., Sidon),[13] Ṣûr ("The Rock"; i.e., Tyre), 'Achzib, Akka ('Akko),[14] Dura ("Fortress"; i.e., Dor),[15] Yapu ("Beautiful [Place]"?; i.e., Yafo),[16] 'Ašqaluna (Ashkelon; related to weighing or the shekel),[17] and Sharuhen (Tell el-'Ajjul), along with perhaps a few small, unidentified Middle Bronze Age anchorages located along the northern Sinai coast. A number of smaller ports, such as Nami, probably filled in the spaces between these larger ports and offered safe harbor to passing ships when needed. The names of these ports may suggest an early perception of each port's significance, whether related to provisioning, commerce, or safe harbor (see notes 12–17).

Table 6.1. Distances between major ports from Byblos to Tell el-'Ajjul.

Port	Distance to Next Port (km)
Byblos	27
Beirut	43
Sidon	37
Tyre	26
Achzib	15
'Akko	39
Dor	65
Jaffa	46
Ashkelon	47
T. el-'Ajjul	—
Average	**38.33**

The average distance between the major ports along the Levantine coast, all of which were occupied from the Middle Bronze Age onward, is approximately 38 km, or 20.5 nautical miles (Table 6.1). This figure probably reflects an average minimum distance that was sailed along the coast in a single day during daylight hours. Presuming that these ports were established in an era of limited open-sea navigation and assuming that an average summer day provided 15 hours of light by which to sail, then the distance between these ports suggests a rate of approximately 1.4 knots (2.6 km per hour), which suggests that Canaanite sailors often managed this route under less than ideal sailing conditions. With approximately 380 nautical miles from the Lebanese coast to the coast of the delta, the trip could have required as much as 269 sailing hours or as few as 63, if six knots (which seems unlikely) could be achieved each day of the journey.[18] It appears, therefore, that an average of 166 hours, or approximately 11 days, were required for the voyage from Egypt to Byblos. Whatever the case may be, there is little reason to doubt that these ports constituted a network of safe harbors and stopping places for Canaanite merchants who endured unpredictable winds, whether they were inadequate summer winds or stormy winter weather.[19] Nevertheless, when weather conditions permitted, many of these ports were doubtless bypassed, thus shortening the journey considerably.

Preliminary analysis of ceramic evidence from Kaplan's excavations, in particular from areas Y and J, appears to support Kaplan's dating of Jaffa's earliest settlement to the MB IIA (contra Beck and Zevulun 1996; Kaplan 1972:74–75).[20] An MB IIA date for the foundation of Jaffa finds an appropriate context within the settlement pattern of its hinterland (Figure 6.2). MB IIA sites around Jaffa include settlements at Gerisa (Herzog 1993), Qana (Tel Mukhmar), Aphek (Kochavi et al. 2000), Nebi Rubin, and Yavneh-Yam; fortresses at Tel Poleg and Zurekiyeh; a probable watchtower (*magdalu*) at Májdal-Yaba inland from Aphek (compare no. 39 with MB IIA evidence at al-Májdal in Burke 2007:51–52); unidentified villages associated with the cemeteries excavated at Sdeh Dov (Kaplan 1971), Namal Tel Aviv (Kaplan 1955), Azor, and Bene-Barak (Broshi and Gophna 1986; Gophna and Portugali 1988); and a number of other unwalled settlements (Peilstöcker 2004:77, Table 73).

A historically nuanced understanding of MB IIA settlement in the coastal plain is possible in light of recent work by Susan Cohen (2002) that employs the MB IIA ceramic sequence from Aphek. Her study permits the recognition that the foundation of fortified MB IIA settlements around Jaffa took place between the end of Phase 2 and Phase 4, following the establishment of fortified Phase-2 settlements north of the Yarkon River (see Burke 2008:98–100). Based on recent chronological assessments (for review, see Burke 2008:18–20), these events occurred primarily within a period of 100 years, ca. 1800 to 1700 B.C.E. This period was followed by a serious disruption of settlement in the coastal plain north of the Yarkon during Phase 3 of MB IIA (see Burke 2008:98), but whether or not these events affected Jaffa's inhabitants is unknown.

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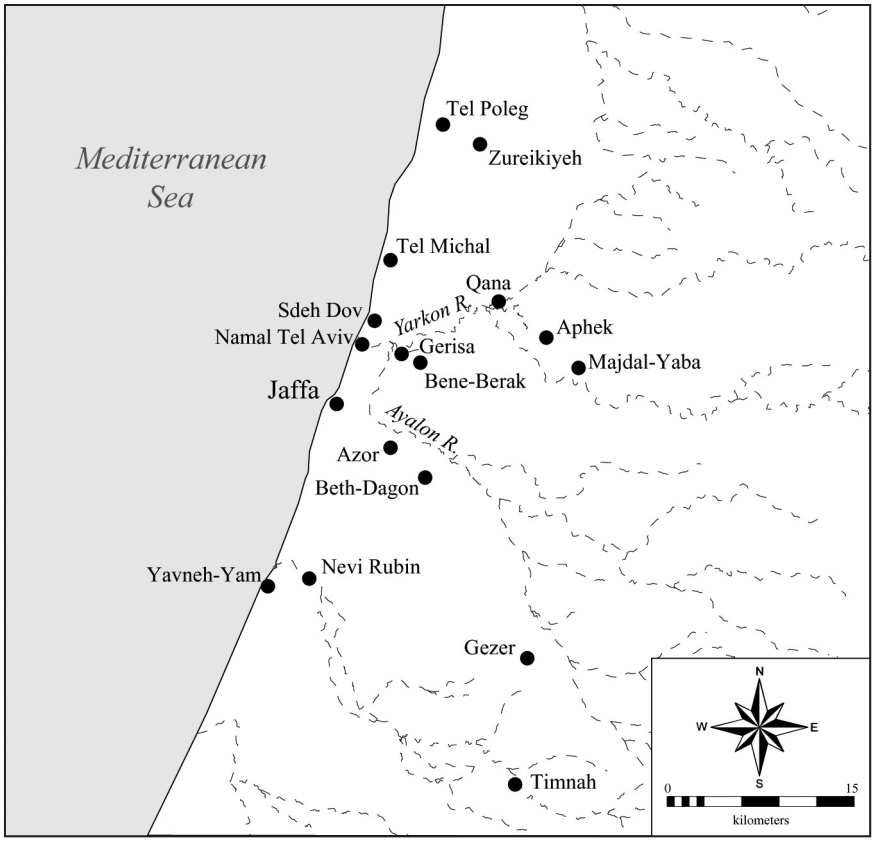

Figure 6.2. Location of settlements in the vicinity of Jaffa.

From outside, Middle Bronze Age Jaffa would have appeared as a typical tell settlement. Despite its foundation during the Middle Bronze Age atop a kurkar ridge, much like Byblos and Biruta in Lebanon, Jaffa was fortified by an earthen rampart that was undoubtedly crowned by a massive mudbrick fortification wall, despite its absence in Kaplan's soundings. A stretch of this rampart was exposed in Area B-D (Kaplan 1960, 1961, 1964) at the northern end of the site, as well as in Area A (Kaplan 1961:192). Although the exact date of the building of the Middle Bronze Age earthen ramparts remains uncertain (Burke 2008:272–273; note also Kaplan 1972:75), in light of the chronological developments discussed above, it appears likely that these defenses were constructed during the late MB IIA, probably Phase 3 (see Figure 23.2). The character and date of the rampart find parallels with Byblos's Ouvrage 3 (see Burke 2008:196 and Fig. 131), which, despite being the first Middle Bronze Age rampart at the site, included both Middle Bronze Age and earlier sherds within its fills. Although a preliminary analysis of the Middle Bronze Age sherds from Jaffa's rampart in Area D does not provide a conclusive identification of the constructional phase of that rampart (see Chapter 23), its elliptical layout (contra Kaplan and Ritter-Kaplan 1993:658), like the ramparts of Byblos, suggests an MB IIA date for its construction (Burke 2008:49).

The role of Jaffa during the Middle Bronze Age, especially during the MB IIB–C, appears to be straightforward based on its location and the remains exposed to date. Although it was a modest settlement of perhaps no more than 3 ha, its anchorages, freshwater, and access to inland sites assured that it was an excellent stopping place for ships plying the route between coastal Lebanon, Cyprus, and Egypt. Middle Cypriot wares such as Black-on-Red Ware and White-Painted Ware attest to this trade, as does the discovery of a number of "Hyksos" scarabs (Figure 6.3). Nevertheless, to date the evidence for the remains of Jaffa's Middle Bronze Age settlement within the ramparts is limited mostly to pits, revealed primarily in Area Y, and a handful of burials (Kaplan 1972:76–77). More recent excavations by Tel Aviv University in Area A suggest the existence of an MB IIB–C gate below the Late Bronze Age gate (Herzog 2008:1791).

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Figure 6.3. Hyksos scarabs from Jaffa. *Kaplan Archive.*

The Late Bronze Age

Archaeological evidence of the Egyptian conquest of Jaffa during the transition between the MB IIC and LB IA remains inconclusive. Clear evidence of destructions are attested, however, at sites throughout the southern coastal plain including Aphek, Gerisa, and Michal (Burke 2008:101), and Jaffa is listed among sites conquered by Thutmose III (Simons 1937:117; also *ANET*, p. 242, no. 62). The sack of these cities by Egyptian forces seems a straightforward matter, with only a question regarding the exact dates of individual destructions, which are generally dated from the end of the sixteenth through the early fifteenth century B.C.E.

Following the taking of Jaffa, Thutmose probably established the city as a Ḫ*tm*-base, according to Ellen Morris:

> Although these harbors [*ḫtm*-bases] are never enumerated by name, based on information concerning harbor depots contained in the Amarna archive, it is likely that they consisted of Gaza, Jaffa, perhaps ʻAcco, Yarimuta, Byblos, and Ullaza—at minimum [2005:138–139, n. 90].

Such ports "monitored the passage of people and goods," as well as communications; permitted the collection of tariffs and the hunting of fugitives; and served as storage depots (Morris 2005:139).

The next Late Bronze Age reference to Jaffa, in at least a historicizing source, is found in the Egyptian tale "The Capture of Joppa," which is preserved in Papyrus Harris 500 (*ANET*, pp. 22–23)[21] and is set in the reign of Thutmose III (ca. 1482–1428 B.C.E.).[22] Although the first part of the document is not preserved, it is possible to infer that the Canaanite inhabitants of Jaffa had managed to rebel against its Egyptian overlord leaving the Egyptian garrison and its commander outside the city. The leader of the insurrection, identified as "the Enemy of Jaffa" for reasons that are not described, had departed Jaffa (perhaps to requisition supplies) and during his excursion met with the Egyptian garrison commander, claiming that he wished to see his great scepter. After the rebel leader became drunk, in an ironic twist the Egyptian commander, named Djehuty, clubbed the rebel over the head with his scepter and threw him in fetters. Djehuty then prepared his garrison of some 700 men to use a ruse, not unlike the Trojan horse, to retake Jaffa. The charioteer of the Canaanite rebel deceived the inhabitants of the city by asserting that his master would be returning with Egyptian prisoners and plunder from his foray against the Egyptian garrison. However, 200 men were loaded into baskets by the Egyptians and delivered by another 500 soldiers to the city, where they were given entry without question. Once the Egyptians were inside, they sprang from the baskets and retook the city. Interestingly, there appears to have been no fighting involved in the retaking of the city, and we are told only that the Egyptian soldiers bound Jaffa's rebels, who, we may infer, chiefly included the leaders of the insurrection.

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Whether or not the details of this story can be accepted as historical fact, the impression supplied by this text is that by the reign of Thutmose III, Jaffa was already home to a strategically located Egyptian garrison. In light of the role the town played as a port for and garrison in the coastal plain, the need for Egyptian troops poised to quell occasional rebellions was obvious. References to both the *ʿapiru* and *maryannu* also suggest the presence of these social elements in and around Jaffa during the fifteenth century B.C.E.; they are otherwise unattested in the region until the fourteenth century in the Amarna letters. The *ʿapiru* appear to be a known threat, with the expressed concern that they might steal horses left outside the city by the *maryannu*, who were responsible for their care. If Djehuty's final request to send the rebels to Egypt as slaves may suggest an Egyptian policy during the early Eighteenth Dynasty in Jaffa, this event would have further increased the percentage that the Egyptian garrison and their families constituted among Jaffa's residents, thus further Egyptianizing the settlement.

In addition to what may be inferred about Jaffa's strategic importance from the "The Capture of Joppa," the Amarna letters from the mid-fourteenth century indicate that Jaffa's (identified as Yapu) strategic value included its granaries.[23] These pharaonic granaries, which are identified by the Egyptian word šnwty, are described in this Akkadian correspondence as the "šunuti of the king" (*EA* 294:20). This important function for Jaffa for the New Kingdom Egyptian Empire is also attested in the correspondence from Aphek dated to ca. 1230 B.C.E. (Horowitz et al. 2006:35–37; Singer 1983). In the seventh letter of this correspondence, which happens to be the most complete, Taguhlina reports to Ḫaya, presumably the Egyptian provincial governor in Canaan (Singer 1983:18–23), that Adduya, Taguhlina's Ugaritian courier, had previously delivered 250 PA (*parīsu*) of wheat (each approximately 50 to 60 liters in size, according to Singer 1983:4) to Tur-šimati of Jaffa but that these were not yet accounted for. That these letters were found in the so-called Governor's Palace (Building 1104) at Aphek suggests that it served as a stopping place for Ḫaya during his administrative tours of the region (Higginbotham 2000:133–134), but it does not establish that Aphek served as an administrative center of Jaffa and the region. In fact, it seems more likely that Jaffa functioned as the central Egyptian administrative center over the central coastal plain. This interpretation is now clarified by recent synthesis of the excavations at Tel Aphek and the identification of the contemporaneous settlement at Aphek as an Egyptian agricultural estate the goods from which were probably delivered to Jaffa (Gadot 2010). Its role also as an Egyptian coastal safe haven in the southern Levant is revealed in *EA* 138, where Rib-Hadda comments upon the pharaoh's suggestion that he should come to Yapu, where the Egyptian official Api resides.

Aside from another reference to Jaffa in *EA* 296:33, where Yahtiru claims to "guard the city gate of Ḫazzatu (Gaza) and the city gate of Yapu," references to Jaffa are surprisingly few in the Amarna correspondence. The discovery in 1999 of a Lion-Hunt scarab of Amenhotep III within Kaplan's old Area A by the Tel Aviv University (TAU) expedition under the direction of Ze'ev Herzog (Herzog 2008), which was found in a later context (Sweeney 2003), does little to clarify Egyptian activity in Jaffa during the Amarna period. Herzog has suggested that the proper original context of this scarab may be the Lion Temple, so named because of the discovery of a lion skull in the structure, which Kaplan assigned to a transitional phase between the Late Bronze Age and Iron I (the so-called Pre-Philistine phase) at Jaffa (Kaplan 1972:84). A second scarab of Amenhotep III was also recovered from Area A during the TAU excavations (Sweeney 2003:59). The large number of commemorative scarabs from the reign of Amenhotep III found throughout the Levant does not suggest, one way or the other, Jaffa's importance within Egyptian administration during the thirteenth century. Taken together with other Egyptian artifacts, however, the scarabs do reveal the Egyptianization of Jaffa during this period (Burke and Lords 2010; see also Chapter 24).

Jaffa is mentioned in a fragmentary letter from Gezer that was most likely written during the early Late Bronze Age (see Gezer 2 in Horowitz et al. 2006:53–55). In light of "The Capture of Joppa" and the fact that no Amarna letters from Jaffa are identified, it may be suggested that Jaffa was directly administered by Egyptian officials throughout the Late Bronze Age. In any event, Jaffa's prominence on Egyptian itineraries is remembered by the scribe in the *Satire of the Trades,* preserved in Papyrus Anastasi I, which is traditionally dated to the thirteenth century (*ANET*, p. 478).

If either sporadic textual references or traces of archaeological data are considered less than decisive indicators of the nature of Egyptian presence in Jaffa, the evidence

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Figure 6.4. Fragment of Egyptian gate facade of Ramesses II (MHA 2156). *JCHP photo.*

for an Egyptian garrison in Jaffa during the thirteenth century B.C.E. is unequivocal. The primary evidence for the garrison consists of the fortifications and monumental gateway attributed to Ramesses II on the basis of an inscription (Figure 6.4).[24] According to K. A. Kitchen, the inscriptions on the two doorjambs read:

> [Right jamb:] Horus-Falcon, Strong Bull, beloved of Maat; Son of Re, Lord of Crowns, Ramesses II.
>
> [Left jamb:] [Horus-Falcon], Strong [Bull], beloved of Maat; [King of S & N Egypt, Lord of Both Lands, Usimare Setepenre]" [Kitchen 1993:II, p. 229, lines 401:226–227].

Although the entire plan of this fortress was not revealed during Kaplan's excavations (Kaplan 1956, 1960), parallels for such fortresses in the north Sinai suggest the overall layout and appearance of this complex (e.g., Hoffmeier 2006; Oren 1987).

The Iron Age

A considerable gap exists between the last references to Jaffa among Egyptian sources and the first references to it during the Iron Age. Indeed, this gap is greater when it is recognized that the references to Jaffa associated with Solomon's reign (especially those in Chronicles, which are Persian period in date) are altogether later than the reference to Jaffa in Sennacherib's Prism. Nevertheless, despite the absence of historical references to Jaffa prior to the eighth century, a combination of historical records and archaeological evidence makes it possible to reconstruct Jaffa's role at the start of the Iron Age.

Ample evidence exists at Jaffa in the form of ceramic remains to suggest a lively interaction with and/or settlement by the Philistines during the Iron I (ca. 1180–1000 B.C.E.). Preliminary analysis of ceramics

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Figure 6.5. Philistine monochrome (left) and bichrome sherds (right) from Jaffa. *JCHP photo.*

excavated by Kaplan reveals ample exemplars of Philistine Monochrome Ware and Bichrome Ware (Figure 6.5). Nevertheless, at this point in our analysis of the ceramics excavated by Kaplan, it is difficult to characterize the nature of this evidence and even more so to corroborate the possibility that the Sea Peoples, specifically the Philistines, might have been responsible for the destruction of Jaffa's thirteenth-century settlement associated with the Ramesside gateway, as suggested by Kaplan (1972:82).[25] Thus the nature of the Philistine presence, but more generally of the Iron I settlement, at Jaffa remains poorly elucidated from excavations conducted to date, as already noted by Kaplan (1972:85). Within the framework of the historical model of Philistine expansion proposed by Lawrence Stager (1995), Jaffa would have fallen under Philistine political control during the Iron IB, some time after 1130 B.C.E. Nevertheless, this would not necessitate assuming that the population was overwhelmingly Philistine, since it is assumed that a significant Canaanite substratum remained within settlements under Philistine control, which ultimately contributed to Philistine assimilation into Canaanite culture (contra Stone 1995), even if a politically distinct region identified as Philistia persisted.[26]

Since there is no archaeological or historical basis, thus far, to indicate the extent to which Jaffa's population during the Iron Age should be identified as Philistine, Israelite, Canaanite, or a mix of these, within the context of the cultural and historical changes that took place in the southern Levant, it is reasonable to infer that Jaffa's population during the Iron II remained largely Canaanite. While it is tempting to employ the term *Phoenician* to distinguish Iron II coastal Canaanite communities, which were city-states par excellence, from inland territorial states such as Israel and Judah, identifying Jaffa as a classic city-state of Phoenician extraction is problematic. Although Iron Age Phoenician city-states are traditionally identified as economically and politically independent, possessing limited hinterlands that were governed from these centers, which were, first and foremost, oriented economically seaward,[27] the classic Phoenician city-state also exhibits a cultural assemblage that has come to be recognized as characteristic of Iron Age Phoenician settlements. The features of such a settlement include *tophet* burials, Phoenician trinkets, and funerary ceramic assemblages (Moscati 1988); to date, none of these features is attested at Jaffa. Furthermore, it appears that different Phoenician city-states ascended to dominate large parts

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of the southern Levant during different periods. Roughly speaking, Phoenician dominance shifted from Byblos (EB III to MB II with an EB IV interlude) to Tyre, perhaps vying against Sidon (eleventh to eighth centuries, fourth century B.C.E.), and finally to Sidon in the Late Iron Age through the Persian period (clearly by the fifth century B.C.E.), when Jaffa was added to Sidon's domain.[28] As it concerns the historical record, Jaffa's eclipse by the Phoenician coast was clearly the result of Sidon's late political resurgence under Persian intervention (see the discussion of the Eshmun'azar inscription below). It is perhaps unsurprising, therefore, that Jaffa's archaeological assemblage during the Persian period (and continuing into the Hellenistic period) bears, on the face of it, so much in common with Dor and Phoenician settlements along the Levantine coast to the north of it.

Within the historical framework of the political and economic development of the southern Levantine coast during the Iron Age, Jaffa's continued role as a Canaanite port from at least the tenth century must be considered. This is all the more relevant in light of biblical traditions concerning the employment of Tyrian craftsmen, trading ventures with Phoenicia employing Tarshish ships during the reigns of David and Solomon mentioned by both the Deuteronomist and the author of Chronicles, and the story of Jonah's ill-fated voyage from Jaffa to Tarshish.[29] A closer examination of these traditions reveals the important connections that Jaffa maintained with Phoenician settlements during the Iron II period.

While the book of Kings makes no explicit reference to Jaffa in connection with Tyrian involvement with Israel during the United Monarchy, the reference in 2 Chronicles 2:16 [Heb. 2:15] concerning Solomon's building of the temple, which is probably of a fourth-century date, suggests that this activity necessitated Jaffa's involvement. In the Chronicler's account, Hiram corresponded with Solomon: "We will cut whatever timber you need from Lebanon, and deliver it to you (as) rafts upon the sea to Jaffa; you will take it up to Jerusalem."

Although we cannot determine what sources the Chronicler possessed that would have illuminated the traditional account, it is possible, as in other cases in Chronicles, that the author took the liberty of providing details concerning what were particularly obvious facts during the author's life. In this case, to the writer, the port of call for this monumental endeavor was, naturally, Jaffa, a place that was beyond Yehud's political power during the Persian period. The specifics of Jaffa's role in Iron II trade remain to be illustrated by archaeological findings, however.

The Chronicler was probably correct in identifying Jaffa as the primary zone of interface between Israel and the Phoenician city-state of Tyre. That it was not merely a retrojection of the circumstances of the author's own day is suggested by references in Kings to joint Israelite-Tyrian maritime ventures beginning during the United Monarchy. To date it has remained almost impossible, however, to illuminate the historical context of references to these joint maritime trading ventures, which are ascribed to Solomon (Kgs 10:22): "Because *Tarshish*-ships belonging to the king were at sea with Hiram's fleet, every three years the *Tarshish*-ships transported gold, silver, ivory, apes, and peacocks (?)."

Indeed, the references to ships of Tarshish in later biblical passages from the eighth century on, such as in the oracles against Tyre (Isa 23; Ezek 27:25), have been interpreted as a basis for the contextualization of the entity of Tarshish in the Iron IIB–C. Thus the biblical reference to a joint maritime venture involving Tarshish ships during Solomon's reign is usually interpreted as a retrojection of later enterprises (if they are accepted as historical at all) intended to embellish the accomplishments of Solomon's reign. Nevertheless, this assertion is problematic since scholarship on the identification of Tarshish (Akk. Tarsisi), although extensive, has yet to produce a consensus regarding the appropriate characterization of the Tarshish phenomenon as known in the biblical texts or to yield the location of a city, land, or kingdom by this name.[30] It is equally difficult to accept that in a world of long-distance military and trade expeditions, which characterized the Iron Age, Tarshish should instead be identified as an Atlantis (i.e., a mythical, treasure-filled land), as many are now resigned to believe.

Such a skeptical approach is entirely unnecessary, however, if Tarshish is identified as an early Tyrian colony founded in the western Mediterranean. Identifying it as such may clarify Jaffa's role as a mercantile entrepôt between Israel and its Mediterranean neighbors during the Iron II period. In this light, Tyrian (1 Kgs 5) and Tarshish-class merchant ships (i.e., "ships of Tarshish;" 1 Kgs 10:22)[31] at Jaffa reveal the historical setting for the tale of Jonah's departure from Jaffa for Tarshish (Jon 1:3):

> But Jonah rose to flee to Tarshish (away) from the presence of Yahweh. He went down to Yafo and found a ship bound

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> for Tarshish. He paid his fare and boarded it to go with them to Tarshish, away from the presence of Yahweh.

The references to the activities of Hiram of Tyre during the tenth century and to the ships of Tarshish from the tenth through the eighth century suggest domination of the coast of the southern Levant by the Phoenician city-state of Tyre throughout this period. Such would appear to have been the case through the eighth century when Sidqia of Ashkelon made Jaffa part of his territory (see below).

It is difficult to know the best context in which to discuss the biblical references to the borders of the Israelite tribe of Dan mentioned in Joshua 19:40–46, which list Jaffa:

> The tribe of Dan according to its families drew the seventh lot.[41] The territory of its inheritance included Zorah, Eshtaol, Ir-Shemesh,[42] Shaalabbin, Ayalon, Ithlah,[43] Elon, Timnah, Ekron,[44] Eltekeh, Gibbethon, Ba'alath,[45] Yehud, Bene-Berak, Gath-Rimmon,[46] and the waters of the Yarkon, and the Rakkon at the border opposite Yafo.

However, this passage may be most appropriately discussed within the historical context of the authorship of Joshua, which is almost unanimously attributed to the Deuteronomic reforms of the late seventh century B.C.E., although this passage is often accepted as indicative of territorial boundaries during most of the Iron II period. Several of these towns, including Bene-Barak, Eltekeh, Timnah, and Yafo (Jaffa), are again mentioned in Sennacherib's account of his conquest of this portion of the coast during the eighth century (see below). The recognition of the Yarkon River's role as a natural boundary north of Jaffa finds historical confirmation from both the extent of Sidqia of Ashkelon's conquests, which included Jaffa (see below), and the earlier limits of Philistine conquests, discussed above.

The first evidence to suggest that Tyre's control of this region, and Jaffa in particular, was contested during the Iron II emerges during the reign of the Assyrian king Sennacherib:

> In the continuation of my campaign I besieged Beth-Dagon, Joppa, Banai-Barqa, Azuru, cities belonging to Sidqia [of Ashkelon] who did not bow to my feet quickly (enough); I conquered (them) and carried their spoils away. . . . In the plain of Eltekeh, their battle lines were drawn up against me and they sharpened their weapons. Upon a trust(-inspiring) oracle (given) by Ashur, my lord, I fought with them and inflicted a defeat upon them. In the mêlée of the battle, I personally captured alive the Egyptian charioteers with the(ir) princes and (also) the charioteers of the king. I besieged Eltekeh (and) Timnah . . . assaulted Ekron and killed the officials and patricians who had committed the crime and hung their bodies on poles surrounding the city [*ANET*, pp. 287–288].

In addition to Jaffa, the settlements mentioned in this text, which are said to have been annexed by Sidqia of Ashkelon, can be confidently identified with toponyms in the vicinity of Jaffa: Beit-Dajan (Beth-Dagon), Bene-Berak (Banai-Barqa; Ar. Ibn-Ibraq), and Azor (Azuru; Ar. Yazur).[32] While this source portrays Sennacherib's conquest of these towns from Ashkelon in 701 B.C.E., it is difficult to know if Sidqia considered these towns part of the traditional territory of Ashkelon and for how long Ashkelon had controlled this stretch of coast; Rainey, for example, suggests that Sidqia conquered Jaffa and its hinterland between Tiglath-pileser III's 734 and 732 B.C.E. campaigns (Rainey and Notley 2006:282). More than likely, Sidqia considered that he was seizing what appeared to be an opportune moment after Sennacherib's conquest of Phoenician territories from the Lebanese coast to the coast of northern Israel.

Although little of the Iron II settlement was revealed by Kaplan's excavations, some archaeological evidence for the settlement in this period is available. In particular, a wine production complex of Iron IIA date was revealed on the eastern slope of the mound (Fantalkin 2005). Additional Iron II domestic remains were exposed to the north of Mifratz Shlomo Street (Peilstöcker 2005), in the area of Rabbi Hanina Street, during 2008 (Orit Segal, personal communication, 2008), and Iron II ceramics have been recovered from Clock Tower Square and areas south of the Ganor Compound (Martin Peilstöcker, personal communication, 2008). By the Iron Age, therefore, the settlement had expanded slightly, such that the line of the Iron Age rampart, which was revealed by Kaplan in Area B within the Hammam (Kaplan 1960, 1961, 1964), does not appear to represent the actual limits of Iron Age settlement in Jaffa. Instead, the settlement was considerably larger than the Bronze Age town and included substantial areas outside the core of the Iron II settlement enclosed by the ramparts. Kaplan's excavations revealed that the Iron Age earthen rampart featured a mudbrick glacis intended to protect the rampart from weathering, a development that is paralleled at the Phoenician towns of Byblos and Beirut, where stone glacis were added to protect the ramparts from erosion (see Burke 2008:190–197).

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The Persian Period

During the Persian period, Sidon gained political supremacy over the Phoenician coast, replacing Tyre as the most important Phoenician city-state (see Elayi 1982:97–104). In addition to ample evidence of this phase of Jaffa's history revealed during Jacob Kaplan's excavations (Kaplan and Ritter-Kaplan 1993:656–657, 659), a cemetery excavated from 1993 to 1994 produced a Phoenician inscription from this period (Avner and Eshel 1996). Likewise, in 1995 a Hebrew seal dated to this period based on its paleography was discovered in the Ganor excavations (Peilstöcker and Sass 2001).

Solomon's exploits in garnering the resources and Tyrian craftsmen for the building of his palace and the temple of Yahweh find a distant echo in Ezra's account of the building of the Second Temple (Ezra 3:7), which was completed in 515 B.C.E. This account provides one of the few references to Jaffa during the Persian period: "They gave silver to the masons and carpenters, and food, drink, and oil to the Sidonians and the Tyrians to bring cedars from Lebanon to the sea to Jaffa, according to the grant of King Cyrus of Persia."

One distinction that can be made, however, is that while the text underscores the acquisition and delivery of Lebanese cedar by Phoenicians to Jaffa, it is by no means clear, as with the Solomonic Temple, that Phoenician "masons and carpenters" were involved in the construction. Indeed, the construction of the sentences may be understood as a subtle clarification suggesting otherwise. Although, as with the references to such activity during the United Monarchy, the historicity of these events cannot be confirmed, there is no basis for denying their historicity since indeed a Second Temple existed and would have required some timbers of this sort, and Lebanon was the natural source for them.

The next reference to Jaffa occurs on the sarcophagus of Eshmun'azar, king of Sidon, and is variously dated from the late sixth to the fourth century B.C.E. but is probably of mid-fifth-century date. In this inscription, following a lengthy introduction of himself, Eshmun'azar describes how the Persian king made him sovereign over the southern coast: "Furthermore, the Lord of Kings gave us Dor and Joppa, the might lands of Dagon, which are in the plain of Sharon, in accordance with the important deeds which I did. And we added to the borders of the country, so that they would belong to Sidon forever" (*ANET*, p. 662). This passing reference to Jaffa indicates an important shift in Jaffa's political relations during the fourth century, the historical and cultural implications of which remain to be elucidated. Nevertheless, in the years prior to Eshmun'azar's sovereignty, it is uncertain whether Jaffa and Dor were under Tyrian control.

Conclusion

The foregoing review provides the historical context for a reconsideration of the significance of the historical role played by Jaffa as a port from the Bronze Age through the Persian period. This Canaanite center and entrepôt, perhaps as early as MB IIA, appears to have been continuously inhabited until the arrival of Alexander the Great. Its role as an outlet to inland centers, including those within the highlands, such as Jerusalem, and the safe haven it afforded ships traveling along the coast certainly appear to have contributed to its characterization among Phoenician ports as "the Beautiful Place." Still, many questions remain unanswered. In what phase of the Middle Bronze I (IIA), for example, was Jaffa established? Was Jaffa ever a true Phoenician town or primarily a coastal Canaanite enclave playing host to mariners from other regions? What evidence remains of the interaction of Israelites and Judeans with the inhabitants of Jaffa in the Iron Age? What material evidence connects Jaffa with the Phoenician coast during the Persian period? These and other questions provide a starting point for further study of Jaffa in the Bronze and Iron Ages.

Acknowledgements

I would like to thank William Schniedewind, Matthew Suriano, Wolfgang Zwickel, and Martin Peilstöcker for their insights regarding this article.

Notes

1. Although Avner Raban claimed that "Jaffa lacks the features for the direct shipment of mass cargoes," his assertion is undermined by the identification of "the large basin east of the site of ancient Yaffo . . . known for centuries as 'El-Basa'" (1985:27), which may, in fact, be identified with the port associated with Phoenician shipments of goods to Jerusalem.

2. This outcrop has been built over since and was expanded during the Ottoman and Mandate periods (e.g., Shepstone 1937).

3. Paleogeographical studies of the harbors of Tyre and Sidon have been undertaken in recent years (Marriner 2006).

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4. It is possible that Caesarea Maritima was, in part, constructed during Herod's reign because of the state of Jaffa's port; its bay may already have mostly silted up. However, anti-Herodian elements in Jaffa may also have made it a more difficult town for Herod to control and thus an unreliable port.

5. Tell Qasile, for instance, is not located on the coast and features no Middle Bronze Age occupation. Thus it is unlikely to have served as an early port. Gerisa, although also occupied from the Middle Bronze Age onward, was not on the coast or directly on the banks of the Yarkon. Thus it too should not be considered within the framework of networks of Mediterranean ports (contra Marcus 2007:166).

6. Given the possibility that Jaffa featured an estuary, it is not unlikely that the unidentified port of the EB III was located off the mound along the edge of this body of water. Indeed, it is remarkable that to date, no network of EB III ports along the coast has been identified with the route between Egypt and Byblos. Nevertheless, the discontinuity between Early and Middle Bronze Age sites with respect to their locations, which is potentially the result of changes to the geomorphology of the coast, is probably responsible for this situation.

7. It is noteworthy that such ships were considered so appropriate to the task that all early seagoing ships in Egypt came to be known as Byblos ships, even until the Eleventh Dynasty (Landström 1970:63, 89).

8. The use of the term *Hyksos* (Egy. *ḥk3w* Ḫ*3swt*) to refer to this Semitic population has created a misnomer, as these Canaanites were not "foreign rulers" in their homeland in the southern Levant. Thus the term *Hyksos* should be reserved to refer exclusively to the rulers of Avaris in Egypt during the Fifteenth Dynasty (ca. 1640–1540 B.C.E.).

9. 9. For one of the clearest explications of these terms available, see Donald Harden (1962:21–22).

10. Execration Texts references f3 and E63.

11. The assertion that settlements located up small streams, such as Kabri, functioned as ports (e.g., Kempinski 2002:451; Marcus 2007:164) cannot be sustained, since these "ports" are substantially above sea level today and there is no clear evidence to suggest that they were otherwise during the Middle Bronze Age. Indeed, to argue for such conditions requires accepting that such inland sites were nearly at sea level but that somehow other MB II ports, which were situated on the coast, were not inundated by the same geomorphological events. Furthermore, the present distance between such settlements and the coast suggests that even if ships could have navigated shallow twisting rivers, these sites would not have been preferred as way stations for regular north-south traffic along the coast.

12. Old Babylonian *berûtu,* meaning "hunger" (*CAD* B, p. 213).

13. Old Babylonian *sidītu,* meaning generally "provisions" or more specifically "travel provisions" (*CAD* Ṣ, p. 172–73).

14. See Execration Texts reference E49.

15. Old Babylonian *dūrum,* meaning "wall" or "fortress" (*CAD* D, pp. 192ff.).

16. West Semitic word meaning "beautiful" (cf. *CAD* J, p. 325).

17. See Execration Texts references e23–25, f15, and E2. On the origin of the name, see Stager and Schloen (2008:7).

18. With regard to the time required for sailing such distances, Ezra Marcus observes the following: "A direct sail from the shores of the eastern Delta to the modern border of Lebanon and Syria covers a distance of approximately 270 nautical miles. A vessel sailing at 3 to 6 knots (nautical miles per hour) would make that voyage in 45 to 90 hours, i.e., 2 to 4 days. In contrast, a ship's course that brought the vessels as close to the shore as possible would cover approximately 377 nautical miles in 63 to 126 hours, or 2.5 to 5 days. Naturally, ships would not have traveled in such straight lines, and if they called at ports along the way or were waylaid by inclement weather, the distance covered and the time would have increased commensurately. Even if the speed is cut to 1 knot, the maximum actual time at sea (12 to 15 days) is fairly negligible compared to the entire length of the expedition" (2007:146).

19. For a discussion of Canaanite ships, see Shelley Wachsmann (1998:49–61).

20. Among the ceramics are an MB IIA bowl with a painted cross decoration (Amiran 1970:pl. 25:22), an MB IIA piriform juglet, and, in Area J, a Levantine Painted Ware storejar.

21. A number of editions of this text are available (e.g., Goedicke 1968; Simpson 2003:72–74).

22. New Kingdom dates follow K. A. Kitchen (2000).

23. The appearance of these granaries is suggested by those exposed at Bir el-'Abd by the North Sinai Expedition (Oren 1987:78–80, pl. A).

24. See KRI II. Fasc. 7, no. 401 (Kitchen 1975–1990).

25. It is unlikely, as Kaplan speculated (1972:82), that Merneptah was responsible for the destruction of Jaffa at the end of the thirteenth century, since a reference to Jaffa would be expected alongside Ashkelon, Gezer, and Yanoam on his stele.

26. The recognition that Philistia vis-à-vis the Middle Bronze Age kingdom of Ashkelon constituted a political territory prior to Philistine settlement (Burke 2008:125–139) also undermines Stone's hypothesis. A contiguous territory may persist politically, but this does not by any means support its ethnic or cultural continuity.

27. There is no phenomenon of political organization throughout the Bronze and Iron Age in the Levant for which the term *city-state* is more appropriate than the development of Phoenician city-states from the coast of Lebanon toward the end of the Iron I period (for the definition of *city-state,* see Charlton and Nichols 1997). During this period, these city-states functioned with both political and military autonomy and, as suggested by many references to them, were ethnically distinct as through identification with specific home cities (e.g., Tyrians, Sidonians, Gebalites, Arwadites), in particular among Semitic sources.

28. The dates offered here reflect the limits of our understanding of the diachronic development of Phoenician political organization of Levantine settlements.

29. Space does not permit a lengthy discussion of recent reappraisals of the historical events attributed to the reigns of David and Solomon by the Deuteronomist and later biblical authors, such as the Chronicler. Nevertheless, within the context of eleventh- and tenth-century Phoenician colonization of Cyprus (Bikai 1994), which was likely a product of Tyrian commercial activity, and with the foundation of Carthage by Tyrian colonists not later than the late ninth century, it is difficult to accept that the account of Tyrian involvement

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in building activity during the reigns of David and Solomon needs to have been invented or retrojected to be accepted as historical.

30. To the extent that a consensus exists, it follows the one presented in Michael Koch's work (1984), that Tarshish should be identified with the region of Tartessos in southern Spain, with which we are familiar only from classical sources. Yet, even in the 25 years since Koch's study, this identification has not been further elucidated, and the equation rests on a tenuous chain of reasoning: Tarshish was a Phoenician entity that traded largely in metals; Tartessos is a metaliferous region with a reasonably similar name; the coast of Tartessos was colonized by Phoenicians; thus the land of Tarshish should be identified with classical Tartessos. However, because of the varied dates of the biblical and classical references identified with Tarshish and their occurrence in wholly different corpora, not to mention the various other characteristics associated with Tarshish that are not addressed in the traditional identification, the equation of Tarshish and Tartessos is highly questionable.

31. The reference to "*Tarshish*-ships" in this passage suggests the early use of this term in the biblical text to designate a class of ship rather than to suggest that sailors or ships from a place called Tarshish were engaged directly with Israelites in naval expeditions. Instead, as with Kbn ships of the third millennium B.C.E. (discussed above), Tarshish, although likely a historical place, was used in this context as a designation for a class of ship, the precise details of which elude us, that was employed by Israel and outfitted with Tyrian sailors.

32. Also mentioned in Joshua 15:41.

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Chapter 7

Jaffa in Its Regional Context during the Late Bronze and Iron Ages

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Jaffa was a major site in the southwestern part of Palestine during the Late Bronze Age. Its situation was ideal for several reasons: (1) the city featured a natural harbor; (2) it sat just north of sand dunes that were a significant part of the landscape along the coast south of Jaffa and that prevented the founding of agricultural settlements; (3) there were swamps (now dunes) along the coast north of the Yarkon River, but they were much smaller than those in the south; and (4) it had an ideal position with respect to important sites in its hinterland and beyond, including Gezer, Lod, Beth-Shemesh, and Jerusalem. Jaffa was, of course, the starting point of one of the major roads leading into the hill country (Fischer et al. 1996).

The Historical Picture during the Late Bronze

Several Egyptian texts of the Late Bronze Age mention Jaffa and provide impressive proof of its importance. The oldest reference occurs as no. 62 in the famous list of Thutmose III (1479–1426 B.C.E.; Simons 1937:109–122). In it appear a number of place-names associated with the surrounding region (Table 7.1 and Figure 7.1). It seems that the Egyptian army was divided in two columns during Thutmose's campaign: one that went along the Mediterranean Sea and another that took a route a little farther to the east. This list also shows the main routes used during this period. The first route leads from Yurza (T. Jemmeh; no. 60) via Muhazi (T. es-Sultan; no. 61) to Jaffa (no. 62). It can clearly be seen that this highway was not located directly along the shore because of the sand dunes that either had to be bypassed to the east or skirted. The second route probably also began at Tell Jemmeh, but it left the first route for the area of Gath (probably T. es-Safi; no. 63), passed Lod (no. 64) and Ono (no. 65), and led to Aphek (no. 66). At Gibbethon (no. 103; cf. von Rad 1933)[1] a branch of this route led via Gezer (no. 104) and Rabba (no. 105; Aharoni 1969) to the southeast. This second route was about 10 km farther west than the first one. We have to suppose that these routes were the most important ones in the southwestern part of Palestine during the Late Bronze Age.[2] Also in that period, one main north-south route was located just east of the dunes, and another some 10 km farther east. Present-day Highway 4 still follows the track of the western road, while the eastern road is nearly parallel to the train line connecting Tel Aviv and Beer-Sheba.

According to this route system, Jaffa's position is particularly important. It is the first place where the Mediterranean Sea can be reached without navigating the sand dunes along the coast. This town was a harbor as well as part of an important inland trade route because there were no dunes in the immediate area surrounding Jaffa (and present-day Tel Aviv). The importance of Jaffa as a harbor is also shown by a tale of the conquest of Jaffa by

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Table 7.1. Toponyms located in the southern coastal plain from Thutmose III's list.

List No.	Historical Name	Tell Name	MR No.
60	Yurza	T. Jemmeh	097.088
61	Muhazi	T. es-Sultan/T. Mahoz	126.148
62	Jaffo	Jaffa	126.162
63	Gath	T. es-Safi	135.123
64	Reten/Lod	el-Ludd	140.151
65	Ino/Ono	Kafr Ana	137.159
66	Aphek	T. Ras el-'Ain	143.168
103	Gibbethon	T. Malat	137.140
104	Gezer	T. Jazari	142.140
105	Rabba	Kh. Bir el-Hilu?	149.137

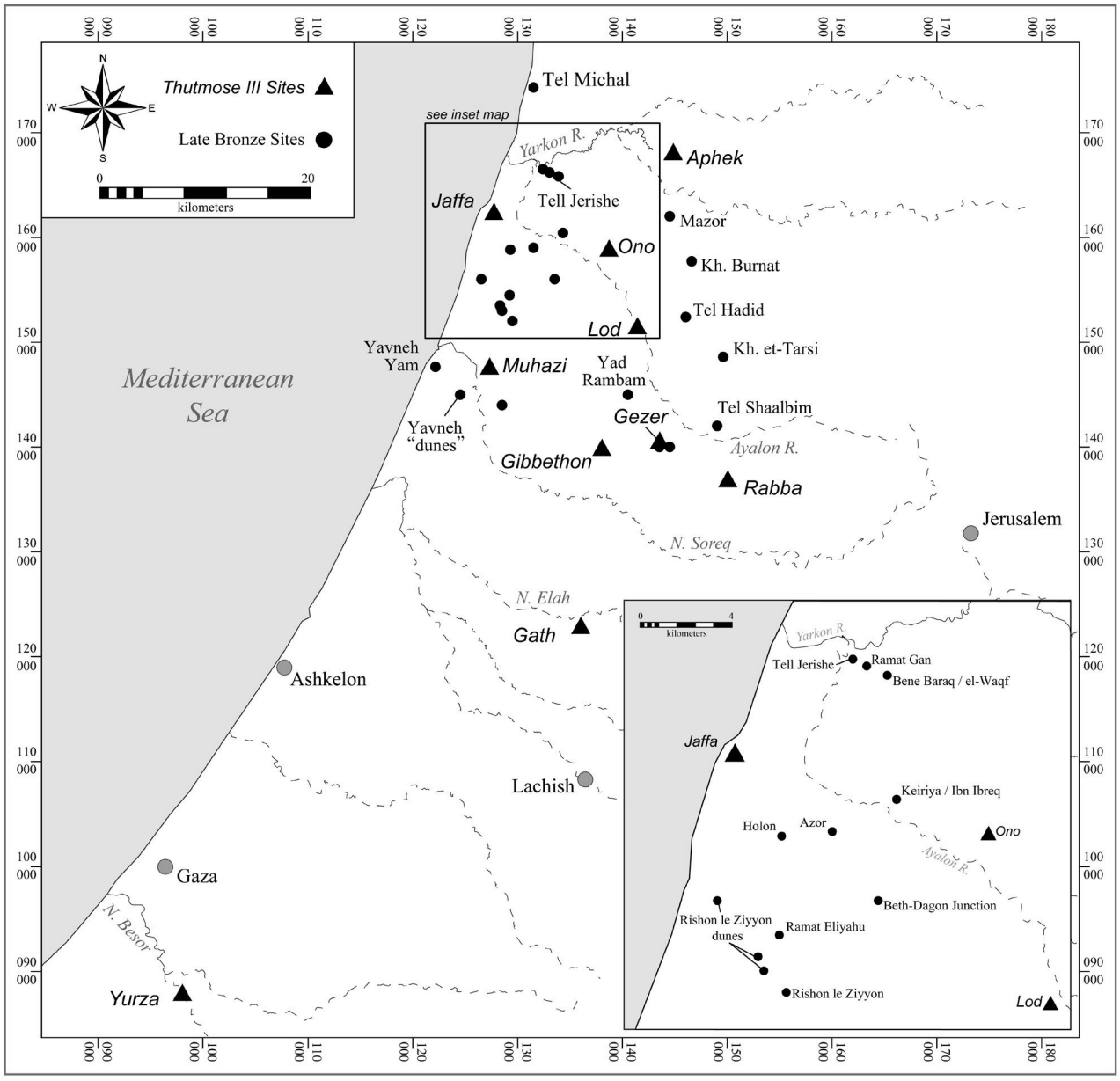

Figure 7.1. Sites in the southern coastal plain mentioned on Thutmose III's list.

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Thutmose III (Papyrus Harris 500, cf. Junge et al. 2001) that was written during the time of Seti I (1290–1279 B.C.E.) or Ramesses II (1279–1213 B.C.E.).

During the Amarna period, Jaffa was still important for the Egyptians, and the city needed protection against Canaanite rebels (*EA* 296). Addadani, the mayor of Gazru (Gezer), wrote a letter to the pharaoh, informing him that he had prepared everything to protect Jaffa (*EA* 294). This story suggests a strong connection between Gezer and Jaffa. Gezer, about 25 km from Jaffa, was the nearest major town during this period, and together with Lachish and Ashkelon, Gezer played an important role in supplying the Egyptian army during the Late Bronze Age (cf. *EA* 287). We may assume, therefore, that there was also a close connection between the towns of Jaffa and Gezer and that Jaffa was the main harbor used by the people of Gezer.

Jaffa also played an important role during the reign of Ramesses II as a fortress where his troops were garrisoned, as suggested by the monumental gate facade inscribed with his cartouche and discovered by Kaplan. A primary reason for constructing a fortress in Jaffa or for strengthening the existing fortress may have been the control of trade through the harbor of Jaffa. The satirical text of Papyrus Anastasi I 25.2–6 (Fischer-Elfert 1986:212–222), written during the time of Ramesses II, mentions a young girl from Jaffa who offered herself sexually to an Egyptian official and then ridiculed him. In Papyrus Anastasi I, Jaffa is the only town in the later Philistine area; most of the sites mentioned in that text are from the area farther north. The absence of towns from the southern coastal area may be due to the fact that the Egyptian official mentioned in this text was responsible only for the northern part of Palestine. If this is correct, the mention of Jaffa shows how important this town had been for the Egyptian army's control of Palestine. Jaffa may have been considered one of the major Egyptian posts in Canaan during this period.

Although Ramesses II ruled 66 years, all his campaigns to Asia can be attributed to the first and second decades of his rule. A stele from Beth-Shean, dated to his eighteenth year (Černy 1958), is the last proof for a military action in Palestine. There must not have been any important events in the later years of Ramesses II (or at the time of his death?). His successor, Merneptah (1213–1204 B.C.E.), had to reconquer the southern coast of Palestine in his fifth year. The famous Merneptah Stele mentions the conquest of Canaan (Gaza?), Ashkelon, and Gezer, and the Amada Stele identifies him as "the binder of Gezer" (Kitchen 2003:1, 9). Although what really happened in that period remains unknown, there seems to have been a severe setback to Egyptian hegemony in Canaan.

The Archaeological Picture during the Late Bronze Age

Table 7.2 presents the Late Bronze Age sites located within a radius of about 20 to 25 km (a little less to the north) around Jaffa (beginning with data provided by Finkelstein 1996; and Jasmin 2006). For this area, only a few intensive surveys have been published (grid squares 14/15 [(Gophna and Beit-Arieh 1997), 14/16 (Kochavi and Beit-Arieh 1994)], and 13/17 (Gophna and Ayalon 1998). The survey in grid 12/14 is only partly published (Fischer and Taxel 2006). However, these intensive surveys do not provide a new picture of the settlement history of the study area when compared to earlier reports. While many new small and very small settlements have been found, not a single truly significant and large site has been identified within this region during this work. Thus we have to suppose that in those areas for which we possess no intensive survey data, the data about the settlement history are reliable enough to outline its development. Much more complicated, however, is the estimation of site sizes. Only very few excavations offer an impression of the size of a settlement in every period. The sizes for sites that are known only from surveys are more complicated to estimate. For this reason, published data can be taken only as an impression of the size and, of course, of the amount of pottery recovered during these surveys. The categories of small, medium, and large in the following tables are merely estimates of the size of sites according to survey and excavation results. Large sites were 4 ha or larger; medium sites were between 1 and 4 ha; and small sites were less than 1 ha in size. The intensive surveys in the area reveal that this region was sparsely settled during the Late Bronze Age. Table 7.3 shows the number of settlements during different periods in the three areas where intensive surveys have been conducted (including cemeteries).

Table 7.3 reveals that the number of settlements in this region was lowest from the Middle Bronze Age through the Iron I period. Only during the Iron II did the number significantly increase inland from Jaffa, while on the coast,

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Table 7.2. Late Bronze Age sites in the region around Jaffa.

Sites	MR Coord.	Size (S = small; M = medium; L = large)	Publications
12/14			
T. Shalaf	1276.1448	S	(Fischer and Taxel 2006; cf. Gorzalczany and Taxel 2001:73*; Kaplan 1957:199–205; Thompson 1979:315–316)
T. es-Sultan (T. Mahoz)	1259.1475	M (1 ha)	(Dothan 1952:109–110; Fischer and Taxel 2006; Thompson 1979:313–314)††
"Yavneh dunes"	1247.1453	S	(Anonymous 1983:50)
Yavneh Yam	1212.1479	S	(Dothan 1952:111; Fischer and Ayalon 2005:173–208; Fischer and Taxel 2006; Kaplan 1993c:1504–1506)
13/14			
T. Malat (T. Malot)	1374.1404	M	(Shavit 1993:49–50; Thompson 1979:319; Weksler-Bdolah and Golani 2000:70*–71*)
14/14			
East of Gezer I	143.140	S	
East of Gezer II	144.140	S	
Gezer (T. Jezer)	1425.1407	L	(Dever 1993:501–504)
T. Shaalbim	1485.1420	S/M	(Thompson 1979:320)
Yad Rambam	140.145	S	
Kh. et-Tarsi	1491.1486	S	(Thompson 1979:319)
12/15			
Holon	1288.1588	S	(Thompson 1979:298)
Rishon le Ziyyon	129.152†	S	(Anonymous 1968:15; Thompson 1979:315)
Rishon le Ziyyon dunes	126.156†	S	
-	1279.1567	S	(Thompson 1979:299)
-	1278.1552	S	(Thompson 1979:299)
Ramat Eliyahu	1287.1545	S	(Thompson 1979:299)
13/15			
Azor	131.159	M	(Dothan 1993:127–129; Gophna 1967:7)
Beth-Dagon Junction	133.156	S	
Ono (Kfar Ana)	1377.1590	M/L	(Thompson 1979:301)
14/15			
T. Hadid (Haditha)	1455.1524	M	(Brand 1999; Gophna and Beit-Arieh 1997:63*–64*)
Lod	1408.1518	S/ M	(Avissar 2000; van den Brink 1999; Gophna and Beit-Arieh 1997:66*–68*; Kogan-Zehavi 2000; Thompson 1979:305; Yannai and Marder 2000:64*)
Kh. Burnat	1461.1577	S	(Gophna and Beit-Arieh 1997:39*)
12/16			
Jaffa	126.162	M	(Kaplan 1972: 77–82; Kaplan and Ritter-Kaplan 1993:655–659; Peilstöcker 2000b:49*, 2007)
13/16			
T. Jerishe	1319.1665	M	(Herzog 1993a)
el-Kheiriya (Ibn Ibraq) = ancient Bene Beraq	1338.1604	M	(Finkelstein 1990)
Bene Beraq: El-Waqf	1334.1658	S	(Kletter 2000)
Ramat Gan	1325.1662	S	(Thompson 1979:286) (IDA file)
14/16			
T. Aphek	1438.1682	S	(Beck and Kochavi 1993; Kochavi and Beit-Arieh 1994:32*)
Mazor	144.162	S	(Kochavi and Beit-Arieh 1994:63*)
13/17			
T. Michal	1310.1743	S	(Herzog 1993b; Muhly and Herzog 1982)

† approximate coordinates

†† Trude Dothan assumes that the nearby cemeteries of el-Humraiya (1258.1492) and Zaharat el-Jisr (1263.1475), which both have LB material, are connected to the town of Tell es-Sultan. For more recent excavations of the tombs, see Fischer and Taxel (2006).

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Table 7.3. Sites per period represented in three major surveys near Jaffa.

Period	Lod (14/15) (Gophna and Beit-Arieh 1997)	Rosh ha-'Ayin (14/16) (Kochavi and Beit-Arieh 1994)	Herziliyya (13/17) (Gophna and Ayalon 1998)
Neolithic	7	1	12
Chalcolithic	12	8	2
EB I–III	19	4	10 (only EB I)
EB IV–MB I	4		
MB IIA–C	3	6	12
LB	4	2	3
Iron I	2	6	1
Iron II	46	34	4
Persian	28	37	6
Hellenistic	19	26	9
Roman	45	17	30
Rom.–Byz.	43	37	
Byzantine	106	77	43
Early Arab	28	26	18
Crusader–Mamluk	15	12	9
Ottoman	21	16	31

a higher density did not start before the Roman period (see Gophna and Ayalon 1998). Until now it has been relatively difficult to write an archaeologically based history of Jaffa for the Late Bronze Age. The excavations of Ze'ev Herzog may contribute significantly to this picture (Sweeney 2003), but these remain unpublished (see, however, Herzog 2008). The excavations of Kaplan are only partly published and present just a general outline (see Chapter 22). New excavations by the JCHP will likely present additional information. Nevertheless, Kaplan's chronology (see Table 2.2), combined with the results of newer excavations (Fantalkin 2005; Kaplan and Ritter-Kaplan 1993; Peilstöcker 2000a, 2007:157; Peilstöcker and Kapitaikin 2000), appears to remain valid.

Jaffa's situation at the end of the LB II is similar to that of Ashdod and Tel Mor. There are at least two levels in a short period around 1200 B.C.E. Ashdod Stratum XIV existed until ca. 1230 B.C.E., or the later days of Ramesses II. There was a transition level, Stratum XIIIB, before the first Philistine sherds appear in Stratum XIIIA. Likewise, Tel Mor was built up as a fortress during the thirteenth century B.C.E. (Stratum 7). This fortress was destroyed by fire and followed by a new fort with a transitional phase (strata 6 and 5). The Philistine strata (strata 4 and 3) belong, of course, to the twelfth and eleventh centuries B.C.E.

The historical picture provided by the texts for the end of the Late Bronze Age and the Iron I period can be easily combined with the archaeological results in Jaffa, Tel Mor, and Ashdod. Jaffa Stratum IVB was certainly built up by Ramesses II during the first decades of his reign. The destruction of this stratum (and likely of Ashdod XIV as well as Stratum 7 in Tel Mor) should be connected with political disturbances during the later years of Ramesses II. The following stratum, IVA (and Ashdod XIIIB and strata 6 and 5 at Tel Mor), should be connected with the reign of Merneptah, who reconquered the area ca. 1208 B.C.E. and likely rebuilt the city gate and fortification wall. The later destruction of this level may be connected with the Sea Peoples. From historical sources, we know that the famous battle between the Philistines and the army of Ramesses III took place in the eighth year of Ramesses III (1187–1156 B.C.E.), ca. 1179 B.C.E. Although the distance between Jaffa and the Egyptian frontier is rather short, it took some years before Philistine settlement spread this far, since the main interest of the Philistines was not the conquest and destruction of foreign cities and cultures but to find a suitable area for new settlements. Therefore, it is likely that the Philistines conquered and settled Jaffa, as earlier suggested by Kaplan (1972:82), about 1180 B.C.E. or some years earlier.

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The distribution of the Late Bronze Age settlements in the region confirms the picture provided by textual sources. A line of villages exists east of the swamps, and another line 10 km east of those. The western route passed Holon, Ramat Eliyahu, Tell es-Sultan, Zaharat el-Jisr, and Tell Shalaf as it progressed southward to Tel Ashdod. According to some reconstructions, Tel Shalaf had an Egyptian fortress that was intended to control this route (Gorzalczany and Taxel 2001).

The only town in our study area south of Jaffa and directly situated on the Mediterranean Sea is Yavneh Yam. Yavneh Yam was likely the harbor of Tell es-Sultan, which can be identified with Muhazi (no. 61) of Thutmose III's list, although some scholars identify Muhazi with Tel Mor (MR 1170.1368; cf. Barako 2007:4–6). The archaeological situation in Yavneh Yam is not completely clear. In the Middle Bronze Age and LB I there certainly existed a strong fortress, surrounded by a rampart, but Kaplan found no LB II remains (1993c). Although Fischer discovered some sherds, no architecture has come to light for this period, and only further excavations will yield the necessary data. However, it seems reasonable to conclude that the fortress of Yavneh Yam was completely or mostly abandoned when Jaffa was further built up under Ramesses II as an Egyptian center.

The second route proposed is also confirmed by the settlement pattern. There is another line of villages from south to north. Passing Tell Miqne-Ekron to the south, these include Tell Malat (Gibbethon), Lod, Ono, and Tel Aphek. Aphek was one of the Egyptian governor's residences and served as a main point for trade and Egyptian control over the country (Kochavi 1990). Egyptian, Hittite, Akkadian, Sumerian, and Ugaritic texts were found in the residence (Horowitz et al. 2006:29–38). Gezer is on an eastern branch of this route. At Lod, a branch to the west connected the two main routes passing Bene Beraq and Azor and led to Jaffa. To the east, this route passed through the Shephelah and climbed up to Jerusalem (Fischer et al. 1996).

Between the two reconstructed major routes from south to north, no settlements are attested. We also have in this area the same situation as in many areas all over Palestine in the Late Bronze Age; that is, nearly all the important settlements were connected to these main routes since the income of these settlements was mainly connected with trade.

In Jaffa a northern route also started toward the bank of the Yarkon River, where Tell Jerishe and the neighboring sites of Bene Beraq and Ramat Gan were situated. Tell Jerishe likely served as an anchorage for small boats. It was certainly easy to cross the river at that spot, and there is no Late Bronze Age site on the northern bank of the river.

There are very few large sites in the study area. Tell Jerishe, Jaffa, Azor, and Gezer were the most prominent settlements. Because Azor and Tell Jerishe are situated close to Jaffa, they were no doubt connected with the harbor town. Since Jaffa was a military post and a fortress, it is likely that the two settlements were involved in the subsistence of Jaffa's population. Gezer was an independent and very large site in that period that was connected to agriculture and served as a main center for the Egyptian army. One building in Gezer of the LB IIB is identified as an Egyptian-style residency (Dever 1993:503), perhaps belonging to an Egyptian official who organized the trade and the taxes for Egyptian soldiers in the area. The Egyptians controlled the major sites in the region. The loss of those sites during the last quarter of the thirteenth century not only signified a loss of country but also mainly destabilized the Egyptian military infrastructure in that period. This may explain why, with Gaza, Ashkelon, and Gezer, three sites of southern Palestine are mentioned in the Merneptah Stele. Merneptah was interested in reinforcing the logistical centers of the Egyptian military.

The Biblical Portrayal for the Iron I

We have rather few texts for the history of the area around Jaffa in the early Iron Age. It is especially remarkable that this town, an important harbor throughout most of the history of the region, is seldom mentioned in the Bible (Jos 19:46; 2 Chr 2:15; Ezr 3:7; Jon 1:3). The only exilic text may be Jos 19:46 (Fritz 1994:198f.); all the others belong to the postexilic period. The five Philistine centers, Gaza, Ashkelon, Ashdod, Gath, and Ekron, were far south and are outside of the study area. A historical background may be visible in a smaller fight between some Israelite tribes (certainly not "all of Israel" but likely only the tribes of Ephraim and Manasseh) in 1 Sam 4:1–2, 11.[3] This battle took place between Aphek and Eben-Ezer (possibly at 'Izbet Sarta; MR 1467.1679). The Israelite tribes lost

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the fight and the ark, which was then brought to Philistia. This was just an encounter at the extreme northeastern edge of Philistine territory and likely only of local importance (like some other battles between Israelites and Philistines; cf. Judg 3:31, 13–16; 1 Sam 13–14; 2 Sam 21:19–21; 2 Sam 23:9–17). Another historical tradition can be found in 1 Sam 29:1. The Philistine army had gathered at Aphek to fight a coalition of Israelite tribes in the Jezreel Valley and at Mount Gilboa. To assemble the troops in Aphek was ingenious, since this was the northernmost town of Philistine territory, on the one hand, and was situated on a main road leading to the north, on the other hand.

There is no conclusive evidence that David destroyed any Philistine town, even though David seems to have been an excellent military leader who was able to repulse the Philistines as they continued to try to expand their territory into the Judean and Ephraimite hill country. A historical tradition of David's victory against the Philistines can be found in 2 Sam 5:17–25. This battle took place southwest of Jerusalem, and David struck down the Philistines up to Gezer. Gezer was likely an independent town on the border of Philistine territory. According to reliable biblical texts, David's conquests do not include any areas belonging to the Philistines. That is why not a single destruction level in Philistine territory should be connected with the wars of King David. Nevertheless, his military power was sufficient to keep the Philistines within their traditional heartland.

The Archaeological Picture during the Iron I

Because texts offer us very few data about the study area for the Iron I period, archaeology receives a prominent place among efforts to reconstruct the history of this period. There is a significant change in the settlement pattern in the study area from the Late Bronze to Iron I period, especially along the coast. Although it was already scarcely settled during the Late Bronze Age, it was now completely abandoned. The excavations of Yavneh Yam have revealed that this harbor town was no longer settled during the Iron I (Fischer and Ayalon 2005:173–208). Jaffa, which is not mentioned in texts of the early Iron Age, survives therefore as the only harbor on the Mediterranean coast within this area. Jaffa may also have lost its dominant position, as suggested by the relatively limited Iron I material recovered there (Kaplan and Ritter-Kaplan 1993:656–658; Peilstöcker 2007:158). Altogether, there were fewer settlements in the Iron I than during the Late Bronze Age (Table 7.4). The Philistines co-opted the settlement pattern from the Canaanites (Burke 2008:137–139), but at least in our study area, only a few major sites survived. This settlement pattern is particularly important when compared with the settlement pattern of the hill country, where the Israelites are credited with establishing many new small villages.

Two other developments in the settlement history of this region are also remarkable. The first is the higher density of settlement characteristic of early Israelite settlements east of Aphek. According to 1 Sam 4:1–2, 11 (see above), Aphek served as a Philistine outpost on their northeastern border. Since directly east of Aphek, a relatively lone Philistine village, new settlements were founded, it would seem likely that the new settlers experienced some trouble with the Philistines, which may be the historical background of the biblical story in 1 Sam 4:1–2, 11.

The most important change compared to the Late Bronze Age was the founding of Tell Qasile (likely biblical MeJarkon [Jos 19, 46]) on the northern bank of the Yarkon River. In the eighth century, an inscription mentions that gold from Ophir was brought to Beth Horon (Renz and Röllig 1995:229–231). The discovery of this inscription in Tell Qasile is only understandable if trade goods were brought to this place and then traded farther inland. We may assume that Tell Qasile was built up in the Iron I as a harbor town for the Philistines and was intended to replace Jaffa as the main port. But why did the Philistines give up the natural harbor of Jaffa and build up an inland harbor? One possible reason may be their own experience. For instance, they knew the danger associated with pirates, since the Sea Peoples to whom they belonged were engaged in similar activity. For them it was likely safer to have an inland port that could be reached by small boats and not larger ships. The trade ships may therefore have had to anchor at the mouth of the Yarkon River, and the inhabitants of Tell Qasile brought the trade goods to their town 2 km from the coast, unless the Yarkon was navigable up to Tell Qasile at that time.

But there is still a puzzling problem. Why was Tell Qasile founded on the northern bank of the Yarkon River? The town was completely isolated; there were no settlements within its hinterland. Given this realization, Tell Qasile and Tell Jerishe might be identified as twin

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towns during the Iron I, both serving as trading centers and inland harbors. Tell Qasile could also have served as a military station to protect Philistine territory north of the Yarkon River. This might also explain why such a prominent temple existed there. Perhaps it served also as a frontier sanctuary of the Philistines.

There seems to have been only one major route crossing our study area during the Iron I. This road came up from Ekron, passed Tell Malat (Gibbethon?) and Tell Ras Abu Hamid, and went northward to Tel Aphek. One branch of this road passed Beth-Dagon Junction and Azor and led to Jaffa as well to Tell Jerishe, as can easily be seen by the distribution of Iron Age I sites in the area (Figure 7.2).

The Historical Picture during the Iron II

There are also surprisingly few data about the region for the Iron II period. 1 Kings 9:15 informs us that King Solomon (965–926 B.C.E.) rebuilt Gezer. Although the historicity of this verse is often discussed, there is no problem accepting the information if one does not attempt to connect it with the city gate discovered at Gezer. The verse may be connected only with some building activities in Gezer. 1 Kings 9:16–17 certainly constitutes a later insertion. There is no extrabiblical evidence of any campaign by an Egyptian pharaoh to Palestine during the tenth century B.C.E. prior to that of Shishak (945–924 B.C.E.). Shishak's campaign passed only the site of Gezer (no. 2 on his list) within this region.

The biblical text records that a war between Israelites and Philistines near Gibbethon (T. el-Malat) occurred during the time of the Israelite king Nadab (907–906 B.C.E.) and once again during the time of Zimri (882 B.C.E.; 1 Kgs 15:27; 16:15–17). The area around Gezer, close to Gibbethon, seems to have been still contested at that time, which may have been connected with Shishak's campaign. The conquest of Gezer led to further local squabbling over the ownership of fields in this region.

Further information about the history of our study area is available from the Assyrian texts from Adad-nirari III (811/810–781 B.C.E.), Tiglath-pileser III (745–727 B.C.E.), Sargon II (722–705 B.C.E.), and Sennacherib (705–681 B.C.E.). Although the first three kings organized campaigns against Philistia, no information about the area in question is provided in the texts. However, there existed (the original has been lost) a relief from the time of Tiglath-pileser III showing the conquest of Gezer (Barnett and Falkner 1962:24:40–41, pl. 62; Ehrlich 1996:192–193). This is the only proof that Gezer was conquered during the reign of Tiglath-pileser III. This event may be connected with the destruction of Stratum VI in Gezer.

On his way to Jerusalem, Sennacherib passed through this region (*ANET*, pp. 287–288; see also Chapter 6). Nearly all the cities mentioned in the text are well known: Joppa is Jaffa; Banai-Barqa is identified with Ibn Ibraq/Bene Berak (MR 133.160), Azuru/Azor with Yazur/Azor (MR 131.159), Eltekeh with Tell esh-Shallaf (MR 128.144), and Timna with Tel Batash (MR 141.132). Those sites seem to be the most important sites in the area at the end of the eighth century, and the region belonged to Sidqia, king of Ashkelon.

Esarhaddon (681–669 B.C.E.) also passed through Philistia during his campaigns against Egypt, and some Philistine kings are mentioned among the conquered "kings of the country Hatti." However, the texts record no such events in the region around Jaffa. There are no informative sources about the end of the Assyrian Empire or the Egyptian or Babylonian domination of this area.

The Archaeological Picture of the Iron II

A connection of archaeological results with the history of our study area needs more detailed research, especially concerning the chronology of the excavated sites, which cannot be undertaken here. The aim of this section is simply to offer an outline of historical developments during the Iron II based on an overview of the settlement pattern (Table 7.4).

There is a remarkable difference in the settlement patterns of Philistine and Israelite territories during the Iron II, or, generally speaking, of the coastal plain and the Shephelah. Compared to the Iron I, we have more sites in Philistia during what might be characterized as a slow development with few major changes. The Philistines lived in villages distributed over the whole area. In Israelite territory identified with the Shephelah, we have a number of small settlements, sometimes single houses, distributed over the entire region. This difference may be especially well observed in two areas that were intensively surveyed, namely grids 14/15 and 14/16. A sharp line between the Philistine and the Israelite area can be drawn based on the settlement density. In Figure 7.2, neither cemeteries nor agricultural installations

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Table 7.4. Iron Age sites in the region around Jaffa.

Sites	MR Coord.	Size (S = small; M= medium; L = large)	Period	Publications
12/14				
T. Shalaf	128.144	S	Iron I–II	(Fischer and Taxel 2006; cf. Gorzalczany and Taxel 2001; Kaplan 1957)
T. es-Sultan (T. Mahoz)	1259.1475	S	Iron I–II	(Dothan 1952:104–117; Fischer and Taxel 2006)
Yavneh dunes	124.145	S	Iron II	(Anonymous 1982)
Yavneh Yam	1212.1479	S	Iron II	(Dothan 1952:111; Fischer and Ayalon 2005:173–208; Fischer and Taxel 2006; Kaplan 1993c)
T. Yavneh	1262.1415	M	Iron I–II	(Fischer and Taxel 2007; Kletter 2004)
Yavneh Favissa Hill	1263.1419	S	Iron II	(Ziffer and Kletter 2007)
Mesad Hashavyahu	1215.1475	S	Iron II	(Fantalkin 2001; Fischer and Taxel 2006; Naveh 1993)
Triangulation point 49	1261.1406	S	Iron II	(Fischer and Taxel 2006)
13/14				
T. Malot	137.140	S	Iron I–II	(Ory and Shmueli 2006; Shavit 1993:49–50; Weksler-Bdolah and Golani 2000)
Ras Abu Hamid	1397.1456	M	Iron I–II	(Wolff 1999; Wolff and Shavit 1999)
14/14				
East of Gezer I	143.140	S	Iron I–II	Survey (Shavit, unpublished)
East of Gezer II	144.140	S	Iron I–II	Survey (Shavit, unpublished)
Gezer (T. Jezer)	1425.1407	L	Iron I–II	(Dever 1993)
Gimzo	145.148		Iron II	Survey (Shavit, unpublished)
T. Shaalbim	1485.1420	M	Iron II	Survey (Shavit, unpublished)
Yad Rambam	140.145	S	Iron II	Survey (Shavit, unpublished)
12/15				
Rishon le Ziyyon	ca. 129.152	S	Iron II	(Anonymous 1968:15)
Rishon le Ziyyon dunes	ca. 126.156	S	Iron II	
Rishon le Ziyyon	1278.1535	S	Iron II	Installation (Segal 2000)
Rishon le Ziyyon	ca. 128.153	S	Iron II	(Segal 2000:67*); Assyrian fortress (unpublished)
13/15				
Azor	131.159	M	Iron I–II	(van den Brink 2005; Dothan 1993:127–129)
Beth-Dagon	1338.1566	S	Iron I–II	(Peilstöcker and Kapitaikin 2000)
Beth-Dagon Junction	133.156	S	Iron II	
El-Yehudiya	139.159	S	Iron II	(Dorsey 1991:61)
14/15				
T. Hadid	1455.1524	M	Iron I–II	(Brand 1999; Cohen 1963:17; Gophna and Beit-Arieh 1997:62*–63*; Horowitz et al. 2006:61–64)
Lod	1404.1516	M	Iron II	(van den Brink 1999; Gophna and Beit-Arieh 1997:66*–68*; Kogan-Zehavi 2000; Yannai and Marder 2000:63*–66*)
Kh. Ammar (H. Pundaq)	1467.1599	S	Iron II	(Gophna and Beit-Arieh 1997:26*–27*)
H. Hani (Burj el-Haniye)	1470.1592	S	Iron II	(Gophna and Beit-Arieh 1997:26*)
H. Al (Kh. Deir ʻAlla)	1495.1595	S	Iron II	(Gophna and Beit-Arieh 1997:27*)
Bareqet (et-Tire)	1447.1584	S	Iron II	(Gophna and Beit-Arieh 1997:28*–29*)
Bareqet (east)	1455.1589	S	Iron II	(Gophna and Beit-Arieh 1997:30*)
Kh. el-Bira (west)	1462.1585	S	Iron II	(Gophna and Beit-Arieh 1997:30*–31*)
Kh. el-Bira	1468.1583	S	Iron II	(Gophna and Beit-Arieh 1997:31*–32*)
Kh. el-Bira (north)	1468.1588	S	Iron II	(Gophna and Beit-Arieh 1997:33*)
El-Muhaddad	1494.1586	S	Iron II	(Gophna and Beit-Arieh 1997:35*)

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Table 7.4. (cont.).

Sites	MR Coord.	Size (S = small; M= medium; L = large)	Period	Publications
Shoham (Kh. Hamid)	1450.1571	M	Iron II	(Gophna and Beit-Arieh 1997:35*)
Kh. Burnat	1461.1577	M	Iron II	(Gophna and Beit-Arieh 1997:39*–40*)
Kh. Musht Feiyada	1475.1575	S	Iron II	(Gophna and Beit-Arieh 1997:41*)
Kh. esh-Shamiya (Kh. Aly Malkina)	1466.1563	S	Iron II	(Gophna and Beit-Arieh 1997:44*)
Kh. Abu el-Fahm	1495.2554	S	Iron II	(Gophna and Beit-Arieh 1997:51*)
N. Natuf	1448.1519	S	Iron II	(Gophna and Beit-Arieh 1997:69*)
Kh. edh-Dhaheriyeh	1439.1504	S	Iron II	(Gophna and Beit-Arieh 1997:72*)
Deir Abu Salama	1461.1508	S	Iron II	(Gophna and Beit-Arieh 1997:74*)
12/16				
Jaffa	126.162	M	Iron I–II	(Fantalkin 2005; Kaplan 1972; Kaplan and Ritter-Kaplan 1993; Peilstöcker 2000b, 2007)
T. Kudadi	129.169	S	Iron II	(Avigad 1993a:882; Fantalkin and Tal 2009)
13/16				
T. Abu Zetun	1347.1673	S	Iron II	(Kaplan 1993a:186)
T. Jerishe	1319.1665	M	Iron I–II	(Herzog 1993a:482–484)
Kheiriya (Ibn Ibraq) = ancient Bene Beraq	1338.1604	M	Iron I–II	(Finkelstein 1990)
T. Qasile	1309.1678	M	Iron I–II	(Mazar 1993)
Bene Beraq. El-Waqf	1334.1658	S	Iron I–II	(Kletter 2000)
14/16				
T. Aphek	1438.1682	S	Iron I–II	(Beck and Kochavi 1993; Gadot 2005; Kochavi and Beit-Arieh 1994:32*)
Mazor	144.162	S	Iron I–II	(Kochavi and Beit-Arieh 1994:63*)
Fejja	141.165	S	Iron II	(Kaplan 1993b; Kochavi and Beit-Arieh 1994:37*)
Izbet Sarta	1467.1679	S	Iron I–II	(Finkelstein 1993; Kochavi and Beit-Arieh 1994:33*)
Kafr Qasim	1471.1693	M	Iron I–II	(Kochavi and Beit-Arieh 1994:22*, 24*)
-	1475.1687	S	Iron I–II	(Kochavi and Beit-Arieh 1994:28*)
Khirbat Taha	1469.1672	S	Iron II	(Kochavi and Beit-Arieh 1994:33*)
Qurnat Haramiya	1462.1665	S	Iron I–II	(Kochavi and Beit-Arieh 1994:38*)
Shaqif esh-Shekh	1494.1676	S	Iron II	(Kochavi and Beit-Arieh 1994:35*–36*)
N. Rabba	1466.1669	S	Iron II	(Kochavi and Beit-Arieh 1994:37*–38*)
Qasr es-Sitt	1475.1660	S	Iron II	(Kochavi and Beit-Arieh 1994:40*)
N. Shillo	1458.1652	S	Iron I–II	(Kochavi and Beit-Arieh 1994:45*)
N. Shillo	1469.1650	S	Iron II	(Kochavi and Beit-Arieh 1994:45*)
Migdal Afeq	1460.1653	S	Iron II	(Kochavi and Beit-Arieh 1994:47*)
N. Shillo	1479.1656	S	Iron II	(Kochavi and Beit-Arieh 1994:48*)
N. Shillo	1488.1652	S	Iron II	(Kochavi and Beit-Arieh 1994:50*)
Khallat es-Sihrij	1476.1649	S	Iron II	(Kochavi and Beit-Arieh 1994:54*)
N. Shillo	1475.1646	S	Iron II	(Kochavi and Beit-Arieh 1994:54*–55*)
N. Shillo	1487.1644	S	Iron II	(Kochavi and Beit-Arieh 1994:56*)
N. Shillo	1472.1638	S	Iron II	(Kochavi and Beit-Arieh 1994:62*)
N. Mazor	1466.1624	S	Iron II	(Kochavi and Beit-Arieh 1994:65*)
N. Shillo	1478.1622	S	Iron II	(Kochavi and Beit-Arieh 1994:67*)
N. Shillo	1487.1619	S	Iron II	(Kochavi and Beit-Arieh 1994:72*)
H. Leved	1482.1617	S	Iron II	(Kochavi and Beit-Arieh 1994:72*)

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Table 7.4. (cont.).

Sites	MR Coord.	Size (S = small; M= medium; L = large)	Period	Publications
N. Mazor	1484.1611	S	Iron II	(Kochavi and Beit-Arieh 1994:72*)
Kh. el-Qasr	1472.1609	S	Iron II	(Kochavi and Beit-Arieh 1994:75*)
Kh. Bir Bunduk	1471.1602	S	Iron II	(Kochavi and Beit-Arieh 1994:76*)
Rosh Ha-'Ayin	1461.1660	M	Iron II	(Avner-Levi and Torgë 1999)
13/17				
T. Michal	1310.1743		Iron II	(Gophna and Ayalon 1998:no. 55; Herzog 1993b; Muhly and Herzog 1982)
T. Makmish	1314.1744		Iron II	(Avigad 1993b; Gophna and Ayalon 1998:no. 44)
T. Qana (T. Hassan as-Sala)	1397.1707	M	Iron I–II	(Gophna and Ayalon 1998:no. 97; Gophna and Kochavi 1966:143–144)
T. Arshaf	1318.1777	S	Iron II	(Gophna and Ayalon 1998:no. 11)
Kfar Shemaryahu	1332.1771	S	Iron II	(Gophna and Ayalon 1998:no. 23)
Herfeliyat	1316.1737	S	Iron II	(Gophna and Ayalon 1998:no. 57)
Hiltamiya	1394.1701	S	Iron II	(Gophna and Ayalon 1998:no. 98)
North of Kfar Shemaryahu	133.177	S	Iron II	(Anonymous 1962)

are indicated. Many more places with Iron II pottery are located within Israelite territory. These should not be identified as real settlements but rather as industrial installations or tombs.

To build up mainly small villages or single houses in Israelite territory is possible only in the context of a relatively peaceful situation and coexistence between Philistines and Israelites. Small houses cannot be defended against a strong and aggressive enemy living nearby. The fact that the Bible informs us of nearly no fighting in that period between these two ethnic groups (except the battles near Gibbethon; 1 Kgs 15:27; 16:15–17) is confirmed by the distribution of settlements.

In Philistia, the old routes already used in the Late Bronze Age and early Iron Age continued to be in use. There were still two main roads, one passing the dunes with Tell Jerishe as the northern end and another about 10 km to the west with a branch to Gezer and Jaffa. The western road was likely secured by an Assyrian fort that was discovered at Rishon le-Ziyyon (Shanks 2007). This is proof of Assyrian interest in securing trade routes through the region. Dorsey (1991) describes many small roads around Jaffa (nos. 12, 13, 14, 15, 16, 17, and S9). However, the role of Jaffa in the Iron II period may be overestimated by Dorsey. While Jaffa was evidently enlarged during this period and even featured wine production facilities (Fantalkin 2005), Jaffa may have been rather insignificant. The main harbor town was possibly still Tell Jerishe on the Yarkon River. In the Shephelah, there must have been a dense net of small routes incorporating all the small sites, but all those routes seem to have been only of local importance, except for the route to Jerusalem (Fischer et al. 1996).

Interesting changes can be observed all along the Mediterranean coast during this period. The sites of Makmish and Tel Michal existed only in the early Iron II period and were abandoned shortly thereafter. Tell Qasile was destroyed in the tenth century and was only partly reused at the end of the Iron Age. The discovery of two inscriptions of the eighth century (Renz and Röllig 1995:227–231) proves there was still some trade activity, although the site was mostly abandoned. Because of the peaceful situation in the ninth and early eighth century, it was likely no longer necessary to maintain a Philistine settlement on the northern bank of the Yarkon. Tel Aphek, formerly the northeastern outpost of Philistine territory, lost its importance. In place of Tell Qasile, on the northern shore of the Yarkon River, the fortress of Tell Kudadi was erected in the ninth century to protect the entrance to the river.

Few data are known about Jaffa in the Iron II, however. The site was enlarged in the ninth century B.C.E. (Fantalkin 2005). Kaplan found pottery of the eighth century in Level IIIA (Kaplan and Ritter-Kaplan 1993:656).

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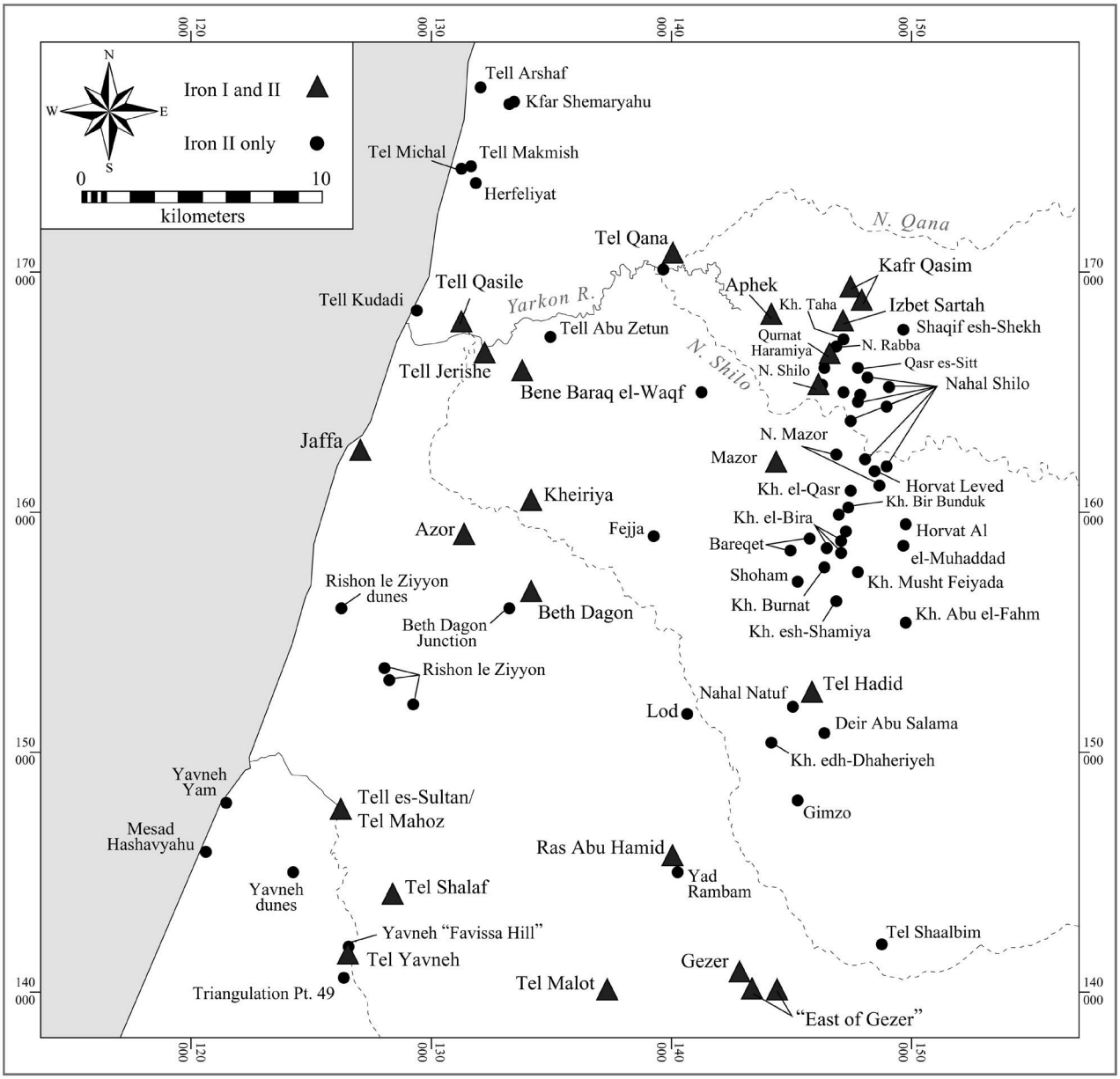

Figure 7.2. Iron Age sites in the area around Jaffa.

The town was likely destroyed by Sennacherib at the end of the eighth century B.C.E. and was possibly not resettled until the Persian period. The main port along the northern Philistine coast from the seventh century onward was Yavneh-Yam. Stratum X (eighth century B.C.E.) was probably also destroyed by Sennacherib. Stratum IX was rebuilt in the second half of the seventh century B.C.E. (Fischer and Ayalon 2005). Next to Yavneh-Yam is the fortress of Mesad Hashavyahu, located just a few hundred meters inland. Wenning has shown that the pottery of Mesad Hashavyahu should be dated to ca. 600 B.C.E. (Wenning 1989). The site is identified as a fortress that also was used for storage of trade goods arriving in Yavneh-Yam.

Excavations also show that the inhabitants of this region during the Iron II produced large amounts of wine and oil. In several excavated sites, presses have been found, especially in the Shephelah (compare the high number of presses in survey map 14/15) but also at sites such as Jaffa, Tel Michal, and Beth-Dagon. Therefore, it would appear that viticulture was one of the major sources of economic growth during the Iron II period.

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Conclusion

The detailed study of textual and archaeological evidence over a span of nearly 1,000 years, beginning with the Late Bronze Age and ending with the Iron Age II, reveals some severe changes in settlement patterns within the area considered here. The archaeological finds provide substantive evidence for the Egyptian economy and administration system in the Late Bronze Age, the violent claim of the area by the Philistines during the Iron I period, and the coexistence of Philistines and Israelites in the Iron Age II. Nevertheless, questions remain concerning Jaffa's character, particularly during the Iron Age. As this study reveals, our assumptions about the size and nature of Jaffa's settlement greatly influence our perception of Jaffa's centrality in the settlement pattern of the coastal plain during different periods. For this reason, renewed research in Jaffa, particularly excavations that are able to expose additional remains from the Iron II, will greatly improve our understanding of Jaffa's interconnections with sites throughout the coastal plain. Likewise, intensive study of the rich corpus of Late Bronze Age materials from Kaplan's excavations will shed a great deal of light on the Egyptian garrison's development over the course of the Late Bronze Age and perceptions of Jaffa's relationship to hinterland sites during this period.

Notes

1. While earlier surveys found Late Bronze Age pottery at Ras Abu Hamid (Tel Hamid; MR 1397.1456), which was often identified with Gibbethon, no pottery of that period has been found during more recent excavations (Wolff 1999).

2. It is noteworthy that this is nearly the same road system that existed in the late nineteenth century according to the Survey of Western Palestine.

3. Verses 3 to 10 are an exilic or postexilic redaction, using the words "ark of covenant" instead of "ark of god."

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Chapter 8

Greco-Roman Jaffa and Its Historical Background

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The final century of Persian domination in the Levant was a time of economic prosperity for Jaffa. Archaeological remains from the late Persian period, as indicated by imported Greek pottery and Attic Ware, link Jaffa with cities throughout the Mediterranean (Ritter-Kaplan 1982:64–68). During this time, the city was transferred to the Sidonians. Stern suggests that Jaffa may have been the southernmost reach of Phoenician material culture in this period (Stern 1992:302–309). The fifth-century-B.C.E. sarcophagus of the Sidonian king Eshmun'azar records that he received the coastal cities of Dor and Jaffa from Darius (see Chapter 6).

Dor and Jaffa are likewise mentioned together in Pseudo-Scylax (fourth century B.C.E.), where Dor is still specified as "a city of Sidonians" (Galling 1938:80). There Jaffa is described in connection with a local myth: "They say Androm[eda] was [stret]ched out here [for the monster]" (80). This is the first mention of Jaffa in connection with the myth of Andromeda, which is elsewhere repeated in Greek and Roman literature of late antiquity (Plin. *H.N.* 5.69, 128; Solin. 34:2; Paus. 4.35.9). Pomponius Mela repeats the story of Andromeda but also notes Jaffa's legendary antiquity, "founded, as it is said, before the Flood" (I.64; cf. Solin. 34:1). Jaffa is also employed to identify the location of the Dead Sea: "Xenophilus says that in the lake near Jaffa not only every weight floats, but every third year it brings forth wet asphalt" (Antig. *Mir.,* 151; cf. Vitr., VIII, 3:8–9). Yet it is the service of Joppa, Jaffa's name during the classical period, as a port for Judea and Jerusalem that is the cause for its greatest renown.

> Then one comes to Jaffa, where the seaboard from Egypt, though at first stretching toward the east, makes a significant bend toward the north. Here it was, according to certain writers of myths, that Andromeda was exposed to the sea monster, for the place is situated at a rather high elevation—so high, it is said, that Jerusalem, the metropolis of the Judeans, is visible from it; and indeed the Judeans have used this place as a seaport when they have gone down as far as the sea [Strabo 16.2.28; cf. 16.2.34].

The Early Hellenistic Period

The arrival of Alexander the Great in 332 B.C.E. marked an abrupt shift in the history of Jaffa. Following his defeat of Darius at Issus in 333, Alexander turned south through the Levant. He first subdued Cyprus and then turned to the cities of Phoenicia (Arwad, Byblos, and Sidon), which offered no resistance. Tyre was allied with Darius and supplied the Persians with their main navy in the conflict with the Greeks. Secure in its isolated location and the hope of assistance from its colony at Carthage, Tyre refused to allow Alexander to enter the city to offer sacrifices in the Tyrian temple to Heracles-Melkart, the Macedonian's mythical ancestor (D.S. 17.40.2). Alexander was angered by the ignominy

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Figure 8.1. Sites mentioned in the text according to their Greco-Roman names.

and laid siege to Tyre for seven months (Curt. 4.2.1–4.18; Just. *Epit.* 11.10.10–14; Plu. *Alex*. 24.2–25.2; Arr. *An*. 2.16–24). After the fall of Tyre, he continued toward his primary objective to the south: Egypt. He met no resistance at the Persian administrative city of 'Akko or the remaining coastal cities on his march south—including Jaffa. Only the independent city of Gaza is mentioned among the cities of Palestine that challenged Alexander (Arr. *An*. 2.25.4–27.7, cf. Rappaport 1970:70–80).

The absence of signs of destruction at Jaffa from the time of Alexander's conquest corresponds to the historical witnesses that report that Jaffa, like other coastal cities, did not resist the Macedonian. After Alexander's death and during the brief period of the Diodochi (323–301 B.C.E.), Jaffa remained a Sidonian city. It appears next in the story of the territorial struggle between the Diodochi and Antigonus Monophthalmus, successor to Antipater. Antigonus sought to reunify the former empire of Alexander at the expense of the Diodochi. He attempted

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to control the shipping in the eastern Mediterranean by conquering the Phoenician coast. Ptolemy I Soter resisted Antigonus's advances by strengthening his own fortresses in Syria and withdrawing his navy to Egypt. In response Antigonus established shipyards in Tripolis, Byblos, and Sidon in preparation for the looming naval conflict, and when he discovered that Ptolemy was drawing away cities along the southern coast, he moved preemptively.

> Antigonus left three thousand soldiers under Andronicus to carry on the siege [of Tyre], but he himself set out with the army and took by storm Jaffa and Gaza, cities that had refused obedience. The soldiers of Ptolemy whom he captured he distributed among his own ranks, but he placed in each city a garrison to force the inhabitants to obey him [D.S. 19.59.2].

Antigonus was eventually defeated by the Diodochi at the battle of Ipsus in 301 B.C.E. (D.S. 20.113.1–5). His lands in Syria were awarded in their entirety to Seleucus I, ruler in Babylonia and founder of the Seleucid Empire. However, Ptolemy moved into southern Syria in advance of the declaration and refused to relinquish control to Seleucus. For the next century, the successors of Seleucus and Ptolemy vied for control of Coele-Syria and the Phoenician coast.

The line of Sidonian kings came to an end in the first part of the third century B.C.E. (Arr. *An*. 2.15.6). The Palestinian coast was reconfigured with the hyparchy of Paralia situated south of Ptolemias. Its capital was likely the Hellenistic coastal town of Strato's Tower. The Ptolemies granted Jaffa independent status, and together with the independent Greek cities of Ascalon and Gaza, these ports assisted the Ptolemaic kingdom to develop as a sea power.

While Jaffa achieved independence under the Ptolemies, ancient writers—perhaps influenced by their use of older sources—on occasion continued to portray Jaffa as a Phoenician city: "Further along the coast is the region of Samaria, the free town Ascalon, Ashdod, the two towns named Jamnia, one of them inland; and the Phoenician city of Jaffa" (Plin. *H.N.* 5.69; Strabo 1.2.35; D.P. *Orbis Descr.* II.910–912). The first-century-B.C.E. Greek historian Diodorus, however, distinguished Jaffa and the Palestinian interior from Phoenicia, reflecting the new political reality that emerged from the Ptolemaic period: "[ʿAkko] in Phoenician Syria, and Jaffa, Samaria and Gaza in [Coele-]Syria" (D.S. 19.93.7).

> The voyage along the coast of this sea is exceedingly long, and any landing is especially difficult; for from Paraetonium in Libya as far as Jaffa in Coele-Syria, a voyage along the coast of some five thousand stades, there is not to be found a safe harbor except Pharos [D.S. 1.31.2; cf. 2 Macc 3:5–8; 4:4; 1 Esdr 2:17, 24, 27; 4:48; 1 Macc 10:69].

Figure 8.2. Hellenistic building exposed in Area C by the JCHP in 2008 and 2009. *JCHP photo.*

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During the Syrian Wars that spanned the third century, Jaffa found itself caught between the competing interests of the Ptolemaic and Seleucid kingdoms. The former ruled Palestine from Alexandria, and its primary interest was economic. During the reign of Ptolemy II Philadelphus (282–246 B.C.E.) and Ptolemy III Euergetes (246–222 B.C.E.), Jaffa served as a harbor town and location for a Ptolemaic mint (Hill 1914:xxiv). In the middle of the third century B.C.E., Zenon, an emissary for the Ptolemaic minister of finance, visited Palestine (cf. Edgar 1925–1931:59003, 59004, 59011). He arrived at the more modest port of Strato's Tower rather than Jaffa. Nevertheless, in correspondence from his visit to Palestine, he mentioned that Jaffa was now free of Phoenician rule. Material remains from Jaffa confirm the strong political and economic ties with the Ptolemaic kingdom. Interconnected rooms have been identified from this period. Kaplan considered them to be reminiscent of Hellenistic agora buildings as well as the lower level of a building that Kaplan termed a "catacomb" (1972:88) (Figure 8.2).[1] In addition, a marble slab with a dedicatory inscription to Ptolemy IV Philopater (222–204 B.C.E.; Figure 8.3) may have belonged to a Hellenistic temple (Kaplan and Ritter-Kaplan 1993:659).

The Late Hellenistic Period

While Jaffa is not mentioned in the ongoing struggles of the Syrian Wars, the Fourth Syrian War in 217 B.C.E. at Raphia (cf. 3 Macc 1:1; Dan 11:10; Plb. 5.79–80) brought the approaching armies of Antiochus III near the port city. In the end, Jaffa shared the fate of the other Greek cities in Palestine when rule of the land transferred to Antiochus and the Seleucids after the Battle of Paneas in 198 B.C.E. The Seleucids divided Palestine into four eparchies: Samaria, Idumea, Paralia, and Gilaaditis (cf. Strabo 16.2.4). The eparchy of Samaria included both Judea and Galilee (1 Macc 10:30). Josephus' mention of Jaffa in the Hellenistic period (J. *AJ* 13.4.9 §125) in connection with the territory of Samaria is likely an indication that the coastal city served as the seaport for Samaria.

The influence of Hellenistic culture witnessed on the coastal cities soon penetrated into the hinterland, where the Jewish population was more concentrated. The missteps of Antiochus IV Epiphanes in raiding the Jerusalem temple treasury and subsequent edicts that struck at the core of Jewish identity led to the uprising by Mattathias and his sons in 167 B.C.E. The writings of Josephus and 1 Maccabees recount that Mattathias, son of John, a priest and leader from the village of Modiin, was one of

Figure 8.3. Ptolemy IV Philopator inscription from Area C. *Kaplan Archive.*

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the first offered an opportunity to submit to the king's edict (J. *AJ* 12.6.1 §265–271). Bar-Kochva has suggested that the location of Modiin contributed to its early place of imperial coercion. It lies in the transitional area of three distinct geographic regions: the Judean Shephelah, Samaria, and the coastal plain (1989:195–196). This transitional region is outlined by the Jaffa–Lydda–Aphek triangle, whose northern boundary is the Yarkon River.

The Seleucids hoped that Mattathias's leadership status in the community would influence others to follow (J. *AJ* 12.6.1 §268). However, he refused, and when one of his own countrymen did step forward to offer a sacrifice on the newly constructed pagan altar at Modiin, Mattathias killed both the willing suppliant and the imperial emissary (1 Macc 2:23–26). Anticipating reprisals from the Seleucids, Mattathias fled with his sons into the nearby hill country of Samaria (1 Macc 2:28; J. *BJ* 1.1.3 §36). From there they attacked the Seleucid forces, pulled down pagan altars, and forcibly circumcised the uncircumcised sons of Israel.

After the death of Mattathias, his son Judas Maccabeus led the resistance for three years (167–164 B.C.E.), culminating in the recapture of Jerusalem and the purification of the temple. Shortly thereafter, during a campaign to rescue Jewish communities outside of Judea, Maccabeus left Joseph, son of Zechariah, and Azariah to defend the population of Judea while he battled Greek cities in the Transjordan. He gave the two clear instructions not to engage the local Gentile forces (1 Macc 5:18–19). The author of 1 Maccabees attributes their disobedience of this order to their pride: "Let us also make a name for ourselves; let us go and make war on the Gentiles around us" (1 Macc 5:57). However, their military initiative may have been in response to hostilities toward Jews living in the coastal region (cf. 2 Macc 12:3–9; Avi-Yonah 1972:170).

Whatever their motive, in military terms, the engagement occurred at an inopportune time, when the bulk of Jewish forces had been diverted elsewhere. Joseph and Azariah marched on Jamnia, but Gorgias quickly routed the Jewish forces, which suffered heavy casualties on their retreat to Judea. Even Judas Maccabeus, with his military skills and personal charisma, did not directly attack the fortified cities along the coastal plain. Kaplan identified an ashlar-built fort in Area A at Jaffa and attributed it to the period of Seleucid occupation (1972:89). Jason the Cyrene reports later reprisals by Judas against Joppa and Jamnia, but in these Judas attacked the ships and harbors of these cities and not the fortified cities themselves (2 Macc 12:6, 9). The language of these attacks more closely resembles guerrilla tactics than a full military assault (Goldstein 1983:434).

The death of Judas in 161 B.C.E. at the Battle of Eleasa (1 Macc 9:1–22; J. *AJ* 12.11.1 §420–434) resulted in the transition of power from Judas to his brother Jonathan. The latter had proved himself on the field of battle, but his greatest accomplishments were navigating the changing hands of power within the Seleucid kingdom. Judea experienced relative political stability until the arrival and conquest of Ptolemais by Alexander Balas in 152 B.C.E. Alexander had found ready allies among the Roman Senate for support as a suitable candidate to challenge Demetrius I Soter for the Seleucid throne. His first move was to occupy Ptolemais with the welcome of disaffected inhabitants (1 Macc 10:1). Demetrius and Alexander soon met on the field of battle in the summer of 150 B.C.E. According to the ancient sources (J. *AJ* 13.2.4; Just. *Epit.* 35.1.10–11; App. *Syr.* 67), the king rode his horse deep into a swamp, where he fell in battle.

Three years later, in 147 B.C.E., Demetrius II Nicanor, son of Demetrius I, journeyed from Crete to Cilicia (J. *AJ* 13.4.3 §86; cf. 13:145) on the border of Syria to challenge Alexander and claim succession of his father's throne. Demetrius retained a certain Apollonius as governor of Coele-Syria (1 Macc 10:69; J. *AJ* 13.4.3 §88), a position that he had already filled, presumably under Alexander Balas and perhaps even for Demetrius's father (Plb. 31.19.6; 31.21.2). The governor moved quickly against Jonathan, who had aligned himself with Alexander Balas (J. *AJ* 13.2.2 §45–46). Apollonius encamped at Jamnia and sent a challenge to Jonathan to capitulate or fight on the open plain, "where there is no stone or pebble, or place to flee" (1 Macc 10:73).

Jonathan and Simon mustered their forces and marched first on Jaffa. The residents of this harbor city initially resisted because of a garrison stationed in the city by Apollonius. The citizens opened their gates, however, when it was clear that Jonathan intended to storm the city. Jonathan now stood between Apollonius on the southern plain and any reinforcements or supplies in the north. From Jaffa Jonathan's troops sallied southward to meet Apollonius (1 Macc 10:77–78; contra J. *AJ* 13.4.4 §92). The Seleucid feigned retreat but then turned to engage Jonathan's pursuing army on the coastal plain. The battle continued from the early morning into evening,

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and the Syrian cavalry weakened. This freed Simon to prevail against the Syrian foot soldiers, while Jonathan routed the cavalry.

Fresh from a decisive victory, Jonathan soon marched his forces across Coele-Syria to "Damascus and through all that region" (1 Macc 12:32; cf. J. *AJ* 13.5.10 §179). The author inserts a brief account of Simon's campaign on the coastal plain. Demetrius had his sympathizers among the coastal cities, but no opposition to Simon is mentioned at Ascalon, a city with a history of good relations with the Hasmoneans (cf. 1 Macc 10:86). Jaffa, on the other hand, had been taken by force (1 Macc 10:75–76). Once again, Simon found the need to secure it without warning, "for he had heard that they were ready to hand over the stronghold to the men whom Demetrius had sent" (1 Macc 12:34). To assure their continued loyalty, Simon stationed in Jaffa a garrison of his soldiers (J. *AJ* 13.5.10 §180).

Five years later (143–142 B.C.E.), Jonathan miscalculated the intentions of Tryphon, regent and usurper of young Antiochus VI (1 Macc 11:54; 12:39). The Hasmonean fell into the hands of Tryphon in an act of treachery at Ptolemais (1 Macc 12:42–48). Simon assumed that his brother had already been murdered and requested the support of the people to accede to Jonathan's place of leadership (1 Macc 13:8). He hastened to finish the defenses of Jerusalem begun by Jonathan, "to complete the walls of Jerusalem, and he fortified it on every side" (1 Macc 13:10): "He also fortified Joppa, which is by the sea, and Gazara, which is on the borders of Azotus, where the enemy formerly dwelt. He settled Jews there, and provided in those cities whatever was necessary for their restoration" (1 Macc 14:33–34).

The Hasmonean had personally overseen the conquest of Beth-Zur before his brother's death (1 Macc 11:65–66). Now he fortified this strategic point in Jerusalem's southern defense. Simon had also led troops against Joppa (1 Macc 10:74–75; 12:33). The loyalty of its residents remained a question. So he expelled the occupants and replaced them with his own sympathizers. Further, he sent troops to Joppa to strengthen the defensive posture of this important port city (1 Macc 13:11; J. *AJ* 13.6.4 §202). Jacob Kaplan suggested identifying a 2.25-m-thick ashlar-built wall in Area A "and a nearby casemate structure with a paving of sea shells" with the Hasmonean fortifications of Jaffa (Kaplan 1972:89; Kaplan and Ritter-Kaplan 1992:947).

Successful in his repulse of Tryphon's aggression, Simon not only assumed the high priesthood but also brought about the removal of foreign taxation upon the people: "This liberation and exemption from tribute came to the Jews in the hundred and seventieth year of the Syrian kingdom" (J. *AJ* 13.6.7 §213). Tyre and Sidon likewise established their eras from the beginning of their freedom from Seleucid rule (Bickerman 1988:72–73).

Simon's leadership was followed by that of his son, John Hyrcanus, whose rule lasted more than 30 years (135–104 B.C.E.), longer than any other figure in the Hasmonean dynasty. The sons of Mattathias, who formed the first generation of Hasmonean leadership in Judea, were occupied primarily in defense of the fledgling state. Now the volatile and quick-paced changes in the struggle for power in the Seleucid kingdom diverted much of Antioch's attention away from Judea, which resulted in a period of relative calm for most of Hyrcanus's tenure (e.g., mMa'asS 5:15; mSot 9:10; mParah 3:5; mYad 4:6). Yet the historians do report one occasion of outside incursion. Antiochus VII Sidetes, second son of Demetrius I, returned to Judea in 134 B.C.E. to finish the uncompleted task of Cendebeus, viceroy of Parlia (cf. 1 Macc 15:38–41; J. *BJ* 1.2.5 §61), to return Joppa and Gazara to Seleucid domination (cf. J. *AJ* 13.6.7 §215; 1 Macc 5:35). He invaded Judea in the first year of Hyrcanus's rule and ravaged the country (J. *AJ* 13.8.2 §236). He then besieged Jerusalem, but the strength of the walls prevented easy victory. The main thrust of the Seleucid attack came from the northern side of the city—historically its point of vulnerability—with towers upon which "were mounted companies of soldiers" (J. *AJ* 13.8.2 §238). The vigorous efforts of those defending their city led to a protracted siege.

Both of Josephus' histories depict the end of the Seleucid blockade of Jerusalem upon the condition that the high priest would agree to pay tribute for "Joppa and the other cities bordering on Judea" (J. *AJ* 13.8.3 §246–247). This concession was an acknowledgement that the cities belonged to the Seleucid kingdom. Josephus, in his earlier report, described Hyrcanus's payment as a bribe "to Antiochus to raise the blockade" (J. *BJ* 1.2.5 §61). Yet the high priest's strategy proved to be the better part of wisdom. Rather than challenging the militarily superior king, the Hasmonean would wait for the inevitable change in power in the Seleucid kingdom to reassert his claim at a time (and under conditions) more advantageous to Judea.

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Upon the death of Sidetes in 129 B.C.E., Hyrcanus attacked Shechem and Gerizim, site of the Samaritan temple (2 Macc 6:2; cf. J. *AJ* 13.9.1 §256, 11:322–324; Stern and Magen 2002; Meg Ta'an 21 Kislev). Hyrcanus also subdued Idumea, taking Adora (cf. J. *AJ* 13.15.4 §396) and Marisa (cf. J. *AJ* 12.8.6 §353). In an unprecedented step, he allowed the Idumeans to remain in their country if they would agree to submit to circumcision "and were willing to observe the laws of the Jews" (J. *AJ* 13.9.1 §257). Hyrcanus's aim was more strategic than religious. The region of Idumea had proven to be a weak point in the Hasmonean defenses of Judea. On several occasions, Seleucid invaders had taken advantage of the disaffection between Jews and Idumeans to gain access to the important watershed route leading to Jerusalem by way of the Idumean cities of Marissa and Adora. Hyrcanus hoped that the identification of the Idumeans with the Jewish nation would prevent their region being used to attack Jerusalem. In Josephus' estimation, Hyrcanus succeeded because, he reports, "from that time on [the Idumeans] have continued to be Jews" (J. *AJ* 13.9.1 §258).

Once regional matters were in hand, Hyrcanus followed the example of his predecessors to renew Judea's alliance with Rome. He rightly understood that this was necessary to offset the pressures from Antioch to reacquire the cities lost under Demetrius II and Antiochus Sidetes. Rome reaffirmed "that Joppa and its harbours and Gazara and Pegae and whatever other cities and territories Antiochus took from them in war [cf. J. *AJ* 13.8.3 §246], contrary to the decree of the Senate, be restored to them" (J. *AJ* 13.9.1 §262; cf. Kaplan 1972:89). Laws imposed upon Judea by Sidetes were also revoked. In effect, Hyrcanus's strategy of accommodating rather than confronting the Seleucid ruler had succeeded. With Sidetes now gone, the status quo reverted to the situation prior to the Seleucid's campaign in Judea.

We have scant historical mention of Jaffa during the lengthy reign of Hyrcanus's youngest son, Alexander Janneus (103–76 B.C.E.). It was during his rule that the Hasmonean kingdom reached its greatest geographical extent. Nevertheless, archaeological evidence for the late Hellenistic period is abundant in Jaffa, as recent excavations are revealing (Martin Peilstöcker, personal communication, 2008; see also Chapter 16).

By 84 B.C.E. in Syria, Antiochus XII Dionysus had succeeded both his brothers, Philip and Demetrius, as king in Damascus, and he marched through Judea in his war against the Nabateans. According to Josephus, Janneus dug a trench from Kefar Saba near Pegae (cf. Abel 1938:245; Klein 1939:79) to Jaffa, "and he erected a wall and set up wooden towers and firing platforms for a distance of a hundred and fifty stades" (J. *AJ* 13.15.1 §390). Archaeological investigations appear to clarify Janneus's efforts:

> Certain features of this defensive line, as described by Josephus, are perhaps given archaeological confirmation by the discovery of two forts within Tel Aviv and of a third at Bnei Braq, thus providing us with a clearer and more tangible picture of these defense works [Kaplan 1972:90].

Janneus used the Yarkon River as a natural line of defense, building his forts on the southern banks of the river. In the corridor between Aphek and the hill country of Ephraim, which has historically proven strategic in controlling north-south movement on the coastal plain, the Hasmonean dug a trench, "behind which he erected a wall with watch-towers at regular intervals" (Kaplan 1972:90). These defenses did little to impede Antiochus's march to Arabia. The Seleucid king fell in battle against Aretas III, however, and his men fled to Kana near the southern end of the Dead Sea.

The Roman Period

Twenty years later, the bitter struggle between the heirs of Alexander Janneus and Queen Helena (76–67 B.C.E.) precipitated Roman intervention by Pompey in 63 B.C.E. (Rainey and Notley 2006:334–337). The boundaries of the political and territorial domain of Judea were redrawn and now "confined within its own borders" (J. *AJ* 14.4.4 §74). John Hyrcanus II, son of Alexander Janneus, was designated ethnarch of the Jewish people (J. *AJ* 14.8.5 §148; 20.10.1 §244) rather than king, and a number of cities conquered during the Hasmonean dynasty—Gadara, Hippus, Scytholopolis, Pella, Dium, Samaria, Marisa, Azotus, Jamnia, Arethusa, Gaza, Joppa, Dora, and Strato's Tower—were freed from Jewish domination. Instead they were annexed to the province of Syria (J. *AJ* 14.4.4 §75–76; cf. J. *BJ* 1.7.7 §156–157). Thus Pompey "split up the country [the Hasmoneans] had united, separated the areas inhabited by the Jews into two, cut Judea off from access to the sea and encircled it with a belt of Greek cities" (Avi-Yonah 2002:79). The denial of Jewish access to Joppa and other seaports seems to have been Pompey's response to accusations of piracy by members

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of the Hasmonean household (J. *AJ* 14.3.2 §43; D.C. 40.18; cf. Rahmani 1967:69–73). Nevertheless, after the death of Pompey in 48 B.C.E., Julius Caesar returned Joppa to Jerusalem's control with the increase of prestige for Hyrcanus II as high priest (J. *AJ* 14.10.2 §190–194, 205; Stern 1974–1984:II:109).

The internecine fighting in the final years of the Hasmonean dynasty brought to power Herod, son of Antipater. In the winter of 40 B.C.E., the Idumean fled, taking a boat from Rhinocurra to offer his loyalty to Rome. Antigonus, son of Judah Aristobulus II, had aligned himself with the Parthians, who were vying with Rome for control of the region. In Rome Herod found allies in Octavian and Mark Antony. The Senate was convened to consider events in Judea. Antigonus was "declared an enemy, not only because of the first offense he had committed against them [i.e., assisting in his father's insurrection], but because he had received his kingly title from the Parthians, thus showing no regard for the Romans" (J. *AJ* 14.14.4 §384). Herod's loyalty to Rome was well known. The Senate thus proclaimed in the summer of 40 B.C.E. that Herod should be king of Judea, and it granted to Herod the possessions of Hyrcanus II: Judea, Joppa, eastern Idumea, Perea, Galilee, and the Jezreel Valley (J. *AJ* 14.5.4 §91; J. *BJ* 1.8.5 §170; Avi-Yonah 2002:86). Appian's record that in 39 B.C.E. Antony expected Herod to collect imperial taxes in (western) Idumea and Samaria (*BC* 5.8.75) indicates that the new king was assigned responsibility for these areas. Since there is no record of a separate occasion when these regions were given to Herod, it seems likely that they were included—but not mentioned—in Josephus' report of the lands awarded by the Roman Senate in 40 B.C.E.

Landing at the port of Ptolemais, Herod marched through Galilee. He chose to move quickly through the countryside and to avoid the strongholds where support for Antigonus was entrenched. His army, comprised of Jews and foreign mercenaries (J. *AJ* 14.14.6 §394), proceeded south through the coastal plain into western Idumea. They met little resistance except at Joppa, where Hasmonean loyalty was strong. Herod besieged Joppa, taking it by force (J. *AJ* 14.15.1 §396). His attention now turned to the interior hill country. He rescued his family at Masada and enlisted the local inhabitants of Idumea, who joined his ranks "because of their friendship with his father" (J. *AJ* 14.15.1 §398; cf. 14:8–10). Galilee, the coastal regions, and Idumea were now in Herod's hands. His campaign strategy followed that of earlier conquerors (e.g., 1 Macc 4:28–61; J. *AJ* 12.7.5 §313–315) who had chosen to ascend into the hill country through Idumea because of the sympathy of those living in the southern Judean hill country. Herod succeeded, and in 37 B.C.E. he took Jerusalem, securing his conquest of Judea.

Control over western Idumea and Samaria gave Herod access to important coastal settlements. Although the Parthians had razed Marisa (J. *AJ* 14.13.9 §364; J. *BJ* 1.13.9 §269), Jamnia and Azotus remained important possessions on the plains of Idumea (1 Macc 4:15; cf. J. *AJ* 12.7.4 §308). Control of Samaria brought with it the important ports of Joppa and Apollonia. Likewise, the strategic site of Arethusa-Pegae (J. *AJ* 13.9.2 §261; mParah 8:10*;* tTer 1:15) controlled trade routes through the coastal plain. It was here that Herod would later establish Antipatris in honor of his father (J. *BJ* 1.21.9 §417).

In the early years of his rule, the territorial integrity of Herod's kingdom was compromised by Antony's love affair with the queen of Egypt. Cleopatra sought to expand her kingdom at the expense of neighboring rulers. "She asked Antony for Judaea and Arabia, requesting him to take them away from their royal rulers" (i.e., Herod and Malchus, king of Arabia; J. *AJ* 15.4.1 §92; J. *BJ* 1.18.4 §360). Although Antony resisted the full scope of Cleopatra's designs, he granted Cleopatra the coastal regions that included Herod's up to the Eleutherus River north of Beirut, with the exception of Tyre and Sidon (J. *AJ* 15.4.1 §95; J. *BJ* 1.18.5 §361; Plu. *Ant.* 36.3). Joppa was included in Antony's generosity. With the loss of his ports and coastal settlements, the queen's territorial ambitions left Herod in danger of having no access to the sea.

The Judean king was able to mitigate the loss of territory by arranging to lease from Cleopatra "those parts of Arabia that had been given to her and also the revenues of the region about Jericho" (J. *AJ* 15.4.2 §96). There is no evidence that Herod was able to arrive at a similar arrangement for Joppa and the other coastal settlements. Nevertheless, after the Battle of Actium in 31 B.C.E. and the deaths of Antony and Cleopatra, Caesar Augustus reaffirmed Herod as king of Judea and returned to him all the lands taken by Cleopatra. Herod was also given additional cities not previously in his possession: Gadara, Hippus (cf. J. *AJ* 14.4.4 §75), and Samaria, and on the coast also Gaza, Anthedon, Joppa (Avi-Yonah: Gabaa; cf. J. *AJ* 15.8.5 §294), and Strato's Tower (J. *AJ* 15.7.3 §217; J. *BJ* 1.20.3 §396; cf. D.C. 49.32.5).

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The lasting testament to the golden era in Herod's reign (25–14 B.C.E.; cf. Schürer et al. 1973:I:296) was his monumental building projects. Any consideration of the role of Joppa in the Herodian period must take into account the impact of the new port city of Caesarea, formerly the Hellenistic town of Strato's Tower. It lay adjacent to Herod's refounded city of Sebaste, site of biblical Samaria (J. *AJ* 15.8.5 §292; J. *BJ* 1.21.2 §403; Strabo 16.2.34; cf. 1 Kgs 16:24). Kaplan suggested that the construction of the new port may have also been a snub to the Jewish community in Joppa, which resisted Herod's advance (J. *AJ* 14.15.1 §396) and remained loyal to his Hasmonean rivals (1972:91). Caesarea's harbor was artificially constructed, but its scale rivaled any port in the eastern Mediterranean. Josephus' description is testimony to its magnificence (J. *BJ* 1.21.5 §408–414; J. *AJ* 15.9.6 §331–37; 16.5.1). It is no surprise that in the New Testament and other contemporary accounts, those embarking from Judea to set sail for the west now departed from Caesarea and not Joppa (e.g., Acts 9:30; 18:22; 25:13).

Nevertheless, the historic route between Joppa and Jerusalem is the setting for the New Testament story of the apostle Peter's journey from Jerusalem to Joppa by way of Lydda (Fischer et al. 1996:67–83). According to Luke's report, Peter first traveled to Lydda at the invitation of "the saints." There he found a paralyzed man, who was healed through Peter's ministry (Acts 9:32–34). Next Peter journeyed to Joppa, where he was called to pray for Tabitha, a woman who had just died (9:36–43). Luke's narrative exhibits a geographical knowledge of the proximity of these cities in noting, "since Lydda was near Jaffa" (9:38). Peter remained in Joppa, and it was here during noon prayer (cf. mBer 4:1) that Peter received a vision and the invitation to travel to the home of Cornelius, a Roman centurion, in Caesarea.

Rabbinical literature likewise remembers the continued use of the route between Joppa and Jerusalem during the Herodian period in the account of the arrival there of the legendary bronze gates for the Herodian temple, which were made in Alexandria, Egypt. Although the Babylonian Talmud reads that they were brought to the northern port of Ptolemias (bYom 37b), the geography supports the variant reading of Joppa found in the Tosefta and Jerusalem Talmud. Shipments from Alexandria would not have traveled to Ptolemais if the intended destination were Jerusalem.

> They say: When Nicanor was bringing them from Alexandria, in Egypt, a gale rose in the sea and threatened to drown them. They took one of them and tossed it into the sea, and they wanted to throw in the other but Nicanor would not let them. He said to them, "If you throw in the second one, throw me in with it." He was distressed all the way to the wharf at Jaffa. Once they reached the wharf at Jaffa, the other door popped up from underneath the boat [tYom 2:4; yYom 41a].

The wording of each of the traditions has been influenced by the language of the biblical story of Jonah, who embarked from Jaffa and also offered to have himself thrown overboard during a sea storm (Jon 1:12). The image of the large fish from the biblical account is even echoed in the Talmudic conclusion, "Others say: A monster of the sea swallowed [the gate] and spat it out on dry land" (bYom 38a; cf. Jon 2:10).

Yet the historical kernel in the story, namely that Nicanor of Alexandria was responsible for the gates of the Jerusalem temple, was bolstered by a discovery in the previous century (cf. mMid 1:4; 2:3, 6; mShek 6:3; mYom 3:10; mSot 1:5; mNeg 14:8; Büchler 1899:46–63). A first-century ossuary found in a family tomb on Mount Scopus in Jerusalem was inscribed, "the remains of the children of Nicanor of Alexandria who made the doors" (Dickson 1903:331). For our purposes, what is important is the identification in the Tosefta and the Jerusalem Talmud of the continued use of Joppa to transport items to Jerusalem.

A Jewish presence among Joppa's population at the outbreak of the revolt in 66 C.E. is signaled by two episodes. In the first, the city appears included in a list of Jewish communities during preparations for war. The ruling council of the insurgency divided the country into six districts and appointed generals to prepare defenses for these districts. Other generals—namely Jesus, son of Sapphas, one of the chief priests, and Eleazar, son of the high priest Neus (cf. J. *BJ* 2.17.2 §409)—were selected for Idumea. Joseph, son of Simon, was sent to take command at Jericho; Manasseh to Peraea; and John the Essene to the province of Thamna, with Lydda, Joppa, and Emmaus also under his charge. John, son of Ananias, was appointed commanding officer of the provinces of Gophna and Acrabetta; Josephus, son of Matthias, was given the two Galilees, with the addition of Gamala, the strongest city in that region (J. *BJ* 2.20.4 §567–568).

The second episode occurs with the outbreak of fighting during the campaign of the Roman legate Cestius Gallus. The Jewish king Agrippa II, allied with

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Figure 8.4. First-century C.E. house in Area C showing wall plaster after 2009 excavations by the JCHP. *JCHP photo.*

the Romans, accompanied Gallus, guiding him and his army south along the coast to Ptolemais. The first Jewish city to fall before Gallus's advance was the fortified city of Chabulon (J. *BJ* 3.3.1 §38; J. *AJ* 8.5.2 §142; J. *Vit.* 213, 227, 234), which lay in Galilee on the frontier between Ptolemais and the Jewish settlements in the region (J. *BJ* 2.18.9 §503–506). While Gallus bivouacked at Caesarea with the main contingent of his army, advance units continued by land and sea and succeeded to capture Joppa. Kaplan excavated a house in Area C (Figure 8.4; see also Chapter 25) that showed signs of destruction dating to the invasion of the troops of Cestius Gallus in 67 C.E. (1972:91).

Although the Romans apparently subdued the hostilities in the port city, they had not won over the hearts of its citizens. Sympathy in Joppa for the rebellion ran deep:

> The insurgents had reoccupied Jaffa after Gallus' withdrawal and were using it as a base for piracy, endangering not only Vespasian's link with Greece and Italy but also the corn supply of Rome itself by disrupting sea traffic from Alexandria. A small force captured the port easily, with the assistance of a well-timed storm, which smashed the pirate fleet, and a garrison was left to hold it (Smallwood 1981:309; cf. J. *BJ* 3.9.2–4).

Vespasian's reconquest of the port seems to have marked a change in the allegiance of the city, suggesting that the general resettled Jaffa with Gentiles. No hint of Jewish unrest is heard again from Joppa for the remainder of the Jewish Revolt. In December 69 C.E., "on reaching Alexandria, Vespasian was greeted by the good news from Rome and by embassies of congratulations from every quarter of the world, now his own" (J. *BJ* 4.11.5 §656). The new emperor delegated his son Titus to command the legions in the assault on Jerusalem (J. *BJ* 4.11.5 §658). Titus set out with select forces by way of Pelsium, Rhinocorura, and Raphia, "at which city Syria begins" (J. *BJ* 4.11.5 §662). He continued along the Philistine coast through Gaza, Ascalon, Jamnia, and then Joppa, all communities that were now aligned with the Romans. From here the new commander returned to Caesarea, where he began to organize his forces for the assault on Jerusalem.

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Joppa's redirected allegiance to Rome is further indicated by a later testimony from Josephus. Vespasian gave orders that no cities were to be founded in Judea in order that previous Jewish lands would now be his personal property: "About the same time Caesar sent instructions to Bassus and Laberius Maximus, the procurator, to lease all Jewish territory. For he founded no city there, reserving the country as his private property" (J. *BJ* 7.6.6 §216–217). However, there is evidence that Vespasian did found two cities in Judea. Josephus' reports concerning Flavia Neapolis (i.e., near Shechem; J. *BJ* 4.8.1 §449; Plin. *H.N.* 5:69; Eus. *Hist. eccl.* 4:12.1; Just. *Apol.* 1.1) and coins minted in Joppa attest to the founding of Flavia Joppa during the rule of Vespasian, with its continued existence at least until the brief reign of emperor Elagbalus (218–222 C.E.; cf. Hill 1914:xxv). Neapolis was situated in Samaria and thus understandably not included among Jewish lands. Vespasian must have likewise ceased to associate Flavia Joppa with Jewish territory but instead as part of the Syrian coast (Smallwood 1981:340–343).

In spite of Vespasian's efforts to resettle Joppa with Gentiles and transform the city's identity as Roman Flavia Joppa, there is soon evidence of renewed Jewish settlement. Limestone molds found at Joppa, possibly for casting lead weights, are inscribed, "In the ninth year of the reign of the emperor Nerva-Trajan, the *Agoranomos* of Jaffa was Judah son of . . . " (Kaplan 1972:93). It is remarkable that so soon after Joppa was destroyed and reestablished as a Roman city, a Jew living there had reached such a position of prominence. There is additional archaeological evidence from Trajan's era suggesting violence that might have been related to the uprising by Jews in Cyrenaica, Egypt, and Cyprus in 115–117 C.E. (Smallwood 1981:423). The destruction of a public building in Joppa at this time coincides with a tile belonging to the Legion X Fretensis and indicating a military presence in the city. Although we have no historical record of the participation of Jews of Joppa in the insurrection, the material evidence implies possible unrest that necessitated a military presence.

Epigraphic evidence further indicates a significant Jewish population in Jaffa during the second and third centuries C.E. Clermont-Ganneau published inscriptions from the ancient Jewish necropolis of Joppa at Abu Kabir (1896:130–147). In addition, of the approximately 90 Jewish inscriptions from coastal cities presented by Frey from the second and third centuries (Frey 1952:nos 882–970), 70 are from Joppa, indicating that the city maintained an important Jewish population (Smallwood 1981:473). An added interesting detail: most of the Jewish names published by Clermont-Ganneau indicate that the individuals originated in the Diaspora. A significant population shift occurred in Judea in the wake of the Bar-Kochba Revolt (132–135 C.E.; cf. Rainey and Notley 2006:398). There is ample evidence of large-scale emigration by Palestinian Jews from Judea. Gradually Jewish immigrants from the Diaspora replaced them. These new Jewish residents were not permitted to reside in Jerusalem or its environs because of Hadrian's edict of exclusion of Jews from Aelia Capitolina (Eus. *Hist. eccl.* 4.6.3–4; Just. *Apol.* 47.10–16; Lam. Rab. 1:17; cf. Harris 1926), a policy that continued under Antoninus Pius (138–161 C.E.).

> In time the tide [of Jewish emigration from Judea] turned, and the Diaspora Jews from Babylonia, Asia Minor and Alexandria are found immigrating into Palestine and settling in Sepphoris, Tiberias and, in the largest numbers, in Joppa—an indication that Palestine had become economically attractive [cf. Frey 1952:nos. 902, 910, 918, 928, 930, 931, 934; Smallwood 1981:478].

Together with the epigraphic evidence, Talmudic sources witness Joppa as a place of Jewish learning with the mention of local sages: R. Ada (bMeg 16b; bTa'an 16b), R. Nahman (Lev. Rab. 6:5), and R. Yudan (Lev. Rab. 20:10). The final reference to Joppa in the late Roman period occurs in Eusebius's *Onomasticon,* ca. 304 C.E. He provides scant contemporary details about Joppa, although he does describe it as a Roman *polis*: "Jaffa: A polis in Palestina that until now is still on the coast. In the inheritance of Dan" (Eus. *Onom*. 110:24; cf. 162:6). Other towns and villages with prominent Jewish populations (e.g., Accaron [22:6], Anab [26:8], Debir [78:5], En-gedi [86:16], and Thalcha [98:26]) are so described. However, the bishop of Caesarea makes no mention of the Jews of Joppa. While his silence is remarkable, it is not exceptional. Other known Jewish communities likewise go unnoticed in the *Onomasticon* (see Arabah and Ziph in Notley and Safrai 2005:16:12, n. 40 and 92:19, n. 465). Certainly, the resident of nearby Caesarea would have been familiar with contemporary Flavia Joppa. The historian's failure to mention the Jews of Joppa is likely mere chance. Fortunately, Eusebius's presentation of Joppa in the late Roman period can now be augmented with results from modern archaeological efforts and a careful reading of other literary witnesses.

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Conclusion

Jaffa of the Hellenistic to Roman period offers interesting insights into the development of this important coastal port following the Iron Age and before the Byzantine period, when its primary focus would become its role in Christian pilgrimage to Jerusalem. Nevertheless, a great deal remains to be learned about the city during this period. To which rulers, for instance, are Hellenistic-period destructions to be assigned? To what extent did Hellenism change Jaffa? What impact did Greek, Hasmonean, and Roman garrisons have upon the city? If Caesarea became the main port during the Roman period, is it possible to detect a process of Romanization in Jaffa? These and other questions, particularly relating to Jaffa's changing population, still remain to be explored.

Note

1. Excavation of this building was resumed in 2008 and 2009 by the JCHP under the direction of Aaron A. Burke and Martin Peilstöcker (Burke and Peilstöcker 2009).

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Chapter 9

Byzantine and Early Islamic Jaffa

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The political and social landscape of Palestine was greatly transformed in the early fourth century C.E. when Constantine the Great became sole ruler of the Roman Empire and moved its capital eastward to Constantinople, thus forming what is now known as the Byzantine Empire. One of Constantine's first acts was the creation of the "Holy Land," or "Terra Sancta," after he had legalized Christianity with the Edict of Milan in 313. This, coupled with his mother Helena's pilgrimage in 325, elevated the region's significance within the empire and ushered in a peaceful period of great prosperity (Parker 1999:135–136). Although Christianity grew rapidly in importance and popularity, certain cities in Palestine remained predominantly Jewish. Jaffa[1] is an excellent example of the continuation of these religious traditions.

Historical Sources for the Byzantine Period

The Early Byzantine Period

Christianity did not take hold very quickly in Jaffa. Eusebius, writing in about 304, may have made no mention of a Jewish community at Jaffa (see Chapter 8), but he also did not refer to any Christian residents in the city. In the list of bishops in attendance at the Council of Nicaea in 325, Jaffa was curiously absent, while many of the cities in its vicinity (including Neapolis, Sebaste, Ascalon, Nicopolis, and Lydda) were present, as first noted by Tolkowsky (1924:73). Despite this evidence, Christianity was not completely absent from Jaffa in the fourth century.

At this time, Jaffa's importance as a pilgrimage stop began to develop, a tradition that would continue into the eleventh century. Two biblical passages are consistently associated with Jaffa and its port: the story of Jonah and the whale and the account of St. Peter resurrecting the widow Tabitha, also known as Dorcas. Jonah's relationship to Jaffa prompted many Christian pilgrims to stop there to see where Jonah began his fateful voyage, although eventually some confusion arose over whether Jonah departed from or was cast up at Jaffa.

The book of Acts recounts many of the miracles of St. Peter, among them the raising of a widow in Jaffa named Tabitha (Acts 9:36–43). From this account, one might be tempted to infer that the population of Jaffa had begun converting to Christianity in the first century; however, other historical sources indicate that the city remained mostly Jewish until the fifth century. The "discovery" of the Tomb of Tabitha, possibly during the fifth century, raised the prominence of Jaffa as a pilgrimage destination and attracted many Christian pilgrims to this location (Antoninus Martyr 1896:35).

In the late nineteenth century, Charles Clermont-Ganneau (1896:2:276) visited an area east of the city known as Ard Tabitha (the Land of Tabitha). Using

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Clermont-Ganneau's description as a base, Baurath C. Schick made a closer examination of the area, also known as Abu Kabir, some twenty years later. One feature he noted was the proliferation of rock-cut tombs. Schick explains that the Russian archimandrite had converted one of these tombs into a chapel and that the local population now referred to it as the Tomb of Tabitha (1893:287). Thus, even in modern times, Jaffa was associated with St. Peter and the widow Tabitha, even though there does not appear to be any evidence to link this particular tomb with the events described in Acts.

Table 9.1. Byzantine sources for Jaffa.

Date	Author	Title of Work
382–383	St. Jerome	*The Pilgrimage of the Holy Paula* or *Letter 108 to Eustochium*
387-389	St. Jerome	*Book of Places*
392	Epiphanius of Salamis	*Treatise on Weights and Measures*
ca. 430	Eucherius	*Letter to Faustus*
early 5th century	Cyril of Alexandria	*Sacred Geography*
ca. 530	Theodosius	*The Layout of the Holy Land*
ca. 570	Anonymous (Pilgrim of Piacenza)	*Of the Holy Places Visited by Antoninus Martyr*

The earliest pilgrim account that mentions Jaffa is that of the Holy Paula (for a complete list of pilgrim accounts, see Table 9.1). Paula and her daughter Eustochium followed St. Jerome to Antioch from Rome and joined him on a pilgrimage to the Holy Land in 382–383. St. Jerome recorded their journey in a letter, which he wrote as an obituary for St. Paula after her death in 404 (see Letter 108 in Jerome 1896; Wilkinson 2002:2–3). In this letter, St. Jerome indicates that it was from Jaffa's harbor that Jonah fled and that Andromeda's rock (see Chapter 8) was also located there: "[A]nd Joppa, the harbor of the fugitive Jonah, and which, to allude to the fables of the poets, witnessed Andromeda chained to the rock" (Jerome 1896:4).

Pilgrimage accounts are not the only documents from this period that mention or describe Jaffa. Eusebius's description in his *Onomasticon* has already been addressed in the previous chapter. The importance of this work, however, is further attested to in a text dated to the late fourth century. St. Jerome, also author of the *Pilgrimage of the Holy Paula* (Jerome 1896), produced a Latin translation of the *Onomasticon* between 387 and 389; it preserved the content of Eusebius's account but changed the word *city* ("polis") to *town* ("oppidum"; St. Jerome, Book of Places 110:24; Notley and Safrai 2005). This change could be an allusion to the decline of the urban settlement at Jaffa in the late fourth century. This interpretation is further supported by Epiphanius's description in his work entitled *Treatise on Weights and Measures*, dated to 392 (see Dean 1935). Epiphanius was born in Eleutheropolis (Beth Guvrin) in 315. After being educated in Egypt, he returned to Palestine at age twenty to found a monastery. His knowledge of the cities in this region must therefore have been extensive. Under the heading "Concerning Names of Places," Epiphanius provides a rather bleak image of Jaffa:

> Jafō, which is transferred (into Greek as) Jōpē, is a city of Palestine on the seacoast in the portion of Dan. But today many of its buildings are in ruins. Here Jonah the prophet embarked for Tarshish, which is called Tarsus above. And here they of Judea were accustomed to embark—I mean, from Jōpē—for it was their port [Dean 1935:76].

Jaffa's ruinous state may have been caused by an earthquake that inflicted significant destruction throughout the region in 363 (Russell 1985:39).

Jaffa seems to have recovered rather quickly from this apparent decline. The fifth century marked a period of revitalization and growth in the city. After a series of provincial administrative reforms in the fourth century, the political divisions within the province of Palestine were finally firmly established. Three separate provinces were created. Jaffa fell into the territory of Palestina Prima, which had Caesarea as its capital (Patrich 1995:470).

At the same time, throughout Palestine, Christianity was gaining in popularity and influence. This was due in part to the actions of Emperor Theodosius I, the last ruler of a unified Byzantine Empire, who reigned from 379 to 395. One of Theodosius's main acts was to outlaw paganism, thus forcing the conversion of many inhabitants of his empire. Judaism, however, remained legal. This change was reflected among the population of Jaffa. While the city's Jewish population continued to thrive, its Christian community had become large enough to warrant the establishment of an episcopate. The first mention of a bishop of Jaffa appears in the records of the Council of Ephesus in 431, where a certain Bishop Phidus is said to have been in attendance (Tolkowsky 1924:74).

Eucherius's *Letter to Faustus,* tentatively dated to the early fifth century (ca. 430), was written by a bishop of Lyons who had never actually visited the Holy Land.

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The author states in the opening passage of his letter that the material presented had been communicated to him by someone who had recently visited Jerusalem. Eucherius presumably supplemented this description with information collected from various libraries (Wilkinson 2002:4–5). In this letter to his friend and fellow monk, Eucherius simply mentions Jaffa as the western boundary of Judea: "The breadth of Judaea is from the river Jordan to Joppa: it begins at the sources of the Jordan and Mount Lebanon, and extends as far as the Lake of Tiberias" (Wilkinson 2002:98).

Jaffa's importance within fifth-century Palestine is confirmed in the writings of Cyril of Alexandria, dated to the first half of the fifth century. The author improved upon Eusebius's reference to the locality by describing it as a Palestinian city situated on the sea and a commercial center where travelers from Judea boarded ships headed for various destinations in the Levant (Abel 1922:417).

The Late Byzantine Period

The sixth century marked a particularly calm and prosperous period in Palestine. The lengthy reign of Emperor Justinian I, between 527 and 565, is often referred to as a "golden age" (Grabar 1967). Justinian initiated an ambitious building program that included several monuments in the Holy Land, in particular the Nea Church in Jerusalem and the Church of the Nativity in Bethlehem (Krautheimer 1986:266). Pilgrimage to the Holy Land became a very popular activity, bringing foreign travelers and increased wealth to the region. Three pilgrims are known to have visited Jaffa in the sixth century. The first was the priest Virgilius, who was drawn to the city around 500 by the story of St. Peter and the resurrection of Tabitha (Vigouroux 1899:1639).

After his pilgrimage around 530, Theodosius composed *The Layout of the Holy Land*. His work was meant to be used as a guide for pilgrims traveling to the Holy Land. Theodosius set out various itineraries and was careful to include the distances from one site to the next (Wilkinson 2002:9). Jaffa is mentioned in the fourth itinerary: "From Diospolis it is twelve miles to Joppa, where Saint Peter raised Saint Tabitha; there too the whale cast up Saint Jonah" (Wilkinson 2002:105). By this time, the confusion over whether Jonah departed from Jaffa or was cast up there had begun to take root.

An unnamed pilgrim[2] from the Italian city of Piacenza recorded his travels through the Holy Land and a substantial portion of the Near East in an account dated to about 570. After having traveled overland from Constantinople, through Syria, Lebanon, and Palestine, the pilgrim reached the Sinai. He returned to Jerusalem once he had visited the most important holy sites in Egypt. He spent some time in Jerusalem recuperating from an illness, after which he set off for the city of Sura on the Euphrates (Wilkinson 2002:12). His first stop was Jaffa: "Leaving Jerusalem, I went down to Joppa, where rests St. Tabitha, who is also called Dorcas" (Antoninus Martyr 1896:35). The anonymous account of the pilgrim of Piacenza provides further proof of the importance of the resurrection of Tabitha for pilgrimage trade in Byzantine Jaffa.

The Christian community in Jaffa continued to gain importance in the sixth century. In 536 Peter, the patriarch of Jerusalem, convened a council of bishops that included Bishop Elias of Jaffa (Tolkowsky 1924:74). The mid-sixth century was marked by two cataclysmic events that do not seem to have had much of an effect on the progress of Palestinian society but may have weakened the state enough to make it vulnerable to subsequent invasions in the seventh century. The so-called Justinianic plague began at Pelusium in Egypt in 541 and spread very rapidly toward Alexandria and the rest of Egypt and toward Palestine (Dols 1974). The plague seems to have been incredibly devastating, in some cases wiping out entire villages (Allen 1979). In the sixth century, the population of the Mediterranean area sank to its lowest point since the time of the early Roman Empire. Although there are no specific references to incidences of plague in Jaffa, the city must have been affected by this epidemic, particularly given its location on the sea. On the heels of this epidemic, a major earthquake shook the region in 551 and affected most of Palestine (Russell 1985:39).

The seventh century represented a period of great change in Palestine. The Byzantine Empire, after the reign of Justinian, was facing more and more conflict with its neighbors to the east. These border skirmishes became a more serious conflict in 614 when the Sassanians, under the leadership of King Chosroes, took control of Palestine along with most of the eastern provinces of the Byzantine Empire. Persian control of the region lasted for fourteen years, until 628, when Emperor Heraclius reclaimed the territory for Constantinople. Byzantine rule in the area would be short-lived, however (Parker 1999:137).

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Archaeological Evidence for the Byzantine Period

From the literary evidence presented, it is clear that Jaffa was an important city that housed both a Christian and a Jewish population throughout the Byzantine period. Excavations conducted over the past 60 years have yielded archaeological material that confirms the significance of Byzantine Jaffa. The archaeological remains from Jaffa dated to the Byzantine period can be divided into three categories: tombs, buildings and installations, and isolated ceramic finds. The two well-known ancient cemeteries near Jaffa have both produced material dated to the fourth through seventh century. The ancient Jewish cemetery at Abu Kabir, previously mentioned in connection with the story of the resurrection of Tabitha, has produced a number of rock-cut tombs dated to the Roman and Byzantine periods, as well as several inscribed tombstones that, as Kaplan points out, provide valuable information on the Jewish inhabitants of Jaffa during this period (Ajami 2006; Kaplan 1972:92). The Southern Cemetery also yielded numerous burials and tombs, with associated grave goods, dated to the Byzantine period (Avner-Levi 1996:56; Ginzburg 2000; Peilstöcker 2000c).

Several Byzantine structures and installations have been excavated in Jaffa. Kaplan's Area C contained three successive strata of Byzantine occupation (see Table 2.3). The earliest produced a large fourth-century building paved with a flagstone floor. The second layer yielded structures dating to the fifth century. The uppermost stratum produced a mosaic floor dated to the sixth/seventh century (Kaplan and Ritter-Kaplan 1993:658). A number of structures dated to the Byzantine period have been uncovered in the area just east of Yefet Street, referred to as the ancient lower city. Domestic architecture with associated mosaic floors and several wine presses indicate that this area was densely populated in the Byzantine period and clearly served as an important industrial center for the city (Feldstein 1996; Peilstöcker 2000a:48*; Peilstöcker et al. 2006). Ceramic remains attest to the extent of Byzantine Jaffa. Sherds dating to the fourth through seventh century have been found in most of the excavated areas in the city, including the southern harbor (Peilstöcker 1999:46*–47*, 2000b, 2005; Peilstöcker and Priel 2000:40*; Sharvit and Galili 2002:54*).

Historical Sources for the Early and Middle Islamic Periods

The Early Islamic I Period

The Muslim army, under the general command of Abu Bakr, entered Palestine in 634. Yafa, as it became known, was conquered early on in the campaign. 'Amr b. al-'As, commander of one of the Muslim forces, took the city in 634. These events were recorded by al-Balâdhurī in his work on the origins of the Islamic state (*Kitab Futuh al-Buldan*). After describing the conquest of other cities in the region, al-Balâdhurī wrote: "He ('Amr b. al-'As) then conquered Yafa [Jaffa] which according to others was conquered by Mu'awiyah" (Balâdhurī 1966:213). The Muslim army continued to expand its territory over the next six years. Jerusalem was conquered, after a long siege, in 638. The final holdout was Caesarea, which was taken by Mu'awiya, the first Umayyad caliph, in 640 (Gil 1992:57–60). This date marked the end of the Muslim conquest of Palestine, as well as the end of Byzantine rule in the region.

Despite the events of the mid-seventh century, the Christian communities of Palestine coexisted with the new Muslim inhabitants and continued to practice their religion. There exists a reference, albeit anecdotal, to a seventh-century bishop of Jaffa. This reference is associated with the history of the Jerusalem patriarchate after the Muslim conquest. A man named Sophronius was patriarch of Jerusalem during the period of the conquest (634–638); however, it is unclear who succeeded him. A seventeenth-century patriarch of Jerusalem, Dositheos II, refers to sources that claim that a certain Sergius became patriarch after Sophronius, but he corrects this statement by pointing out that Sergius was in fact bishop of Jaffa at that time. Thus the identity of Sophronius's immediate successor remains a mystery. A series of letters written by Pope Martin I (649–655), appointing John, bishop of Amman, as patriarch, also exists, but these events must have taken place at least a decade after the death of Sophronius (Gil 1992:433). According to Vailhé (1899–1900:20), who undertook a careful study and decipherment of all the pertinent sources, Sergius was indeed bishop of Jaffa and briefly headed the church in Palestine after Sophronius's death. Pope Theodore I (642–649), however, considered Sergius a heretic and replaced him with Stephen of Dor. Once Martin assumed control of the church, he disposed of Stephen and handed power

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over to John of Amman. In spite of the confusing nature of the history of the Jerusalem patriarchate in the mid-seventh century, Sergius's participation in these events certainly confirms the importance of Jaffa's Christian community at this time. Although the city was taken early on in the Muslim Conquest, its Christian inhabitants continued to thrive, and the bishop assumed a key role within church hierarchy.

Once the Muslims had firmly established their rule in Palestine, they set about fortifying their newly acquired territory. Coastal cities were some of the first places to receive attention. The Palestinian coast had become a frontier between the Islamic and Byzantine empires. This thriving commercial zone was transformed into a heavily disputed border. Coastal cities were frequently attacked by the Byzantines. In 669 and 683, both Caesarea and Ascalon were invaded by the Byzantine navy. To protect their new territory, the Muslims initiated a building program along the coast. *Ribatat,* fortified structures of varying sizes and degrees of importance, were built in several of the major seaside cities. Although the *ribat* of Jaffa has yet to be identified, it is reasonable to assume that the Muslims would have fortified this important port city,[3] thus linking their other defensive installations at sites such as Ashdod and Tel Michal (Masarwa 2007).

The first Islamic dynasty, the Umayyads, was founded by Mu'awiya, former governor of Syria-Palestine, in 661. The new caliph chose Damascus as his capital. This decision had a beneficial effect on Palestine, which was the new focus of the empire. The caliphate paid particular attention to the region and poured a significant amount of wealth into it. One of its most ambitious undertakings was the establishment of the city of Ramla. The Umayyads reorganized the provincial divisions established under the Byzantine Empire, creating a series of military districts (*ajnad*). Jaffa had been located in the province of Palestina Prima, with its capital at Caesarea, and was now part of the Jund al-Filistin, centered on the city of Lod (Lydda). Ramla was founded in 714 and replaced Lod as capital of the district (Schick 1998:76, 79). Jaffa acted as the port of Ramla and thus became the principal port of Palestine. The city's importance as a trade center increased, and it eventually absorbed most of the trade activity from Caesarea.

Jaffa also became one of the main ports of entry for pilgrims to the Holy Land. Although the region, which had been the focus of pilgrimage for the previous four hundred years, was under Muslim control, Christians continued to make the journey to the Holy Land. St. Willibald, an English cleric, left Rome for the Holy Land in 724. He dictated the account of his pilgrimage, as well as the rest of his life, to Hugeburc, an English nun to whom he was related (for a chronological list of sources from the Early–Middle Islamic period, see Table 9.2). Willibald traveled throughout the Levant over the course of the next two years. After landing on

Table 9.2. Sources for Jaffa from the Early to Middle Islamic period.

Date	Author	Title of Work
724	Hugeburc	*The Hodoeporicon of St. Willibald*
mid-9th century	al-Balâdhurī	*The Origins of the Islamic State (Kitab Futuh al-Buldan)*
891	al-Ya'qūbī	*Book of the Countries (Kitab al-Buldan)*
mid-10th century	al-Balawi	*Biography of Ibn Tulun (Sirat Ibn Tulun)*
985	Muqaddasi	*The Best Division for the Knowledge of the Provinces (Ahsan al-takasim fi ma'rifat al-akalim)*
1038	Abraham b. David b. Sughmar	Letter to 'Eli ha-Kohen b. Ezekiel (Cairo Geniza)
mid-11th century	Mahbub b. Nissim	Letter (Cairo Geniza)
ca. 1060	Jacob b. Samuel ha-Andalusi	Letter to Nehorai b. Nissim (Cairo Geniza)
1064	Ingulf	*Chronicle of Ingulf*
late 11th century	Hayfa	TS 13 J 8, f. 19 (Cairo Geniza)
1071	'Eli ha-Kohen b. Ezekiel	TS 13 J 15, f. 23 (Cairo Geniza)
1077	?	Deed of divorce between Yefet b. Abraham and Sitt al-Husn (Cairo Geniza)

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the Syrian coast, he gradually made his way to Jerusalem, passing through Damascus, Nazareth, and Jericho. After a side trip to Gaza, Willibald left Jerusalem and made his way northward, stopping first at Jaffa (Wilkinson 2002:22). Although the text does not implicitly name Jaffa, the reference to St. Peter and the resurrection of the widow Tabitha is a clear indication of the identity of the site: "And from thence he went to another town. There is the church of St. Peter the Apostle, and there St. Peter raised to life the widow, who was named Dorcas. Having prayed there, he went on" (Hugebruc 1895:25). By the early eighth century, a church dedicated to the apostle had been built, commemorating the miraculous event that had taken place at Jaffa.

In the mid-eighth century, Bishop Maldeveus, from the city of Verdun in France, arrived in Jaffa, after having set sail from Greece. The bishop did not stay in Jaffa for long and quickly continued his pilgrimage that had as a final destination the city of Jerusalem (Gil 1992:484). These two accounts confirm that Muslim rule did not disrupt Christian pilgrimage to the Holy Land and hence through Jaffa. St. Willibald's reference to the church at Jaffa also attests to the continued existence of the city's Christian community.

The Early Islamic II Period

In 750 the Umayyad dynasty came to an end. Power was transferred to the Abbasids, descendants of the uncle of the Prophet, who had settled in southern Jordan at the site of Humayma. The Abbasids garnered a lot of support in Iraq and Iran for their revolution against the Umayyads. Thus, once they took control of the caliphate, they established their new capital at Baghdad (Schick 1998:76–77). Although this shift of focus away from Palestine did not cause an immediate decline in the region, it did put an end to the extravagant investments that characterized Umayyad rule. This political change had little direct impact on Jaffa. Its role as the port city of the Jund al-Filistin ensured its continued importance within the empire.

The Abbasid government, based in Baghdad, had difficulty retaining control of Palestine. In 873 Ahmad Ibn Tulun, who had been sent by the Abbasids to govern Egypt, broke from the caliphate and established an independent government. In 878 Ibn Tulun entered Ramla and took control of Palestine (Schick 1998:77). This event marked the beginning of a period of significant Egyptian influence in the region that would last until the end of the eleventh century. Recognizing Jaffa's commercial and strategic importance, Ibn Tulun was quick to fortify the city's citadel.[4] As the Tulunids continued to challenge Abbasid rule, Jaffa's importance increased. In 885, after the Abbasids had reconquered Damascus, the Tulunids used Jaffa's port to bring soldiers into Palestine. Ibn Tulun's son Khumarawayh led these forces against the Abbasids and defeated them at the battle of al-Tawahin, ushering in a thirty-year period of Tulunid rule in Palestine (Gil 1992:306–310).

Jaffa's connection to Ramla and its importance as a port city throughout the Early Islamic period are confirmed in the writings of al-Ya'qūbī. This famous Arab historian and geographer trained as a scribe in Baghdad and, after traveling around the Abbasid Empire, settled in Egypt, where he died in the early tenth century. Al-Ya'qūbī penned two major works: a history of the world (*Tarikh*) and a general geography (*Kitab al-Buldan*). The latter, dated to 891, includes a reference to Jaffa in a list of the military colonies of Palestine: "Jaffa, a coastal city, to which the inhabitants of Ramla flock" (al-Ya'qūbī 1937:182).[5]

The Abbasids regained control of Palestine in 906, but this renewed rule was short-lived. In 935 the governor of Syria-Palestine, who was known by the nickname Ikhshid, took control of Egypt and established independent rule, much as Ibn Tulun had done less than a century earlier. This new Ikhshid dynasty renewed Egyptian rule in Palestine and controlled the region for the next thirty-five years. Palestine had once again become the battleground separating Egypt and Iraq (Schick 1998:77).

The Middle Islamic I Period

In 969 the Fatimids, a dynasty that originated in North Africa, defeated the Ikhshids and assumed control of their territories. Thus Palestine was still under Egyptian control, but the ruling family had changed. The Fatimids quickly faced opposition in Palestine. Their fiercest opponents were the Karmatis, adherents to a specific branch of the Ismailiyya, who attacked Damascus in 971 after the Fatimids refused to pay the annual tax that had been promised by the previous Ikhshid rulers. The Karmatis were victorious and continued their campaign southward. They successfully conquered all Palestinian territory up to Ramla. The Fatimid army fled to Jaffa and secured its position there.

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The Karmatis took Ramla and turned their attention toward Jaffa. They laid siege to the port city for a lengthy period of time, possibly up to two years. The deciding battle took place on the sea. Jawhar, the senior Fatimid commander in Egypt, brought soldiers and supplies to Jaffa, but the Karmatis captured thirteen of the fifteen ships. Fortunately for the Fatimids, Jawhar devised a way to counteract this attack. He had flaming flasks of oil flung onto the Karmati ships, setting them ablaze. The siege on Jaffa had thus been lifted. This, in addition to the dissolution of the anti-Fatimid alliance set up by the Karmatis, prompted the abandonment of Ramla and a retreat northward in about 973 (Gil 1992:339).

Muqaddasi, the famous tenth-century Arab geographer, provides a description of Jaffa from the period immediately following the siege:

> Yafah, lying on the sea, is but a small town, although the emporium of Palestine and the port of Ar Ramlah. It is protected by an impregnable fortress, with iron gates; and the sea-gates also are of iron. The mosque is pleasant to the eye, and overlooks the sea. The harbor is excellent [Muqaddasi 1886:54].

Muqaddasi's account, dated to 985, certainly attests to Jaffa's importance as a port city in the tenth century, as well as its substantial fortifications, perhaps the *ribat* mentioned above. One interesting point raised by this piece is the presence of a mosque at Jaffa. Up until this time, only references to Jaffa's Jewish and Christian communities exist. This mosque was most likely built for the city's Muslim inhabitants and the large Fatimid army stationed there.

The eleventh-century city of Jaffa is better known to modern scholars thanks to the abundance of material in the Cairo Geniza. This storeroom, in which Hebrew scriptures no longer in use as well as the community's legal records were kept, belonged to the Synagogue of the Palestinians, originally located in Fustat, Egypt's first Islamic capital (Goitein 2008). Jaffa's importance as a port city is reiterated in some of the Geniza documents. Mahbub b. Nissim, a Karaite Jew, recounted his adventures on the way to Ladhiqiyya on the Syrian coast in a letter from the mid-eleventh century. He insisted on stopping at Jaffa and had to bribe the ship's captain to do so (Gil 1992:219). A second letter depicts a very harrowing sea voyage from Tyre to Jaffa. The storm was so bad that the ship was thrown off course and eventually landed at Caesarea (Goitein 1967:1:320–321). Thus, in the eleventh century, although Jaffa remained the port of Ramla, the main port of Palestine, Caesarea, still had a functioning harbor.

The Geniza documents are most valuable for the information they provide on the Jewish community of Jaffa during the eleventh century. In a letter dated to 1038, Abraham b. David b. Sughmar explains that Jaffa was one of the cities to which letters were sent in an effort to deal with the conflict over Nathan b. Abraham's bid to become *gaon* of the academy of Erez Israel (Gil 1992:219). Ben Abraham had established himself at Ramla, and thus the community at Jaffa may have been under his influence. He wrote a number of letters defending himself against statements made in the letters sent to Jaffa and other cities in Palestine. According to b. Sughmar, however, b. Abraham's letters were full of lies (Gil 1992:702).

The Jewish community took advantage of Jaffa's port and used it extensively for commercial purposes. In about 1060, Jacob b. Samuel ha-Andalusi of Jerusalem composed a letter, now part of the Cairo Geniza collection, to Nehorai b. Nissim, explaining that he had delivered a cargo of olive oil to Ibn al-Tuffahi, a ship owner in Jaffa. The delivery was to be shipped to Egypt (Gil 1992:219). This document provides evidence of the type of goods exported from the city. Olive oil was one of Palestine's major exports throughout antiquity, and this still held true in the eleventh century. From Jaffa this product could be sent all over the Mediterranean basin.

The port of Jaffa not only played a role in commercial activities, it was also used by the Jewish populations of the region when traveling to and from major city centers. A letter from the Geniza dated to the third quarter of the eleventh century records the hardship of a woman named Hayfa who was abandoned by her husband in Jaffa. The couple had arrived there after being evicted from their home: "Then there was that incident with Ibn al-Zuqilliya, who drove us out of our place. We arrived in Jaffa, where Said abandoned me, leaving me alone in a town where I was a stranger" (Goitein 1967:3:197). The husband had fled to Egypt. Hayfa followed him there and then attempted to gather support from the Jewish community in Fustat.

The documents from the Cairo Geniza also afford a glimpse into the troubled personal lives of the Jewish inhabitants of Jaffa during the eleventh century. A deed of divorce, or *get,* was written in Jaffa on June 12, 1077. The document states that Yefet b. Abraham was divorcing

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Sitt al-Husn, daughter of Abraham, and was signed by two witnesses (Gil 1992:220). This deed confirms the existence of an important Jewish community in Jaffa, complete with the legal court necessary to produce this type of contract.

The Fatimids had been in control of Palestine since the latter half of the tenth century, and although their presence in Jaffa was well established, their rule in the rest of the region was unstable. They consistently had difficulty with the Arab tribes in Palestine. One group in particular, the Djarrahids, caused a significant amount of unrest. This tribe, originally from Yemen, settled in Palestine and for a brief time, between 1011 and 1013, set up their own small caliphate in Ramla. Certain documents in the Cairo Geniza record events that took place in 1024, when the Fatimid governor of Palestine, al-Dizbiri, sent his army to take over a Djarrahid estate. The Djarrahids killed the Fatimid messengers. In return, al-Dizbiri had them imprisoned in the fortress at Jaffa, and from there they were transported to Ascalon (Gil 1992:388). It is clear from these events that Jaffa played a key military role in the region and that its citadel not only protected the city but also served to detain opponents of the Fatimid caliph.

The eleventh century was also marked by a major natural disaster. In 1033 a large earthquake shook the southern Levant (Amiran et al. 1995:268). Although there are no literary references to how Jaffa was affected, a letter preserved in the Cairo Geniza describes in great detail the aftermath of the earthquake and the damage it caused. The letter, composed in Ramla by Solomon b. Semah, tells of how one-third of Ramla was destroyed and the water in the city's wells rose. Based on this description, it is reasonable to assume that Jaffa also suffered serious damage (Gil 1992:399).

Pilgrimage continued to be a major factor in Jaffa's success as a port city. Most pilgrims, both Christian and Jewish, chose to take the sea route to the Holy Land, which meant that they landed at Jaffa, the closest port to Jerusalem (Tolkowsky 1924:81). The *Chronicle of Ingulf,* dated to 1064, recounts the pilgrimage of the prior of Croyland Monastery in England. Ingulf joined a group of 7,000 pilgrims led by Bishop Gunther of Bamberg, Germany. While traveling to Jerusalem, the group was attacked by Bedouin, who robbed and killed many of them. On the journey back from Jerusalem, they were attacked again, but they managed to escape and flee to Jaffa, where they could embark on a ship and return to Europe (Gil 1992:487).

The late eleventh century witnessed yet another political upheaval in Palestine. Turkish tribes that had been gradually gaining power began to make incursions southward. These tribes, commonly referred to as Seljuks,[6] captured Ramla in 1071 and laid siege to Jerusalem. This siege lasted two years, and in the end the Seljuks were successful. The Fatimids managed to retain control of Jaffa, the port that had consistently been their safe haven (Gil 1992:411). Seljuk rule elsewhere in the region, however, created a difficult situation for the Fatimids. A letter in the Cairo Geniza from Eli ha-Kohen b. Ezekiel to his son-in-law, dated to April 1071, discusses the problems with importing goods into the port at Jaffa. The author cautioned his son-in-law against bringing a cargo of flax into Jaffa and suggested the port of Ascalon as a viable alternative. Ben Ezekiel explained that the Fatimid authority would seize any shipments being brought into Jaffa for the benefit of the army (Goitein 1967:3:198). The Fatimids had clearly resorted to drastic measures in their effort to defend the city against the Seljuks.

By 1075 the Seljuks, under command of Atsiz, had taken Damascus. As part of the treaty drawn up with the Fatimid governor, the cities of Baniyas and Jaffa were left under Fatimid control in exchange for the surrender of Damascus. Jaffa would remain in Fatimid hands for another two years. Then, after being defeated in Egypt, Atsiz withdrew to Palestine. He conducted several brutal campaigns throughout the region. When Jaffa was attacked in 1077, the city's governor and inhabitants fled to Tyre. Atsiz ordered the destruction of Jaffa's fortification walls, thus putting an end to Fatimid rule in the city (Gil 1992:411–412) (for a general overview of the Byzantine and Early–Middle Islamic chronology of Jaffa, see Table 9.3).

Archaeological Evidence for the Early and Middle Islamic Period

Excavations at Jaffa have produced limited evidence of Early Islamic occupation. Jaffa clearly continued to flourish after the end of Byzantine rule in the region. All the excavated areas that contain Early Islamic material also have Byzantine remains. Early Islamic archaeological evidence, however, is far less ubiquitous than its Byzantine counterpart. Like the Byzantine material, the Early Islamic remains can be divided into three categories: tombs or funerary evidence, buildings or installations, and isolated ceramic material.

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Table 9.3. Chronology of Byzantine and Early–Middle Islamic Jaffa. All dates C.E.

Date	Event
313	Edict of Milan
325	Pilgrimage of Helena
325	Council of Nicaea
363	Major earthquake
379–395	Reign of Theodosius I
382–383	Pilgrimage of Sts. Jerome, Paula, and Eustochium
387-389	St. Jerome, *Book of Places*
392	Epiphanius of Salamis, *Treatise on Weights and Measures*
409	Creation of province of *Palestina Prima*
ca. 430	Eucherius, *Letter to Faustus*
431	Bishop Phidus at Council of Ephesus
early 5th century	Cyril of Alexandria, *Sacred Geography*
ca. 500	Priest Virgilius visits Jaffa
ca. 530	Theodosius describes city of Jaffa
527–565	Reign of Justinian I
536	Bishop Elias at Council of Jerusalem
541–542	Justiniac plague
551	Major earthquake
ca. 570	Pilgrim of Piacenza visits Jaffa
614	Sassanian conquest of Palestine
628	Heraclius recaptures Palestine for Byzantine Empire
634	Muslim conquest of Jaffa by ʻAmr Ibn al-ʻAs
638	Muslim conquest of Jerusalem
640	Muslim conquest of Caesarea, end of Muslim conquest of Palestine
649–653	Letters of Pope Martin I
661	Foundation of Umayyad caliphate
669	Byzantine invasion and destruction of cities on Palestinian coast
683	Byzantine invasion and destruction of cities on Palestinian coast
714	Foundation of the city of Ramla
724	St. Willibald visits Jaffa
750	Bishop Maldeveus arrives in Jaffa
750	Foundation of Abbasid caliphate
873	Ibn Tulun established independent rule in Egypt
878	Ibn Tulun captures Ramla and fortified the citadel at Jaffa
885	Tulunids used port of Jaffa to bring soldiers into region
885	Battle at al-Tawahin
906	Abbasids regain control of Palestine
935	Ikhshid conquers Palestine
969	Fatimid conquest of Egypt and Palestine
971	Karamati siege against Fatimids in Jaffa
1024	Djarrahid revolt in Palestine
1033	Major earthquake
mid-11th century	Mahbub b. Nissim stopped en route to Ladhiqiyya
1071	Seljuks capture Ramla
1073	Seljuk conquest of Jerusalem
1075	Seljuks take control of Palestine
1077	Jaffa attacked by Seljuk forces
1093	Muslims barred Christians from entering Palestine
1098	Antioch taken by Crusaders
1099	Godfrey of Bouillon entered Jaffa

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Material dating to the Early Islamic period has been found in the ancient Jewish cemetery at Jaffa. Kaplan explains that the tombstones in the cemetery at Abu Kabir indicate that the area was used until the Arab period (Kaplan 1972:92). There is substantial evidence that Jaffa's lower city continued to function much in the same manner as it had in the Byzantine period. Excavations reveal that streets, domestic buildings, and industrial installations continued in use into the Early Islamic period. The only significant change is the apparent reduction in wine production at the site, although this phenomenon is characteristic of other sites in the region (Peilstöcker 2000a:48*; Peilstöcker et al. 2006).

Early Islamic ceramic evidence demonstrates that the settlement at Jaffa during this period was not restricted to the areas where architectural remains have been uncovered. Potsherds have been unearthed to the north of the lower city, along the shore to the east of the city's harbor (Feldstein 1996:56; Peilstöcker and Priel 2000:40*). This is a clear indication that Early Islamic Jaffa may not have been as large a settlement as the Byzantine city, but it certainly occupied all the key areas of the site.

The end of the eleventh century was marked by further conflict between the Seljuks and Fatimids. These clashes coincided with increasingly strained relations with the West. The Muslim communities in the coastal cities of Palestine barred Christians from entering the country in 1093. This action may have been taken in an effort to forestall the invasions that occurred a mere six years later. Because of this decree, the Crusader armies of Europe were forced to approach Palestine overland, rather than by the more popular sea route. Antioch was taken by the Crusaders in 1098, and the European forces then began their march southward. Godfrey of Bouillon arrived in Jaffa in May 1099 (Tolkowsky 1924:83–84). He captured the city and established Frankish rule on the Palestinian coast. This conquest brought an end to Islamic rule in the city and ushered in a new cultural period in Jaffa.

Conclusion

With renewed exploration of Jaffa, considerable possibility of further elucidation of the traditions of Byzantine and Early Islamic Jaffa emerges. Is it possible to identify areas associated with the presence of pilgrims during the Byzantine period? Is the transition between the Byzantine and Early Islamic periods distinct in Jaffa, or was it as gradual as in many other places? What imprint did early Christianity leave on Jaffa? What imprint did Islam leave? These and other questions remain to be addressed in archaeological studies of Jaffa in the years ahead.

Notes

1. Jaffa went by different variations of its name during the Byzantine and Early–Middle Islamic periods. In the interest of simplicity, only the name Jaffa will be used here, unless otherwise written in a historical text.

2. This pilgrim is sometimes referred to as Antoninus Martyr, because the author states at the beginning of his text that this particular figure accompanied him on his journey.

3. The tenth-century Arab geographer al-Muqaddasi mentions Jaffa as one of the *ribatat* of the district of Palestine (Masarwa 2007:38–39).

4. These events are recorded by al-Balawi in his tenth-century biography of Ibn Tulun (Ashtor 1970:603).

5. Translated from the French by the author.

6. The Seljuks were one of the families that made up these Turkish tribes, or Turcomans. They played a key role in the Turkish conquests of the late eleventh century and thus lend their name to the entire group of tribes.

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Chapter 10

Frankish Jaffa

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The city of Jaffa (known alternatively in Frankish sources as Joppa, Joppe, Jafis, and Japhe) played an important role in the two centuries of the Latin Kingdom of Jerusalem. Although Jaffa was not the most serviceable port on the coast of Palestine, its proximity to Jerusalem enabled it to retain a degree of commercial importance even after the remarkable growth of Acre, and it continued to serve pilgrim traffic to the Holy Land (see Chapters 17 and 18). In addition, under Frankish rule, Jaffa achieved a new role as the administrative center of one of the principal lordships of the Kingdom of Jerusalem.

The Crusaders occupied Jaffa in June 1099. The departing Muslims must have demolished the city before abandoning it, and according to Raymond of Aguilers, little remained intact beyond one tower in the ruined castle (Raymond d'Aguilers 1969:141). Jaffa soon recovered and took up its position as the first Crusader port, even playing a small but decisive role in the siege of the Holy City following negotiations between the Crusaders and a fleet of six Genoese ships that had been scuttled in the port in mid-June. The outcome of these negotiations was that the army managed to obtain wood desperately needed to construct siege machines. The ships were dismantled, and ropes, hammers, nails, mattocks, hatchets, and most importantly timber were taken to Jerusalem, accompanied by carpenters, to be used for the construction of three siege towers (Raymond d'Aguilers 1969:147; William of Tyre [Willelmus Tyrensis] 1986:8.9, p. 398–399).

After the occupation of Jerusalem on January 15, 1100, Godfrey of Bouillon, first ruler of the Latin Kingdom of Jerusalem, rebuilt and fortified Jaffa (Albert of Aachen [Aix] 1879:7.12, p. 515). The existing defenses did not apparently amount to much. William of Tyre suggests this as the reason for the abandonment of Jaffa by its citizenry when the Crusaders arrived (William of Tyre [Willelmus Tyrensis] 1986:8.9, p. 399). Aware of the dangers of leaving the city uninhabited (the Franks only occupied the citadel), Godfrey permitted some of the original population to return to Jaffa, apparently excluding the Jews.[1]

Daimbert of Pisa, the Latin patriarch of Jerusalem, claimed the port city as the rightful property of the church, a claim justified as due recognition of the support given to Godfrey by the Pisan fleet in the spring of 1100. However, although Godfrey granted a quarter in Jaffa to the Holy Sepulcher (William of Tyre [Willelmus Tyrensis] 1986:9.16), the city remained part of the royal domain until around 1108/1110, when it was given by Baldwin I to Hugh of Le Puiset. Formerly an Orthodox see, Jaffa now remained without a bishop and came under the spiritual jurisdiction of the prior and canons of the Holy Sepulcher (James of Vitry 1611:58).

After the death of Godfrey on July 18, 1100, the Norman knight Tancred was denied entrance to Jerusalem because he refused to swear allegiance to Godfrey's

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brother, Baldwin I of Edessa, who had not yet arrived to accede to the throne. Tancred responded by besieging the small Lotharingian garrison at Jaffa, but he dropped the siege when Baldwin arrived in the kingdom. Baldwin's difficulties, aggravated by the rivalry of Tancred and Diambert, included constant Arab raids and the dominance of the coast by Arab ships. The presence of the Fatimid fleet made it difficult for pilgrim ships to enter the port. Early in 1101, a Fatimid army of 20,000 troops attacked the garrison at Jaffa, which consisted of a mere 40 knights and 200 foot soldiers (see Olfter Dapper 1677 as cited in Tolkowsky 1924:89, n. 81). The situation was resolved on April 16 with the timely arrival of a Genoese squadron of 26 or 28 galleys and an additional four to six freight ships (Foucher de Chartres 1969:viii: 151, n. 151). They relieved the city, and their presence improved conditions for other ships reaching the port, but the threat of raids remained. Between 1101 and 1123, Jaffa was defended successfully six times against Egyptian attacks. When Baldwin II was taken into captivity in Syria in 1123, Muslims from Ascalon opened attacks by land, and the Muslim naval forces invested Jaffa. They employed heavy siege machines and attempted to sap the walls in several places (Foucher de Chartres 1969:xvii: 240–241). The land forces were defeated by Eustace Garnier near Ibelin (Yavne), and the Muslim navy was then repulsed by the Venetians under Doge Domenico Michiel (1118–1130).

Not all of Jaffa's problems were caused by man. On October 13, 1102, a violent storm struck the city, resulting in the loss of many lives and the destruction of several ships. The pilgrim Saewulf, who had arrived in Jaffa the day before, described the event in some detail, recording the "bodies of men and women without number drowned and miserably lying on the beach" and the "ships dashed against each other and broken into small pieces." Out of 30 large ships in the port, only 7 had survived by the time Saewulf had left the shore, and he states that more than 1,000 people were killed (Huygens and Pryor 1994:62–63). Although this account is probably somewhat exaggerated and describes an exceptional event, it points to the main problem facing Jaffa and why the port of Acre achieved precedence over it. In rough weather, Jaffa was an extremely dangerous harbor.

In 1133 the town of Jaffa rebelled against King Fulk. Count Hugh of Jaffa had been accused of the crime of *lesè-majesté* (high treason) by his stepson, Walter of Caesarea. It was believed that Hugh had conspired together with Romanus of Puy, lord of Transjordan, against the life of the king and that he was also possibly engaged in illicit relations with his cousin Queen Melisende.[2] Hugh was summoned to trial by single combat but failed to appear on the appointed day. He was judged guilty by default, and the king marched against him. In response, Hugh made an alliance with the Muslims at Ascalon. By this act, he lost whatever support he may have had, including the loyalty of his vassals, who had until then been in opposition to Fulk but now left their fiefs and went over to the side of the king (Mayer 1972:102). Fulk besieged Jaffa, but eventually, to avoid civil war, he negotiated with the count, who agreed to go into exile for a period of three years. Hugh subsequently died in exile in Apulia. Meanwhile, the county of Jaffa was divided into several smaller holdings, and the city was returned to the Crown. In 1151 Fulk gave it as an appanage to his second son, Amalric. In 1153, when Amalric's older brother, Baldwin III, captured Ascalon, the county of Jaffa was given with its territory to Amalric to become part of the county of Jaffa-Ascalon (William of Tyre [Willelmus Tyrensis] 1986:17.30, p. 804; 19.1, p. 864). In 1157 Amalric granted rights in the city to Pisa (Mayer 1972:176; Röhricht 1893:83, no. 324). In 1168 Amalric and patriarch Amalric of Neslé attempted to restore the bishopric of Jaffa and to turn the Church of St. Peter into the cathedral. This change was opposed by the prior of the Holy Sepulcher, who complained to Rome, but Pope Alexander III endorsed the action, although requiring that the chapter be reimbursed (Bresc-Bautier 1984:291–292, no. 149; Pringle 1993:267; Röhricht 1893:121, no. 461). However, in the end these plans fell through. The Holy Sepulcher retained its possessions and received additional rights, including tithes from the entire county of Jaffa (Bresc-Bautier 1984:292–296, no. 150; 297–301, no. 151; Pringle 1993:267).

Throughout the Frankish period, Jaffa continued to play its traditional role in Christian pilgrimage. The Anglo-Saxon pilgrim Saewulf began his pilgrimage in the Holy Land from Jaffa in October 1101/2, as did the Russian abbot Daniel (Daniel of Kiev 1888:8–9) in 1106. But even after Acre took over most of this traffic, pilgrims visited Jaffa, not only because it was on the direct route to Jerusalem but for its own biblical importance. It was associated with the story of Jonah, with the New Testament raising of Tabitha (Dorcas) by St. Peter (Acts 9.36–43),

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and with St. Peter's vision of the unclean foods (Acts 10). The city contained the Perron Saint Jacques, the stone on which St. James's body had been laid before it was transported to Spain. In addition, pilgrims were shown the stone to which Andromeda had been chained (Fretellus 1896:46).[3] Although it was small, rocky, and fairly dangerous, Jaffa nonetheless maintained a certain amount of maritime commercial activity, which continued even after the development and expansion of the northern Crusader ports. This commerce was probably mainly in the hands of the Pisans; the other Italian cities, Venice and Genoa, vested most of their efforts in Acre and to a lesser extent Tyre. However, merchants from Marseilles were also active in Jaffa: King Fulk gave them an annual payment from the city's customs revenue (Röhricht 1893:163, p. 140). On June 2, 1157, Count Amalric, with the approval of his brother Baldwin III, granted the Pisans a site for houses, a market, and a church in Jaffa. He also reduced their customs duties by half (Müller 1879:8, no. 6; Röhricht 1893:83, no. 324). Later, following the Battle of Hattin (July 4, 1187) and the loss of Jaffa and all the cities of the kingdom except Tyre, Conrad of Montferrat offered extensive new privileges in each of those cities to the Pisans as an incentive for their aid in recovering Tyre, Acre, and Jaffa. In Jaffa these gifts included the appointing of Pisan consuls, or *vicecomites,* to be in charge of Pisan administrative, judicial, and communal affairs in their quarter; the granting of the castle, the patriarch's garden, new houses near the port, ovens, and bathhouses; and the right to have their own controllers, authorized to supervise royal revenue officials in transactions with Pisan merchants, at the city gates and market. The privileges further granted them the use of their own weights and measures; a complete tax exemption for all Pisan citizens living in their quarter; and, for Pisans living outside the quarter, exemption from all taxes except the *talia*—a tax intended for use exclusively in interests of the Pisan community (Röhricht 1893:667, p. 178; Schaube 1906:169–170). The privileges were later confirmed by Richard I in October 1191 (Schaube 1906:171). The Pisan quarter was situated by the sea, possibly in the faubourg between the old city and the Hospitallers quarter (Pringle 1993:fig. 79).

All three of the major military orders gained a presence in the city. In 1194 Henry of Champagne granted the Hospitallers a section in the northwest of the faubourg, including two towers on the outer wall next to the sea. The property extended up to the castle walls. The Templars possessed houses nearby, also in the faubourg near the shore, including a postern gate and staircase that was used by Richard I to enter the city in August 1192 (Ricardus 1997:15, p. 356). The Teutonic Knights also held a number of possessions in the city (Röhricht 1893:135,194–195, nos. 510, 727, 732; Strehlke 1975:27, 120–128, 264–168, nos. 132, 128, 296, 298).

In July 1187, shortly after the Battle of Hattin, Salah ad-Din (Saladin) arrived at Jaffa. He attacked the city, employing mangonels and sappers against the east gate, considered to be the weakest part of the defenses (Baha ad-Din [Behâ ed-Dîn] 1897:163, p. 361). According to Ibn al-Athīr, it was Salah ad-Din's brother al-Ādil who took the city by storm (Ibn al-Athīr b. Muhammad 1965:11.543; Lyons and Jackson 1982:268). After Acre was recovered by the armies of the Third Crusade on July 12, 1191, Salah ad-Din destroyed the fortifications of Jaffa together with those of Caesarea, Ascalon, and Gaza (Ricardus 1997:261). He also demolished private houses in Jaffa; when the first contingent of the Crusader army arrived on September 10, 1191, three days after the Battle of Arsuf, it could not find anywhere to lodge and had to set up camp outside the city in the olive groves (Ricardus 1997:262–263). On October 13, Richard himself arrived by ship, reorganized his army, and began to refortify the city with the intention of using it as a base of operations for the recovery of Jerusalem.

In the summer of 1192, while Richard was at Acre, Salah ad-Din laid siege to Jaffa. On July 27 the attack began, once again employing mangonels and sappers. On July 29 part of the curtain wall collapsed, but the Franks held the besiegers back with piles of brushwood. Two days later, the Muslims stormed the walls (Ricardus 1997:350); only the citadel held out. Richard, who had been advancing on Beirut, now turned back and dispatched a force of mounted knights from the military orders under Henry of Champagne by road to Jaffa, while he himself set off by sea with a fleet of 35 galleys. When he arrived at Jaffa and saw the Muslim banners on the walls, he believed the city was lost, until one of the defenders, "a chanting priest" according to Ambroise (2003:179), swam out to his flagship and informed him that the citadel was still in Frankish hands. Richard leaped into the sea and waded ashore, leading 54 knights and 2,000 Genoese and Pisan crossbowmen into battle. The intense fighting ended when Salah ad-Din's troops

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were forced back into the city, surrounded, and defeated. Richard had the walls repaired and withstood a renewed attack by the Muslim forces.[4]

On September 2, 1192, the Treaty of Jaffa was formally sworn, guaranteeing a three-year truce between the two armies. The city remained in Frankish hands until September 1197, when it fell once again to al-Ādil. It appears to have been left in ruins, and it remained so even after it was ceded to the Franks in September 1204, being described by Thietmar in 1217 as desolate (Laurent 1857:24). Jaffa was to undergo a short-lived recovery and restoration of its position as the port of Jerusalem with the event of the Sixth Crusade. From November 1228, the troops of Emperor Frederick II were stationed in the city. Following a treaty signed between the emperor and Sultan al-Kamil on February 18, 1229, the walls of the citadel were rebuilt and the ditch was cleared. Part of an inscription discovered in the nineteenth century apparently refers to work carried out on the fortifications at this time. It was reconstructed by Charles Clermont-Ganneau to read: [FREDERICUS, ROMANORUM IMPERATOR SEMP]ER AUGUSTUS, I[ERUSALEM REX] . . . [ANNO DOMIN]ICE INCARNATI[ONIS] . . . TI (Clermont-Ganneau 1896:155). On the weakest point of the castle, above the sea facing Ascalon, patriarch Gerald of Lausanne (Gerald of Jerusalem, 1225–1239) built a two-tower structure known as the Tower of the Patriarch to serve as his residence (Philippe of Novare and Hubert 1936:192). This was probably the same Patriarch's Tower referred to by John of Joinville as cause for the excommunication of Walter of Brienne, who occupied it and refused to hand it over to the patriarch in about 1244 (Villehardouin and Joinville 1963:298).[5] Walter had held custody over Jaffa since the late 1230s (Edbury 1999:21). In 1240 Richard of Cornwall arrived and fortified the city along with Ascalon.

Four years later, the Kharawazmians besieged Jaffa. According to Joinville, they took Walter of Brienne, who had previously fallen into captivity at Gaza, and had him tied to a forked pole and paraded before the castle, where he exhorted the garrison not to surrender (Villehardouin and Joinville 1963:299).[6] The siege failed and Jaffa remained in Frankish hands, but conditions in the city must have been difficult. The fortifications were not yet complete, and with the loss of Jerusalem (1244), Jaffa's commercial role would have declined, perhaps even become marginal. The outlook must have been dispiriting. Nonetheless, an additional major program of defensive work was carried out between May 1252 and June 1253 by John II of Ibelin, lord of Jaffa, together with the troops of Louis IX.[7] According to Joinville, who accompanied King Louis, the fortifications enclosed the new city and included 24 towers (estimated to have been 50 m apart), three gates, and a ditch (Villehardouin and Joinville 1963:295, 305). The port was also partly repaired, and over the following years work was carried out on the citadel and additional improvements were made to the defenses with money from the West (Pringle 1993:266).

A peace treaty with the lord of Jaffa, John of Ibelin, enabled the Muslims to receive grain via Jaffa's port, an important achievement for the Mamluk leader Baybars because of a plague of rats that infested Syria, depleting its harvests (Thorau 1992:143). Peaceful relations would continue only as long as they were in Baybars's interests, however, and he soon found reason to end the treaty. In June 1266 he protested that mangonels had been set up on the citadel of Jaffa in spite of the terms of the treaty (Lyons and Lyons 1971:91).[8] By 1268, to the south of Acre, only Chateau Pelerin ('Atlit) and Jaffa were still in Frankish hands, and Baybars decided to take Jaffa. After the death of John of Ibelin, he refused to extend the treaty with his successor. Instead, on March 7 he brought his troops to the city, and within half a day Jaffa had capitulated, according to the Templar of Tyre by means of treason (Templar of Tyre 2003:59). The city was surrounded and the gates were opened (Lyons and Lyons 1971:108). The garrison in the citadel surrendered. Its defenders were escorted to safety, but many of the citizens were killed. Others were allowed safe conduct to Acre with their belongings. Baybars removed the relic of the head of St. George and burned the body of St. Crestiene (St. Christine), which the Bishop of Troyes had left in the city. He demolished the citadel to the level of the talus and had its timbers and marble slabs sent by ship to Cairo for incorporation in a mosque he had built (Lyons and Lyons 1971:108).

Conclusion

The tumultuous history of Jaffa as revealed in the documentary and historical sources can be illuminated, and perhaps corroborated, by archaeological investigation. The periods of crisis that seem most likely to leave material records are the violent transition from Fatimid to

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Frankish rule, the long period of reported dereliction following Salah al-Din's and al-Ādil's destructions of the late twelfth century, and the violent transition from Frankish to Mamluk rule. The vitality of commerce throughout these episodes is also available to study, primarily by means of the ceramic evidence (see Chapter 17), which may also shed light on the possible loss of the city's commercial significance in the mid-thirteenth century. Finally, the physical organization of the city as alluded to in the sources, such as the shape of the defenses and the identifications of the Pisan and Hospitaller quarters, should be traceable.

Notes

1. This would explain why some seven decades later, Benjamin of Tudela records there being only a single Jew in Jaffa (1907:27).

2. According to H. E. Mayer, there was probably no truth to the rumor that Hugh had been the queen's lover (1972:107). He suggests that what may have been behind these accusations was the desire of Fulk to remove Melisende from power and rule alone (110).

3. For a discussion of the Andromeda myth, see Chapter 8.

4. For a recent discussion of Frankish Jaffa's fortifications, see B. Kedar (2006).

5. On opposing views regarding Walter of Brienne's status vis-à-vis Jaffa, see Edbury (1983:123–125) and Mayer (1984:142–147).

6. Walter died some years later in captivity in Cairo.

7. John of Ibelin had received the lordship from Henry I by 1247 (Edbury 1999:22).

8. On top of the infestation of rats, the minting of debased imitation dirhams in Jaffa at this time (ca. 1260) was seen as the cause of a rise in prices and shortages in goods throughout Syria (Lyons and Lyons 1971:42).

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Chapter 11

Mamluk Jaffa: A Note

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Jaffa's fortunes changed as the Crusader era drew to a close. As Frankish forces began to lose ground in the Levant, the Mamluk sultan Baybars negotiated a treaty with Jaffa, using its port in 1261 to import grain into Syria's interior from Damietta, Egypt (Irwin 1980; Lyons and Lyons 1971:52–53). By 1268 he had violated the truce, occupying Jaffa and reportedly razing the town (Buhl and Bosworth 2002:234; Ibn Shaddad 1983:72, 321). Jaffa was once again incorporated into the district of Ramla, the Early Islamic capital, which lay on the major land route through the region (e.g., al-Maqrīzī 1959:399; Popper 1955:15). Baybars's destruction may have been limited to the fortifications, however, because it was not long until Jaffa's markets and port were described by travelers as thriving. For example, the geographer Abu'l-Fida (d. 1331) remarked that the "markets are much frequented" and that the celebrated, large harbor was "frequented by all the ships coming to Filastin, and from it they set sail to all lands" (Le Strange 1890:551). In 1334 Rabbi Isaac Chelo visited and enumerated the merchandise to be found in Jaffa's markets: "olive oil, spun cotton, scented soap, glass vases, dyed fabrics, [and] dried fruits" (Tolkowsky 1924:126-127).

Christian pilgrimage continued as well as commerce. In the thirteenth century, ships from Marseilles brought an annual pilgrimage of the Hospitallers of St. John consisting of 3,000 pilgrims (Day 2002:812). Throughout the thirteenth and fourteenth centuries, Venetian vessels made two pilgrim voyages a year to Jaffa (Darrag 1961:269-270, 273, 334; Day 2002:812). Destruction of the harbor facilities for fear of new Crusades in the mid-fourteenth century slowed pilgrimage for a time, however (Buhl and Bosworth 2002:234). Ludolph von Suchem, visiting in 1340, noted the beauty of the ancient town but remarked that since the destruction by Sultan Nasir al-Din Muhammad a few years previously, it was no longer the main port of embarkation for pilgrims (Tolkowsky 1924:129). It also lay off the major north-south route through the region, so it was bypassed by the famed voyager Ibn Baṭṭūṭa, who in the mid-fourteenth century on his way from Cairo to Damascus journeyed from Ascalon to Ramla instead (Ibn Baṭṭūṭa 1964:60).

By the end of the fourteenth century, European travelers' accounts indicate that the town of Jaffa lay in ruins and was abandoned (Tolkowsky 1924:129-131). It is not clear how this came about, although an attack by Peter of Cyprus in 1367 is a possibility (Tolkowsky 1924:130). Nevertheless, the port continued to function. In the fifteenth century, Venetian traders were exporting the cotton of the region from Jaffa (Ashtor 1974:30, 1976:677–681). Pilgrims continued to arrive, being housed first in tents and later in a partly ruined vaulted structure that appears both in written accounts and artists' drawings of the period (Tolkowsky 1924:129-131). That the town still lay on no major route through the

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region is indicated by Sultan Qaitbey's voyage through Syria and Palestine in the 1480s, which he began in Gaza and which did not include a stop in Jaffa (Ibn al-Jīʿān 1984:6).

The archaeological evidence for occupation at Jaffa in the Mamluk period is sparse to date, with few clear contexts. It is likely that the town continued to shrink in size throughout the era, with activity centered on the port and markets, as the texts suggest.

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Chapter 12

Ottoman Jaffa: From Ruin to Central City in Palestine

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The history of Jaffa in general and the period under discussion in particular can be viewed in several theoretical and comparative contexts. The first perspective is of Jaffa as a preindustrial city and its comparison to other preindustrial cities (Kark 1984:18–27). The second is of Jaffa as a traditional city with all its Middle Eastern characteristics (Kark 1981). The third is of Jaffa, which was one of the main coastal towns in Palestine, as a Middle Eastern town in the framework of coastal towns versus inland towns, and their rise and decline in different periods depending on the change of regimes (Kark 1990b:69–90). There are other important themes that may be discussed, such as the interrelationships between Western civilizations and the Holy Land over time, and urban versus rural developments in the empire and in Palestine. However, due to space constraints, this paper will focus on local developments that occurred mainly in the city of Jaffa during the Ottoman period.

Ottoman Historical Background

In the sixteenth century, the Ottoman Empire was one of the largest political units in the world. By the late eighteenth and early nineteenth century, it had declined to the lowest point in its history (Lewis 1968:21–39). The Ottomans conquered Palestine and Jaffa in 1517 and ruled there for 400 years (to 1917/1918). During this period, the pashas (governors) of the Syria-Palestine region functioned as autonomous rulers, although they recognized the sovereignty of the sultan. In 1831 Muhammad ʻAli from Egypt conquered Palestine and Syria. He and his adopted son, Ibrahim Pasha, ruled Palestine and Syria to 1841. In this decade, Palestine was exposed to Western influence and modernization. When the Ottomans pushed the Egyptian rulers back to Egypt in 1840/1841, and up to 1876, we view a period of administrative, legal, economic, and cultural reforms (*tanzimat*) in the empire. Western involvement in the empire increased following the end of the Crimean War in 1856 and the opening of the Suez Canal in 1869. In the last subperiod of the Ottoman Empire, 1876–1918, it was under the dominant rule of Sultan Abdulhamid II (1876–1909) and the Young Turks, after their revolution in 1908. The sultan did not introduce legal or political reforms but advanced education, the economy, and infrastructure. The Young Turks introduced a new constitution and established a House of Representatives in Constantinople. Although their regime was much criticized, there were successes in the field of education. World War I and the British conquest of the empire and Palestine in 1917/1918 ended 400 years of Ottoman rule in Palestine (Kark 1990a:13–52).

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The History of Jaffa

Post-Crusader Period to Napoleon's Invasion

After the Crusaders were driven from Palestine, life in Jaffa came to a virtual standstill for hundreds of years. This period of dormancy commenced with the deliberate razing of Jaffa's harbor and urban infrastructure by the Mamluk sultan Baybars in 1268, followed by similar actions by Nasr al-Din Muhammad in 1336, 1344, and 1346 to prevent renewed Crusader attempts at conquest (Tolkowsky 1926:81–82).

Ottoman population censuses from the early and late sixteenth century indicate that Jaffa was a village in the *sanjak* (district) of Gaza, with a total of 27 taxpayers during the years 1525 and 1526 and 15 Muslim family heads in 1596 (Hütteroth and Abdulfattah 1977:151; Lewis 1968:490).

The Jaffa harbor continued to be used on a very small scale by the town of Ramla for the export of agricultural products and as a port of entry for pilgrims. Since attacks by pirates and Bedouins were common at the time, the Ottomans stationed sentries in Jaffa's two watchtowers to guard storage cellars and ships (Hirshberg 1953:123; Rauwolf 1727:152–153).

In the early eighteenth century, as the central government in Constantinople strengthened its control over Palestine's southern coastal plain and introduced greater security measures at the Jaffa port, the town began to grow as an urban center. The Turks built another watchtower equipped with cannons to keep the Bedouins and pirates at bay and brought in close to 100 soldiers to guard the port (Cohen 1973:144, 152–153). By this time, the Christian churches had begun to establish a foothold in Jaffa. To provide travel services for incoming pilgrims, the Catholics built the Hospice and Convent of St. Peter (1642–1654) (Baedeker 1876:130; Tolkowsky 1926:111–112). At the initiative of the Jerusalem patriarch, the Armenians expanded the Convent of St. Nicholas and purchased property and warehouses (Sanjian 1965:142–145). The Greek Orthodox founded the Church and Hospice of St. Michael.

As the first quarter of the eighteenth century drew to a close, commerce and light industry expanded as part of the overall economic recovery in the region (Cohen 1973:153–154). The period was marked by the renovation of the wharf and warehouses and the construction of an Armenian khan and the Sheikh Muhammad al-Tabiya Mosque in 1730 (Miller in Mayer and Pinkerfeld 1950:29; Tolkowsky 1926:114–116). A wall around the city seems to have been built during the first half of the century. Improved security and economic growth led to a sharp increase in Jaffa's population. Among the new inhabitants of the town were French merchants, an agent of the Venetian Republic, the consular representatives of different countries, and a few Jews. Even soldiers stationed in Jaffa took part in the commercial activity. The swamps on the outskirts of the town were drained, and fruit and citrus trees were planted there (Heyd 1969:35).

By the mid-eighteenth century, Jaffa had been transformed from a crumbling, neglected port to Ramla's replacement as a bustling center of commerce, boasting a population of 5,000 to 6,000. During the 1750s, the governor of Jaffa undertook the building of a school for local Muslims, who apparently had become more numerous (Cohen 1973:155). The prosperity was brought to a halt by a clash between the central government and local rulers over control of the region, which continued for several years (1769–1775). Uthman Pasha fought bitterly against Zahir al-'Amr and 'Ali Bey, who later joined forces against Abu Dhahab. Following two sieges, in 1773 and 1775, Jaffa was conquered and destroyed. Its gardens were ravaged and many inhabitants were massacred (Heyd 1969:43–47, 61–71). Jaffa scarcely had time to heal its wounds before Napoleon appeared on the scene in 1799. After a brief siege (see maps of Jaffa by Jacotin in figures 13.1 to 13.10), his soldiers captured the town, ransacked it, and killed scores of inhabitants (Malos in Tolkowsky 1926:122–123). Then came the plague, which further reduced the population and laid waste to the town (Macalister 1906:133–134, 139).

The Rule of the Pashas (1799–1830)

After the retreat of Napoleon, and until the Egyptian conquest in 1831, Jaffa became an important local administrative center and a transit point for the growing wave of pilgrims and travelers to Jerusalem. It was characterized by disputes between the district governors and the central Ottoman administration. One of the governors, Muhammad Agha Abu Nabbut ("father of the cudgel"), motivated by military and economic considerations, developed the region and fortified Jaffa. He restored the town's ruins; rebuilt the city wall, gate, and towers; and constructed the seawall (see Figure 13.2). The stones were transported by boat from ancient Caesarea up the coast (see Chapter 20). Abu Nabbut also reinforced the Mahmudiyya Mosque, built markets, and erected two ornate *asbila* (public fountains, see 'Awrā 1989:318–321; see also figures 12.1 and 12.2).

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Figure 12.1. *Sabil* built by Abu Nabbut in old Jaffa, near Mahmudiyya Mosque (Pellé and Galibert 1840–1842).

Figure 12.2. Sabīl Abu Nabbut near Jaffa, on the road to Jerusalem (after S. Landman, ca. 1960 in Kark 1990a:13).

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During the first third of the nineteenth century, consular representatives of England, France, and Russia were active in Jaffa. Jaffa's population was estimated at 1,000 to 1,500 in 1800. The city had 2,750 residents in 1806 and around 5,000 in the 1820s and 1830s. The majority were Arab Muslims, with around 600 Christians in 1818 (Kark 1990a:14–20, 146).

Jaffa under Egyptian Rule: Ibrahim Pasha (1831–1841)

Jaffa surrendered peacefully to Ibrahim Pasha and his Egyptian forces in November 1831 (Figure 12.3). Being the closest port to Egypt on the coast of Syria-Palestine and being very well fortified, Jaffa became his headquarters. During the decade of Egyptian rule, more orderly administrative procedures were introduced. Ibrahim planned to develop an inland port at Jaffa by digging a canal between Bassat Yafa ("Jaffa Swamp") and the sea (see the body of water east of the site in figures 13.1 and 13.2). This plan did not materialize. He also planted a beautiful garden at the entrance to the town and was behind the building of two quarantines for pilgrims by the Greek Orthodox and Armenian churches from 1834 to 1836 (Kark 1990a:23–26; Rustum 1936).

Egyptian peasants began to move into the Jaffa area during the reign of Ibrahim Pasha. They settled in *sakinat* neighborhoods outside the city wall and engaged in farming of fruit trees. This was also a period of growth for the Jewish community in Jaffa, as Jews from North Africa and later Europe began to arrive. The total estimated population of Jaffa during this subperiod ranged between 5,000 and 10,000, with 600 to 800 Christians and 60 Jews (Kark 1990a:146–147). Consular activity in Jaffa continued with renewed vigor; Russia, England, France, Greece, and Armenia had consular agents there. They dealt with business matters, pilgrims, and the protection of foreign nationals (Kark 1990a:23–26).

Ottoman Reform in Jaffa (1841–1876)

From 1841 Jaffa's rapid economic and physical development accelerated. The town was run in a more orderly fashion and general security improved. In 1871 Jaffa authorities established the first municipal council with the support of town notables and consular representatives. The municipality's goal was to improve the city, enhancing its cleanliness and installing street lighting. Between 1841 and 1876, Jaffa's status as a fortified city began to change. Thus another gate was opened, the

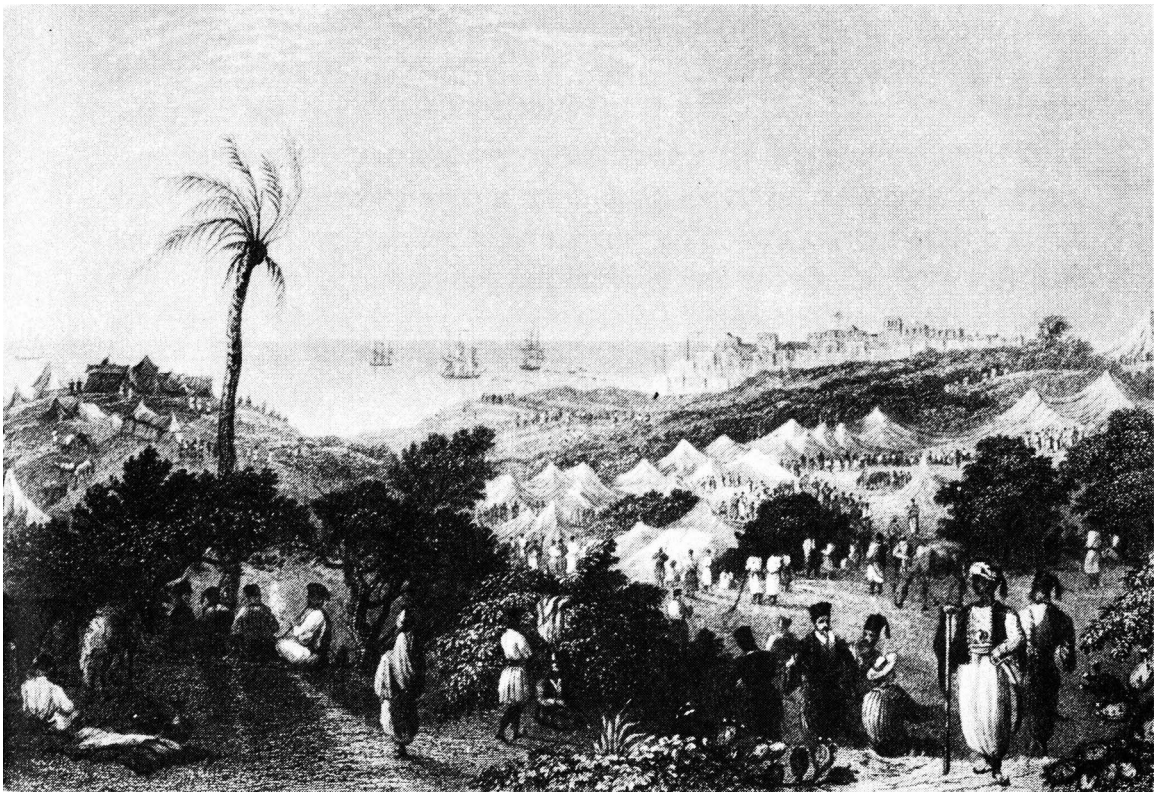

Figure 12.3. Military encampment of Ibrahim Pasha south of Jaffa (Pellé and Galibert 1840–1842).

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landward wall was gradually torn down, and the moat was filled in. The stones from the wall and fortifications were sold to builders of private homes, shops, and the Scottish mission's new school building.

Consular activity increased, and vice-consulates of Britain, Germany, France, Austria, the United States, and Spain were opened. Missionary schools and welfare services were established. From the 1840s to the 1860s, Jews and Christian Americans settled in and around Jaffa, followed by a wave of German Templars. The total estimated population of Jaffa by 1876 amounted to 8,000, with 1,800 Christians and 600 Jews (Kark 1990a:32–38, 149).

End of the Ottoman Period: Abdul Hamid II and the Young Turks (1876–1918)

Government and administrative procedures in Jaffa steadily improved during this interval, and the local population assumed a greater role in the affairs of the city. The local government paid special attention to certain spheres of development: infrastructure, government institutions, and improving security in new sections of the city, both residential and commercial, that were being built outside the walls. An elegant *saray* (governor's palace), army barracks, clock tower, fountain in the harbor, and other public buildings were constructed outside the old city. By the end of the 1870s, nearly all the fortifications on the landward side of the city were gone (Figure 12.4). The wharf-side square was nicely paved, and the market near the gate was expanded.

On the eve of World War I, tenders were issued for the construction of a tramway, water for drinking and irrigation, and electric street lighting. None of these plans materialized because of the breakout of war, according to local newspapers in Arabic and Hebrew from 1912, and the *Tender* (Kark 1990a:47–49). During the war, the Ottoman governor built an attractive boulevard

Figure 12.4. Detail of map of Jaffa (see Figure 13.19) and vicinity by T. Sandel, 1879–1880.

Figure 12.5. Map of Jaffa by T. Sandel, 1912.

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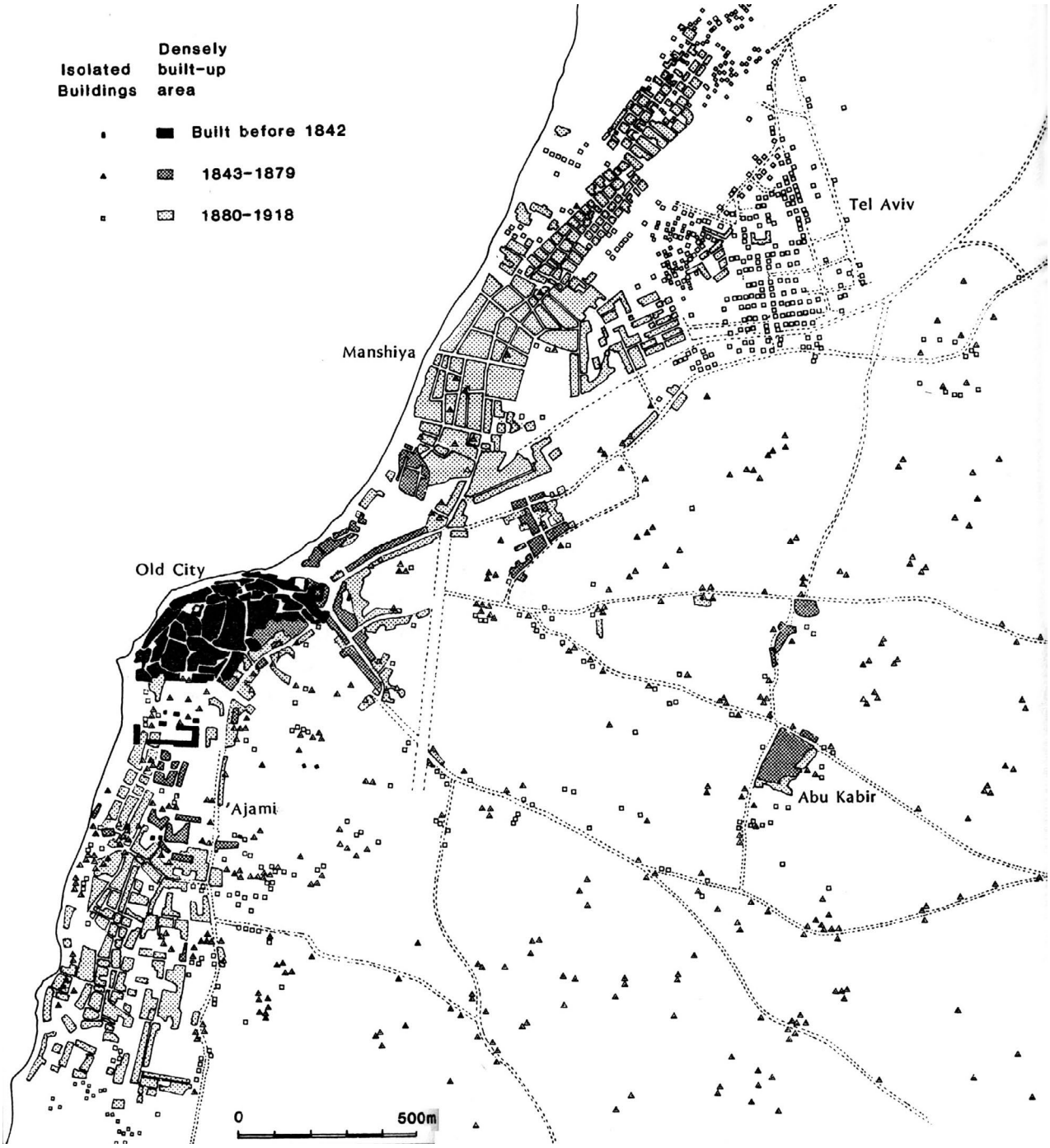

Figure 12.6. Expansion of built-up area in Jaffa, 1799–1918 (after Kark 1990a:300).

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with palm trees (see Figure 13.25) in the eastern part of the town (today Jerusalem Boulevard, see Tolkowsky 1926:134–135). The first railway in Palestine ran between Jaffa and Jerusalem and was opened in 1892. This facilitated the travel of passengers, including pilgrims and tourists, as well as goods. The Ottomans were ambivalent toward the development of the Jaffa port, which became one of the most active in the eastern Mediterranean, and its infrastructure was hardly better than it had been at the beginning of the nineteenth century (Kark 1990a:224–235). The Jaffa municipality, by contrast, greatly extended its activities at this time to the benefit of both building infrastructure and inhabitants. The municipality made efforts to keep the city clean, paved some of the roads, installed streetlamps, and planted a public garden near the *saray* and clock tower (Kark 1990b:44–52).

The vice-consuls of the Western powers (America, Britain, Germany, Italy, Greece, Persia, France, and Russia in 1891) continued to operate in Jaffa throughout this period (Luncz 1891:63–67). They assisted in governmental and municipal projects; advised their countrymen in matters of taxation, legal rights, and business; and pursued private business and land purchase (Kark 1990a:50–52). On the eve of the World War I, Jaffa's population grew 14.5-fold and reached 40,000 to 50,000 (30,000 Arab Muslims, 10,000 Christians, and 10,000 Jews). It became the second largest city in Palestine (Kark 1990b:72–74) (Figure 12.5).

Conclusion

Jaffa, one of the world's oldest port cities, turned from a small walled settlement into one of the major cities and harbors of the eastern coast of the Mediterranean at the beginning of the twentieth century. Its small-scale rise under Ottoman rule began in the eighteenth century, after a few hundred of years of stagnation. Until the mid-nineteenth century, it was a small, typical preindustrial and traditional Middle Eastern city.

After Napoleon's retreat in 1799, Jaffa was to suffer from several internal wars and changes in local government, which influenced its development for better and worse, before embarking on an uninterrupted course of growth and development that continued until 1918 (Figure 12.6). The town gradually increased in area, population, ethnic and religious diversity, and economic activity. In concert, the Ottoman Empire, Western powers, local Muslim and Christian entrepreneurs, Christian settlers from America and Europe, churches, Jewish institutions, philanthropic organizations, and new immigrants set Jaffa on the road to population growth and economic prosperity and transformed it into Palestine's leading city. The end of the Ottoman period was among the most eventful in Palestine's history and one in which Jaffa often played a central economic and cultural role.

Despite the diverse sources available for the study of Ottoman Jaffa, such as historical maps (see Chapter 13) and documents, a great deal of work remains to be done to contextualize this material within the framework emerging from recent archaeological and conservation work (see Chaper 20). How did increases in traffic through Jaffa by foreigners affect its heritage and social institutions, and to what degree are these changes evident in the archaeological record? How accurate are early maps of Jaffa, and what can be said about locations that are now excavated that appear on these maps? How can archaeological data be integrated with travelers' accounts of the city, and to what extent can the city's diachronic development be charted? These and many other questions can be posed as renewed archaeological work with a concern for the Ottoman period is carried out in Jaffa.

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Chapter 13

Jaffa in Historical Maps (1799–1948)

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Eretz Israel Museum, Tel Aviv

The modern mapping of Jaffa and its vicinity began with the arrival of the French army of General Napoleon Bonaparte in 1799. Until then anyone interested in the region had to use travelers' reports and the illustrations in some of them to obtain an impression of the region. The maps of the next 64 years were prepared for military use and were not intended for civilian purposes. Only with the beginning of archaeological and historical research in the region did the new mapping of Israel begin, in particular with the British Palestine Exploration Fund (PEF), which subsequently served as the basis for German and British maps during World War I. The publication of travel guides, among them the well-known Baedeker guide, in the last quarter of the nineteenth century provides us more or less with detailed maps of Jaffa and the region.

In 1920, with the beginning of the British mandate in Palestine and the establishment of the Survey Department, the systematic publication of maps in different scales began. This work continues today as the responsibility of the Survey of Israel (Center for the Mapping of Israel, or MAPI).

Research on these maps has been carried out so far only by Ruth Kark (1987–1989, 1988) in her comprehensive works on Jaffa from the time of Napoleon until the British mandate and her publication on Jaffa in these periods (1990), and by Baruch Sapir in his M.A. thesis (1970, 1981), partly concentrating on the appearance of Jaffa on the British map from 1842. Also to be mentioned are the works of Baruch Rosen (1992), dealing with the bathymetric British map from 1863, and of Yehuda Karmon (1960) and Anne Godlewska (1985, 1988), analyzing Jacotin's mapping for Napoleon. The present article will concentrate on all maps and their importance for the architectural remains uncovered in recent archaeological excavations throughout Jaffa.

The Maps

French Maps from 1799 (Figure 13.1 to Figure 13.10)
The French campaign of the late eighteenth century under the command of Napoleon was accompanied by an engineering unit led by Colonel Jacotin. Its task was the mapping of Egypt and the Holy Land. From this mapping, several maps of Israel and Jaffa are preserved, although not all of them are well known. There is a general map of the region of Jaffa and Jerusalem (Figure 13.1) and a more detailed map of just Jaffa (Figure 13.2; Reybaud 1830), which was published recently (Kedar 2006; Raban 1990–1993).

At the end of the nineteenth century, a map of Napoleon's attack on Jaffa (Figure 13.3) was published in the book of General Jonquiere (1899–1907). A note on this map indicates that the map was produced according to maps in the archive of the French army. Upon visiting

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the archive of the Service historique de l'armée de terre, I identified a number of maps that had been forgotten for about 200 years and to the best of my knowledge have never been published. It needs to be mentioned that the same archive holds the notebooks of Jacotin's units and records of their measurements. The material is comprised of three sheets with four maps of Jaffa and the harbor:

- A map drawn by hand and colored (Figure 13.4; detail Figure 13.5), containing on the left side a description of the conquest written by General Berthier and on the upper part an illustration of the southern walls of Jaffa (Figure 13.6), which indicates the point of the breach opened by the army. The map also marks the positions of French forces around the city.
- A map drawn by hand and colored (Figure 13.7; detail Figure 13.8), indicating the location of forces around the city. This and the previous map are almost identical. However, they were prepared by two different persons, and the handwriting is different. Because of the use of colors, the topography and vegetation in the area of Jaffa can be identified. Moreover, the roads and the swamp ("el-Bassa") east of the city can be discerned.
- A sheet with two maps: (1) A map drawn in pencil showing the city walls, the watchtowers, and the roads around the city (Figure 13.9). It seems that this map was used as a base map for the two maps mentioned above; (2) A map added on the same sheet showing the harbor with its installations and the breakwater (Figure 13.10). This breakwater was, in fact, the row of (natural) rocks closest to the shore. The importance of this map lies in the information given about the depth of the water in various places, indicating the way vessels could enter the harbor.

On the maps shown in Figure 13.3 and Figure 13.5, it is possible to identify a wall perpendicular to the coast from the northeastern end of the seawall. Above it is written the word *estacade,* meaning a quay, pier, or breakwater constructed of stones or wood. It seems possible that this is the remnants of an earlier pier or breakwater that does not appear on later maps.

British Map from 1800 (Figure 13.11)

This map was published in a book by Wittman (1803 opp. 226) and was prepared by George Pink, a surveyor of the British army. The map was drawn on July 25, 1800, one year after Jaffa had been conquered by Ottoman forces with the assistance of British officers. The map shows the location of the Ottoman forces around Jaffa after the conquest. This map is less detailed than the French maps, but the roads are no less accurately marked than on those maps.

British Map from 1841 (Figure 13.12)

Recently located in the National Archives of the United Kingdom, this map shows details of the fortification system of the city. The map was prepared by Major Frederick H. Robe. It accompanied a report of Lieutenant-Colonel R. C. Alderson and Lieutenant C. F. Skyring dated to June 10, 1841. This report describes the condition of the city's fortifications and suggests improvements; it was signed by Lieutenant-Colonel Alderson (Alderson and Skyring 1841). The report differs from Alderson's report from 1842 (see below). The map was part of the cartographic description of Palestine by the British Engineering Corps (Goren 2002, 2005) and has been mentioned so far only briefly by Jones (1973:40) and Kark (1988:49, map no. 3 under the name of Skyring). The map differs in two important details from the other maps. On the northern portion of the fortifications appear three gates that do not appear on other maps. At the northeastern section appears an opening without any further explanation; the opening is unattested on other maps.

Map of the British Engineering Corps from 1842 (Figure 13.13)

After the conquest of Jaffa by the forces of Muhammad 'Ali, mapping of the fortifications of the coastal towns (Goren 2002, 2005; Jones 1973) was initiated by Lieutenant G. F. Skyring from the British Engineering Corps (Jaffa map on February 27, 1842). This map is published in R. C. Alderson's book on the fortifications of 'Akko and the coast (1843) and is housed in the collection of the British Library.

The map gives a detailed description of the fortifications of Jaffa, which had been changed after the departure of Napoleon in 1801 by General Smith and in 1816 by Governor Muhammad Aga (Abu Nabbut), who refurbished the seawalls (Shacham 2001). The bastions and possibly other changes, such as alterations to the main entrance gate of the city, the Jerusalem or Abu Nabbut Gate, and the blocking of an additional gate on

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Jaffa's eastern side, were planned by Major Holloway, an engineer, and his main assistant, Major Fletcher (see Anonymous 1801)

A comparison of the maps of Jacotin (Figure 13.1), Pink (Figure 13.11), Robe (Figure 13.12), and Skyring (Figure 13.13) maps reveals a number of observations that were important for the evolution of the city after the changes made to its fortifications in 1901:

- Bastions were added at the northeastern and the southeastern corners of the city.
- The second gate, situated in the eastern city wall, was blocked. Only in the 1970s was this blocking removed. A gate called Bab el-Jadida ("New Gate") was opened. It served as an additional gate in the walls until these were dismantled later (Or [Oredentlich] et al. 1988). Despite the gate's name in the literature on Jaffa, the gate is called the Old Gate (Bab el-'Atiqa) by the indigenous Arab population. The architecture of the gate (which consists of an outer gate, an inner gate, and an open space surrounded by rooms) seems to be the original ancient gate (from the eighteenth century) and not a secondary opening in city walls before these were dismantled.
- As a result of this development, the system of roads toward the east changed. The road connecting the gates and the split into three main roads toward the east (Jerusalem), north (Shechem and 'Akko), and south (Gaza) disappeared after losing their raison d'être.

In 1970 Baruch Sapir made an attempt in his master's thesis to link the modern map of Jaffa with the map of 1842 (Figure 13.14).

Bathymetric Map of Jaffa from 1863 (Figure 13.15)

This map, obviously based on the map of 1842, was prepared by Lieutenant F. D. G. Bedford and served first and foremost as a bathymetric map. The map is part of a set of maps of harbor cities in the Mediterranean (Rosen 1992) and was in use with updates until 1936. In the same year, a new map had to be prepared because of the changes caused by the new harbor. The harbor of Tel Aviv was added to this map at the last minute. The maps include the following changes:

- The location of the lighthouse. On the map from the 1860s, the lighthouse appears close to the monastery and hostel of the Greek Orthodox convent. Only in 1875 was the lighthouse moved south to its present location.
- The depth of the harbor.
- Signs of the entryway into the harbor.

On the upper part of the map appears a view of Jaffa as it looked from the sea, drawn by Lieutenant Bedford.

In 1901 German navy captain Franz von Hipper (1901) published a new view of Jaffa from the sea (Figure 13.16) because, as he wrote, the 1863 depiction no longer reflected the appearance of Jaffa. The two illustrations are of importance, since they were prepared to give arriving captains a picture of Jaffa and thereby assurances that they were entering the right harbor.

The illustrations are drawn from two different perspectives, possibly caused by the different approaches to the harbor used by ships of different sizes. However, they record the development of the city as seen from the outside. For example, the picture from 1901 shows the monastery and church of St. Peter's, which were built between 1888 and 1894 on the slopes of the tell of Jaffa in the place of the former fortress or the tower of the Russian church at Abu Kabir, which was also built in the last quarter of the nineteenth century.

Map of the Palestine Exploration Fund (Figure 13.17)

After the fund was established in 1865, the Survey of Western Palestine was carried out from 1872 to 1877. The mapping of the survey by lieutenants C. R. Conder and H. H. Kitchener was published in 1880 on 26 sheets (Conder and Kitchener 1881–1883), one of which shows the area of Jaffa (Sheet 16; Figure 13.17). In additional volumes, the results of the survey, including important observations, were also published. The maps also functioned during World War I as base maps for both the German and British armies.

Theodor Sandel's Maps

An important contribution for the mapping of Jaffa at the end of the nineteenth century was made by Theodor Sandel, an engineer and architect with the German Colony in Jaffa. His maps can be divided into two groups: first the maps for the Baedeker guidebooks, and second the map from 1878–1879 prepared for an article by G. Schwartz, which was published in 1880.

The Baedeker Maps (Figure 13.18; see also Figure 12.5). These maps appear in two editions of the Karl

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Baedeker guidebooks, the guide to Palestine and Syria, *Palästina und Syrien* (Baedecker 1876b), and the guide to the Mediterranean, *Das Mittlemeer* (Baedecker 1876a). Although editions were produced in various languages, including French, English, and German, there was not an edition each year in each language. For this reason, the maps were not updated along with the text in the various editions published between 1875 and 1912 (e.g., Baedeker 1876b). Thus the maps illustrate situations one, two, or even more years prior to those described in the text. In addition to the map of the town, a map of the vicinity of Jaffa was also published.

The Map of 1878–1879 (Figure 13.19; see also Figure 12.4). This map was added to the article on Jaffa and its region published by Schwartz in *ZDPV* (1880). The map consists of two parts: a detailed map of the vicinity of the city, and a detailed plan of the town. The importance of this map, based on the Baedeker maps, lies in the known date of the map, 1878–1879. The article by Schwartz, of which this map was a part, describes Jaffa in the important period of change during which the walls fell out of use and were dismantled and the city grew beyond its traditional borders.

Hanauer Maps (Figure 13.20)

The maps illustrating the articles of Hanauer (1898, 1903) are also based on the Sandel maps. They add an important element to our knowledge of Jaffa at the end of the nineteenth and the beginning of the twentieth century. Although the maps are based on older maps and do not show the new neighborhoods of Jaffa, they add important information concerning roads, landmarks, and place-names around Jaffa.

Meistermann Maps (Figure 13.21; Figure 13.22)

The maps, which appeared in Meistermann's guidebook, are also based on the Sandel maps. One map was included in the 1907 edition (see Meistermann 1907:fig. 35); the other in the 1923 edition (see Meistermann 1923:fig. 36). The maps show the growth of the city before and after World War I.

German Map from 1918 (Figure 13.23)

This topographical map was prepared during World War I by the German army, which was part of the Turkish forces in the region. With a scale of 1:50,000, it is based on the Palestine Exploration Fund map (Figure 13.17).

British Map from 1918 (Figure 13.24)

This map is also based on the Palestine Exploration Fund map. It was prepared by the British army at a scale of 1:40,000.

Map of Jaffa from 1917 (Figure 13.25)

This map was published as part of British plans to conquer Palestine during World War I (British Army 1917).

British Map from 1918 (Figure 13.26)

This map was published after World War I. It shows the development and growth of the city in the beginning of the twentieth century.

Map of Tel Aviv and Jaffa from 1922 (Figure 13.27)

This map of Jaffa and Tel Aviv was published in Hebrew by the Palestine Land Development Company, established in 1922 in England by the World Zionist Organization as an instrument for purchasing and developing land in Palestine.

Topographical Map from 1927 (Figure 13.28)

With the establishment of the Survey Department in 1920, the regular publication of topographical maps at different scales began. The example shown here, published in 1927, has a scale of 1:20,000. The systematic publication of maps in different scales began in 1948 and continues today as the responsibility of the Survey of Israel.

Maps for Development Plans

Starting in 1864, plans were made for the development of Jaffa's harbor, its connection to the railway station, and even a horse-drawn tram (Avitsur 1965). These plans, which were never implemented, provide information about the city in these times.

Plan for the Development of the Harbor in 1864 (Figure 13.29). This plan, made by Charles J. Zimpel, was not realized (Avitsur 1972:100–104).

Plan for Changes in the Harbor from 1882 (Figure 13.30). Another plan for changes in the harbor area of Jaffa, made by F. Boemches, was also never realized (Avitsur 1972:104–106; Loehnis 1882:44–48).

Plan for a Horse Tram from 1892 (Figure 13.31). This plan for an urban horse-drawn tramway, prepared in 1892 but never realized, includes important information about Jaffa (Avitsur 1985–1986).

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The Palmer Proposal from 1923 (Figure 13.32 to Figure 13.35). After a survey of harbor installations in Palestine, Palmer presented a proposal for changes to the Jaffa port, including changes to a new railway line surrounding the new northern neighborhoods of Jaffa, meaning Tel Aviv (Palmer 1923).

Conclusion

Despite the reasonable collection of maps of Jaffa from 1799 to 1918, proper maps do not exist for long periods of Jaffa's history. This forces the researcher to use historical literature and other sources to obtain detailed descriptions of the town and its vicinity. The establishment of the Survey Department in 1920 made detailed descriptions of the country in general and of Jaffa in particular available to give researchers a precise picture of the development and changes of the city.

Acknowledgements

I would like to thank Lior Rauchberger for drawing my attention to "Turkish Ceremony of Laying a First Stone" in the *Sporting Magazine* (Anonymous 1801). I would also like to thank Dan Mirkin for pointing out the 1841 Robe map (Figure 13.12) and Baruch Rosen for calling my attention to Fran von Hipper's publication (1901).

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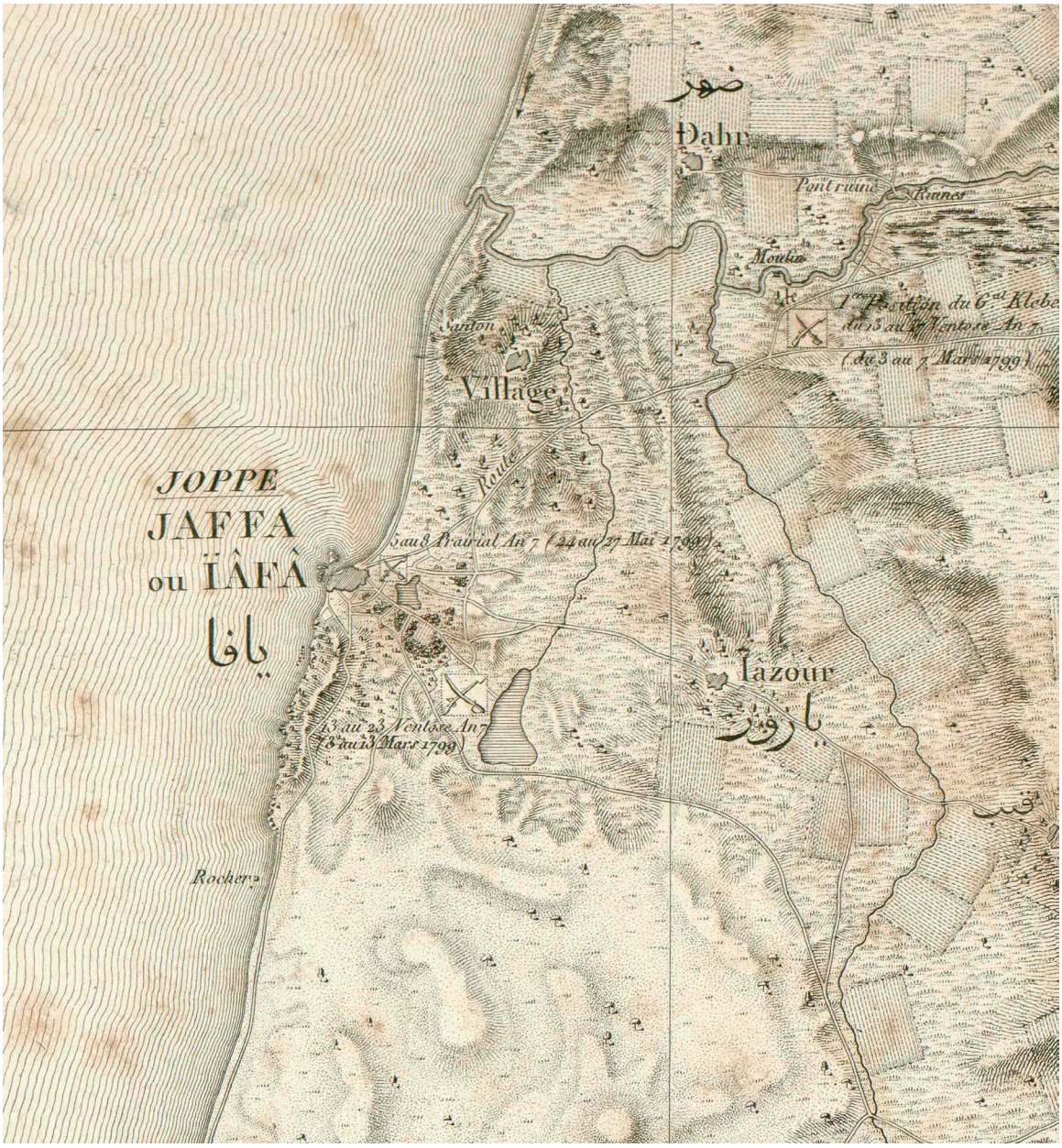

Figure 13.1. Map of Palestine by Jacotin, 1799. Jerusalem and Jaffa sheet. *Eran Laor Cartographic Collection, National Library of Israel.*

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Figure 13.2. Map by Denain & Delamare, 1830–1831. *Bibliothèque nationale de France: fonds géographique, Res. Ge. FF. 6421.*

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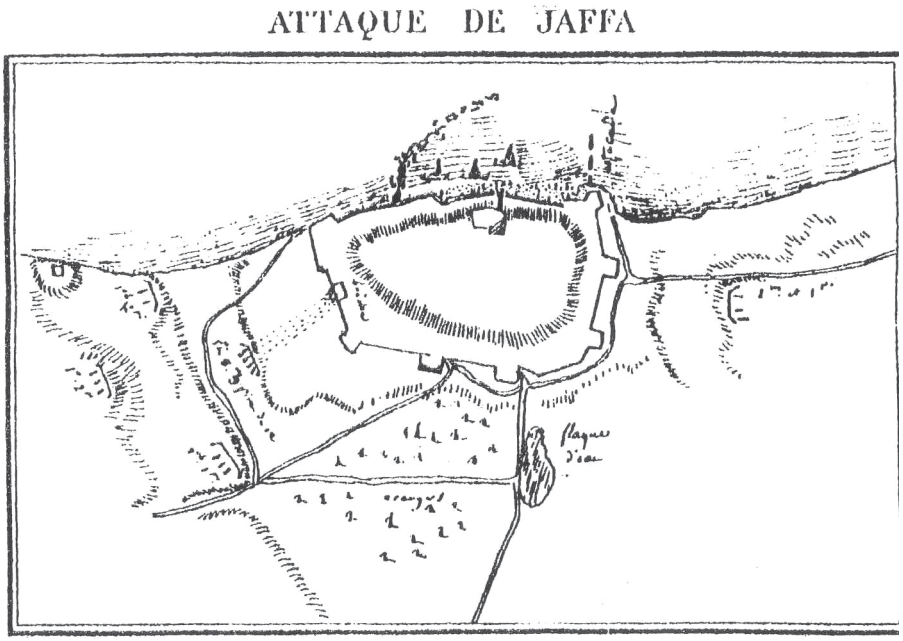

Figure 13.3. Map of the "Attaque de Jaffa" by Jonquiere, 1899.

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Figure 13.4. Jaffa map with sidebar by Jacotin, 1799. *Service historique de l'armée de terre, Armées. France: LII 332-2.*

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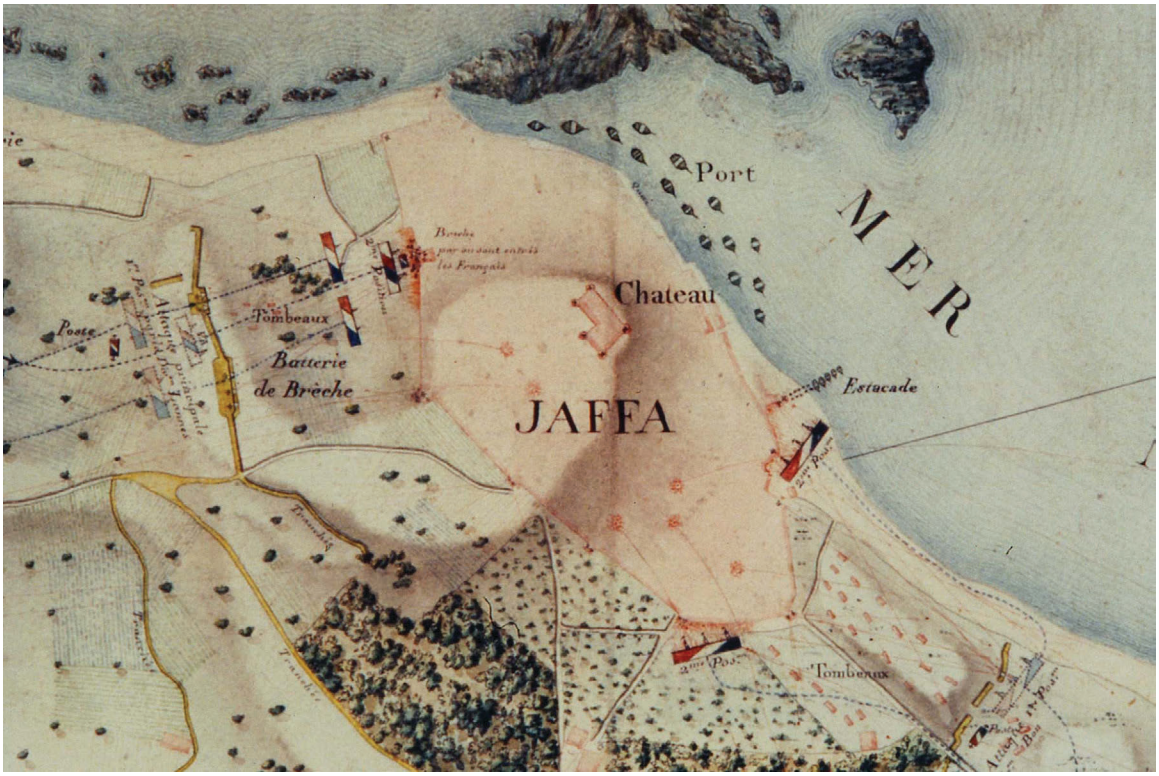

Figure 13.5. Detail of Jaffa on map by Jacotin, 1799 (Figure 13.4). *Service historique de l'armée de terre, Armées. France: LII 332-2.*

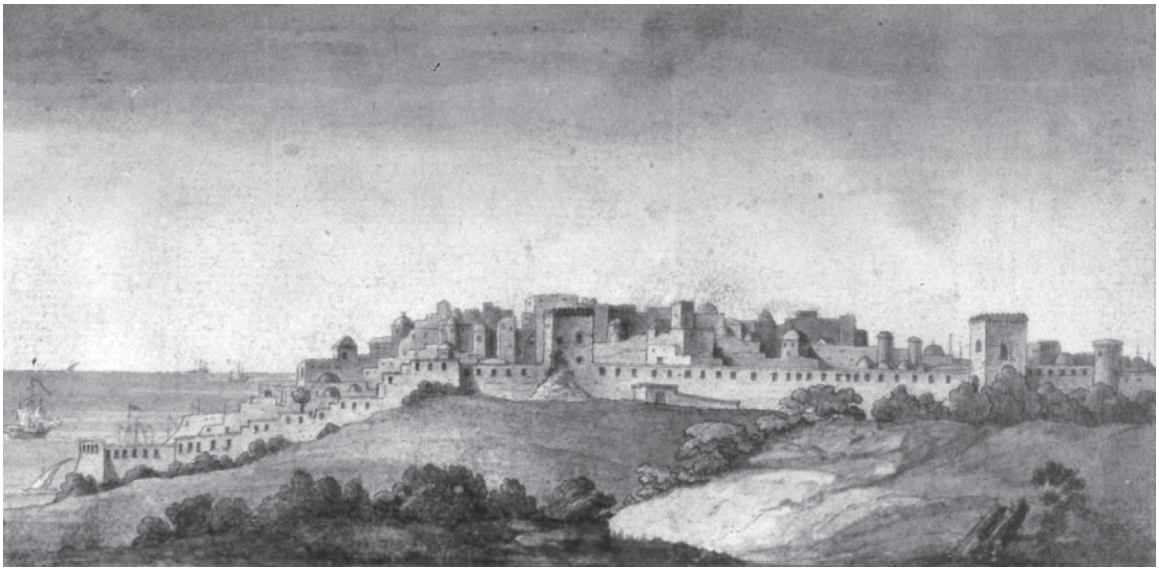

Figure 13.6. Painting of Jaffa from south, 1799. *Service historique de l'armée de terre, Armées. France: LII 332-2*. Original in color (Figure 13.4).

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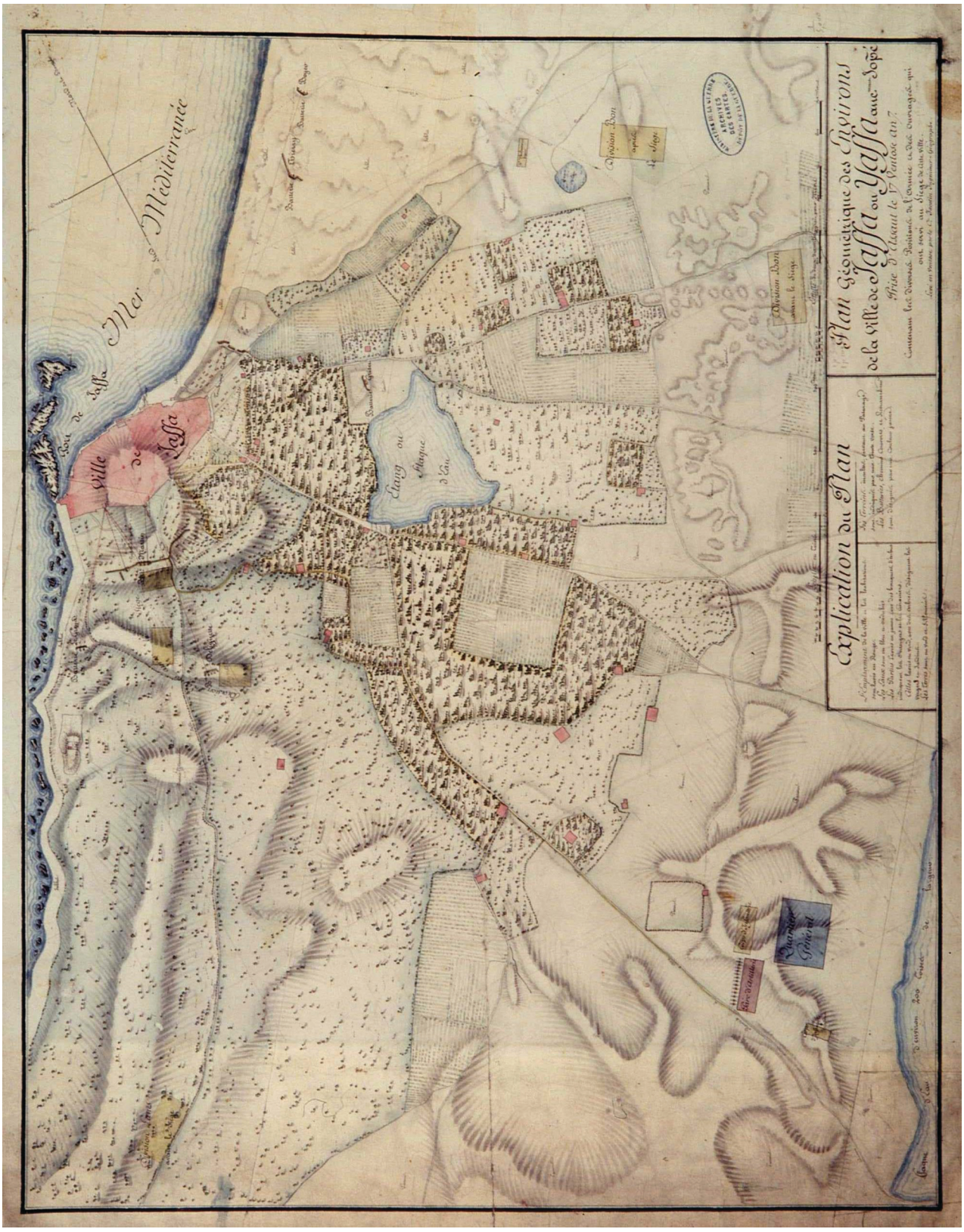

Figure 13.7. Second map of Jaffa and environs based on Jacotin, 1799. *Service historique de l'armée de terre, Armées. France: LII 332-2.*

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Figure 13.8. Detail of Jaffa on map (Figure 13.7). *Service historique de l'armée de terre, Armées. France: LII 332-2.*

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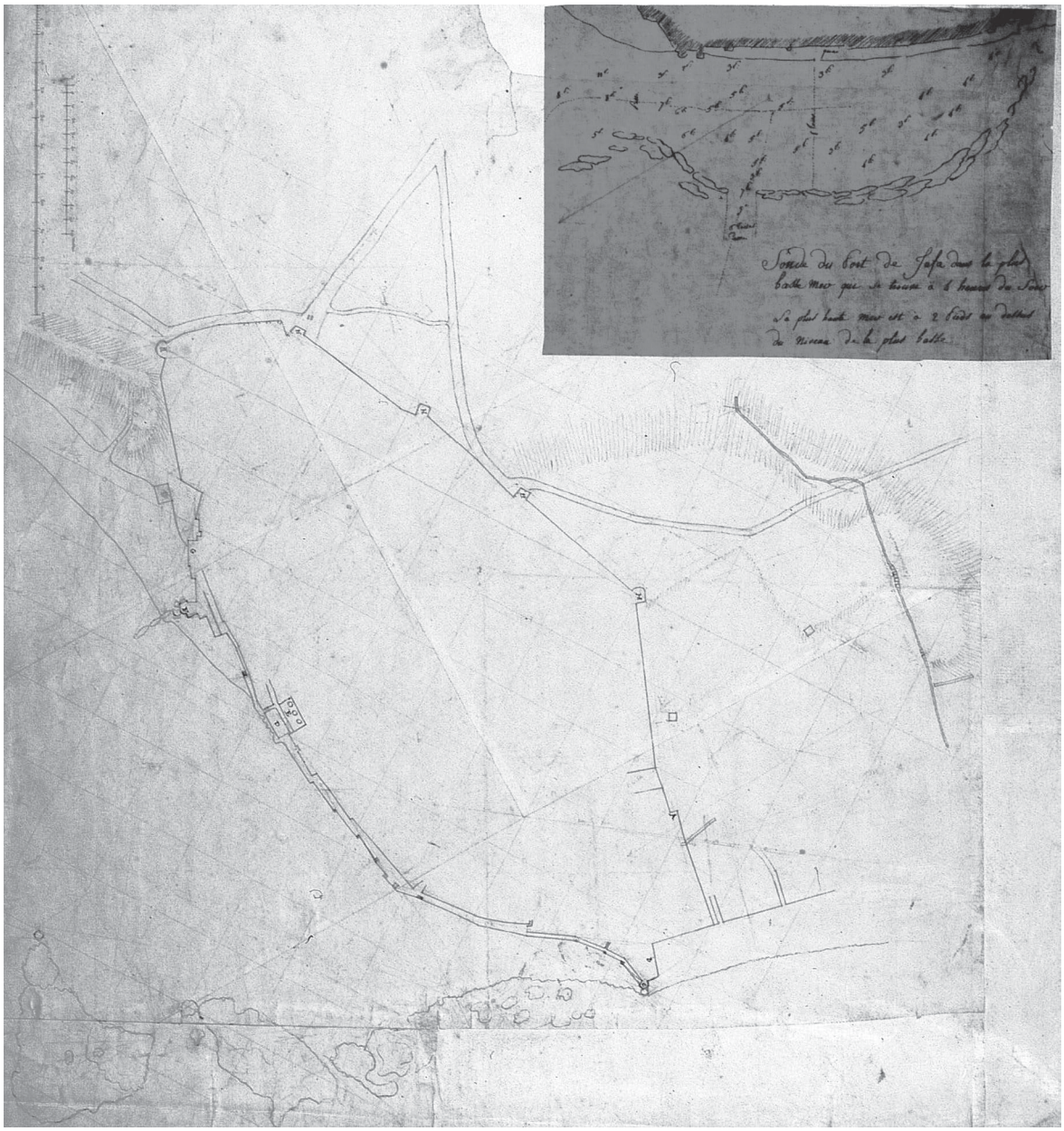

Figure 13.9. Preliminary draft of Jaffa map and harbor bathymetric map by Jacotin, 1799. *Service historique de l'armée de terre, Armées. France: LII 332-2.*

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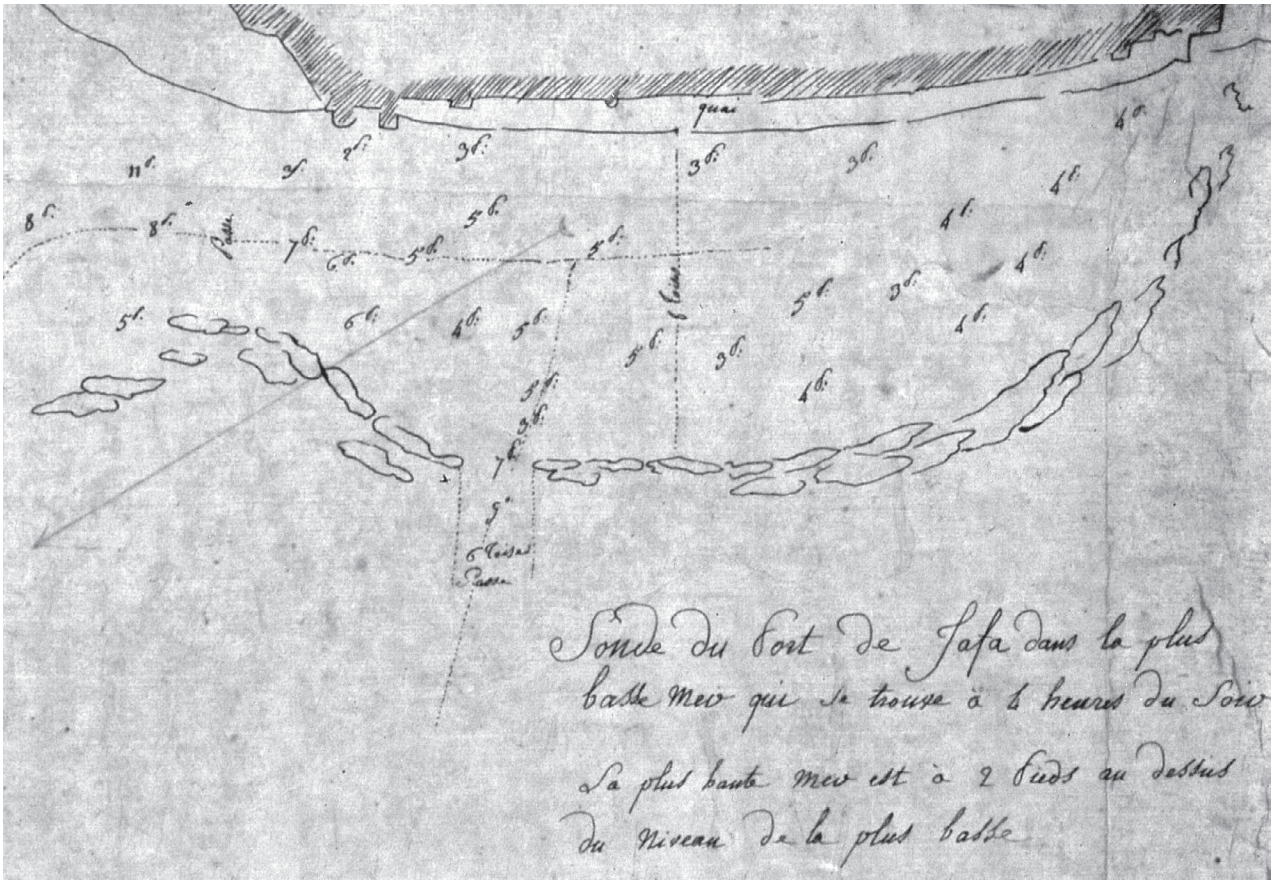

Figure 13.10. Detail of map showing harbor, breakwater, and depths (Figure 13.9). *Service historique de l'armée de terre, Armées. France: LII 332-2.*

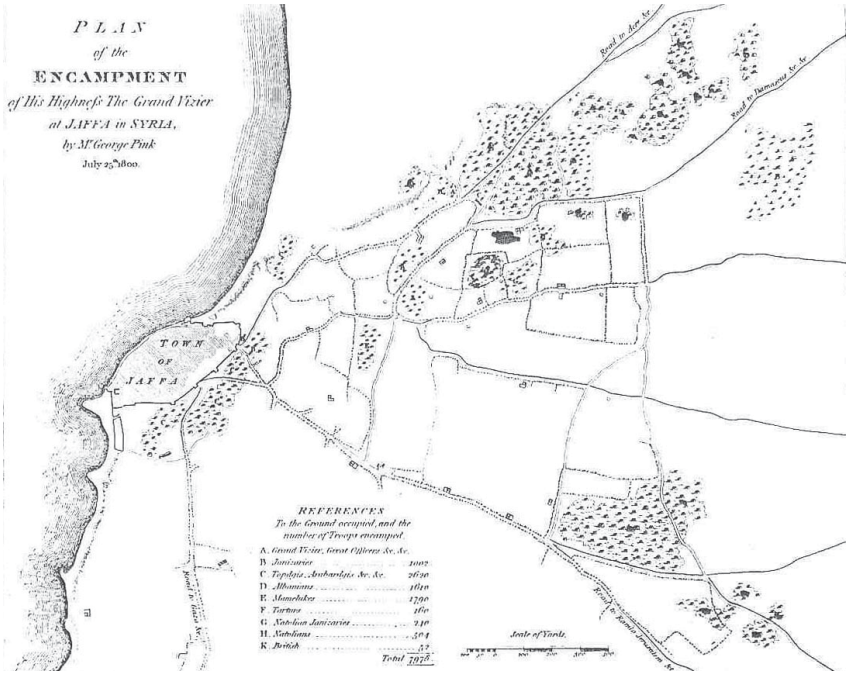

Figure 13.11. British map by George Pink 1800 published by Wittman, 1803.

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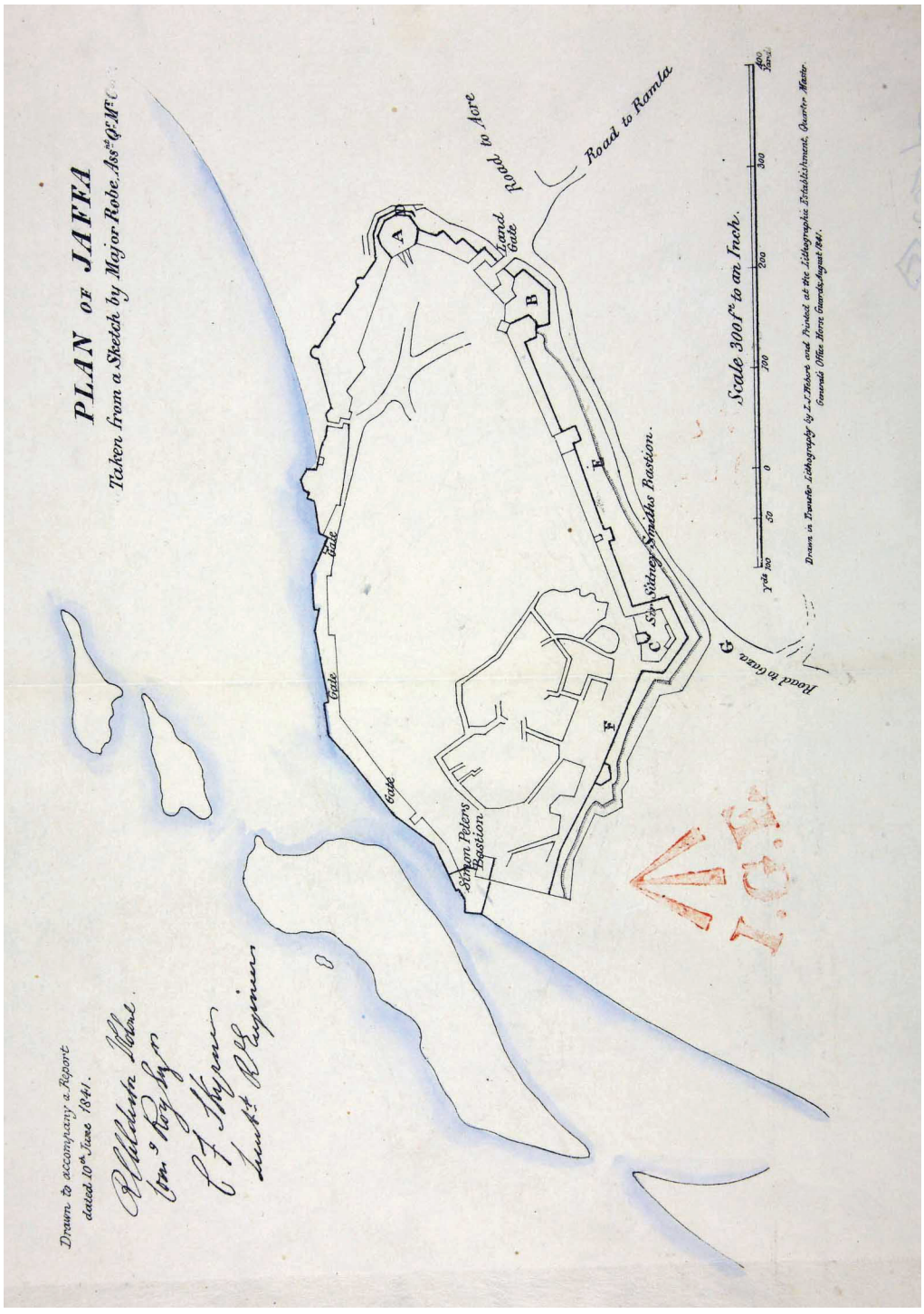

Figure 13.12. British map by Major Robe, 1841. The National Archives, United Kingdom, MPH 1-1127(5) (WO 55-1562).

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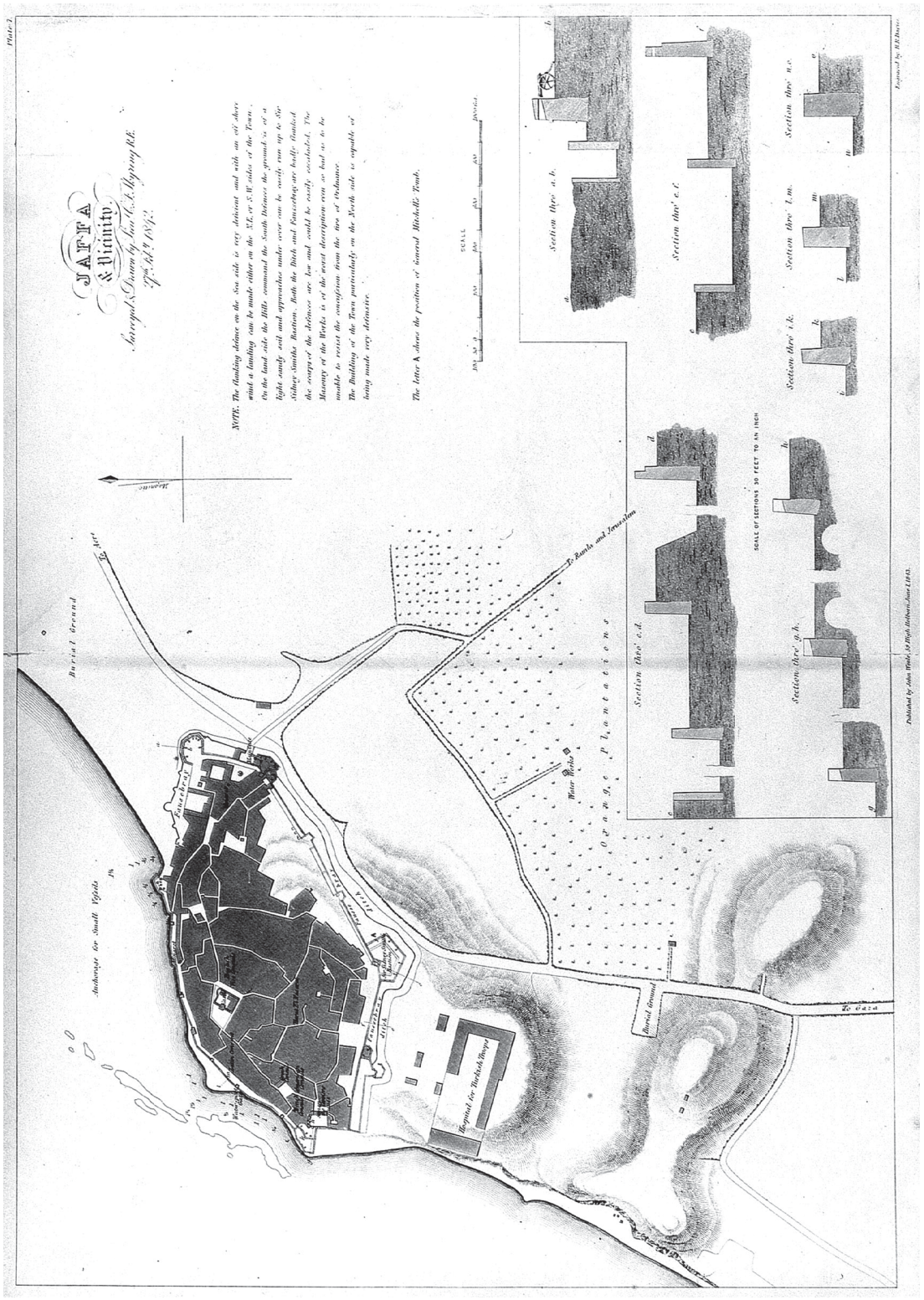

Figure 13.13. British map by Lieutenant G. F. Skyring, 1842 (from Alderson 1843; also British Library: MSS no. P.P. 40501.i., vol. 6. Folio: p. 24).

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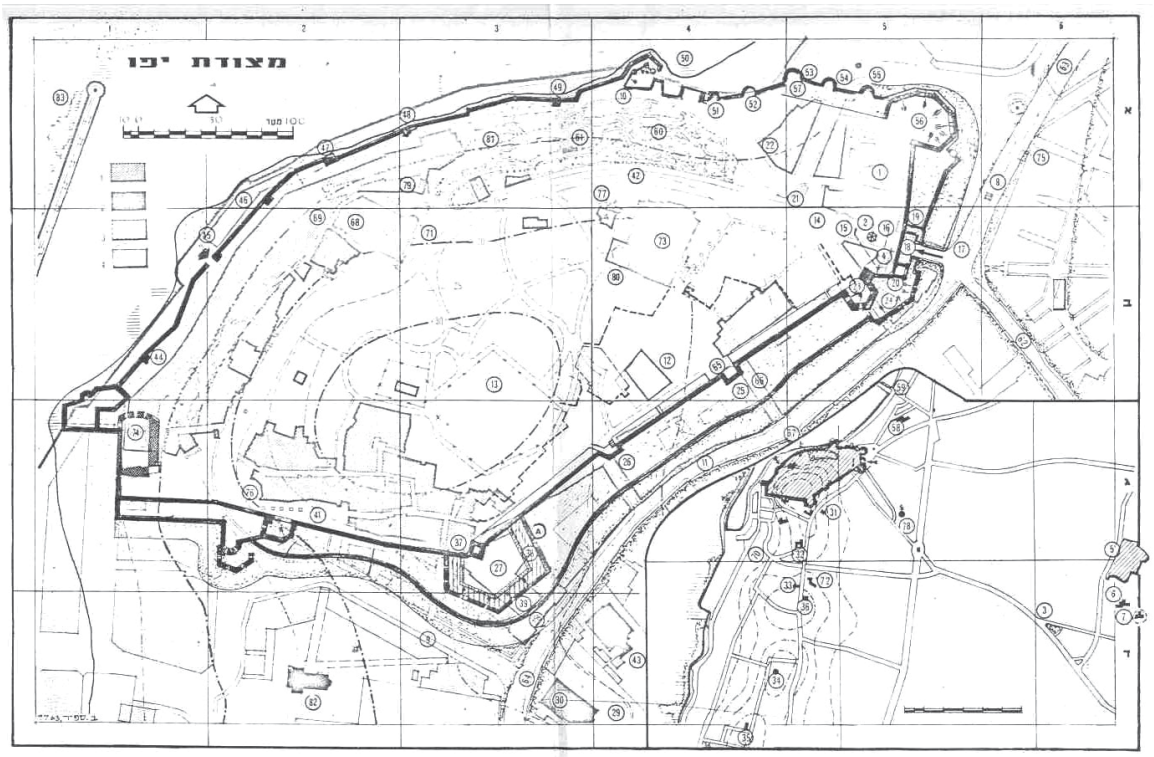

מצודת יפו במחצית המאה הי"ט על רקע יפו בימינו

1. בנינים פרטיים שהיו קיימים כבר ב־1840; 2. בניני ציבור שהיו קיימים כבר ב־1840; 3. בנינים שנבנו סמוך להוריסת החומה ב־1888 או מיד לאחריה; 4. בנינים מחוץ לשטח המצודה.

1. המסגד הגדול. 2. מזרקת אבו נבות (לפנים). 3. סביל אבו נבות. 4. שער העיר. 5. אבו כביר. 6. אוניברסיטת תל־אביב. 7. הכנסיה הרוסית וקבר סביתא. 8. כיכר השעון. 9. רח' פסטר. 10. רציף העליה השניה. 11. רח' יפת. 12. שטח פנוי (1841). 13. החקרא (כיום: שטח החפירות). 14. רח' רוטלאן. 15. צריח המסגד הגדול. 16. רחט המסגד. 17. גשר מעל לחפיר. 18. חצר קטורה. 19. תבנון מול השער. 20. בית השער. 21. מזרקת אבו־נבו (כיום). 22. בית־הספר אלכסנדר ינאי. 23. סוללה עליונה. 24. סוללה תחתונה. 25—26. בחני החומה הדרומית. 27. תבנון סידניי סמית. 28. בית"ח הצרפתי. 29. השלוחה הדרומית. 30—31—32. בתי הספר הצרפתיים. 33. הכנסיה הקפוטית. סנט פטר. 34. מגדל מים ברח' ברקאי. 35. בית"ס האורתודוכסי ברח החטה. 36. גן סולה. 37. בית השער בתבנון סידניי סמית. 38. סוללת עפר. 39. כוות־ירית. 40. התבנון הדרומי. 41. שרידי החומה שהשתמרו. 42. רח' מפרץ שלמה. 43. בית"ס סביתא. 44—50. חומת הים ובחניה. 45. שער הים ובחן. 46. בחן (כיום הכניסה לגמל). 51. שער סתר. 52—55. החומה הצפונית ובחניה. 56. תבנון פינה (לשעבר בית מעצר יפו). 57. דייק פנימי. 58. בית"ס בארי. 59. צינור הביוב ברח' 280. 60. גן הפסגה. 61. שרידי חומה בגן הפסגה. 62. דרך ירושלים. 63. דרך עכו. 64. דרך עזה. 65. רח' 26. 66. רח' 9. 67. רח' עמיעד. 68. מועדון עומר כייאם. 69. מגדל יווני אורתודוכסי. 70. שכונת ע'מי (לשעבר). 71. כנסית סנט פייר. 72. כנסית סנט אנטוניו די פדואה. 73. מחיאון יפו. 74. בית שמעון הבורסקי. 75. "טראיה" (הרוס). 76. בית אדום על 5 עמודים. 77. צריח מזרני ומצפה. 78. מסגד "סיקסיק". 79. המגזר הארמני. 80. ה "חמאם". 81. צריח מסגד הים. 82. כנסיה יוונית סנט ג'ורג'. 83. טלע אנדרומידה.

Figure 13.14. Modern map of Jaffa incorporating Skyring map, by Sapir 1970 and 1981.

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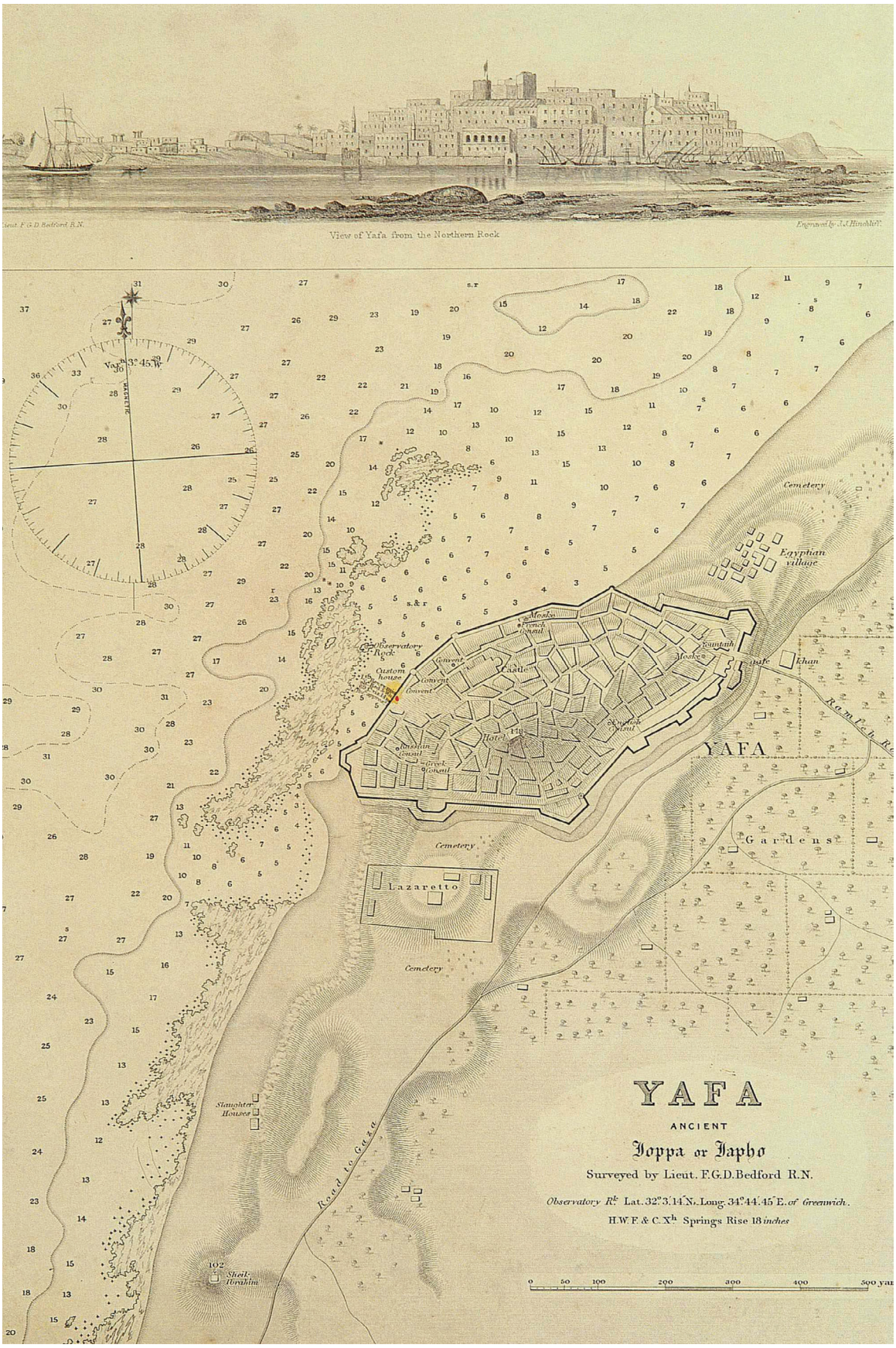

Figure 13.15. Map by Lieutenant F. D. G. Bedford, 1863. *Courtesy of the Baruch Rosen Collection.*

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Figure 13.16. Illustration of Jaffa from the sea by Franz von Hipper, 1901.

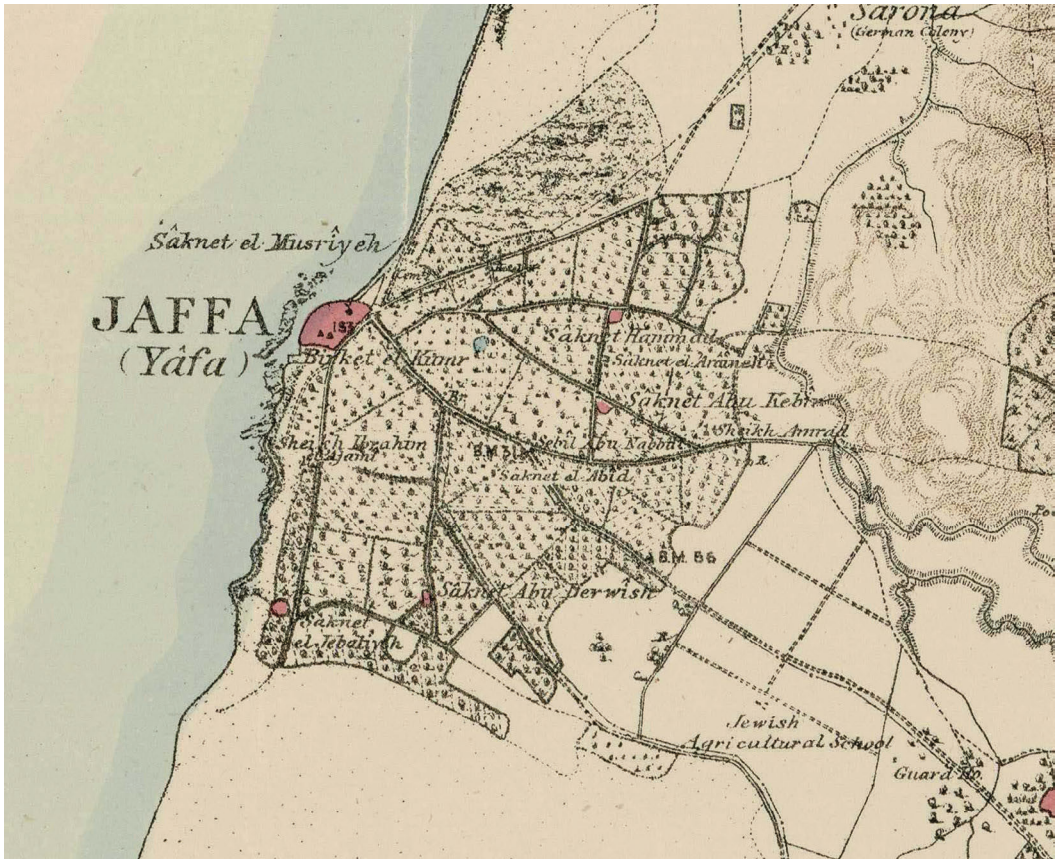

Figure 13.17. Detail of PEF map of Jaffa and vicinity from the Survey of Western Palestine, 1880 (Sheet 16). *Courtesy of the Eran Laor Cartographic Collection, National Library of Israel.*

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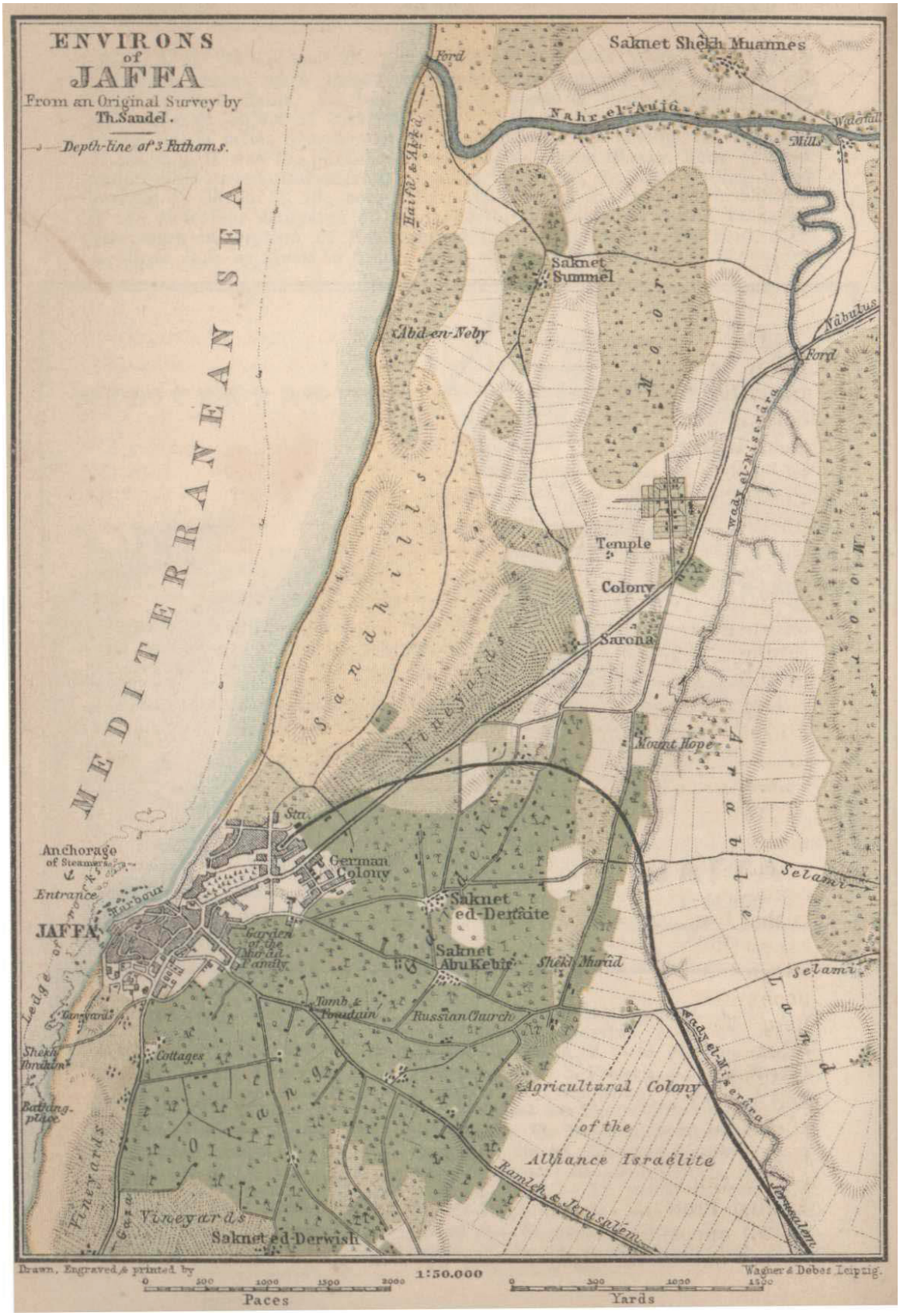

Figure 13.18. Baedeker guidebook map of Jaffa by Theodore Sandel, 1878–1879. Original in color.

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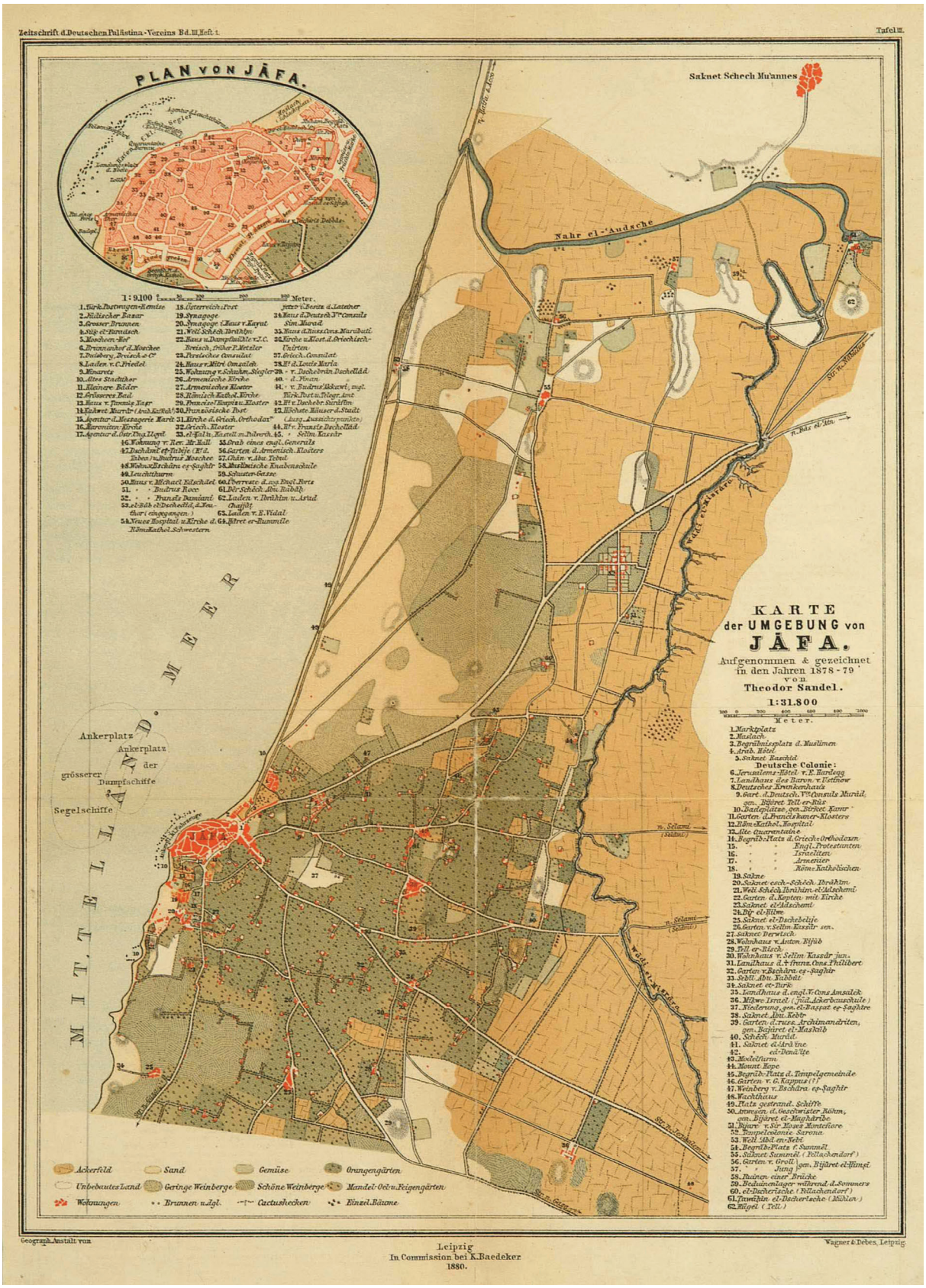

Figure 13.19. Map by Theodore Sandel, 1878–1879 (from Schwartz 1880).

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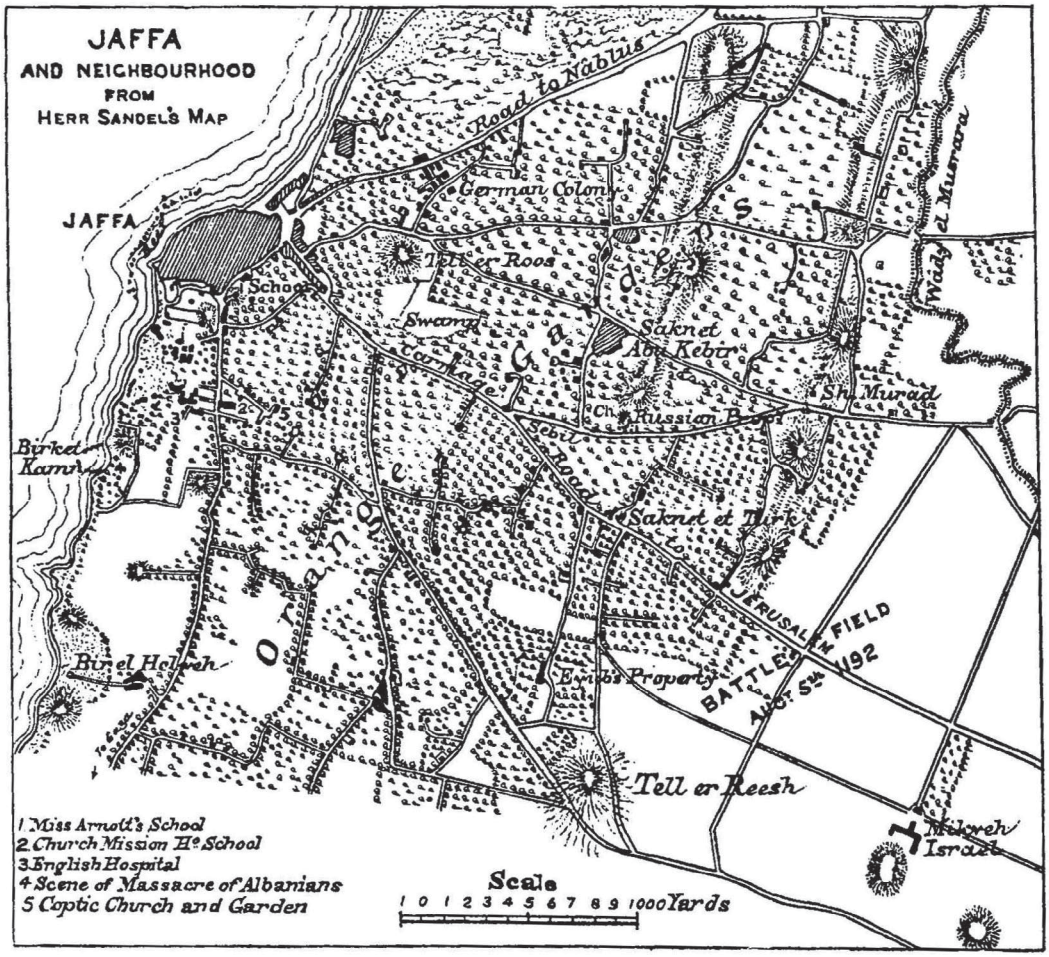

Figure 13.20. Sandel map modified for use by Hanauer, 1898.

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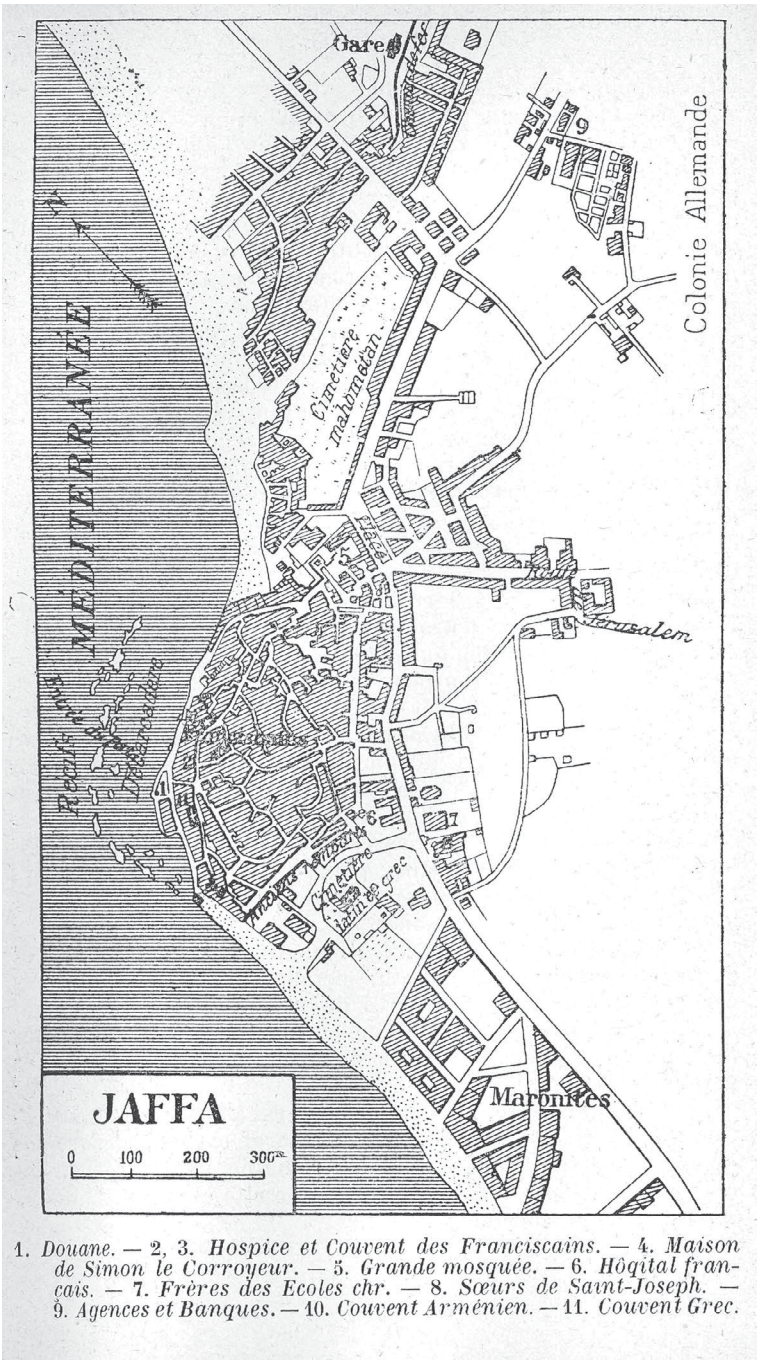

1. *Douane.* — 2, 3. *Hospice et Couvent des Franciscains.* — 4. *Maison de Simon le Corroyeur.* — 5. *Grande mosquée.* — 6. *Hôpital français.* — 7. *Frères des Ecoles chr.* — 8. *Sœurs de Saint-Joseph.* — 9. *Agences et Banques.* — 10. *Couvent Arménien.* — 11. *Couvent Grec.*

Figure 13.21. Map by Meistermann, 1907.

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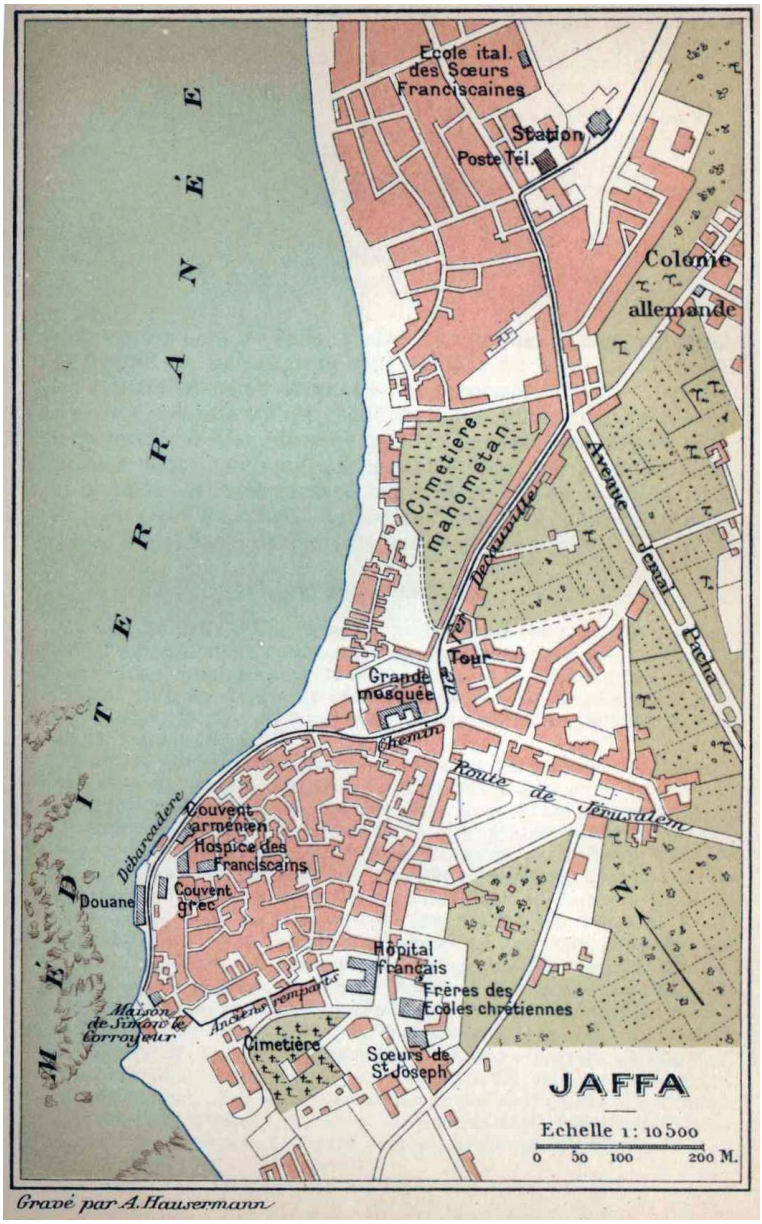

Figure 13.22. Map by Meistermann, 1923. Original in color.

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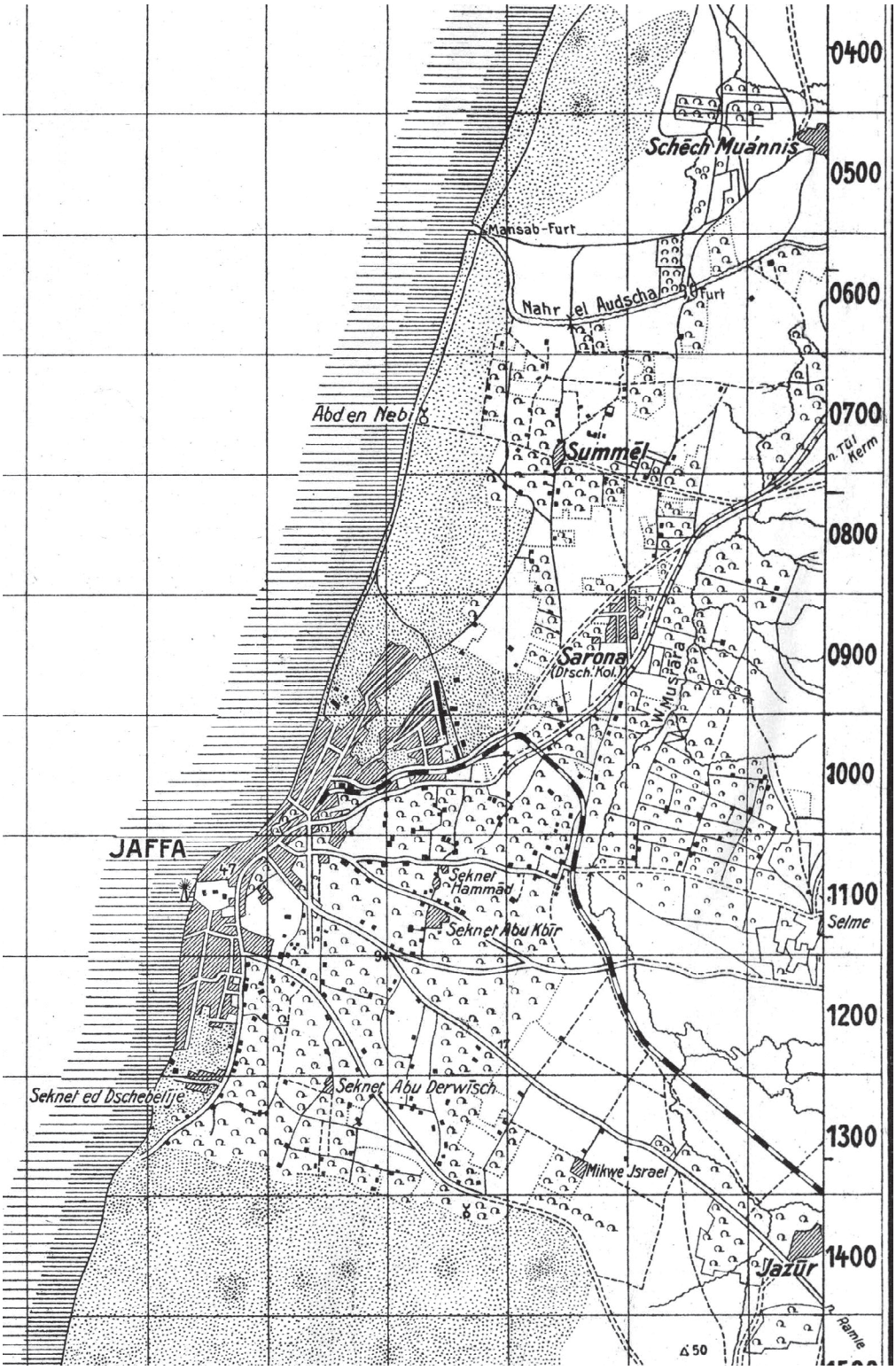

Figure 13.23. German military map, 1918. *Eran Laor Cartographic Collection, National Library of Israel.*

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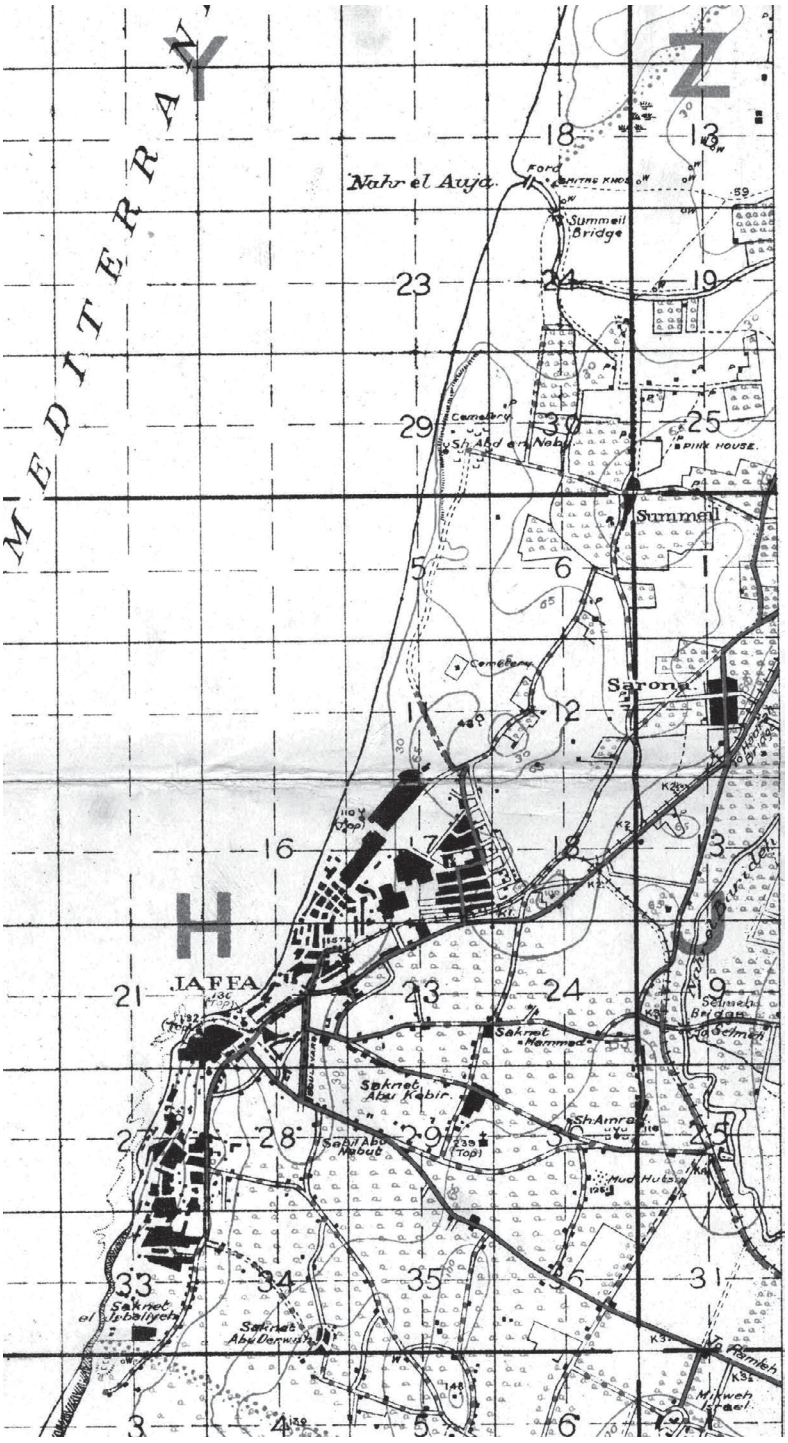

Figure 13.24. British map, 1918. *Eran Laor Cartographic Collection, National Library of Israel.*

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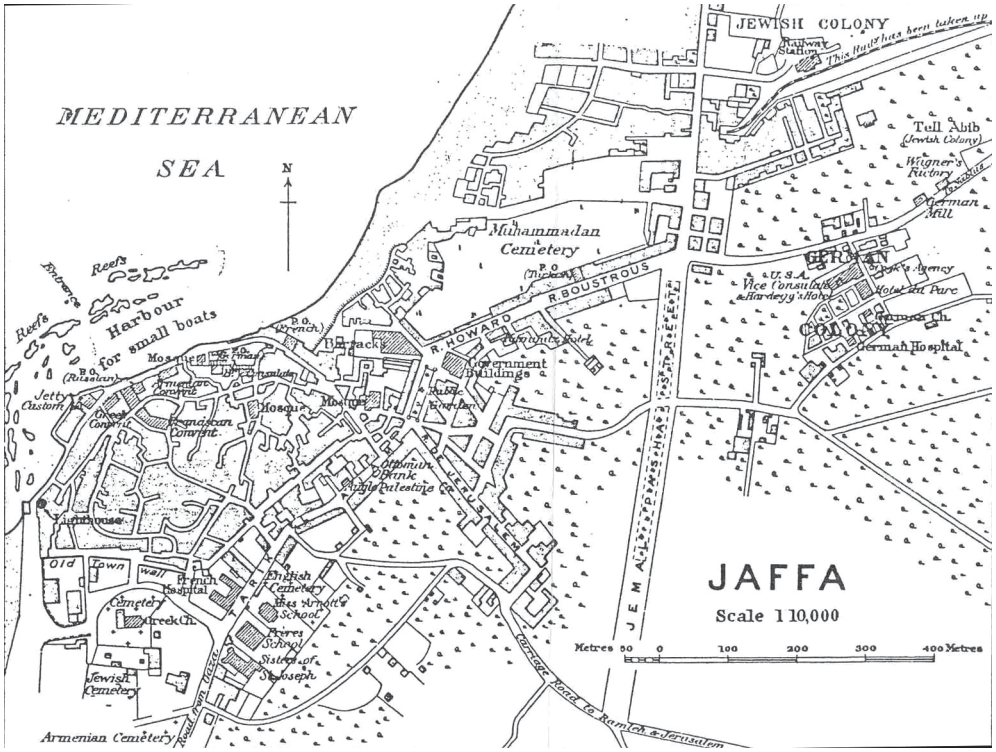

Figure 13.25. Map from British military handbook, 1917.

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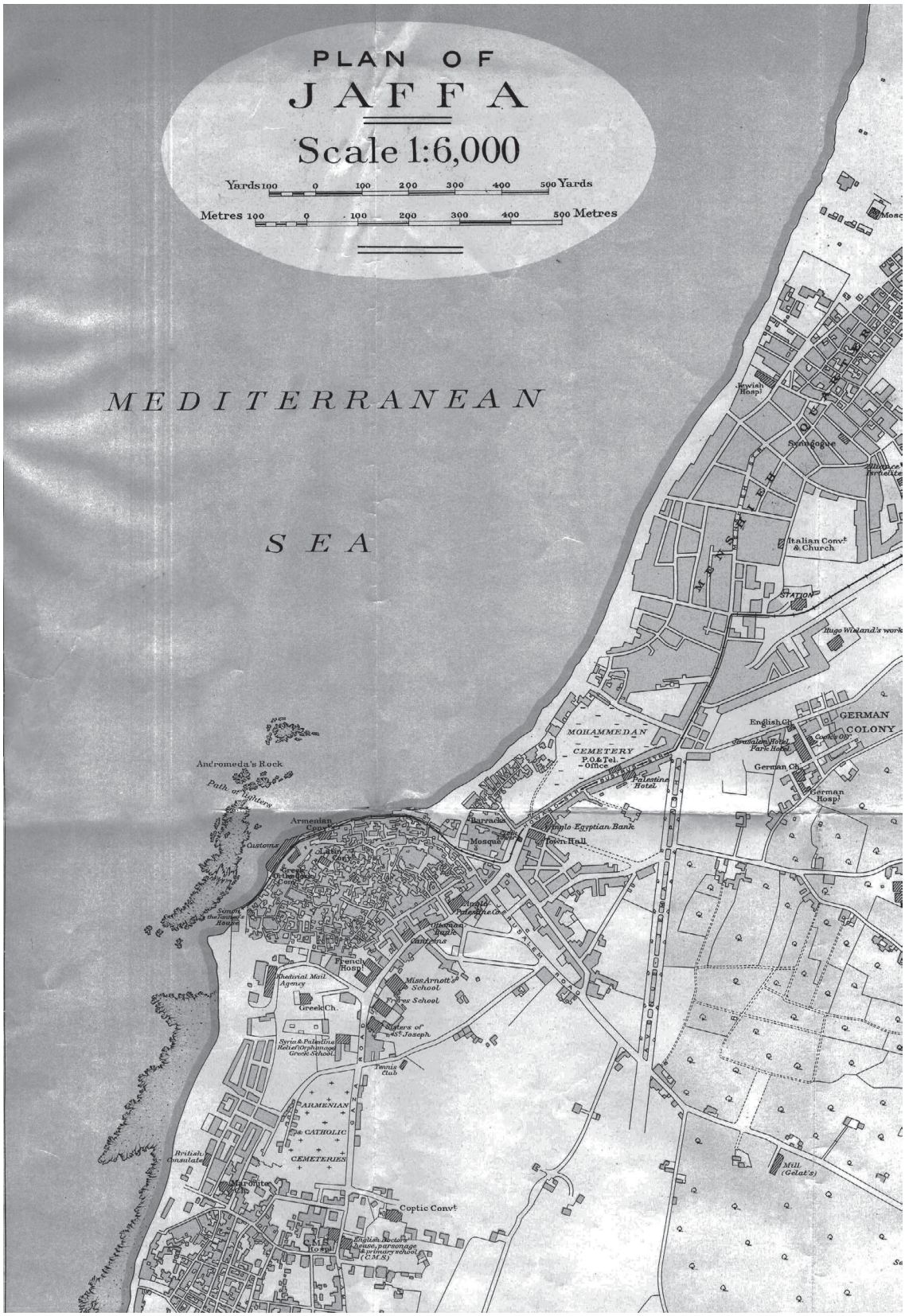

Figure 13.26. British map, 1918. Original in color.

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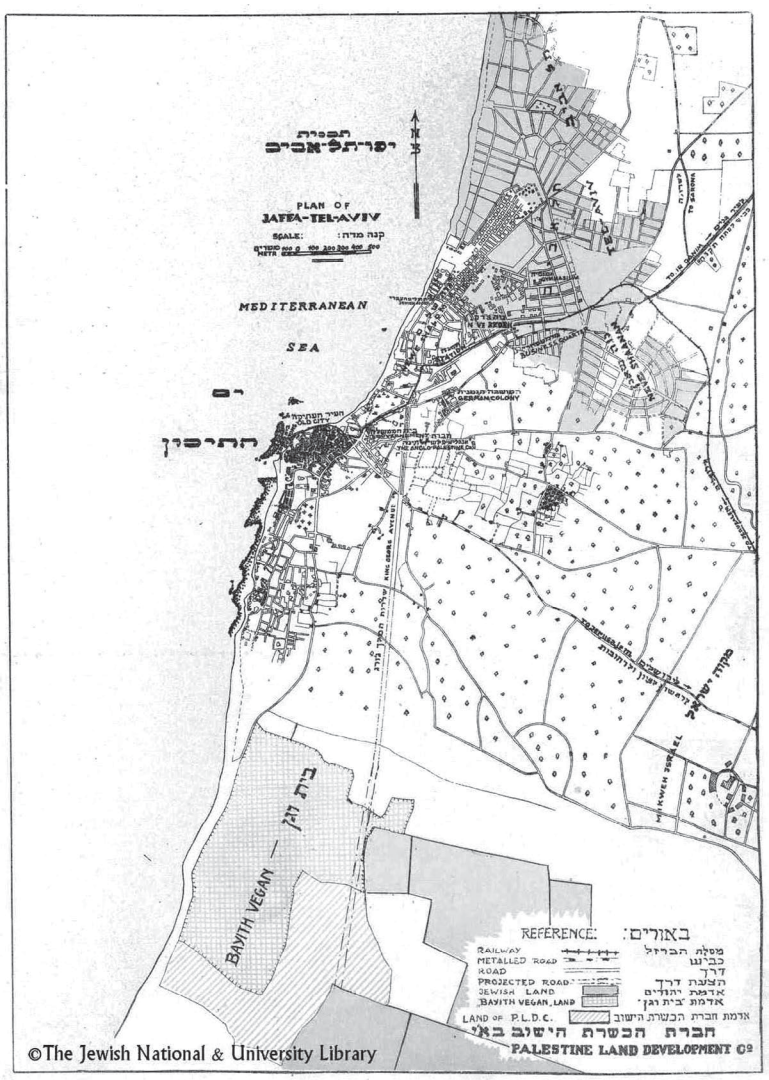

Figure 13.27. Map of Jaffa and Tel Aviv published by the Palestine Land Development Company, 1922. *Eran Laor Cartographic Collection, National Library of Israel.*

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Figure 13.28. Survey Department map, 1927. *Eran Laor Cartographic Collection, National Library of Israel.*

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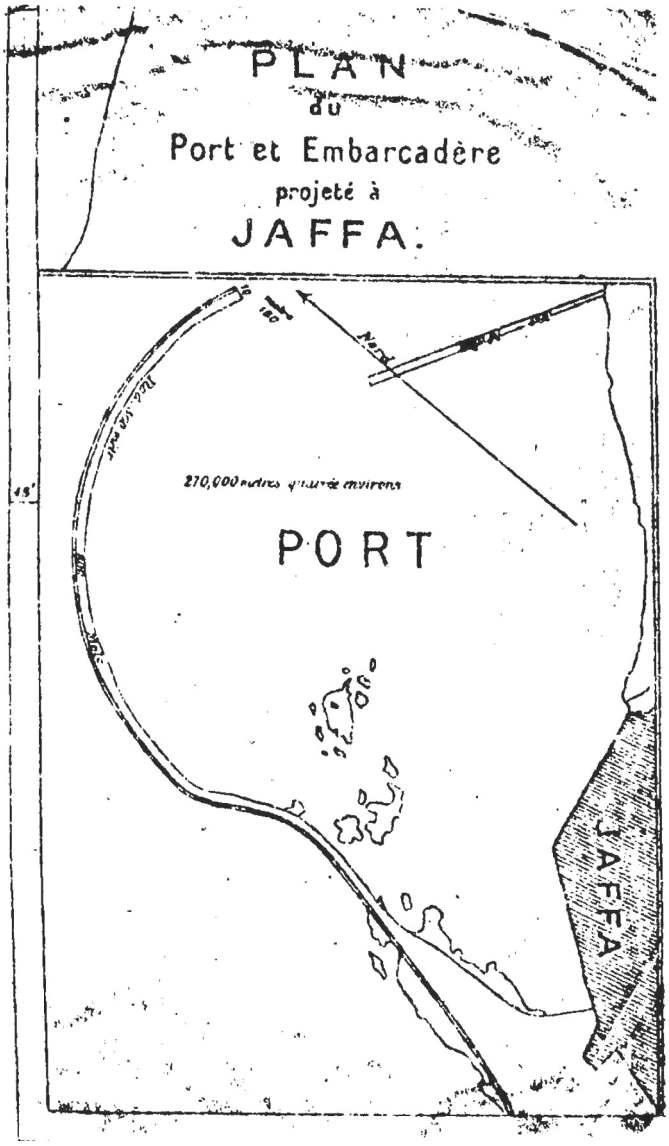

Figure 13.29. Plan for the development of the harbor, 1864 (from Avitsur 1972).

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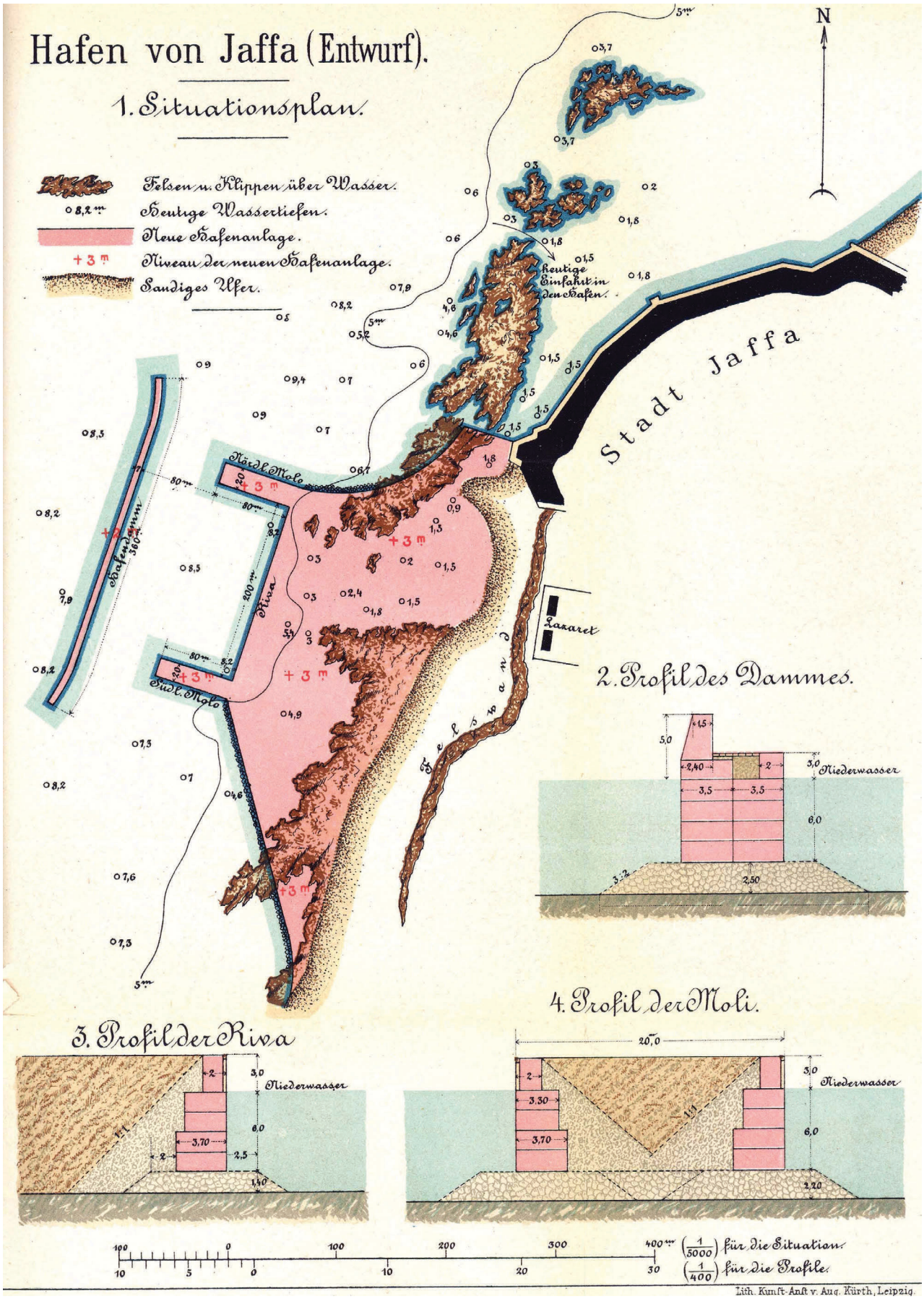

Figure 13.30. Plan for changes in the Jaffa harbor by F. Boemches (Loehnis 1882).

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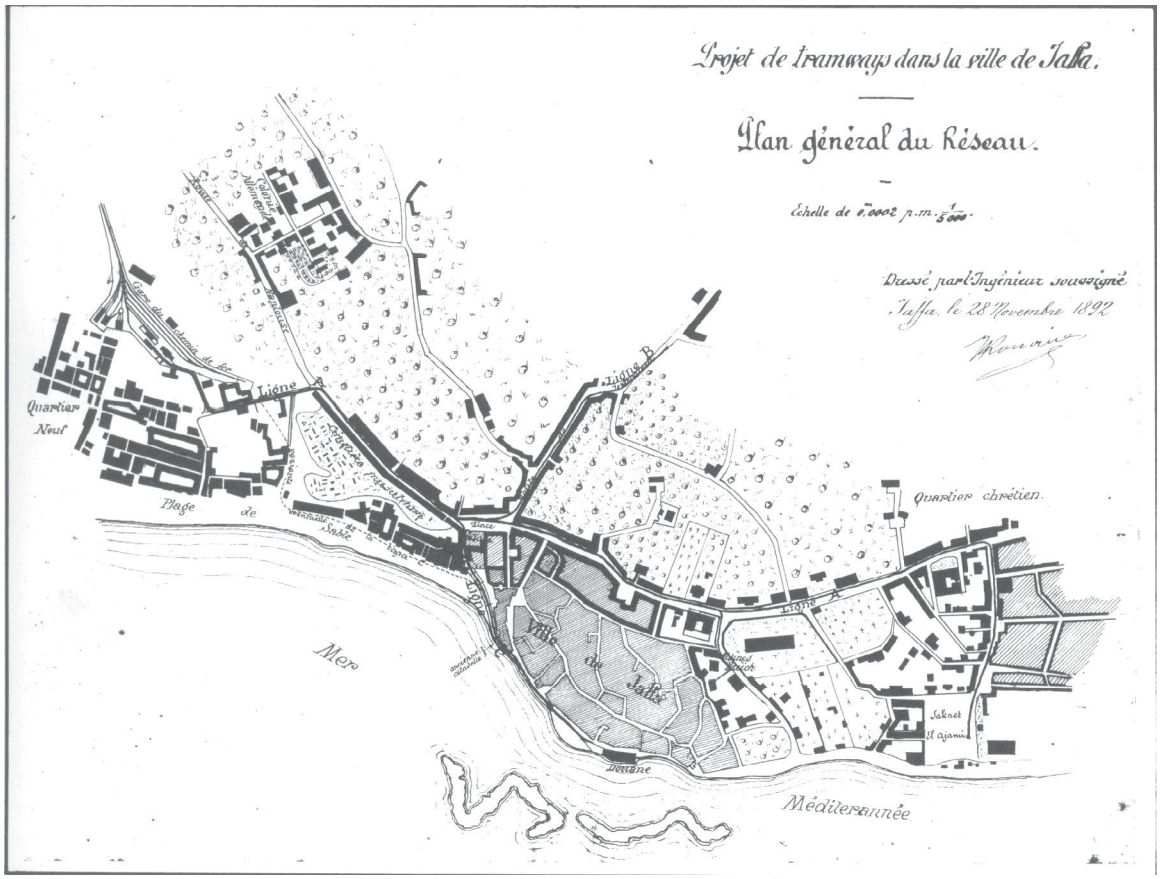

Figure 13.31. Plan for a horse-drawn tramway, 1892 (Avitsur 1985–1986).

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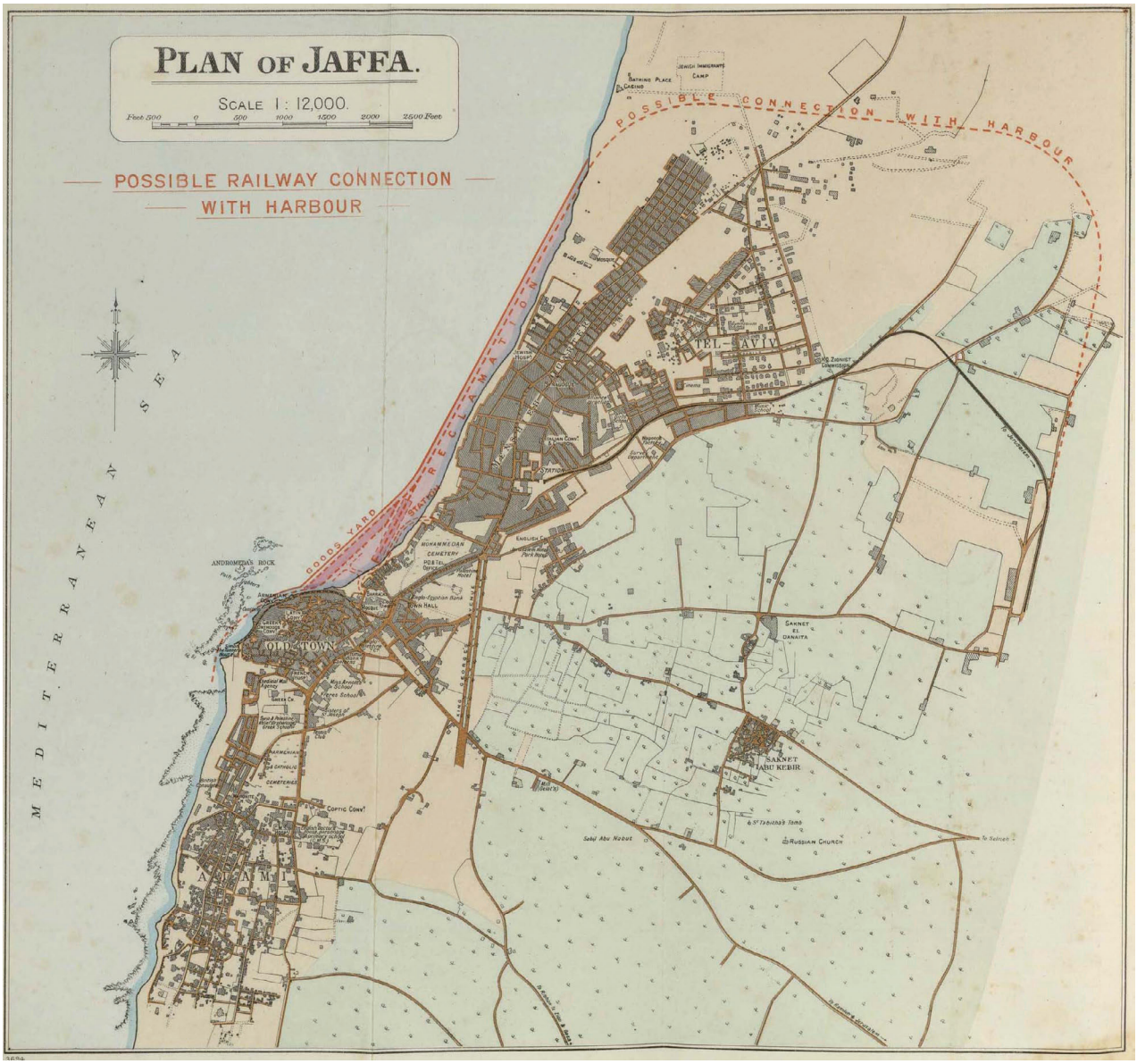

Figure 13.32. Palmer proposal for possible railway connection with the harbor, 1923. Courtesy of the Jewish National and University Library, David and Fela Shapell Family Digitization Project, Eran Laor Cartographic Collection, Hebrew University of Jerusalem.

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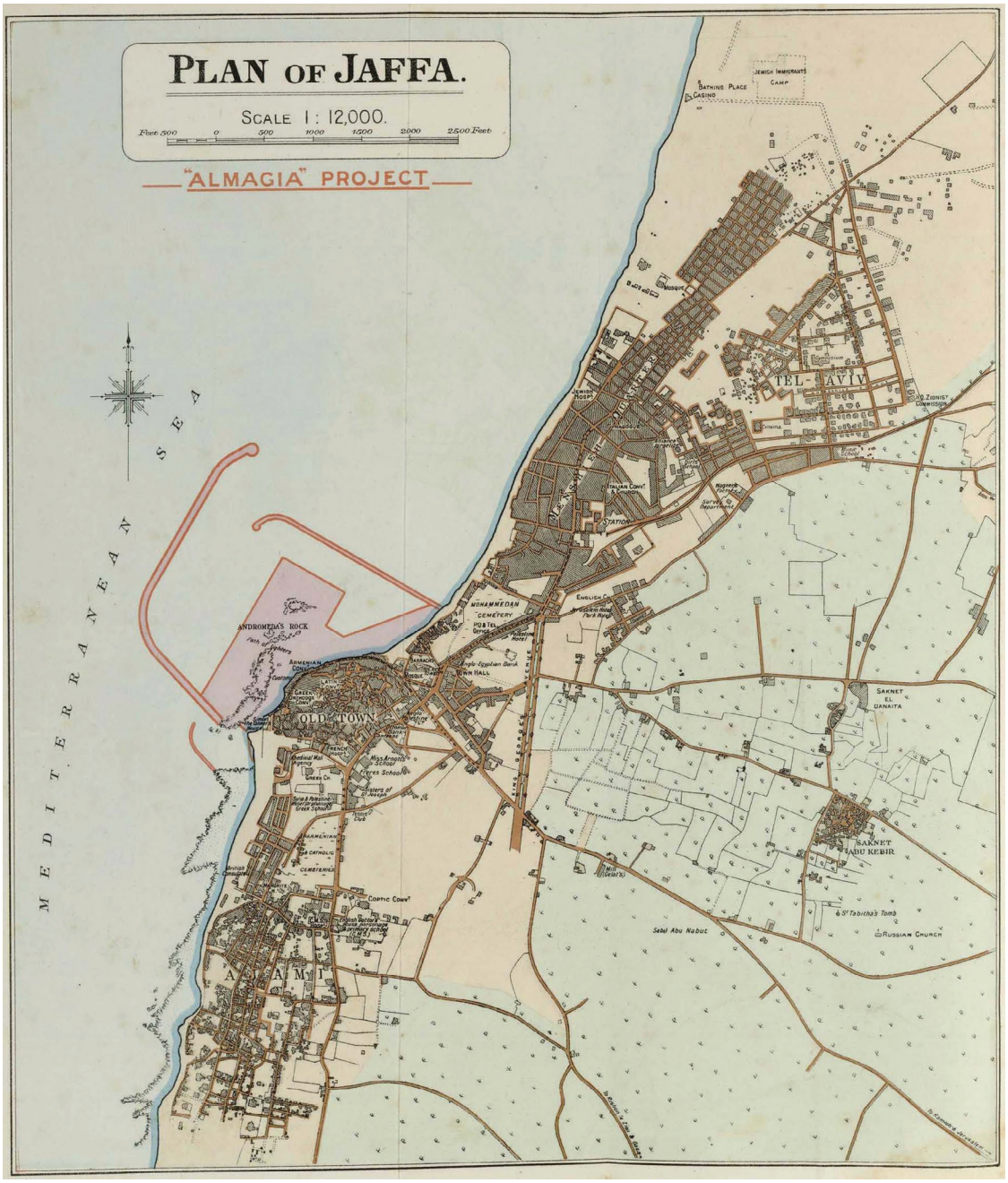

Figure 13.33. Palmer proposal for Almagia Project changes to the Jaffa port. *Courtesy of the Jewish National and University Library, David and Fela Shapell Family Digitization Project, Eran Laor Cartographic Collection, Hebrew University of Jerusalem.*

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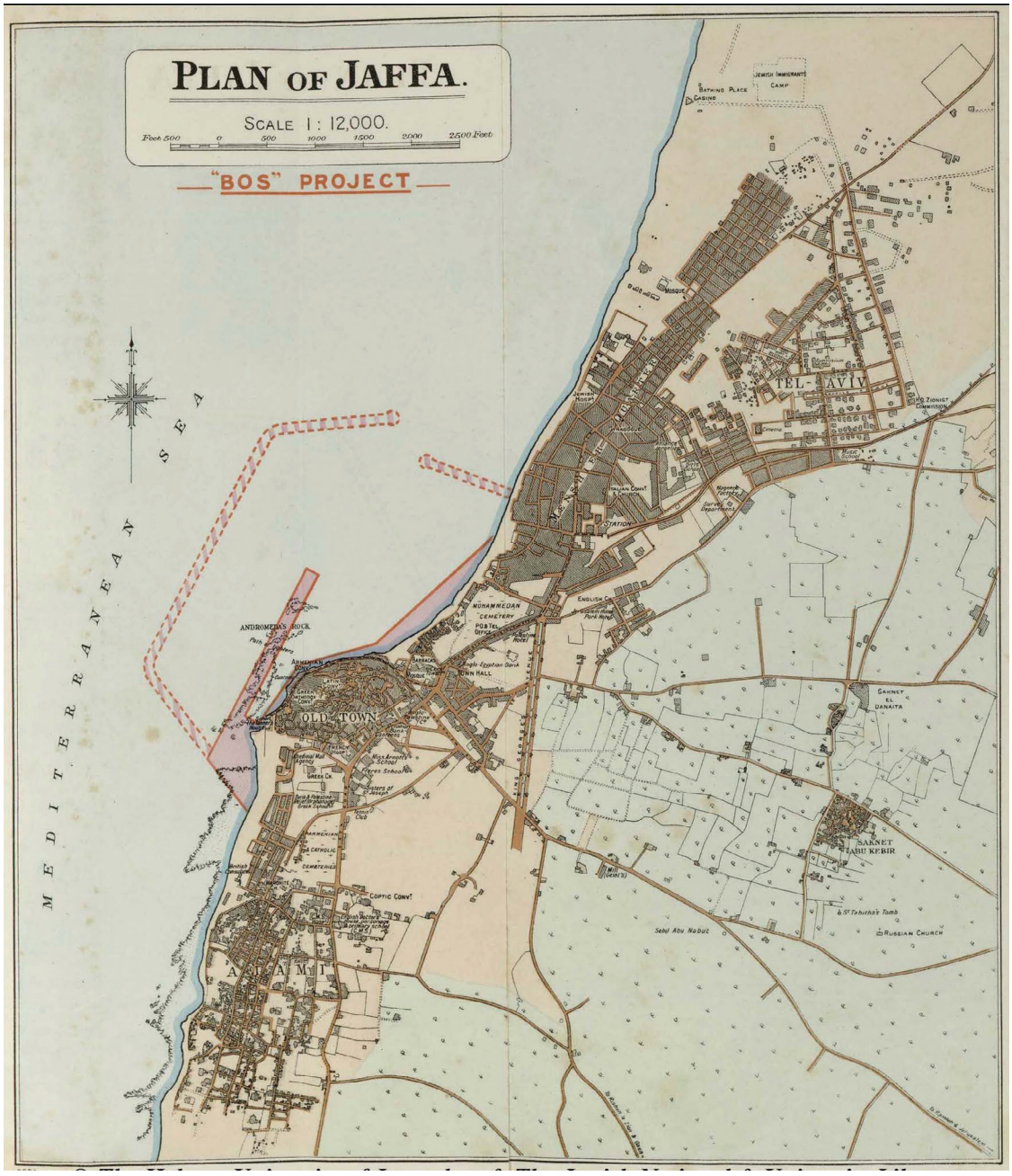
PLAN OF JAFFA.
SCALE 1 : 12,000.
"BOS" PROJECT
MEDITERRANEAN SEA
TEL-AVIV
OLD TOWN
JAMI
SARONA
SARONA
SARONA

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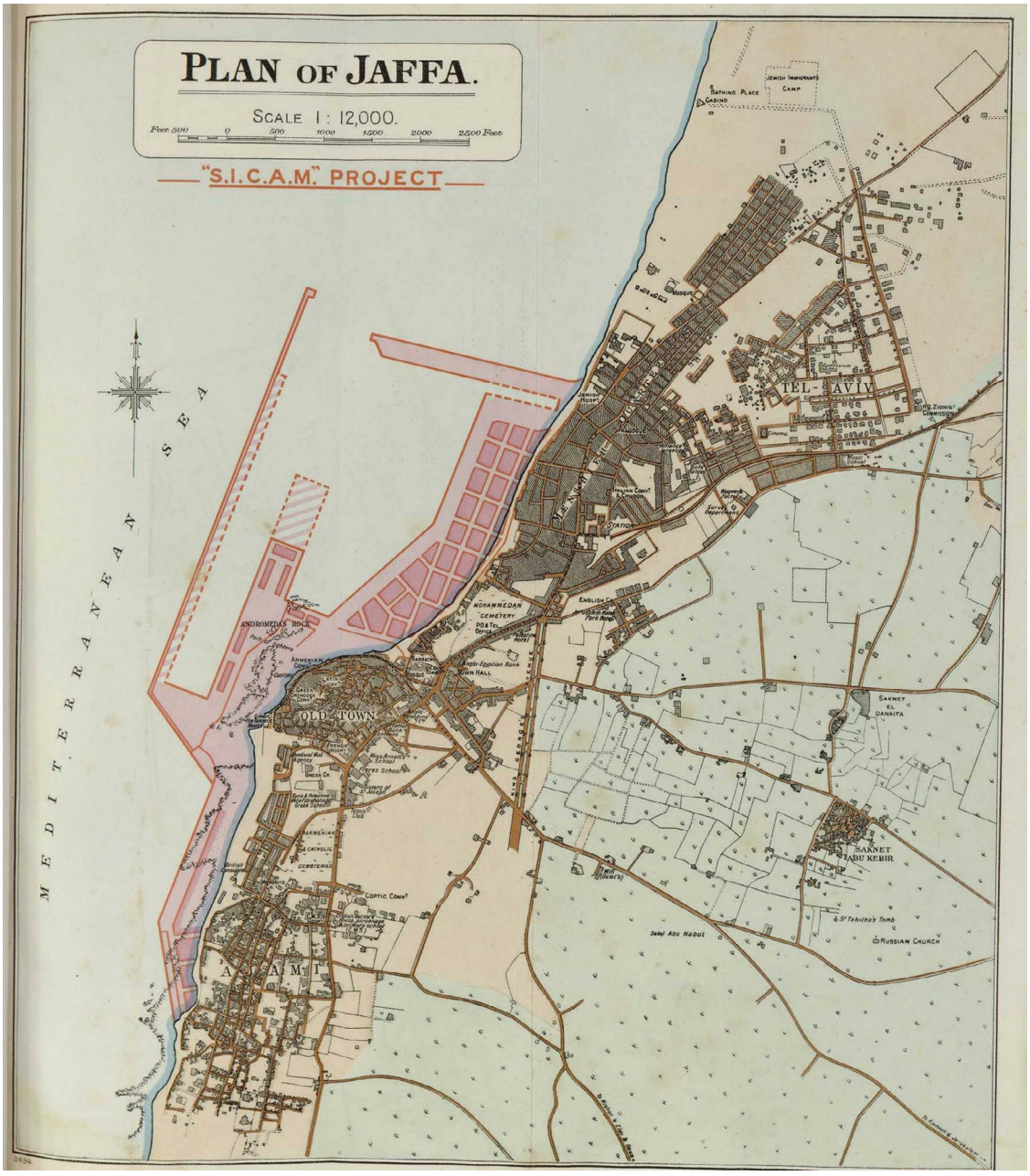

Figure 13.35. Palmer proposal for SICAM Project for the Jaffa port. *Courtesy of the Jewish National and University Library, David and Fela Shapell Family Digitization Project, Eran Laor Cartographic Collection, Hebrew University of Jerusalem.*

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PART III

Recent Archaeological Research of Jaffa

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Chapter 14

Preliminary Report for the 2007 Ganor Compound Excavations

Martin Peilstöcker and Aaron A. Burke
Israel Antiquities Authority and University of California, Los Angeles

In April 2007, excavations of the Ganor Compound in Jaffa resumed in the northernmost part of the area that was previously labeled Area E. The excavations were begun in April 1999, and work continued until September 9, 2007 (Figure 14.1, below; also Figure 4.5; see also Chapters 15, 17–19). Work was interrupted twice, first for the removal of modern concrete foundations endangering the ongoing excavations, and second for the removal of a high-voltage cable that cut across the area. Excavations were carried out by the IAA under the direction of Martin Peilstöcker (IAA) and Aaron A. Burke (UCLA) with the assistance of Amir Gorzalczany, Hagit Torgë, and Yoav Arbel as assistant field directors, and Roi Assis, Hen Ben-Ari, Ronit Korin, Lior Rauchberger, Rudi Chaim, George Pierce, Kyle Keimer, and Marek Molokandov as area supervisors during various phases of the excavation. A number of other individuals contributed as specialists: Katherine S. Burke and Edna Stern (Islamic-Crusader pottery reading), Wadim Assman, Slava Pirsky, and Dov Porotzky (surveying), Oren Ackerman (geomorphology), Yossi Nagar (physical anthropology), Tsila Sagiv and Orit Chaim (photography), and Oxana Ashkenazi (find registration and data entry). Yossi Levy, Moshe Ajami, and Diego Barkan (IAA Tel Aviv office) also assisted in various stages of the project. Conservation work was carried out by Jak Nagar and Rhaleb Abu-Diab. Find sorting and storage were carried out in the facilities of the Jaffa Museum. The excavators would like to thank Yaron Klein (CEO, OJDC) and Naama Meirovitz (director, Jaffa Museum) for their assistance. The publication of this project will be carried out as a part of the Jaffa Cultural Heritage Project Series.

Located east of the upper tell and west of the Flea Market, Area E is the only part of a housing project related to the Ganor Compound east of Yefet Street that has not been built up. Excavations here were begun in 1994, and subsequently almost 16 ha have been investigated in various seasons of excavations. In 1996 approximately 40 5-x-5-m excavation squares were opened in Area E, which for administrative reasons was divided into Area E1 (southern part) and Area E2 (northern part). The excavations came to a halt late during the same year (without being completed) due to budget problems, and in 1999 the area was backfilled by the owner at the request of the IAA after a limited area in the northern portion of Area E1 (six squares) was dug down to bedrock. In 1999 a small excavation was conducted inside a building known as Bet November prior to the reinforcement of the building's foundation. Between 2000 and 2006, several additional excavations were carried out in the Ganor Compound (Table 14.1). During these excavations, a Byzantine bathhouse was uncovered in Area H, situated in the southeastern part of the compound.

Before excavations resumed in 2007, modern buildings that were situated close to Yefet Street were dismantled.

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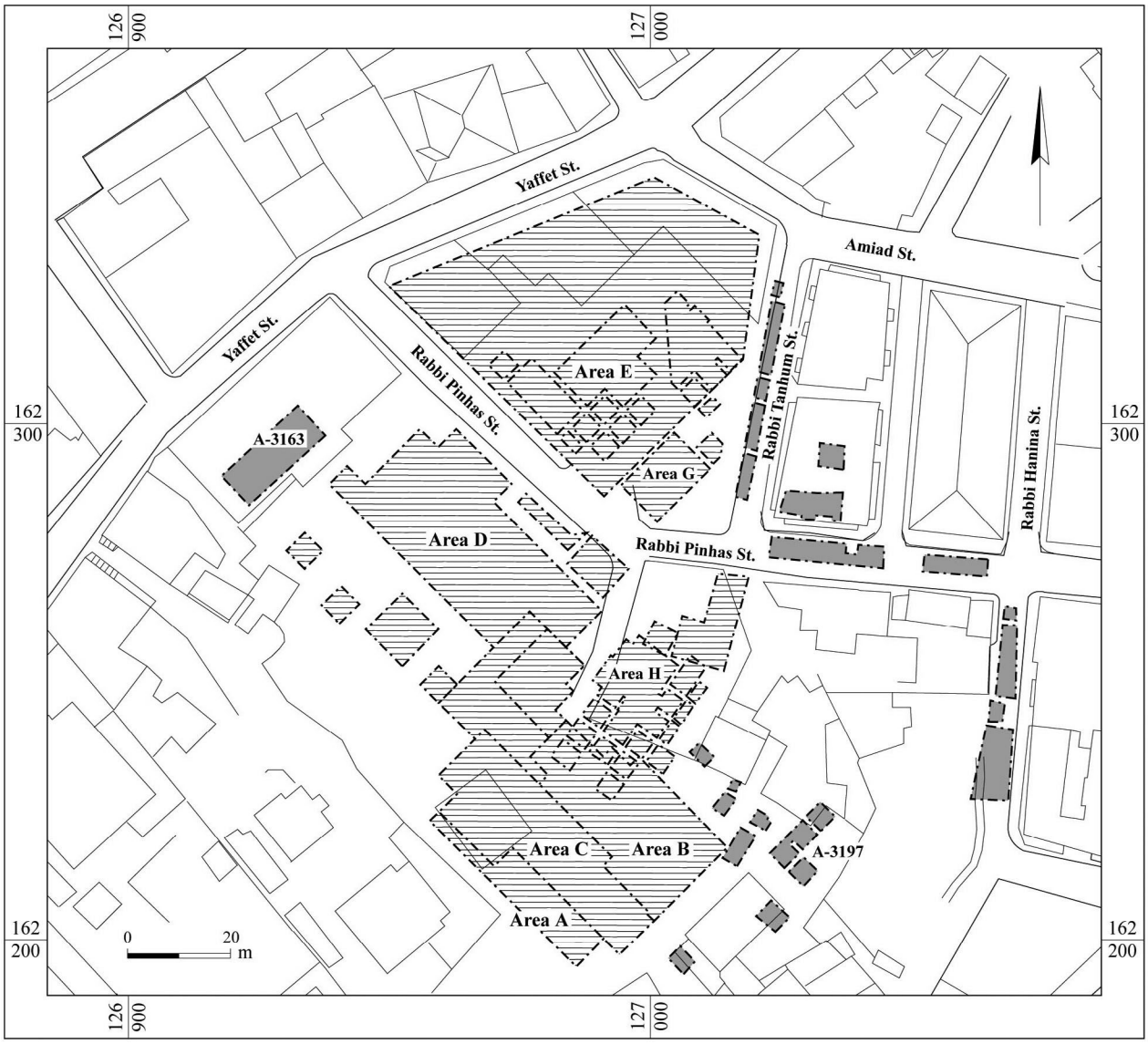

Figure 14.1. Location of Ganor Compound showing the previously excavated areas. *Plan courtesy of the IAA.*

Table 14.1. Excavation areas within the Ganor Compound.

Areas	Permit/Year	Excavator (Institution)	Notes	Refs.
A, B, C	A-2118/1994	Feldstein (IAA)	trial dig	(Feldstein 1996, 1998)
A, B, C, D, E	A-2374/1995	Peilstöcker (IAA)		(Peilstöcker 1998, 2000b)
Bet November	A-3163/1999	Peilstöcker (IAA)		
E	A-3135/1999	Peilstöcker (IAA)	*The Body* movie set	
F	B-211/2000	Fantalkin (TAU)		Ganor Compound: Rabbi Pinhas St. (Fantalkin 2005)
F	B-245/2002	Fantalkin (TAU)		
H	A-3908/2003	Peilstöcker, Gorczalzany (IAA)		
H	A-4751/2006	Peilstöcker, Gorczalzany (IAA)		
E	A-5084/2007	Peilstöcker (IAA) and Burke (UCLA)	JCHP	

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The 1995 excavation grid was reinstated, and the refill covering the old squares was manually removed. The area was then subdivided again, this time using Roman letters, into Area EI (squares F-R, 17–22) and Area EII (squares L-R, 23-27) (see Figure 14.1). A total 97 squares were excavated. This report describes the preliminary results of the excavations according to the stratigraphy that was established (see Table 14.2).

Late Bronze and Iron Age Remains

In contrast to the results of the 1996 season (Peilstöcker and Sass 2001; see also Peilstöcker on LB tombs, this volume), no tombs or architectural finds dating to these periods were unearthed. However, a limited amount of pottery dating to the Iron Age was found during the excavations, and it seems that the area explored in this season was not settled during these periods. It is probable that this area served instead as an open-air area adjacent to the Iron Age remains discovered during previous excavations in the Ganor Compound and nearby Rabbi Pinhas Street (Yoav Arbel, personal communication, 2008).

The Persian Period (Stratum IX)

Although large quantities of Persian pottery had been found in previous excavations in the Ganor Compound, only during the 2007 season were architectural remains that could be associated with a phase of Persian-period occupation found. In squares L-K/21–22, remains of a massive building were found. Its foundations penetrated into the kurkar bedrock. The area in which these remains could be exposed remained limited, and little can be said about the building's function.[1] However, the massive walls suggest its identification as a public building.

The Hellenistic Period (Stratum VIII)

As well known from previous excavations in the Ganor Compound and the Flea Market, a layer dating to this period was identified during the 2007 excavations. In all the excavated squares, pottery from this phase was recovered, but only in the southern portion of the site was architecture found to be preserved. It seems that construction during later periods, in particular during the Byzantine period, seriously damaged earlier architectural remains in this area. Narrow walls built of fieldstones show the same characteristics observed already in previous excavations and are suggestive of domestic architecture. A destruction layer marks the end of this occupation, and an in-depth analysis of the finds from this layer will hopefully help date it and connect this phase with particular historical events in Jaffa during this period.

Table 14.2. Stratigraphy of Ganor Area E according to the 2007 season.

Str.	Phase	Period	Dates	Remarks
0		Modern	post-1947	
I		Mandatory	1917–1947 C.E.	
II	2	Ottoman	1517–1917 C.E.	Late phase: architecture
	1			Early phase: agriculture
III		Mamluk	1250–1517 C.E.	Tombs only
IV	2	Crusader	1099–1250 C.E.	Thirteenth cent.
	1			
V		Early Islamic	638–1099 C.E.	
VI		Byzantine	324–638 C.E.	
VII	2	Roman	63 B.C.E.–324 C.E.	Settlement remains identified only during the 2007 season
	1			Tombs only
VIII		Hellenistic	332–63 B.C.E.	
IX		Persian	586–332 B.C.E.	Stratum identified in the 2007 season only
X		Iron Age	1200–586 B.C.E.	Pottery only
XI		Late Bronze Age	1530–1200 B.C.E.	Pottery only

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The Roman Period (Stratum VII)

The construction of Caesarea's port and the growth of Apollonia-Arsuf went together with a settlement crisis at Jaffa (see Chapter 8). It seems that the area excavated was not settled any longer and was used, therefore, as a cemetery, as several tombs would indicate (Figure 14.2). Since these tombs cut into the earlier layers but were covered by the later layers, their stratigraphic position is clear.

Although most of the tombs were constructed as cist tombs of different sizes, simple pit burials and a sarcophagus were also found, and it has to be pointed out that the tombs had different orientations and sizes. The excavation of the tombs produced a large quantity of glass vessels, as well as other finds including pottery, beads, and metal objects.[2] They show an overall similarity, and preliminary analysis dates them to an early phase of the period.

The use of the area for burials in this period was attested during previous excavations. During the 2007 season, it became clear, however, that the reoccupation of the area as a domestic quarter had already started in the Roman period. A layer with architectural remains was found and can be dated by pottery found on floors to the third or early fourth century C.E. (Stratum VII2).

Figure 14.2. Remains of the Roman, Crusader, and Ottoman periods in areas EI and EII. *Plan courtesy of the IAA.*

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The Byzantine Period (Stratum VI)

The excavations in 1996 already indicated an intensive occupational layer dating to the Byzantine period featuring mosaic floors. Additional excavations in the vicinity produced remains indicating public activities (a bathhouse was excavated in 2002 in Area H), as well as industrial activities (wine presses were unearthed in the Flea Market; Peilstöcker 2006). During the 2007 season, the mosaic floors in Area E were completely excavated, conserved, and removed. During this process, it became clear that they belonged to a public building, the walls of which had been robbed. However, the robber's trenches enabled a reconstruction of a three-winged basilica-type building with an apse of the central room (Figure 14.2). Since the building had an east-west orientation and the small finds included numerous fragments of marble architectural elements, its identification as a church seems in place. Opposite the building, remains of a plastered courtyard were found; its limits remain uncertain. Scattered in the area of the excavations were elements such as stone vessel fragments, column bases, and capitals, together with a large quantity of roof tiles. A lime kiln dating to the Crusader period may explain why no other marble elements were found in the excavation: in a region of kurkar stone, which is unsuitable for plaster production, marble elements were a welcome raw material for lime production, as known from other sites such as Caesarea Maritima. In contrast to the bathhouse and wine presses mentioned above, it seems that the building fell out of use soon after the end of the Byzantine period, as indicated by several wall fragments and installations dated to the following period.

The Early Islamic Period (Stratum V)

The Umayyad and the following Abbasid period are strongly represented in the material culture in the Ganor Compound by ceramics, coins, glass vessels, bone tools, and other small finds. In the excavated area, however, architecture was very badly preserved. Most of the remains were parts of installations that had been below the floor levels of buildings, and the monuments belonging to them could not be identified. The reason for this situation may be sought in the leveling activities that were carried out at the beginning of the Crusader period.

The Crusader Period (Stratum IV)

Remains dating to the Crusader period were unearthed in every excavated square, and at least two phases of this period are represented in the architectural record, although the ceramic evidence suggests an uninterrupted settlement of the site until the end of that period. The architectural remnants of this period indicate a high degree of urban planning. Although in many cases, only robbers' trenches of walls or the lowest foundation layers were preserved, they all adhere to the same orientation. In addition, the absolute floor levels indicate that several terraces were prepared for the construction of the buildings in order to adapt the natural slope, which descends in a southwest-to-northeast direction. For none of the buildings was a specific function determined, but the width of the foundations and the size of some of the buildings suggest monumental architecture of a public nature, probably featuring more than one story. This impression differs from the picture that emerged from earlier excavations at the site. Most of the architecture then probably belonged to domestic complexes, as also indicated by the ceramics.

The Mamluk Period (Stratum III)

Following the destruction of Jaffa by the Mamluks, the excavated area was abandoned. The remains of the Crusader period were found covered by an almost sterile layer of sand. According to a geological investigation carried out in the field by Oren Ackerman, these sands were a natural accumulation as a result of an abandonment of the area for a lengthy period of time. However, it seems the area was used sporadically as a burial ground and possibly a garbage dump, since it was located outside of what was then the small settlement of Jaffa. A similar situation was observed in other excavated areas in Jaffa, such as the Flea Market (Peilstöcker et al. 2006).

The Ottoman Period (Stratum II)

During an early phase, this area was used for agriculture, as attested by irrigation channels found during the 1996 season. This use is also documented on historical maps showing wells and indicating the agricultural use of the lands (see Chapter 13). During a later phase of the period, a building was constructed in the northwestern part of the excavated area (Figure 14.2). It marks the eastern side of Yefet Street and was built on vaulted foundations,

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typical for this period. It dates most probably to the late nineteenth century, after the medieval fortification system, which consisted of a wall and a ditch, went out of use. The ditch was filled up (today's Yefet Street; see Chapter 5), and buildings were constructed on both sides using the stones of the dismantled city wall.

The Mandatory Period (Stratum I)

During the reorganization of the area of the Flea Market in the middle of the 1930s, which was initiated by the government of the British mandate, the Ottoman building was replaced by a new complex built on solid concrete foundations. These foundations were removed during the excavations, and the extent to which they had disturbed the earlier remains could be observed in various places.

Conclusion

The 2007 season in the Ganor Compound continued the investigation of the largest area excavated in Jaffa to date. The results of this excavation season need to be understood in conjunction with earlier excavations in the Ganor Compound and in the nearby Flea Market (Peilstöcker et al. 2006). In addition to the results of the earlier investigations, it became obvious during this season that the Persian or early Hellenistic settlement included well-planned, massive architecture, suggesting the existence of public buildings in this part of the city.

Another important result of the renewed excavations was the identification of a late Roman horizon. Although the precise dating of this layer remains to be carried out by an analysis of the ceramics and coins, it seems that after a settlement hiatus in the beginning of the Roman period, during which the area was used as a burial ground, the vicinity was resettled before the beginning of the Byzantine era. As has become clear in recent years (Peilstöcker 2000a, 2006), the eastern slopes of Jaffa, although located outside the fortifications of the upper town, were densely settled during most of the city's history.

Notes

1. Due to budget limitations, not all the area could be excavated to bedrock. However, when monitoring the post-excavation work of mechanical equipment at the site, we could trace no further remains. It seems that later occupation had nearly destroyed the earlier phases.

2. The tombs were excavated in February 2008 with the assistance of Limor Talmi and Dor Golan (IAA). Yossi Nagar and Ya'el Barzilay carried out the anthropological investigation of the human remains in the field before they were handed over to a representative of the Ministry of Religious Affairs for reburial.

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Chapter 15

A Group of Late Bronze Age Tombs from the Ganor Compound

Martin Peilstöcker
Israel Antiquities Authority

Little is known so far about the Middle and Late Bronze Age settlements of Jaffa (for an overview, see Chapter 6, "Early Jaffa"). Settlement traces dating to the Late Bronze Age have been mentioned by Kaplan (1972:77–78), but no material has been published so far. Although the publication of Kaplan's excavation at the site will hopefully shed light on this period (see Chapter 21), I plan to publish a small number of LB I tombs found on the periphery of Jaffa during recent salvage excavations (Peilstöcker 2000).

In 1995, during the first season of excavations at the Ganor Compound carried out by the IAA and under my direction (see Peilstöcker 1998, 2000), two tombs dating to the Late Bronze Age were unearthed in Area A (Figure 15.1). Area A is located in the southeastern part of the compound, bordered to the south and east by a wall surrounding the plot and to the north and west by excavation areas B and C. The compound had been used for industrial purposes prior to the excavations, and the area had been covered by a thick layer of modern asphalt. The natural topography of the compound rose toward the west and south, and it seems that when the ground was leveled and prepared for its modern use, the archaeological remains in Area A were damaged.

The LB tombs were the only remains dating to this period found during the excavations, but it seems likely that additional tombs were destroyed in antiquity when the area was used for domestic purposes starting in the Iron Age (Fantalkin 2005). However, it has to be pointed out that no pottery or other finds dating to the LBA were found in later layers.

The Tombs

Tomb 111

This tomb was found in square Y-3 and consists of a shallow pit dug into the natural kurkar bedrock.[1] The tomb was heavily damaged by later archaeological remains but in particular by modern leveling activities. Immediately after we removed the topsoil in the excavated northern half of the square, two features became visible: in the western portion, a stone-lined pit (L.112), which contained animal bones and pottery of the Crusader period, and a grayish spot in the southeastern corner of the square (L.111). When we continued the excavation, we unearthed the badly preserved remains of a female adult, together with two pottery vessels placed close to the skull. According to the state of preservation of the teeth, the person was not more than 50 years old. The deceased was buried on her back and roughly in a north-south orientation with her head toward the north. It has to be mentioned that the tomb was found at the southernmost border of the excavations, and it seems quite possible that it continued into the unexcavated area.

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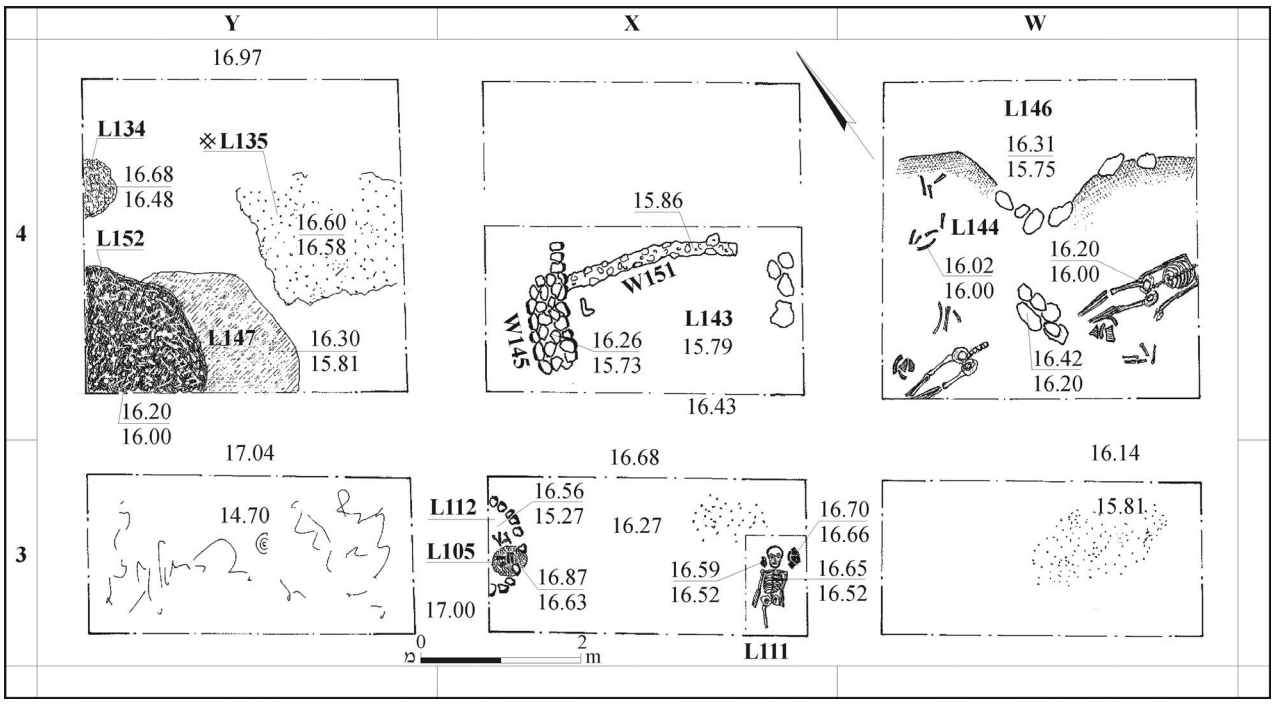

Figure 15.1. Plan showing Late Bronze Age tombs. *Plan courtesy of the IAA.*

Tomb 144

After removing topsoil in the area of square X-2, we reached a layer with pottery sherds dating to literally all periods represented at the site. In this layer (L.106), despite the disturbances the area had undergone, sherds of at least two LB vessels were found. After cleaning the area, we recognized the outline of T.144. It consisted of two burials in a shallow pit dug, like T.111, into bedrock.[2] The northern border of the pit was partly marked by unworked stones, and a concentration of stones in the middle of the pit either was used as a headrest for one of the buried or served as a separation between the two burials. The remains of two deceased could be identified; however, additional human bones in the northwestern part of the pit may indicate a third burial. According to the anthropological examination of the human remains, it appears that the burial placed in the eastern part of the pit belongs to a female adult of uncertain age. The deceased was found buried on her back in an east-west orientation with her head toward the east. From the second person, only the bones of the lower part of the body were found in articulation. Examination of the bones indicates a child burial of unknown gender. According to the teeth, its age can be estimated at three to four years. The deceased was also buried on its back in an east-west direction.

The Finds

In both tombs, nothing other than small assemblages of pottery vessels could be associated with the burials. However, the soil around the tombs contained pottery sherds representing every other period of settlement at the site.

Ceramics from Tomb 111

Only two vessels were found in association with the burial. It seems possible, however, that more vessels were situated in the unexcavated area south of the burial.

Juglet 1054. (Figure 15.2:1): a small Base Ring I (BR I) juglet (11.5 cm high) with a flat handle, a horizontal plastic decoration at the junction of handle and neck, and a ring base. The vessel has a trumpetlike open rim. It is made of hard fired brownish clay and shows remains of a brownish gray slip.

Juglet 1055. (Figure 15.2:2): the body and parts of a flat handle and neck of a small BR I juglet. According to the diameter of its ring base (4 cm), it seems to be the same size as the former. The vessel had a vertical plastic decoration from base to neck and shows traces of a reddish slip on the brownish clay.

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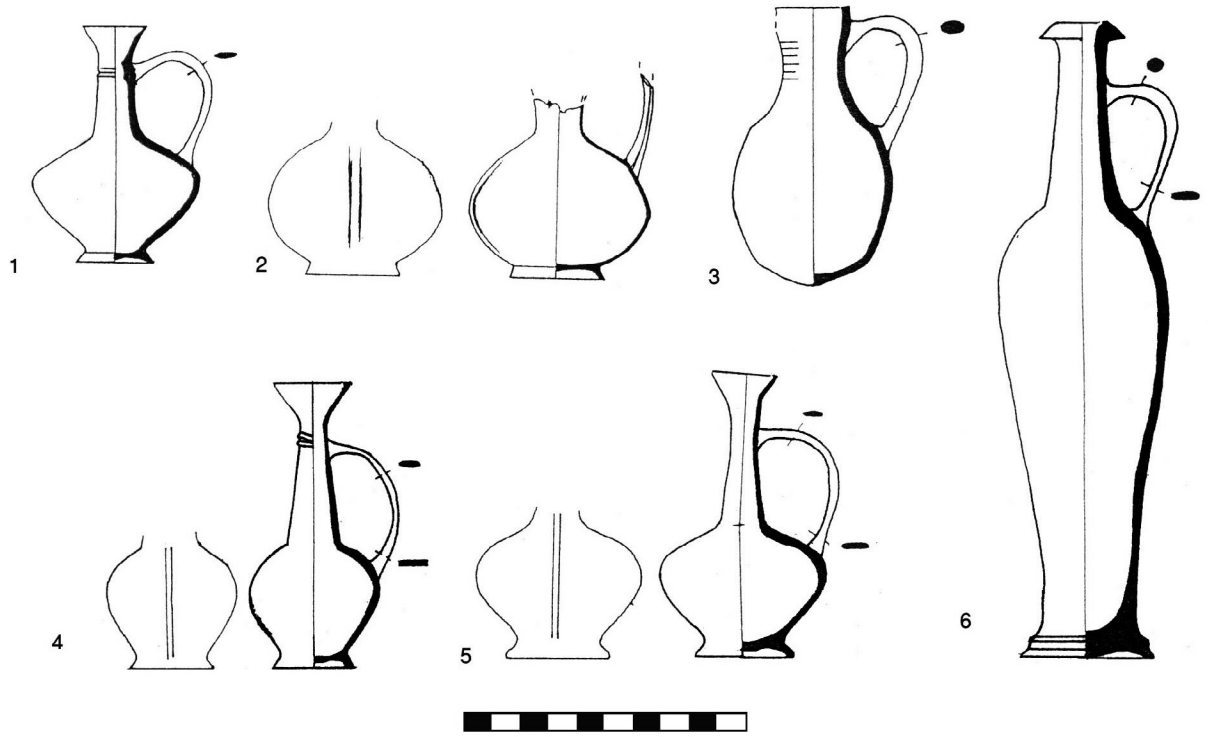

Figure 15.2. Ceramics from Late Bronze Age tombs in the Ganor Compound.

Ceramics from Tomb 144

At least eight vessels were identified from this tomb. Two of them had already appeared in the disturbed layer covering the burials (L.106).

Jug (?) 1089. (L.106; not illustrated): fragments of the neck of a vessel, including a fragment of its rim or base; possibly of a jug made of reddish clay.

Bottle 1272. (Figure 15.2:6): This Syrian imitation of a Cypriot Red Lustrous Wheelmade Ware jug has already been published (Yannai et al. 2003).

Juglet 1285. (Figure 15.2:4): Found complete, this is a small BR I juglet of 14 cm in height with the same plastic decorations described for juglet 1084. The slip of the vessels is similar in color. However, 1285 was made of reddish clay.

Juglet 1287. (Not illustrated): part of the upper body and neck of a small BR I juglet. Its rim and base are missing.

Juglet 1300. (Not illustrated): two sherds of another BR I juglet: one a body sherd; the second part of a flat handle showing two incised lines.

Juglet 1083. (L.106, without illustration): a small BR I juglet with a missing rim. At the junction of the flat handle and the neck, the vessel is decorated with a horizontal plastic band. At the junction of body and neck appears a ridge. The vessel is made of reddish clay and shows remains of a reddish gray slip.

Juglet 1084. (L.106, Figure 15.2:5): a complete small BR I juglet (15 cm high) with a ring base. The flat handle ends in two lines of a plastic decoration applied horizontally around the neck. Two additional plastic decorations rise from the base vertical to the junction of body and neck. The vessel is made of reddish clay and has a grayish slip.

Dipper Juglet 1273. (Figure 15.2:3): a complete dipper juglet of reddish clay with a single handle from the body ending right below the rim.

The finds date both tombs to the fifteenth to fourteenth century B.C.E. (i.e., LB I). The list above shows that the assemblage is dominated by Base Ring I juglets. This vessel type is one of the most widespread types dating to the beginning of the Late Bronze Age, which is contemporaneous with the beginning of the Late Cypriot period. The vessels are particularly popular in tomb assemblages—for example, in Jatt (Yannai 2000). The second outstanding type is the Red Lustrous Wheelmade Ware jug, which has been discussed at length and is also characteristic of (coastal plain) tomb assemblages. The disturbances of the tombs do not allow a statistical analysis of the number of vessels. However, the tombs

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obviously do not represent the higher socioeconomic ranks, which buried their members in rich tombs with a large number of artifacts laid down with the deceased. On the other hand, the use of imported pottery indicates the international connections of the people of Jaffa with Cyprus and northern Syria in this period.

Conclusion

In conclusion, the tombs are another indication for an LB I settlement at Jaffa, about which little is known and even less has been published. According to the stratigraphy Kaplan published (see Kaplan and Ritter-Kaplan 1993), Stratum VI in Area A dates to the LB I period. Late Bronze Age tombs are reported from the salvage excavation of Edna Ayash and Aviva Bushnino (1999), resuming the project of Rina Avner for the Andromeda Housing Project in an area south of the former French Hospital along Yefet Street (Avner-Levi 1998). The cemetery at Yefet Street, however, continued the burial activities of the Middle Bronze Age and also stayed in use in later periods. In recent salvage excavations in the area of the former French Hospital, at the corner of Yefet and Pasteur streets, tombs were found dug into the kurkar bedrock. The interventions of religious authorities made their excavation impossible, but pottery dating to the Late Bronze Age was collected. The area of excavations is located about 100 m from Kaplan's Area A and gives further indication of the limits of the Late Bronze Age settlement. Whether the precise chronological setting is LB I or another phase of that period remains unclear.

The area of the Ganor Compound, however, was subsequently settled. This indicates that in the LB I period, the area was situated outside the settlement limits, and the settlement of this era has to be reconstructed as a site of limited size located on the upper part of the tell.

Notes

1. The excavation was supervised by Orit Sa'idi and carried out on October 24, 1995. The human remains were investigated on the spot by Yossi Nagar (head anthropologist of the IAA) and handed over to a representative of the Ministry of Religious Affairs.

2. Sulaffa Gabali supervised the excavation of the tomb, which was carried out on November 14, 1995. The human bones of this tomb were investigated by Yossi Nagar and handed over to the Ministry of Religious Affairs immediately after the excavation.

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Chapter 16

The Hasmonean Conquest of Jaffa:

Chronology and New Background Evidence

Yoav Arbel
Israel Antiquities Authority

The Hasmonean conquest of Jaffa in 142 B.C.E. and the eviction of the local pagan population concluded a struggle spanning more than 20 years (see Chapter 8). Jaffa subsequently underwent a fundamental demographic transformation into a predominantly Jewish city under full Hasmonean control. This achievement was duly celebrated in the literature of the period and advertised through Hasmonean coinage. This article addresses the Hasmonean takeover of Jaffa from two perspectives. First, it suggests a viable historical framework to the sequence of Hasmonean offensives against the city as reported in 1–2 Maccabees. Second, it introduces new relevant data from recent salvage excavations in areas adjacent to the ancient mound of Jaffa. The new discoveries offer new information on Jaffa between the fourth and second centuries B.C.E. and place the events within the context of the town's urban development. The combined study of the historical testimony and the new archaeological materials allow the tentative reconstruction of the conditions that facilitated Hasmonean success in their endeavor to conquer Jaffa.

Historical Setting

The Persian province of Judea was incorporated into the Ptolemaic kingdom in 301 B.C.E. as part of new territorial arrangements emerging out of the Diodochi struggles. Ptolemaic rule in Judea lasted a century and was generally stable. Strong mercenary units, stationed in towns and forts, along with settlers in veteran colonies, ensured security and orderly tax extraction in their regions. The Hellenized local populations, in particular those in the newly established Greek cities (poleis), generally cooperated with the authorities. No major ideological clashes between the Ptolemaic government and its Jewish subjects are reported.[1]

In 198 B.C.E., the Seleucid king Antiochus III defeated the Ptolemies at Paneas and the land came under his rule. Peace between the Jews and the new authorities prevailed through the three following decades, but there is some evidence for Jewish ideological discontent. Harsh words in Chapter 36 of Ben Sira (Sirach),[2] written before 180 B.C.E., reflect bitter religious sentiments that probably originated in the Ptolemaic period and continued to build up under the Seleucids. These tensions, however, did not ripen into major violence. Matters changed with Antiochus IV's (175–164 B.C.E.) enforcement of compulsory religious-cultural assimilation. The draconian regulations sparked the Hasmonean rebellion, which progressed from guerrilla warfare to frontal battles and long-distance strikes against urban Hellenistic populations that threatened the Jewish minorities in their midst. As their strength increased, the Hasmoneans expanded the borders of the emerging independent Jewish state. The confrontations over Jaffa fall within the context of these dynamic developments.

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In Hellenistic times, Jaffa was home to a predominantly pagan population of mixed ethnic origins. Under the Seleucids of Syria, it was also a base to Seleucid mercenary units. Although it was never an ideal harbor,[3] Jaffa was nonetheless the nearest port to Judea proper. 1–2 Maccabees report several Hasmonean offensives against Jaffa, conducted by Judas, Jonathan, and Simon, the three Hasmonean brothers who rose to lead the Jewish uprising against the Seleucids. Critically analyzed, these accounts can be placed within a viable sequence, and their historicity supported. The final Hasmonean incorporation of Jaffa evidently was the result of a multiphased effort spanning nearly 20 years. It reflects the steady growth of Hasmonean military power and organization and the corresponding rise of Hasmonean political ambitions.

Judas's Raid

The earliest Hasmonean offensive against Hellenistic Jaffa (2 Macc 12:3–7)[4] took place in 163 B.C.E. as one of numerous clashes that raged throughout the land as Seleucid authority gradually disintegrated. The text echoes the violence and anarchy of the time:

> [The people of Joppa] invited the Jews who lived among them to embark, with their wives and children on boats which they had provided, as though there was no ill will to the Jews. . . . When [the Jews] accepted, because they wished to live peacefully and suspected nothing, the people of Joppa took them out to the sea and drowned them, at least two hundred. When Judas heard of the cruelty visited on his compatriots, he gave orders to his men and, calling upon God, the righteous judge, attacked the murderers of his kindred. He set fire to the harbor by night, burned the boats, and massacred those who had taken refuge there. Then, because the city's gates were closed, they withdrew, intending to come again and root out the whole community of Joppa.[5]

The atrocity against a peaceful Jewish community provided the Hasmoneans with a pretext to strike at Jaffa, but despite the author's effort to maximize its impression, the inflicted punishment was apparently modest. The revenge for the massacred Jews of Jaffa was limited to stores destroyed, the burning of boats, and some hapless individuals killed. Against the bolted gates of fortified Jaffa, Judas could do no more. Hasmonean warfare at that early stage consisted mostly of guerrilla tactics. Acquainted with the landscape, supported by the local population, and fighting for their home territory, the rebels surprised and overcame Seleucid mercenary units moving through unfamiliar and hostile territory. The early Hasmoneans, however, lacked the technological means and military expertise to effectively besiege a walled city. Furthermore, Judas possessed neither the military manpower nor the administrative infrastructure to consolidate his rule beyond the hill country of Judea's heartland. His aggressive incursions into Galilee and Transjordan in defense of threatened Jewish populations concluded with hasty withdrawals into his home territory, taking the rescued Jews with him (1 Macc 5:21–23, 45). Tales of jubilation as the refugees marched into Judea veil what must have been a traumatic uprooting of these people from lands upon which they had lived for generations, and their subsequent loss of homes, property, and livelihood. Judas never returned to Jaffa to complete what he had started, because the storming of a fortified town and the consolidation of control there were simply beyond the capacity of his forces. Although the Hellenistic town survived this initial Hasmonean onslaught, the relief was short-lived.

Jonathan's Campaigns

Following Judas's death in the Battle of Eleasa (161 B.C.E.), his brother Jonathan became commander of the Jewish forces. Two attacks on Jaffa were launched during his eventful term of nearly 20 years. They were a far cry from Judas's punitive raid and must be studied within the complex regional political realities that evolved from the reign of Antiochus IV (164 B.C.E.) to the death of Judas. Skillfully combining military action with political maneuvering, Jonathan exploited the struggles for succession to the throne in Antioch and efforts of the contestants to gain his support. The threat of religious and cultural assimilation was no longer relevant, and Jonathan upgraded his efforts to expand Jewish autonomy en route to political independence. Jaffa apparently played a meaningful role in his program. During Hellenistic times, the town had been an important maritime gateway for the export of processed commodities such as wine and oil, mainly to Egypt. Production centers inland such as Maresha thrived from this trade (Kloner and Ariel 2003:154). Shifting the lucrative activity to the Hasmonean state would have accelerated the establishment of an independent economy and facilitated communications with the Ptolemies and the powerful Romans, with whom the early Hasmoneans were allied.

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The days when motivated but inexperienced Hasmonean fighters stood helpless against the closed gates of fortified cities were over, and both of Jonathan's attacks on Jaffa (147 and 143 B.C.E.) ended with his forces inside the walls. The first narrative (1 Macc 10:75–76) is forthright: " [Jonathan] encamped before Joppa, but the people of the city closed its gates, for Apollonius had a garrison in Joppa. So they fought against it, and the people of the city became afraid and opened the gates, and Jonathan gained possession of Joppa."

Jonathan had earlier received a menacing message from the new Seleucid king, Demetrius II, through Apollonius, a Seleucid official appointed to interrupt the growth of Hasmonean power. Demetrius challenged Jonathan to meet his forces in the plain, away from Hasmonean strongholds in the highlands. Thus the conquest of Jaffa was also meant to be a statement of defiance on Jonathan's part (Tolkowsky 1924:50). The Hasmonean hold on Jaffa, however, remained frail. To prevent the consolidation of Jewish rule, the local inhabitants handed (or planned to hand) the town over to the forces of Demetrius. Hasmonean reaction was swift. Simon, then still a lieutenant of Jonathan, "turned aside to Joppa and took it by surprise . . . and he stationed a garrison there" (1 Macc 12:33–34). The immediate problem was resolved, but the Hasmonean possession of Jaffa and its antagonistic population remained unstable. It was left to Simon, once having risen to full command, to resolve the issue.

Simon's Conquest

Simon, the last surviving son of the Hasmonean patriarch Mattathias, assumed the Jewish command at the aftermath of Jonathan's assassination in 142 B.C.E. The problem of Jaffa was among the new leader's first priorities, and he resolved it during his first year in office. His decisive measures are described in two separate but complementary narratives. 1 Maccabees 13:11 informs that "[Simon] sent Jonathan son of Absalom to Joppa, and with him a considerable army; he drove out its occupants and remained there." The second testimony is part of a general discussion of Simon's activities on behalf of the nascent Jewish state: "[Simon] also fortified Joppa, which is by the sea, and Gazara, which is on the borders of Azotus, where the enemy formerly dwelt. He settled Jews there, and provided in those cities whatever was necessary for their restoration" (1 Macc 14:33–34).

The two reports probably reflect the gradual progress of these developments. The expulsion of Jaffa's pagan population and the temporary stationing of a military garrison there could be completed quickly, pending resolute decisions, planning, and implementation. Resettlement with a new Jewish population and renovation of the fortifications demanded careful planning, funds allocation, and measured execution, all of which depended on the prior stabilization of the political conditions at the site.

Simon's accomplishment merits more than such laconic reports. His assertive and ruthless policies not only resolved the immediate problem of Jaffa but transformed its demography for centuries to come. The former pagan Hellenistic town was now predominantly if not exclusively Jewish, and a final attempt by Antiochus VII to restore Seleucid rule in Jaffa had failed. This far-reaching success was highly cherished by Simon's compatriots during his lifetime and beyond. The author of 1 Maccabees, probably writing sometime between 134 and 63 B.C.E., the period of Jewish independence under Simon's descendants (Callaway 2001:202), praises the exploits of Simon through 12 poetic verses (1 Macc 14:4–15). His opening phrase announces that "to crown all [Simon's] honors he took Joppa for a harbor, and opened a way to the isles of the sea" (14:5). It is probable that the anchor and the ship bow depicted on coins of later princes of that dynasty represent the maritime Hasmonean trade out of Jaffa (Meshorer 1967:pl. II:8, 1997:37). All further Seleucid claims to Jaffa were eliminated during the reign of John Hyrcanus, Simon's son and successor (134–104 B.C.E.), also thanks to Roman support.

Hellenistic Jaffa: The Archaeological Evidence

During the Hellenistic period the coastal area included several urban centers with planned street layouts (Stern 1995:437–438). Examples have been uncovered at coastal sites, notably Dor (Stern 1985:171–173), as well as in the interior, as in Marissa (Maresha) in the Judean lowland (Bliss and Macalister 1902:pl. 16; Kloner and Ariel 2003:11). Along with Gaza, Ashkelon, Dor, and 'Akko, Jaffa was part of the fortified Ptolemaic coastal network (Kaplan and Ritter-Kaplan 1993:656; Stern 1980:244), although present archaeological exposure is insufficient for a feasible evaluation of urban planning. Evidence from recent archaeological excavations (Gorzalczany

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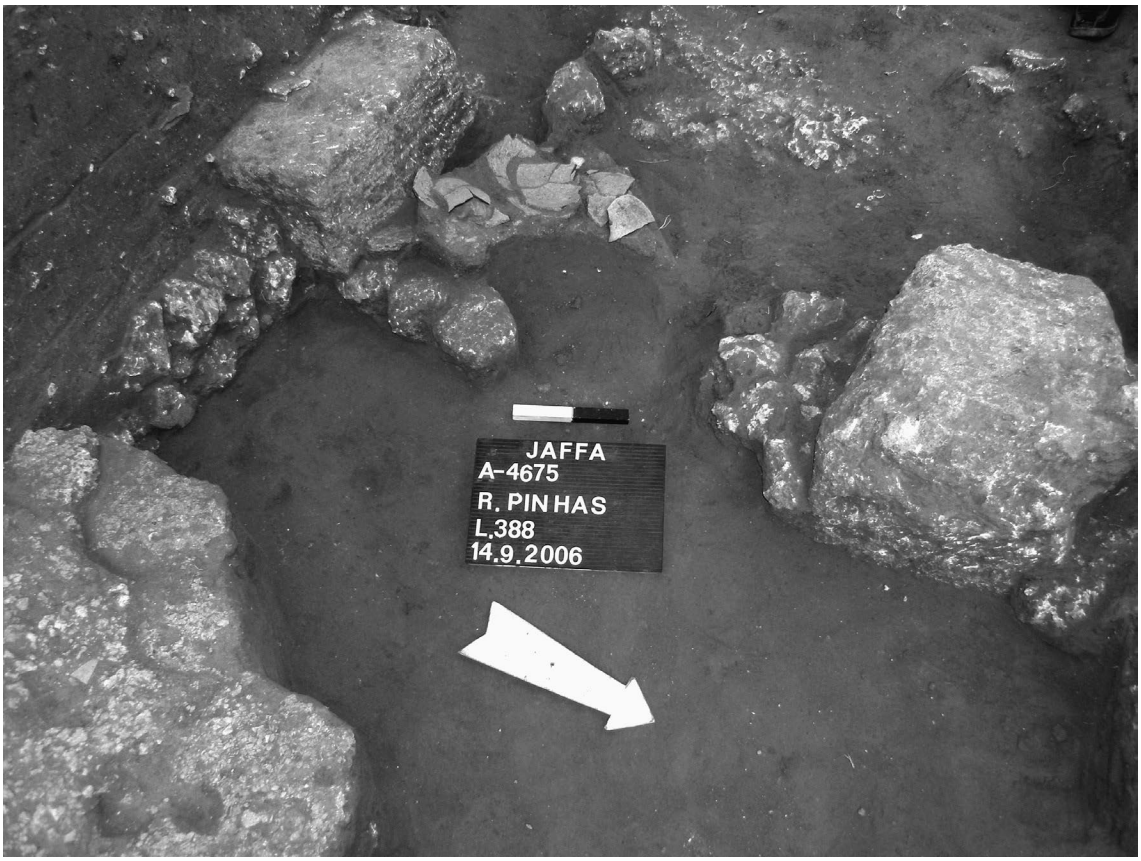

Figure 16.1. Traces of Hellenistic walls dismantled in medieval times in the Flea Market Complex. *Photo by Yoav Arbel.*

Figure 16.2. Sherds of Hellenistic serving bowls (ca. fourth to second century B.C.E.) from the Flea Market Complex. *Photo by Yoav Arbel.*

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1999:31, 2003:11, 2006:14) reveals a gradual abandonment of some smaller central coastal sites, contributing resources and population to the remaining urban centers at Apollonia and Jaffa. Jaffa was of sufficient administrative and commercial significance to the Ptolemies to be granted the right to mint its own coins (Kaplan 1972:88; Tolkowsky 1924:46–47). This thriving period in the town's history saw the exacerbation of an expansion process that had begun in Persian times and possibly as early as the late Iron Age, as settlement spread from the ancient mound mainly to the low grounds to the east. The exact nature of this new settlement, including the degree of planning and density, cannot yet be determined. While extensive excavation projects have taken place in recent years in the area immediately to the east of the ancient mound of Jaffa, archaeological access to Hellenistic strata remains limited. Such layers were reached at the mound itself, both in Kaplan's excavations (see Chapter 2) near the summit of the mound (Kaplan 1972:88), and in the latest excavations carried out in the same general area in 2008 and 2009 under the auspices of the JCHP directed by Aaron Burke and Martin Peilstöcker (Burke and Peilstöcker 2009).

Archaeological research at Jaffa owes its recent momentum to extensive urban development taking place to the north, south, and east of the mound (see Chapter 4). During the last 15 years, numerous salvage excavations have been performed, mostly by teams of the IAA. Major salvage excavations include Clock Tower Square, the Flea Market, Andromeda Hill, the Ottoman Qishle, and the Ganor Compound.[6] Newly excavated evidence illustrates that during various periods, urban expansion in Jaffa effectively created a lower city on the eastern margins of the mound. The process began in the latest phase of the Iron Age, gathered momentum under Persian rule, and reached its peak in Hellenistic times. After a gap of several centuries, the area was reoccupied during the Byzantine and Crusader periods.

Excavations of this area were hindered by conditions on the ground. A vibrant flea market, set in narrow streets and crowded alleys, covers a large part of the site. Furthermore, the Hellenistic remains were found in most cases only in deep probes, below meters of later strata. Yet Hellenistic layers were met practically in all areas where excavations reached the appropriate depth, strongly indicating a significant presence during that period. Parts of domestic units were exposed under the market's Rabbi Hanina and Rabbi Pinhas streets and the Ganor Compound. A Hellenistic layer was also exposed under Rabbi Pinhas Street about 30 m to the north. The walls there were mostly dismantled in medieval times (thirteenth to fifteenth centuries C.E.), as indicated by pottery found in the trenches (Figure 16.1).

Missing walls at the Ganor Compound left clear trenches that attest to other structures of the same period. Three small plastered basins and a clay oven found in proximity may indicate a small-scale industry whose exact nature remains unclear. The Hellenistic construction technique comprises facades of dressed stone enclosing a dense core of smaller fieldstones and clay reaching about 60 cm in width. Local sandstone (kurkar) and beach rocks were used for wall construction, while surfaces were made of packed earth.

Finds from the occupation layers include both local and imported ceramic vessels representing known production centers in the Hellenistic eastern Mediterranean. The ceramic assemblage shows a typical domestic repertoire, including cooking pots, storage jars, and black and red-slipped serving bowls (Figure 16.2). Some of the ceramic types date to as early as the sixth and fifth centuries B.C.E., but the majority date between the fourth and second centuries B.C.E. Among the ceramic finds were dozens of stamped handles of amphorae originating in the Greek islands (Figure 16.3). The discovery of several clay figurines strongly indicates a non-Jewish population,

Figure 16.3. Stamped handle of imported Hellenistic amphora from the Ottoman Qishle. *Photo by I. Ben-Ezra.*

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as do pig bones found in the occupation layers (Moshe Sade, personal communication, 2007).

An analysis of the archaeological results must take into consideration the scattered and narrow exposure of Hellenistic strata in most parts of the lower city. The excavations in the Flea Market, in particular, were conducted in long and relatively narrow trenches, from which no extensions were possible. Even where expansion was technically possible, as at Clock Tower Square, there were restrictions due to the presence of later graves or to constraints in the original development program. Yet once gathered into a single framework, the results of the various probes and of excavations where expansion was possible allow us to characterize Hellenistic settlement in the lower city and provide a tentative perspective on the conditions that formed the background of the Hasmonean conquest.

Overall, there seems to be a marked advantage to the lower city's settlement during the Ptolemaic period compared with successive Seleucid occupation. This conclusion is based on the presence of pottery dating up to the third century B.C.E. in practically every location where Hellenistic strata exist, while the appearance of later Hellenistic pottery is sparse and isolated. Additional evidence for the Ptolemaic advantage are the stamped handles, most of which date up to the third century B.C.E., and oil lamp typology. Excluding some relatively rare imported luxury items, all the complete and fragmentary Hellenistic oil lamps uncovered in the lower city belong to the wheel-made type (Figure 16.4). Although this variety is common between the late fourth and second century B.C.E., not a single mold-produced lamp, a very common type during the second and first centuries B.C.E., has been found in the excavations.

Archaeological evidence thus indicates a climax of construction, expansion, demographic growth, and commercial vibrancy during the Ptolemaic period, which probably continued into the early Seleucid period but experienced decline, reflected in the reduction of the size of occupation in the lower city. The process of decline must have accelerated with the gradual destabilization of parts of the Seleucid realm during the reign of Antiochus IV (Finkielsztejn 1998:258) and culminated with the Hasmonean conquest of Jaffa, the desertion of the lower city, and the renewed concentration of Jaffa's urban occupation within the upper city. The abandoned lower city was used as a cemetery possibly as early as Hasmonean times through the Roman period. Archaeological testimony of these developments includes isolated signs of destruction dated by coins and pottery to the mid-second century B.C.E. and articulated burials dated to the Roman period found at the Flea Market (Figure 16.5), the Ganor compound, and Ben Shetah Street near the Post Compound (Ereola Yekuel, personal communication, 2007). These discoveries were made in the most recent excavations to date within the perimeter of the lower city.[7]

Discussion

It took several attacks before Hasmonean hold on Jaffa was secured. The difficulties can be explained within the geopolitical context of the time. Jaffa is located at the coastal plain, relatively far from the Judean heartland. From Gaza to the south to Phoenicia in the north, this region has historically been home to mostly non-Jewish populations, whose general stance was hostile to the Jews (Bohak 2003; Gruen 2002). The coastal cities maintained

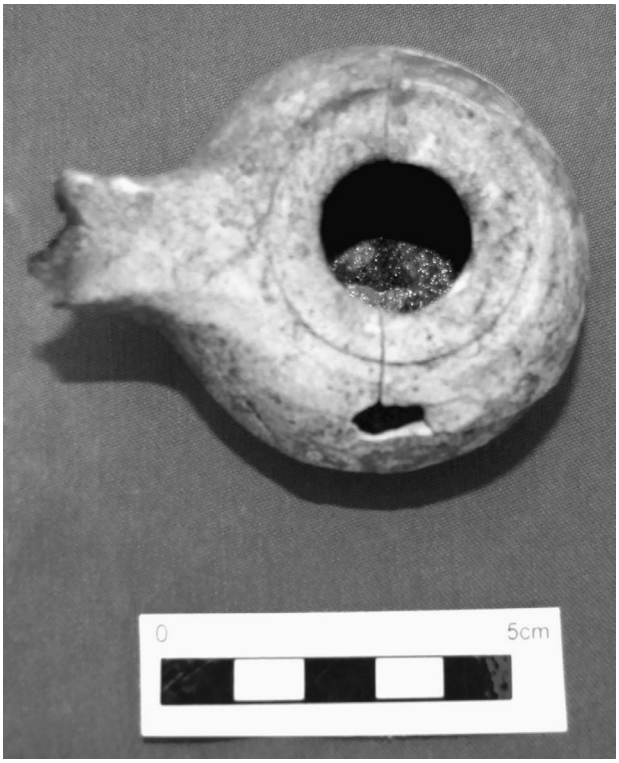

Figure 16.4. Wheel-made Hellenistic oil lamp (fourth to second century B.C.E.) from the Flea Market Complex, Rabbi Hanina Street. *Photo by I. Ben-Ezra.*

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strong political, cultural, social, and religious commitments to Hellenism and were an inseparable part of the Hellenistic economy. The Hasmoneans must have realized that the demographic makeup of these cities made governing them virtually impossible, hence the "deportation or conversion" policy of their later princes. Jaffa became one of the earliest sites where this policy was implemented, and the Hasmonean experience there may have contributed to its formulation. As for the strategic significance of Jaffa to the Hasmoneans, the following factors should be considered: (1) Jaffa was the closest commercial harbor to Judea proper but was conveniently distant from the Seleucid political and administrative center. Once it was conquered and pacified, long-term control there was feasibly maintained; (2) the establishment of profitable trade networks was crucial for the consolidation of Judea's independence; (3) control over Jaffa could obstruct the transportation of Seleucid troops to the Judean heartland; (4) the opening of a maritime line on the Mediterranean coast facilitated communications with the Roman Republic, with which the early Hasmoneans established political and military alliances; and (5) Jaffa offered direct maritime communication with Ptolemaic Egypt and its substantial Jewish community. The Seleucid authorities would have been aware of these factors and must have realized that the loss of Jaffa considerably strengthened Hasmonean independence. The Apollonius episode during Jonathan's term (see above) reflects an effort to maintain or regain Seleucid control over the city, but the effort failed. Jaffa was lost to the Seleucids for the same fundamental reasons that Judea had been as a whole.

The results of recent archaeological excavations in Jaffa's lower city correspond to this broader historical scene. Based on architectural and artifactual evidence, the gradual spread of Jaffa began during the late Iron Age, continued under Persian rule, and culminated in the Ptolemaic period. During the third century B.C.E., Jaffa

Figure 16.5. Roman burial in the Flea Market Complex, Rabbi Pinhas Street. *Photo by Yoav Arbel.*

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was a thriving community, home to a growing population that made a living from agriculture, fishing, industry, and trade. Parts of private residences unearthed in the excavations contained a wide variety of local and imported wares. Typical ritual figurines were discovered but no Jewish features such as ritual baths, which would indicate the pagan makeup of the local population, with political, cultural, and economic ties to Ptolemaic Egypt.[8]

Fortunes began to change once the Seleucids assumed control of the region in the early second century B.C.E. The decline must have been gradual, since marks of second-century habitation in the lower city did appear in some parts, while others seem to have been abandoned. Some ceramic types characteristic of the second century B.C.E., such as mold-made oil lamps, are entirely absent, and Seleucid coins are rare. The decline may be at least partly blamed on the reduction or loss of long-established commercial contacts with Ptolemaic markets, the general waning of Hellenistic power under growing pressure from Rome, and the subsequent destabilization of the Seleucid court at Antioch. Jaffa preserved enough strength to repulse the attack of Judas, but it was only a temporary setback for the Hasmoneans. The Seleucids were losing assets throughout Judea, and Jaffa in the mid-second century B.C.E. was growing weaker, regardless of Hasmonean activities. Its final fall to the Hasmonean brothers was merely a question of time and circumstances.

Conclusion

Several raids and short-lived Hasmonean conquests of the city of Jaffa are reported in 1–2 Maccabees. These were not varying narratives of a single event, confused by the indiscriminate inclusion of different sources. The testimonies can be integrated in a logical sequence that agrees with the historical circumstances of the time. Jaffa repelled, apparently with minimal effort, the first Hasmonean attack under Judas. Growing Hasmonean power and the simultaneous Seleucid decline allowed the two incursions of Jonathan's forces into the city, but in neither case was he able to maintain control there. It took nearly 20 years for the Hasmonean occupation of Jaffa to be consolidated, and that happened only when Simon, having taken the town twice himself, took the radical step of evicting the native population and settling Jews in their stead.

One may only speculate how a Jewish insurrection would have fared had they faced the Ptolemies instead of the Seleucids two generations earlier. It seems certain that Jaffa would have offered an even more formidable challenge. To the Ptolemies, Jaffa was a crucial link on the eastern Mediterranean coastal sea route between Phoenicia and Egypt. Under their administration, it became a large, thriving, and fortified commercial center, home to a growing population that spread from the ancient core of the city to new grounds that previously had been only sparsely populated. Along with many other Hellenistic centers, Jaffa gradually lost its status following the transition to Seleucid rule. The city that opposed the Hasmoneans in the mid-second century B.C.E. was different than its Ptolemaic predecessor. Diminishing trade and political destabilization led to a demographic decrease, and previously populated sections, mainly in the lower city, were abandoned. Funds and manpower necessary for its defense were insufficient. Although Jaffa retained enough resources to survive Judas's haphazard raid and bounce back from Jonathan's conquests, once Antioch's decline and the Hasmonean ascent reached the point in which effective Seleucid support for the local population was impossible, Jaffa's final fall became inevitable. This was a crucial turning point in the town's history. The drastic demographic alteration under Simon turned it from a Hellenistic hub of anti-Jewish sentiment and action to the new home of a vibrant Jewish community. Jaffa was to become one of the most important assets of the Hasmonean kingdom, its main trading seaport, and a source of its prosperity.

The historical narrative receives preliminary corroboration in new archaeological discoveries from recent years in what can now be identified as a lower city adjacent to the ancient mound. A flourishing segment of the city under Ptolemaic rule, it had been partly abandoned under Seleucid administration. This process reflects the gradual decline that facilitated the Hasmoneans' ultimate success.

More than two centuries after Simon's conquest, Jaffa became a rare example of a Jewish city that the Romans, in their suppression of the First Jewish Revolt, were forced to conquer twice (J. *BJ* 2.18.10 §507–508, 3.9.2–3).[9] The outstanding commitment of the local inhabitants to the Jewish cause illustrates the radical transformation that the town had undergone since its pagan inhabitants offered a similarly stiff resistance to the ancestors of the rebels who fought Rome.

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Notes

1. The Zenon papyri report a local confrontation during the reign of Ptolemy Philadelphos (285–246 B.C.E.), but the dispute is over taxes not ideology (Stern 1980:248). Tributes also caused conflict between the high priest Onias II and the Ptolemaic court (Josephus, J. *AJ* 12.4.1 §156–174). Whether the report is factual, or a fictional account constructed by Alexandrian Jews to promote local agendas, as Gera (1990:35–38) suggests, it reflects certain tensions between the Jews of Judea and the Ptolemaic court.

2. It should be noted that the prayer calls for divine retribution. No direct reference is made to human action: "Lift up your hand against foreign nations and let them see your might (v. 3); Rouse your anger and pour out your wrath; destroy the adversary and wipe out the enemy (vv. 8–9); Let survivors be consumed in the fiery wrath, and may those who harm your people meet destruction. Crush the heads of hostile rulers" (vv. 11–12).

3. The coast of Jaffa was unpredictable and dangerous, pierced by massive rock outcrops extending far into the water and subject to severe winter storms. These combined hazards caused several catastrophes and considerable loss of life. Josephus reports that 4,200 Jewish rebels escaping the Romans drowned when a sudden storm wrecked their ships (J. *BJ* 3.9.2–3). The English pilgrim Saewulf reports more than 1,000 people lost in 1102 in similar circumstances, as some 30 ships were crushed against each other by a violent gale in Jaffa's harbor.

4. All biblical quotes are from *NRSV*.

5. Josephus mentions a similar incident that took place during the chaotic early phases of the First Jewish Revolt against Rome, as riots between Jewish and non-Jewish populations raged in many mixed communities. The entire local Jewish community of Scythopolis (Beth-Shean) was massacred by their Gentile neighbors at a grove outside the city, having voluntarily assembled there at the request of the Gentiles as a sign of faith and loyalty (J. *BJ* 2.18.3 §466–468).

6. Large-scale excavations began in 1994. For preliminary reports, see Peilstöcker et al. (2006) and Arbel (2008). No previous excavations were undertaken at the Ottoman police compound before this project (Arbel 2009, Arbel and Talmi 2009).

7. The excavations were undertaken in the summer of 2007, under the direction of Martin Peilstöcker and Aaron Burke, as the second major phase of the Ganor Compound excavations (see Chapter 14).

8. Hasmonean ritual baths clearly appear in the archaeological record from the Hasmonean period (Reich 1981), Qeren Naftali (Aviam 2004:70-72) and Khirbet Burnat, south-east of Jaffa (Amit et al. 2008:104). Installations interpreted as ritual baths were also unearthed at Hellenistic Maresha (Bliss and Macalister 1902:pls.16–17; Finkielsztejn 1998:47–48; Kloner and Ariel 2003:11). It remains unclear whether the baths belong to the Hellenistic strata or to a short-lived Jewish occupation that postdates the Hasmonean conquest, after which the site was largely abandoned.

9. According to Josephus, the second Roman offensive was aimed at rebels who had escaped from other towns that were earlier taken by the Romans, and who had settled in the ruins of the city that Cestius Gallus had destroyed in the first attack. It is likely that refugees did find shelter at Jaffa and continued to fight their war from there, but their activities indicate that many of them were natives of the town who had escaped and returned to fight again. The rebels are reported to have effectively disrupted at sea the coastal shipping traffic between Syria, Phoenicia, and Egypt, using vessels they had built themselves (see J. *BJ* 3.9.2 §416). Since there were no other significant Jewish settlements at the coast, and assuming that Jewish fishermen arriving from the Sea of Galilee were not familiar with Mediterranean conditions, the skill of the rebels at Jaffa implies that among them were a substantial number of the town's original Jewish population.

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Chapter 17

Islamic and Crusader Pottery from Jaffa:

A Collection of Whole and Reconstructed Vessels

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A number of major IAA salvage excavations in Jaffa have yielded a rich assemblage of pottery from the Islamic and Crusader periods. These finds promise to bring medieval Jaffa into much clearer focus and allow comparisons with other important coastal sites such as Acre and Caesarea. Raz Kletter began with publication of a small excavation in Roslan Street (2004), and work is ongoing to publish ceramics from recent excavations at the Qishle site (Arbel 2009) and French Hospital (future site of the Eden Hotel). This paper is concerned with Islamic and Crusader ceramics excavated from the Ganor Compound.

The vessels discussed below were excavated in 1995 and 1996 primarily in areas B and D1 in the Ganor Compound on Yefet Street , under the direction of Martin Peilstöcker. The vessels were set aside because of their excellent preservation or prospects for reconstruction and do not represent a coherent assemblage. Because the stratigraphy of these excavations has still to be worked out, only well-known ceramic types are presented here, from two distinct periods, the Early Islamic and the Crusader. This preliminary presentation is intended to provide a glimpse of the ceramic riches Jaffa contains. In the final report, these vessels will be presented again in context with the entire assemblage of each period. Unusual or less well-known types are not included because it will be more useful to wait until they can be presented in terms of quantification and stratigraphic context in the final report. The references given for each type are not meant to be exhaustive but provide examples of one or two other sites at which the vessel type is known and provide dates based on those excavations.

Early Islamic Pottery

In the Early Islamic period, Jaffa was the port of Ramla, the regional capital; the conduit for export of the region's olive oil; and a node on a north-south trade route between Egypt and Constantinople (Goitein 1967:1:214; Goldberg 2005:336, n. 314; Le Strange 1890:303; see also Chapter 9). At this time, the Ganor Compound can be best characterized as domestic, with most of these nearly whole and reconstructed vessels found in large refuse or sanitation pits beneath houses (Martin Peilstöcker, personal communication, 2008). The vessels in this group include few of the transitional Byzantine-Early Islamic wares or the earliest Islamic types. Most of the samples rather seem to date from ca. post-750 C.E. (after the Abbasid revolution; Figure 17.1 and Figure 17.3). In reference to dynastic periodizations, the Early Islamic archaeological period includes the dynastic periods of Tulunid, Ikhshid, and Fatimid rule in Filastin—up to the Crusader conquests of the late eleventh and early twelfth century. This group includes several types that have parallels both in Jaffa's close neighbors and much farther afield in the wider Islamic world.

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The earliest of the Early Islamic group is a single sample of White-Painted Ware (Basket 3146). This is a jar with a piriform (pear-shaped) body that gently slopes up to a wide, straight neck. The rim is rounded but "stepped," with a single groove around the inside, and the vessel sits on an omphalos base. There are distinct manufacture lines inside and out. The fabric is fairly compact but with moderate fine pores and moderate medium to very coarse white and black grits. There are coarse red inclusions, which may be bits of unmixed red clay. It is fairly coarsely potted, and the core and interior surface fire to a 7.5YR 6/6 reddish yellow, while the exterior surface is 5YR 6/4 light reddish brown. The exterior has been decorated with white paint; six or more registers of a single wavy line are drawn around the body and neck. Parallels dating to the seventh and eighth centuries C.E. come from Ramla (Arnon 2007:fig. 10:15-16; Cytryn-Silverman forthcoming 2:14), Yoqne'am (Avissar 1996:fig. XIII.141, Type 115), Beth-Shean (Johnson 2006:fig. 15.15:290), Tiberias (Stacey 2004:fig. 5.39:32), and Pella (McNicoll et al. 1982:pl. 144:144, 147).

Another early type, probably dating to the eighth century C.E., is the Creamware pilgrim flask found at Ramla (Rosen-Ayalon 2006:pl. 5; Rosen-Ayalon and Eitan 1969), Yoqne'am (Avissar 1996:fig. XIII.145, Type 119), and other sites. The single example in the group of whole and reconstructed vessels at Jaffa (Figure 17.1: Basket 4460) is a very large flask with no rim, a broken neck, and two tall rabbit ear handles. The clay body has common very fine pores and common very fine-coarse red, white, and black grits and is fairly compact and hard. It fires 5Y 7/3 pale yellow. The surface is wet-smoothed, but there is no decoration.

Related to the flasks in ware is one of the most recognizable groups of the Early Islamic assemblage in the Levant—a series of Creamware juglets of various sizes and forms. The most common form is a cylindrical body with a carinated shoulder joined to a slightly everted conical neck and a simple rim (Figure 17.1: baskets 4412, 91505, 93711, and 93657). The base is flat. The single handle rises from the rim and then curves down to join the body just above the carination. Handles are simple, with a circular or oval profile, or are sometimes deeply grooved, appearing doubled. Often there are one or two small lumps of clay at the top, serving as thumb knobs. These vessels seem to come in three sizes. They usually do not have filters, but one example, 4412, which has the aforementioned double handle and two thumb knobs, has a filter one-third of the way down the neck. Parallels dating to the ninth or tenth century C.E. can be found at Jaffa's near neighbor and the capital of the region, Ramla (Arnon 2007:fig. 7:1; Cytryn-Silverman forthcoming: pls. 4:6, 9, 11:16, 24:15; Rosen-Ayalon and Eitan 1969:pl. 5) but also at Abu Ghosh (de Vaux and Steve 1950:pl. C:23), Tel Tanninim (Arnon 2006:fig. 123:126), Khirbet al-Mafjar (Whitcomb 1988:fig. 1:4C), and Yoqne'am (Avissar 1996:157, Type 153, fig. XIII.129:159).

A variation on this juglet (baskets 4453-2, 5263) has a piriform body tapering to a small grooved disk base. The neck flares to what was probably a simple rim (missing in these examples). It has a single handle and pronounced manufacture lines on the interior toward [the base?] base. The clay body is of medium density, with common amounts of medium-very coarse white and yellow grits and very fine red grits. It fires 2.5Y 8/2 pale yellow, sometimes with a pinkish core. Decoration consists of small incised half circles around the shoulder. Parallels are found at Ramla (Arnon 2007:fig. 7:2-3; Cytryn-Silverman forthcoming: pl. 24:24; Rosen-Ayalon 2006:pl. 5), Caesarea (Arnon 1999:fig. 3:b-d), and Yoqne'am (Avissar 1996:156, figs. XIII.128:151-152, XIII.136). The date is the same as the previous type.

A third type of Creamware juglet (baskets 2455, 4459, 7876-1, and 82874-2) has a filter in the neck and comes in various sizes (Figure 17.1: Basket 2455). The piriform body narrows to a small grooved disk base, and the neck is conical with a simple rim. The exterior of the neck is marked by one or more grooves, giving it a "stepped" appearance. The handle begins probably midway down the neck, loops up, and turns straight down to the shoulder. The top of the handle may have a thumb knob. The filter can be either at the neck or one-third of the way down the neck from the rim. The former is created using a sharp tool, either triangular or round in section, which is punched through the body of the vessel. The latter filters, placed higher in the vessel neck, are decorated with incising. The vessels are fairly finely potted, with fabric of medium density, having common amounts of fine-medium black grits. They fire 2.5Y 8/2 pale yellow, sometimes with a pinkish core. As with all these vessels, the surface is untreated, but there is sometimes decoration in the form of small incised half circles around the shoulder. Filters are excised with geometric designs such as triangles. Parallels suggest a date from the second half

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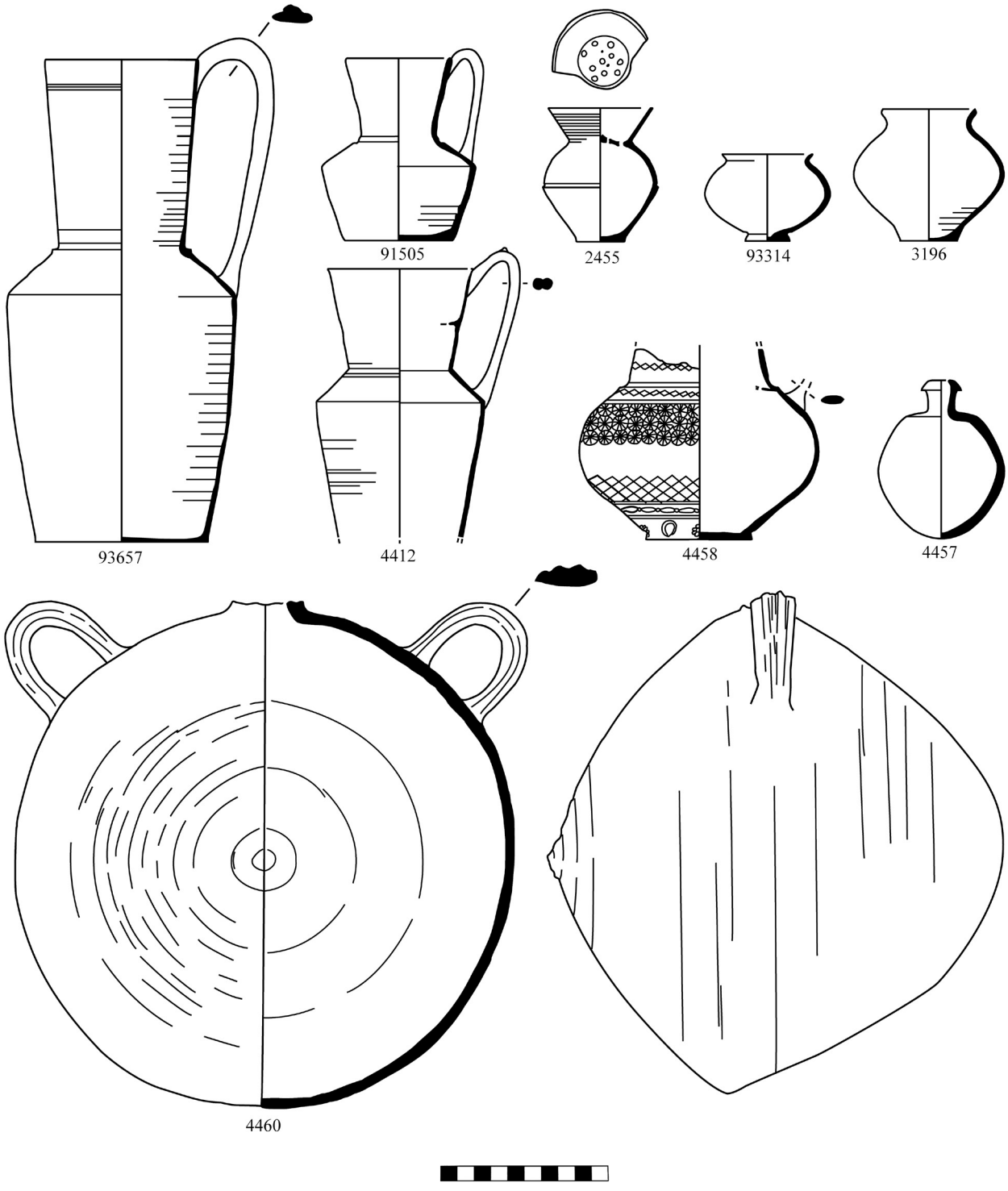

Figure 17.1. Early Islamic-period whole and reconstructed vessels by Basket number.

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of the eighth to the tenth or eleventh century C.E. They have been found at Ramla (Arnon 2007:fig. 8; Cytryn-Silverman forthcoming: pls. 1:8, 4:4; Rosen-Ayalon 2006: pl. 5), Caesarea (Arnon 1999:fig. 3b), Yoqneʿam (Avissar 1996:figs. XIII.129:124, XIII.158:121), and Tiberias (Stacey 2004:fig. 5.41: 49).

Related to these is a filterneck water jug that is mold-made and so is covered in impressed decorations, with some designs added with another tool (Figure 17.1: Basket 4458). The form is of a jug made in three pieces. It has a wide, probably conical neck, a filter at neck-body join, and a piriform body that narrows to flat base. The handle begins on the shoulder. The fabric has common very fine-fine pores and common fine-medium red and black grits. The core fires brownish with pink margins and whitish surfaces, 10YR 8/2–7/4 very pale brown. The decoration is in the form of repeated registers of geometric and vegetal forms, primarily diamonds and five-petaled flowers. Parallels indicate a ninth- and tenth-century date and are found at Ramla (Arnon 2007:fig. 7:8; Cytryn-Silverman forthcoming: color pl. 16:12), Caesarea (Arnon 1999:fig. 3: e, n-o), Yoqneʿam (Avissar 1996:fig. XIII.132:131-132), Khirbet al-Mafjar (Whitcomb 1988:fig. 1:3E), and Tiberias (Stacey 2004: figs. 5.49:44, 45.61:13).

The fourth type in this group is a series of miniature pots of similar clay body (baskets 3196, 3654, 93314; Figure 17.1). They tend to have wide mouths, short everted S-curved necks, and pointed or simple rims. The vessel body is piriform, tapering to flat, string-cut base, and there are faint manufacture lines on the interior. The fabric tends to the coarse, with abundant fine-coarse red, black, and white grits, but sometimes the vessels are fairly well potted and the surfaces wet-smoothed. They often fire 2.5Y 8/2 pale yellow on the surfaces with a grayish core. Parallels suggest a tenth-century date and have been found in previous excavations at Jaffa (Kletter 2004:fig. 17:14), Ramla (Cytryn-Silverman forthcoming: color pls. 8-9; Rosen-Ayalon 2006: pl. 5), Beth–Shean (Johnson 2006:553, cat. no. 282), and Tiberias (Stacey 2004:fig. 5.51:54).

Several types of glazed bowls, most fitting within the types identified by Miriam Avissar at Yoqneʿam and seen at several other sites, were also recovered at Jaffa. They are decorated in monochrome glaze or with several glaze colors either splashed or painted on. These bowls are often segmental in shape, with a small everted rim on a flat disk base. The exterior is pared. Most have a similar fabric of medium-soft density and hardness, tempered with moderate fine-medium black and red grits with sparse coarse red grits (possibly grog) and common very fine-fine yellow grits, a few of which are burned out and are possibly limestone. They often fire 2.5Y 7/3 pale yellow to 10YR 7/3 very pale brown.

There are several examples of monochrome-glazed bowls: one that falls within Avissar's group of "common glazed bowls" (Basket 4949-3, cf. Avissar 1996:fig. XIII.5, Type 5) and three that match her classification of "Fine Glazed Bowls" (baskets 4268, 7213-7, 94083, cf. Avissar 1996:fig. XIII.8: 1-4, 7, 9, Type 8). The former vessel was first covered with a light wash, 2.5Y 8/2 pale yellow, that extends a few centimeters over the rim. The green glaze is applied thickly on the interior and drips over the rim. The latter bowls are in one of two forms: a small, shallow, segmental bowl with a plain or slightly everted, rounded rim, which has a pared exterior; or a conical bowl with a plain rim. Both types sit on a low ring base. This group perhaps should be subdivided, as two different clay bodies are used. The vessel from Basket 4268 has fired red, so a thin wash of a pale color was applied inside and out before the vessel was glazed. The glaze of all vessels extends over the entire exterior, even over the base. A second coat of glaze is applied to the interior and drips over the outer rim. Thus the interior of the vessel is glassy in texture while the exterior is gritty. Glaze colors are yellow and dark green.

Painted and glazed bowls (baskets 93630, 93639, 93654; Figure 17.3) have no slip, but black paint and green glaze are used to draw distinct designs under a clear glaze that goes only to the edge of the vessel rim; stylized leaves and triangles are outlined in black, with green infilling (green glaze or green in-glaze paint). Parallels dating to the second half of the eighth century C.E. are found at Yoqneʿam (Avissar 1996:1977-1978, fig. XIII.1973:1973, "Coptic Glazed Ware") and are also mentioned as appearing at several sites in the survey of Nahal Yattir in the Negev (Magness 2003:fig. 4).

Glaze-painted and polychrome-splashed bowls are of similar shape as the aforementioned and are knife-pared as well. They are of a similar fabric and are slipped on the interior to 2 to 3 cm below the rim exterior. The one glaze-painted bowl has a slightly flattened and thickened rim (Figure 17.3: Basket 4949-1). The decoration over the slip is on the interior only, to the top of the rim. It is a clear glaze with in-glaze painting consisting of

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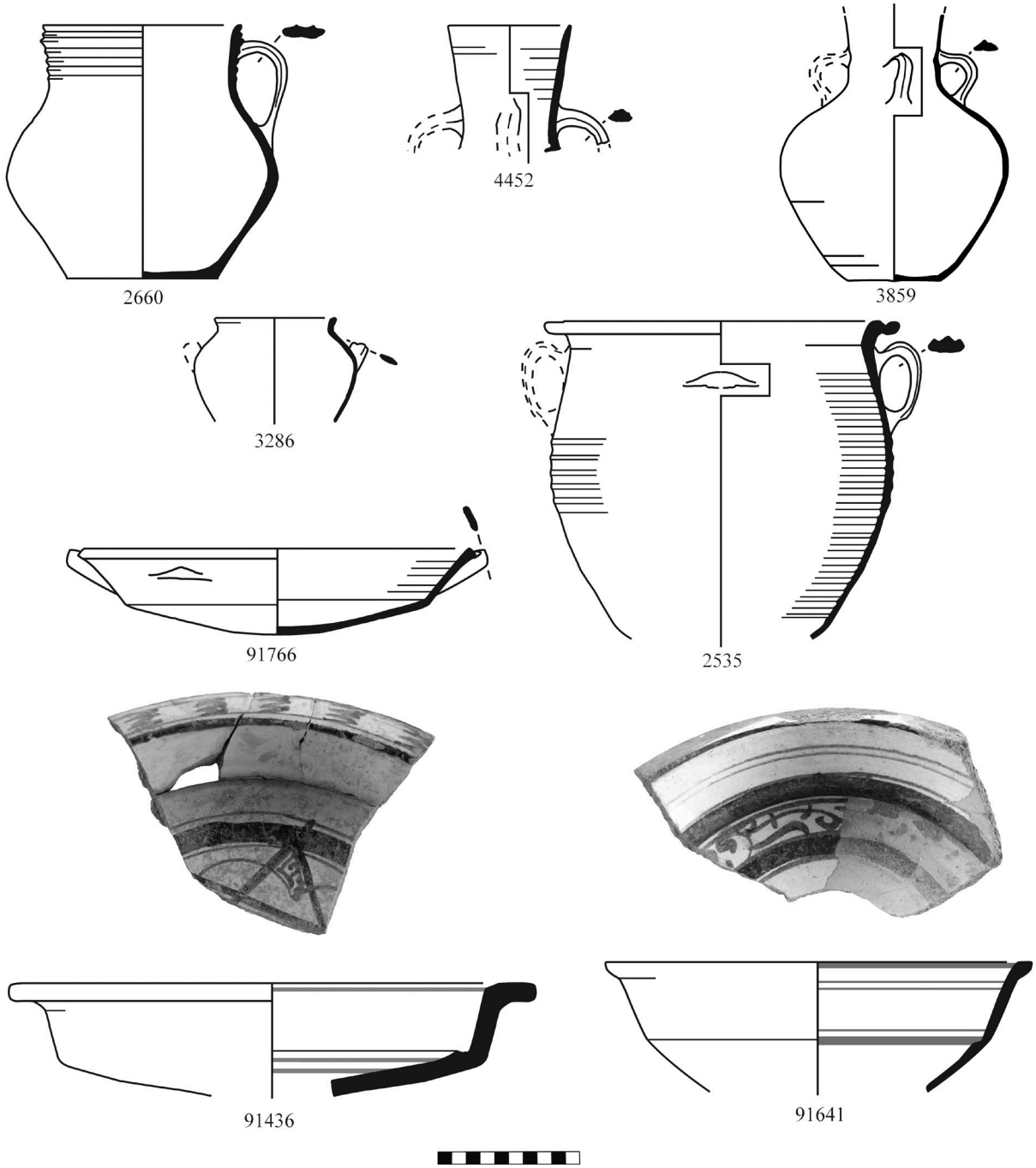

Figure 17.2. Crusader-period whole and reconstructed vessels by Basket number.

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large semicircles or festoons in green, between which are daubs of dark brown. Parallels dating from the late ninth to the first half of the tenth century C.E. are found in excavations at Jaffa (Kletter 2004:fig. 11:19), Ramla (Arnon 2007:fig. 4:1), Caesarea (Arnon 1999:fig. 4h), and Yoqneʿam (Avissar 1996: fig. XIII.2:4, Photo XIII.I, Type 2). Similar types have also been found in Egypt, at Fustat (Scanlon 1974:73, pl. XIX:78) and Alexandria (Zagórska 1990:84, pl. I:82).

The polychrome splash-glazed bowls (baskets 2989, 3745, 4413) are much like those at Tiberias that are thought to be of local manufacture and that date to the ninth or tenth century C.E. (Stacey 2004:fig. 5.25). Although the pared exterior and body shape are like those above, these examples sit on either a grooved disk or low beveled ring base rather than a flat disk base. The vessels are slipped. The sample from Basket 2989 is glazed bright yellow on the inside with green splashes that drip from the rim to the interior of the base. Vessel 3745 has a glaze that is cream or clear, with festoons of green, dabs of brown, and spaces filled with yellow. The glazes are very runny, and the pattern is difficult to discern. The sample from Basket 4413 is glazed clear, with two large drips from the rim down into base, one black and another green.

Finally (in the glazed bowls category) are two "splashed and mottled" glazed bowls (baskets 4013 and 4949-2). These are either conical bowls with everted rims on low, wide ring bases, or segmental bowls with everted, slightly flat rims on low ring bases. Despite differences in form, the vessels share a similar fabric and decoration: both vessels are of buff-colored, medium-density fabrics. The sample from Basket 4013 has common fine black grits and sparse coarse white limestone grits and fires 5YR 7/4 pink. The sample from Basket 4949-2 has moderate medium black and red grits and fires 2.5Y 8/4 pale yellow (Figure 17.3). Both are glazed inside and out, even over the base. There is a possible light-colored wash under the glaze on the sample from Basket 4013. Both vessels are glazed on the exterior in plain yellow. The interior of 4949-2 has careful dabs of white slip and brown glaze under the yellow glaze, producing a spotted appearance. The interior of 4013 has large, thick drips of green running over the yellow glaze from the rim to the interior, creating a splashed appearance (cf. Arnon 2007:fig. 3:2-3, 6; cf. Avissar 1996:78-79, Type 76).

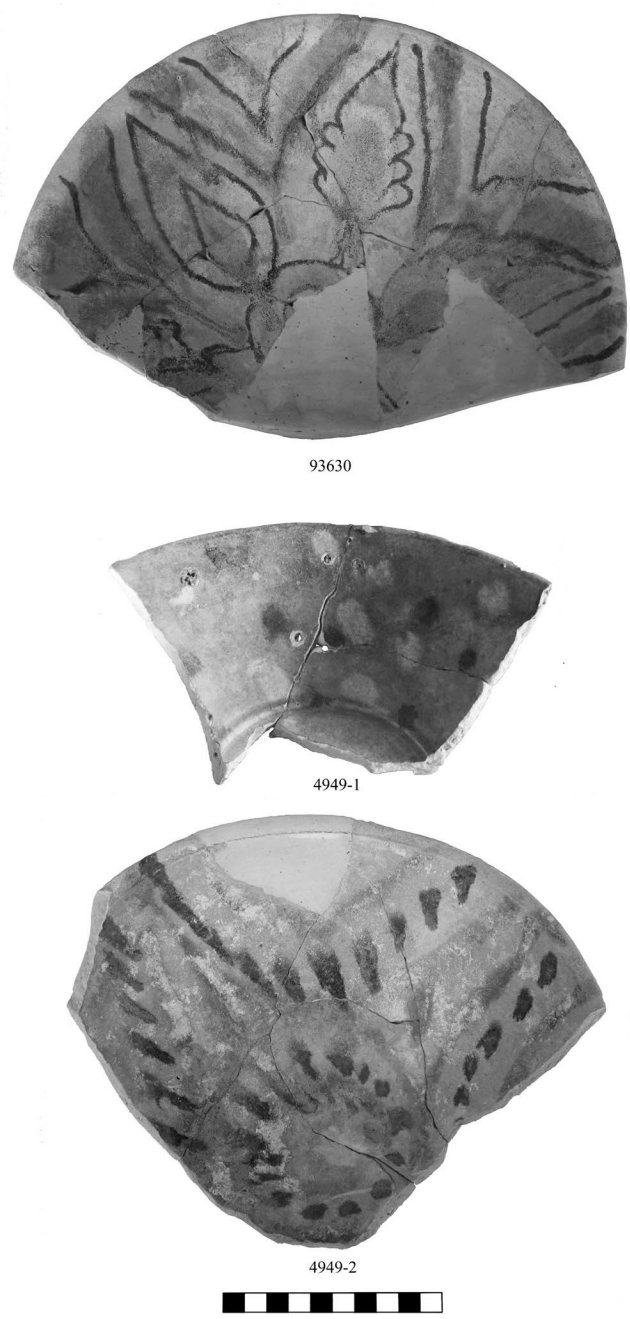

Figure 17.3. Glazed bowls of the Early Islamic period by Basket number.

A few utility wares were also discovered nearly complete or restorable. The sphero-conical vessel (Figure 17.1: Basket 4457) is a familiar form, having ninth-century parallels at previous Jaffa excavations (Kletter 2004:fig. 17:12), at Ramla (Arnon 2007:fig. 14:15-17; Rosen-Ayalon 2006:pl. 5), and at Tiberias (Stacey 2004:fig. 5.52: 59-10), among other sites. The form is of a juglet with a tiny mouth; a folded, thickened triangular rim above a narrow neck that widens abruptly to a carinated shoulder; and an almost piriform body with a flattened base. The

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fabric is very heavy and dense, and the vessel is thickly potted. It displays common very fine-fine pores, abundant fine black grits, and moderate coarse white sand, firing 5YR 7/6 reddish yellow. On the exterior surface is a slip or self-slip colored GLEY 4/N dark gray to 5/N gray.

The remainder of the utility wares consists of three cooking vessels, of both the deep and shallow varieties. The deep cooking pot (Basket 4213) has a rounded base and a cut, beveled rim. The body and base have numerous fine manufacture lines (ribs). Two horizontal handles are placed under the rim. The fabric is fairly compact and hard, with common coarse white sand, firing 5YR 4/3 reddish brown. The surface was not treated or decorated. Parallels dating to the late seventh to the ninth or tenth century C.E. are found at Ramla (Arnon 2007:fig. 15:14; Cytryn-Silverman forthcoming: pl. 6:10), Caesarea (Arnon 1999:fig. 1e), Khirbet al-Mafjar (Whitcomb 1988:fig. 1:2B), Yoqne'am (Avissar 1996:fig. XIII.99:96), and Tiberias (Stacey 2004:fig. 5.32:37).

Cooking pans are present in both unglazed and glazed varieties. The first (Basket 9240) is in the same family as the deep cooking pot. The form is of a shallow pan with curved walls to a cut rim and flat base. Two looped horizontal handles curve slightly upward. Numerous fine manufacture lines are evident inside and out (ribbed). The fabric is fairly compact and hard, with common coarse white sand, firing 10R 4/4 weak red at the core, 10R 2.5/1 reddish black at the margins, and 10R 5/4 weak red at the surfaces, with burning from use. As with the previous vessel, there is no surface treatment. Parallels dating from the late seventh to first half of the eighth century C.E. or into the ninth century are seen at Ramla (Arnon 2007:fig. 15:13; Cytryn-Silverman forthcoming: pl. 6:9), Caesarea (Arnon 1999:225), Yoqne'am (Avissar 1996:fig. XIII.99:12), and Tiberias (Stacey 2004:fig. 5.32:36).

The glazed cooking pan (Basket 91936) is a shallow vessel with almost vertical straight sides, a folded rim, and a flat base in which some manufacture lines are evident. Although only one horizontal handle is extant, these vessels usually have two. The fabric has common medium-coarse white sand, sparse coarse red inclusions, and moderate mica. It fires red but has burned 7.5YR 3/2 dark brown from use, with surfaces 2.5YR 4/6 red. The exterior of the vessel has been wet-smoothed, and only the interior of the base has been glazed dark brown. Parallels dating to the second half of the ninth to the eleventh century C.E. are found at Ramla (Arnon 2007:fig. 15:12), Tiberias (Stacey 2004:fig. 5.32:14 from Stratum IV, early Abbasid, and Stratum I, late Fatimid), and Yoqne'am (Avissar 1996:139, fig. XIII.100:131, Type 113).

The Crusader Pottery

Under Frankish occupation, Jaffa became the county seat, home to the count of Jaffa and Ascalon (see Chapter 10). It maintained its functions as a port for both mercantile and pilgrim traffic, receiving numerous faithful bound for Jerusalem even after Acre surpassed it in importance (Richard 1979). The Crusader-period occupation of areas B and D1 at the Ganor Compound is less easy to characterize than the Early Islamic but may also be domestic in nature, consisting of well-constructed courtyard buildings (Martin Peilstöcker, personal communication, 2008). The ceramic types preserved in this group of whole and reconstructed vessels are both table and utility wares (Figure 17.2) and can all be found in Miriam Avissar and Edna Stern's recent detailed catalog of ceramics of this period that are present in sites throughout modern Israel (Avissar and Stern 2005). The terminology and dating of the Jaffa vessels follow this catalog.

Nearly all the glazed bowls in this group from Jaffa seem to be imports from elsewhere in the Crusader realms. A small group is possibly imported from Lebanon, and planned petrographic analysis of several types within this group will test the veracity of this hypothesis. This group includes a "glazed bowl with double slip," the one sample of which (Basket 93562) is a shallow hemispherical bowl with slightly incurved sides and a simple rim on a wide, low footring. The fabric is medium-coarse, with abundant very fine white grits and moderate medium-coarse white grits. It is of medium compaction and fires to 10R 4/6 red. The surface is slipped a lighter color, 10R 8/2 pinkish white inside and out, even over the ring base. The polychrome glaze is on the interior but drips over the rim exterior. The first glaze applied seems to have been clear, with yellow and green drips from the rim into the interior and radial stripes of manganese purple that extend from the base almost to the rim. The name of this ware is taken from Avissar and Stern's catalog (Avissar and Stern 2005:6, fig. 1:1, Type I.1.1), and according to their analysis of the data from several sites, it dates from the early eleventh to mid-twelfth century C.E.

Another member of this possibly Lebanese group is Reserved Slip Ware (Basket 2536). The single example

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is a shallow bowl with a segmental body and guttered ledge rim, having a ridge at the body-rim join. It sits on a low footring that is finely potted and sharp. The clay body is silty and compact, with moderate very fine pores and moderate very fine to coarse white inclusions. It fires 2.5YR 5/8 red at the core, interior margin, and interior surface and 7.5YR 4/2 brown at the exterior margin and surface. The vessel is decorated with random, sparse splashes of slip on the interior and over the rim, over which a yellow glaze was applied. Because there is very little slip, most of vessel appears olive green, a result of yellow glaze over red clay. Chemical and petrographic analysis of the same type of bowls found in Acre suggests a Levantine provenance in the vicinity of Beirut (Stern and Waksman 2003:175), and thus this type is included in those from Jaffa slated for petrographic analysis. For references see Avissar and Stern (2005:fig. 8:1–2, Type I.1.6.4 [for rim form, cf. fig. 2:7]) and Stern and Waksman (2003:170-171, fig. 175). This type is dated to the twelfth to thirteenth century C.E.

Most likely an import from elsewhere in greater Syria is a single example of an underglaze-painted vessel made of soft-paste ("stonepaste" or "frit") fabric (Basket 3635). This example is an albarello, a small jar with a cylindrical, concave body that widens to a carinated shoulder and wide neck. Neither the rim nor the base is preserved, but see Grube (1963:Abb. 17) and Stern (1997:fig. 17:120) for the complete form of this vessel. The fabric is of proto-soft-paste or poor-quality soft-paste with moderate fine to medium pores and containing sparse coarse white sand. This sample was overfired 2.5Y 3/2 very dark gray to 2.5Y 7/1 light gray. The vessel is covered with a white slip inside and out. Over this, black paint has been applied in rows of thick zigzag lines around the body and a black horizontal line around the neck, under a clear glaze. There are also remains of a vitrified blue glaze at the neck and in patches on the body. Several references for this type dating to the end of the twelfth century C.E. are given in Avissar and Stern (2005:Type I.2.3.1 [but no albarelli of this type depicted]), but see particularly vessels at Acre (Stern in press: fig. 4.28:23-24), Yoqne'am (Avissar 1996:104, Type 162), Qal'at Jabar in northern Syria (Tonghini 1998:Fritware 2, Type 2b, Two-color Underglaze-Painted Ware [closed forms are rare, none illustrated]), and Acre (Stern 1997:fig. 17:120).

The arrival of the Franks and the increase in trade controlled by European merchant colonies sharply increased Mediterranean imports to the region, bringing in imports from parts of the Byzantine Empire that had not been seen previously at Jaffa (Stern in press: 2-3). For example, Aegean Green-Splashed Ware (Basket 4126) makes its appearance at Jaffa in the form of a conical bowl on a low footring with a squared, slightly inverted rim. The vessel is rather poorly potted of a coarse-textured fabric firing 2.5YR 6/8 light red at the core and 2.5YR 6/6 light red in the margins. The temper or accidental inclusions consist of sparse coarse black and white grits and sparse very coarse white grits. The surface has been slipped pinkish on the interior and over the rim, with a yellowish glaze over the slip that has mostly disappeared. Splashes of green glaze are randomly applied around the vessel interior. This type is described in detail by Avissar and Stern, but this particular form is not illustrated (2005:Type I.5.2 [rim and base similar to fig. 18]). See, however, an example from Yoqne'am (Avissar 2005:fig. 2.17:14) and from A. H. S. Megaw's study of Cypriot parallels (1975:fig. 1:c). This type seems to date from the end of the twelfth to the early thirteenth century C.E.

In the same family is Aegean Coarse-Incised Ware (Basket 83146). The sample from Jaffa is a bowl on a low footring with a segmental body and the beginnings of an everted or ledge rim. Like the splashed type, it is coarsely potted of coarse-textured fabric, firing 2.5YR 5/6 red with moderate fine pores, sparse fine voids, and sparse medium white grits. The vessel has cream slip on the interior and exterior, into which coarse and fine incisions and gouges have been made under a yellow glaze. The design is of a coarsely incised kneeling human figure, a possible tree trunk, and a grape bunch. There are also some gouged dots along the rim-body join and indeterminate incising on the rim. See Avissar and Stern (2005:fig. 17:12 [form], 14, Type I.15.13) for further references for this type and compare Megaw (1975:fig. 2:a) and Stern (1997:fig. 13:99-101). The vessel dates from the end of the twelfth to the early thirteenth century C.E.

Three well-known Cypriot types are present in the group of whole vessels from Jaffa. The first is Cypriot Slip-Painted Ware (Basket 2254) in the classic form of a carinated bowl with concave vertical sides and a sharp out-turned rim on a high everted footring. The fabric cannot be adequately described because there are no fresh breaks visible. The surface has been painted in a light slip; four large spirals are spaced evenly around the interior of the cavetto, with one small spiral at the center.

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The interior and exterior faces of the vertical part of the cavetto are each painted with a wavy line. Over the slip paint is a light greenish yellow glaze reaching over the carination on the exterior. There are tripod marks on the interior, indicating how such vessels were stacked in the kiln. For references for this thirteenth-century vessel type, see Avissar and Stern (2005:fig. 23:22–23, Type I.28.21) but also specific examples from Roslan Street in Jaffa (Kletter 2004:fig. 16.16), Acre (Stern 1997:fig. 8:69, 72), Yoqne'am (Avissar 2005:fig. 2.17:13), and Alexandria (François 1999:fig. 29:312–313), and vessels made in Cyprus (von Wartburg 1997:328–329, fig. 323:321.344, 322.328).

Also found at Jaffa are Cypriot vessels of the same shape but decorated in the monochrome sgraffito style. One is present in this group of whole vessels (Basket 2255). Its fabric is compact, firing 10R 5/6 red, with moderate medium-coarse white and dark grits. The light slip has been applied somewhat patchily on the interior of the bowl to just over the vertical rim. Two to three incised lines appear just inside the rim, along with four wide incised lines (circles) at the base and one small circle at the center. A yellowish clear glaze has been applied from the interior over the carination on the exterior. As with the previous vessel, there are tripod marks on the interior of this sample. This type also dates to the thirteenth century C.E. For references see Avissar and Stern (2005:fig. 24:22, Type I.28.23) but also examples from Roslan Street in Jaffa (Kletter 2004:fig. 16:12), Acre (Edelstein and Avissar 1997:fig. 1:2; Stern 1997:fig. 10:77), Yoqne'am (Avissar 2005:fig. 2.17:19), and Alexandria (François 1999:figs. 27:296-298, 228:299), and from Lemba in Cyprus (von Wartburg 1997:329, fig. 322:R.LB321).

The third type of Cypriot import presented here is Cypriot Green and Brown Sgraffito Ware (Basket 91630). This sample consists only of a well-preserved base sherd of a bowl on a high ring foot that is slightly out-turned. The clay fabric is compact but has been coarsely potted with moderate very coarse bubbles and sparse coarse to very coarse white inclusions. The core and surfaces fire 5YR 7/6 reddish yellow, with the margins firing 10Y 6/6 light red. The interior has been slipped white, incised, and then glazed light yellow with splashes of green and dark yellow. The incising takes the form of a face: a circle, inside which is a schematic representation of eyebrows, eyes, a nose, a mouth, and a chin. As with the other Cypriot types, this also dates to the thirteenth century C.E. For references see Avissar and Stern (2005:fig. 25:23, Type I.28.25), but see also vessels from Alexandria (François 1999:fig. 28:303, 307-311) and Lemba (von Wartburg 1997:331-333, figs. 337, 338:332.329 [the stylistic subgroup present in incised designs]).

Proto-Maiolica imported from southern Italy in the second half of the thirteenth century C.E., consisting of bowls on low ring bases in a variety of forms, is also present at Jaffa (baskets 2240, 8144, 8158+91632/1). Vessel 2240 is shallow, with a double rim (one straight and vertical, the other ledge/everted). Vessel 8144 is a large shallow dish with a ledge rim and a ridge at the wall-rim join, and vessel 8158+91632/1 is a small segmental bowl with a rounded, thickened, inward-sloping rim. The fabrics fire pink to yellow: 7.5YR 7/4 pink, 10YR 7/4 very pale brown, or 2.5Y 8/4 pale yellow with abundant very fine-medium pores, moderate coarse bubbles, and sparse medium to coarse white sand. The vessels are glazed white on the interior and sometimes over the rim. Overglaze-painted decoration is present in brown only, or in black, brown, and blue. Decoration is seen in rows of dots or festoons along the rim, and medallions or flowers on the vessel interiors. These vessels all match Avissar and Stern's description of "Proto-Maiolica from Apulia: Other Designs" (Avissar and Stern 2005:fig. 27: 22, 24–25, Type I.29.21.21.22). See also vessels from Roslan Street in Jaffa (Kletter 2004:fig. 16:17), Acre (Stern 1997:figs. 14-15), and Alexandria (François 1999:fig. 16:154-156).

From outside the Frankish realm, we have imports from North Africa, the typical North African Blue and Brown Ware (baskets 91436, 91641; Figure 17.2). These are thick-walled bowls with carinated sides and either a wide ledge rim or a short everted rim. They are coarsely potted of a fairly coarse fabric having common fine to medium pores, common coarse yellow-rimmed voids (burned-out limestone), and common coarse white quartz, which fires 5YR 7/6 reddish yellow or 10YR 8/6 yellow. These vessels have greenish cream glaze on the interior and exterior, with blue and brown overglaze paint on the interior, but the glaze has flaked off in parts. Vessel 91436 has geometric decoration, including a triangular shape on the base interior, while 91541 has a vegetal scroll between straight lines. For references see Avissar and Stern (2005:fig. 32) and Avissar (2005), and for more specific examples see those from Alexandria (François 1999:figs. 22: 241, 245, 223:242, 247–248 for form, figs. 222:237, 224:254, pl. 212:236, 241–242 for decoration).

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These vessels date from the end of the twelfth to the early thirteenth century.

There are a few vessels of household utility in this group. The well-known type Handmade Geometric-Painted Ware (Basket 8036), is present in this vessel group only in the body sherd of a closed form. This vessel is handmade, with common coarse to very coarse black and white grits, firing 7.5YR 6/2 pinkish gray. It is slipped cream, over which geometric motifs are painted in dark red that is fired brown in places and then burnished. This ware, widely distributed around the Muslim Middle East in the twelfth to fifteenth century C.E., has been treated extensively by Jeremy Johns (1998). For references to its distribution in the southern Levant, see Avissar and Stern (2005:fig. 47:45, Type II.44.44.41), but see also specific closed forms at Yoqne'am (Avissar 2005:figs. 2.23–22.24), Beth-Shean (Boas 2006:fig. 15.17:16), and Burj al-Ahmar (Pringle 1986:figs. 42, 43:49-10).

A simple jug or krater (Basket 5002; also Figure 17.2: Basket 2660) like those found in Acre is also present at Jaffa. This type has a small piriform body on a flat base. The wide neck is ribbed, slightly flaring, with a simple, rounded rim. It has a vertical handle from mid-neck to lower shoulder. The interior of the lower body has pronounced manufacture lines. The vessels are made of a medium-loose fabric with common fine to medium pores, firing 7.5YR 3/2 dark brown or 10R 5/6 red at the core. The margins are 5YR 4/2 dark reddish gray or 10R 4/8 red, but surfaces fire lighter, 10YR 7/2 light gray to 10YR 7/3 very pale brown. The fabric has common medium to very coarse red, white, and soft yellow inclusions, possibly limestone. Vessels of this type found in Acre and dating to the twelfth and thirteenth centuries C.E. are made of the local fabric used to produce the Acre bowl (Stern in press: 13; Stern and Waksman 2003:168, fig. 162). Petrographic analysis of samples from Jaffa will soon determine whether those found in Jaffa are products of Acre as well. For further references, see Avissar and Stern (2005:fig. 45:41, Type II.44.41.41; for form see Stern in press: fig. 4.8:1-3).

Possibly related to the simple jugs are "filterneck table jars with three handles" (Figure 17.2: baskets 3859 and 4452). These are small jars with piriform bodies on inverted ring bases (flat, pushed in, similar to omphalos bases) and having conical necks containing simple filters at the neck-body join. Three handles descend from mid-neck to high shoulder. The rim is plain. The fabric is fairly coarse, with common very fine pores, moderate fine voids rimmed yellow (limestone burnout?), and moderate medium-coarse white, red, and black grits. The buff fabric fires either pink or green (5Y 5/3 olive) with lighter surfaces (2.5Y 7/2 light gray); see Avissar and Stern (2005:fig. 45:43, Type II.44.41.42 Small Table Jars). The three-handled variant is mentioned as being present at Acre but is not shown. According to finds from Acre, it dates to the twelfth and thirteenth centuries C.E. Illustrations can be seen in the forthcoming volume on pottery from Acre (Stern in press: 13, fig. 14.17).

As with the Early Islamic group, the Crusader group includes three types of cooking vessels, one type of pan, and two types of deep vessels. The cooking pan (Figure 17.2: Basket 91766) is a shallow vessel with a flattish yet convex base, gently flaring sides, and a simple rim. It has two strap handles just under the rim and triangular ledge handles halfway down its exterior. The fabric has common fine pores, abundant medium to coarse black and white grits, and moderate mica, firing 2.5YR 4/8 red and on the exterior surface 10R 4/4 weak red. The exterior has been wet-smoothed, while the interior is glazed brown up to the rim. Similar types have been found in the Roslan Street excavations in Jaffa (Kletter 2004:fig. 16:18), at Yoqne'am (Avissar 2005:fig. 2.19:12), and at Paphos in Cyprus (Megaw 1971:fig. 2:7). Petrographic analysis may show this type to be another of the group imported from Lebanon to Jaffa. (Samples from Jaffa are slated for petrography to determine the place of manufacture.) For further references, see Avissar and Stern (2005:fig. 41:41–42, Type II.42.43). This type of glazed cooking pan dates from the second half of the twelfth to the first half of the thirteenth century C.E.

One sample of a "globular cooking pot with plain rim" is found in this group (Figure 17.2: Basket 3286). This vessel has a small globular body with a gently everted neck, a thickened slightly incurved rim, a carinated shoulder, and a flat loop handle. The fabric fires 2.5YR 3/3 dark reddish brown and has common fine to medium voids, abundant medium to coarse white sand, and sparse coarse black grits. The interior of the base of this vessel only has been treated with a brownish glaze. This type, dating from the second half of the twelfth to the first half of the thirteenth century C.E., has been found at Burj al-Ahmar (Pringle 1986:fig. 48:36-38) and Yoqne'am (Avissar 1996:fig. XIII.95:91), as well as at Acre. Chemical and petrographic analysis of the vessels

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found in Acre suggests a Levantine provenance in the vicinity of Beirut or perhaps Transjordan (Stern and Waksman 2003:175, fig. 173). Samples from Jaffa are scheduled for petrographic analysis as well. For further references, see Avissar and Stern (2005:fig. 39:35-36, Type II.32.31.33).

Finally, we have a single sample of a "deep cooking pot" (Figure 17.2: Basket 2535). This is a deep vessel with a thickened, everted gutter rim, two ledge handles, and two vertical handles (one is missing on this sample). The base of the vessel is missing but in this type is usually rounded. The fabric has common fine-medium white grits and fires 10R 4/6 red to 10R 4/3 weak red. In this case, the brown glaze has been applied to the entire vessel interior, even over the rim. This is later than the previous type, dating to the second half of the thirteenth century C.E. Chemical and petrographic analysis of the same types found in Acre suggests a Levantine provenance in the vicinity of Beirut or perhaps Transjordan (see also Stern 1997:fig. 5:27-33; Stern and Waksman 2003:175, fig. 173). Therefore, samples of this type from Jaffa are slated for petrographic analysis to try to determine provenance. For references see Avissar and Stern (2005:fig. 39:37, Type II.32.31.34).

After the Crusades

Although there are reports of the Mamluk sultan Baybars razing Jaffa in 1268, the port nevertheless remained active in the thirteenth, fourteenth, and fifteenth centuries for both pilgrimage and commerce (see Chapter 10; also Ashtor 1974:30, 1976:677-681; Buhl and Bosworth 2002; Darrag 1961:258, 270; Le Strange 1890:551). The Ganor Compound was not occupied at this time, perhaps an indication that the city had contracted in size. Illumination of Mamluk Jaffa by means of its ceramic material must therefore await publication of other excavation areas.

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Chapter 18

Crusader Period Archaeozoological Finds

from the Ganor Compound, Flea Market, and Clock Tower Square Excavations

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Israel Antiquities Authority

Recent IAA excavations at the Ganor Compound (Peilstöcker 2000; Peilstöcker and Burke 2009; also Chapter 14, this volume), the Flea Market (Peilstöcker et al. 2006), and Clock Tower Square (Peilstöcker 2009) permit an examination of archaeozoological remains from Jaffa that are exclusively dated to the Crusader period. The material, one of the largest assemblages of mammals and birds dating to this period that has been investigated so far, consists of animal bones from 621 baskets in 411 different loci.

The excavations in each of the areas of Jaffa include archaeozoological findings from many other periods, which will be analyzed in future final reports. As part of the present study, other Crusader sites with archaeozoological remains were sought for comparison with the material from Jaffa. However, this effort revealed that very few animal bones have been recovered from other Crusader-period settlements. For instance, from the Red Tower, in the period between 1191 and 1265 C.E., fewer than 300 animal bones were recovered (Cartledge 1986). Another site, Belmont Castle, shows that in Phase B, dated to the twelfth century, 666 animal bones were recovered. In Phase C, dated to the thirteenth to sixteenth century (a mix of Crusader, Mamluk, and Ottoman periods), there were 526 animal bones, which are not useful, however, because there is no way to separate the material belonging to each individual period (Croft 2000). From Acre, most of the Crusader archaeozoological remains were not stratigraphically separated because they were mixed (Eliezer Stern, personal communication, 2007). The last excavation done by Ofer Sion is now in the Haifa University laboratory waiting to be analyzed. The archaeozoological remains from the last excavations at Caesarea are also now undergoing analysis, but the archaeozoological material from the Caesarea excavations of the 1960s was not analyzed and cannot be located. By comparison to these potential datasets, the collection of animal bones from Jaffa includes more than 9,000 samples and is thus the largest available for conducting a detailed study. The excavation areas from which the animal bones from Crusader Jaffa were recovered include the excavations of Ganor Compound, the Flea Market (including Bet Eshel Street), Clock Tower Square, and the Rabbi Hanina, Rabbi Tanhum, Rabbi Pinhas, Rabbi Nahman, Ben Yair, and Oley Zion streets.

The domestic animal bones include the following species: sheep/goat (*Ovis aries/Capra hircus*), cattle (*Bos taurus*), pig (*Sus scrofa domestica*), horse (*Equus caballus*), ass (*Equus asinus*), dog (*Canis familiaris*), dromedary camel (*Camelus dromedaries*), cat (*Felis domestica*), chicken (*Gallus gallus domestica*), goose (*Anser anser*), and duck (*Anas platyehynchos*). The wild animal bones include the following species: wild pig (*Sus scrofa*), deer (*Cervus*), fallow deer (*Dama dama mesopotamica*), zebu (*Bos indicus*), European hedgehog (*Erinaceus europaeus*), rodent (*Rodentia*), mole (*Spalax ehrenbergi*), vulture

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(*Gyps fulves*), eagle (*Aquila*), stork (*Ciconia ciconia*), turtle (*Testudo*), sea turtle (*Cheloniidae*), crab (*Atergtis roseus*), sea bream (*Sparus aurata*), shark (*Selachii*), triggerfish (*Balistes coralinensis*), catfish (*Clarias gariepinus*), Nile perch (*Lates niloticus*), and several seashells: *Murex trunculus* (Linne'), *Glycymeris violacescens* (Lamark), *Trivia lathyrus* (Blaniville), *Pteria occa* (Reeve), *Cardium edule* (Linne'), *Pallum saburon* (Bruguie're), *Thais haemas* (Linne'), and *Tridacna.*

Methodology

The animal bones were identified according to Schmid (1972) and measured according to Van den Driesch (1976). The Latin names of the species follow Barash and Danin (1965), Dor (1987), and Darom and Tsurnamal (1992). The bone collection in the author's laboratory, including bones from many other archaeological excavations in Israel, was also consulted. In the first step, the archaeozoological remains were cleaned, identified, measured, and listed according to species. Separate distribution tables were created for domestic and wild animal bones. They are followed by tables listing the metapods in four groups: distal, proximal, right, and left. These tables function to estimate the minimum number of individuals (MNI) of every animal species.[1] The MNI tables establish the relationship between the species, especially between domesticated animals. They also help illustrate the economy of the site in the Crusader period by the percentage of every species present. In a final step, the available historical documents were analyzed for evidence of farm animals during the Crusader period to determine if these documents are corroborated by the archaeozoological finds from the excavations.

The Finds

The bones of domesticated species appear more frequently (97.93 percent) than the bones of wild species (2.07 percent). Table 18.1 shows the distribution of domestic animal bones. It shows that cattle bones occur most frequently, which indicates that cattle raising was a very important part of Jaffa's economy in the Crusader period.

Most of the wild animal bones are from wild pigs (Table 18.2). The three wild mammals—the wild pig, the fallow deer, and the deer—suggest that a fairly dense forest existed around Jaffa. The preferred food for wild pigs is the acorn, which suggests that around Jaffa there was substantial oak forest. The mole may date to a later period because it lives in underground burrows and may have dug down to earlier strata.

To determine the MNI of all the domestic and wild species represented by the collected samples from Jaffa during the Crusader period, the metapodial bones were divided into four categories: proximal, distal, right, and left (Table 18.7).

Conclusions

As Table 18.8 reveals, it seems that the Crusader inhabitants of Jaffa in the mid-thirteenth century had rich water sources. Both cattle and pigs need a great amount of water, and the estimates indicate large proportions of individuals of both cattle (23.68 percent) and pigs (22.37 percent). Together they comprise almost the half of the MNI of the domesticated animal remains at Jaffa during this period.

Thirteenth-century documents from the Crusader Kingdom of Jerusalem show that pork was a desired meat for Christians. Jean de Joinville, the chronicler of Louis IX of France during the latter's visit to the Holy Land, wrote that the knights kept their dietary customs as in their home countries (Joinville and Bowen-Wedgwood 1906). Mark Bloch writes that the French knights did not change their habits of eating large quantities, "preying a big tibia of a pig, [and] drinking a gallon of wine by tow gulps" (1964:294). From written evidence from Caesarea during the middle of the thirteenth century, it is evident that the knights consumed a lot of meat, including pork, and drank a lot of wine. Wine and meat were considered the most desirable elements of the diet in this period (Rosen 1996:35). Pigs were also imported from foreign countries, as attested in a list of foods from the citadel of Caesarea, where both pigs and sheep appear. In another document, kept by the petty commander under Hospitaller administration, was a list of victuals, included pig and fowl (perhaps chicken, goose, and duck). The birds came to Acre from a nearby village. The hospital under the management of the Hospitallers gave its guests fresh pork and beef. If guests could not eat this sort of meat, the host offered fowl. In Mahumria, north of Jerusalem, pigs were raised. It was also possible, according to precedent, that a herd of pigs was transported from Jaffa to Jerusalem. The import of pigs and birds from

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Table 18.1. Distribution of domestic animal bones.

Bones / Species	Sheep/Goat	Cattle	Horse	Ass	Pig	Camel	Dog	Cat	Hen/Cock	Goose	Duck	Total
Horn core	60	14										74
Cranium	74	145	3		17	2						241
Orbit	15	21	1		4							41
Maxilla	17	6			48	6	1					78
Mandibula	187	135	8	4	121	6	5	6				472
Hyoid	2	4		2								8
Molar	271	197	60	13	247	10	11	10				819
Premolar	184	64	6	6	124	7	6					397
Canin					78	1	5	2				86
Incisor	17	28	17	3	16	1	3					85
Scapula	158	123	8	4	43		1	1	1			339
Humerus	137	114	11		72	4	1	5	16			360
Coracoid									8		1	9
Clavicula											1	1
Radius	81	92	15	3	31	1	1	2	2			228
Ulna	54	60	9	5	24		2	2	9			165
Metacarpus	57	56	9	1	33		12	2				170
Os carpale	12	59	12	1	1							85
Carpometacarpus									2			2
Pelvis	153	127	5	3	20	6	2	1	2			319
Femur	83	96	13	2	3		4	3	15	1		220
Tibia	92	72	9	1	19	2	3	1				199
Tibiotarsus									16			16
Patella	2	14	4		3							23
Fibula	3	5	7	1								16
Calcaneus	37	54	5	3	5	2						106
Astragalus	25	59	7	3	22	1						117
Metatarsus	58	73	10		44		7	2				194
Os centrotarsus	1	28	9	4								42
Tarsometatarsus									7		1	8
Metapod	472	345	25	5	52	1	1	1	30		1	932
Phalanx I	53	174	24	8	4	5						268
Phalanx II	14	99	19	6	3							141
Phalanx III	5	57	17	2								81
Os pisiforme			1									1
Rudinentory			1									1
Accesory carpale			2									2
Sesanoid			1									1
Vertebra	12	22	1		4							39
Vertebra atlas	29	36	1		1		1					68
Vertebra axis	8	9					1					18
Vertebra cervical	7	9	3						1			20
Vertebra thoracic	42	94	4	2	3	2						147
Vertebra lumbar	233	266	21	2	10	6						538
Vertebra sacrum	2	6										8
Vertebra sternum									5			5
Vertebra coccyx	5	20			1							26
Costa	788	745	82	6	87	6	5	5	2			1726
Total	**3450**	**3528**	**430**	**90**	**1140**	**69**	**72**	**43**	**116**	**1**	**4**	**8943**
%	**38.58**	**39.45**	**4.81**	**1.00**	**12.75**	**0.77**	**0.80**	**0.48**	**1.30**	**0.01**	**0.05**	**100.00**

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Table 18.2. Distribution of wild mammal bones.

Bones / Species	Zebu	Fallow deer	Deer	Wild Pig	Hedgehog	*Rodentia*	Mole	Total
Maxilla				3		1		4
Mandibula				10	1			11
Molar				21	1	14		36
Premolar				11				11
Canin				9				9
Incisor				1				1
Scapula						1		1
Humerus			1	4				5
Radius				1				1
Metacarpus				1				1
Femur							1	1
Tibia			1	1			1	3
Metatarsus		1						1
Metapod				1			3	4
Calcaneus				1				1
Vertebra cervical	1							1
Costa				3				3
Total	**1**	**1**	**2**	**67**	**2**	**16**	**5**	**94**
%	**1.065**	**1.065**	**2.13**	**71.27**	**2.13**	**17.02**	**5.32**	**100.00**

Table 18.3. Distribution of wild bird bones.

Bones	Stork	Vulture	Eagle	Unidentified	Total
Scapula				1	1
Humerus		1		1	2
Radius	3				3
Ulna	4				4
Carpometacarpus	2				2
Tibiotarsus			1		1
Os centrotarsus	1				1
Metapod				8	8
Costa				2	2
Total	**10**	**1**	**1**	**12**	**24**
%	**41.66**	**4.17**	**4.17**	**50.00**	**100.00**

Table 18.4. Distribution of reptile and arthropod bones.

Bones	Turtle	Sea Turtle	Crab	Total
Shell box	4	1		5
Humerus	1			1
Plier			1	1
Total	**5**	**1**	**1**	**7**
%	**71.43**	**14.285**	**14.285**	**100.00**

Table 18.5. Distribution of fish bones.

Bones / Species	Sea Breams	Shark	Triggerfish	Nile Perch	Catfish	Unidentified Fish	Total
Cranium				1	4		5
Mandibula	2						2
Caltrum					2		2
Quadratum					1		1
Vertebra		4	8			1	13
Spine I			10				10
Total	**2**	**4**	**18**	**1**	**7**	**1**	**33**
%	**6.06**	**12.12**	**54.54**	**3.035**	**21.21**	**3.035**	**100.00**

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Table 18.6. Distribution of mollusk shells.

Species	*Murex trunculum (Linné)*	*Glycymeris violacescens (Lamarck)*	*Trivia latkyrus (Blainville)*	*Pteria occa (Reeve)*	*Cardium edule (Linné)*	*Phallum saburon (Bruguière)*	*Thais haemastoma (Linné)*	*Tridacna*	Total	Species
Total		18	3	1	3	1	1	1	1	29

Table 18.7. Proximal (P) and distal (D) of right (top no.) and left (bottom no.) metapodials from domesticated animals.

	Sheep/Goat	Cattle	Horse	Ass	Pig	Camel	Dog	Cat	Hen/Cock	Goose	Duck
Humerus	11	5	1		3		1	1	2		
P	4	13	4		2		1		5		
	47	36	1		32		1	2	5		
D	51	35	3		34		1	3	3		
Radius	23	22	3		16		1	2	1		
P	21	32	4		16			1			
	6	9	7		5			1	3		
D	2	9	2	2	3	1			1		
Ulna	22	17	6	1	13		1	2	6		
P	17	21	2	1	8				1		
	3	4	1						4		
D			1	1					1		
Coracoid									1		
P									5		1
									1		
D											1
Metacarpus	27	30	3	1	12		5		1		
P	34	22	1		12		2	1			
		5	1	1	9		1		2		
D		6	1		9		2	1			
Metacarpus II			1		1						
P											
Metacarpus III			1		1						
P					1						
			1		1						
D					1						
Metacarpus IV P			1		2						
					2						
					2						
D					2						
Os cessory carpale											
			2								
Femur	20	20	2	1	3		3		4		
P	18	13	1	1			1		4	1	
	13	13	2				2	1	6		
D	14	29	5				1		3		
Tibia/Tibiotarsus	12	12	2		1		2	1			
P	17	5	2		1			3			
	18	23	1		10	2	3		10		
D	15	16	3	1	6				10		
Calcaneus	14	20	1	1	3	1					
	17	18			2						
Astragalus	13	22	4	2	13	1	1				
	21	27	2		8						
Metatarsus	35	30			22						
P	22	19		1	13		2				
	9	11			13						
D	3	2			6		2				
Tarsometatarsus									5		
P									4		
									5		
D									1		
Patella		3									
		2			1						

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Table 18.8. MNI for domesticated species.

Species	*Sheep/Goat*	*Cattle*	*Horse*	*Ass*	*Pig*	*Camel*	*Dog*	*Cat*	*Hen/Cock*	*Goose*	*Duck*	Total
No.	51	36	7	2	34	2	5	3	10	1	1	152
%	33.55	23.68	4.60	1.31	22.37	1.31	3.29	2.93	6.58	0.67	0.67	100.00

Table 18.9. Proximal (P) and distal (D) of right (top no.) and left (bottom no.) metapodials from wild animal species.

Bones	Fallow Deer	Deer	Wild Pig	Stork	Vulture	Eagle	Turtle
Humerus							
P		2			1		1
			2				
D			2				1
Radius							
P			1	1			
D				2			
Ulna				1			
P				2			
Carpometacarpus				1			
P				1			
				1			
D							
Tibia/Tibiotarsus		1					
P						1	
			1				
D							
Calcaneus							
			1				
Metatarsus							
P	1						
D	1						

Table 18.10. MNI for wild species.

Zebu	*Fallow deer*	*Deer*	*Wild Pig*	*Hedgehog*	*Rodent*	*Mole*	*Stork*	*Vulture*	*Eagle*	*Turtle*	*Sea turtle*	*Crab*	*Sea breams*	*Shark*	*Trigger Fish*	*Cat Fish*	*Nile Perch*	Total
1	*1*	*2*	*2*	*1*	*1*	*1*	*2*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*10*	*2*	*1*	*31*

Europe to the Crusader kingdom established this pattern of consumption, and the Crusaders subsequently raised pigs and fowl themselves. The raising of pigs by Crusaders became a matter of cultural separation from Muslims, as was Crusader viticulture.

Cattle were used for meat and for plowing. A thirteenth-century painting on a map of Acre by Matthew Paris shows a bull pulling a plow (Prawer 1975:450; Vaughan 1958:pl. xvi Tafel-Thomas, II, 368–337). Jaffa was under control of an earl from 1253 to 1268, and Ashkelon was part of the Jaffa earldom until October 15, 1244 (Prawer 1971:2:299–300). It is this period that the excavations in Jaffa address. Only seven horses are attested (Table 18.8). This number may be attributed to the Battle of Hirbia (between Ashkelon and Gaza), when the Crusaders were defeated, all of Jaffa's knights died, and most of the horses were killed or captured. The French king left Jaffa in 1254 after he built its walls. Since no knights were left in Jaffa, the horses, which were a symbol of military status, also appear to have departed. The attestation of camels in Jaffa may suggest the presence of Arabian merchants, who came from far away, crossing

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deserts to bring goods to Jaffa (Prawer 1971:2:300). The battle got the name "second Hittin" after the big battle of Karniy Hittin in the north.

A number of wild animal species have been identified in the assemblage (Table 18.9 and Table 18.10). The appearance of the zebu is very interesting. It shows either that the area had substantial water to support them or, possibly, that an individual zebu was brought to Jaffa from the Yarkon River alive or for its meat. The fallow deer, the deer, and the wild pig suggest that the environment around Jaffa was forested with a considerable quantity of oak trees, which provide acorns, the favorite food for wild pigs.

The two storks (Table 18.3, Table 18.9, and Table 18.10) illustrate Jaffa's location along the birds' migration route between Europe and Africa, although another route follows the Jordan Valley to Egypt, crossing the Beer Sheba Valley. These routes have been demonstrated by the excavators of Tel Gerisa. However, the stork bones found at Gerisa date to the Late Bronze Age (ca. 1530–1200 B.C.E.; Sade 2001). Most of the fish and all the mollusks come from the Mediterranean Sea (Table 18.4, Table 18.5, and Table 18.6). Only the Nile perch is not a saltwater fish.

Unfortunately, there are few Crusader sites in Israel against which to compare the archaeozoological finds from Jaffa. One of the few sites is the Red Tower. There, domesticated examples of sheep and goat, cattle, pig, equid, camel, dog, and cat bones were excavated (Cartledge 1986:177). At Apollonia, north of Jaffa, sheep/goat, cattle, pig, ass, dog, chicken, raven, and turtle were attested (Israel Roll, personal communication, 2007). To the south of Jaffa, at Yavneh-Yam, where the author is still working on the archaeozoological remains, there is additional evidence dating to the Crusader period. There, bones of sheep/goat, cattle, pig, dog, chicken, goose, vulture, turtle, crab, and triggerfish were identified. At Belmont Castle, the species of Phase B were sheep/goat, cattle, and pig (Croft 2000:186).

Note

1. The discussion of the number of individual species (NISP) and the minimum number of individuals (MNI) necessary is found in Klein and Cruz-Uribe (1984:24–38). There are several ideas about how best to employ MNI and NISP. While both are used here, the NISP is used to show the distribution and the MNI is used in my conclusions concerning the economy of the site.

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Chapter 19

Mamluk-Period Skeletal Remains

from the Excavations on the Eastern Slopes of Jaffa

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The settlement of the area east and west of the upper city of Jaffa, later defined by the Ottoman city walls, came to an end when the Mamluks conquered and destroyed the city in 1268 (see Chapter 11). For a long period, the settled area was restricted to the upper city; the former densely settled area was used only for agriculture and burials. Only when the city had grown again, by the end of the nineteenth century (see Chapter 12), did the burial area move toward the north. New markets and governmental buildings were erected. Excavations in this area of the city, namely today's Flea Market Complex (Peilstöcker et al. 2006) and Clock Tower Square (Peilstöcker 2009), have revealed human skeletal remains dated to the Mamluk period in simple pit graves or simply constructed cist tombs. Although no finds were revealed in the tombs, their stratigraphic position, cutting into the latest Crusader layer and covered by late Ottoman agricultural installations, makes their dating certain.[1] All the burials had east-west orientations, with the heads of the deceased on the western side facing south. In particular in Clock Tower Square, these tombs were found in high density. However, due to the resistance of religious circles, only a limited number of them could be excavated. This article presents the anthropological data from the excavated tombs that could be examined during the excavations.

In most cases, the bones were well preserved, allowing for reliable age and sex estimations. The estimation of sex was based upon skull and pelvic morphology and measurements of the proximal head of the femur and distal end of the humerus (Bass 1987:82, 151, 204, and 219). The estimation of stature was made possible in three individuals (Table 19.1) by means of femoral length measurements (Feldesman et al. 1990). The estimation of age was based mostly upon tooth development and attrition stages (Hillson 1990:176–201). For individuals who were only partially excavated, only the minimum age was determined. The methodologies used for each individual were detailed in the Jaffa anthropological report (Nagar 2004). The bones were checked on-site, then sent for reburial immediately after their excavation. The circumstances imposed many physical and political constraints on the anthropological analysis, making a morphometric description of skulls impossible. Despite these constraints, the anthropological examination also included registration of epigenetic traits and visual checks for the presence of pathologies.

Burial Posture

The original burial postures of fourteen individuals could be determined (Table 19.1). All these individuals were similarly interred. The dead were laid in east-west orientations, heads in the west facing south. All were put on

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Table 19.1. Results of the anthropological examination of Mamluk burials.

Area	Locus	Skeletal Posture	Age (years)	Sex	Stature (cm)
Bet Eshel St.	3216	On right side, east-west orientation, head to west facing south	20–30	Male	?
	3217	On back, slightly turned right, east-west orientation, head to west	30–50	Male	173
	3234	On right side, east-west orientation, head to west	25–40	Male	?
	3240	On right side, east-west orientation, head to west	20–30	Male	176
	3507	On right side, east-west orientation, head to west	20–30	Male	?
	3556	On right side, east-west orientation, head to west facing south	20–30	Male	?
	3650	On right side, east-west orientation, head to west	20–25	Female	?
	3656	On right side, east-west orientation, head to west facing south	18–25	Male	165
	3657	On right side, east-west orientation, head to west	< 50	Male	?
	3658	On right side, east-west orientation, head to west	20–30	Male	?
	3779	On right side, east-west orientation, head to west facing south	20–30	Male	?
	3818	On right side, east-west orientation, head to west facing south	30–40	Male	?
	3819	On right side, east-west orientation, head to west	< 20	Male	?
	3820	East-west direction, head to west	< 20	Male	?
	T.110	Uncertain	20–30	?	?
	T.142	Uncertain	< 17	?	?
	T.145	Uncertain	20–60	Male	?
	T.147	Uncertain	< 20	Male	?
	T.170	Uncertain	< 15	?	?
	T.173	Uncertain	10–11	?	?
	T.184	Uncertain	20–25	Male	?
	T.200	Uncertain	< 16	?	?
	T.206	Uncertain	< 20	?	?
	T.462	Uncertain	20–25	?	?
	L.145	Uncertain	18–20	Male	?
	L.404	Uncertain	< 15	?	?
	L.627	Uncertain	< 20	?	?
	L.647	Uncertain	20–30	?	?
	L.999	Uncertain	15–20	?	?
Clock Tower	CS 110	Uncertain	15–20	?	?
	CS 136	Uncertain	< 20	Male	?
	CS 143	Uncertain	18–21	Male	?
	CS 173	Uncertain	11–13	?	?
	CS 275	Uncertain	< 15	?	?
	CS 291	Uncertain	< 20	Male	?
	CS 313	Uncertain	10–15	?	?
	CS 349	Uncertain	40	?	?
	CS 410	Uncertain	< 15	?	?

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Table 19.2. Relative frequencies of epigenetic traits in the sample.

	Trait	Sample	Trait Expression	Frequency (%)
Skull	Metopic suture	11	2	18.2
	Supraorbital foramen	11	2	18
	Supratrochlear notch	6	3	50
	Parietal foramen	4	4	100
	Accessory infraorbital foramen	11	0	0
	Frontotemporal articulation	7	0	0
	Foramen of Huschke	16	0	0
	Condylar canal	9	1	11
	Ossicle at lambda	9	0	0
	Inca bone	11	0	0
Jaws	Mylohyoid bridge	15	0	0
	Mandibular torus	13	0	0
	Mandible, M3 agenesis	12	1	8.3
	Maxilla, M3 agenesis	12	0	0
Postcranium	Humerus, septal apperture	13	0	0
	Suprascapular foramen	6	0	0
	Tibia, squatting facet	10	4	40
	Atlas, posterior bridge	14	0	0
	Atlas, lateral bridge	13	0	0
	Atlas, spina bifida	8	0	0
	Atlas, incomplete fusion of the transverse process foramen	12	0	0
	Axis, incomplete fusion of the transverse process foramen	12	0	0
	Sacrum, spina bifida	8	0	0

their right sides, except for one individual (L.3217) who was placed on his back. This burial practice is characteristic of Islamic burials and is known from all other Early Islamic– and Mamluk-period cemeteries attributed to Islamic populations (e.g., Gorzalczany 2004; Peilstöcker 2000a; Yannai and Nagar forthcoming).

Demography

The skeletal remains represented at least 38 individuals. The results of their age and sex estimations are summarized in Table 19.1. The estimation of sex was made possible in 60 percent of the adult individuals.

Skeletal Morphology

The stature of only three male individuals could be estimated. Their average height was 171.3 cm, higher than that reported for males in earlier periods (e.g., Roman-Byzantine; Nagar 1999:63). A battery of 23 epigenetic traits was recorded. Bilateral traits were counted separately for each side (methodology following Hauser et al. 1989). The results are summarized in Table 19.2. No exceptional frequencies were noticed. Although the sample size was too small for further anthropological analysis of this specific population, the results were incorporated into the relevant IAA data bank for future studies.

Pathology

The presence of cribra orbitalia (porosity of the orbital roof) and porotic hyperostosis (porosity of the skull vault) was checked. Cribra orbitalia was not found in 9 available cases; porotic hyperostosis was not found in 11 available cases. The frequency of cribra orbitalia

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in adjacent sites along the central coast of Israel was relatively high in earlier periods (Nagar and Eshed forthcoming). Therefore, although the available sample is small, not finding the condition in 11 individuals who were checked might indicate its relative rareness in this population.

The presence of fractures was also systematically checked. Traumatic lesions were not found in 23 tibiae, 16 fibulae, 19 femora, and 18 humeri of adult individuals.

Summary and Conclusions

The skeletal remains from the Jaffa burials represent at least 38 individuals. All the dead were laid with an east-west orientation, heads in the west facing south, typical practice of Islamic burial. The sample included 35 adults and only three children. The adult population included at least 19 males and only one female. Although the sample is too small to reliably represent the distribution of age and sex in the overall Jaffa population during the Mamluk period, the presence of only one female and three children in this sample is abnormal. This abnormal demography of the skeletal sample might be the result of internal cemetery arrangement, based upon the age and sex of the dead; might be the result of a tragic event (e.g., battle) in which mostly adult males were killed; or might reflect the actual age and sex distribution of the small population living in Jaffa after the Mamluk destruction of the city. The relatively wide geographic distribution of the graves, which were arbitrarily sampled, refutes the first possibility, and the relatively low frequency of pathologies makes the "tragic event" explanation a probable one.

Notes

1. It needs to be mentioned that in all excavations carried out in Jaffa in recent years, in the area east and northeast of the old city, human bones were sporadically found, although not in clear burial contexts. So far, except for the Mamluk period, burial activities in this area are attested only for the Late Bronze Age (Peilstöcker 2000b; see also Chapter 15) and the Roman period (Peilstöcker and Burke 2009; see also Chapter 14).

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Chapter 20

Two Monumental Doorjambs from Ottoman Jaffa:

A Historical Reconstruction

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Two monumental granite doorjambs were accidentally discovered under a modern pavement at the center of Jaffa as a new underground infrastructure was being laid in the summer of 2006 (Figure 20.1; Arbel and Eder'i 2008).[1] Historical documents suggest that the doorjambs were not originally from Jaffa but were imported from another site, possibly Caesarea, by the Ottoman governor Mohammed Abu Nabbut in the early nineteenth century. Intended to adorn one of Abu Nabbut's public buildings, possibly the city gate, the doorjambs were discharged after one of the two sustained irreparable damage. This article presents the evidence for the connection between the doorjambs and Abu Nabbut's projects while addressing the historical background for the absence of large-scale architectural elements in numerous archaeological excavations conducted at Jaffa in recent decades.

Discovery and Description

The doorjambs were found in a layer of mixed fill under the northern sidewalk of modern Roslan Street in front of the ornate fountain known as Sabīl Suleiman (Figure 20.2). The fountain is attached to the southern perimeter wall of the courtyard of the Mahmudiyya Mosque (see Kana'an 2001a), opposite the historical city gate. There was no prior indication of the presence of the doorjambs in this location.

Between the fill and the modern asphalt, sidewalk tiles of an earlier stone pavement, dated to the late Ottoman or Mandate period, were discovered. The few gray Gaza Ware sherds found in the fill below the tiles date to the late nineteenth or early twentieth century. Pottery and occupation layers of the late Ottoman period were also unearthed in adjacent excavations (Kletter 2004:194–197; Peilstöcker et al. 2006; Volinsky and Arbel in press). The sherds provide only the latest possible date for the deposit of the doorjambs. Finds from the layer below the elements were needed to determine the actual date of the deposit, but as no excavation occurred, no such data could be obtained.

Each doorjamb was hewn out of a single block of red granite (IAA Registration nos. 2006-1481 and 2006-1482). One is perfectly preserved, measuring 3.77 m in height and 1.05 m in width (Figure 20.3). It is subdivided into three parts along its length: a rectangular straight-angled pilaster; a narrow, 0.22-m-deep central depression; and an attached circular column. The column measures 2.98 m in length and 0.22 m in diameter. Its top end is 0.5 m shorter than the corresponding end of the pilaster, while the difference between the bottom ends of each part is 0.25 m. The column probably stood on a separate pedestal and held a capital that supported an arch or lintel. The opposite ends of both pilaster and column are slightly

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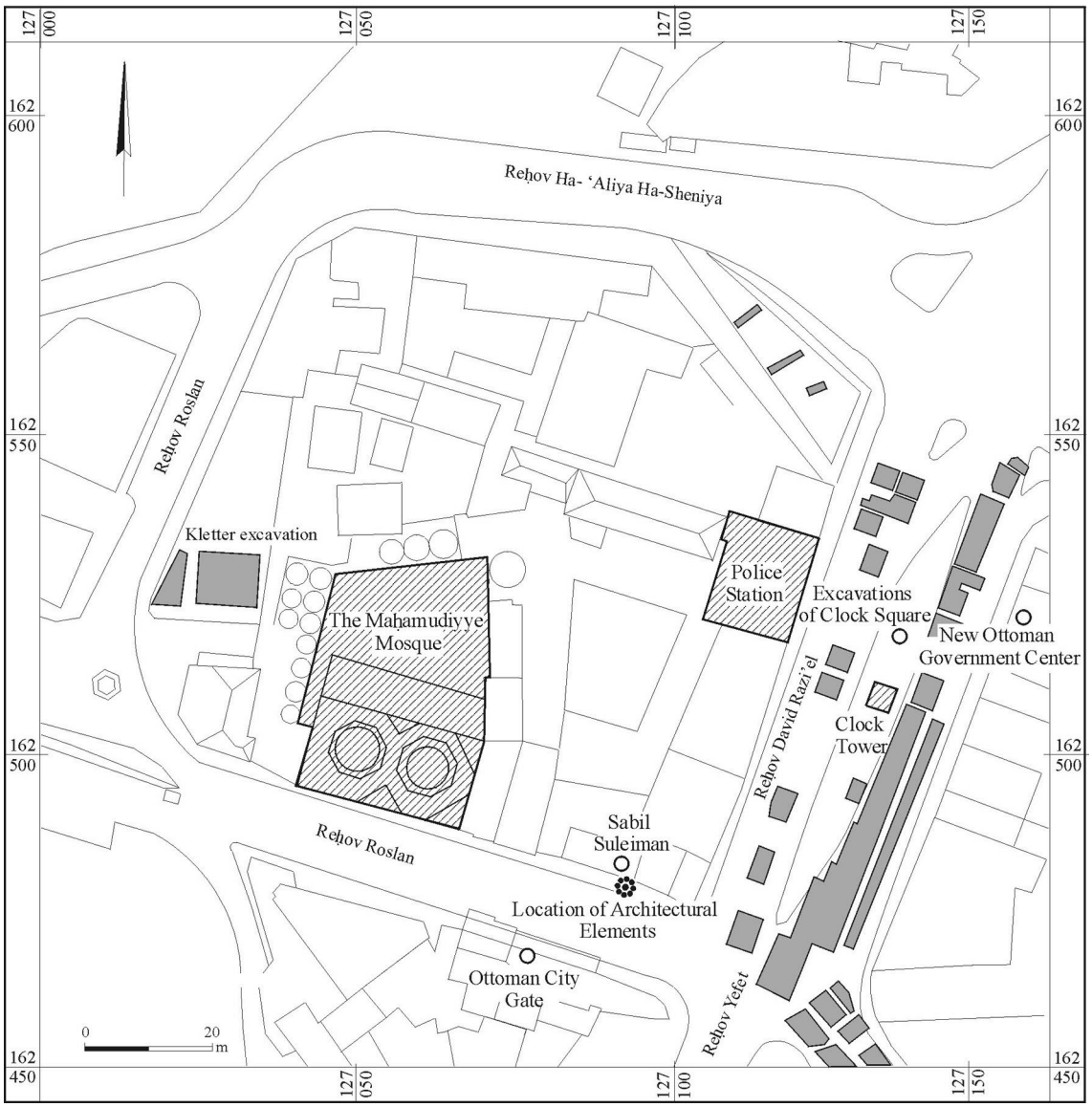

Figure 20.1. Location of discovery of the doorjambs. The darkened areas represent prior archaeological salvage projects carried out in the surroundings. *Plan courtesy of the IAA.*

flared, widening them by 7 cm. A thin and shallow incision is engraved across the base of each flare. No remains of paint or plaster were detected, and the flaring and parallel incisions seem to be the only decoration. The central depression lacks both flaring and incisions.

The second doorjamb is partly preserved, with the column and one end missing (Figure 20.4). The surviving element measures 2.5 m in length and 0.85 m in width. The relative dimensions and style of the pilaster and central depression match those of the fully preserved doorjamb. Each probably stood at opposite sides of an entryway. The unique style of the doorjambs and the lack of archaeological context prevent precise association with any particular period.

Their exact architectural position in the original building is difficult to determine. The most telling hints are the absence of flaring and incisions in the opposite ends of otherwise meticulously fashioned central depressions, and the rough backs of the elements, which must have been embedded in the adjacent wall and were not visible. In our reconstruction, the facades of the elements were placed perpendicularly to the wall into which they were fitted, and the central depressions held the massive wooden jambs into which the hinges and the rest of the actual door mechanisms were placed. In that case, the pilaster and the column would have served two different spaces at each side of the entrance that the door frames flanked (Figure 20.5). Without local archaeological

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Figure 20.2. Sabīl Suleiman; the doorjambs were found under the sidewalk at its front. *Photo by Yoav Arbel.*

Figure 20.3. Doorjamb. *Photo by Yoav Arbel.*

Figure 20.4. Doorjamb. *Photo by Yoav Arbel.*

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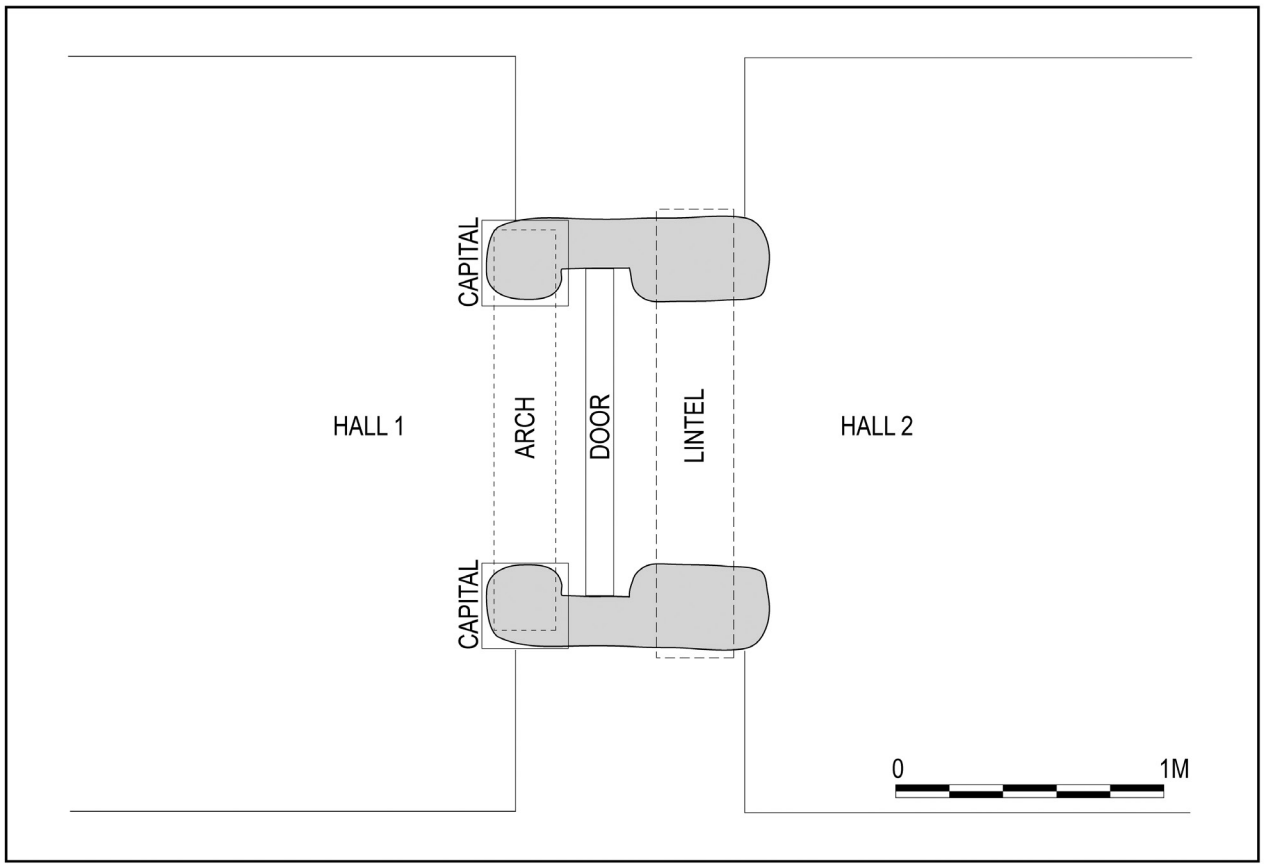

Figure 20.5. Suggested reconstruction of the monumental doorjambs in their original positions. *Plan by Jennifer Dillon.*

context and in the absence of comparative elements in stratigraphic layers from other sites, no date could be determined for the doorjambs. Their date can be hypothesized, therefore, only on the basis of reconstruction of the historical circumstances that led to their final deposition.

Historical Perspective

The appearance of the doorjambs is inconsistent with the striking scarcity of large architectural elements from the numerous excavations that have taken place at various sites in and around Jaffa since the mid-twentieth century. No granite elements have been found, while marble elements consist of small or medium-sized columns, capitals, and bases, many of them broken. Only fragments of larger elements were discovered (Figure 20.6 and Figure 20.7).

We are faced with three questions. Was Jaffa of sufficient importance to have had monumental architecture? If it was, why have more architectural elements not been found? And how can the presence of the doorjambs be explained? The probability that Jaffa contained luxurious public buildings and private residences with invested decorative architecture derives from the town's historical importance as an international harbor and as a regional political and commercial center. During the Hellenistic and Hasmonean periods, Jaffa served as an important commercial maritime link to Hellenistic Egypt, Phoenicia, Asia Minor, and other Mediterranean destinations (1 Macc 10:76, 12:33–34, 13:11, 14:5; see also Chapter 8). The monogram of Jaffa on Ptolemaic coins from the third century B.C.E. indicates that the city was entitled to mint its own currency, evidence of its status in the commercial and administrative system. The anchor, a common motif on Hasmonean coins, probably symbolized the Jewish royal dynasty's control of maritime trade from Jaffa (Meshorer 1967:pl. II:8, 1997:37). Following its conquest by the Romans in 63 B.C.E., Jaffa was allowed self-government. Despite the role played by Jaffa's Jewish sailors during the First Revolt, which led to the city's conquest and destruction, the Romans

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Figure 20.6. Capital from the excavations at the Flea Market and Ganor Compound. *Photo by Yoav Arbel.*

Figure 20.7. Capital from the excavations at the Flea Market and Ganor Compound. *Photo by Yoav Arbel.*

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allowed its reconstruction, probably recognizing its importance to the local economic system. A locally struck coin of Emperor Elagabalus (218–222 C.E.) indicates the operation of an imperial mint in Jaffa during the later Roman period (Hendin 1976:111). The miracles performed here by the apostle Peter (Acts 9:36–42, 10:1–23) attracted Christian pilgrims to Jaffa beginning in the Byzantine period, and the town benefited from the related income. Funerary data from cemeteries in the modern Andromeda Compound south of the mound (Avner-Levi 1996:80) and at neighboring Abu Kabir (Ajami 2006; Kaplan 1966, 1972:92; Kaplan and Ritter-Kaplan 1993:46–47; Levy 1988–1989:176–177, 1993; Tolkowsky 1924:173) and architectural artifacts from tombs found out of context (Pinkerfeld 1955)reflect a vibrant Roman-Byzantine urban population who made their living by fishing, craftsmanship, agriculture, and trade, monitored by local officials (Kaplan 1962:150; Kaplan and Ritter-Kaplan 1993:659).[2] Remains of public buildings adorned with mosaic floors from the Byzantine period were discovered at the eastern margins of the mound (Peilstöcker 2000).

Jaffa experienced some decline during the Early Islamic period, but as the port of the provincial capital Ramla, it retained some status (Tolkowsky 1924:78–79, 122, n. 121). Under the Crusaders, Jaffa served as the port of entry nearest to the capital at Jerusalem, and its vibrancy only three years after the Frankish takeover is illustrated in the report of more than 30 large ships carrying pilgrims and goods at its port during a disastrous storm (October 13, 1102; Saewulf 1896:6–8). In the next 150 years, Jaffa was the theater of battles between Christian and Muslim forces and endured several sieges. King Louis IX arrived in Jaffa in 1250 and invested sumptuous funds in reconstruction of the local fortifications and the erection of religious buildings (Tolkowsky 1924:92). Eighteen years later, Crusader Jaffa was conquered by the Mamluk sultan Baybars and was left in ruins by royal decree for nearly 400 years.[3]

During various phases of its existence, Jaffa was a coastal trading center of considerable significance, and as such Jaffa possessed its share of public structures and private residences, planned and adorned according to the prevailing styles during those periods. Hints of this trend are also found in the fragmentary remains of marble capitals and columns found in the various excavations, in granite stones inserted in the surviving core of the southern Ottoman wall of Jaffa, and in chance discoveries of isolated artifacts in the immediate vicinity of the ancient city (Figures 20.6 and 20.7).[4] Yet considerably more material evidence of the town's decorative architecture should have emerged. The events associated with the Mamluk conquest may explain its disappearance.

The Pillaging of Jaffa's Architectural Elements

The following excerpts, taken from works by the medieval authors Ibn al-Furat and Taki Eddin Ahmed Makrizi respectively, describe the conquest of Jaffa by the Mamluk sultan Baybars. Of particular interest to this article are the reports of the sacking of Jaffa's decorative architectural elements:

> On the twentieth of Jumada II of this year (8 March 1268), the Sultan mounted and rode to Jaffa, and before its people knew what was happening, it was surrounded by troops. . . . The Sultan kept the place from being sacked, and he came up to the citadel and calmed the people there, arranging for them to be sent to a place of safety. . . . He then began to have the citadel demolished. It was all pulled down and timbers and marble slabs found there were taken and loaded on a ship to Cairo [Lyons and Lyons 1971:108].

> On the twentieth day of the month, he left [Aoudja] and turned to Jaffa, where he laid a siege, and conquered it that same day. The citadel (fort) also fell under his power. He made all inhabitants leave that place and destroyed it completely. The wood and the marble elements were loaded and transported to Cairo. There, the wood elements were employed in making the *maksoura* of the mosque Daheri, located in the quarter of Hosainiah; and with the marbles the mihrab was constructed. The sultan had many mosques erected in that region [Makrizi 1845].

Parts of the Mamluk al-Zahir Mosque still stand (Figure 20.8), and some of its integrated architectural elements may have been pillaged from Jaffa (Parker and Sabin 1981:62–63; Williams 2002:224). Since Jaffa was never a big city, even in its heyday, the volume of monumental or semi-monumental architecture there was probably limited. Dismantling most if not all the local architectural elements and shipping them south to Egypt would have been a viable option for the Mamluks, who fully controlled maritime traffic to Cairo.

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Figure 20.8. Marble pillars of possible Jaffa origin at the al-Zahir Mosque, Cairo. *Photo courtesy of Martyn Smith.*

Fortunes Reversed: Recovery, Siege, and Reconstruction

For nearly four centuries, Jaffa was left in ruins, with only its port operating under the supervision of a local garrison stationed in two commanding forts (see Chapter 11). The town began to recover in the middle of the seventeenth century and in time reestablished itself as a port town and gateway to pilgrims and commerce. Yet its resurgence had the downside of once more making it the center of regional struggles, now featuring ambitious Ottoman officials as well as foreign aggressors. Several calamitous siege episodes took place in the late eighteenth and early nineteenth century, culminating in the bloody conquests by Mohammed Bey "Abu al-Dahab" on May 19, 1776, and by Napoleon Bonaparte on March 6, 1799. Repelling Napoleon by the walls of Acre marked the highlight of the career of the powerful provincial Ottoman governor Ahmad al-Jazaar Pasha, who nonetheless continued to face active opposition within his own southern domains. In the decade after Napoleon's retreat, Jaffa endured two additional sieges (1800–1803, 1807) as Jazzar and his successor, Suleiman Pasha, battled the forces of the rogue Ottoman official Abu Marq. The second and final reconquest of Jaffa by Suleiman's army took place under the command of Mohammed Agha, the appointed governor of the Gaza district between 1803 and 1819. Abu Marq fled, leaving Mohammed Agha to establish his seat of government in Jaffa, where he was soon to build a reputation as the most influential governor of Jaffa during the four centuries of Ottoman rule.

Mohammed Agha, better known as Abu Nabbut ("father of the mace"), owes his pseudonym to a club that he apparently brandished while touring Jaffa and with which he personally punished wrongdoers.[5] A Circacian or Georgian by origin, he was born in the Caucasus around 1770. He arrived as a Mamluk (soldier-slave) in Istanbul, where he was sold to Ahmad Jazaar Pasha, the governor of the province of Sidon. At the governmental seat in Acre, he distinguished himself as an effective and trustworthy official, enjoying the confidence of both Jazaar and Suleiman, who succeeded him in 1804. Abu Nabbut's military exploits against Abu Marq at Jaffa and his subsequent governorship marked a turning point in both his own career and in the history of the town.

Ruthless reputation notwithstanding, Abu Nabbut's term was highly beneficial to Jaffa and its population. He clamped down on corruption and battled Bedouin banditry. His judgment was stern but apparently fair. Abu Nabbut was also an avid builder, and the severe damages repeatedly visited upon Jaffa during Napoleon's campaign and Abu Marq's insurrections gave him ample opportunities to put his ambitions in this field into practice. His projects included a new government building, a central mosque, markets, public fountains, schools, and, most prominently, the restoration of Jaffa's fortifications.[6] Fortification work began shortly after Napoleon's retreat and before Abu Nabbut's appointment in the local government with the assistance of British admiral Sidney Smith, who had played a leading role in repelling Napoleon at Acre but was interrupted by the Abu Marq disturbances.

Having consolidated his rule, Abu Nabbut took advantage of his close alliance with Suleiman to resume the building operations (Figure 20.9). As specified below, the circumstances in which the monumental doorjambs reached the spot where they were found are in all

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Figure 20.9. Corner of the northeastern bastion of early-nineteenth-century fortifications within the Ottoman Qishle. *Photo by Yoav Arbel.*

likelihood directly related to these construction projects. Under Abu Nabbut's firm and effective rule, Jaffa recovered from decades of ruinous violence and chaos and became a commercial center, attractive to traders and settlers. Yet Abu Nabbut had greater goals, including a superior political office at Acre or to otherwise extend autonomous rule; his methods for furthering his goals were imaginative. Planning to benefit from both the cash and the prestige, he actively and enthusiastically supported the eccentric Lady Hester Lucy Stanhope's futile expedition to find a treasure allegedly buried in Ashkelon. Later he lavishly entertained a visiting top Ottoman official, hoping to recruit him as an influential ally in Istanbul. Yet his rivals in Acre, headed by Haim Farhi, a senior Jewish vizier in the courts of both Jazaar and Suleiman, had the upper hand. In 1819 their pressure on Suleiman eventually resulted in the ousting of the overambitious governor of Jaffa, who spent the remaining years of his life wandering between various positions in the Ottoman Empire. Abu Nabbut's colorful career ended in 1827 with his death at Diyarbakır in eastern Anatolia.

The Importation of Classical Architectural Elements

Five and a half centuries after the stripping of Jaffa's decorative architectural elements, they were replaced by Abu Nabbut with artifacts imported from the ruins of long-abandoned ancient coastal sites. The main source was the former Roman, Byzantine, and Crusader city of Caesarea, 63 km north of Jaffa. Charles Irby and James Mangles, two British Royal Navy officers visiting the country at that time, witnessed the project (Ben-Arieh 2007:52–54):

> Jaffa, situated on the sea coast, is a small fortified town; the fortifications were in a very ruinous state, but [Abu Nabbut] was busily employed in repairing them. Vessels were arriving from the north daily, with stones . . . and he himself was in constant attendance on the operation [Irby and Mangles 1823:186]Irby and Mangles 1823:186.

Work progressed efficiently after the characteristically dynamic fashion of the governor. Abu Nabbut probably imported more than just cut building stones. The fortifications were dismantled and have mostly disappeared,

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but other surviving structures of Abu Nabbut's time employed various decorative elements of classical origin. Some were incorporated into decorative fountains (*asbila*), such as the one named after Suleiman, built in 1809, which may still be visited at the outer southern wall of the Mahmudiyya Mosque in central Jaffa. Most artifacts are within the grounds of the mosque itself, which was erected in 1812 on the site of a smaller earlier building (Kana'an 2001b; Kark 1990:19). Its western courtyard is surrounded by arcades supported by columns, several of which rest on upside-down capitals. Two of the columns at the side bays of the western arcades are made of single red granite blocks (Figure 20.10). Other than these two columns, the only other large granite elements documented at Jaffa are a gray granite column presently sunk in the yard of the neighboring Clock Tower Square (Figure 20.11) and another column recently spotted on a waste-strewn beach south of the mound (Figure 20.12).

From the above summary, two points merit emphasizing. First, the presence of these doorjambs stands in stark contrast to the scarcity of large decorative elements among Jaffa's artifacts and corresponds to the historical reports of the extensive pillaging of architectural elements by Baybars. Second, the doorjambs were found at a shallow level near a large mosque and an ornate fountain built by a governor who is known to have imported large quantities of architectural materials from coastal ruins elsewhere for use in his projects. It is therefore highly probable that the elements reached Jaffa as part of large-scale reconstruction projects conducted by Abu Nabbut in the early nineteenth century (Kark 1990:19–20).

Figure 20.10. A granite column in secondary use in the arcade of Abu Nabbut's Mahmudiyya Mosque. *Photo by Yoav Arbel.*

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Figure 20.11. The granite column in Clock Tower Square. *Photo by Yoav Arbel.*

The Building to Which the Doorjambs Belonged

While the structure whose entrance the doorjambs were intended to grace remains unknown, there is a limited number of possible candidates. The mosque is the most obvious candidate, although its public entrances do not appear to have been high enough to accommodate these doors. The two fountains built by Abu Nabbut, of course, did not accommodate such doors. Abu Nabbut's market, which stretched over much of the modern waterfront

Figure 20.12. Granite column found among debris on the southern coast. *Photo by Yoav Arbel.*

promenade, was destroyed nearly a century later by the Ottoman governor Hasan Bey (Kark 1990:49). While it is theoretically possible that the doorjambs were meant to provide an impressive entrance to the commercial complex, this is unlikely. Such extravagance would have been rare, if not unique, in the architecture of such markets. Additionally, the market is considerably closer to the sea than the place where the doorjambs were found, and there would be no reason to transport them from the market to the place where they were left. We are left, therefore, with the fortifications or, more precisely, with the complex main gate that allowed traffic in and out of the fortified city (Figure 20.13).[7]

The main entrance was reached over a moat and connected to a fortified yard (Figure 20.14), to the right of which was a large decorated fountain, the Sabīl Suleiman. The yard was a vibrant commercial and social meeting point, as was common in premodern cities. An additional entrance to the south, flanked by four turrets and located opposite the fountain, led inside the town. This inner gate is the only surviving part of the original structure. It is presently cluttered with modern additions, but its general outline and dimensions can still be traced, and parts of two of the turrets remain within a small inner yard and within a nearby shop.

Other than the elimination of the other potential destinations, several factors indicate that the doorjambs were originally intended to be incorporated into the city gate. First is the location of discovery. Considering the substantial size and weight of the elements, it is unlikely that they were moved other than to be installed near the location

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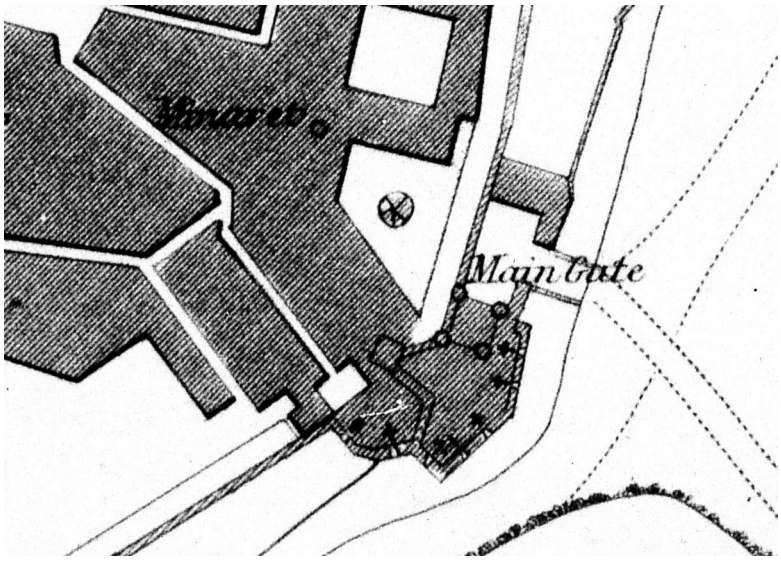

Figure 20.13. Detail of 1842 Skyring map (see Figure 13.13) showing "main gate" of Jaffa and with cannon positions marked as crosses. The passage across the outer moat appears on the right.

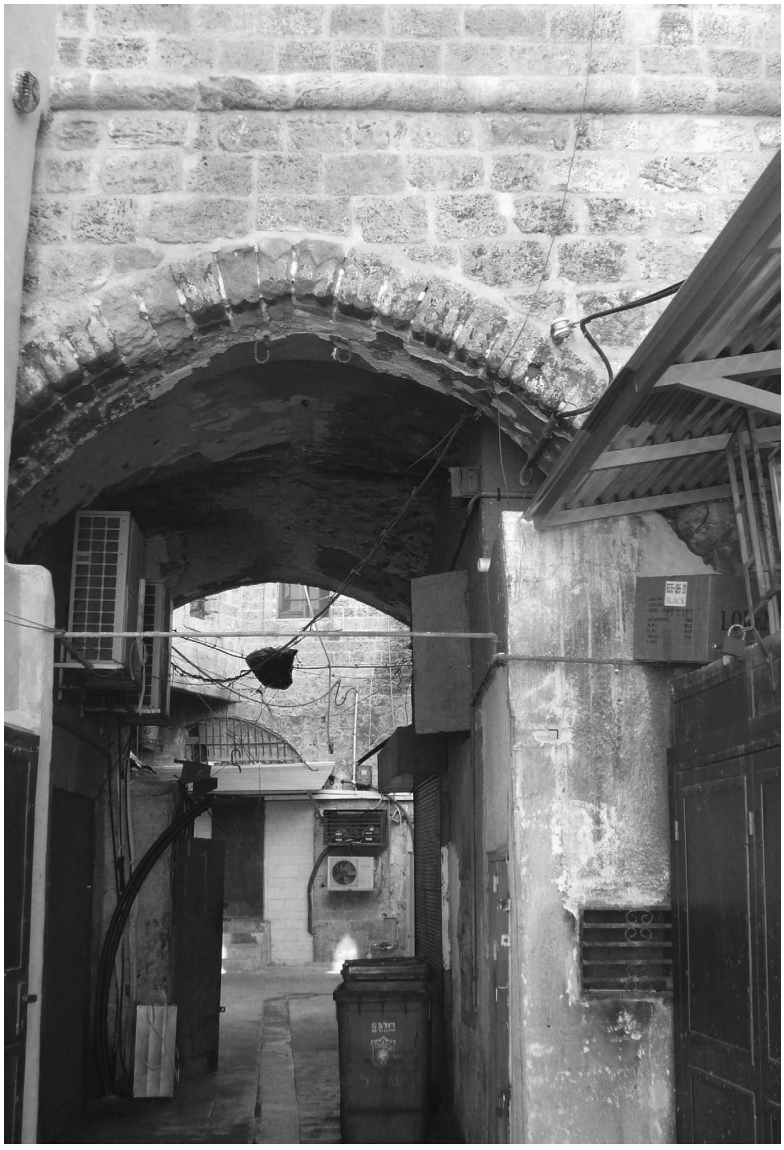

Figure 20.14. The archway of the main gate as it appears today. *Photo by Yoav Arbel.*

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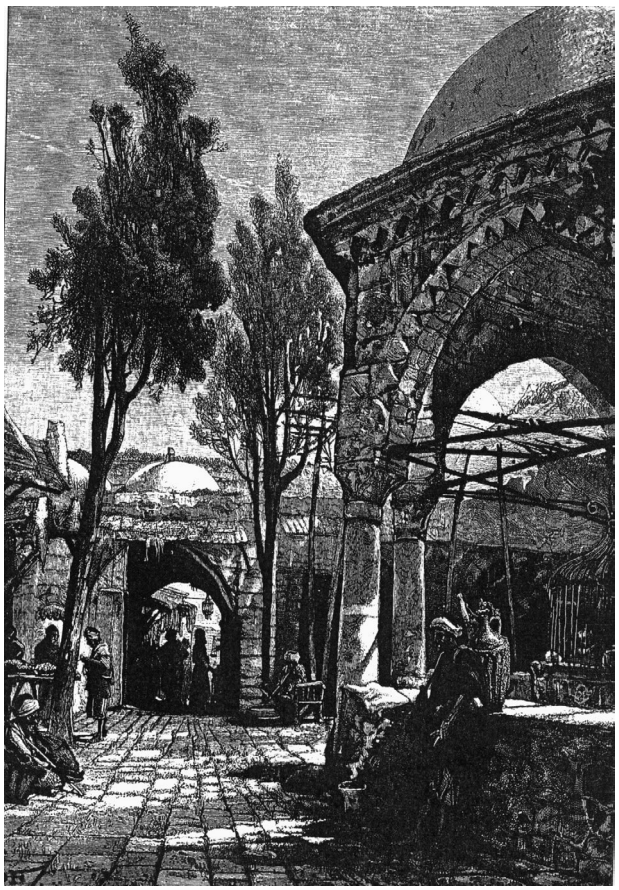

Figure 20.15. Large element resembling the broken doorjamb used in a narrowed archway in a drawing by Charles W. Wilson (1881:137). The element can be seen at the archway's left side, behind the figure standing to the right of the tree. Notice that the second jamb of the gate is built of a row of building stones.

where they were discovered. Excluding the mosque and fountain, the gate is the only structure of Abu Nabbut nearby. The second factor is that all of Abu Nabbut's surviving structures are lavishly adorned. It is unlikely that the gate, the main entryway to Abu Nabbut's official seat of government and a central meeting and business place for both locals and visitors, would have been left plain. In addition, the gates of Jerusalem bear testimony to the long historical tradition of aesthetic investment in city gates. The final factor is the length of the doorjamb that was left intact, which seems to roughly correspond to the height of the gate. Unfortunately, the modern obstructions at the face of the surviving inner gate prevented our obtaining its precise dimensions.

It should also be noted that the British explorer James Silk Buckingham, who visited Jaffa during Abu Nabbut's reign and saw the gate structure shortly after its completion (Ben-Arieh 2007:45), reported that there were "six fragments of gray granite columns" in the adjacent yard (Buckingham 1822:146). The gray granite column by the present Clock Tower mentioned above is likely to have been one of the columns seen by Buckingham. Other columns were uncovered a few years ago during development work near the gate but were reburied before they could be extracted.[8] The presence of discarded granite columns scattered near the monumental gate when the complex was still new suggests the following reconstruction: Abu Nabbut planned an impressive gate complex in which imported architectural artifacts made of granite were embedded. The doorjambs probably flanked the main entrance. An accident may have caused the breaking of one of the doorjambs, perhaps while the very heavy element was being put in place. The remaining doorjamb, although intact, would have been useless alone. The whole plan of the structure was probably altered, resulting in the removal of some of the other granite columns, which may have been part of an architectural program along with the granite doorjamb. Large enough to obstruct traffic, the doorjambs were buried in the nearest convenient location.

A drawing dated to the late nineteenth century shows a large, unusual element apparently used for narrowing an arched passageway; (Figure 20.15). Its end seems to flare in a similar fashion to the doorjambs, and like them it is subdivided along its length, with a thinner part that may have been the central depression. By its appearance and its proportions compared to the gate and the figures drawn next to it, the element in the drawing may be conceivably associated with the partially preserved doorjamb. Following this option, the elements may have been used in secondary construction throughout the 1800s and buried during the extensive development conducted by the Ottomans in this part of Jaffa in the late nineteenth century and the two early decades of the twentieth century.

Conclusion

Much about the monumental doorjambs, their origins, and their final voyage remains unknown. Unfortunately, the architectural elements were not discovered in the course of a systematic archaeological excavation. Yet these unique and impressive artifacts cannot be simply dismissed as yet another out-of-context discovery, since there is sufficient circumstantial evidence to suggest a viable, if hypothetical, reconstruction based on the combined analysis of historical data and archaeological evidence.

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Jaffa was a regional center in both the Classical and Medieval periods, possessing public buildings and, of course, luxurious private residences. Yet dozens of excavations have yielded next to no decorative architectural elements, and there is no reason to distrust the medieval historical chronicles that explicitly describe their dismantling and exportation following the Mamluk conquest. It is unlikely that the two imposing doorjambs would have been neglected when most other elements were taken. Had the breaking of one of the doorjambs prevented their relocation to Egypt, no one would have bothered to bury them in an orderly manner in a city that was to be left in ruins by royal decree.

On the other hand, we have several eloquent testimonies from reliable sources from the past two centuries describing major operations to import building stones from Classical and Crusader sites by a governor whose personal ambitions and keen interest in architecture are evident in Jaffa's most conspicuous Ottoman buildings. An association of the doorjambs with Abu Nabbut's project receives additional support from the location of their discovery, between the Sabīl Suleiman, the mosque, and the city gate, three of the chief structures erected during his term. The comparable dimensions of the doorjambs and the gate's height are not coincidental. Finally, the depth at which the elements were found corresponds to the estimated sub-street level in Abu Nabbut's day.

Urban archaeology rarely allows researchers the privilege of excavating exactly where they would like to address the questions for which they seek answers. However, the frequent necessity of infrastructure maintenance and renovation ensures that chance and out-of-context discoveries will continue to be made. Circumstantial reconstructions such as the one offered in this article may be our only venue for addressing the doorjambs and similarly enigmatic objects. Without them meaningful segments of the complex historical mosaic of Jaffa would remain blank. Thus the obscurities involved in these finds and the lack of related empirical data should not discourage their investigation but only broaden the scope of investigation of Jaffa's turbulent history.

Notes

1. Since the artifact in question was recovered during a standard inspection during infrastructure work by the municipality, no IAA permit number was issued.

2. The latest find of this type is a gravestone depicting an incised three-legged candelabra, discovered during recent salvage excavations at Rabbi Tanhum Street in the Jaffa Flea Market (in preparation for publication by Yoav Arbel).

3. See Schur (1996:nn. 2–8) for several references to the desolate state of Jaffa during the early seventeenth century. The abandonment received archaeological confirmation in recent excavations on the fringes of the city, in which the late Mamluk and early Ottoman periods were represented only by graves (Peilstöcker et al. 2006). Earlier excavations on the mound exposed layers of "whitish driftsand which accumulated over the long centuries when Jaffa was deserted after its destruction by Sultan Beibars" (Kaplan 1974:137).

4. Two columns, one of gray granite and the other of marble, were recently spotted among masses of construction debris at the southern coastline of Jaffa. The two may have been mentioned by the traveler Johannes Kootwijck, who visited Jaffa in 1598 and reported stone columns scattered near flat reefs south of the town (1619:133ff.).

5. The data on Abu Nabbut is summarized from Dr. H. I. Said's presentation "Abu Nabbut's Image According to the Protocols of the Shari'i Courts of Jaffa," presented at *Yafo—Tides of Times: The First Annual Convention of Yafo's Research, 2001*. Jaffa.

6. For details on Abu Nabbut's building projects, see R. Kana'an (1998).

7. The Jewish National and University Library, David and Fela Shapell Family Digitization Project, Eran Laor Cartographic Collection, Hebrew University of Jerusalem.

8. Aviva Bushnino, an inspector with the IAA who personally saw the columns, related this information.

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Chapter 21

The Kaplan Excavations Publication Initiative

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As noted in the introduction, publication of previous excavations in Jaffa is one of the four primary initiatives of the JCHP. While this work certainly entails an effort to publish ongoing research and excavation results in a timely and thorough fashion, because archaeological work in Jaffa has been under way since 1947, the backlog of data to be published is substantial. Among these are the early excavations of P. L. O. Guy and the Leeds expedition (Bowman et al. 1955; and Table 2.7), excavations by Jacob and Haya Kaplan between 1955 and 1981 (Bar-Nathan 2002; and Table 2.8), and salvage excavations by various institutions since the mid-1980s (see Table 2.9 and related bibliography). While plans for the publication of recent salvage excavations conducted by the IAA are now largely supported through the framework of the JCHP, enabling the integration of findings from across the site, the most significant corpus of excavated materials and records derives from the excavations of Jacob and Haya Kaplan. Although the results of these excavations were published in a number of short preliminary reports (see Chapter 22), which are crucial for interpreting the records and materials of their work, these materials have been neglected in various ways for many years since the completion of the excavations. Following an assessment of the quantity, quality, and state of the materials in 2007, and in light of the fact that Jaffa's earliest settlement was particularly limited (and will always be difficult to access archaeologically), the study and publication of the Kaplan excavations in Jaffa are clearly worthy of a considerable investment of the project's time and resources. Indeed, without understanding as fully as possible the results achieved by the Kaplans' excavations, work by our and any future project risks squandering the limited resource that is Jaffa's cultural heritage.

The Significance of the Kaplan Excavations

Since many scholars are aware of the type and range of materials unearthed by the Kaplans in Jaffa (see Kaplan and Ritter-Kaplan 1993), it may seem unnecessary to justify any efforts to publish them. However, in recent years the value of the Kaplans' work and its potential contribution to studies of the archaeology of the region has been undermined. This process has ranged from ad hominem attacks on the Kaplans to characterizations of their work as unprofessional. Some have claimed that they lacked adequate professional and academic training to conduct such work, failed to employ proper archaeological methods, excavated without proper permissions, and so forth. Some have even gone so far as to suggest that they were engaged in the illicit trade of antiquities. While such attacks have had some success in denigrating the value of the Kaplans' work, such characterizations were also

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ultimately responsible for the neglect their excavations experienced in the years after their completion. Sadly, until 2000 Jaffa's previously excavated cultural heritage was held hostage by such circumstances. Nevertheless, following the passing of Haya Kaplan, the records of their excavations were for the first time made available to the scholarly community for publication (Bar-Nathan 2002), and research on Jaffa entered a new phase.

The value of the records of the Kaplans' excavations in Jaffa is apparent in that many scholars since their work began have sought and accessed the collection, which is primarily housed in the Jaffa Museum. For this reason, a number of discussions make reference to the archaeological remains and records from the Kaplan excavations. Among these are studies of bichrome ware (Epstein 1966); Middle Bronze Age pottery kilns (Kletter and Gorzalczany 2001), and the Egyptian gate (Herzog 1986:74–75).[1] These serve as a testimony to the significance of this collection for understanding not only Jaffa's archaeology but that of the southern Levant more generally.

Permissions for Access to and Locations of the Materials

In January 2007, the IAA granted official permission to Aaron Burke and Martin Peilstöcker, which enabled the start of work on the publication of these materials. Beginning in June 2007, efforts were made to identify the locations of all materials belonging to and deriving from the Kaplans' excavations in Jaffa. This effort was greatly aided by the patient work of Orit Tsuf, whose groundbreaking efforts to understand and publish the Persian-to-Byzantine-period artifacts have been supported by a grant from the Shelby White-Leon Levy Program for Archaeological Publication.[2] It was also aided by the experience of Martin Peilstöcker, who has sought to reconstruct the history of Kaplan's excavations and has proposed a plan for addressing their publication and the needs of the site (2007), aware as he is of Jaffa's historical and archaeological importance (2000). With their assistance, a strategy for the systematic archiving of all the materials was initiated.

In 2007 a full assessment of the quantity and nature of the records and artifacts from the Kaplans' excavations in Jaffa was undertaken. It was possible to identify a number of different facilities in which these artifacts and records are today stored.[3] The bulk of the artifacts, especially the ceramics and stone artifacts, are located in the storage rooms of the Jaffa Museum. However, initial reconnaissance revealed that many artifacts (especially those considered more valuable) have been relocated. The offices of the Jaffa Museum also contain copies of registration cards (including those for objects and coins), photo logbooks, general plans of Jaffa (though mostly copies), and a few photo books.[4] Most of the excavation books, object illustrations, plans, records, and photos, however, are located in the Maps and Plans Division of the IAA in the Rockefeller Museum in Jerusalem.[5] A collection of approximately 10,000 negatives (nearly half concerning Jaffa) and prints of 4,000 of these negatives from the Kaplans' excavations are housed in the Har Hotzvim facility of the IAA in Jerusalem. Strips of photo negatives of objects taken by the Jaffa Museum since 1988 are also housed in the Eretz Israel Museum.[6]

Assessing the Records and Remains

Our attempts to locate and identify the extent of the records and artifacts from Jaffa led us to the conclusion, which was a verification of our initial impressions, that these records permit the reconstruction of the stratigraphy of the Kaplans' excavations in Jaffa. While the discovery of certain elements would make our work easier,[7] based on the quality, quantity, and diversity of the materials preserved, the directors of the JCHP agree that the materials merit a commitment of resources for their study and publication during the early phases of the project. In fact, it is difficult to imagine how new excavation areas could be selected or how excavations in various areas could be interpreted in the absence of an attempt to provide a detailed assessment of this collection, regardless of the value that may be ascribed to it thereafter.

For this reason, Kyle Keimer and George Pierce, graduate students from the Near Eastern Languages and Cultures Department at UCLA, undertook a feasibility study, employing the records and remains of Kaplan's soundings of the fortifications at the northern end of the site, in areas B, D, and G (see Chapter 23). The general conclusion of this study reveals that Kaplan's records were meticulous and mostly commensurate with the stratigraphic archaeological methods of his day. He collected all manner of ceramics (even Islamic and Ottoman sherds), took elevations, drew sections and plans, and

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photographed extensively (even in color). Our assessment also revealed no substantive evidence to support any of the characterizations cited above; indeed the contrary appears to be the case on each score. Kaplan was a fine stratigrapher, and to the extent that we experience difficulties in reconstructing his excavations, it is usually the result of the general quality of excavation records from the 1950s through the 1970s and uncertainties regarding whether we have identified all the records that were generated. As director of the excavations, Kaplan was more than prepared for the task—all the more so in light of the fact that his engineering skills were perfectly suited to working in an environment where unstable buildings lingered, renovations of buildings were continually under way, and infrastructure maintenance meant that architectural remains from many periods were constantly being exposed and needed to be excavated and recorded immediately. His unbiased approach, not favoring early periods over later periods, is single-handedly responsible for the preservation of Jaffa's cultural heritage from the 1950s through the early 1980s.

Preserving the Records and Conserving the Remains

In an effort to preserve the archives of the Kaplans' excavations in Jaffa and to make them readily accessible to the team members involved in their publication, a systematic approach was implemented for their documentation. Since the best means of achieving both of these results was to create a digital archive, all documents identified in 2007 that were of immediate relevance to the publication and study of the Kaplans' excavations were scanned. To date, this archive consists of more than 20,000 digital files, including PDFs of all object registration cards and photo notebooks, as well as high-resolution scans of negatives, photos, maps, plans, section drawings, and object illustrations.

Our efforts to manage, share, and disseminate the data that we have collected for this publication project are aided by use of the Online Cultural Heritage Research Environment (OCHRE) database (Burke forthcoming), developed by David and Sandra Schloen at the Oriental Institute of the University of Chicago. This software has already permitted the organization and sharing of data generated by this project in the formats discussed above. It will also permit the integration of GIS data as the Kaplan excavation areas are integrated into the overall plan of excavations and monuments in Jaffa. Upon completion of our work, this application will also enable the project to make the full database of Kaplan's materials available for continued study. Such a database significantly reduces the effects of selective publication of data that are inherent to traditional means of publication, such as the final report volume, and that further diminish an already highly selective process of publication as it concerns old and languishing excavation records.

Work Remaining

Despite the abundance of materials already available to assist in the publication of the Kaplan materials, a considerable amount of post-excavation artifact processing and conservation remains to be done. This is evident from the fact that the object registration cards are largely the product of the Jaffa Museum staff under the direction of both Ivan Or (Ordentlich) and Tsvika Shacham in the years after the Kaplans. Many objects (including ceramics) remain to be properly cataloged. Many vessels must be restored before they can be analyzed, drawn, and photographed. Other objects for which registration cards exist may have been inadvertently moved to the Israel Museum along with non-Jaffa artifacts in 1988 and 1989, and these remain to be identified and further studied. Many of the objects must also be drawn; others photographed. These tasks are easily accomplished, however, compared to the intensive work that will be required in the reconstruction of the stratigraphy (see Chapter 23). Furthermore, extensive work is necessary to properly integrate the excavation areas of the Kaplans into the overall plan of excavations at Jaffa (see Chapter 5 and Figure 23.1).

Publication Plans and Funding

Despite the use of sophisticated applications such as OCHRE for the dissemination of the data and results of publication of the Kaplan excavations by the JCHP, the need for the dissemination of the results in a traditional volume format persists. For this reason, the publication program is still conceptualized within such a framework. At present the publication program has been divided into two parts, as follows: (1) Middle Bronze to Iron Age remains including the Islamic, Crusader, and Ottoman remains; and (2) Persian-to-Byzantine-period remains.

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The responsibility for these publication programs has been individually allocated to those within the project with greatest specialty in these areas. Aaron Burke and Martin Peilstöcker will oversee and edit excavated remains prior to the Persian period, which will also include a section devoted to the post-Byzantine remains to be published by Katherine S. Burke. Orit Tsuf, whose work is already in an advanced stage, will publish the Persian to Byzantine remains. The JCHP will serve as an umbrella organization for the process associated with the publication of these findings by providing logistical and, when available, funding support and by creating a venue through the current series edited by Aaron Burke and Martin Peilstöcker, which will be published by the Cotsen Institute of Archaeology Press. In May 2008, the JCHP's publication initiative received a substantial boost with the receipt of a White-Levy Program grant for the publication of the Middle Bronze Age to Iron Age remains. This project therefore enters a strict timeline, with publication of its first volume targeted for 2012.

Notes

1. In the course of our work, we have learned that many other scholars, whose names need no mentioning, also consulted the materials from Jaffa while the Kaplans were still active.

2. Tsuf began her work in 2004, after receiving permission from the IAA to publish this corpus.

3. These observations pertain not only for the materials the Kaplans excavated at Jaffa but also for the other 30 sites that Jacob Kaplan excavated during his career. It is our hope that the information provided in this article will aid scholars in their efforts to undertake the publication of these other sites.

4. My thanks are extended to Naama Meirovitz of the OJDC for her assistance with materials located in the front office of the Jaffa Museum.

5. We thank Arieh Rochman-Halperin and Silvia Krapiwko for their assistance with accessing these materials and their patience during this process.

6. We thank Orit Tsuf for providing the project with digital copies of many of these negatives.

7. Among these missing pieces, which we will continue searching for, are pottery bucket lists that we have every reason to believe were produced by Kaplan during the course of his excavations. Nevertheless, information on the boxes of retained sherds from pottery buckets and on the plans and sections does permit a reconstruction of the stratigraphy of each excavation area.

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Chapter 22

The Bibliography of Jacob Kaplan and Haya Ritter-Kaplan

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The following are publications that have been identified to date for Jacob Kaplan and his wife, Haya Ritter-Kaplan, neither of whose bibliographies have ever been properly published.[1] Although Jacob Kaplan's bibliography was collected by Mordechai Lamdan,[2] since the documents exist only as mimeographs, they are entirely inaccessible to scholars outside Israel and mostly unknown to Israeli scholars. While they were useful in production of the bibliography provided here, what follows is the most complete bibliography that has been assembled to date. It is quite likely, however, that some works, published in obscure locations such as Festschriften, may have been missed. These will be included in a future addendum to this collection to be published in this series if necessary. It is our hope that this bibliography is a fitting tribute to the years of work that both Jacob and Haya Kaplan invested in the exploration of Jaffa and greater Tel Aviv and that it will also be a useful reference, whether for scholars studying the sites the Kaplans first explored, the issues they addressed, the periods they studied, or the history of archaeology in Tel Aviv, or more generally for the stewardship of archaeological sites in urban environments.

Included in this list of publications are numerous preliminary reports for the many sites at which Jacob and Haya Kaplan worked. These references have not been separated into publications for each site, since this would make the bibliography more difficult to use. The bibliography includes therefore all known translations of preliminary reports, which often appeared in essentially the same form in *Hadashot Arkheologiyot*,[3] the *Israel Exploration Journal*, *Revue Biblique*, and the *Bulletin of the Museum Haaretz*. Excluded from this bibliography, however, are Jacob Kaplan's contributions to the newspapers *Haaretz* and *HaBoker* (among others) and the yearbooks of the Museum Haaretz and the municipality of Tel Aviv, as well as a variety of archived municipality documents (including those of Tel Aviv, Petah Tiqwa, and surely others), all of which are included in Lamdan's bibliographies (see note 2). The reader is also cautioned to observe the presentation of Haya Kaplan's last name as either Kaplan or Ritter-Kaplan. For this reason, her works are listed according to the names under which they were published. It is also noteworthy that from approximately 1975 onward, Jacob Kaplan submitted no works for publication that were not coauthored with Haya Kaplan; the few works in his name after this date occur in edited volumes (e.g., *EAEHL*) and journals, to which undoubtedly these articles were submitted in 1975 or earlier.

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Notes

1. I would like to thank George Pierce for his assistance with the compiling of this work.

2. M. Lamdan, "A Publications List of Dr. J. Kaplan, 1942–1974" (mimeograph, Tel Aviv, 1975); M. Lamdan, "A Publications List of Dr. J. Kaplan, 1975–1985" (mimeograph, Tel Aviv, 1985). For references to these two works, see N. Naveh, "Bibliography of Personal Bibliographies of Scholars of the Archaeology of Palestine," *Israel Exploration Journal* 35:284–288.

3. It should be noted that early contributions to *Hadashot Arkheologiyot* were treated as anonymous. While many *HA* articles attributed to Jacob and Haya Kaplan are included here based on previous citations, it is likely that a number of others are not.

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Chapter 23

Area B:

A Test Case for the Publication of the Kaplans' Excavations in Jaffa

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One concern of the JCHP during the 2007 season was the evaluation of Jacob Kaplan's excavation records. The level of information that could be recovered from these records needed to be determined so that future research could progress accordingly. Kaplan's material from Area B was chosen as a test case largely because of the discrete nature of this corpus. The quantity of materials however was not too small to preclude assessment of Kaplan's excavation records and methods. This article presents the findings from the study done on the Area B materials and addresses some of the issues that await the JCHP in dealing with the final publication of the remainder of the corpus of excavated finds and records from Kaplan's excavations in Jaffa.

Area B is located inside the old Turkish bathhouse (the Hammam) that sits on the northeastern end of the tell (Figure 23.1). Kaplan opened two areas in the Hammam, referring to them as "the Large Room" and "the Small Room."[1] Excavations were conducted between December 1959 and March 1960 in conjunction with repairs made to the Hammam (Kaplan 1961b:191, 1964a:273). Kaplan uncovered a 5-x-10-m section of a mudbrick glacis in the Large Room[2] and what appears to be the foundation for a later glacis in the Small Room (Figure 23.2). In addition, two probes were sunk in the central and western part of the Large Room, revealing that the glacis had a "facing of stone slabs beneath which appeared alternate layers of sand, black soil, red clay, and sun-dried mud brick" (Kaplan 1961b:192). It is not yet clear how we can harmonize this description, which would suggest that the layer of mudbricks was located below the other layers, despite the fact that both the section drawings and the photographs of Area B clearly show the mudbricks above these fill layers. Furthermore, elsewhere Kaplan again seems to suggest that the mudbrick layer was the uppermost (1961a:6–7, 1961b:192). Two possible explanations for this inconsistency exist: either the layer of stone slabs was not drawn on Section A or the "facing of stone slabs" is evidenced only by the three stones drawn in Section A that sit directly above the mudbricks. If this second, more likely, option is correct, then the sequence of layers as given by Kaplan does not reflect their exact order but is merely a list of the various layers within the feature. Further support for this second interpretation is the fact that none of the other layers mentioned in Kaplan's articles is in the correct sequence in comparison to the section drawing. In addition, not all the layers noted on the section drawing are mentioned in Kaplan's articles. Although Kaplan initially dated this glacis to the ninth century, he subsequently lowered the date to the eighth century (1961a:6; Kaplan and Ritter-Kaplan 1993:658). Our determination regarding the date of this feature will be provided in the final report of this excavation area.

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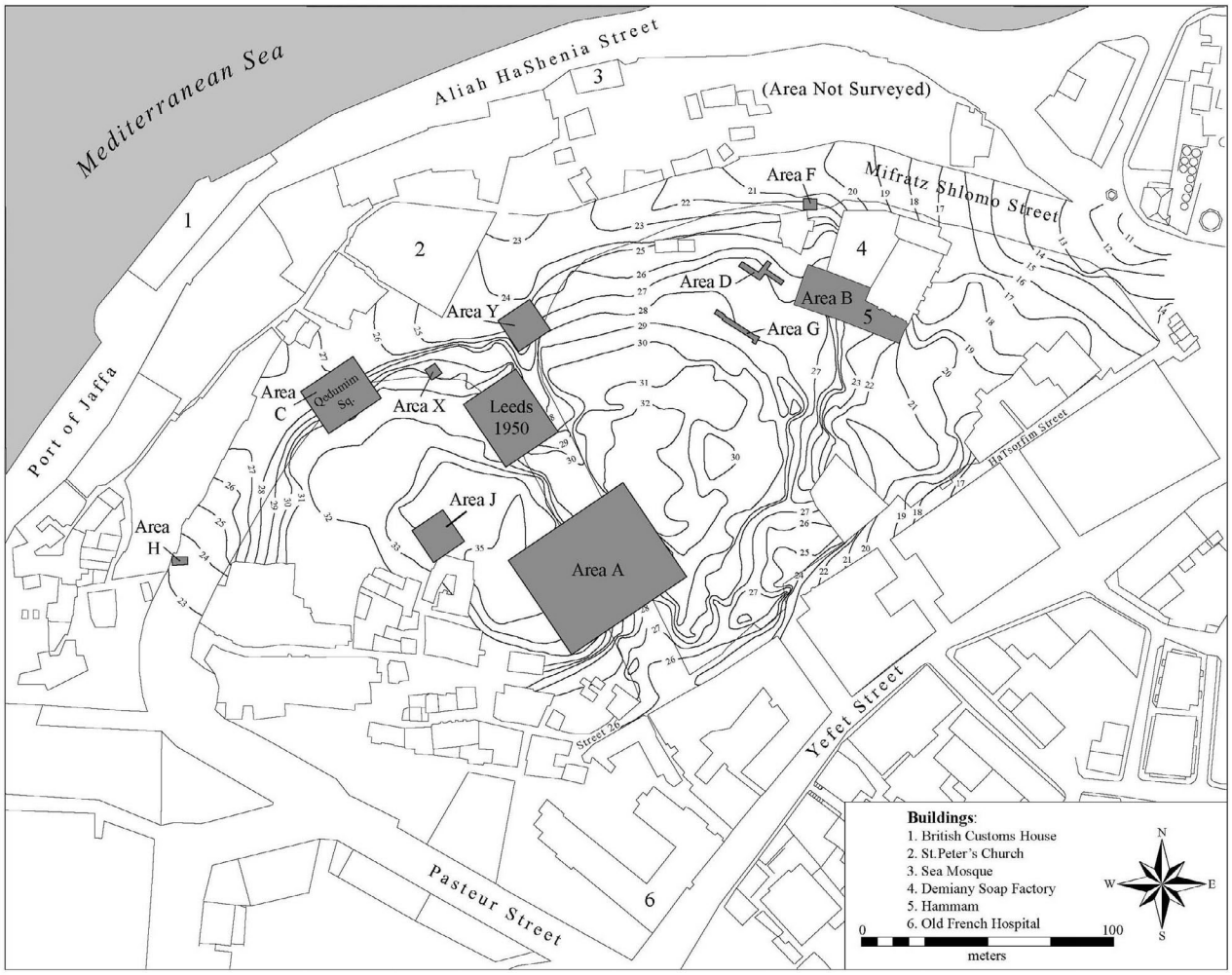

Figure 23.1. Map of Jaffa showing locations of excavation areas B (Hammam), D, and G. *JCHP plan.*

The fact that the Area B excavations constituted salvage work and were located entirely indoors had both positive and negative effects on the outcome of the work. Among the positive effects were that Kaplan was able to excavate in the rainy winter months at a leisurely pace, collecting data that may otherwise have gone unnoticed. Within this context he also devised an excavation strategy that becomes clear when looking through the fragmentary notes. Using his background as an architect, he divided the Large Room in half and focused his excavation on the eastern half. A 1-m-wide baulk was left standing in the center of the room running north-south. Then Kaplan opened one probe in the northwestern corner of the room and another that expanded the excavations on the east vertically (Figure 23.4).

Kaplan realized that the small exposure offered by his excavations in Area B needed to be expanded for a better understanding of the diachronic development of the site's fortifications. To accomplish this, he subsequently opened areas D and G outside the Hammam. In 1963 he reached the Middle Bronze Age glacis in Area D (Figure 23.2), directly west of the Hammam (Kaplan 1965:553). Further exposure of both the Middle Bronze Age rampart and a small segment of the Iron Age glacis was accomplished by Kaplan's excavations in Area G in 1964 (1964b:286).

Problems Identified in Kaplan's Material

Many records from the excavation of Area B, including top plans (Figure 23.5), section drawings (Figure 23.2 and Figure 23.3), and photographs (Figure 23.6), as well as pottery from the area and 31 registered objects and their registration cards (Figure 23.7), have been located. While none of these sets of data is complete, enough of each of

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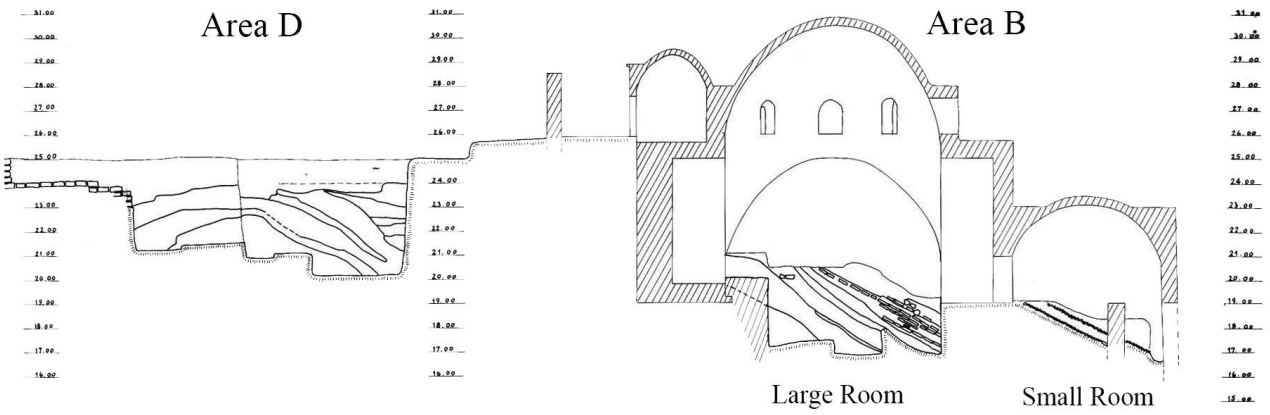

Figure 23.2. North section schematic drawing through excavation areas D and B (Hammam), showing layers exposed. *Kaplan Archive.*

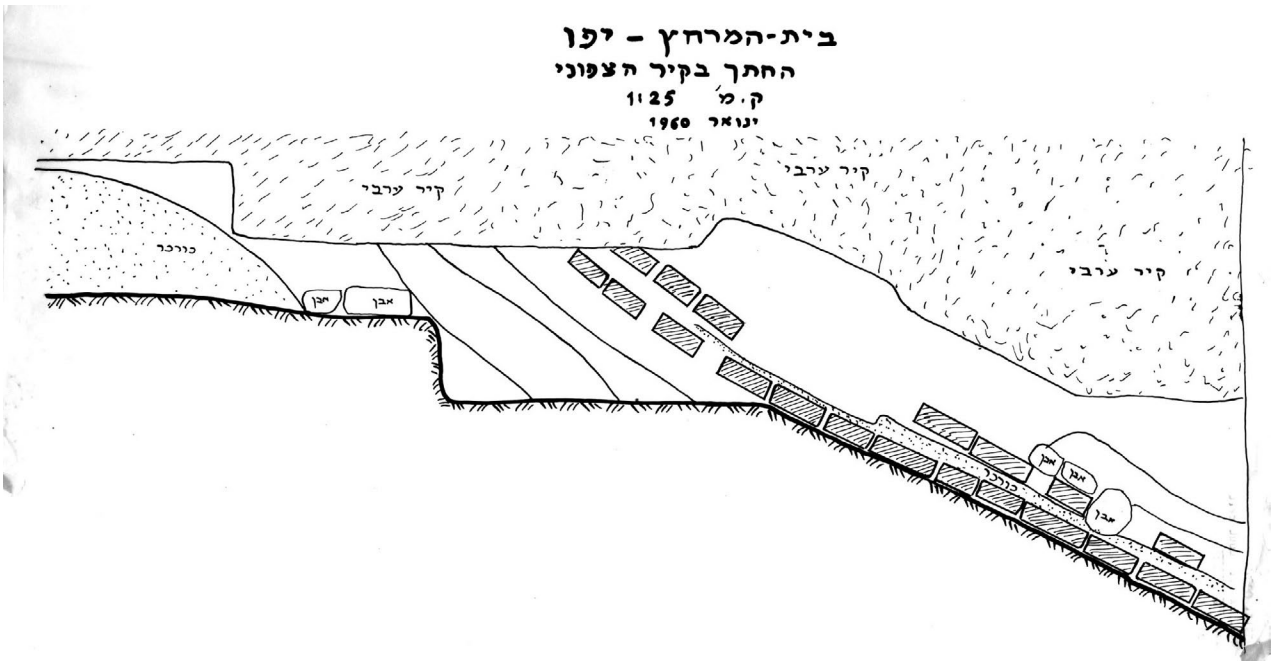

Figure 23.3. In-progress north section drawing of Large Room excavations in Area B during January 1960. *Kaplan Archive.*

them has been preserved to make it possible to understand and publish Area B. While some sets of data, such as the pottery bucket list, have yet to be located, they can be reconstructed from the remaining information, such as pottery bucket tags. While problems will certainly arise in the absence of certain records, most of the problems that have been identified so far are not insurmountable; a cogent and informative final publication of Area B, and likewise the remaining excavation areas, is possible.

Due to the number of records preserved, we have been able to identify and rectify numerous errors that were introduced in Kaplan's materials either during his excavations or afterward when the material was reorganized in the Jaffa Museum. Kaplan treated his excavations of both areas A and B in 1960 under a single rubric. For example, he employed one sequential pottery bucket list for both areas, and his excavations rotated between the two areas over the course of several months. Unfortunately, this approach to the recording of materials from areas A and B is nowhere noted explicitly. Rather, all the material was attributed to Area B. Based on the pottery tag descriptions and labels on the top plans, however, it is clear that the Area A materials were mistakenly combined with the Area B materials. The identification

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of this problem not only clarified why numerous boxes of pottery appeared to be missing from the Jaffa Museum but also elucidated part of Kaplan's excavation strategy. It became clear that he began excavating in the Large Room of the Hammam and then moved to the Small Room for a short while. He then moved back to the Large Room before focusing the majority of his efforts on Area A in 1960. Nevertheless, work continued in Area B, and for this reason stray pottery buckets recorded as having come from the Large Room in Area B have been identified among the Area A materials.

It appears that there were 86 pottery buckets from the area A and B excavations in 1960. The information for at least 14 of these buckets is missing, however. The existing pottery bucket tags are straightforward and generally preserve the same information (i.e., bucket number, location, date, and a short description of the locus). It is only when one tries to correlate the descriptions on the pottery bucket tags with the terse descriptions on the top plans and sections, most of which are completely unlabeled, that challenges arise: only the ceramics from his Section A possess labels (not depicted). Furthermore, instead of using locus numbers on a consistent basis, Kaplan appears to have resorted to descriptive phrases for loci in Area B, such as "the layer above the bricks" or "next to wall 16."[3] In the Large Room of the Hammam, there are multiple layers of the same type of soil, which creates some confusion when trying to match the pottery bucket descriptions to the soil layer descriptions on Section A. Further ambiguity arises because descriptive phrases on pottery tags and section drawings are not necessarily identical. Complicating the picture even more is the fact that Kaplan did not excavate the entirety of the Large Room at the same time but rather excavated the eastern portion of the room and then dug two exploratory trenches (Figure 23.4). The descriptions of the layers for each of these probes are identical, so even efforts to situate pottery buckets based on the dates they were excavated are not entirely conclusive because the descriptions of what parts of the Large Room were being excavated are not specific enough. Fortunately, the instances where there are discrepancies between the phrases on the pottery bucket tags and those on the section drawings are rare. Many of the pottery buckets also supply information that provides both horizontal and vertical stratigraphic control. Based on an initial plotting of the pottery buckets, we are able to reconstruct Kaplan's activities, which reveal that his excavations shifted around within Area B. He excavated part of one feature one day, then excavated part of another feature the next day, only to move back to the original feature later in the excavation. Although on most days only one pottery bucket was used, there were a few instances when multiple pottery buckets were opened on the same day.

Only one of the three top plans that exist for Area B was drawn to scale, and on one of the plans the glacis was placed in the wrong location. The latter issue was obvious because the section drawings and photos clearly revealed the location of the glacis. The former issue, however, was not immediately obvious, since all the plans had scales. It was only after all the plans were digitized and entered into our GIS database that inaccuracies were exposed. Fortunately, the photos of the Large Room helped resolve the issue (Figure 23.6), and as a result we were able to produce georectified and correctly scaled top plans for Area B (Figure 23.4). It is also now clear that there have been architectural changes to the Hammam's structure since Kaplan excavated there in 1960.[4]

Some of the problems inherent in the plans have been rectified thanks to the few photos that exist of the Area B excavations (Figure 23.6). Overall, however, there is a dearth of photos from Area B in comparison to other areas that Kaplan excavated. It is actually surprising that so few photos exist for Area B, as Kaplan was quite diligent in photographing other excavation areas. Perhaps additional photos of Area B will be found mixed in with those of other seasons as the JCHP proceeds with the publication of Kaplan's excavations. As of now, however, not one of the five photos of the Large Room offers a view of the entire room, which must in part be due to the fact that a proper lens (notably a fish-eye lens) was not readily available. All the photos focus on the glacis but neglect the two probes that appear on the top plans. Also, no photos of the Small Room have yet been found.

An inherent difficulty that becomes clear when looking at the excavation records for Area B is that no surfaces or adjoining architectural features were identified. Furthermore, very few ceramics appear to have been retained. That these excavations dealt with layers of fill is obvious, and the limited stratigraphy that was encountered in Area B was the direct result of a probe that was cut to provide a section through the Iron Age glacis. In fact, Kaplan dismantled a small section of the glacis, revealing that it was four courses thick. Fortunately,

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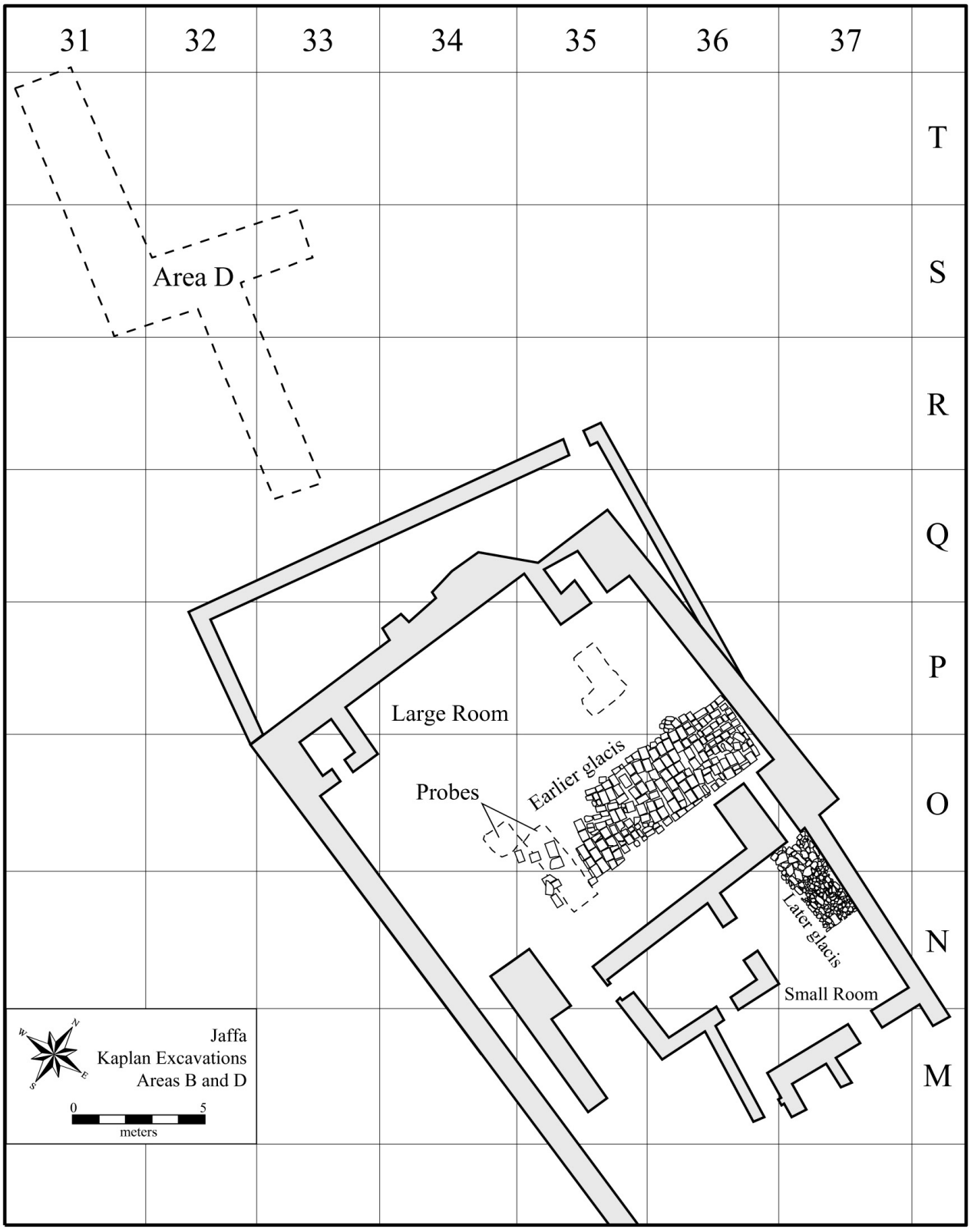

Figure 23.4. Georectified plan of areas B and D showing location of probes within Hammam. *JCHP plan.*

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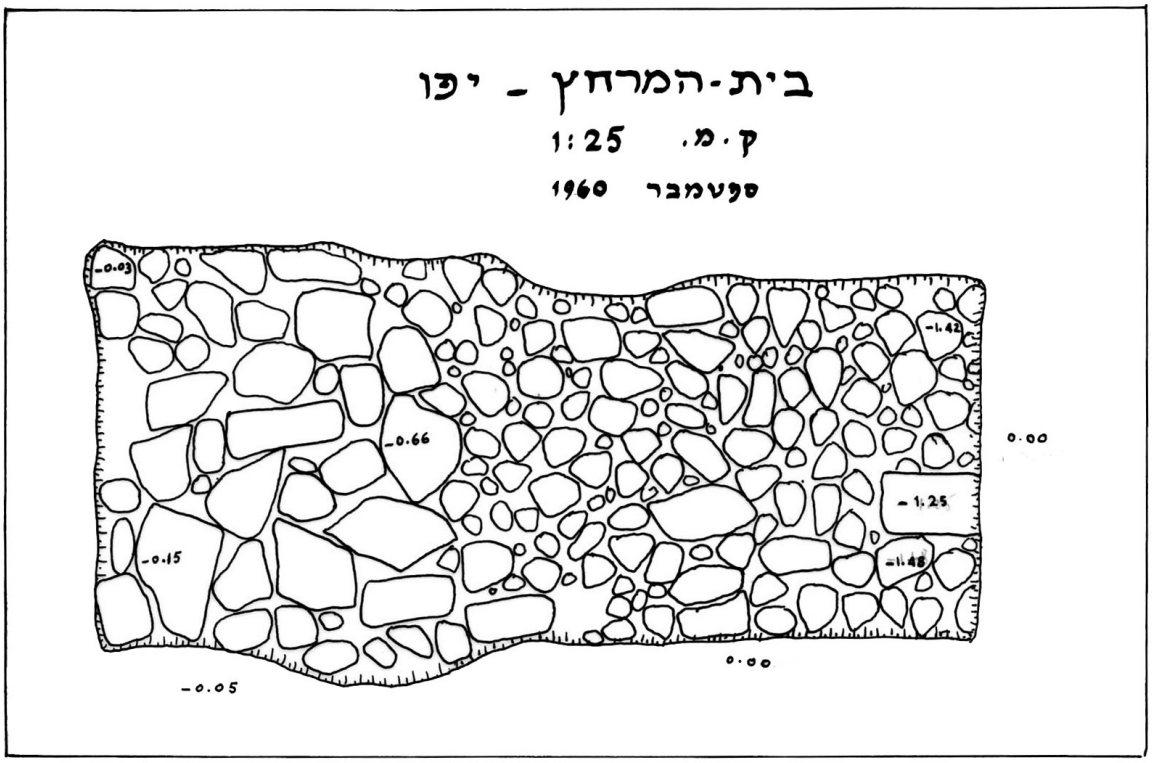

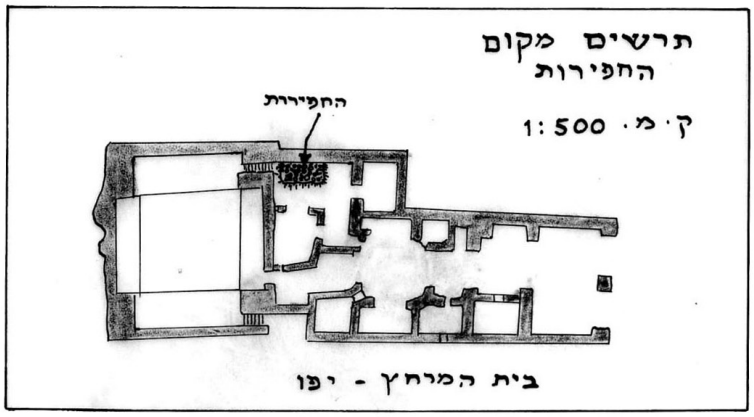

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Figure 23.5. Example of top plan from Area B. *Kaplan Archive.*

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Figure 23.6. Photo of glacis in Large Room of Area B. View north. *Kaplan Archive.*

the pottery and other objects recovered from this section are clearly labeled, so placing them back in their context poses no difficultly.

Changes to Kaplan's Registration System

Artifacts from Kaplan's excavations appear to have been registered under no less than three different numbering schemes. An example of these numbers can be seen on an object registration card from the Jaffa Museum shown in Figure 23.7. The early numbers, which were used mostly for the first four seasons, are identified by the JCHP as Kaplan Registration Numbers because they were originally assigned by Jacob Kaplan and his staff for all artifacts including individual pottery sherds (e.g., 19/במ/60/יפ); the numbers run into the thousands for each season. The second system uses Museum Registration Numbers, which were assigned between 1986 and 1991 by Jaffa Museum staff (e.g., 79/B/60/001). The third registration system appears only occasionally and includes numbers assigned by the Israel Department of Antiquities for items displayed in the Jaffa Museum and for objects that have been removed from the storerooms (this number does not appear on the example in Figure 23.7). Due to the uneven application of these registration systems and in order to provide a single, easy-to-use registration system for our publication efforts, the JCHP adopted what is identified as the Museum Haaretz (MHA) registration system.[5] While none of these registration systems encompasses all of the registered materials, the most complete registration is provided by the MHA numbers, and this system has been established to register new finds during the analysis of artifacts; this number appears on the sticker-dot on the reverse side of the registration cards (e.g., MHA 2345).

Through the absence of field notebooks, pottery bucket lists, and registration lists, various mistakes (e.g., differing dates and/or locations between a pottery bucket tag and registered objects coming from that bucket) were introduced into the registration systems and object cards, which were not created until 1983. It is difficult to know when or how these mistakes were introduced, but it is clear that many occurred after Kaplan's excavations and before 1986, when the most recent inventory of Jaffa material was undertaken, including the photographing of registered objects. The discrepancies occur largely on objects that were not originally registered by Kaplan. Sometimes, however, Kaplan's registrations are incomplete.

Conclusion

This article has employed the JCHP's preliminary assessment of the excavation records from Area B as a test case, highlighting some of the problems the JCHP faces in publishing Kaplan's old excavations—the kinds of problems that others who have worked with old excavations have no doubt also faced. Despite these problems, sufficient data remain to enable the filling of most lacunae in the Area B materials. The situation is even more promising in other excavation areas where, after an initial investigation of the remaining records, many of the problems faced in Area B are isolated occurrences. The final publication of the Area B remains is promising and will provide useful comparative material for the study of the development of Iron II fortifications. In sum, Kaplan's

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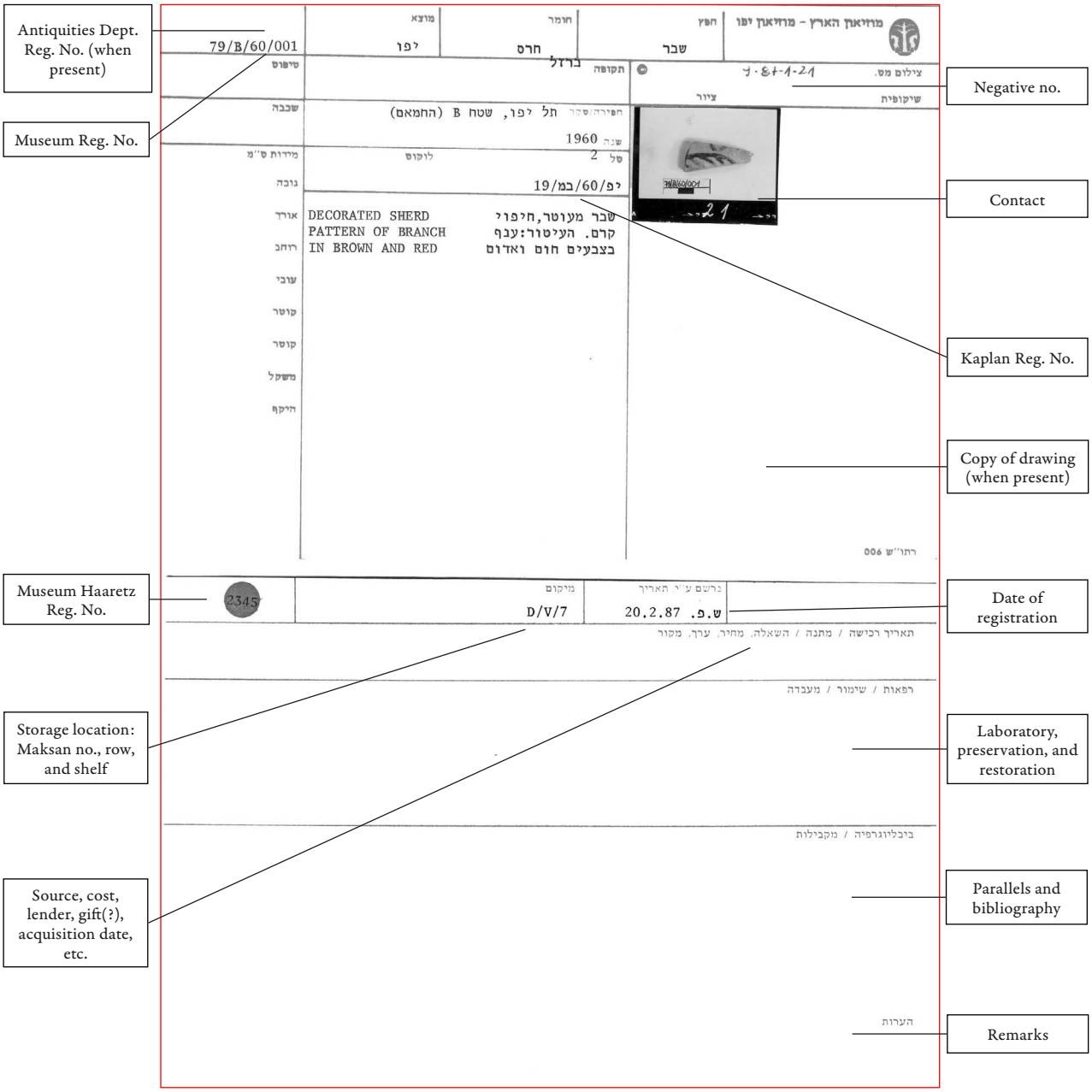

Figure 23.7. Object registration card from Jaffa Museum for Area B. Front shown at top; back of card shown at bottom with annotations.

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materials are quite usable once they are properly processed and placed within their context, and they will permit the reconstruction of coherent final reports for each of the areas in which Kaplan excavated.

Acknowledgements

I would like to thank Aaron Burke and Martin Peilstöcker for inviting me to publish Kaplan's excavations of the fortifications. I would also like to thank the Humanities Division at UCLA for awarding me Graduate Summer Research Mentorships for 2007 and 2008, which made this research possible. The results of this research were also presented at the annual meeting of the American Schools of Oriental Research in Boston in November 2008.

Notes

1. These terms occur only in Hebrew on the pottery bucket labels associated with finds from these "areas." They were not employed in preliminary reports.

2. A small section of this mudbrick glacis also appears in Area G at a higher elevation. The mudbricks in Area B on average measured 58 x 38 x 11 cm (Kaplan 1961b:192).

3. While Kaplan also used descriptive phrases for his excavations in areas D and G, he employed numbered loci for areas A, C, and Y.

4. I investigated the Hammam in July 2007 and observed that an external wall on the south side of the building had been added, blocking an earlier entrance to the Large Room. Furthermore, no traces of Kaplan's excavation areas within the Hammam could be found, despite an agreement to maintain these excavation areas as accessible signed by the then owner of the building and the municipality.

5. There is actually a fourth set of numbers, Department of Antiquities Registration Numbers. However, none of the materials from Area B received one of these numbers.

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CHAPTER 24

EGYPTIAN "FLOWERPOTS" FROM KAPLAN'S AREA A EXCAVATIONS:

CULTURAL AND HISTORICAL IMPLICATIONS[1]

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University of California, Los Angeles

During the 1958 excavation season in Area A in Jaffa, Jacob Kaplan recovered 20 so-called flowerpots and two other similarly manufactured pot stands (Figure 24.1). The "flowerpots" were found in an open-pit firing or kiln (L. 304) in Square G6, near an assemblage of other Late Bronze Age Egyptian vessels that included pot stands from L.308. All of these vessels belong to an LB IB phase (Kaplan's Level VI), below the so-called Egyptian fortress of the thirteenth century B.C.E. (Burke and Lords 2010). Kaplan briefly described their context in the preliminary report for the 1958 season and mentioned that Bichrome Ware, Cypriot Base Ring I, and "a number of complete vessels of Egyptian type" were recovered from four Late Bronze Age phases (Kaplan 1960:122). Although based on their context it is likely that he had already recognized that these vessels were part of an Egyptian assemblage, it is clear that the implications of their discovery in Jaffa was never realized. For this reason, this discovery has not received scholarly attention until our work (Burke and Lords 2010). Nevertheless, the passing reference to Egyptian vessels in his preliminary report can now be identified as an allusion to a collection of Egyptian vessels that included, among others, 20 of the so-called flowerpots and two vessels of a newly identified Egyptian or Egyptianizing form of uncertain function. The significance of this group is its place as the best-preserved assemblage of complete and restored "flowerpots," which probably functioned as beer jars (see discussion below), unearthed to date in Israel. Along with a preliminary description of these vessels, the implications of these vessels for our understanding of Jaffa's settlement during the first half of the Late Bronze Age are summarized here.

Figure 24.1. Photo of pot stand (left, MHA 2215) and "flowerpots." *Kaplan Archive.*

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The Jaffa "Flowerpots" and Pot Stands

Almost all the "flowerpots" in the Kaplan collection are nearly complete exemplars (missing sherds were missed during the vessels' recovery), while a couple of them are missing substantial portions of their rims (Figure 24.2). In general the vessels fit well within the descriptions recently provided for these vessels (Martin 2004:269–270, 2006b:145; Mullins 2002:259). All the vessels were quickly and crudely thrown on the wheel; wheel marks are evident on all of them while being most pronounced on the inside (Figure 24.2, bottom row, second from left). Initial analysis indicates that the fabric is comparable in appearance and composition to locally produced Canaanite wares and is not therefore evidence of the importation of these vessels.[2]

The average "flowerpot" in the Jaffa assemblage is bell shaped, pierced at the bottom (Figure 24.3), and approximately 18.25 cm high. The vessels feature flat bases averaging 10.6 cm in width. Their mouths are on

Figure 24.2. Collection of Egyptian "flowerpots" and pot stand. *JCHP photo.*

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average 22.9 cm in diameter, with beveled rims (Figure 24.4). That they were hastily produced is demonstrated by the fact that the mouths of several are clearly lopsided (Figure 24.2, lower left example and third pot from left on second row). Their hasty production is also evident in the characteristic finger impressions (which are more than fingerprints) left on the sides of the bases (not shown in Figure 24.4), which resulted from the manner in which they were removed from the wheel. It is difficult to accept that finger impressions were intentionally added for some purpose such as gripping the vessels, since there is no evident regularity in the size or placement of these

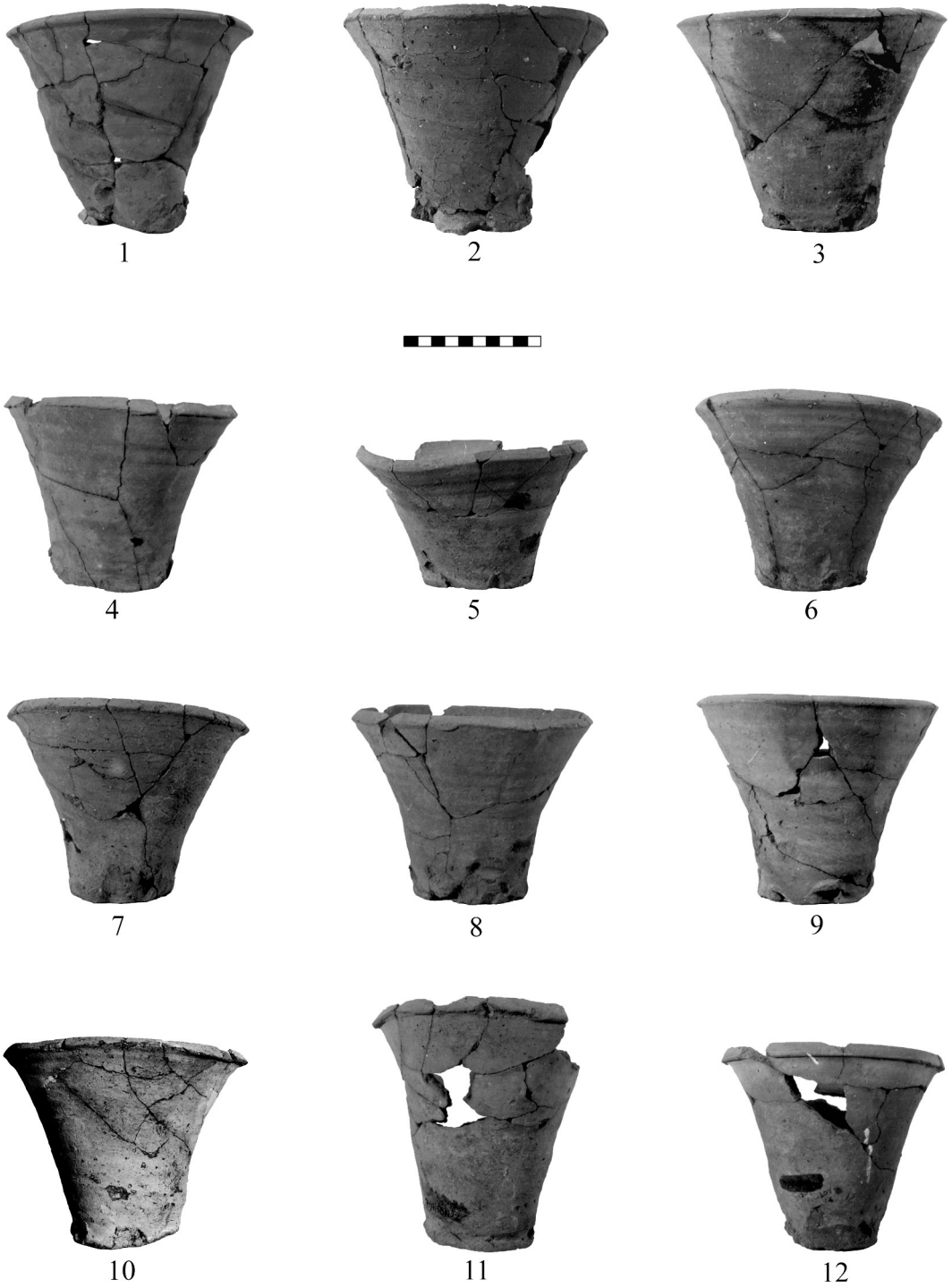

Figure 24.3. Egyptian "flowerpots." (For measurements, see Table 25.1.) *JCHP photo.*

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impressions. However, each vessel's base was intentionally pierced by hand (Figure 24.2, top row), probably by the potter's thumbs. It is possible, therefore, that the potter's finger impressions on the base of a vessel were actually left while the vessel was held during this procedure, since the piercing appears to have been done before the vessels dried and there are no traces on the rims to suggest that the vessels were placed upside down on their rims during this process. The holes suggest that these vessels were intended to drain or strain their contents, which clearly did not include products requiring fine straining since the holes are quite large, approximately 2 cm in diameter.

Accompanying the 20 "flowerpots" were a number of examples of pot stands (Figure 24.5; also Figure 24.1 [left vessel]). Although some fragments of these appeared to be pierced all the way through, recent joins among them reveal otherwise (Krystal V. L. Pierce, personal communication, 2011). They were identified by Kaplan as cult stands, although close examination of their cross section reveals that they are not comparable to Canaanite cult stands in their production, and nowhere were Egyptian parallels noted. For all the pieces of these stands recovered, no part or vessel that would function as the bowl atop the stand has been identified. The most complete example from Jaffa indicates that these stands were more than 30 cm in height, with base diameters of approximately 13.5 cm; they featured thick walls and were produced in an identical fashion and fabric as the "flowerpots." They were also apparently hurriedly thrown on a wheel and finished by hand with the addition of a spout. If placed in the same orientation as the "flowerpots," the upper portions or bowls of the vessels, including bodies and rims, exhibit the same production characteristics as the bodies and rims of the "flowerpots" (Figure 24.5). The only difference is their size; for instance, the diameter of the base of the restored pot stand is just over half the size of the mouth diameter of the average "flowerpot." From both exemplars, the uppermost portions have not been preserved, having been broken off.

While the vessels' appearance is suggestive of a funnel of sorts, other fragments recovered from L.309, adjacent to L.304 in G6 (e.g., MHA 5137), reveal that the vessels were not pierced through. While it is not certain how these vessels functioned, that they shared production

Table 24.1. "Flowerpots" from L.304 in square G6 of Area A.

No.	MHA No.	Object Reg. No.	Height (cm)	Mouth Dia. (cm)	Base Dia. (cm)	Figure
1	2221	A/58/049	19.5	27	10.5	25.3.2
2	2222	A/58/050	17.4	27	9.5	—
3	2223	A/58/051†	NA	NA	NA	—
4	2224	A/58/052	21.5	20	11	25.3.11
5	2225	A/58/053	17	23	10	—
6	2226	A/58/054	18	22	11	25.3.4
7	2227	A/58/055	19	27	13	—
8	2228	A/58/056	NA	23	NA	—
9	2229	A/58/057	18.5	24	11	25.3.8
10	2230	A/58/058†	NA	22††	10	—
11	2231	A/58/059	18.5	25	11	25.3.1
12	2232	A/58/060	14	21	11	25.3.5
13	2233	A/58/061	NA	NA	11	—
14	2234	A/58/062	18	22	10.5	25.3.7
15	2235	A/58/063	18	20	10	25.3.12
16	2236	A/58/064	19	21	10	—
17	2237	A/58/065	18	24.5	10.5	25.3.6
18	2238	A/58/066	19.5	23.75	10	25.3.3
19	2239	A/58/067	18.5	22	11	25.3.9
20	2302	A/58/130	19	23	?	25.3.10; 25.4
		Average	**18.25**	**22.9**	**10.6**	

†Locus not noted. Vessel was cataloged with the other identical vessels. These vessels also lack preservation of their rims.

††Figure based on a restored rim that probably belonged to this vessel.

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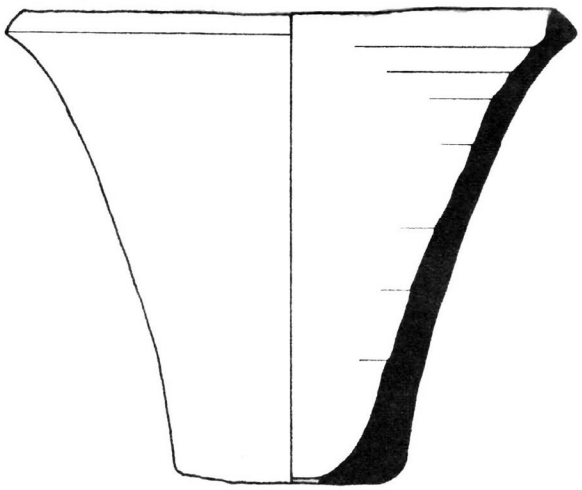

Figure 24.4. Egyptian "flowerpot" (MHA 2302). *Kaplan Archive.*

Figure 24.5. Egyptian pot stand (MHA 2215). *Kaplan Archive.*

characteristics with the "flowerpots," suggests that they were part of a single assemblage and in our opinion may have functioned together with the "flowerpots." Evidence in support of this conclusion comes from the ceramic assemblage associated with two potter's kilns from the administrative center at Haruba (Site A-345) in the North Sinai, which was excavated by Eliezer Oren (1987:97–107). Rooms adjacent to the first kiln included "large quantities of industrial waste, as well as many fragments of pottery stands with a tall, trumpet-shaped foot, including unfired specimens and chunks of unused clay" and "[in] another room nearby . . . a group of especially large flowerpots" (Oren 1987:102). With regard to the repertoire of shapes produced by the Egyptian potters at A-345, Oren observes that these included "tall stands on a high, trumpet-shaped base," which apparently included "a small bowl on top" (Oren 1987:pl. I), as well as "flowerpots with heavy, frequently perforated bases bearing deep thumb indentations"; the illustration reveals a perfect match for the Jaffa assemblage. Nevertheless, no parallels are yet attested for Jaffa's Egyptian pot stands in Canaan.

The "Flowerpot" Phenomenon

Parallels

Before discussing the probable function of these vessels and their historical importance, the Jaffa assemblage can be situated temporally by the stratigraphic context of other examples of these vessels throughout Canaan. Although a limited number of examples of "flowerpots" occur in this region, they serve as an important chronological indicator of Eighteenth Dynasty contexts, as recently noted by Mario Martin (2004:269–270). They occur at Beth-Shean in strata R1b (Mullins 2002:pls. 23:22–23, 27:11, 32:26, and 38:26) and R1a (Mullins 2002:pls. 38:5 and 41:8) and in the University Museum excavation's Level IX (Mullins 2002:pls. 10:10, 20:4 and 30:12) and below Level IX (Mullins 2002:pl. 78:1), as well as in an LB I tomb (26B) at Megiddo (Guy 1938:pl. 59:57) and at Tell el-'Ajjul (Petrie 1931:pl. 37, no. 36E13, 1932:pl. 27, no. 29Q). The vast majority of parallels for "flowerpots" come from Egypt, however. The general LB I context for these vessels in the Levant is thus confirmed by their Egyptian contexts, which reveal, as noted by Bruce Williams, that they were common from the mid-Eighteenth Dynasty through the reign of Amenhotep III in the middle of the fourteenth century (1992:34–35).[3]

General Description

Egyptian "flowerpots" are deep vase-shaped coarse-ware vessels with flared rims and string-cut bases, often with fingerprint impressions just above the base. Because most "flowerpots" were perforated prior to firing, it has been suggested that they were used by Egyptians to grow or

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to transport plants and thus were so designated by some excavators. In a garden at Avaris (T. ed-Dab'a), several "flowerpots" were in fact placed in a line in small pits that ran between two larger tree pits (Hein 1994:39–40). This context seemed to suggest that they had been used to grow plants. The remains of roots in several "flowerpots" in two garden levels at 'Ezbet Helmi Stratum V, which dates to the Late Hyksos period, are also seen as evidence that "flowerpots" were used to hold or transport plants (Mullins 2002:260). However, it is of course possible that these roots are chance finds in these containers and resulted, therefore, from the context in which they were discovered (Holthoer 1977:83). These are, in fact, the only two examples known in which this vessel type can be suggested to have been employed as a flowerpot. Based on the limited evidence for such usage (if indeed this is the correct characterization of this evidence), it is clear that this was not the intended function of these vessels, as demonstrated by the fact that none of the examples of these vessels in Canaan, where they are also attested during the New Kingdom, suggests that they were employed to grow or to transport plants. Thus considerable room exists for a reevaluation of their function and significance.

Form

In Egypt archaeologists have made a distinction between "flowerpots" with unmodeled or straight rims and those with modeled rims that are slightly flattened and flared. Those with unmodeled rims were made from a loose and uncoated brown ware, while bowls with modeled rims could be made from this material or from an uncompacted white-coated brown fabric with a white background color (Holthoer 1977:84). More importantly, in Egypt unperforated bowls of this type tend to have unmodeled rims, while the perforated bowls usually have modeled rims. Overall these vessels are undecorated because of their utilitarian function, although some bowls with modeled rims and perforated bases feature red-splash decoration on their interiors, red rims, or white-painted rims (Holthoer 1977:83)—decoration common on other Egyptian bowls during this period.

In Canaan a distinction is made between "flowerpots" with unmodeled rims and those with modeled or externally beveled rims, and there is also evidence for "flowerpots" with everted rims, a form that is unattested in Egypt (Mullins 2002:259). These characteristics are also evident in the Jaffa assemblage. Two main vessel forms exist: a short V-shaped vessel with a base width equal to that of the vessel's height, and a longer, more slender vessel with a narrower base that is half as wide as the vessel's height. The walls of the more slender form flare out toward the top half of the vessel (Mullins 2002:259), like a bell. "Flowerpots" in Canaan, as evident in the Jaffa examples, were made of very coarse fabric and are extremely crude in appearance. The bases tend to be string cut and often have traces of the potter's fingerprints impressed into the clay above the base. The lack of effort in the finishing of the bases on "flowerpots" suggests that they were made quickly and sloppily, to the point that they were often removed from the wheel or tournette without being trimmed or finished. The bases of many of these vessels were perforated, apparently from the interior of the vessel before it was removed from the wheel. When the bowl was string cut, the potter angled the string to section the clay at an angle high enough to create a thin base wall with a small perforation (Martin 2006b:145). When bowls were cut off the wheel at too shallow an angle, the potter removed the vessel from the wheel and pierced the vessel manually with a finger or a sharp object from the base inward (145). The base could also be perforated from inside or outside the vessel with a finger or a tool (Mullins 2002:259).

Vessel Function

The fact that not all of these "flowerpots" possess perforated bases is significant and undoubtedly relates to their intended function. As previously mentioned concerning Egyptian examples, only bowls with modeled rims were usually perforated (Holthoer 1977:83). To understand the purpose for which they were used, the functions of both perforated and unperforated "flowerpots" must be explained. The most common characterization of these vessels includes their use as bread molds, for votive offerings, as incense burners, or as strainers in beer production. Below these various notions are evaluated.

Bread Molds. It has been proposed that the reason some of these bowls were perforated relates to their use as bread molds, where two halves were used together. The perforated upper half would be the top of the bread mold, while hot air would escape from the mold through the perforation as the bread baked. Although this theory resolves the need for both perforated and unperforated variants, there is no evidence that "flowerpots" were

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employed in bread making; nor is there evidence to suggest that they are found in pairs as would be expected. Evidence from several Middle Kingdom sites actually indicates that conical bread molds were employed for baking bread. The ovens at Abu Ghalib, for example, feature both conical bread molds and large platters associated together as ceramic vessels used in bread making (Samuel 2000:541–542). There are also hundreds of examples of bread loaves that for the most part have been recovered from elite tombs (542). "Flowerpots" with bread remains or associated with bread ovens have never been identified. Also, none of these vessels shows the characteristic friability that is consistent with repeated firing and is typical of bread molds (Holthoer 1977:83). There is therefore no evidence to indicate that these vessels were employed in bread production, and this appears also to be the case with the Jaffa exemplars.

Votive Function. Another proposal for their function is based upon their association with beer jars in tomb deposits. Holthoer suggests that the New Kingdom "flowerpot" was derived from Old Kingdom bread molds (1977:83) and that while they were used as bread molds in baking, in grave contexts they should be interpreted as votive symbols for bread. Because "flowerpots" can be found together with beer jars in the same funerary contexts, Holthoer proposes that these vessels constitute a votive funerary unit symbolizing the bread and beer components of the *ḥtp-dj-nsw* funeral offering (1977:83, 86). However, evidence from funerary contexts alone does not provide definitive proof that that these two types represented bread and beer offerings. First, it is rare to find both types in the same funerary context; the funerary contexts that Holthoer examined in Egypt and Nubia are mainly group tombs and reflect a variety of ceramics from several phases of the New Kingdom. Moreover, individual tombs, which are representative of one period, typically do not possess both vessel types (Higginbotham 2000:157). If these two forms were indeed complementary parts of bread and beer funerary offerings, there should be examples of both types, regardless of whether the tomb was a single or group burial. Also, since in Canaan "flowerpots" and beer jars do not occur together in the same contexts (and many sites have either "flowerpots" or beer jars), it appears that these two vessels were not employed during the same periods (Higginbotham 2000:156). In Nubia "flowerpots" are common during the mid- to late Eighteenth Dynasty but decline by the reign of Amenhotep III and disappear entirely by the late Eighteenth Dynasty (Martin 2006b:147), just as the same form of beer jar that is attested in Canaan becomes popular (147).

Incense Burners. The proposition that "flowerpots" were used as incense burners is based on the observation that several bowls of this type were discovered with a layer of soot inside. One such bowl from a foundation deposit dating to Thutmose III reveals traces of incense (Holthoer 1977:83). However, to suggest that therefore all these vessels functioned as incense burners does not follow. If this were the case, all or at least the majority of "flowerpots" should reveal traces of soot or incense, and they do not.

Unrestricted or V-Shaped Beer Jars or Beer Strainers. The distribution and chronology of the "flowerpot" in Egypt, Nubia, and Canaan suggest that there was a transition between the phases of use of the "flowerpot" and the beer jar during the late Eighteenth Dynasty and that these two vessels had a similar function (Mullins 2002:259–260). As previously mentioned, it was typically the case in Canaan that in strata where there are "flowerpots," there are no beer jars, and vice versa. For instance, at Beth-Shean, "flowerpots" appear during the mid-fifteenth century but are no longer attested during the thirteenth century, when the beer jar type becomes popular (Mullins 2007:447–449). All "flowerpots" in the Levant date to the Eighteenth Dynasty, while the beer jars date to the Nineteenth and Twentieth Dynasties. The only exceptions to this are in a Nineteenth Dynasty context at Haruvit (Martin 2006b:147) and the base of what may be a broken "flowerpot" at Beth–Shean (James et al. 1993:fig 12:14). The disappearance of "flowerpots" during the peak of the popularity of beer jars suggests that these vessels were popular during different periods of the New Kingdom and were not used simultaneously, although there was most likely a period of transition between the two types. Furthermore, the similarity between their extremely crude and unfinished wares and manufacture, including string-cut bases with finger impressions, strongly suggests that their functions are similar and may represent two separate phases of production of the same vessel type. Therefore, instead of interpreting "flowerpots" and beer jars together in New Kingdom tombs as both bread and beer votives, they should be reinterpreted as a grouping of two different forms for the same type of votive offering during two distinct periods.

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The chronological evidence is instructive, therefore, concerning the function of these vessels, namely in their suggested identification with beer production. At the cemetery in Rifeh, Petrie recorded extremely crude, perforated vessels that contained the remnants of a mashed barley cake, which was pivotal in making fermented beer mash (Petrie 1907:23). This mash would have been stirred in perforated bowls such as these, which acted as sieves to separate the mash from the fermented beer. Unperforated containers would have been placed under the holes to collect the beer. All the vessels of this type at Rifeh that are grouped together in Tomb 12 are coarse-ware, tall bowls that greatly resemble "flowerpots" and beer jars in the crudeness of their production.

The discovery of mash inside a perforated bowl so similar in ware to "flowerpot" and beer jar types supports the prevailing theory proposed by Mario Martin, among others, that crude, deep bowls such as these vessels, "flowerpots," and beer jars were part of a distinct family of utilitarian vessels used in Egyptian beer production (2006b:146–147). It is proposed, therefore, that in domestic beer production, perforated vessels such as "flowerpots" were used to filter out the fermented mash from the beer (Martin 2006b:147). The perforated bowls would have been central to stirring the mixture to drain the beer from the mash, while the unperforated bowls served as beer receptacles and containers (Martin 2004:272). The wide vaselike shape of the "flowerpot" would have been ideal for mixing and processing the beer mash. Holthoer has observed that the type of modeled rim that is usually accompanied by a perforated base would have been ideal for creating a tight join when another vessel was placed on top (1977:83).

Conclusions: Historical and Archaeological Implications for Jaffa

While there are countless examples of Aegean and Cypriot imports and local Canaanite imitations of these forms found at sites in the southern Levant during the Late Bronze Age (as there are at Jaffa), a remarkable dearth of imported Egyptian pottery during this period has been identified to date (e.g., Martin 2006a). This has been variously interpreted to mean that Canaanites pursued a process of "elite emulation" (particularly during the Ramesside period), whereby they sought to appear Egyptian but did so with the importation of a limited number of prestige goods alongside the use of locally produced goods made in an Egyptian style (Higginbotham 2000:132–133). The scarcity of Egyptian ceramic imports and of locally made Egyptian-style wares in Canaan is remarkable in light of the dramatic impact that the New Kingdom Egyptian Empire had upon Canaan. In this context, a reappraisal of the "flowerpot" phenomenon is necessary, since the imitation of Egyptian products did not apparently extend to Egyptian ceramics. Furthermore, "flowerpots" found at Jaffa were clearly not imported, as suggested by their local fabric, crude production, and heavy weight; nor did they serve as containers for commodities. In light of their local make and their attestation at only Egyptianized sites, these vessels fall outside the parameters of objects regarded as characteristic of the process of "elite emulation." It is more likely, therefore, that these vessels were used and probably produced by Egyptians living in Canaan, not by Canaanites emulating Egyptians.

These vessels, along with a number of others, were found in situ only a short distance southwest of the location of the later Ramesside gate. While the assemblage was clearly located near the gate of the period (which lay beneath the LB IIB gate), it was not located where Jaffa's Canaanite rulers would have resided during the Middle and Late Bronze Age (nor, most likely, where the Egyptian administrator resided when he was present), which was more likely on the western or windward side of Jaffa. Indeed, the windward location of palaces is evident at all excavated Middle and Late Bronze Age acropoleis throughout the Levant (compare also the description of the location of the Tjekker-Ba'al's palace at Byblos, see Simpson 2003:119). All of this suggests that the location of these finds, while within Jaffa's fortress walls, was not one that was ideal for Jaffa's rulers or where they should be expected to have dwelt. However, such a location near the gate would have been appropriate for the local Egyptian garrison and its support apparatuses, which required a substantial kitchen.

Preliminary analysis of the assemblage with which the "flowerpots" were found reveals nearly the full range of locally produced Egyptian wares that are attested in the southern Levant (Burke and Lords 2010). In addition to the "flowerpots," there are numerous simple bowls (including "lip-stick" ware bowls), as well as large shallow bowls, many of which were pierced through; bag-shaped

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jars;[4] neckless storage jars with rounded bases and rolled rims; and carinated jars. Further analysis, in addition to continued excavations, will reveal additional examples of other Egyptian vessel types. The assemblage revealed does not, therefore, support its identification with a local Canaanite population attempting to emulate Egyptian practices. Indeed, the locally and crudely produced Egyptian assemblage found in Jaffa features too many items of a mundane and culturally conservative nature to support the identification of a process of Canaanite emulation of Egyptian elites.[5]

While our study of the context of these and other Egyptian vessels discovered by Kaplan in Area A is preliminary, in light of the chronological limits of the occurrence of "flowerpots" during the Eighteenth Dynasty (i.e., LB I and IIA) in the southern Levant, the collection from Jaffa will prove critical to the dating of Jaffa's Late Bronze Age assemblage. At this stage it is possible to say that these vessels confirm a significant Egyptian presence at Jaffa during the Eighteenth Dynasty (ca. 1530 to 1300 B.C.E.). The attestation of this particular vessel type reveals the extent of Egyptian occupation of Jaffa during late fifteenth century B.C.E., when the site appears to have served as an Egyptian garrison. This role is already suggested in the tale "The Capture of Joppa" (Simpson 2003:72–74). Indeed, both the archaeological evidence provided by the assemblage to which these vessels belong and this piece of Egyptian literature serve as a basis for confirming Jaffa's importance to Egyptian administration in the years following Thutmose's initial conquests (see Chapter 6).

Egyptian garrisons and administrative centers were established in strategic locations throughout Canaan, for example at Beth-Shean. The majority of these centers were clustered along trade routes and key ports along the coast. It was in this context that Jaffa became important as the primary port along the coast north of Ashkelon and south of 'Akko and Dor. Indeed, if later historical periods are any indication, Jaffa was the port of entry for the central coastal plain and access to hill country sites such as Jerusalem, a role that it probably assumed as early as the Middle Bronze Age. The important role of maritime activity during the early New Kingdom is suggested by, among other things, Thutmose I's transport of boats overland to the Euphrates from the coast of Syria, not to mention that the traffic that connected Egypt and Byblos and would have required ports for supplies and safe harbor along this route. Jaffa's role was vital to such maritime traffic well after the Iron Age. The occurrence of this vessel type in other Eighteenth Dynasty contexts in the southern Levant supports the identification of an Egyptian garrison in Jaffa during this period, but it is not adequately explained as "elite emulation" of Egyptian practices by Canaanites (Higginbotham 2000). The chronological information provided by the Egyptian vessels unearthed by Kaplan provides important archaeological data for refining the date for the emplacement of an Egyptian garrison at Jaffa.

Notes

1. A version of this paper titled "Egyptians in Jaffa: Observations from Jacob Kaplan's Excavations at Tel Yafo" was presented at the Sixth International Congress on the Archaeology of the Ancient Near East, University of Rome "La Sapienza," on May 8, 2008, by Aaron Burke.

2. For this reason, excavators unfamiliar with this vessel type and its identification with an Egyptian assemblage undoubtedly overlooked or ignored any sherds belonging to such vessels as some crude ware type when insufficient sherds were recovered to permit the reconstruction of the profile of a vessel.

3. Lists of exemplars of these vessels in Egypt and Nubia have been provided by both Higginbotham (2000:156) and Mullins (2006:258).

4. The reference to these types follows the typology proposed by Mario Martin and posted on his Web site: http://www.geocities.com/mario_antonio2005/Set_Egypot.htm.

5. The presence of spinning bowls, for example, represents a culturally specific approach to textile production that would have been unlikely to be emulated.

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Chapter 25

The Jaffa-Jerusalem Relationship during the Early Roman Period

in Light of Jewish-Judean Pottery at Jaffa

Orit Tsuf

Over the course of many years of research, the question has been asked: What is the practical significance of the identification of Jaffa as "the gate to Jerusalem"? The existence of a Jerusalem Gate in Jaffa, along with evidence of a paved road between Jaffa and Jerusalem, attests to the relationship between these two important cities. Its status and nature, however, remain somewhat unclear (Fischer et al. 1996). The study of the material finds that characterize Jaffa may constitute another level of data for clarifying this issue. This article treats a group of pottery vessels made in the Judean tradition that were uncovered in Jaffa during the excavations of Jacob Kaplan (1955–1974) and are now being prepared for publication. These vessels reveal commercial and cultural ties that Jaffa had with the rest of the cities of Judea, in particular with Jerusalem, on the eve of the destruction of the Second Temple. The ceramic assemblage discussed here is of significance: (1) because it is the first publication of a complete assemblage from a Judean port city; and (2) because of the extraordinary diversity of the pottery, which is uncharacteristic of this region prior to the Roman conquest. These ceramic artifacts permit an analysis of the historical events that influenced the status of Jaffa in the period under discussion.[1]

During the Roman period there were two primary types of transport: a national road for the civilian administration and the army, and transportation for economic and commercial purposes. The national road from Jaffa to Jerusalem passed through Lod; from Jaffa to Lod there was a paved road that is mentioned in historical sources (Roll 1987:121). With the rehabilitation of Jaffa after the revolt and its elevation to a Roman city called Flavia Joppa, and in the wake of Lod being made a Roman city (Diospolis) in the Severan period, a national road between the two cities was essential. The road from Lod to Jerusalem branched off along two main axes: one via Beth-Horon and the other via Emmaus. The Beth-Horon road from Lod to Jerusalem was 45 km long; five milestones without inscriptions have been found for the road so far. The Emmaus road from Lod to Emmaus was 17 to 18 km long; from Emmaus to Jerusalem it was 27 km long. In the Roman period, both routes were turned into national roads. Already in the Hellenistic period, they served to link Jerusalem and the coastal plain. However, they were repaved and renovated at the end of the Great Revolt when the Tenth Legion was stationed in Jerusalem (J. *BJ* 7.7, also 3.17; Roll 1987:125). Both of them were intended to ensure the connection between Caesarea, where the commander of the Tenth Legion and the procurator of Judea resided, and Jerusalem, where the Tenth Legion was garrisoned.

Naturally, the road between Jerusalem and Jaffa was also used for mercantile purposes throughout the region of Judah and especially for transferring goods from the

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harbor in Jaffa to Jerusalem. In the Xenon Papyri of the third century B.C.E., Jaffa is mentioned as an important harbor where Greek merchants and officials were located (Fischer et al. 1996:19, 182; P. Cairo 59011, 59093). In the Second Temple period, many of the goods intended for the temple arrived by way of Jaffa and from there were shipped via Beth-Horon or Abu Ghosh to Jerusalem. The port at Jaffa is mentioned in Talmudic sources along with the Gates of Nicanor, which were brought to the temple from Alexandria via Jaffa and were miraculously saved when a storm occurred at sea (tYoma 2:4; yYoma 3:41a). Until the destruction of the Second Temple, the pilgrimage to Jerusalem was part of the Jewish tradition, which required that one visit the city during the three festivals. In these periods, the road between Jaffa and Jerusalem served pilgrims who arrived from the Diaspora as well as those from different regions throughout Palestina. Philo describes thousands of people from many cities arriving at the temple, some coming overland and others by sea (Philo, *De specialibus legibus* I.12.69; see Fischer et al. 1996:18). Josephus reckoned that 2,700,000 Jews were present in Jerusalem for the Passover holiday in the year 68 C.E. (J. *BJ* 6.425). The commercial, economic, and social ramifications of such a large number of Jews converging on Jerusalem (even if Josephus is exaggerating in his description) were enormous.

There is no doubt that the connection between Jaffa and Jerusalem was of major importance throughout history and was multifaceted. It was along this road that Jews set off for the Diaspora and peddlers moved between the marketplaces with their produce. However, the connection became stronger and acquired new significance after the destruction of the Second Temple. It was no longer a connection based mainly on commerce and the passage of pilgrims. It was, instead, a route by which the Roman army maintained control over the entire region of Judah. All the coastal cities south of Caesarea were included in the province of Judea, and the entire coastal region was divided into units such that the Tel Aviv-Jaffa area was split between two cities, Jaffa and Apollonia, for more effective rule. The Yarkon River was apparently designated the border between them (see map in Kaplan 1959:94).[2] These administrative changes directly influenced the cultural development and the political status of the coastal cities and indirectly affected the material culture of the residents of the coastal plain.

A familiar and widespread trend in all the coastal cities of the Hellenistic period and even prior to that was the regional division between the traditions of the coastal and highland regions. The population of the coastal cities of Palestina was in regular contact with countries that lay beyond the sea and they derived their cultural sources from pagan traditions, including those of the Phoenicians, the inhabitants of many coastal areas (Berlin 2006:75–87). On the other hand, in the more distant regions, there was a tendency to maintain local traditions, while foreign influences were usually met with suspicion and penetrated very slowly and gradually, if at all.

A good example of this is during the early Hellenistic period (third/second centuries B.C.E.), which is characterized by a fundamental distinction between the material culture of the so-called highland and coastal zones. On the one hand, there was Jerusalem and the south of the country, which were characterized by a population that was culturally conservative and preserved the traditions of the Iron Age. On the other, there were the coastal cities, characterized by a heterogeneous population that readily accepted foreign influences and benefited from cultural and religious openness. This fact is evident in an examination of the ceramic finds from port cities such as ʻAkko (Dothan 1976), Shikmona (Elgavish 1974:51–53), Dor (Guz-Zilberstein 1995:289–313), Caesarea [Strato's Tower] (Gendelman 2007:35–45), Tel Michal (Fischer 1989), Apollonia (Fischer and Tal 1999a:223–248), and Ashdod (Dothan 1967, 1971) during the Hellenistic period. These cities are characterized by a massive presence of imported tableware and the pottery in the Phoenician tradition, as opposed to a lack of the same types in the distant regions in the south. Few examples appeared at Gezer (Gitin 1990),[3] at Jerusalem (Hayes 1985:186–188),[4] and in the Negev at Tel ʻIra (Fischer and Tal 1999b:290–292). This pattern also typifies Jaffa, as will be demonstrated in the final publication of Kaplan's excavations. In the early Hellenistic period, a large and diverse amount of imported pottery was discovered. This included Attic black-glazed bowls together with local red slip bowls, and amphorae imported from the Mediterranean Basin.

In the Late Hasmonean period, especially after the annexation of Jaffa to the Hasmonean kingdom and the preparation of its port as an outlet to the sea and a connection with the Jews in the Diaspora,[5] one can discern changes in the ceramic assemblages of Jaffa. There is the distinct presence of pottery that is characteristic of the

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region of Judah, such as incurved bowls, spherical juglets, Herodian cooking pots, Judean bag-shaped jars, and Herodian closed lamps.[6]

The Judean pottery mostly penetrates into the southern coastal cities and does not appear in the northern coastal cities and the Galilee. In the coastal plain, the geographic proximity of Jerusalem hastened processes that in the distant regions of the Galilee and Golan transpired in a slow and gradual fashion. For example, in the Hellenistic city of Tel Anafa, as in the Jewish village of Gamla, the Phoenician tradition clearly predominates (Berlin 1997:75–76, fig. 71, 2005:62, fig. 64.61). This trend is not unusual in a Hellenistic city with a pagan population such as Tel Anafa. What is surprising, though, is that in a Jewish village such as Gamla, the pagan nature of the settlement was preserved after its conquest in the year 80 B.C.E. by Alexander Jannaeus at a time when in Jaffa one can see the beginnings of the Judaization of the region (Berlin 2005:69, 2006:134–135, fig. 135.131). The physical proximity to Jerusalem and to the region of Judah left its mark and accelerated processes that in the Galilee and Golan came into existence mainly after the destruction with the arrival of Jewish inhabitants to the region. That is probably also why in the middle of the second century B.C.E., there was a decline in the consumption of imported food products and especially amphorae for wine and oil in the region of Jerusalem; in the Galilee and Golan, the cessation of the importation of Terra Sigillata bowls occurs later, during the first century C.E. (according to evidence from Yodefat, Capernaum, Bethsaida, and Gamla; see Berlin 2005:63–64, fig. 64.61). Berlin associates this phenomenon with the transition to new dining practices around a central bowl and not from a decision to abstain from using imported vessels, which according to Jewish tradition are not ritually clean (Berlin 2006:150). However, it should also be taken into account that the penetration of vessel types in the Jewish tradition happened only in the first century C.E., and in the wake of it, imported vessels became less popular as a result of a collective decision by the Jewish community to maintain Jewish dietary laws in their households.

Before we examine the ceramic finds from Kaplan's excavations in Jaffa, we should ask the question: Did identical pottery assemblages exist in all southern coastal cities that were part of the province of Judea? Unfortunately, there are still no final publications of the occupation strata that date to the early Roman period in most of the southern coastal cities in Palestina. However, it is reasonable to assume that the assemblages in them are also similar to those of Jaffa. The coastal cities where artifacts originating in the region of Judah are likely to be found are (from north to south) Dor, Caesarea, Ramat Hanadiv, Tel Michal, Apollonia, Jaffa, Yavneh (Berlin 1997:76, table 71),[7] Ashdod (Berlin 1997:76, table 71),[8] and Ashkelon.[9]

Below is a short review of the sites with evidence that gives a general picture of the assemblages that are characteristic of each of these cities. In the excavation areas that date to the Roman and Byzantine periods at Caesarea, there is pottery from a source in the region of Judah: incurved-rim bowls, cooking jugs, spherical juglets, and perfume bottles.[10] In the early Roman settlement layer of Strato's Tower, pottery in the Judean tradition was uncovered, but not in the quantity and diversity attested at Jaffa. On the other hand, at Strato's Tower there is a noticeable preference for Italian thin-walled bowls (Gendelman 2007:12–119, figs. 117.114:172–117.118:224).

Pottery types characteristic of the region of Judah, such as incurved-rim bowls, casseroles, storage jars, cooking pots, and Herodian lamps, were also discovered in a rural house of a Jewish family at Kh. 'Aqev (Ramat Hanadiv) (Calderon 2000:91–103, pls.101–105; Silberstein 2000:pl. V:7–13; pl. VIII:13–15, 15–16; pl. VI:10–12; pl. I:13–15, 21; pl. XIII:12–19). Calderon emphasized the similarity between the early Roman pottery at the Ramat Hanadiv farmstead and the Bar-Kochba Revolt pottery (2000:92–97). Judean traditional material was also identified at Ashdod. Jewish stone vessels, as well as pottery consisting mostly of spherical juglets, were uncovered at the site (Dothan 1971:figs. 17–28, 78–80). There is no evidence whatsoever of artifacts of a Judean origin at Apollonia (Oren Tal, personal communication, 2007). The finds from the first to third centuries at Yavneh-Yam are extremely meager, even though it was associated with the mother city of Yavneh. In this period it probably functioned as a suburb, in particular as the port of Yavneh (Fischer 2005:190). In spite of this, there are very few finds characteristic of the material culture of Judah, such as Herodian lamps, limestone measuring vessels, and coins of Agrippa I. Kaplan uncovered four ossuaries that date to the latter part of the Second Temple period along the eastern fringes of Yavneh (Fischer 2005:191, figs. 130–131).

Most of the ceramic finds of Judean tradition from Jaffa are concentrated in the residential building in Area

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C within Qedumim Square. In the period under discussion, this structure was inhabited by a Jewish family, as attested by the Agoranomos Inscription, which was exposed in the strata that date to the early second century C.E. (Kaplan 1981:413–416). This inscription, which is dated to the fourth and ninth years of Trajan's reign (101/102 and 106/107 C.E.), ends with the name of a Jewish *agoranomos*, Yehuda Tuzomou. This extraordinary evidence points to the fact that this house was occupied by a high-ranking official of Jewish ancestry who was responsible for the weights and measures in Jaffa on behalf of the Romans. In 1964 a meager ceramic assemblage from this building was published by Kaplan as part of a group of vessels that date to 50–67 C.E., the time when the aforementioned residential building was destroyed by Vespasian (Kaplan 1964).[11] This residence expresses in the best possible manner the presence of the Judean tradition among the Jewish population of Jaffa. An especially large assemblage of Herodian lamps, particularly nozzle fragments, was uncovered in this building. Of the 102 lamps from different periods (Hellenistic to Byzantine), about one-third of them (71) are Herodian. In this context, Judean stone vessels that were found in large quantities in the residential building in Area C and dated to the first to second century C.E. can be mentioned, although they will be discussed separately within the framework of the final publication of the Kaplans' excavations.[12] Judean pottery was also uncovered in small amounts in other parts of Jaffa, such as areas A, G, J, and Y.

The general review presented above suggests that Jaffa is not an isolated instance for the presence of Judean artifacts among coastal communities. Rather it represents a general trend that was prevalent in nearby coastal cities that were part of Judah. Nevertheless, as previously mentioned, due to the lack of excavation reports dealing with the early Roman period in the southern coastal sites in Palestina, it is difficult to unequivocally determine the regional distribution of Judean pottery and in general to identify the borders of the local commerce from the region of Jerusalem and in the direction of the coastal plain. Were types that imitate the Judean tradition manufactured locally on the southern coast of Palestina concurrent with the Judean pottery found in Jaffa? At this stage, we are unable to ascertain whether the entire assemblage that belongs to the Judean manufacturing tradition was indeed produced in Jerusalem and its environs. It is reasonable to assume that the early vessels were brought from pottery workshops in Judah, whereas in later phases imitations were produced by potters in the area of the southern coastal plain.[13] Thus we should differentiate between "Judean" ware that was produced in the region of Judah and "Jewish" ware that imitates types that belong to the Jewish-Judean tradition.

The Jewish-Judean pottery in Jaffa can be divided according to three historic periods. The first phase was from the end of the second century to the beginning of the first century B.C.E. to 37 B.C.E. (Late Hasmonean period). The second phase followed the annexation of Jaffa, Caesarea, and Dor by the Hasmonean kingdom (by Simon and Alexander Jannaeus), when a process characterized by the penetration of Judean pottery into the southern coastal cities began. This process was accompanied by another event connected to the introduction of new rabbinical laws that stringently dealt with dietary laws among the population of Jerusalem. In the City of David in Jerusalem, one notices a dramatic decline in the presence of stamped amphorae from the middle of the second century B.C.E. This was probably due to a decrease in the consumption of imported oil and wine, which Jewish Halakha regarded as ritually unclean (Ariel 2000:267–283; Finkielsztejn 1999:31–32 and fig. 32).

In this period, Jaffa still preserved its coastal character by importing tableware and foodstuff, as indicated by the appearance of the Eastern Terra Sigillata Ware in all excavated areas. At that time in Judea, local pottery, which is well known from sites in Samaria, the Judean Shephelah, and elsewhere, continued to be manufactured. It is considered a direct continuation of the local tradition that is characteristic of the Hellenistic period.

It is interesting to note that the Judean types appeared at Jaffa and Ramat Hanadiv in large quantities. At Ramat Hanadiv, a Hasmonean fortress probably built by the rebel leader Simeon Bar Giora (J. *BJ* 4.9.4) was exposed (Hirschfeld 2000:51, 240). The presence of the Jewish rebel at Ramat Hanadiv as part of the Hasmonean attempt to fortify the kingdom provides an excellent context for evidence of Judean pottery at the site. The same situation probably characterized Jaffa. The connection of Jaffa to the Hasmonean kingdom is clear and well known from the literature. However, at Jaffa well-known Hellenistic forms appeared in relatively large numbers during the second and first centuries B.C.E.

For example, early incurved-rim bowls (Figure 25.1:1–3) were the most common type at the Judean

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Desert and Jerusalem vicinity from the late second century B.C.E. and extending to the late first century C.E.[14] The Hellenistic version made of relatively thick ware was found at Shikmona and Ashdod.[15] Some of the bowls at Jericho and Jaffa were employed as lamps and still possess traces of soot on the rims (Bar-Nathan 2002:86–87, Type J-BL83A83, pl. 14:199–228, plate V:195). The idea that they might reflect eating customs among the priestly sect during the Second Temple period, such as the Essenes and the Sadducees, was impressed by Bar-Nathan (2002). On the other hand, the common use of the bowls in nonreligious household contexts may point to their use as lids for cooking pots (Bar-Nathan 2006:129).

The spherical juglet is also considered the typical Second Temple–period perfume juglet in Judea during mid- to late second century B.C.E. through the late first century C.E. The early version made of heavier walls also appeared at Ashdod from the second century B.C.E. onward (e.g., Figure 25.1:19–21) (Dothan 1967:25, figs. 26:29, 11:13, 1971:57–58, fig. 17:11–12). The form's antecedent lies with the local Iron Age and Persian globular juglets, which become traditional and typical to the Jewish settlements in Judea from the second century B.C.E. onward.[16] Spherical juglets are well documented in Jewish sources.[17] The shape of the spherical juglet accords well with the Talmudic description of the *tslohit* (צלוחית). According to the inscription, its collar is constricted inward; its shoulder is high, with a narrow mouth to preserved the costly perfume inside from evaporation or spillage (Bar-Nathan 2002:50). The collar-rim storage jar (Figure 25.2:29–36) and the flared-rim cooking pot (Figure 25.4:62–63) were most popular throughout Palestina during the second century B.C.E. to the mid-first century C.E. Based on the Jericho assemblage, Bar-Nathan suggests that the collar-rim storage manufacturing was not limited to southern Palestina but that other regional workshops were located in northern and central areas, since the rim profiles are not completely identical (Bar-Nathan 2002:30). The flared-rim cooking pot was manufactured and distributed in Jerusalem and its vicinity (Berlin 2005:35, fig. 33:31–39) and was defined as the "Hasmonean cooking pot" and "Herodian prototype" in the Jericho palaces (Bar-Nathan 2002:pl. 12:140–149). Both of them appeared at Ramat Hanadiv (Silberstein 2000:421, pl. 1:13–15; 429, pl. V:9, 11), Strato's Tower (Gendelman 2007:16, fig. 11.13:17–18), and Ashdod (Dothan 1971:48, 144, fig. 112:142).

End of First Century B.C.E. to 70 C.E. (Herodian Period)

Increasingly strict religious laws naturally had extensive ramifications on the management of the Jewish household. Throughout the period of Greek and Roman rule in Palestine, we are aware of changes in the running of the household that stem from historical events. During the first century B.C.E., probably with the rise of the schools of Shammai and Hillel (Ariel and Strikovsky 1990:28; Berlin 2005:53; Regev 2000:180; Sanders 1990:166–236) and before the destruction of the Second Temple, one notices a pronounced manner in which different historical political fluctuations affected the diversity that characterized household wares at Jewish settlements. Production of stone vessels began; these were not susceptible to ritual impurity (mKelim 10:1; mOhal 5:5; mParah 5:5; mYad 1:2). From the second half of the first century B.C.E. through the first century C.E., stone vessels appeared in all areas of Jewish settlement as part of the strict observance of ritual purity among all classes of Jewish society (see Magen 1994:24–25, with a distribution map of stone vessels in Palestine). At Kfar Hananiah in the Galilee, a workshop began producing Jewish pottery in the first century B.C.E. In the period of the Mishnah and Talmud, it was responsible for the marketing and distribution of pottery among all the Jewish settlements of the Galilee and Golan (Adan-Bayewitz 1993). Specific laws also concerned the region where ritually clean pottery vessels were manufactured. Mishnah Hagiga (3:5) states that one cannot depend on pottery vessels manufactured and brought to Jerusalem from farther away than Modi'in being ritually clean. This decree is further reinforced by the fact that pottery vessels uncovered at Qumran were made of local clay, which was regarded as ritually clean (Berlin 2005:53; Magness 2002:52–53). Similarly, production was begun at a number of centers in the vicinity of Jerusalem from the middle of the first century B.C.E.

A few manufacturing centers have already been identified in the vicinity of Jerusalem; none of them has been excavated until now. All of them produced pottery during the mid- to late first century B.C.E. until 70 C.E. Two manufacturing centers were identified in Jerusalem. The first is located at Givat Hamivtar, north of the Old City, and the second is on the ridge of Givat Ram west of the Old City (Abu Raya 1997; Arubas

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and Goldfus 1995:95–107). The excavation at Binyanei Hauma (Jerusalem Convention Center) exposed part of what is assumed to be the Givat Ram pottery production zone (Berlin 2005:29). The main source of material for the Jerusalem vessels was Motza clay, as evident from neutron activation analysis (Berlin 2005:46). Other manufacturing centers were probably located in the region of the Dead Sea. One of them was located at Qumran and probably served the local community (Magness 2002). In the palace at Jericho, many wasters were found, which may indicate a nearby production center (Bar-Nathan 2002:196, and personal communication, 2007). However, in her recent publication on Masada, Bar-Nathan suggested "a Jewish potter's school" that developed local and regional independent workshops in the Jordan Valley and the Dead Sea region (Bar-Nathan 2006:375).

This phenomenon was the product of a new understanding of religious laws that said that pottery vessels made of clay from the region of Jerusalem were ritually clean. By buying and using "clean" vessels, the homemakers of Jerusalem kept their households ritually pure. In this way every person was granted an opportunity to achieve a "personal spiritual relationship with holiness" (Berlin 2005:54; Regev 2000:202). It is interesting to note that maintaining a vessel's ritual purity did not detract from its quality. The vessels were not provincial; rather they were a local imitation of Phoenician and Roman cooking ware. The potter produced conservative vessels that were nevertheless sophisticated (Berlin 2005:55).

As previously mentioned, the ceramic assemblages of Jaffa started to change after the Roman conquest in 63 B.C.E. During Herod's reign and the establishment of the kingdom of Judea, Jaffa was already part of the same kingdom. However, the main trade routes, especially the "perfume routes," did not pass through it; rather they ran from the region of the Dead Sea to Jerusalem, Antipatris, Shechem, or the port of Caesarea, which during Herod's time was his kingdom's principal harbor. The Great Revolt and the riots that ensued during and after it are in a sense a last attempt at a fundamental change of the status and nature of Jaffa in relation to the capital of the Herodian kingdom in Jerusalem. A process that took place in Jaffa was totally opposite what was customary until the Roman conquest: the "conservative" material culture of the highlands that belonged to the Hasmonean tradition (second to first century B.C.E.) descended to the coast and appears in the artifacts from Jaffa.

A few of the ceramic types that were typical of the Jerusalem pottery industry appeared at Jaffa. Some types are known from the site at Binyanei Hauma, and others are a reflection of the distribution pattern in Judea. The appearance of most of the Jaffa repertoire at the same time at Ramat Hanadiv and Strato's Tower may be solid evidence of a manufacturing center shared by both cities in the coastal plain region or evidence of the export of Judean pottery throughout the southern coastal plain. Evidence for the export of Judean ware over long distances can be found at the Jewish village of Gamla in the Golan Heights. Carinated-shoulder casseroles (Figure 25.5:81–84) from Judah appear there. Even though the site manufactured its own Jewish pottery, for unknown reasons it also chose to import pottery from Judea (Berlin 2006:41, fig. 42.16:15–17).

In that period, almost all the typical Judean types made of thinner and finer ware appeared at Jaffa. The early Roman incurved-rim bowls (Figure 25.1:4–11) and spherical jugs and juglets (Figure 25.1:22–25) attested at Strato's Tower and Ramat Hanadiv (Gendelman 2007:fig. 8.7:65–67, 68.61:61–63; Silberstein 2000:428, pls. iv:426, viii:423–425). Next to the known Judean types appeared newly made shapes such as cups (Figure 25.1:12–13) and mugs or small pots (Figure 25.1:14–16) The latter probably did not function as cooking vessels but rather as accessory vessels. A small quantity of one-handled pots (24 vessels), identified as mugs, was found at Masada (Bar-Nathan 2006:145–146, pl. 126:172–174). Another new type was the casserole or deep bowl (Figure 25.1:17–18) made of semi-fine ware. Lapp identified the form as a deep bowl (Lapp 1961:174, type 151.176a). In the coastal plain, a similar bowl was recovered at Nahalat Yehuda (Kaplan 1964:13 fig. 13:11, pl. 13:17). That tableware developed into fine vessels made of well-levigated ware in a diversity of forms. One can think they were influenced by early Roman Italian thin-walled vessels.

The common storage jars of Jaffa were made of the typical coastal red ware but are distinctly of Judean morphology. The ridged-neck storage jar (Figure 25.2:37–41), a remnant of the former Hellenistic collar-rim storage jar, appeared almost exclusively during the first century C.E. at Judean sites. One of the jars from Masada bears a *titulus picti* with the Hebrew word קצבא ("butcher") written in black ink, which may provide the identification of the

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owner of the jar (Bar-Nathan 2006:55, pl. 55:21). The type is pretty common in Caesarea and is also known from Nahalat Yehuda (Bar-Nathan and Adato 1986:160, 171 fig.161:161; Berlin 1992:118, fig.154:115; Gendelman 2007:59 fig.55.51:56; Kaplan 1964:8, fig. 2:5; Silberstein 2000:421, fig. 421:416–418). At Sussita similar types are dated pre-second century C.E. Another transitional shape that developed during the early first century C.E. was the flanged-neck storage jar (Figure 25.2:44–47). At Masada complete jars of this type were recovered. One of them bears the Hebrew *titulus pictus* שמעון בן יועזר ("Shimon Ben Yoezer") in black ink. The type was considered one of the typical Zealot jars, dated to the first and early second century C.E. (Bar-Nathan 2006:57–58, pl. 58:39–42). In the coastal plain, the type appears at Ramat Hanadiv and Jaffa (Kaplan 1964:8, fig. 1:3, pl. 1:1; Silberstein 2000:421, fig. 421:418). The latest development was the bell-shaped, shelf-rim storage jar (Figure 25.3:49–57). Several complete amphorae from Masada storerooms bear the Hebrew *tituli picti* דבלה, which means "dried figs." The folded-rim storage jars (Figure 25.2:42–43) from Jaffa are made of the typical Judean fine, hard fabric. That type was less common in Jaffa, and only several examples appear in Area C. In the south, the type is most typical to Judean Desert sites during the first to early second century C.E.

The triangular-rim cooking pot (Figure 25.4:64–68) was most common in Judea and various other parts of Palestine. The appearance of the type as far away as Gamla is quite unusual. At Gamla 240 rim fragments of various fabrics, all with identical flanged rims, were counted. Berlin noticed that no scientific analysis had been made, but "by eyes and feel" many are similar to the "lime flecked red brown cooking ware produced at Binyane Hauma in Jerusalem" (Berlin 2005:35–36, 2006:32). The type was dated at the fortress on the summit of Ramat Hanadiv to after 30 B.C.E. The Ramat Hanadiv exemplars seem to have originated in Judea (Silberstein 2000:55, 430–431, fig. 433, pl. V:438–439).

The tunneled-rim cooking pot (Figure 25.4:73–77) was the second most popular casserole at Masada (26 percent) following the carinated-shoulder type (40 percent). It is dated from the late first century B.C.E. to the first century C.E. (Bar-Nathan 2006:167–168, pl. 130:162–170). In Judea the type was in common use at Machaerus and Masada from the end of the first century B.C.E. up to the second century C.E. (Bar-Nathan 2006:167–168, pl. 131:169; Loffreda 1996:81–82). Examples of the tunneled-rim casserole were recovered from Roman dumps and fills at Mevorakh (Rosenthal and Sivan 1978:16, fig. 12:13), Ramat Hanadiv (Silberstein 2000:435, pl. VI:414–416), and Jaffa (Kaplan 1964:fig. 4:9).

The Judean steep-walled casserole (Figure 25.5:81–84) and the carinated-shoulder casserole (Figure 25.5:78–80) are characterized by the dominant neck, which is clearly absent among other Hellenistic casseroles, which featured a distinguished broad rim for accommodating a lid. The morphological development of the Judean casserole probably relates to its role in cooking. According to Kahane, the carinated-shoulder casserole can be considered the Jewish kettle. Its shape was derived from Syrian, Greek, or Italic metal prototypes, which are imitated in clay with no link to earlier local pottery (Berlin 2005:39–42; Kahane 1952:130–131, pl. 131:e). On the other hand, references in the Mishna identify the casserole as *kdera*, which served for cooking solids and liquids (mNed 6:1–2). Many of the foods needed constant stirring and were left uncovered so they did not boil over (Bar-Nathan 2002:68). The traditional way of cooking may explain the lack of need for lids and thus the morphological shape of the plain rim with a high neck, slightly wider than the typical Hellenistic cooking pot.

Herodian lamps (Figure 25.6:85–88) are well represented in the house in Area C. Their distribution is restricted to Judea, and they are rare in the coastal plain, the Galilee, and the Golan (see references in Rosenthal and Sivan 1978:81). The finger bottle (or "Judean kohl bottle"; Figure 25.1:26–28) was identified at Masada as locally produced "Judean unguentaria" and not imported as Hershkovitz has suggested. It was used as the Talmudic *tslohit foliatum*—a fine, expensive perfume container for a precious plant from the Himalaya Mountains (Zevulun and Ulenik 1979:95). Three kohl sticks, found next to a few bottles in the Zealot dwelling, suggested that the bottles also functioned as kohl containers. According to her suggestion, small unguentaria were the favored type of talmudic *tslohit* for perfume, which replaced fusiform and piriform unguentaria during the first century C.E. (Bar-Nathan 2006:200, 206). Their appearance along the coastal plain, at Jaffa (Kaplan 1964:15, figs. 14:13, 15, 18) as well as at Yoqneam (Avissar 1996:59, fig. x. 57:26) and in grave contexts near Tel Abu Shusha at Mishmar Ha-Emeq (Siegelman 1988:28 and 32, ill. 28), can also be connected to Jewish settlements.

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Between Revolts: The Late First to Second Century C.E.

The Roman conquest and especially the introduction of the Tenth Roman Legion to Jerusalem were significant in the continued functioning of pottery production centers in the city. Excavations in the workshop exposed at Binyanei Hauma, which was probably part of an extensive pottery production complex at Givat Ram (one of two major production centers in Jerusalem), indicate that activity at this site came to a halt in 70 C.E. (Berlin 2005:33). This evidence is likely to show that as a result of the conquest, the pottery industry was reorganized; in the vacuum created between the time of the destruction and the establishment of new production centers, there was room for local potters from distant regions to imitate Judean pottery. Moreover, the forms were familiar and known for several generations. Workshops existed, and, most important of all, pottery in the Judean tradition was highly prized and was in even greater demand after the conquest. These were the circumstances in which traditional Judean types continued to be produced in workshops that were probably located in the southern coastal plain.

It is interesting to note that many types that were quite prevalent in Jaffa were also discovered in the Dead Sea region at Masada (Bar-Nathan 2006:62–65, pls. 12:62–66, 13:67–71), Jericho (Bar-Nathan 2002:153, pl. 124:410–411), En Boqeq (Fischer and Tal 2000:30–44, figs. 32.31–32.13), and En Gedi (Hershkovitz 2007:455–456, fig. 451) and, after the destruction of the temple, in the Judean Desert caves of Bar-Kochba (Eshel and Amit 1998:15, map 11). The shelf-rim, bell-shaped storage jar (e.g., Figure 25.3:48–57) as well as the folded-rim storage jar (compare Figure 25.2:42–43) appeared in the Cave of Horror, next to spherical juglets (compare Figure 25.1:22–25), a carinated-shoulder casserole (compare Figure 25.5:78–80), grooved-rim cooking pots (compare Figure 25.4:69–72), and Herodian lamps (compare Figure 25.6:85–88; Aharoni 1962:190–195, figs. 192–194). The flanged-rim cooking pot was discovered in the Cave of the Letters and was known as the typical cooking pot for the period (Yadin 1963:112, fig. 141:164.112, 164.114). The type appeared as well during the second century at caves at Wadi Murabba'at and Wadi ed-Daliyeh (Lapp and Nickelsburg 1974:52, pl. 26:55–57; de Vaux 1961:30–31, fig. 37:32). The appearance of the type at sites connected to the Bar-Kokhba Revolt during the early second century serves as a case for examination of the connection between the Jewish inhabitants of Jaffa and Jewish Zealots during the Bar-Kochba Revolt. We know that the Zealots were concentrated in the Judean Desert and did not reach the coastal plain. The Jaffa evidence indicates potential for a new direction in this research, however. The bell-shaped storage jar (Figure 25.3:58–60) and the folded-rim storage jar (Figure 25.2:42–43) were not common in Jaffa. However, they continued to appear during the second century C.E. Both examples from Jaffa were made of the characteristic hard but fine Judean fabric and probably were exported from that region. In the Area C residence in Jaffa, the discovery of an intact *dolium* (Figure 25.3:61) that is identical to *dolia* recovered at Masada, further corroborates the existence of mercantile ties and the transfer of food products from the Dead Sea region to Jaffa. The continued use of these types throughout the second century C.E. in regions where Jewish rebels lived connects Jaffa even more clearly to the same extremist Jewish population that led to the Bar-Kochba uprising from 132 to 135 C.E.

From the ceramic finds that characterize the three phases presented above, one learns that Jaffa constitutes an excellent model that likely reflects the political situation of the population of the coastal cities of Palestine on the eve of the destruction of the Second Temple and after the establishment of the province of Judea. The historical evidence indicates that as long as the Jewish population had contact with the Roman authorities, it demonstrated complete loyalty to the Roman ruler (see Chapter 8). This model is also correct with regard to other countries. For example, on the eve of the destruction, the overwhelming majority of Jews living in the Diaspora resided in Egypt. Jews were parts of all levels of society and held key positions in every occupation, including different areas in maritime commerce. A similar situation also existed in Palestine prior to the outbreak of the Great Revolt (Radan 1988:79).[18] During this period, Herod encouraged the Hellenization of the kingdom through the formation of commercial ties between coastal cities (by way of the port at Caesarea) and countries that were located overseas. Imported vessels, among them Terra Sigillata, casseroles, and pans, and food products transported in amphorae arrived in Palestine, particularly from Italy and the Levant (Malfitana 2002:149–151, fig. 148). These imported vessels were also marketed at sites in the south of the country, were utilized by the Jewish aristocracy in Jerusalem, and reached the northern limits of Palestine

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(Berlin 2006:137–142, fig. 135.134; Hayes 1985:183–185, from the Armenian Garden in Jerusalem; Rosenthal-Heginbottom 2003:192–230, from the Jewish Quarter). By the same token they also occur in the Herodian palaces at Jericho, Herodium, and Machaerus but are rare in the rural regions of the Dead Sea (Magness 2002:78). In general it can be said that there was no fundamental resistance to imported products among secular Jews. On the contrary, the presence or absence of particular foods and pottery vessels was primarily a function of economic resources and not the result of ideological preferences.

Jewish unrest against the government was the first clear mark of a change in Jewish attitudes toward Roman authority and its spoils. Jews began to undergo a process of turning inward that included the rejection of Roman features such as food products or tableware of a foreign nature. This process is well known in Jerusalem and its environs; however, it also transpired in other regions of the country. For example, in the Galilee in the first century C.E., Eastern Terra Sigilatta A ceramics disappear, serving as a sign of resistance to Roman rule, as well as a sign of the identification of the Galilean Jewish population with the simple traditional lifestyle, in contrast to their neighbors the Latinized Phoenicians and the rich, Orientalized Jewish aristocracy of Jerusalem (Berlin 2005:102–130). This process was clearly manifest in the distant Jewish village of Gamla. In the first century C.E., the households there used Jewish stone vessels produced in the Galilee; with them also appear types of carinated-shoulder casseroles and Herodian lamps of Judean origin (Berlin 2006:150, fig. 155.158).[19]

Changes in Jaffa probably transpired under similar circumstances. Jaffa is known for its role as a Jewish port and a stronghold of Jewish resistance during the Great Revolt. Nevertheless, after Caesarea Jaffa was the principal harbor of the province of Judea. This combination apparently created a conflict of interests for Rome when addressing the needs of Roman government in Palestine. In *Wars of the Jews* Josephus relates as a minor episode Vespasian's destruction of Jaffa's port along with the pirates of Jaffa in 67 C.E. (J. *BJ* 3.419–427). Two years earlier, Cestius Gallus came from Ptolemais and attacked Jaffa on two fronts, from land and by sea (J. *BJ* 2.507–509; Gichon 1981:47–48). Even after both of these attacks, Jaffa remained a bastion of Jewish resistance to Roman conquest (Radan 1988:74).[20] In this context, various scholars have wondered if military operations were meant to reinforce the Roman fleets along the coast of the province to protect grain shipments from Egypt. Was this the reason Vespasian considered Jaffa strategically important and changed its status to Flavia Joppa as a means of establishing political security in the Middle East (Applebaum 1985/88:140)? Another point of view suggests that Jewish rebels were the real reason for concern among Roman rulers. The attacks on Jaffa were first of all an attempt to defend the Roman rear and to destroy an entrenched Jewish stronghold (Radan 1988:75). We know that during his campaigns, Vespasian made it a point to destroy the villages and farms near Jaffa, which were probably Jewish and may have served as a convenient base for rebels.

Whatever the reasons for the attacks on Jaffa, Jewish presence in Jaffa was strong and the population was fervid and fraught with a deep ideological commitment. This situation characterized Jaffa on the eve of the destruction of the temple and probably even after the city was conquered, destroyed, and resettled by a pagan population alongside the Jewish one. On the one hand, after Caesarea, Jaffa was the principal port of Judea. As such it was a source of revenue and control in the eyes of the Romans. For the Jews, on the other hand, Jaffa was a source of national pride for being the "traditional home of Jewish seamanship and the livelihoods dependent thereon" (Jones 1971:276). The Jewish population was probably constantly and persistently fighting over control of the port. Even during the time of Herod, when Jaffa's status as a city was negated, it was able to acquire its role once again. This situation fostered ambivalence among the Romans. On the one hand, Jewish seamen may have been essential for the port from the standpoint of their familiarity with maneuvering around the difficult jetty upon entering Jaffa's harbor. On the other hand, Jaffa's Jews were suspect as to their real intentions and were in need of constant surveillance.

In Area C, the dwelling of the wealthy Jewish official who was empowered on behalf of the Roman government in the second century C.E. clearly expresses the dual concerns present in Jaffa. On the one hand, one can see the Hellenistic characteristics of the city in the likeness of the ceramic finds, which include a wide variety of imported vessels, Eastern Terra Sigillata bowls, and Roman amphorae and lamps. On the other hand, unequivocally Jewish artifacts include stone vessels and pottery in the Judean tradition.

Yehuda the *agoranomos* was probably Hellenized. He most likely also belonged to one of the aristocratic Jewish families in Jerusalem and was brought to Jaffa by the ruler to act as a bridge between the Jewish community and the

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Roman government.[21] He was apparently a manifestation of the divide-and-conquer form of governing. While the government granted him status and wide-ranging economic authority, in return for which he was obligated to serve the interests of the government, whatever they were, he remained loyal to the Jewish way by maintaining a ritually clean household with traditional features. A similar situation existed in Caesarea with John, the customs official who negotiated with Gessius Florus on behalf of the Jewish community in 66 C.E. (Applebaum 1985/88:144).

A similar combination of local Jewish tradition and the delicacies of pagan dining practices existed in the rural farmhouse at Kh. 'Aqev in Ramat Hanadiv. Here, too, a residential albeit rural building of a wealthy Jewish population was exposed. While they adopted Jewish customs as evident from the *miqwa* and Judean pottery, the presence of Eastern Terra Sigillata bowls and Roman Imperial lamps are stark reminders of their comfort with elements of pagan culture (Magness 2002:78).

The wealthy Jews who lived in the coastal region were apparently exposed for many generations to foreign cultures and did not consider them a threat to their existence as a Jewish society. From their standpoint, there was no conflict of interest in continuing to manage a household that included food products and tableware of pagan origins. The feelings of sympathy and support that become stronger in the wake of political events were expressed by reinforcing the distinctly Jewish features of their households.

Conclusion

From the evidence provided by Jacob Kaplan's excavations, Jaffa emerges as an excellent example for understanding the relationship between the inhabitants of the coastal plain and Judean Jews. The close connection began after the conquest of Jaffa, Caesarea, and Dor by the Hasmoneaen kings Simon and Alexander Jannaeus and became only tighter after the Roman conquest and the establishment of the Judean province, which is reflected in the ceramic finds and probably the stone vessels from Jaffa dated to the first to second century C.E. During that period, a decline in the presence of imported tableware, particularly Eastern Terra Sigilatta, occurred, while stone vessels accompanied by Judean wares appeared in large quantities.[22] This phenomenon reflects a psychological concern to protect group identity in the presence of an external threat. This process is manifested in the finds at all Jewish sites in Palestina, in the south as well as the north. There is no doubt that on the eve of the destruction and afterward, until the establishment of Jaffa as a Roman polis, apparently by Vespasian (Kaplan 1981:415),[23] the Jewish population lived in an emotional vacuum in which it maintained its collective identity by remaining loyal to Jewish features that connected Jews to a world that was familiar. In the second century, the status of the Jews in Jaffa improved. The transfer of legal and governmental authority to a Jewish superintendent in a Roman city attests to the formidable status of Jaffa's Jews, who were without doubt the overwhelming majority in the city (Kaplan 1981). During this period, Jewish linkage was of great importance, and the connection to Jewish Zealots or the Bar-Kochba Revolt is apparent. However, at the same time a sigh of relief must have been heard when Terra Sigillata vessels returned to dinner tables. Jaffa provides the first example of a port city in Palestine that preserves the nonreligious character that was so typical of late Jewish coastal communities but also reflects the clear link with Jewish populations. The preceding observations should be treated as a working theory that must be tested against the results of petrographic analysis and further research of stone vessels.

Table 25.1. Judean thin-walled ware.

No.	Reg. No.	Type	Description
1	C/61/411	Bowl	Incurved rim
2	C/61/413	Bowl	Incurved rim
3	C/65/585	Bowl	Incurved rim
4	A/56/260	Bowl	Incurved rim
5	C/61/415	Bowl	Incurved rim
6	C/65/586	Bowl	Incurved rim
7	C/61/412	Bowl	Incurved rim
8	C/61/B382	Bowl	Incurved rim
9	C/61/B637.2	Bowl	Incurved rim
10	C/65/B1037.2	Bowl	Incurved rim
11	C/61/416	Bowl	Incurved rim
12	C/65/558	Cup	
13	C/61/B621	Cup	
14	C/65/592	Mug/Pot	
15	C/61/B549	Mug/Pot	
16	C/61/B286.3	Mug/Pot	
17	C/61/85//B253.2	Casserole	
18	C/61/L432	Casserole	
19	A/70/K4/B200.3	Spherical jug	
20	Y/69/324	Spherical jug	
21	C/65/B983.2	Spherical jug	
22	C/65/587	Spherical jug	
23	C/65/588	Spherical jug	
24	C/65/B931	Spherical jug	
25	C/69/599	Spherical jug	
26	C/65/591	Finger bottle	
27	C/61/428	Finger bottle	
28	X/60/023	Finger bottle	

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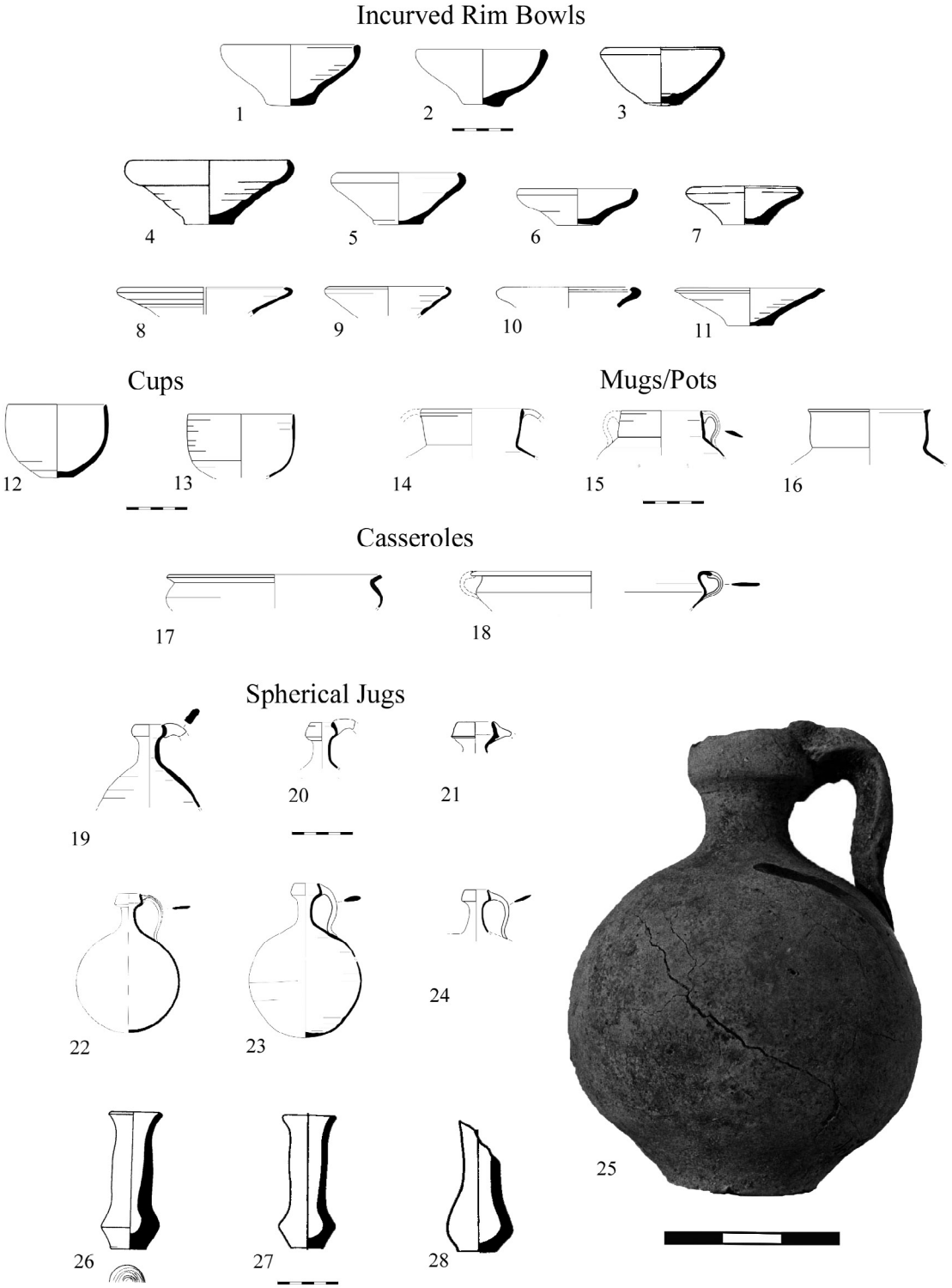

Figure 25.1. Judean thin-walled ware.

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Table 25.2. Storage jars.

No.	Reg. No.	Type	Description
29	J/70/088	Storage jar	High collar
30	C/61/B487	Storage jar	High collar
31	A/70/B174.2	Storage jar	Low collar
32	A/72/B31.3	Storage jar	Low collar
33	C/61/B637.3	Storage jar	Low collar
34	C/6/B634	Storage jar	Low collar
35	C/61/B637.4	Storage jar	Low collar
36	C/61/B646.1	Storage jar	Low collar
37	C/61/B503	Storage jar	Ridged neck
38	C/61/B556.1	Storage jar	Ridged neck
39	A/70/L3/B48.2	Storage jar	Ridged neck
40	C/61/692	Storage jar	Ridged neck
41	C/61/B633.1	Storage jar	Ridged neck
42	C/61/439	Storage jar	Folded rim
43	C/61/B295	Storage jar	Folded rim
44	C/61/B403	Storage jar	Flanged rim
45	C/61/B465	Storage jar	Flanged rim
46	C/61/406	Storage jar	Flanged rim
47	C/61/447	Storage jar	Flanged rim

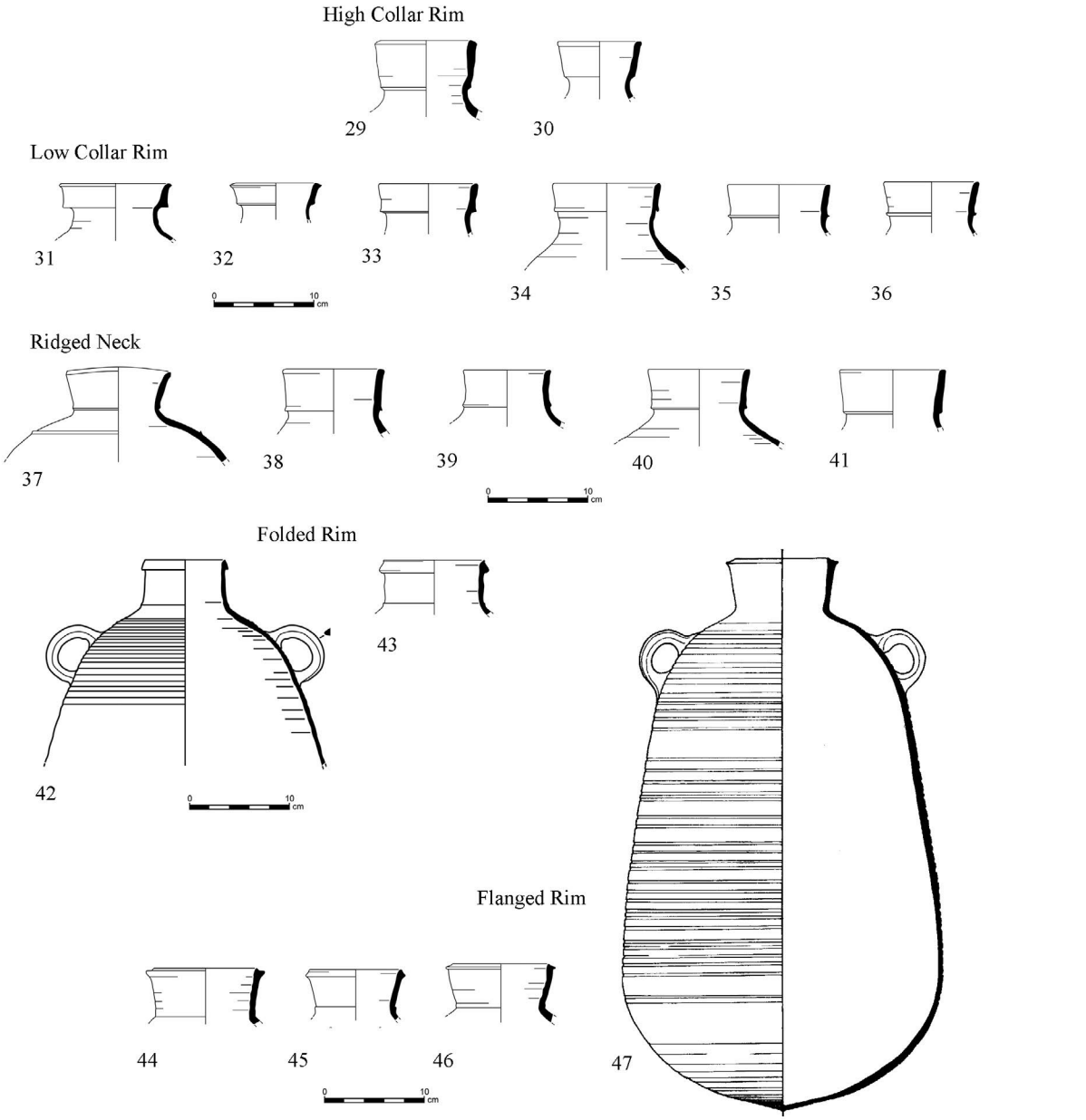

Figure 25.2. Storage jars.

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Table 25.3. Storage jars.

No.	Reg. No.	Type	Description
48	C/61/451	Storage jar	Shelf rim, bell-shaped
49	C/61/B594.1	Storage jar	Shelf rim, bell-shaped
50	C/61/B591.2	Storage jar	Shelf rim, bell-shaped
51	C/61/B233.1	Storage jar	Shelf rim, bell-shaped
52	C/61/694.2	Storage jar	Shelf rim, bell-shaped
53	C/61/B328.1	Storage jar	Shelf rim, bell-shaped
54	C/61/B281.4	Storage jar	Shelf rim, bell-shaped
55	C/61/B253.1	Storage jar	Shelf rim, bell-shaped
56	C/61/B655	Storage jar	Shelf rim, bell-shaped
57	C/61/B230.2	Storage jar	Shelf rim, bell-shaped
58	C/61/448	Storage jar	Thickened rim
59	C/61/B518	Storage jar	Thickened rim
60	C/61/B405	Storage jar	Thickened rim
61	C/61/442	*dolium*	Thickened rim

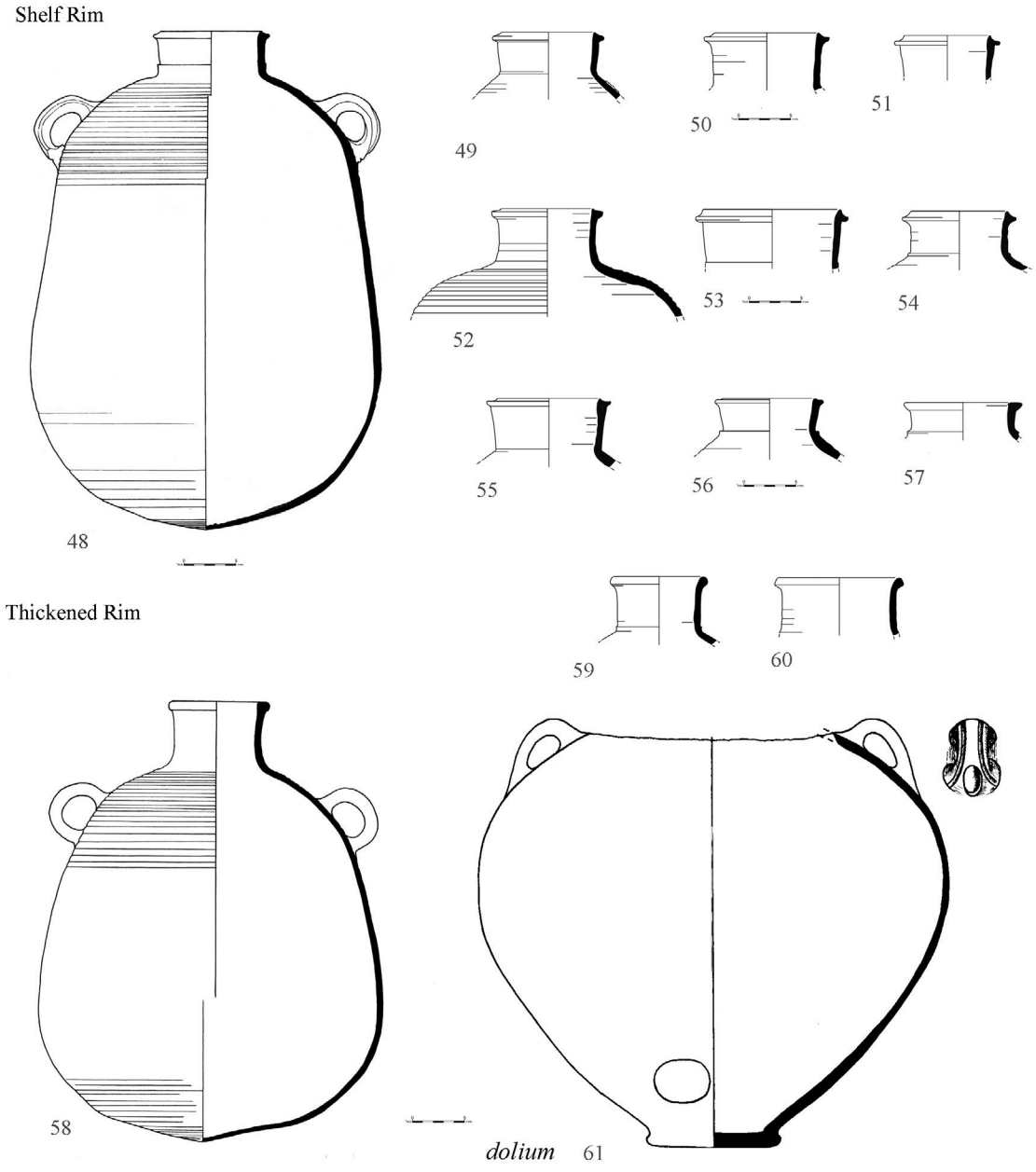

Figure 25.3. Storage jars and *dolium*.

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Table 25.4. Cooking pots.

No.	Reg. No.	Type	Description
62	C/68/326	Cooking pot	Flared neck
63	A/70/B143.3	Cooking pot	Flared neck
64	C/61/B672	Cooking pot	Triangular rim
65	C/61/B771	Cooking pot	Triangular rim
66	C/61/642	Cooking pot	Triangular rim
67	C/61/B646	Cooking pot	Triangular rim
68	C/61/B621	Cooking pot	Triangular rim
69	T/62/10	Cooking pot	Grooved rim
70	G/64/016	Cooking pot	Grooved rim
71	C/61/185.4	Cooking pot	Grooved rim
72	C/61/133.1	Cooking pot	Grooved rim
73	C/61/265.1	Cooking pot	Tunneled rim
74	C/61/B671.1	Cooking pot	Tunneled rim
75	C/61/B606	Cooking pot	Tunneled rim
76	C/61/281.1	Cooking pot	Tunneled rim
77	C/61/B671.3	Cooking pot	Tunneled rim

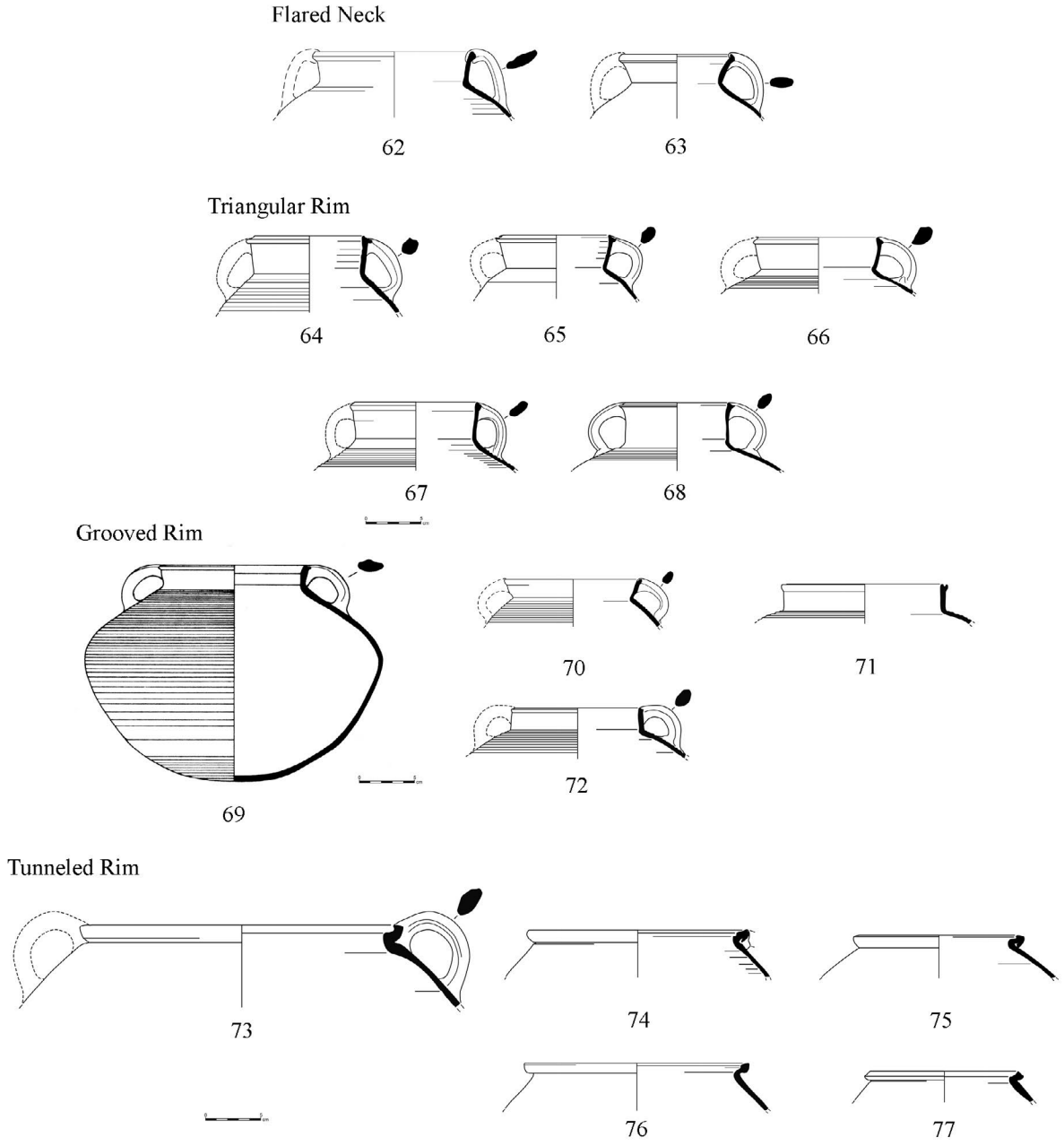

Figure 25.4. Cooking pots.

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Table 25.5. Casseroles.

No.	Reg. No.	Type	Description
78	A/70/B349.3	Casserole	Carinated shoulder
79	C/61/B693	Casserole	Carinated shoulder
80	A/70/B248.3	Casserole	Carinated shoulder
81	J/70/081	Casserole	Steep wall
82	J/70/075	Casserole	Steep wall
83	A/70/B105	Casserole	Steep wall
84	A/70/181	Casserole	Steep wall

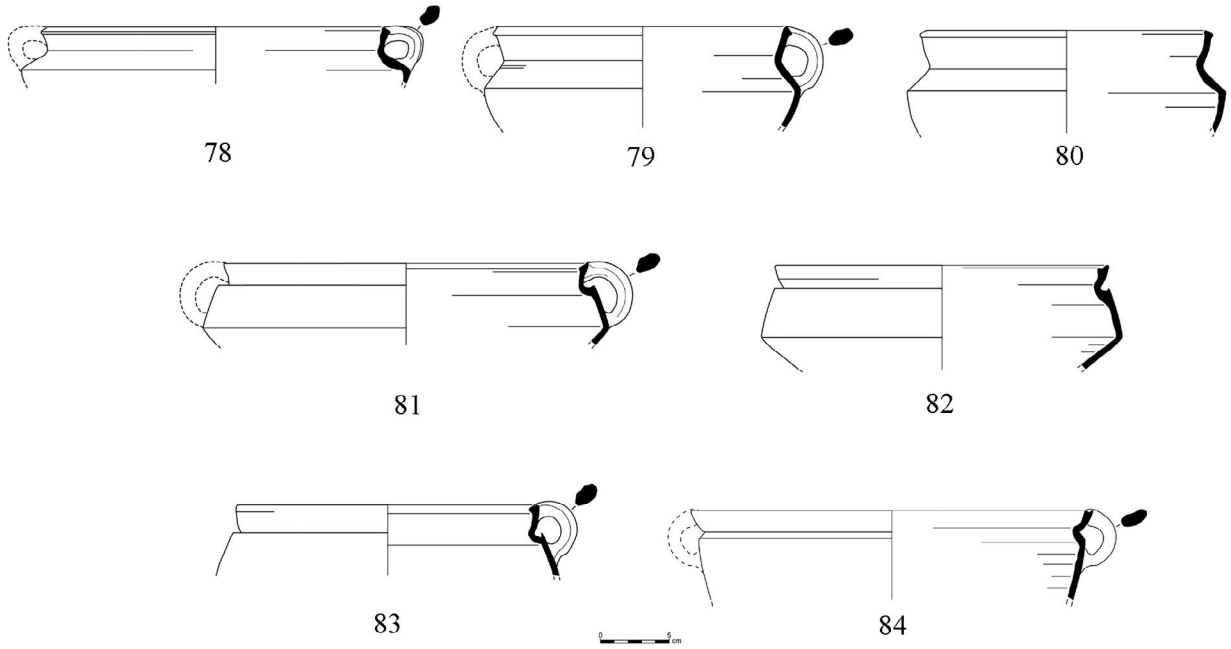

Figure 25.5. Casseroles.

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Table 25.6. Herodian lamps.

No.	Reg. No.	Type
85	C/61/324	Lamp
86	C/65/507	Lamp
87a	D/63/063	Lamp
87b	C/61/369	Lamp
88	D/63/293	Lamp

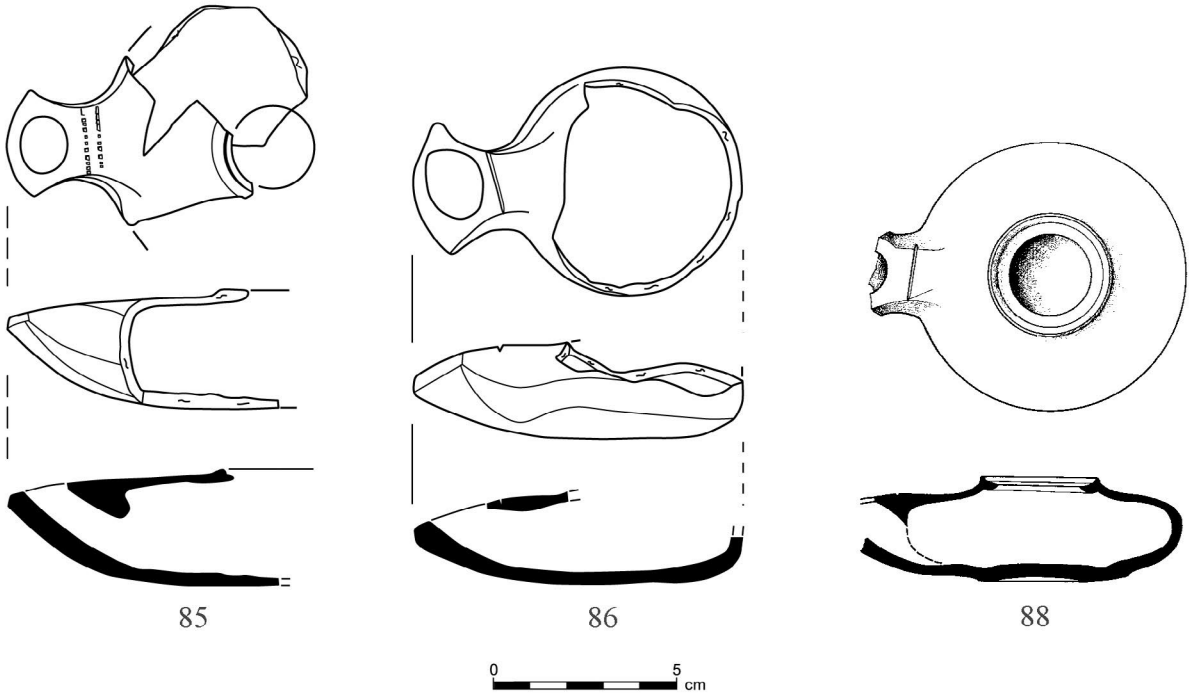

Figure 25.6. Herodian lamps.

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Notes

1. The final publication of the Hellenistic, Roman, and Byzantine remains from Jaffa, which has been funded by a generous grant from the Shelby White-Leon Levy Program for Archaeological Publications, will be published by the author in a forthcoming volume in the present series. Ceramic petrographic analysis will be included in the final publications of the ceramics from this period.

2. There were also areas that were not subdivided, particularly those held by the legion, especially in the province of Judea (except for Jaffa, Yavneh, and Ashdod).

3. There is no evidence of Black-Glazed Ware, only a few later examples of Palestinian Red Slip Ware.

4. There is no evidence of Black-Glazed Ware, only the later-second-century Palestinian Red Slip Ware (a local imitation of Black-Glazed Ware).

5. This is after Alexander Jannaeus conquered Caesarea and Dor (103–76 B.C.E.).

6. Along with the gradual appearance of the Judean pottery, one notices a halt in the importation of Eastern Terra Sigillata A bowls to Jaffa. The latest types, Hayes's types 22 to 24 (Hayes 1972), date to the end of the first century B.C.E./beginning of the first century C.E. The ETS A bowls are replaced by a limited amount of Cypriot Terra Sigillata bowls that date mostly to the first half of the second century C.E. (Hayes's types 29, 30, and 42 in Hayes 1972). They will appear within the framework of the final publication of the Jaffa excavations.

7. A petition from a Sidonian colony was found at Yavneh-Yam, which may be evidence of a Phoenician occupation during the Hellenistic period.

8. A shrine to Dagon, which is related to Phoenician culture, was found at Ashdod.

9. No publications from Tel Dor, Tel Michal, or Ashkelon deal with these periods.

10. Observations are based on the author's familiarity with the finds from Caesarea.

11. Some of the pottery vessels that appear in Kaplan's article (1964) are republished here.

12. The report on the stone vessels will be published by David Amit and Yonatan Adler in the final publication.

13. One should also remember that the same "Jewish" ceramics, which are considered ritually clean, adopt forms that are regarded as foreign to Jewish tradition. The cooking pots imitate Phoenician ones that have triangular rims, ribbing, and short necks characteristic of Tel Anafa and the other Hellenistic cities. Carinated-shoulder casseroles imitate metallic Roman kraters, and Jewish stone vessels imitate the western and eastern Terra Sigilatta bowls.

14. Maresha (Kloner 1981:pl. 40, fig. 43.44; Levine 2003:83, figs. 86.82:31–33), Jewish Quarter in Jerusalem (Geva 2000:137–138, fig. 135.133:BL131–132), Jericho (Bar-Nathan 2002:79–101, pls. 114–116, and 182–185, pl. 128:522–536), and Masada (Bar-Nathan 2006:130–133, pl. 125:131–119).

15. Elgavish (1976:69, fig. 63:65); Dothan (1971:54–55, fig. 15:24).

16. See Masada (Bar-Nathan 2006:191–194 , type 191 pl 133:191–114).

17. Bar-Nathan (2002) suggests that in Talmudic interpretations, the juglets functioned in the Jewish world.

18. Before the climate changed after Gaius's attack on the temple in 39–40 and under Flaccus.

19. Some Jewish villages rejected Terra Sigillata Ware for unknown reasons during the first century C.E. This change may be connected with a shift toward collective dining (Berlin 2006:150, fig. 155.158).

20. Concerning epitaphs from Jaffa in the following centuries, see Smallwood (1976:473, n. 426).

21. The exposure of the seal of the Tenth Legion in this residence attests to the close ties that existed between the *agoranomos* and the government.

22. Eastern Terra Sigillata A appeared during the first century B.C.E./early first century C.E. (Hayes's types 4b, 11, 18, 20, 22, 24, and 42, 1972). After an absence, Cypriot Terra Sigillata appeared. It mainly dates to the early to mid-second century C.E. (Hayes's types 4b, 29, 30, 40).

23. Scholars are divided on this question. Josephus does not mention that Jaffa was granted the status of polis. Smallwood claims the process occurred during the time of Vespasian (1976:342–343), while Alon contends that after the city was destroyed by Vespasian, the Tenth Legion was garrisoned there and it did not recover in such a short time (1952–1955:II, 59).

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Appendix

Terminology for Excavation Areas and Regions within Jaffa

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The following are the preferred spellings for areas and locations within Jaffa employed by the JCHP in its publications. Note in particular the handling of the definite article for street names. For the history and bibliography of excavations in these areas, see Chapter 2.

Abulafia	Bakery on Yefet St.
ʻAjami	Neighborhood south of Jaffa
Amiad St.	
Andromeda Hill	
Armenian Compound	Location of Armenian monastery and related properties
Beʻeri School	
Ben Yair St.	
Bet Eshel St.	
Bet HaKeshatot	Bordering the Ganor Compound on Rabbi Pinhas St.
Bet November	Now part of the Ganor housing project on Yefet St.
Clock Tower Square	Traffic circle intersection in the northeast of old Jaffa
Demiani Soap Factory	Jean Demiani and Sons Soap Factory, located in a building northwest of the Hammam
Dante Compound	
Dror St.	
Flea Market	
French Hospital	Complex on the southeastern corner of the tell
Ganor Compound	Eastern slope of the tell, on the east side of Yefet St.
Goldman St.	See *Nahum Goldman St.*
Hammam	Bathhouse on the north end of the tell; Kaplan's Area B
Jaffa Museum	Building directly north of Hammam
Jerusalem Blvd.	
Mahmudiyya Mosque	Mosque built by Abu Nabbut
Manshiyeh	Neighborhood north of Jaffa
Marzuq and ʻAzar St.	
Mazal Dagim St.	
Mifratz Shlomo St.	
Nahum Goldman St.	
Oley Zion St.	
Pasteur St.	Also Kaplan's Area P
Police Station	See *Qishle*
Post Compound	

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al-Qal'ah	Arabic term for the old city of Jaffa
Qedumim Square	Open plaza next to St. Peter's Church; Kaplan's Area C; also known as Kikkar HaKedumim and variants thereof
Qishle	Turkish term for a fortified complex on the northern end of the lower city, on the west side of Clock Tower Square
Rabbi Aha St.	
Rabbi Hanina St.	
Rabbi Nahman St.	
Rabbi Pinhas St.	
Rabbi Tanhum St.	
Rabbi Yehuda MeRaguza St.	
Rabbi Yohanan St.	
Ramesses Gate	Area A of Jacob Kaplan's excavations
Raziel St.	
Razif Ha-'Aliyah Ha-Sheniya St.	
Roslan St.	
Saray	Ottoman serai in Clock Tower Square to the east of the Clock Tower
Sea Mosque	
Sheikh Muhammad al-Tabiya Mosque	Mosque constructed in 1730 Shomon Ben Shetah St.
St. Peter's Church	
Southern Cemetery	
Tabitha School Compound	
HaTsorfim St.	Jewelers St.
visitor's center	Within Qedumim Square; Kaplan's Area C excavations
Yefet St.	Road along the eastern side of the tell
Yehuda Yamit St.	
Zedef St.	

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