# STRATA

# Bulletin of the Anglo-Israel Archaeological Society



Volume 29

2011



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# Strata: Bulletin of the Anglo-Israel Archaeological Society

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# **Editorial**

This issue appears in the year in which we commemorate 50 years of the Anglo-Israel Archaeological Society. Founded in 1961 by Professor Yigal Yadin, Dr Alec Lerner, Leon Shalit and Dr Richard Barnett, the aim of the Society is to foster the dissemination of knowledge about archaeology in Israel and surrounding regions. Over the past decades this has been done by a series of illustrated public presentations on recent archaeological finds and new theories, and by the publication of the *Bulletin of the Anglo-Israel Archaeological Society*, now *Strata*. The Society also gives grants for students of archaeology. Interest in discoveries in Israel and its vicinity has remained strong internationally over the decades, because of the relevance archaeological excavations have for understanding Biblical history, and for the history of Jews, Christians and Muslims in Israel-Palestine. We hope that in enabling the furtherance of archaeological scholarship the work of the AIAS will be fulfilled.

As a special event, the Society was addressed by its long-serving Vice-President, Amihai Mazar – Hebrew University Professor of Archaeology and winner of the Israel Prize for Archaeology in 2009 – on 27th June, 2011. The many people who attended were delighted to hear about Israeli archaeology from the foundation of the State of Israel in 1948 to the present day. This lecture is included here in *Strata*, along with two other pieces reviewing work in Israel-Palestine: one outlining the most important numismatic discoveries, by coins expert Ilan Shachar, and the other reviewing the arguments concerning Qumran, the site associated with the discovery of the Dead Sea Scrolls, by Dennis Mizzi of the University of Malta.

Along with these overview pieces, this issue also includes two explorations of material based on contemporary excavations, one concerning Early Bronze Age III, by Ram Gophna, Professor Emeritus at Tel Aviv University, and Yitzhak Paz, of Ben Gurion University of the Negev, and the other on Iron Age pottery, by Juan Manuel Tebes of the Departamento de Historia – Facultad de Filosofía y Letras, Pontificia Universidad Católica Argentina. It also provides the continuation of an important scientific piece on flotation and otoliths from the last issue, by Egon Lass.

Looking back over more than 50 years, the archaeological memoir section by Bart Wagemakers of the University of Amsterdam focuses on the travel account of a Dutch visitor to Jerusalem and the important photographs he took of archaeological sites in the 1950s.

The AIAS anniversary was also celebrated by means of a revamped website – thanks to the expertise and labours of committee members Dr Sean Kingsley and Dr David Milson: see www.aias.org.uk. Strata thus has a new web profile.

The celebrations of the 50th anniversary provided a good opportunity for fundraising, and the Society would like to thank the many donors who have contributed

#### EDITORIAL

with a view to funding both the lectures and the publication of *Strata*. I would personally like to express my appreciation for the especially generous donations made by Alan Brener, Paul Brett and the Polonsky Foundation.

Strata also includes as usual summaries of lectures given in both London and Manchester. While these are presented for a public audience, they often engage with scholarship at the highest level and provide a forum for the dissemination of the latest discoveries and ideas. For example, last year's lecture series included a thought-provoking presentation on the Kh. Qeiyafa inscription, by Gershon Galil, Professor of Biblical Studies and Ancient History at the University of Haifa, which was responded to by Alan Millard, Emeritus Rankin Professor of Hebrew and Ancient Semitic Languages at the University of Liverpool. Prof. Millard's response has been developed into an interesting article disagreeing with Prof. Galil's interpretations, published now: 'The Ostracon from the Days of David found at Khirbet Qeiyafa', Tyndale Bulletin 62.1 (2011), 2–13.

I would like to thank Sandra Jacobs for her very fine work on reviews, resulting in an extensive section this year. This is invaluable for scholars and interested others who wish to keep up with the latest debates and advances in the field. I extend my thanks to all reviewers who have contributed. Thank you also to Stephen Rosenberg, for allowing *Strata* to publish his fascinating reports. I thank also Rupert Chapman for his excellent proof-reading skills.

Joan Taylor Editor

# Contents

| Editorial  | 5   |
|--|-----|
| 50 Years of the AIAS: Special Commemorative Reviews  |     |
| Amihai Mazar, Israeli Archaeology: Achievements and the Current State of Research  | 9   |
| Ilan Shachar, The Coins of Ancient Israel – Discoveries of the Last<br>50 Years  | 23  |
| Dennis Mizzi, 60 Years of Qumran Archaeology   | 31  |
| Research Articles  |     |
| Ram Gophna and Yitzhak Paz, On Rural Aspects of the Urban Settlement System in Southwestern Canaan during the Early Bronze Age III                           | 51  |
| Juan Manuel Tebes, The Potter's Will: Spheres of Production,<br>Distribution and Consumption of the Late Iron Age Southern<br>Transjordan-Negev Pottery      | 61  |
| Egon H. E. Lass, Flotation Procedures in the Southern Levant:<br>A Summary of 20 Years of Work, Part II  | 103 |
| Archaeological Memoir  |     |
| Bart Wagemakers, A Forgotten Diary and Photograph Collection as<br>Valuable Records for the Historical and Archaeological Study of Israel<br>and Transjordan | 121 |
| Book Reviews   | 141 |
| Summaries of Lectures  | 181 |
| Reports from Jerusalem, by Stephen Rosenberg   | 187 |
| Notes for Contributors and Membership Form   | 207 |



# Israeli Archaeology: Achievements and the Current State of Research

#### AMIHAI MAZAR

Lecture given upon the occasion of the 50th anniversary of the Anglo-Israel Archaeological Society, London, June 27, 2011

It is a special honour for me to speak on this occasion of the 50th anniversary of the Anglo-Israel Archaeological Society. For half a century, the society has continued its mission to support research and bringing the news of archaeology in Israel to the British audience. Its journal, recently renamed *Strata*, has become a significant source of information in our field of research. I wish the Society well in the continuation of its important mission and activities.

I was asked to summarise today in 50 minutes the current state of research and achievements of Israeli archaeology. This is an almost impossible task due to the wide scope of the subject. I will thus limit myself to short surveys to several key issues.

# The development and scope of archaeology in Israel

Although the foundations for the archaeological exploration of the Holy Land were laid by European and American scholars in the 19th and the beginning of the 20th centuries, it was only after the First World War that a small number of Jewish archaeologists participated in the archaeological research of the country. This was done by several scholars related to the Jewish Palestine Exploration Society (later renamed the Israel Exploration Society) and to the Hebrew University of Jerusalem, which was founded in 1925, where Eleazar Sukenik was a pioneer of academic archaeological research. His main interest was Jewish antiquities, such as the 6th-century synagogue at Beit Alpha and the Second Temple period cemeteries around Jerusalem. He joined the British expedition at Samaria and, in 1947, was one of the first scholars to identify the date and the importance of the Dead Sea Scrolls, which have been recognised as the greatest archaeological discovery ever made in the Holy Land. In 1935, Sukenik and Leo Arieh Mayer, a well-known scholar of Islamic art and archaeology, established the Department of Archaeology in the Hebrew University of Jerusalem, and, in 1942, founded the Museum of Jewish Antiquities on the Mount Scopus campus. Jewish antiquities were the focus of other scholars at that time, such as Benjamin Mazar, who, in

1936–1939, conducted the excavation of the vast cemetery of Beit Shearim, the burial place of Rabbi Yehudah ha-Nasi, the leader of the Jewish community in the Land of Israel during the 2nd century CE.

The emphasis on Jewish heritage was natural in those days, when the Zionist movement was occupied with creating the identity of a growing community of Jewish immigrants, many of them secular young people who were looking for new values, ideas and subjects to identify with. Their drive to study the roots of the Jewish people in its land motivated much of the archaeological research and activity in the early days of the State of Israel in 1948. Yet, alongside this emphasis, a number of Jewish archaeologists started working in other subjects of archaeological research, such as Prehistory, Bronze Age archaeology, Classical and Islamic archaeology and studies of Ancient Near Eastern civilisations. Several Jewish archaeologists who worked for the British Department of Antiquities inherited their well-organised methods and traditions and introduced them to the newly created Israel Department of Antiquities, established in 1948 as part of the Ministry of Education.

During the 1940's, Sukenik and Mazar trained a number of students at the Hebrew University who subsequently became the leading archaeologists, biblical historians and Near Eastern scholars in Israel in the years to come.

Archaeological exploration developed rapidly. The first excavation was conducted by Benjamin Mazar at Tell Qasile in northern Tel Aviv. Mazar initiated the first comprehensive study of Philistine material culture of the 11th and 12th centuries BCE, the work being conducted by Trude Dothan. Sukenik's son, Yigael Yadin, who was Chief of Staff of the fledgling Israeli army, entered the archaeological arena in 1952 as a faculty member of the Hebrew University. His extensive activity in this field until his death in 1983 included the large-scale excavations of the Canaanite and Israelite city at Hazor, smaller-scale excavations at Megiddo, extensive excavations at Masada, explorations in the Judean Desert, publication of two major Dead Sea scrolls and the publication of numerous archaeological studies, notably those related to warfare in the Ancient Near East. Yadin's varied and dynamic activity, his charismatic personality and his ability to reach the general public, raised awareness of archaeology among the Israeli public on a level that is virtually unknown today. Ironically, as often happens in academia, many of his ideas have now become the target of criticism and deconstruction.

The excavations at Hazor and Masada in the 1950's and 1960's became a field school for a whole generation of Israeli archaeologists. Scholars like Yohanan Aharoni, Ruth Amiran, Trude Dothan, and others who were field directors at Hazor, became the leading archaeologists in Israel in the years to come and many of the young students who participated in those excavations are today retired professors of archaeology who, in turn, trained a younger generation who today carry the burden of teaching and research in Israel.

Since the 1960's, four new universities have been established in Israel in addition to the Hebrew University: Tel Aviv University, Haifa University, Bar Ilan University and Ben Gurion University in Beer Sheba, and all of them established departments

of archaeology, either independent or combined with Near Eastern Studies, Bible or Land of Israel Studies. Field activity has greatly expanded and since the 1960's, dozens of major excavations have been carried out, some in cooperation with foreign institutions of higher learning. In addition to their value as research projects, many of these endeavours also have an educational role, since they often serve as summer field schools for hundreds of students and volunteers from Israel and abroad. In addition, hundreds of smaller excavations, field surveys and salvage digs have been conducted each year. As society in Israel has changed and different methods of archaeology have arisen, new research questions have been raised, innovative methods and ways of thinking have been introduced, and state-of-the-art analytical techniques have been employed in cooperation with a wide variety of scientists.

Currently, in the 2010/11 academic year, the five universities with departments of archaeology employ about 40 tenured faculty members, along with some 15 retired professors who continue to conduct research and dozens of affiliated researchers. In 2010, there were several hundred students in the undergraduate and graduate study programs and about 130 registered Ph.D archaeology students in Israel (for details, including lists of faculty members, research projects and links to individual web sites, see the following web pages:

Bar Ilan University: http://lisa.biu.ac.il/en

Ben Gurion University: http://www.bgu.ac.il/humsos/ Haifa University: http://arch.haifa.ac.il/home.php The Hebrew University: http://archaeology.huji.ac.il

Tel Aviv University: http://www.tau.ac.il/humanities/archaeology

In 1988, the Israel Antiquities Authority, an independent governmental authority, replaced the former Department of Antiquities. It now employs about 300 archaeologists, including over 50 with a Ph.D. degree in archaeology. The authority conducts wide-scale and intensive inspection in developing areas, resulting in the need to carry out hundreds of rescue excavations each year, some of them on a large scale. The authority manages storage spaces, up-to-date research facilities, conservation departments of sites and of artefacts, various laboratories, a superb research library and an active publication department (for details and online publications see: http://www.antiquities.org.il/home\_eng.asp).

The Israel Museum in Jerusalem contains a large archaeological section which was recently renovated in a most impressive way and is curated by a group of specialists (for details see <a href="http://www.english.imjnet.org.il/htmls/page\_819">http://www.english.imjnet.org.il/htmls/page\_819</a>. aspx?c0=14322&bsp=14162). Other Israeli archaeologists work for the National Parks Authority, local museums or as affiliated researchers in various institutions and research projects.

The numbers cited above are relatively high for a population of about 7 million people. Israeli archaeologists have proven their ability to initiate large-scale projects and to raise substantial funding through local and international research funds, although as elsewhere, funding is in many cases insufficient.

#### AMIHAI MAZAR

The current research topics in Israeli archaeology are of a broad scope and well reflect developments in world archaeology. This is illustrated in the distribution of the main subjects of interest among the tenured faculty staff and emeriti professors in the universities (Table 1).

### Surveys, Settlement Patterns and Historical Geography

The need for archaeological mapping of the country and the study of its settlement patterns through the ages was recognised as an essential issue from the beginning of archaeological research in the Holy Land. Following the pioneering work of the British Survey of Western Palestine in the 19th century and various other scholars during the first half of the 20th century, Israeli scholars joined this effort and conducted surveys in large parts of the country. The Israel Archaeological Survey was established in 1964 with an ambitious programme, to carry out a total foot survey of the entire country in map units of 100 sq km. Much of this enterprise has been accomplished, although it is far from being completed. Other surveys were initiated as regional projects, often related to specific subjects. The first survey of this type was done during the 1950's by Yohanan Aharoni in Upper Galilee. Following his example, younger generations of archaeologists conducted regional surveys in various parts of Israel with impressive results. Recently, modern research tools were introduced, such as computerised Geographical Information System (GIS), which helps in analysing settlement distribution maps in relation to various parameters, such as topography, geology, soil types, land uses, water resources, ancient roads, and so on.

The surveys revealed a new and hitherto unknown picture of the settlement pattern in various periods and provided a database for studies related to geo-political and demographic changes, road networks, agricultural terraces and installations, and

Table 1. Distribution of faculty positions in archaeology in Israeli universities by fields of interest (academic year 2010/2011; not including adjunct and affiliated teachers)

| Research agenda                              | Faculty positions | Retired, active in research | Total |       |
|--|-------------------|-----------------------------|-------|-------|
| Prehistoric research                         | 11                | 1                           | 12    | 18.2% |
| Bronze Age and Iron Age                      | 16.5              | 9                           | 25    | 38%   |
| Art and archaeology of the Ancient Near East | 3*                |                             | 3*    | 4.5%  |
| Classical archaeology                        | 11                | 4                           | 15    | 22.7% |
| Islamic and Medieval archaeology             | 2                 | 1                           | 3     | 4.5%  |
| Archaeological science                       | 7.5               |                             | 7.5   | 11.4% |
| Total  | 41                | 15                          | 66    | 99.3% |

<sup>\*</sup> not including Egyptologists and Assyriologists, who deal mainly with texts

many other features which together comprise what is known today as 'landscape archaeology'. Several major research subjects are mainly dependent on such surveys. A prominent example is the study of the settlement wave in the central hill country and Galilee during the Iron Age I (12th–11th centuries BCE), which has been attributed by many scholars to the Israelite settlement in these regions.

However, it became evident that surface surveys may result in some distortion of the results due to various factors, such as the coverage of earlier periods by later remains, erosion, human activity and so on, and only excavations can provide a more exact profile of settlement history. In several cases, excavations have shown that survey results were misleading, calling for a more extensive utilisation of excavation results to reach a detailed understanding of the settlement history. The thousands of salvage excavations carried out in the country provide a database which recently has been used in reconstructing a more exact picture of the settlement history in certain regions.

A related field of research is Historical Geography, the goal of which being to explore the vast geographical data in ancient written sources and relate it to the archaeological information from surveys and excavations. This integrative discipline deals with identification of ancient place names with archaeological sites, analysis of geographical documents, such as biblical town lists, tribal allotments, political and cultural borders, ancient administrative divisions, road systems, and exploitation of land sources, among other issues.

#### Excavations

Archaeological excavations are the jewel in the crown of archaeological activity and remain our main source for studying the sequence, and many other aspects, of material culture in all periods. The number of excavations in Israel is overwhelming compared to the small size of the country. This is not surprising, considering the interest in the Holy Land from the three largest monotheistic religions of the world. In this brief lecture, I cannot mention even a small fraction of the achievements of these excavations, and the following is only a superficial bird's eye view of the subject.

Excavations in prehistoric caves and camp sites helped reconstruct human cultures from their earliest appearance about two million years ago until the emergence of the first settled communities and the beginning of agriculture and animal domestication. The vast field of prehistoric research goes back to the earliest human activity in the Levant, revealed at the site of Ubeidiya and other Paleolithic sites, such as Gesher B'not Yaakov, both lying along the Jordan Valley. In the Middle Paleolithic period, small groups of hunter-gatherer Neanderthals were replaced by the first appearance of a local variation of Homo Sapiens, a subject explored intensively in several cave sites in northern Israel. Among the Epi-Paleolithic cultures, the Natufian culture was explored at several sites in northern Israel, such as Hayonim Cave in the Galilee, which provides evidence for initial experiments in utilising natural cereals for food and establishing permanent small settlements. The Neolithic

period, which saw the first experiments in agriculture, animal domestication and herding, commanded much attention in the recent exploration of the Ancient Near East. Israeli archaeologists discovered cultic sites of this period, such as Kefar Hachoresh in the Galilee and the Nahal Hemar cave in the Northern Negev, studied desert sites and revolutionised our knowledge of the last phase of the period, the Pottery Neolithic Period, mainly through the excavations of the large village at Sha'ar Hagolan in the Jordan Valley. This site shed new light on village planning, architecture, social structure and ritual art of the 6th millennium BCE.

The Chalcolithic period, between the mid-fifth and mid-fourth millennia BCE surprised scholars with outstanding discoveries, such as the unique Nahal Mishmar hoard in the Judean Desert, which included hundreds of copper objects of the highest quality, among other objects, shedding light on a highly developed metallurgical technology at a time when, elsewhere in the Ancient Near East, such technology was not yet evidenced. Other notable discoveries related to this period are the burial of a warrior/chief in a cave close to Jericho, found with his full personal paraphernalia, including well-preserved textiles, weapons and sandals. The ossuary burials in the coastal plain and the Galilee enriched our knowledge of religious beliefs, art and iconography of the period, while a local aspect of the Chalcolithic culture discovered in the Golan Heights has its own typical architecture and art.

Thanks to the discoveries and studies related to these periods, we are now able to reconstruct the development and changes of human prehistoric and protohistoric societies in the Land of Israel, their economy, technology and spiritual life, from their beginnings until the eve of the urban cultures of the Bronze Age. The importance of these discoveries has implications for the study of cultural change and interconnections in the entire Ancient Near East.

The Bronze and Iron Ages, between c. 3500 and 600 BCE, are the focus of intense research, much of it due to the fact that the Iron Age corresponds with most of the period of the Hebrew Bible. The multi-layered tells, where the major Canaanite and Israelite cities were located, stand at the centre of this research. Israeli archaeologists conducted long-term excavations at many of these mounds, such as Tel Dan, Hazor, Akko, Megiddo, Yoqne'am, Dor, Beth-Shean, Tel Rehov, Aphek, Tel Qasile, Jaffa, Shiloh, the City of David in Jerusalem, Beth Shemesh, Tel Batash (biblical Timnah), Tel Safit (Gath), Tel Miqne (Ekron), Ashdod, Lachish, Tel Sera, Tel Haror, Tel Beer Sheba, Arad and others.

Aside from those major excavations in multi-layered mounds, numerous small-scale excavations, many of them salvage excavations, revealed rich data concerning human activity outside the major towns and cities, thus enabling us to complete the archaeological picture of the past and study village life, farmsteads, fortresses, agricultural installations, burial fields and road systems.

Both types of excavations enriched and changed our knowledge of the Canaanite Bronze Age civilization and of the Israelites and their neighbours in the Iron Age. The study of the Early Bronze Age concentrated on the process of settlement nucleation that led to urbanization and finally, to the collapse of the

urban system towards the end of the third millennium BCE. Egyptian colonisation at the beginning of the period and northern immigrant groups later in the period are notable research subjects. The study of the Middle and Late Bronze Ages concentrated on the revival of urbanisation in the early second millennium BCE, the development of the thriving Canaanite culture throughout the period, and the impact of the Egyptian New Kingdom rule over the country for 300 years. At Hazor, excavations revealed the fortifications, temples and palace of this thriving city, the 'head of all these kingdoms' (Josh. 11: 10).

Research into the Iron Age I (12th–11th centuries BCE) has shed light on Israelite settlement in the hill country, on Philistine material culture and on continued Canaanite occupation in the valleys, as well as the emergence of Phoenician culture. Research into the Iron Age II concentrated mainly on various aspects related to the kingdoms of Israel and Judah, but also on the fate of the Philistine cities, the Phoenician and Aramaean cultures and the impact of the Assyrian and Babylonian conquests.

The excavations in Jerusalem are particularly notable, it being one of the most challenging and difficult sites for archaeological exploration. Since 1967, Israeli expeditions succeeded in revealing spectacular finds which have changed much of our knowledge of ancient Jerusalem in the biblical period, while raising new debates and unresolved issues.

The Babylonian, Persian and early Hellenistic periods were relatively neglected in the past, although recent studies have focused on the exploration of these periods at both coastal sites such as Tel Dor and inland sites, such as Ramat Rahel south of Jerusalem. These extensive studies in recent years have revolutionised our knowledge of these lesser-known periods.

Among the many discoveries related to the Hellenistic to Byzantine periods, I would first mention those that are related to the Jewish past. The Dead Sea Scrolls, the most outstanding archaeological discovery ever made in the Holy Land, were mostly explored by non-Israeli scholars, yet some of the major scrolls were studied and published by Israeli scholars like Yigael Yadin. A comprehensive publication and conservation project of the main scrolls and of thousands of small fragments of scrolls was successfully completed by the Israel Antiquities Authority.

Excavations in Jerusalem provided much information about the Hasmonean and in particular, Herodian periods. The discoveries included monumental architecture related to the Temple Mount, as well as private houses of elite families that were excavated in the Jewish Quarter of the Old City and elsewhere, including dramatic evidence for the destruction of the city in 70 CE. Hasmonean and particularly Herodian palaces and forts in the Judean desert include Herod's magnificent buildings at Masada, Jericho, Herodium and what appears to be Herod's burial place in Herodium, as well as his magnificent harbour in Caesarea, that was explored by an underwater archaeological expedition. Discoveries related to the First Jewish Revolt were made at Yodfat in the Galilee, Gamla in the Golan Heights and Masada in the Judean Desert. Evidence of the much less documented Second Jewish revolt was revealed in the Judean Desert and the Judean hills,

including the discovery of letters signed by Simeon ben Kosiba, known in history as Bar Kokhba, the leader of this revolt. The discovery of many Jewish burial caves in the vicinity of Jerusalem dated to the Second Temple period and the 2nd–3rd centuries CE Jewish catacombs at Beth Shearim in the Galilee provided a wealth of inscriptions and artistic depictions with unique iconography that shed light on Jewish burial customs through the centuries. Studies of Jewish coins and iconography, and, finally, the excavation of a series of Jewish towns, such as Sepphoris and a series of synagogues from the Late Roman and Byzantine periods in the Galilee, Golan Heights and southern Judah contributed to the research into Jewish communities and culture under Roman and Byzantine regimes. All these discoveries provided a wealth of data which enable us to follow changes and developments in Jewish culture throughout these periods.

Archaeological exploration of non-Jewish sites have flourished as well. Large-scale excavations and restoration were carried out at the Roman cities of Scythopolis (Beth Shean), Caesarea, Hippos (Susita), Eleutheropolis (Beth-Guvrin), the five Nabataean/ Byzantine cities of the Negev and many additional sites.

During the Byzantine period, the 4th–6th centuries CE, settlement in the Land of Israel reached its peak and therefore much of the salvage archaeological activity in Israel is dedicated to the excavation and exploration of Byzantine settlements, churches and monasteries.

Achievements were also made in the exploration of the Early Islamic and Medieval periods. Notable among the discoveries were four Umayyad palaces located near the Temple Mount in Jerusalem, the extensive excavation and publication of the early Islamic cities of Ramla and Tiberias, the exploration of several Crusader sites, such as the city of Akko, the fortresses of Belvoir, Vadum Iacob, Montfort, Caesarea and Apollonia, as well as the study of the Crusader-period countryside and various other aspects of Crusader material culture. Other important branches of Israeli archaeology are underwater archaeology and desert archaeology. Both are research fields with their own methodology and in which great achievements have been made.

This superficial survey represents only a fraction of the enormous volume of field activity and research of the archaeology of the Land of Israel, which cover all periods and subjects related to ancient human activity in the land.

# **Excavation and Subsequent Research**

Reliable answers to archaeological questions can be achieved only by methodical, well-controlled excavations using up-to-date methods of field work, and by the processing, research and publication of the finds. Methods, field techniques and laboratory procedures have gradually improved over time in Israel. The excavation of multi-level sites is a huge challenge to archaeologists due to the deep accumulation of many occupation layers that often disturb one another. The decipherment of the stratigraphy at such complicated sites, the correct attribution of finds to occupation strata, the study of site formation and proper documentation

and interpretation of the results pose a real challenge to field archaeologists in Israel, as in other places in the world.

The need for in-depth quantitative and typological studies of objects and for full publication of the results is acknowledged by all. Yet, such research and publication of the vast data is a complex, expensive and time-consuming enterprise, and in Israel, as elsewhere around the world, too often more than a generation passes between excavation and publication. In recent years, archaeologists in Israel are much more aware of this issue and the results can be seen in an increasing number of impressive excavation reports that appear on the book shelves every year.

## **Synthesis and Integrative Studies**

Field work and publication of its results provide the database for research, yet the interpretation of the finds and their integration into a comprehensive synthesis is the ultimate goal of archaeology. Integrative studies carried out by Israeli scholars cover a wide scope of issues, including ancient settlement patterns and demography, synthesis of architecture, pottery and various other objects, art, iconography, religious practices, local and international trade relations, chronology, burial customs, palaeography, numismatics and so forth.

An extensive number of monographs and articles have been published by Israeli scholars in both local and international forums. Among the most prominent publications, I would mention the five volumes of the Encyclopedia of Archaeological Excavations in the Holy Land, two general text books on the biblical period, a basic handbook of ancient pottery, two synthetic books on the Philistine culture, two synthetic books on the Israelite settlement process in the Iron Age I, a synthesis of Israelite society during the Iron Age, synthetic books on the Persian, Hellenistic and Late Roman periods, and hundreds of papers published in 29 volumes of Eretz Israel, 62 volumes of the Israel Exploration Journal, 36 volumes of the journal Tel Aviv, more than 50 monograph volumes in the Qedem series of the Hebrew University, about 30 monograph volumes published by Tel Aviv University, and almost 100 volumes of essays and excavation reports appearing in two series - 'Atigot and IAA Reports, as well as short reports on excavations in Excavations and Surveys in Israel (currently accessible online), that have been published by the Israel Antiquities Authority (IAA). Many studies have appeared in collections of essays such as congress volumes, Festchrift volumes and other occasional publications, as well as numerous papers published by Israeli archaeologists in international journals or collections of essays. This flood of scholarly publications is evidence of extraordinarily dynamic, varied and, in most cases, high-quality scholarly work.

# **Intellectual Background and Theoretical Framework**

As was the case in general Near Eastern and Classical archaeology, archaeology in Israel has been traditionally viewed as part of the Humanities. The mutual

relationship between archaeology and textual historical-philological studies has always been crucial for the interpretation of the finds. This is why archaeology departments in Israeli universities are to be found in faculties of Humanities and they are often part of combined departments, such as Archaeology and Ancient Near Eastern Studies or Bible and Near Eastern Studies or Land of Israel Studies. Anthropological approaches to archaeology which dominate much of Western archaeological thinking and practice, and define archaeology as part of the Social Sciences, have remained largely alien to Israeli archaeologists, except to those who have specialised in the prehistoric and proto-historic periods. The so-called 'Processual Archaeology' or 'New Archaeology' which dominated Western archaeological scholarship in the 1970's and 1980's has had minimal influence on Israeli archaeology, as well as on most of the rest of Near Eastern and Classical archaeology. However, this situation has been changing and, during the last two decades, archaeologists in Israel have become increasingly aware of current theoretical trends, resulting in a shift in research directions and interpretations. New questions are being asked, related to socio-economic changes, political boundaries, ethnic affiliation and definition, self-definition of population groups, the meaning of borders and fringe zones, analysis of countryside society vs. urban societies, the emergence and collapse of urban systems, processes of immigration, exchange systems of goods and of ideas, gender, understanding ritual and cult, collapse of urban cultures, cognitive aspects related to material culture, the role of ancient technologies and so forth. The vast data accumulated over the years in Israel can now be utilised within these theoretical frameworks in order to enrich new research directions.

## Science in Archaeology

Cooperation between archaeologists and various scientists has always existed in Israel, but, in recent years, it has become a fundamental issue. The Weizmann Institute of Science established a centre for science in archaeology (http://www. weizmann.ac.il/kimmel-arch/) and in most of the university departments of archaeology, various aspects of archaeological science have been developed. The research subjects are varied and include palaeo-zoology, palaeo-botany (including pollen analysis), optical mineralogy analysis (petrography), archeometallurgy, radiocarbon dating, studies of climatic and environmental changes, residue analysis, geomorphology and micro-archaeological studies, computerised 3D analysis of pottery and other artefacts, and so forth. Archaeologists in Israel are now much more aware of the potential contribution of the various fields of science to the study of the past and cooperation between archaeologists and scientists have become part and parcel of archaeological activity. For example, in my own excavations at Tel Rehov, we discovered the earliest and only known apiary. Its research required participation of experts on residue analysis, palynology, bee biology and systematics, as well as ethnography, and history of the Ancient Near East.

#### **Debated Issues**

Critical examination of earlier scholarly paradigms is common in all disciplines and Israeli archaeology is no exception, often resulting in attempts to slaughter 'sacred cows' of past research. Sometime, this has resulted in corrected theories, while in other cases, the debate continues.

One of the major issues of recent years is the relationship between archaeology and ancient texts, and in particular between archaeology and the biblical text. For many years archaeologists used to read the biblical narratives as reflecting actual history. Yet, biblical criticism which emerged in Europe some 200 years ago questioned the historicity of many biblical narratives. It became clear that large parts of these narratives must be regarded as literary creations, dated to the late monarchic era or even later. A whole spectrum of views on these issues emerged, from total nihilism to conservative approaches. Many scholars stand in the 'middle of the road' so to speak. Archaeology plays a central role in this discussion, since it is expected to provide external, presumably objective data on the debated issues. However, the correlation between archaeological finds and biblical texts is often inspired by the individual scholar's attitude toward the text. It sometimes seems that the subject is too loaded with emotions and non-objective judgments, resulting in attempts to utilise archaeology to both deconstruct biblical history as well as to confirm it as the ultimate truth. Both approaches raise controversies.

It has also become clear that while archaeology has nothing to say relating to the patriarchal narratives and very little to say concerning the sojourn in Egypt and the exodus, it has successfully denied the biblical narrative of the Israelite conquest of Canaan. Archaeological work relating to the Iron Age I has provided extensive evidence concerning the wave of settlement in the highlands which can be related to the appearance of early Israelites. Extensive research into the Philistine culture has shown that the biblical references to the Philistines are based on the *realia* of the 12th–11th centuries BCE in Philistia. Although the narratives concerning each of the individual judges should be regarded as a literary construct, the socioeconomic and geo-political profile reflected in these stories fits the context of the Iron Age I as revealed by archaeology.

The most recent debate relates to the historicity of the United Monarchy of David and Solomon. In spite of the discovery of the Tel Dan inscription that mentions Judah in the 9th century as *Beth David*, the house of David, several scholars have attempted to deconstruct earlier paradigms concerning the United Monarchy and to delete it from the historical narrative of ancient Israel, based on their interpretation of the archaeological data. This issue has raised a lively debate that has continued for almost twenty years, related to questions pertaining to the interpretation of the archaeology of Jerusalem, dating monumental buildings at Megiddo, Hazor and Gezer, the date and meaning of the extensive Iron Age settlement wave in the Negev, the rise of Edom and other issues. Extensive utilisation of radiocarbon dates and their interpretation have become part of this debate. Recently discovered

sites, such as Khirbet Qeiyafa in the Judean Shephelah, revealed new data and raised further issues for debate.

In this debate, I represent those who think that the Bible has preserved data taken from early written documents and oral traditions based on a long-lived common memory, although these early traditions were dressed in literary and sometimes mythological clothing, and were inserted into the later Israelite historiographic narrative, with its substantial theological and ideological mantle. Archaeology can help to uncover the historical kernels in the biblical traditions in those cases where they survived, but it is also capable of invalidating the historicity of the texts, as in the case of the conquest narratives.

A second example of a fiercely debated issue relates to Qumran and the Dead Sea Scrolls. Was the large building excavated at Qumran the centre of a Judean Desert sect, responsible for the writing of the scrolls? While the mainstream of scholars agree that indeed the building was the centre of the Essenes who wrote the scrolls, others claim that the building had nothing to do with the scrolls and that most were brought to the desert from elsewhere in Judah on the eve of the First Revolt against Rome.

A third example relates to the dating of Jewish synagogues in the Galilee. Based on numismatic evidence from stratified excavations, several scholars suggested that monumental and well-decorated Galilean synagogues dated traditionally to the 2nd—3rd centuries CE are, in fact, from the 5th–6th centuries CE. This debate appears to have been resolved with the recent discovery of the synagogue at Khirbet Hammam north of Tiberias which was clearly dated to the 2nd century CE.

These are just a few examples of many issues of debate and controversy which make our life as scholars more interesting and challenging.

# Archaeology and Ideology

The relationship between archaeology and the Zionist ideology which provided the keystone for the foundation of the State of Israel as a Jewish state should be addressed. On one hand, the Zionist movement was based on the Jewish longing for the Land of the Fathers and to Jerusalem as expressed in prayers, poetry and literature during hundreds of years, and on the other hand, on 19thcentury European secular ideas of the liberation of nations. Zionism embraced archaeology, as it displayed the connection between the Jewish people of the modern era to its ancient homeland. Archaeological finds, and specifically Jewish antiquities, met with a heartfelt response among the small but ever increasing Jewish population of Palestine during the first half of the 20th century. This interest developed during the years following the foundation of the State of Israel in 1948, particularly in light of the spectacular discoveries mentioned above, which had an important impact on modern Israeli culture. Archaeological discoveries became well known to the public and were integrated into the Israeli educational system and intellectual life. Prime Minister David Ben Gurion and other Israeli leaders supported archaeological research and expressed much interest in it.

In our era, such an attitude may appear as an expression of a nationalistic patriotism which sounds to many anachronistic. Yet, the utilisation of archaeological data to connect people in the present to their past is natural and universal. In the particular case of Jewish history, the impact of archaeological evidence related directly to the nation's past is expected and justified. Still, we should separate the impact of archaeology on the Israeli public and archaeological academic research. We should recall that the study of the Jewish past constitutes only a fraction of the wide-scale archaeological activity in Israel. I estimate that only about 15% of archaeologists in Israel deal with biblical/Jewish archaeology as their major field. The others deal with many other research subjects, related to all periods, regions, religions and ethnic groups that were present in the Holy Land throughout the ages. Most Israeli archaeologists consider themselves to be scholars who conduct research for its own sake, without a political or ideological agenda, and they are aware of the danger of mixing scholarship with modern ideologies and political views.

In fact, as archaeology in Israel has become a more professional and scientific discipline, it has lost much of its impact on the general public, yet continues to play an important educational tool for both Israelis and non-Israelis. It has become a dynamic, thriving, highly professional and interdisciplinary academic field of research, touching upon diverse subjects and raising challenging debates, some of them with far-reaching implications for our understanding of the past.

#### **Notes**

1. These numbers include only archaeologists and ignore philologists, historians etc. who are faculty members in combined departments.



# The Coins of Ancient Israel – Discoveries of the Last 50 Years

#### ILAN SHACHAR

Hundreds of thousands of coins have been found in the region of ancient Israel during the past half-century. They include individual finds and hoards, the most significant of which have come from controlled archaeological excavations. Interesting discoveries have also emerged from the antiquities market and from within private collections and some such finds have been of major importance to researchers.<sup>1</sup>

This summary will highlight some of the most significant numismatic finds, selected for their rarity or uniqueness in context, historical importance, their contribution to research, intrinsic value, unusual quantity or other characteristics which make them noteworthy. They have been listed by period according to the chronological sequence of the coin issue, and, in the case of some hoards, according to the preponderance of issues in the hoard.

## **Iron Age**

In 1995 a jar containing approximately 8.5 kg of Phoenician cut pieces of silver was found in a secure late 11th or early 10th century BCE context during excavations at Dor. This *Hacksilber*, the precursor of coined money, had been subdivided into units of weight and, although not unique, this find was important for its early dating and for its find-spot. It was also an illustration of trade relations between East and West (Stern 2001).

Six hoards of 305 pieces of silver, cut pieces (*Hacksilber*) and silver ingots were uncovered during excavations at Tel Miqne-Ekron over the period 1981–1996. These provided a rare opportunity for analyzing the use of silver as currency during the 7th century BCE (Gitin and Golani 2001).

# Persian period

One of the very few Archaic Greek coins found in Palestine, and possibly the earliest ever found in the region, was discovered in 1979 during excavation of a burial cave in Jerusalem. It was minted on the island of Cos and has been dated to c.550–500 BCE. This is the only one of its type to have been found in a controlled archaeological excavation (Barkay 1984–5; Gitler and Tal 2006: 16).

A hoard of thirty-one 4th century obols of the Athena/owl type was discovered in 1989 during excavations at Ashkelon (Gitler 1996). The significance lies in the fact that only a total of 51 Philistian coins, including this hoard, are known to have come from controlled archaeological excavations. It has been estimated that these 51 represent about 1% of the total number of extant Philistian specimens (Gitler and Tal 2006: 49).

A hoard of 18 Samarian coins and 2 individual finds from the excavations at Mt. Gerizim during the 1980s are the only Samarian coins known to have been discovered during a controlled archaeological excavation (Magen 2000: 114; Gitler and Tal 2006: 49).

### Hellenistic and Hasmonean periods

Jewish coins minted in the 3rd century BCE during the period of Ptolemaic rule, and bearing the inscription YHD, YHDH or YHWD, were unknown until about the 1960s. Most of the YHDH types are copies of the principal Ptolemaic type of that time (Meshorer 2001: 19–20).

In 2010, a gold *mnaieion* from Ptolemaic Cyprus was found during excavations at Tel Kadesh in the Upper Galilee. Finds of Ptolemaic gold coins in Israel are extremely rare, and this is only the second extant specimen of this issue known anywhere (Lorber 2010).

In 1960, a hoard of about 4,500 silver coins was discovered near Isfiya on Mount Carmel. Nearly all were Tyrian shekels and half-shekels dated from the 1st century BCE to the 1st century CE. It was speculated that they represented dues collected for the Temple in Jerusalem (Kadman 1961: 69–76).

The coins discovered in the 1980s during excavations at Mt. Gerizim proved beyond doubt that John Hyrcanus I was the first Hasmonean ruler to strike coins, in the 2nd century BCE, and that all the coins with the name *Yehohanan* must be ascribed to him, thus settling very long-standing argument on both subjects (Magen 1990: 87, 96; Meshorer 1990–91: 106).

An assemblage of more than 1,700 coins from the reign of Alexander Jannaeus was found in 2002 during a survey near Kh. Mazin on the shore of the Dead Sea. This is not the first such assemblage found at what has been suggested was a dock for royal use, and very large quantities of Jannaeus coins from this area (one dealer suggested 300,000) have shown up in the antiquities market over the years (Hirschfeld and Ariel 2005).

A private collection turned up an unusual Hasmonean coin which had been triple struck, enabling the final determination of a decades-old discussion in favour of Alexander Jannaeus as the identity of the ruler *Yntn*, whose name appears on Hasmonean overstruck coins (Hendin and Shachar 2008).

The cleaning and treatment of a bronze coin in a private collection led to the identification of a previously unknown mint which operated in the mid-1st century BCE at Marisa in south-west Judea, during the period of the governorship of Gabinius in Syria (Qedar 1992–3; Gitler and Stein 2004).

#### Herodian period

Finds of nearly 1,000 Herodian coins from various excavations in Jerusalem, mainly since 1970, enabled a major new study of the chronology of the undated types of Herod (Ariel 2000–2).

#### First Jewish Revolt

Three hoards totaling 32 shekels and 34 half-shekels were discovered during the 1963–65 Masada excavations (Meshorer 1989). These, together with the lack of any such finds in the fortress of Simon Maccabeus at Beth Zur (Sellers 1933: 89), provided the final unequivocal determination that none of the coins presently identified as coins of the first Jewish revolt against the Romans in the 1st century CE could be attributed to Simon in the 2nd century BCE, as some scholars had continued to maintain despite accumulating evidence to the contrary (Meshorer 2001: 24, 133).

The excavations at Gamla between 1976 and 1989 produced a total of more than 6,200 coins, the majority Hasmonean, but the most interesting are undoubtedly the few specimens of the 'Gamla coin', struck locally in imitation of the silver shekels of the first Jewish revolt. The first such coin was found in 1979 (Eidlin 1981) and has since generated a small library of literature (most recently Syon 2007).

#### Second (Bar Kokhba) Revolt

The excavations at Herodion in 1967 produced a hoard of 770 bronzes of the Bar Kokhba revolt. This exceptionally large quantity was helpful in developing theories about the internal chronology of the numerous variants (Spijkerman 1972) and the possibility of distinguishing between two mints (Barag 2000–2).

In 2009, three hoards of coins from the time of the Bar Kokhba revolt were found in *Ha-Te'omim* Cave in the Jerusalem hills. The total of 117 included about 90 struck by the Bar Kokhba administration, together with Roman gold and silver, weapons and other artefacts (Zissu *et.al* 2009–10). The significance of the find lies in the fact that it is one of the few hoards of Bar Kokhba issues that was found with associated material in a controlled archeological excavation.

# Roman period

Excavations at Shu'afat (Givat Sha'ul, Jerusalem) in 2003–5 and 2006–7 produced about 800 coins, of which about half have been identified. A high proportion of these are from the 1st and 2nd centuries CE, many with the countermark of the Tenth Legion, offering a rare glimpse of coinage circulating between the two Jewish revolts. The most impressive example among the finds was a very rare *aureus* of Trajan (Bijovsky 2007).

In 1966, excavations at Mampsis in the eastern Negev uncovered a hoard of more than 10,300 Roman silver coins hidden in a Nabatean house. Apart from three

Nabatean issues and one denar, the hoard consisted of drachms and tetradrachms from the 1st–3rd centuries CE. About 75% were issued by the Severan dynasty (Rosenthal-Heginbottom 1980).

A hoard of 188 Roman bronze coins was found accidentally at Migdal, north of Tiberias, in 1973. It contained several types previously unknown and contributed to research into the use and distribution of Roman provincial coinage in the 3rd century CE (Meshorer 1976).

One of the largest hoards ever found in Israel – some 26,000 coins – was discovered in 1998 during a salvage dig at Tel Malot north of Kibbutz Hulda. Based on about 5,000 examples already cleaned, 90% are from the 5th century CE. The nature of the hoard and the circumstances of its deposit could not be determined (Kindler 2000).

In 1972, archaeologists at Capernaum discovered some 6,000 bronze coins under the floor slabs of the synagogue and when in 1975 excavations were renewed at the same site, more than 14,000 more bronzes were found. A representative sample of 3,058 issues was dominated by Roman issues through to the end of the 5th century CE. (Callegher 2007: 147). The importance of the find lies clearly in the relation between such foundation deposits and the chronology of the structure.

### Byzantine period

A hoard of 485 Byzantine coins from the 6th–7th century, including 245 gold issues, were found during excavations carried out between 1981–6 at the synagogue of Meroth in the Upper Galilee, in an installation identifiable as the synagogue treasury. The content, with such a large proportion of gold issues, is unusual, shedding light on the financial aspect of community life of a Jewish village in this period (Kindler 1986).

In 2008 a cache of 264 *solidi* of Heraclius (610–641 CE) was discovered during excavations at the Giv'ati parking lot in Jerusalem. This hoard is a unique find in context, the evidence strongly suggesting that it was part of an emergency issue minted in Jerusalem, which would be the only time that gold coins were ever minted in the province of Palestine during the Roman and Byzantine periods. It also has provided strong evidence for the dating of the destruction of the Byzantine complex to the Persian invasion in 614 CE (Ben-Ami *et al* 2010).

# Ummayyad period

In 1998, a hoard of 751 Byzantine *solidi* was found at Bet She'an, the largest gold hoard from the 7th century found in an archaeological excavation in Israel. It was probably sequestered during the unstable decade preceding the monetary reform of 'Abd al-Malik in 696/697 CE (Bijovsky 2002).

### Fatimid period

A hoard of more than 300 gold coins was found in 2005 during excavations at Ramla. The latest coin was dated 1098 CE. This is one of the largest Fatimid hoards ever found in a controlled archaeological excavation (Kool 2008).

Also from the Fatimid period, a hoard of 85 Byzantine *folles* deposited in the late 11th Century CE was found in 1998 during excavations at Tiberias. Finds of late Byzantine types are rare in Israel and this is the only such hoard on record. It should be associated with the unrest related to the Seljuq invasion almost three decades before the arrival of the First Crusade (Bijovsky and Berman 2008).

## Crusader period

Thirty 13th century gold florins and other coins were recovered from the sea bed of Acre harbour under conditions of controlled dredging in 1993 and 1994. There were indications that the florins were likely part of a hoard of at least 70–80 that was lost at sea (Kool 2006).

## Mamluk period

In 1982, finds from underwater excavations of a ship's cargo off the Megadim coast included several blocks of small copper coins (*fulus*). The estimated quantity calculated by weight was 117,000. Most are from the reign of the Mamluk sultan Faraj (1399–1405 CE) (Shoham *et al* forthcoming).

A total of 666 coins were discovered in 2004 during excavations at a Mamluk-Ottoman period complex in Safed. These included a 14th century CE mixed hoard of 125 silver Mamluk *dirhams* and Venetian *grossi*, providing important information about contemporary currency circulation (Kool and Berman, forthcoming).

#### **Notes**

1. For the purposes of this article, the region has been limited to the geographical area of western Palestine. The author would like to thank D. T. Ariel, G. Bijovsky, H. Gitler, R. Kool, and D. Syon for their helpful suggestions. It is inevitable that any summary based on importance or significance will have been highly selective, and the author acknowledges and accepts responsibility for any inclusions or omissions to which some readers might take exception.

# Bibliography

Ariel, D.T., (2000–2). 'The Jerusalem Mint of Herod the Great: A Relative Chronology', *Israel Numismatic Journal* 14: 99–124.

Barag, D., (2000–2). 'The Two Mints of the Bar Kochba War', *Israel Numismatic Journal* 14: 153–6.

- Barkay, R., (1984-5). 'An Archaic Greek Coin from the Shoulder of Hinnom Excavations in Jerusalem', Israel Numismatic Journal 8: 1-5.
- Ben-Ami, D., Tchekhanovets, Y. and Bijovsky, G., (2010). 'New Archaeological and Numismatic Evidence for the Persian Destruction of Jerusalem in 614 CE', Israel Exploration Journal 60 (2): 204–21.
- Bijovsky, G., (2002). 'A Hoard of Byzantine solidi from Bet She'an in the Umayyad Period', Revue Numismatique 158: 161–228.
- Bijovsky G., (2007). 'The Coins from the Shu'afat excavations (Givat Sha'ul) Preliminary summary'. Pp. 65-72 in J. Patrich and D. Amit (eds.), New Studies in the Archaeology of Jerusalem and its Region (Jerusalem) (Hebrew).
- Bijovsky, G. and Berman, A., (2008). 'The Coins'. Pp. 63-105 in Y. Hirschfeld and O. Gutfeld, Tiberias. Excavations in the House of the Bronzes Final Report, Volume 1. Architecture, Stratigraphy and Small Finds (Qedem 48, Jerusalem).
- Callegher, B., (2007). Cafarnao IX (Jerusalem).
- Eidlin, D., (1981). 'The Coins'. Pp. 86-95 in S. Gutmann, Gamla The First Three Seasons (Tel Aviv) (Hebrew).
- Gitin, S. and Golani, A., (2001). 'The Tel Migne-Ekron Silver Hoards: The Assyrian and Phoenician Connections'. Pp. 27–48 in M.S. Balmuth (ed.), Hacksilber to Coinage: New Insights into the Monetary History of the Near East and Greece (New York).
- Gitler, H., (1996). 'Coins of the Fourth Century BC', The Numismatic Chronicle 156: 1-9. Gitler, H. and Kushnir-Stein, A., (2004). 'A New Date on Coins of Marisa in Idumaea and its Historical Implications', *Schweizerische Numismatische Rundschau* 83: 87–96.
- Gitler, H. and Tal, O., (2006). The Coinage of Philistia of the Fifth and Fourth Centuries BC (Milan and New York).
- Hendin, D. and Shachar, I., (2008). 'The Identity of YNTN on Hasmonean Overstruck Coins and the Chronology of the Alexander Jannaeus Types'. Israel Numismatic Research 3: 87-94.
- Hirschfeld, Y. and Ariel, D.T., (2005). 'A Coin Assemblage from the Reign of Alexander Jannaeus Found on the Shore of the Dead Sea', Israel Exploration Journal Vol. 55, No. 1:66-89.
- Kadman, L., (1961). 'Temple Dues and Currency in Ancient Palestine in the Light of Recent Discovered Coin Hoards' in Congress Internationale di Numismatica Roma 11–16 Settembre 1961, Vol. II (Rome).
- Kindler, A., (1986). 'The Synagogue Treasure of Meroth, Eastern Upper Galilee, Israel'. Pp. 315–320 in I.A. Carradice (ed.), Proceedings of the 10th International Congress of Numismatics (London).
- Kindler, A., (2000). 'The Tel Malot Hoard'. Pp.219-225 in Y.Eshel (ed.), Judea and Samaria Research Studies 9 (Ariel) (Hebrew).
- Kool, R., (2006). 'A Thirteenth Century Hoard of Gold Florins from the Medieval Harbour of Acre", The Numismatic Chronicle 166: 301-20.
- Kool, R., (2008). 'Unveiling the Ramla Treasure', Video production by Israel Antiquities Authority, http://www.antiquities.org.jl/ramle web movie heb.asp (Hebrew).
- Kool, R. and Berman, A., (forthcoming). 'The Coins of Safed'.
- Lorber, C., (2010). 'A Gold Mnajejon of Ptolemaic Cyprus at Tell Kadesh: Background and Context', Israel Numismatic Research 5: 41-57.
- Magen, Y., (1990). 'Mount Gerizim A Temple-City', Qadmoniot 23: 70–96 (Hebrew).
- Magen, Y., (2000). 'Mount Gerizim A Temple City', *Qadmoniot* 120: 74–118. Meshorer, Y., (1976). 'A Hoard of Coins from Migdal', '*Atiqot* 11: 54–71.
- Meshorer, Y., (1989). 'The Coins of Masada'. Pp. 71–132 in Masada I (Jerusalem).
- Meshorer, Y., (1990-91). 'Ancient Jewish Coinage Addendum I', Israel Numismatic Journal 11: 104-32.

#### THE COINS OF ANCIENT ISRAEL - DISCOVERIES OF THE LAST 50 YEARS

Meshorer, Y., (2001). A Treasury of Jewish Coins from the Persian Period to Bar Kokhba (Jerusalem and Nyack, N.Y.)

Qedar, S., (1992–3). 'The Coins of Marisa: A New Mint', *Israel Numismatic Journal* 12: 27–33.

Rosenthal-Heginbottom, R., (1980). 'The Mamphis Hoard – A Preliminary Report', *Israel Numismatic Journal* 4: 39–51.

Sellers, O.R., (1933). The Citadel of Beth-Zur (Philadelphia).

Shoham, E., Berman, A., Schultz, W.C., and Galili, E., 'An early fifteenth-century Assemblage from a Mamluk Shipwreck off the Carmel Coast, Israel – The Coins,' *Atiqot* (forthcoming) (Hebrew).

Spijkerman, A., (1972). Herodion III Catalogo delle monete (Jerusalem).

Stern, E., (2001). 'The Silver Hoard from Tel Dor.' Pp. 19–26 in M.S. Balmuth (ed.), Hacksilber to Coinage: New Insights into the Monetary History of the Near East and Greece (New York).

Syon, D., (2007). 'Yet again on the Bronze Coins Minted at Gamla', *Israel Numismatic Research* 2: 117–22.

Zissu, B., Eshel, H., Langford, B., and Frumkin, A., (2009–10). 'Coins from the Bar Kokhba Revolt hidden in Me'arat Ha-Te'omim, Western Jerusalem Hills', *Israel Numismatic Journal* 17: 113–19.



# 60 Years of Qumran Archaeology

#### **DENNIS MIZZI**

Khirbet Qumran is perhaps one of the most discussed ancient Near Eastern sites. Ever since its investigation in the 1950's, the site has been mired in several scholarly debates and controversies. The site has also captured the general public's imagination and occupies a prominent role in popular culture: it is frequently featured in newspaper articles and television documentaries – sometimes (unfortunately) with a flair for the sensational – and it constantly attracts large audiences at public lectures on the subject as well as a large number of tourists who visit the actual site.

In commemoration of the 50th anniversary of the Anglo-Israel Archaeological Society, I have been asked to write a brief overview of 60 years of Qumran archaeology, 50 years being not long enough to encompass the full range of excavations and theories. The history of research on Qumran is eventful and the scholarly discussion on its archaeology is quite complex, filling pages upon pages of books and journals. Inevitably, this paper will present only a few simplified snapshots of some of the salient facets of Qumran archaeology and its history of research.

# Khirbet Qumran: what's so special about the site?

Khirbet Qumran is a relatively small site situated along the north-western shore of the Dead Sea, in the Judaean Desert. The site was first occupied in the Iron Age, during which it probably functioned as a fortress. After having been abandoned for several centuries, the site was re-occupied by a group of new settlers in the Late Second Temple Period. The Second Temple phase of Khirbet Qumran represents the most extensive and intensive occupation of the site, which lasted for almost 170 years until it was destroyed by Roman forces that were active in the region during the First Jewish Revolt (in 68 CE). At its zenith in the Second Temple Period, Qumran consisted of a courtyard building with a fortified tower in its north-western corner, which was surrounded by various annexes on its eastern, western, northern, and southern parts. Throughout the settlement there were various storage areas, numerous rooms, a number of workshops and industrial installations (including a pottery kiln), as well as a complex water system which fed several cisterns. Substantial amounts of pottery were also found, together with a few other finds. A cemetery containing more than 1,000 graves was located adjacent to the site. Following the First Revolt, the site was re-occupied again by yet another group of settlers – either Roman legionary forces (de Vaux 1973: 41–44) or pro-Roman Jews (see Taylor 2006) – who inhabited only a small part

of the main building and re-used only one of the pre-existing cisterns. This post-Second Temple phase lasted for only a few years or, perhaps, a few decades.

The many debates that exist with regard to Qumran pertain to the Second Temple phase of the site. To an extent, it is quite paradoxical that a small and inconspicuous site such as Qumran has attracted this much attention relative to other sites of the Second Temple Period – sites which, from an archaeological perspective, may be more important than Qumran. In fact, Qumran's popularity stems from its connection to one of the greatest archaeological discoveries of the 20th century – the Dead Sea Scrolls: hundreds of ancient Jewish manuscripts comprising biblical and non-biblical religious texts, roughly dating between the late 3rd century BCE and the 1st century CE (for a good introduction on the Dead Sea Scrolls, see VanderKam and Flint 2005).

Despite repeated visits – between the mid-19th century and the early 20th century – by numerous explorers and archaeologists (see de Saulcy 1853; Poole 1856; Isaacs 1857; Rey 1860; Conder and Kitchener 1883; Clermont-Ganneau 1896; Masterman 1902; 1903; Dalman 1914), Khirbet Qumran did not have an iota of the significance it was to acquire after the 1950's. Back in 1853, Louis-Félicien Caignart de Saulcy noted that the ruins at Qumran, which comprised what appeared to be the foundations of a square enclosure, 'are not easily distinguished, and that it is very probable a hundred successive travellers might pass them by without the slightest idea of their existence' (de Saulcy 1853: 63). Subsequent explorers did note the remains of various walls, some cisterns, a tower, an aqueduct, and a cemetery but, otherwise, in the words of G. Lankester Harding, by the early 1950's, Qumran 'has been chiefly notable for its cemetery of more than 1,000 graves' (Harding 1952: 104).

The discovery of the Dead Sea Scrolls – between 1947 (or late 1946) and 1956 – in various caves close to the Qumran ruins changed the trajectory of the site's history, turning this relatively unknown site into a worldwide phenomenon (for a detailed description of the discovery of the Dead Sea Scrolls, see Fields 2009). These ancient manuscripts are the primary reason why Qumran occupies such a prominent place in contemporary scholarship. This is not to say that Qumran has little to contribute to the archaeology of the Second Temple Period; on the contrary, the publication of the site's ceramic corpus will certainly be a welcome addition for the study of Second Temple Period pottery, to mention but one example. But without this connection to the Dead Sea Scrolls, it is highly doubtful that one would speak of such a thing as 'Qumran archaeology' today. However, as we will see below, the unique status which Khirbet Qumran holds in academia can sometimes work to the detriment of scholarship on the site and the scrolls.

# **Investigations and Excavations at Qumran**

The first Dead Sea Scrolls were found by Bedouin in late 1946 or early 1947 – in what is now known as Cave 1Q – but this cave was only located and investigated

by the relevant authorities in 1949. The investigation that followed was headed by G. Lankester Harding (Trans-Jordan Department of Antiquities) and Roland de Vaux (École Biblique et Archéologique Française in Jerusalem): in and outside Cave 1Q, they discovered a few additional manuscript fragments – some of which matched with the manuscripts retrieved by the Bedouin, thus confirming the authenticity of the previous discoveries – pieces of linen, as well as a variety of pottery vessels (Harding 1948–49: 112–114). Harding and de Vaux also excavated two graves from the cemetery next to the *khirbeh*; they found nothing within the graves but, on the surface, they did retrieve pottery sherds which they dated to the 2nd or 3rd centuries CE (Harding 1952: 104). Accordingly, Harding and de Vaux dated the Qumran ruins to the Late Roman Period – believing they were the remains of a Roman fort – and concluded that there was no connection between Khirbet Qumran and the scrolls found in Cave 1Q (Lankester Harding 1952: 104; de Vaux 1953a: 89).

Since this negative conclusion was reached on the basis of very limited and unreliable evidence, in 1951 it was decided that minor excavations should be undertaken within the ruins adjacent to the cemetery. In the process, Harding and de Vaux made significant revisions to their previous conclusions; not only was evidence found for a 1st century BCE and CE occupation of the site, but a cylindrical jar paralleling those discovered in Cave 1Q – in which scrolls had been discovered – was found in one of the rooms, thus creating an apparent link between the site and the scrolls.<sup>2</sup> Consequently, it was concluded that the inhabitants of Qumran must have been the people responsible for writing and depositing the scrolls found in Cave 1Q (Harding 1952: 105; de Vaux 1953a: 105).

Eventually, the convergence of various pieces of evidence led to the conception of the Essene/sectarian hypothesis – namely, that Qumran was an Essene/sectarian settlement in its Second Temple phase.<sup>3</sup> The evidence included: the presence of Jewish manuscripts in the Qumran area and their apparent connection to Khirbet Qumran; the existence of so-called sectarian texts among these scrolls, two of the earliest scrolls to be recovered from Cave 1Q being the Community Rule (1QS) – a sort of rule book describing some of the practices and beliefs of a Jewish sectarian community – and the *Pesher Habakkuk* (1QpHab) - a commentary on Habakkuk with overtones supposedly pertaining to the history of this community; the occurrence of considerable similarities between the sectarian community(ies) depicted in the scrolls and the descriptions of the Essenes in Flavius Josephus (War 2: 119-161; Ant. 18: 18-22), Philo of Alexandria (Quod. 75–91; Hypoth. 11), and Pliny the Elder (Hist. Nat. 5: 17); and Pliny's placement of the Essenes on the north-western shores of the Dead Sea, roughly corresponding to the geographic location of Khirbet Qumran. These connections between Khirbet Qumran, the Dead Sea Scrolls, and the Essenes provided de Vaux and Harding with an impetus to embark on four further seasons of excavations, which were conducted between 1953 and 1956 (de Vaux 1954; 1956). Thus, the site's excavation itself was largely driven by the connection it was believed to have had with the scrolls.

In the meantime, between 1952 and 1956, further manuscripts were discovered - the majority by the Bedouin and some by the archaeological team - in various different caves in the same general area of Qumran (Caves 2Q-11Q), some of which were located right next to the khirbeh (the artificially-hewn marl Caves 4Q-5Q, 7Q-10Q). All these caves were investigated by de Vaux's team, although in some cases the investigations took place after clandestine excavations by the Bedouin were well underway. In addition, de Vaux and his team surveyed and investigated around 270 natural caves and crevices in the limestone cliffs to the north, west, and south of Khirbet Qumran. Only 40 of these caves contained traces of human activity, approximately three-fourths of which yielded pottery that dates to the 1st centuries BCE and CE, often paralleling the pottery from Khirbet Qumran (see de Vaux 1953b; 1962; 1973: 50-53; 1977). In 1956, to the immediate south of Qumran, de Vaux also excavated a small settlement at 'Ein Feshkha, which likewise yielded pottery paralleling that found at Qumran and which appeared to have been contemporary with the Qumran settlement (de Vaux 1959; 1973; 58-87).

Following de Vaux's investigations, the Qumran area continued to attract the attention of various archaeologists. In the 1960's, ten further tombs were excavated by Solomon H. Steckoll (see Steckoll 1968; 1969), whereas in the 1980s, additional limestone caves in the Oumran area were investigated by Joseph Patrich and his team (see Patrich and Arubas 1989; Patrich 1994). In the 1990s, Magen Broshi and Hanan Eshel carried out excavations in a few newly-discovered artificial marl caves to the south and north of Qumran (see Broshi and Eshel 1999a; 1999b; 2004a; Eshel and Broshi 2003), while another survey of some of the natural limestone caves was carried out as part of a larger survey covering the northern part of the Judaean Desert (see Baruch, Mazor, and Sandhaus 2002); additionally, James F. Strange and his team conducted a GPR survey and minor excavations on the Qumran plateau, to the south of the built settlement (see Strange 2006). In 2001, a detailed mapping of the cemetery was also carried out, similarly with the aid of a GPR survey (see Eshel et al. 2002). The major undertaking at the site since de Vaux's excavations, however, was the ten-year campaign of excavations directed by Yizhak Magen and Yuval Peleg between 1993 and 2004, during which they re-investigated some areas that had already been exposed by de Vaux and excavated various dumps on the outskirts of the site, which yielded thousands of pottery fragments and numerous other finds (see Magen and Peleg 2006; 2007).

However, the excavations conducted by Roland de Vaux and G. Lankester Harding – despite the problems that have often been noted in their regard – remain the most important investigations of Qumran to date. First, these excavations constitute the first proper investigations conducted at Khirbet Qumran. Second, they remain the most extensive investigations to have been undertaken at the site, responsible for uncovering most of the settlement. Therefore, despite the important new data which later investigations at Qumran have produced, one cannot really gain a good understanding of the site and of its development without the data from

de Vaux's excavations. As such, 60 years and many further investigations later, the results from de Vaux's campaigns at Qumran remain the backbone for any study of the site.

## Roland de Vaux's Synthesis and the Essene/Sectarian Hypothesis

In his famous Schweich Lectures, delivered in 1959, de Vaux produced a synthesis of his findings at Qumran. This synthesis was subsequently published – with some expansions and alterations – in French (de Vaux 1961) and in English (de Vaux 1973). This publication remains a landmark study in Qumran research, particularly because de Vaux never managed to publish a final report on the Qumran material.

The focus of de Vaux's synthesis was largely devoted to the Second Temple phase of the site, which he associated with the Essene/sectarian occupation (unlike the Iron Age and the post-Second Temple phases). De Vaux subdivided the late Second Temple occupation into three phases: Period Ia (second half of the 2nd century BCE), Period Ib (c. 100 BCE-31 BCE), and Period II (c. 4 BCE-68 CE). He also surmised that it was during Period Ib that the settlement at Qumran expanded to reach its fully-fledged plan, as described above (see Figure 1). On the basis of the overall material evidence from the Qumran area and of the textual sources, de Vaux concluded that Khirbet Qumran served as a community centre for a rather large Essene community – the members of which lived in the various caves around the site as well as in tents - where various religious texts were written, copied, and studied, and where various communal activities were carried out, including prayer, work, and the partaking of religious meals. Moreover, he believed that the Qumranites comprised a celibate male community who led an austere life, deprived of sumptuousness, and who were, for the most part, cut-off from general society; members of this community were buried in the adjacent cemetery. De Vaux also posited a close connection between Qumran and the settlement at 'Ein Feshkha.

Some of de Vaux's most renowned conclusions vis-à-vis the archaeology of Qumran include his interpretation of L.77 as a refectory or dining room – on the basis of the hundreds of dishes found in an adjoining room (de Vaux 1973: 11–12) – and his interpretation of L.30 as a *scriptorium* – on the basis of inkwells and the remains of plastered elements (writing tables according to de Vaux) found within this locus (de Vaux 1973: 29–33). De Vaux also attached importance to the spacious and public aspects of Qumran's architecture, which he identified as communal spaces for the assembly of the community (de Vaux 1973: 10–11). While many of de Vaux's conclusions are indeed supported by the archaeological evidence, there is no doubt that the textual sources on the Essenes and the sectarian Dead Sea Scrolls played an influential role in de Vaux's interpretations. As we will see below, this methodological issue has occupied a prominent position in the various challenges that have arisen to de Vaux's hypothesis in the past few decades.

However, apart from these noted exceptions, Roland de Vaux's interpretation of the Second Temple phase of Qumran was widely accepted by the scholarly

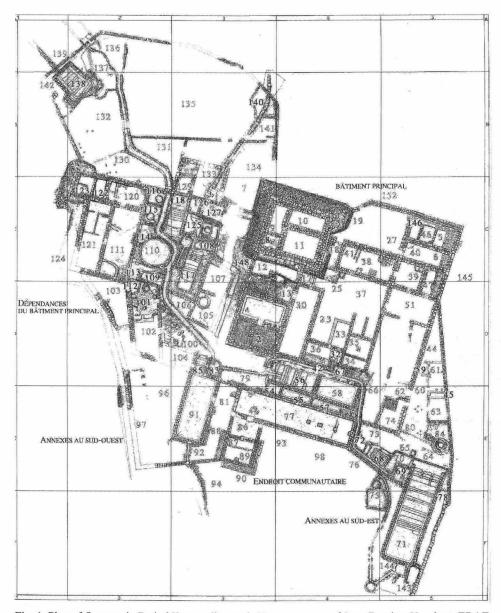


Fig. 1. Plan of Qumran in Period II according to de Vaux, courtesy of Jean-Baptiste Humbert, EBAF.

community from the moment of its inception (for works which basically accept de Vaux's interpretation and which more or less represent the sentiment of the largest part of the academic community, see, for example, Milik 1959; Laperrousaz 1976; Broshi 1992; 1998; Cross 1995; Magness 2002; Vermes

2004). Naturally, though, it has accrued some minor revisions along the way. For example, the idea of an isolated and secluded monastic-like community that was virtually cut-off from general society has since been generally abandoned, as has the notion that the Qumranites led a life of complete poverty. Also, a heightened emphasis on aspects of ritual purity at Qumran developed in subsequent scholarship, no doubt a result of advances in the study of ritual purity in Second Temple Judaism – a noteworthy example is the identification of the several stepped cisterns as ritual baths (see Wood 1984; Reich 2000a; 2000b). Perhaps, the major revision to de Vaux's synthesis pertains to the chronological development of the site during its Second Temple phase (see Magness 1995; 1998; 2002: 47–72). Jodi Magness has concluded that Qumran was first inhabited sometime in the first half of the 1st century BCE – hence eliminating de Vaux's Period Ia altogether – and that there was no gap of occupation following the earthquake of 31 BCE. Therefore, while the basic tenets of de Vaux's synthesis still stand, this hypothesis has continued to be developed and refined, proving to be a dynamic and influential theory. In fact, today it still maintains an almost universal consensus among scholars.

## **Shifting Perspectives**

Despite this general consensus, a number of scholars have challenged the Essene/sectarian hypothesis. There have been a few scholars who, while largely maintaining the Essene/sectarian interpretation of the Second Temple phase of Qumran, have challenged minor aspects of it.<sup>4</sup> For example, some have presented a slightly different scenario with regard to the site's history, suggesting that before becoming an Essene/sectarian settlement, Qumran functioned as a villa (Humbert 1994; 2003) or as a fortress (Cargill 2009). Some scholars have also taken a different stance on the site's function and the nature of its habitation as an Essene/sectarian settlement, arguing, for example, that the built settlement at Qumran was used for residential purposes – as opposed to it being used as a community centre – by a small Essene/sectarian community (Patrich 2000), or that it functioned as an Essene centre for the production of manuscripts (Stegemann 1998: 51–55), or that it was a sacred Essene centre (Humbert 1994; 2006).

The aforementioned theories still fall, more or less, within the folds of the Essene/sectarian hypothesis. However, there have been a few scholars who have completely rejected this reading of the site. These scholars have proposed various alternative interpretations to the site, namely that, in the Second Temple Period, Khirbet Qumran was a fortress (Golb 1995; for such an interpretation of the site during an earlier phase of its Second Temple Period occupation, see Hirschfeld 2004; Magen and Peleg 2006; 2007), a villa or a wealthy manor estate (Donceel and Donceel-Voûte 1994; Donceel-Voûte 1994; Hirschfeld 2004; for such an interpretation of the site during an earlier phase of its Second Temple Period occupation, see Humbert 1994; 2003a), a way-station (Crown and Cansdale 1994; Cansdale 1997), a pottery-production centre (Magen and Peleg 2006; 2007), or

a multi-industrial site related to the Hasmonaean and Herodian royal palaces in Jericho (Stacey 2007; 2008), among others.<sup>5</sup>

Besides the site's interpretation, another feature of Qumran archaeology on which much ink has been spilt relates to the site's chronological development. While Magness' revised chronology remains almost universally accepted – correctly so, on the basis of the published evidence – there are a number of scholars who have offered their own take on the chronology and development of the site during its Second Temple phase. There are, today, no less than five proposed chronological outlines for Qumran. Many of these chronologies do not agree on the architectural development of the site, either. Magness believes that, throughout its occupation in the Second Temple Period, Qumran had essentially the same architectural layout; however, some scholars think that Qumran reached its fully-fledged plan in the later 1st century BCE and, thus, they have come up with alternative reconstructions for the site's plan before the mid-1st century BCE. Much like the issue of chronology, there are no less than five proposed reconstructions (see, for example, Humbert 1994; 2003a; 2003b; Magness 2002; Hirschfeld 2004; Magen and Peleg 2006; 2007; Stacey 2007; Cargill 2009).

The above-mentioned debates are only *some* of the contentious issues that characterise Qumran archaeology. The worse of it is that this disagreement does not always take the shape of a proper academic dialogue – contrarily, the field can sometimes be rather antagonistic – and that, sometimes, alternative views are expressed through somewhat sensational channels. Unavoidably, the question arises: why is there this lack of consensus in the field of Qumran archaeology? As the following sections will illustrate, the current state of the field is largely a result of debated methodological issues and of various hurdles that have curtailed advancement in the study of Qumran.

## On Some Methodological Issues

At the very centre of the whole Qumran debate is the very issue of the relationship between Khirbet Qumran, the Dead Sea Scrolls and the Essenes. Generally, those scholars who oppose the Essene/sectarian hypothesis argue that the relation between the Dead Sea Scrolls and Khirbet Qumran, as well as between the Essenes and Qumran, is questionable. Accordingly, they go on to interpret the site from a purely archaeological perspective – unrestrained by the texts – proposing various alternative interpretations in the process.

In essence, the *total* disconnection of Qumran from the Dead Sea Scrolls is one of the most serious methodological flaws of the non-sectarian hypotheses. There are many pointers which underscore the connection that must have existed between the site and the scrolls, as numerous scholars have maintained since the 1950's. Some of these include: the geographical proximity of the scroll caves to Khirbet Qumran; the ceramic links that exist between the two; the fact that some scroll caves were only accessible through the Qumran settlement; the analogous chronological timeframe of the site's occupation and of the scrolls' palaeography;

as well as the presence of numerous inkwells within the *khirbeh*. The burden of proof really rests on those who question this link, but none of the alternative explanations given have been really convincing. Therefore, interpretations of the site that ignore the scrolls are essentially based on selective archaeological evidence because they overlook an important piece of the puzzle. To an extent (given that they do not constitute archaeological evidence directly linked to Qumran), this also applies to those interpretations that ignore the classical sources on the Essenes.<sup>6</sup>

Nonetheless, opponents of the Essene/sectarian hypothesis do have a point in insisting that Khirbet Qumran should not be interpreted through the framework of the textual sources. In fact, for purely methodological purposes, it is important and advantageous not to conflate the textual sources and the archaeology of Qumran at the first stage of the research process. The complex literary history of some of the sectarian Dead Sea Scrolls, such as the Community Rule (see, for example, Murphy-O'Connor 1969; Pouilly 1976; Alexander 1996; Metso 1997; Schofield 2009) and the *Damascus Document* (see, for example, Davies 1983; Hempel 1998), as well as the uncertain relationship between the aforementioned two documents - do they legislate for different communities within the same movement, do they diachronically represent the same movement at two different points in time, or do they reflect two separate but closely-related movements? - to mention but a few examples, preclude one from applying, uncritically, the data inferred from the scrolls onto the Qumran archaeological remains. Thus, for example, which document are we to relate to Qumran: the Community Rule or the Damascus Document? And which of these documents' literary stratum are we to relate with the Qumran remains? What if the archaeological remains at Qumran and the descriptions in the Community Rule and the Damascus Document pertain to two different chronological realities? This approach also applies to the use of the classical sources which mention the Essenes, which have their own set of historical-critical issues to consider.

The history of Qumran archaeology has taught us the dangers of conflating both sources of information at the very first stage of the research process. For example, the references to the Teacher of Righteousness and the Wicked Priest – two sobriquets that may refer to actual historical figures – in the *Pesher Habakkuk* might have been partly (if not highly) influential in de Vaux's dating of the beginning of occupation at Qumran to the second half of the 2nd century BCE since he linked the foundation of the Teacher's sectarian community (or movement) with the establishment of Qumran (see Davies 1988: 204–205), the Teacher probably being a 2nd century BCE figure whose history in the *pesher* is intricately linked with that of the Wicked Priest. However, as Jodi Magness has correctly shown, the archaeological evidence does not support a 2nd century BCE occupation. The situation can also work in the reverse order: the elevated status which Khirbet Qumran enjoys in academia has sometimes resulted in too much emphasis being placed on the site, to the extent that studies on the scrolls become too Qumran-centric in their approach. For example, throughout the past

60 years, it has been quite common for the term "Qumran Community" to be used as a synonym for the *Yaḥad* of 1QS, thus limiting the *Yaḥad* largely to Qumran. However, the literary evidence is far from clear on whether the *Yaḥad* consisted of one unified large community or whether it was a conglomeration of many communities (see the debate in Metso 1999; 2006; Regev 2003; Collins 2003; 2006; *idem* 2010; Hempel 2008; Schofield 2009). At present, there is no reason to limit the *Yaḥad* exclusively to Qumran; in this regard, one must acknowledge the undue influence that Khirbet Qumran – in its place as the only Second Temple site that has been identified as a sectarian settlement connected to the Dead Sea Scrolls – may play in the interpretation of the textual sources. These are just two examples out of various ones that could be adduced to illustrate the dangers of amalgamating Qumran archaeology and the textual sources in the first stage of the interpretative process.

However, the scrolls as physical entities have to be reckoned with in the archaeological analysis of the site because their physical reality in itself constitutes archaeological evidence; it is their contents that should be treated separately, and only at the first stage of the research process. It is, perhaps, time that the methodological debate ceases to focus on whether Qumran and the scrolls are related, and starts to concentrate, instead, on how to actually relate the archaeology of Qumran with the textual sources. Adopting such an approach may well lead to a further refinement of the Essene/sectarian hypothesis.

In addition to the disassociation of the scrolls from Khirbet Qumran, the various non-consensual theories that have been proposed are imbued with a number of other methodological problems. Indeed, the very fact that so many scholars have reached so many alternative conclusions vis-à-vis Qumran already raises a red flag, indicating that something must be amiss. One of the recurring flaws in many of these proposed hypotheses includes the failure to deal convincingly with any contradictory archaeological evidence. Advocates of the Essene/sectarian hypothesis have consistently noted a number of archaeological features which are peculiar to Khirbet Qumran, adducing them as further proof for the sectarian (or 'religious') identification of the site. Some of the most obvious idiosyncratic features include the presence of at least eight ritual baths at such a relatively small site, of a pottery kiln in an area where water and fuel were scarce, of a virtually unique class of ovoid and cylindrical storage jars,8 of numerous buried bone deposits (placed within or covered by ceramic vessels), and of a cemetery adjacent to the built settlement. However, opponents of the Essene/sectarian hypothesis fail to explain convincingly these unique features, which distinguish Qumran from any other settlement of the Second Temple Period. Some of the alternative interpretations that have been proposed, regarding these features, betray the fact that some scholars try too hard to come up with an unconventional conclusion.

A related flaw involves the complete focus on the similarities that Qumran shares with other sites to the exclusion of the more important differences. For example, the fact that the main building at Qumran consists of a courtyard building with a corner fortified tower should not be taken as a defining characteristic – as some

scholars have done (see, for example, Hirschfeld 1998) – particularly since this was a basic architectural blueprint in ancient Palestine, shared by small fortresses, villas, way-stations, farmsteads, and other types of buildings. Rather, one should look at the differences: thus, the dearth of architectural and pictorial decoration and the absence of a *triclinium*, among other features, contradicts the interpretation of Qumran as a villa (see further Magness 1994); the presence of numerous industrial installations is, for example, one of many features that are incongruent with the interpretation of Qumran as a small fortress; likewise, the fact that Qumran is not situated at any major crossroads (see Broshi 1998; Gibson and Taylor 2008) completely negates the understanding of the site as a way-station.

One final example will illustrate a number of other flaws that often permeate counter-theories to the Essene/sectarian hypothesis. It has often been claimed that the presence of glass at Qumran signifies wealth and that this is, therefore, contradictory to the presence of a sectarian community (see, for example, Donceel and Donceel-Voûte 1994; Wouters et al. 1999/2000: 18; Hirschfeld 2004: 145). However, these conclusions are erroneous on several grounds. First, a thorough comparative analysis of the glass from Qumran with that circulating in ancient Palestine reveals that the glass corpus from Qumran largely comprises the least expensive types of glass vessels (Mizzi 2010). Second, in such arguments all the glass vessels from Qumran are typically grouped together and associated with the Second Temple occupation of Qumran, ignoring the possibility that some of the glass may actually come from the post-Second Temple phase (i.e. Period III). This is highly problematic considering that we do not have a stratigraphic context for the Qumran finds. In fact, in an attempt at attributing a probable 'stratigraphic' context to these finds, it was discovered that the few expensive glass vessels from Qumran come either from Period III contexts or from uncertain ones (Mizzi 2010). Third, saying that the presence of wealth is incompatible with the presence of a sectarian community is a non sequitur since there are many indications in the scrolls that while the sectarian movement of the Dead Sea Scrolls condemned illegitimate wealth and connected wealth with corruption, the movement as a whole must have been wealthy (see Collins 2010: 185-186; Mizzi 2010: 122; for a full treatment on wealth in the Dead Sea Scrolls, see Murphy 2002). Therefore, many of the alleged incongruities between the archaeological interpretation of Qumran and the interpretation of the textual sources do not stand up to scrutiny, either because of bad archaeology or because of a misreading of the textual sources.

Certainly, the Essene/sectarian hypothesis has not been without its flaws, which is why it continues to be re-evaluated and refined (in itself, a testament of its strength). But all in all, the Qumran archaeological evidence – even without the input from the Dead Sea Scrolls and the classical sources on the Essenes – suggests that the Qumran settlement could not have been a villa or a fortress or any of the proposed alternatives; what it certainly shows is that its inhabitants do not appear to have been typical Jews. Besides the noted idiosyncratic features, the archaeological evidence indicates that the Qumranites were particularly concerned with ritual purity, at a level that was beyond what was typical at other Second

Temple Period settlements. This is a really distinguishable aspect of Khirbet Qumran, attested through the architectural, the ceramic, as well as the stone-vessel evidence (see Mizzi 2009). Furthermore, when one then brings the interpretation of the archaeological evidence in dialogue with the interpretation of the scrolls and of the classical sources on the Essenes, one is faced with a convergence of evidence that best supports the Essene/sectarian interpretation of the site and which is simply too strong to ignore.

## Major Setbacks for the Field

For the past 60 years, scholarship on Qumran has been significantly hindered by problems in de Vaux's excavations – notably, the problem of stratigraphy – and by the fact that much of the data from these excavations remain unpublished. Likewise, the final report of Magen and Peleg's ten-year campaign – which produced ample artefacts – has yet to be published. However, because de Vaux's excavations are particularly crucial for the advancement of the field, their publication is all the more important.

Before passing away, de Vaux managed to publish only preliminary reports on his investigations at Qumran. For the major part of the past 60 years, these preliminary reports, together with de Vaux's published synthesis on Qumran, served as the foundation for much of the research that has been conducted on the site. The situation was greatly ameliorated by the publication of de Vaux's excavation notes and photographs in 1994, which were edited by Jean-Baptiste Humbert - who became the person in charge, at the École Biblique in Jerusalem, for the publication of the Qumran material from de Vaux's excavations - and Alain Chambon (see Humbert and Chambon 1994; see also Rohrhirsch and Hofmeir 1996 [German edition]; Humbert, Chambon, and Pfann 2003 [English edition]). This important publication has been an immense contribution to the field since it provides more details about (and a much closer access to) de Vaux's excavations, mainly in the form of a day-by-day journal on the work conducted at Qumran, supplemented with photographs. It also includes a list of all the finds that de Vaux catalogued, which far exceeds the sample that de Vaux published in his preliminary reports. The publication of a second volume containing various scientific, anthropological, and archaeological studies on limited samples of pottery, on the cemetery and the bones from the excavated graves, on the ritual baths, on the textiles found in the Qumran caves, as well as on the inscribed sherds and stones, among others (see Humbert and Gunneweg 2003), has been another important milestone in the road to final publication.

The impact of these new data on subsequent studies on Qumran is indeed noticeable. Nevertheless, future volumes containing detailed reports (not just studies) on all the finds remain eagerly expected since important data (such as detailed descriptions, illustrations, etc.) are still lacking. In most instances, it is very difficult to infer certain important aspects – such as typology – from the published list of finds. Additionally, it should be noted that this list only features the items

that de Vaux catalogued in his official inventory; however, de Vaux collected many other items – mostly pottery fragments, of which there are at least a thousand new entries<sup>9</sup> – which were not recorded in his inventory and which remain completely unpublished. Unless publication of the Qumran material resumes, further (and significant) advancement in the field will be greatly hampered.

Even when this is accomplished, the serious problem of stratigraphy will persist. This, together with the incomplete publication of the Qumran material, is the very reason why the issue of chronology and of the architectural development of the site remains so hotly disputed. In the case of the latter, the fact is that most of the proposed architectural plans for Period Ib are largely speculative reconstructions, sometimes conditioned by preconceived interpretations for which archaeological evidence is sorely missing. For example, because some scholars believe that Qumran was a fort or a military outpost during Period Ib – an interpretation that is heavily dependent on the historical and political circumstances of the period and not on archaeological data – they reconstruct a plan which accordingly resembles the plan of other known forts. Therefore, this reconstruction is guided by external non-archaeological evidence when the process should be in the reverse. Similar problems characterise the other proposed reconstructions, including, to an extent, the widely accepted views of de Vaux and Magness. This is, perhaps, one instance where we should honestly acknowledge the limitations of our data and of our knowledge.

Another consequence of the problem of stratigraphy is that it will remain impossible for scholars to determine which objects come from which context. Without a context, archaeological artefacts lose much of their worth; in the case of Qumran, the context of the finds would be particularly useful for distinguishing which items belong to which period, which is essential for a serious understanding of the various phases of occupation at Qumran. In an attempt at partly rectifying the problem of stratigraphy, the present author has undertaken a study in which a method for attributing a probable 'stratigraphic' context to the Qumran finds has been developed (Mizzi 2009).<sup>11</sup> It is the author's hope that this endeavour will generate a constructive debate which will take the field into new directions.

## On Some Neglected Matters

A quick glance at the scholarly literature of the past 60 years will reveal that in the field of Qumran archaeology there is an overarching tendency to focus on the sectarian occupation of the site, with little regard for the Iron Age phase or for Period III – a trend reflected in this overview itself! In fact, it is quite paradoxical that the Iron Age occupation at Qumran was not even assigned a periodic designation (such as Period I, II, or III) but is simply referred to as the Iron Age (Joan Taylor, personal communication [July 2011])!

However, studying the Iron Age phase and Period III are very important endeavours. From an epistemological perspective, both these phases should be studied for the important archaeological data that they may provide concerning the respective periods within which they fall. But a study of these two neglected

periods is also of great benefit for those studies that deal with the Second Temple phase of Qumran. This has been aptly shown by Joan Taylor and Shimon Gibson, in a paper delivered by Taylor at the SBL International Conference in London (July 2011). In this study on the architectural layout of Qumran during the Iron Age, they conclude that the Iron Age plan served as a sort of blueprint on which the Second Temple occupants based their own plan of the settlement. This is an important observation, as it means that we should not make much out of some basic architectural features which Qumran shares with other sites of the Second Temple Period. Likewise, a good study of Period III – because this immediately followed the Second Temple sectarian occupation – would enable important comparisons between the material culture of a sectarian and a non-sectarian occupation at the same site, thus diminishing any shortcomings that might arise out of a comparison between sites which are situated in different geographical, environmental, and political contexts. Again, Taylor has been a pioneer in undertaking the first detailed study on Period III Qumran (see Taylor 2006). It is only hoped that, in the future, these two neglected periods will become more integrated within the field of Oumran archaeology.

#### The Road Ahead

In the past 60 years, theories about Qumran have abounded but the 'original' interpretation of the site – the Essene/sectarian hypothesis (with all the revisions it has incurred over time) – remains the interpretation which best explains the extant evidence. Nevertheless, this hypothesis is not flawless and there will always be room for further modifications. In this regard, the multitude of hypotheses that exist – which may, at first, appear to be superfluous – are of great importance to the field. Having a variety of perspectives, with the various challenges each brings up, helps the field move forward by forcing scholars to re-consider previously-held views (and, perhaps, even revise them) or to further strengthen established conclusions. Thus, advocates of the Essene/sectarian hypothesis would do well to welcome challenging views.

Qumran archaeology has a long way to go, with numerous unresolved issues lying on its horizon. Some of these have been discussed in this brief overview but many others have not. Was Qumran a large or a small sectarian settlement? How large was the population that inhabited this site? Is it possible that women were present at Qumran, contrary to what the majority of scholars think? What can the cemetery really tell us about the Qumranites, considering that less than 5% of the graves have been excavated? What role did Qumran really play within the wider sectarian movement of the Dead Sea Scrolls? These are only a few of the lingering questions in the field. Some of them may be answered with the complete publication of the Qumran material; others will be solved through further research and debates. It is only hoped that these issues will be tackled within the context of a constructive academic dialogue and that they will open interesting new chapters in Qumran archaeology.

#### **Notes**

- 1. I would like to thank Joan Taylor for inviting me to write this paper for *Strata*.
- 2. It should be noted that, at the time of excavation, these cylindrical jars together with ovoid jars (a related class of storage vessels) were unique to Qumran. In the past 60 years, the excavation of hundreds of Second Temple Period sites have not significantly changed this picture, with limited specimens of these jars having been found at only a few other sites, such as Jericho (see Bar-Nathan 2002; 2006a) and Masada (see Bar-Nathan 2006b). Therefore, both in terms of quantity and of typological variety, ovoid and cylindrical jars have their largest concentration at Qumran; their presence at other sites, as such, remains very minimal.
- 3. The identification of the community mentioned in the *Community Rule* with the Essenes had already been made earlier by various scholars, such as Eleazar Sukenik (1948–50), William H. Brownlee (1950), and André Dupont-Sommer (1950).
- 4. The alternative perspectives listed here are limited to those that mainly presented challenges from an archaeological point of view. However, it should be noted that there are also scholars who, while largely maintaining the consensual view, have challenged minor aspects of it from a textual (not archaeological) perspective. For example, some scholars have questioned the Essene identity of the Qumran sectarians, with some positing other identifications instead (see, for example, Schiffman 1990; Goodman 1995; Baumgarten 2004) and others suggesting that the Qumran sectarians were an offshoot of the Essenes (see, for example, García Martínez 1988; 1990).
- 5. For a brief discussion of various theories that have been proposed concerning Qumran, whether from a textual or archaeological perspective, see further Broshi and Eshel 2004b.
- 6. The connection between the Essenes and Qumran, and the Essenes and the scrolls has, likewise, been the subject of intense debate in the field. On the basis of many similarities between the two bodies of textual evidence, the majority of scholars believe that there is some kind of connection between the scrolls and the Essenes (for a recent overview on this issue, see Taylor 2010 [with many further references therein]; but see note 4). In addition, many scholars underscore Pliny's placement of the Essenes on the north-western shores of the Dead Sea (*Hist. Nat.* 5.17). Pliny's use of language in this passage has been disputed but the reading which places the Essenes in the area of Qumran rather than above 'Ein Gedi appears to be the better one (for a recent evaluation of Pliny's passage on the Essenes, see Taylor 2009 [with further references therein]; also see Hirschfeld 2000; Magness and Amit 2000). The convergence of evidence suggests that there was indeed some kind of relationship between Qumran, the scrolls, and the Essenes.
- 7. This issue of how to relate text and artefact is, in fact, the subject of a heated debate in the sister fields of biblical studies and biblical archaeology (for a recent treatment of this debate, see Frendo 2011).

- 8. See note 2.
- 9. I was able to see many of these uncatalogued items at the École Biblique in the summer of 2007. I would like to thank Jean-Baptiste Humbert for kindly giving me access to this material.
- 10. From the non-consensual theories, Stacey's reconstruction of Period Ib is the one which is most grounded within a stratigraphic and archaeological methodology as against a reliance on external evidence but it still has its problems (see Magness 2007a; 2007b).
- 11. A detailed description of this method and of its underlying principles is to appear in the publication of the author's dissertation.

## **Bibliography**

- Alexander, P. S., (1996). 'The Redaction-History of Serekh Ha-Yahad: a proposal', Revue de Oumran 17: 437–456.
- Amit, D. and Magness, J., (2000). 'Not a Settlement of Hermits or Essenes: a response to Y. Hirschfeld, A Settlement of Hermits above 'En Gedi', *Tel Aviv* 27: 273–285.

Bar-Nathan, R., (2002). Hasmonaean and Herodian Palaces at Jericho: Final Reports of the 1973–1987 Excavations: Volume III: The Pottery (Jerusalem).

(2006a). 'Qumran and the Hasmonaean and Herodian Winter Palaces of Jericho: the implication of the pottery finds on the interpretation of the settlement at Qumran'. Pp. 263–277 in K. Galor, J. -B. Humbert, and J. Zangenberg (eds.), Qumran: The Site of the Dead Sea Scrolls: Archaeological Interpretations and Debates: Proceedings of a Conference held at Brown University, November 17–19, 2002 (Leiden).

\_\_\_\_ (2006b). Masada VII: The Yigael Yadin Excavations 1963–1965: Final Reports:

The Pottery of Masada (Jerusalem).

Baruch, Y., Mazor, G., and Sandhaus, D., (2002). 'Region XI: survey and excavations of caves along the fault escarpment above Horbat Qumran', 'Atiqot 41 (2): 177–183 (English), 'Atiqot 41 (1): 189–198 (Hebrew).

Baumgarten, A. I., (2004). 'Who cares and why does it matter? Qumran and the Essenes

once again!', Dead Sea Discoveries 11: 174-190.

Broshi, M., (1992). 'The Archaeology of Qumran – a reconsideration'. Pp. 103–115 in D. Dimant and U. Rappaport (eds.), *The Dead Sea Scrolls: forty years of research* (Leiden). \_\_\_\_\_\_., (1998). 'Was Qumran, indeed, a monastery? The Consensus and its Challengers: an archaeologist's view'. Pp. 19–37 in J.H. Charlesworth (ed.), *Caves of Enlightenment: Proceedings of the American Schools of Oriental Research Dead Sea Scrolls Jubilee Symposium (1947–1997) (Texas).* 

\_\_\_\_\_., (1999). 'Was Qumran a Crossroads?', Revue de Qumran 19: 273–276.

Broshi, M. and Eshel, H., (1999a). 'Residential Caves at Qumran', *Dead Sea Discoveries* 6: 328–348.

(1999b). 'How and where did the Qumranites live?'. Pp. 266–273 in D.W. Parry and E.C. Ulrich (eds.), *The Provo International Conference on the Dead Sea Scrolls: technological innovations, new texts, and reformulated issues* (Leiden).

\_\_\_ (2004a) 'Three Seasons of Excavations at Qumran', Journal of Roman Archaeology

17: 321–331.

(2004b). 'Qumran and the Dead Sea Scrolls: the contention of twelve theories'.
 Pp. 162–169 in D.R. Edwards (ed.), Religion and Society in Roman Palestine: old questions, new approaches (London).

Brownlee, W. H., (1950). 'A comparison of the Covenanters of the Dead Sea Scrolls with

pre-Christian Jewish Sects', The Biblical Archaeologist 13: 49–72.

- Cansdale, L., (1997). *Qumran and the Essenes: a re-evaluation of the evidence* (Tübingen). Cargill, R. R., (2009). *Qumran through (Real) Time: a virtual reconstruction of Qumran and the Dead Sea Scrolls* (Piscataway, NJ).
- Clermont-Ganneau, C., (1896). Archaeological Researches in Palestine during the years 1873–1874, 2 vols. (London).
- Collins, J. J., (2003). 'Forms of Community in the Dead Sea Scrolls'. Pp. 97–111 in P. M. Shalom *et al.* (eds.), *Emanuel: Studies in Hebrew Bible, Septuagint, and Dead Sea Scrolls in honor of Emanuel Tov* (Leiden).
- \_\_\_\_\_ (2006). 'The Yahad and 'The Qumran Community''. Pp. 81–96 in C. Hempel and J. M. Lieu (eds.), Biblical Traditions in Transmission: Essays in Honour of Michael A. Knibb (Leiden).
- Conder, C. R., and Kitchener, H. H., (1883). *The Survey of Western Palestine: memoirs of the topography, orography, hydrography and archaeology: Volume 3: Judaea* (London). Cross, F. M., (1995). *The Ancient Library of Qumran*, 3rd edn. (Sheffield).
- Crown, A. and Cansdale, L., (1994). 'Qumran was it an Essene settlement?', *Biblical Archaeology Review* 20 (5): 24–34, 73–78.
- Dalman, G. H., (1914). Palästinajahrbuch des Deutschen evangelischen Instituts für Altertumswissenschaft des heiligen Landes zu Jerusalem: Volume 10 (Berlin).
- Davies, P. R., (1983). The Damascus Covenant: an interpretation of the "Damascus Document" (Sheffield).
- \_\_\_\_ (1988). 'Commentary: how not to do archaeology: the story of Qumran', *The Biblical Archaeologist* 51: 203–207.
- Donceel, R. and Donceel-Voûte, P., (1994). 'The Archaeology of Khirbet Qumran'. Pp. 1–38 in M.O. Wise *et al.* (eds.), *Methods of Investigation of the Dead Sea Scrolls and the Khirbet Qumran Site: present realities and future prospects* (New York).
- Donceel-Voûte, P., (1994). Les ruines de Qumran réinterprétées', Archeologia 298: 24–35. Dupont-Sommer, A., (1950). Aperçus preéliminaires sur les manuscrits de la mer Morte (Paris).
- Eshel, H. and Broshi, M., (2003). 'Excavations at Qumran, Summer of 2001', *Israel Exploration Journal* 53: 61–73.
- Eshel, H. et al., (2002). 'New Data on the Cemetery east of Khirbet Qumran', Dead Sea Discoveries 9: 135–165.
- Fields, W. W., (2009). The Dead Sea Scrolls: a full history: Volume 1 (Leiden).
- Frendo, A. J., (2011). Pre-Exilic Israel, the Hebrew Bible, and Archaeology: Integrating Text and Artefact (London).
- García Martínez, F., (1988). 'Qumran origins and early history: a Groningen hypothesis', Folia Orientalia 25: 113–136.
- Gibson, S. and Taylor, J. E., (2008). 'Roads and Passes round Qumran', *Palestine Exploration Quarterly* 140: 225–227.
- Golb, N., (1995). Who Wrote the Dead Sea Scrolls? (New York).
- Goodman, M., (1995). 'A Note on the Qumran Sectarians, the Essenes and Josephus', *Journal of Jewish Studies* 46: 161–166.
- Harding, G. L., (1948–49). 'The Dead Sea Scrolls', *Palestine Exploration Quarterly* 81: 112–116.
- \_\_\_\_\_(1952). 'Khirbet Qumran and Wady Muraba'at: fresh light on the Dead Sea Scrolls and New Manuscript Discoveries in Jordan', *Palestine Exploration Quarterly* 84: 104–109.
- Hempel, C., (1998). The Laws of the Damascus Document: sources, tradition and redaction (Leiden).

- (2008). 'Emerging Communal Life and Ideology in the S Tradition'. Pp. 43–61 in F. García Martínez and M. Popovic (eds.), *Defining Identities: 'We'*, 'You' and 'the Others' in the Dead Sea Scrolls (Leiden).
- Hirschfeld, Y., (1998). 'Early Roman Manor Houses in Judea and the Site of Khirbet Qumran', *Journal of Near Eastern Studies* 57: 161–189.
  - (2000). 'A Settlement of Hermits above 'En Gedi', Tel Aviv 27: 103–155.
- \_\_\_\_ (2004). Qumran in Context: reassessing the archaeological evidence (Peabody, Massachusetts).
- Humbert, J.-B., (1994). 'L'espace sacré à Qumrân: propositions pour l'archéologie', Revue Biblique 101–102: 161–214.
- (2003a). 'Arguments en faveur d'une résidence pré-essénienne'. Pp. 467–482 in J.-B. Humbert and J. Gunneweg (eds.), Khirbet Qumrân et 'Aïn Feshkha: II: Études d'anthropologie, de physique et de chimie (Studies of Anthropology, Physics and Chemistry) (Switzerland; Göttingen).
- (2003b). 'Reconsideration of the Archaeological Interpretation of Qumran'. Pp. 419–440 in J.-B. Humbert and J. Gunneweg (eds.), *Khirbet Qumrân et 'Aïn Feshkha: II: Études d'anthropologie, de physique et de chimie (Studies of Anthropology, Physics and Chemistry)* (Switzerland; Göttingen).
- (2006). 'Some Remarks on the Archaeology of Qumran'. Pp. 19–39 in K. Galor, J.-B. Humbert, and J. Zangenberg (eds.), Qumran: The Site of the Dead Sea Scrolls: Archaeological Interpretations and Debates: Proceedings of a Conference held at Brown University, November 17–19, 2002 (Leiden).
- Humbert, J.-B. and Chambon, A. (eds.), (1994). Fouilles de Khirbet Qumrân et de Aïn Feshkha: I: album de photographies, repertoire du fonds photographique, synthèse des notes de chantier du Père Roland de Vaux OP (Switzerland; Göttingen).
- Humbert, J.-B., Chambon, A., and Pfann, S. J. (eds.), (2003). *The Excavations of Khirbet Qumran and Ain Feshkha: synthesis of Roland de Vaux's field notes* (Switzerland; Göttingen).
- Humbert, J.-B. and Gunneweg, J. (eds.), (2003). *Khirbet Qumrân et 'Aïn Feshkha: II: Études d'anthropologie, de physique et de chimie (Studies of Anthropology, Physics and Chemistry)* (Switzerland; Göttingen).
- Isaacs, A. A., (1857). The Dead Sea: or, Notes and Observations made during a Journey to Palestine in 1856–7, on m. de Saulcy's discovery of the Cities of the Plain (London).
- Laperrousaz, E. M., (1976). Qoumrân: l'établissement essénien des bords de la Mer Morte: Histoire et archéologie du site (Paris).
- Magen, Y. and Peleg, Y., (2006). 'Back to Qumran: ten years of excavation and research, 1993–2004'. Pp. 55–113 in K. Galor, J. -B. Humbert, and J. Zangenberg (eds.), Qumran: The Site of the Dead Sea Scrolls: Archaeological Interpretations and Debates: Proceedings of a Conference held at Brown University, November 17–19, 2002 (Leiden). (2007). The Qumran Excavations 1993–2004: Preliminary Report (Judea & Samaria).
  - \_\_\_(2007). The Qumran Excavations, 1993–2004: Preliminary Report (Judea & Samaria Publications 6) (Jerusalem).
- Magness, J., (1994) 'A Villa at Khirbet Qumrân?', *Revue de Qumran* 16: 397–419. \_\_\_\_\_ (1995). 'The Chronology of the Settlement at Qumran in the Herodian Period',
- Dead Sea Discoveries 2: 58–65.

  (1998), 'The Chronology of Oumran, Ein Feshkha, and Ein el-Ghuweir', Pp. 55–76
- \_\_\_\_\_(1998). 'The Chronology of Qumran, Ein Feshkha, and Ein el-Ghuweir'. Pp. 55–76 in Z.J. Kapera (ed.), Mogilany 1995: papers on the Dead Sea Scrolls offered in memory of Aleksy Klawek (Krakow).
- \_\_\_\_\_ (2002). The Archaeology of Qumran and the Dead Sea Scrolls (Grand Rapids, Michigan).
- \_\_\_\_ (2007a). 'A response to D. Stacey, "Some archaeological observations on the aqueducts of Qumran", *Dead Sea Discoveries* 14: 244–253.
- \_\_\_\_\_ (2007b). 'A final response to Stacey', Dead Sea Discoveries 14: 255–256.

- Masterman, E.W.G., (1902). "Ain el-Feshkhah, el-Hajar, el-Asbah, and Khurbet Kumrân', Palestine Exploration Fund Quarterly Statement 27: 160–167, 297–299.
- \_\_\_\_ (1903). 'Notes on Some Ruins and a Rock-Cut Aqueduct in the Wâdy Kumrân', Palestine Exploration Fund Quarterly Statement 28: 264–267.
- Metso, S., (1997). The Textual Development of the Qumran Community Rule (Leiden).
- \_\_\_\_\_ (1999). 'In Search of the Sitz im Leben of the Community Rule'. Pp. 306–315 in D.W. Parry and E. Ulrich (eds.), The Provo International Conference on the Dead Sea Scrolls: Technological Innovations, New Texts, and Reformulated Issues (Leiden).
- \_\_\_\_\_ (2006). 'Whom does the Term Yahad identify?'. Pp. 213–235 in C. Hempel and J.M. Lieu (eds.), *Biblical Traditions in Transmission: Essays in Honour of Michael A. Knibb* (Leiden).
- Milik, J. T., (1959). Ten Years of Discovery in the Wilderness of Judaea (London).
- Mizzi, D., (2009). The Archaeology of Khirbet Qumran: a comparative approach (unpublished D.Phil. thesis, Oxford).
- (2010). 'The Glass from Khirbet Qumran: what does it tell us about the Qumran Community?'. Pp. 99–198 in C. Hempel (ed.), *The Dead Sea Scrolls: texts and context* (Leiden).
- Murphy, C. M., (2002). Wealth in the Dead Sea Scrolls and in the Qumran Community (Leiden).
- Murphy-O'Connor, J., (1969). 'La genèse littéraire de la *Règle de la Communauté'*, *Revue Biblique* 76: 528–549.
- Patrich, J., (1994). 'Khirbet Qumran in light of new archaeological explorations in the Qumran Caves'. Pp. 73–95 in M.O. Wise *et al.* (eds.), *Methods of Investigation of the Dead Sea Scrolls and the Khirbet Qumran Site: present realities and future prospects* (New York).
- (2000). 'Did Extra-mural Dwelling Quarters exist at Qumran?'. Pp. 720–727 in L.H. Schiffman, E. Tov, and J.C. VanderKam (eds.), *The Dead Sea Scrolls: fifty years after their discovery: proceedings of the Jerusalem Congress, July 20–25, 1997* (Jerusalem).
- Patrich, J. and Arubas, B., (1989). 'A Juglet containing Balsam Oil(?) from a Cave near Qumran', *Israel Exploration Journal* 39: 43–59.
- Poole, H., (1856). 'Report of a Journey in Palestine', *Journal of the Royal Geographic Society* 26: 55–70.
- Pouilly, J., (1976). La Règle de la Communauté de Qumrân: son évolution littéraire (Paris). Regev, E., (2003). 'The Yahad and the Damascus Covenant: structure, organization and relationship', Revue de Qumran 21: 233–262.
- Reich, R., (2000a). 'Miqwa' ot at Qumran and the Jerusalem Connection'. Pp. 728–731 in L. H. Schiffman, E. Tov, and J. C. VanderKam (eds.), The Dead Sea Scrolls: Fifty Years after their Discovery: Proceedings of the Jerusalem Congress, July 20–25, 1997 (Jerusalem).
- \_\_\_\_ (2000b). 'Miqva'ot'. Pp 560–563 in L. H. Schiffman and J. C. VanderKam (eds.), Encyclopedia of the Dead Sea Scrolls, 2 vols. (Oxford).
- Rey, M. E. G., (1860). Voyage dans le Haouran et aux bords de la Mer Morte: exécuté pendant les années 1857 et 1858 (Paris).
- Rohrhirsch, F. and Hofmeir, B. (eds.), (1996). *Die Ausgrabungen von Qumran und En Feschcha: IA: Die Grabungstagebücher* (Switzerland; Göttingen).
- Saulcy de, L. -F. C., (1853). Narrative of a Journey Round the Dead Sea and in the Bible Lands in 1850 and 1851, 2 vols. (London).
- Schiffman, L. H., (1990). 'The New Halakhic Letter (4QMMT) and the Origins of the Dead Sea Sect', *Biblical Archaeologist* 53: 64–73.
- Schofield, A., (2009). From Qumran to the Yaḥad: a new paradigm of textual development for the Community Rule (Leiden).

- Stacey, D., (2007). 'Some Archaeological Observations on the Aqueducts of Qumran', Dead Sea Discoveries 14: 222-243.
- (2008). 'Seasonal Industries at Qumran', Bulletin of the Anglo-Israel Archaeological Society 26: 7-29.
- Steckoll, S. H., (1968). 'Preliminary Excavation Report in the Qumran Cemetery', Revue de Qumran 6: 323-344.
- (1969). 'Marginal Notes on the Qumran Excavations', Revue de Qumran 7: 33–40. Stegemann, H., (1998). The Library of Qumran: on the Essenes, Qumran, John the Baptist, and Jesus (Grand Rapids, Michigan).
- Strange, J. F., (2006). 'The 1996 Excavations at Qumran and the Context of the New Hebrew Ostracon'. Pp. 41-54 in K. Galor, J. -B. Humbert, and J. Zangenberg (eds.), Oumran: The Site of the Dead Sea Scrolls: Archaeological Interpretations and Debates: Proceedings of a Conference held at Brown University, November 17–19, 2002 (Leiden).
- Sukenik, E., (1948). Megillot Genuzot: mi-Tokh Genizah Qedumah she-Nimse'ah be-Midbar Yehudah: Segirah Rishonah (Jerusalem).
- Taylor, J. E., (2006). 'Khirbet Qumran in Period III'. Pp. 133-146 in K. Galor, J. -B. Humbert, and J. Zangenberg (eds.), Qumran: The Site of the Dead Sea Scrolls: Archaeological Interpretations and Debates: Proceedings of a Conference held at Brown University, November 17–19, 2002 (Leiden).
- (2009). 'On Pliny, the Essene Location and Kh. Qumran', Dead Sea Discoveries
- (2010). 'The Classical Sources on the Essenes and the Scrolls Communities'. Pp. 173-199 in T.H. Lim and J.J. Collins (eds.), The Oxford Handbook of the Dead Sea Scrolls (Oxford).
- VanderKam, J. C. and Flint, P., (2005). The Meaning of the Dead Sea Scrolls: their significance for understanding the Bible, Judaism, Jesus, and Christianity (London).
- Vaux de, R., (1953a). 'Fouille de Khirbet Qumrân: rapport préliminaire', Revue Biblique
- (1953b). 'Exploration de la region de Qumrân: rapport préliminaire', Revue Biblique 60: 540-561.
- (1954). 'Fouilles de Khirbet Qumrân: rapport préliminaire sur la deuxième campagne', Revue Biblique 61: 206-236.
- (1956). 'Fouilles de Khirbet Qumrân: rapport préliminaire sur les 3e, 4e, et 5e campagnes', *Revue Biblique* 63: 533–577. (1959). 'Fouilles de Feshkha', *Revue Biblique* 66: 225–255.
- (1961). L'archéologie et les manuscrits de la Mer Morte (Oxford).
- (1962). 'Archéologie'. Pp. 3–36 in M. Baillet, J.T. Milik, and R. de Vaux (eds.), Les 'petites grottes' de Qumran: exploration de la falaise, les grottes 2Q, 3Q, 5Q, 6Q, 7Q à 10Q, le rouleau de cuivre (Discoveries in the Judaean Desert III) (Oxford).
- (1973). Archaeology and the Dead Sea Scrolls (Oxford).
- (1977). 'Archéologie'. Pp. 3–22 in R. de Vaux and J.T. Milik (eds.), Qumrân Grotte 4: II (Discoveries in the Judaean Desert 6) (Oxford).
- Vermes, G., (2004). The Complete Dead Sea Scrolls in English, revised edition (London). Wood, B. G., (1984). 'To Dip or Sprinkle? The Qumran Cisterns in Perspective', Bulletin of the American Schools for Oriental Research 256: 45-60.
- Wouters, H., et al., (1999/2000). 'Antique Glass from Khirbet Qumrân: archaeological context and chemical determination', Bulletin de l'Institut royal du Patrimoine Artistique 28: 9-40.

## On Rural Aspects of the Urban Settlement System in Southwestern Canaan during the Early Bronze Age III

#### RAM GOPHNA AND YITZHAK PAZ

The urban settlement system that flourished during EB III (c. 2700–2200 BCE) in southwestern Canaan has been thoroughly discussed in recent decades and is still being studied. On-going excavations and research continue to provide impressive evidence of the existence during this period of major fortified centres such as Yarmouth, Tel Zafit, Tel Hesi, Tel Poran and Tel Halif. In contrast, archaeological research has neglected the rural system that accompanied these urban centres. The accumulated data from surveyed and excavated sites that may belong to the socioeconomic hinterland of the urban centres has allowed us to shed some light on several aspects of this rural system. Our discussion will focus on rural sites from EB III, and will delineate the possible spatial connections between rural and urban sites in the EB III settlement system of this region.

## Recent research on the EB III urban landscape in southwestern Canaan

The flourishing urban system that prevailed during EB III (c. 2700–2200 BCE) in southwestern Canaan is now well known. This is thanks to continuous years of excavations at sites such as Ashqelon, Tel Yarmouth and Tel Zafit as well as complementary research on various aspects of the urban settlement system in southwestern Canaan. This area includes the Judean Shephelah, the southwestern coastal plain, and the northern Negev of Israel (e.g., Getzov, Paz and Gophna 2001; de-Miroschedji 1999, 2003, 2006; de-Miroschedji and Sadeq 2001).

It should be noted that most of these studies have concentrated on the urban centres and their role in the larger scope of the urban system. Recent studies have focused, for example, on Horbat Shovav (Gophna and Paz 2008), Tel Yarmouth (de-Miroschedji 2006), Lachish (Gophna and Blockman 2004) and Tel Zafit (Maeir 2003).

In his latest paper discussing socio-political developments in southwestern Canaan in EB III, de-Miroschedji (2006) examined the role of Yarmouth as a major city in southwestern Israel (ibid: 74). He mentioned a number of unfortified settlements that were known to scholars but refrained from a detailed discussion of rural sites that may have been related to the urban system.

In the detailed surveys of the Judean Shephelah, dozens of Early Bronze Age sites were detected. The problem, however, was that the dates for the pottery collected during these surveys were highly problematic. This was first illustrated in the "Map of Lachish" (Dagan 1992), where the author described no less than 25 'EB II–III' sites, being unable to provide more accurate dates. In his description of the settlement pattern that characterizes the Map of Amazya (Dagan 2006), the author used different guidelines for the EB II and EB III sites. He noted a continuum from most of the EB II sites to EB III (ibid: 4), but again, the pottery illustrations that appeared in the report were far from sufficient for accurate dating, not only within EB III, but even between EB II and EB III. Furthermore, the general 'EB II–III' date for the pottery was also employed in the Amazya volume (ibid: 313, 398.1, 399.1, 402), mostly due to a lack of clear-cut diagnostic traits for the EB III pottery. All the above observations illustrate our limited ability to use the survey data in the evaluation of EB II and EB III rural settlements in the Judean Shephelah.

In the following discussion, we address the finds from several EB III rural sites that were not previously dealt with as components of one specific settlement phenomenon.

In 1994, Yekutieli and Gophna published the results of their small-scale excavation at Nizzanim, where remains of a small rural EB III settlement were revealed. The Khirbet Kerak Ware sherds that were discovered in the excavation helped to confirm the date of this site, which was assigned to the nearby urban centre at Tel Poran (Yekutieli and Gophna 1994: 181).

An important component of the rural settlement system in EB III was recently discovered at Giv'at Ziqit, located near Moshav Sheqef, some 10 km east of Tel Lachish. A salvage excavation extending over an area of 1500 sq m unearthed an unfortified settlement there. Three consecutive occupation phases were detected, consisting of square buildings and caves that were used both as residences and for industrial production. A plethora of installations for the production of olive oil and wine, silos for cereal storage, and other industries all hint at the wealth and importance of the site (Baumgarten: pers. comm.).

In the area that extends southward, toward Tel Halif, no fortified urban centre existed. There is controversy concerning the importance of Tel 'Ira. While de-Miroschedji considered the site a small village (de-Miroschedji 2006: 72), its size (3 ha; Getzov, Paz and Gophna 2001: 49), as well as the material culture, hint that it was a more important site, possibly a regional centre for the population of the southernmost extension of the Hebron Hills.

The only article to date to focus on rural sites that existed within the urban settlement system was published by Gophna and Gazit in 2006. They remark that Bir Abu-Jukheidim and Bir Gamla could have served as way stations along trade routes that connected Wadi Feinan with the southern coastal seaports such as Ashqelon and Tell Sakan (Gophna and Gazit 2006: 38). It is noteworthy that the location of these two small sites may signify the southern frontier at the edge of the urban settlement system.

All the above examples may illustrate a settlement variable in which the sites differ from one another in geographic setting, chronology (history of occupation within EB III) and type (e.g., settlement, regional centre, way station, etc.).

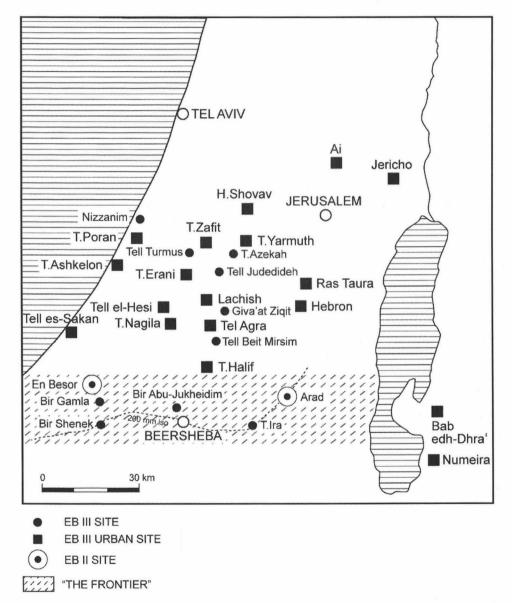


Fig. 1. The settlement system in southwestern Israel during EB II-III (after Gophna and Gazit 2006).

## Tell Turnus: a story of another rural site in the shadow of urban entities

Tell Turnus is a rural site (as yet unpublished) that can serve as an example of the connection between urban and rural sites during EB III. The tell is located on the northern bank of the Ha-Ela stream, one of the tributaries of the major Lachish stream, c. 7 km west of Tel Zafit; its estimated size is c. 0.2 hectares (Gophna 1974: 55; Gophna and Portugali 1988: 25). The ancient site, partly surmounted by an Arab village until 1948, was first mentioned in 1964; remains from the Chalcolithic period and the Early Bronze Age (Yalkut Ha-Pirsumim 1091: 1443) were observed there. Tell Turnus was surveyed in 1970 by R. Gophna, who collected potsherds belonging to EB III (Fig. 2). A small-scale salvage excavation was conducted at the site in 2000 (Zelin 2004) in an area of 8 × 3 m at the western edge of the site. The excavation revealed remnants of a pear-shaped hearth containing two pottery vessels, a holemouth and a jar base. Inside the vessels were some animal bones and organic material, as well as a bone sickle. The excavator dated the finds to the Chalcolithic-Early Bronze Age periods, but an Early Bronze Age date is much more suitable for this type of vessel, and a more accurate EB III date is also plausible.

The pottery collected during the survey conducted by R. Gophna included poorly fired buff-coloured clay platters, red slipped and burnished (Fig. 2: 1–4); thick-rimmed holemouth vessels (Fig. 2: 5, 6); a jar base and a plain jar rim (Fig. 2: 7, 8); a pithos sherd (Fig. 2: 9); and a wavy-ledge handle (Fig. 2: 10). The large pithos sherd, red slipped and burnished, was outstanding (Fig. 2: 9) – two lug handles were attached at the shoulders. This vessel finds a close parallel at Tel Nagila (Paz: forthcoming).

The above description portrays another small rural site that was situated close to the major urban centre at Tel Zafit during EB III.

# Discussion – rural settlements and their relationship to the urban centres in EB III southern Canaan (see Fig. 1)

The following discussion will evaluate the role of the rural sites mentioned above within the range of the urban settlement system of southwestern Canaan. Fieldwork conducted recently has revealed a multi-faceted rural settlement system that may have existed alongside and in close connection with these major urban centres.

A few cautionary remarks should be posed here. First, the scanty amount of pottery sherds collected from most of the survey sites do not enable us to date with precision within EB III; thus, we cannot establish whether rural and urban sites existed simultaneously or which urban phase was contemporaneous with each rural site.

Second, the picture presented here is very limited because dozens of surveyed sites may not have been dated to EB III due to the inability to distinguish between sherds from EB II and EB III (see discussion above). Third, continuing the first point, one should note that most of the area under discussion, namely southwestern

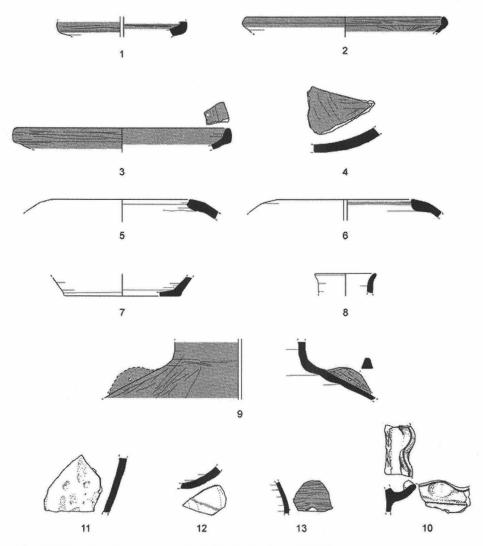


Fig. 2. Pottery from the survey conducted by R. Gophna at Tell Turnus.

Canaan, has not been thoroughly surveyed, and thus, many Early Bronze Age sites that are not within multi-period mounds still await discovery.

Notwithstanding the above remarks, it is necessary to outline some spatial,

Notwithstanding the above remarks, it is necessary to outline some spatial, cultural and, perhaps, socio-political aspects, which can at least serve as a starting point for further research. The sites that will be discussed below are Nizzanim, Tell Turnus, Bir Gamla, Bir Abu-Jukheidim, Giv'at Ziqit, as well as Tell Beit Mirsim and Tel 'Ira.

#### RAM GOPHNA AND YITZHAK PAZ

In terms of spatial distribution, these sites are located in the southwestern coastal plain (Nizzanim and Tell Turmus), in the central Judean Shephelah (Giv'at Ziqit and Tell Beit Mirsim), and in the southern fringes of the region (Bir Gamla, Bir Abu Jukheidim, Tel 'Ira).

Two size groups may be reconstructed. Tell Beit Mirsim and Tel 'Ira both reached a maximum size of 3 hectares, far larger than the other five sites under discussion. The other five sites did not exceed 0.2 hectares. Therefore, we speculate that they may have been completely different in nature and in political standing in comparison to Tel 'Ira and Tell Beit Mirsim (it should be noted that Tell Beit Mirsim was probably unfortified during the Early Bronze Age, while in later periods, such as the Middle Bronze and Iron Ages, it was massively fortified).

The nature of the above-mentioned sites is not easy to reconstruct. It seems clear that Tell Beit Mirsim, Tel 'Ira, Giv'at Ziqit, Nizzanim, and possibly, Tell Turmus, were sedentary settlements where a variety of activities took place (noteworthy of all were the industrial foci of Giv'at Ziqit). However, the nature of Bir Abu-Jukheidim and Bir Gamla is by no means clear, and calls for further assessment (Gophna and Gazit 2006: 38).

In any case, it is important to try to reconstruct the possible political connections between the major urban centres and these small rural sites. In this sense, their proximity to the major regional urban centres is of special importance.

Tell Turmus is located *ca*. 7 km west of Tel Zafit, which is without a doubt one of the largest (at least 30 hectares) and most important urban centres in the western edge of the Judean Shephelah (Maeir 2003). It seems logical to speculate that a socio-political connection existed between them.

As already noted by Yekutieli and Gophna (1994: 181), Nizzanim was probably connected to the fortified town at Tel Poran (Gophna 1992). The general similarity between the pottery recovered from both sites also seems to illustrate this connection. Noteworthy are the short, everted-rim cooking pots, which seem to be at home in southwestern coastal plain sites such as Tel Poran and Tel Sakan (Gophna 1992: Fig. 5: 3, 4; de Miroschedji and Sadeq 2001: Fig. 19.12: 12, 13).

Giv'at Ziqit is close to Tel Lachish, the major EB III town located c. 10 km to its northwest. A connection between these sites seems logical, but this issue will be resolved only when the rich pottery assemblage from Giv'at Ziqit is published and it will be possible to compare the assemblage to that of Tel Lachish.

Further south, in a rather isolated location, stands Tel 'Ira, thus making it difficult to connect it to a large urban centre in southern Canaan. Considering the tell's commanding topographic setting and its considerable size, one can assume it was itself a local centre, probably unfortified, but with natural defences.

As for Bir Gamla and Bir Abu-Jukheidim, defining them as way stations along trade routes hints at their connection to the maritime urban centres at Ashkelon and Tel Sakan (Gophna and Gazit 2006: 38). The ceramic assemblage from both sites is insufficient to define a clear relationship to coastal EB III centres or, rather, to more inland urban entities, such as Tel Halif, located c. 10 km north of Bir Abu-Jukheidim.

### **Summary and conclusions**

In his detailed analyses of the socio-political developments in southwestern Canaan in EB III, de-Miroschedji stresses the domination of Yarmouth over the rest of the political entities in this region. Yarmouth is said to rule a territory that included the Judean Shephelah, the Judean Hills, the northern Negev, and the coastal plain (de-Miroschedji 2006: 74). In his article, de-Miroschedji did not discuss the small rural settlements that existed among the urban settlement system.

Our analysis of these small sites, often neglected by scholars, may illustrate a somewhat different picture than the one provided by de-Miroschedji. While there is no reason to cast any doubt on the predominant role played by Yarmouth in the southern Canaanite urban system, it is hard to accept the idea of the overall domination of Yarmouth over a vast territory that exceeds by far the 'city-state' system. We believe that the picture that emerges from our analysis enables us to present a complicated, multi-faced settlement system in which rural and urban settlements were interwoven. Having said this, the fragmentary state of the data does not enable us to establish a strict settlement hierarchy within this system.

Another point presented by de-Miroschedji focuses on the rather early date within the EB III horizon for the fortified phase of towns such as Tel Halif, Tel Hesi, and Tel Poran, which he connected to the domination of Yarmouth over a large territory within which these sites existed (de-Miroschedji 2006: 73). It is, however, important to note that these three centres do not necessarily have the same urban history. Tel Halif was established as a fortified town (Stratum XV; Seger 1989) and was later destroyed; three unfortified settlements (Strata XIV-XII) followed that also met with destruction. Tel Hesi, on the other hand, was established as an unfortified settlement (Stratum 4c) after which a heavily fortified town was established (Stratum 4b). This fortified town was destroyed and replaced in the next phase by another unfortified settlement (Stratum 4a; O'Connell, Rose and Toombs 1978). Moreover, there is real reason to date Tel Poran to early EB III, although the complete pithos that seems to postdate the fortifications at Tel Poran bears a 'potmark' that seems very similar to EB IIIC pithoi uncovered at Tel Yarmouth (Gophna 1992: Fig. 5: 7; personal examination of the EB IIIC assemblage from Tel Yarmouth).

The above findings seem to portray a dynamic settlement system during EB III. Within this period of *ca*. 500 years fortified urban towns declined and became unfortified (Tel Halif), villages evolved into fortified towns (Tel Hesi), other sites retained their power as urban centres (Yarmouth, Lachish), and others remained small villages or way stations (Tell Turnus, Bir Gamla, etc.). The lack of clear diagnostic ceramic hallmarks from surveyed rural sites diminishes our ability to date these sites to a specific phase within EB III. This makes the decipherment of the relationship between the sites and the adjacent urban centres quite speculative.

In conclusion, we view the EB III settlement system in southwest Canaan as a living organism comprised of a variety of components, each with its own rhythm of life, changing according to inter- and intra-regional relations. The current paper

#### RAM GOPHNA AND YITZHAK PAZ

attempted to define one component—the small rural sites that retained the same status throughout their existence. As the EB III settlement system in southwestern Canaan is a picture of interweaving parts, thorough research is needed to decipher the socio-economic and political characteristics of this settlement system. We lastly remark that research on the rural aspect of the Canaanite urban landscape is in its infancy. A major scholarly effort is called for as the present article is based upon limited data.

## **Bibliography**

Dagan, Y., (1992). Archaeological Survey of Israel, Map of Lachish (98) (Jerusalem). Dagan, Y., (2006). Archaeological Survey of Israel, Map of Amazya (109) (Jerusalem).

Dever, W. G. and Richard, S., (1977). 'A Reevaluation of Tell Beit Mirsim Stratum J', Bulletin of the American Schools of Oriental Research 116: 1–14.

Fargo, V., (1979). Settlement in Southern Palestine during Early Bronze III, (Ph.D. Dissertation) (Chicago).

Getzov, N., Paz, Y. and Gophna, R., (2001). Shifting Urban Landscapes during the Early Bronze Age in Canaan (Tel Aviv).

Gophna, R., (1974). The Settlement of the Coastal Plain of Eretz Israel during the Early Bronze Age (Ph.D. dissertation) (Tel Aviv) (Hebrew).

Gophna, R., (1992). 'Early Bronze Age Fortification Wall and Middle Bronze Age Rampart at Tel Poran', *Tel Aviv* 19: 267–73.

Gophna, R., and Portugali, Y., (1988). 'Settlement and Demographic Processes in Israel's Coastal Plain from the Chalcolithic to the Middle Bronze Age', *Bulletin of the American Schools of Oriental Research* 269: 11–28.

Gophna, R., and Blockman, N., (2004). 'Neolithic, Chalcolithic, Early Bronze and Intermediate Bronze Age Pottery.' Pp. 873–99 in D. Ussishkin, (ed.) *The Renewed Archaeological Excavations at Lachish* – 1973–1994, Vol. II (Tel Aviv).

Gophna, R., and Gazit, D., (2006). 'The Southern Frontier of Canaan during the Early Bronze Age III: Some Neglected Evidence.' Pp. 33–8 in A. M. Maeir and P.

de-Miroschedji (eds.), I Will Speak the Riddles of Ancient Times Archaeological and Historical Studies in Honor of Amihai Mazar on the Occasion of His Sixtieth Birthday (Michigan).

Gophna, R. and Paz, Y., (2008). 'Horvat Shovav – A Fortified Urban Settlement from the Early Bronze Age in the Judean Shephelah.' Pp. 55–63 in Bar, S. (ed.), In the Hill Country and in the Shephelah, and in the Arabah, Studies and Researches Presented to Adam Zertal in the Thirtieth Anniversary of the Manasseh Hill-Country Survey (Jerusalem). (Hebrew).

Maeir, A. M., (2003). 'Tell es-Safi/Gath, 1996–2002', Israel Exploration Journal 53: 237–246.

de Miroschedji, P., (1988). Yarmouth I: Rapport sur les trois premières campagnes de fouilles à Tell Yarmouth, Israël (1980–1982) (Paris).

de Miroschedji, P., (1999). 'Yarmouth: The Dawn of City-States in Southern Canaan', Near Eastern Archaeology 62: 2–21.

de Miroschedji, P., (2006). 'At the Dawn of History: Sociopolitical Developments in Southwestern Canaan in Early Bronze Age III.' Pp. 55–78 in A. M. Maeir and

P. de-Miroschedji (eds.), I Will Speak the Riddles of Ancient Times Archaeological and Historical Studies in Honor of Amihai Mazar on the Occasion of His Sixtieth Birthday (Michigan).

Miroschedji, P., and Sadek, M., (2001). 'Tell es-Sakan 2000', Orient Express 4: 98–101.

O'Connell, K. G., Rose, D. G. and Toombs, L. E., (1978). 'Tell el-Hesi, 1977', Israel Exploration Journal 27: 246–50.

Paz, Y., Forthcoming. The Early Bronze Age Pottery of Tel Nagila.

Seger, J. D., (1989). 'Some Provisional Correlations in EB III Stratigraphy in Southern Palestine.' Pp. 117–135 in P. de Miroschedji (ed.), *L'urbanisation de la Palestine à l'âge du Bronze Ancien* (BAR International Series 527), (Oxford).

Tufnell, O., (1958). Lachish IV. Oxford.

Yekutieli, Y. and Gophna, R., (1994). 'Excavations at an Early Bronze Age Site near Nizzanim,' *Tel Aviv* 21: 162–85.

Zelin, A., (2004). 'Tell et-Turmus,' Hadashot Arkheologiyot 116: 75 (Hebrew).



## The Potter's Will: Spheres of Production, Distribution and Consumption of the Late Iron Age Southern Transjordan-Negev Pottery<sup>1</sup>

### JUAN MANUEL TEBES

This paper makes a reassessment of the Southern Transjordan-Negev Pottery (STNP), traditionally known as 'Edomite' ware, discovered in archaeological sites in the Negev and southern Transjordan dating to the Late Iron Age. It is built upon three main parts: building a typology of the STNP in the Negev, focusing on both their functional and taxonomic aspects; dating using well stratified assemblages from the Negev; and investigating their spheres of production, distribution and consumption. Scholars have proposed several models for explaining the distribution of STNP, and while many of these proposals have much to commend, they nevertheless focus on a few specific pottery types and stress only one or a few factors for the spatial allocation of the ceramics. However, this ceramic group, being composed of discrete entities, is neither homogeneous nor static. While each of its constituting is congruent inside the typology, they were part of different spheres of production, distribution, consumption and symbolic meaning.

#### I. Introduction

The STNP is a distinctive ceramic group found in southern Transjordan (the territory of Biblical Edom) and Negev sites of the Late Iron Age. Usually this pottery has been associated specifically with the kingdom of Edom. Whether it is 'Edomite' or not (and I would argue it is not) is open to question.

The history of research on the 'Edomite' pottery begins with N. Glueck's pioneering archaeological studies in southern Transjordan during the 1930s–1940s. Glueck was the first to recognize a distinct Iron Age painted pottery tradition which he readily called 'Edomite' pottery; rather than on ethnic grounds, he seems to have coined this term owing to this pottery's broad distribution over the territory of the ancient land of Edom. His first reference to these wares appeared in the report of the 1934–1935 survey of southern Transjordan, in which under the heading of 'Edomite pottery' he commented pottery dated to what he called the 'Early Iron Age'. The prevalent vessel types were by and large slipped and burnished bowls with an ample spectrum of rim shapes, with a characteristic painted decoration in which were prevalent geometric patterns painted in red and black. The corpus was supplemented by coarser vessels such as plain bowls,

unpainted storage jars, cooking pots and some thin-walled loop handled jugs (Glueck 1935: 123–137). Glueck initially defended an extremely early dating (13th–10th centuries BCE) for the Edomite society and its pottery (ibid.: 137), but his 1939–1940 excavations at Tell el-Kheleifeh in the southern Arabah led Glueck to change his mind on this dating. The conspicuous presence of 'Edomite' pottery in the site – which he identified as Solomonic port Ezion-Geber – demonstrated in Glueck's eyes that this pottery should be redated to the 10th and 8th centuries BCE (Glueck 1967).

Subsequent surveys and excavations in the highlands of Edom, particularly C.-M. Bennett's digs during the 1960s-1980s at Buseirah, Tawilan, and Umm el-Biyara, reinforced our knowledge about the pottery. The archetypal 'Edomite' forms are those found by Bennett's excavations at Buseirah, while the site's pottery typology done by M. F. Oakeshott (1978) has become standard. Due to the lack of stratigraphic evidence for the site at that time, Oakeshott classified the Buseirah wares according to both forms and methods of manufacture of the vessels rather than on stratigraphy. The scheme developed by Oakeshott consists of ten main pottery groups which are in turn divided into types (1978: 28–58). Under the label of 'Edomite' pottery several locally made ware types were included, most particularly plain wares, usually bowls with a denticulated fringe applied around the vessel; bowls with red and black-painted geometric decorations; cooking pots with a stepped-rim; and vessels, mainly carinated bowls, influenced by 'Assyrian ware' pottery. Although the conclusions of Glueck on the characteristics of these ceramics stood the test of time, his chronology of the material was down dated by at least two centuries, basically based on the 'Qos-Gabr' seal impression found in Umm el-Biyara and dated to the 7th century BCE (Bienkowski 1992). Bennett herself adopted Oakeshott's typology for the subsequent final report on Buseirah and so did not keep a separate record of type series categories. The methodology of recording followed by Bennett in Buseirah as well as in Tawilan is somewhat awkward for today's standards, since her objective was not to produce a record of phase pottery assemblages from stratified loci, but rather to compile 'type series'. These were constructed according to the forms of rims, handles and bases, and no attempt was made to reconstruct whole vessels. Also, no effort was spent in recording the amount of pottery, or of pottery types, retrieved from each locus (Bienkowski 1995a: 17; 2002: 45). The final reports of the Buseirah (Bienkowski, Oakeshott and Berlin 2002), Tawilan (Hart 1995) and Umm el-Biyara pottery (Bienkowski and Oakeshot 2011), as well as S. Hart's PhD dissertation on the material culture of Ghrareh (1989), follow in general Oakeshott's typology with slight modifications and additions. 'Edomite' pottery found in the Negev has been classified into either Oakeshott's system or the pottery types developed for the Iron Age Cisjordanian ceramics, or both (e.g., Freud and Beit-Arieh 1995; Freud 1999; 2007; Singer-Avitz 1999; 2002; 2004; Whiting 2007).

#### II. STNP: Definition

The geographical distribution of these wares defies to some extent the common understanding of the 'Edomite' phenomenon. Bienkowski has demonstrated that, interestingly, the pottery from Buseirah has more typological and decorative affinities with the STNP from the Negev than with those from sites in southern Edom (Bienkowski, Oakeshott and Berlin 2002: 350). This indicates that the southern Edomite plateau did not share the same cultural assemblage prevalent in Buseirah and the Negev. For example, the ratio of painted pottery found in southern Edom varies considerably, with sites featuring no painted pottery (Zeitler 1992; Lindner and Knauf 1997) and others with substantial proportions of it (Bienkowski 2011). Given all these limitations, one wonders if it is still useful to call this ceramic assemblage 'Edomite'. Bienkowski confronted this dilemma renaming it 'Busayra Painted Ware', on the grounds that Buseirah is the site where such ceramic is most frequent and best understood (Bienkowski and Sedman 2001: 319–320). Yet Bienkowski's suggestion also brings problems, not only because it focuses attention on only one site (Buseirah) which, although being the site with most pottery parallels it does possess a stratigraphy that is poorly known at best, but also because it sheds light on only one feature of the pottery assemblage (the painted decoration) while not paying attention to morphological features that are very significant as well.

I would like to call this ceramic assemblage 'Southern Transjordan-Negev' pottery. I consider the STNP a distinct family of diverse vessel types that were made and utilised throughout the Late Iron Age in Edom and the Negev. In choosing this terminology, I stress the vessels' geographical distribution while avoiding reference to their physical characteristics. In the same vein, the term 'STNP' is intended to represent two geographical zones and not one ethnic entity, as the term 'Edomite pottery' constantly brings to mind. The distribution of these vessels suggests that the northern Edomite plateau and several sites in the Negev constituted one cultural 'province', which is not to say that both areas were under one political umbrella. It also emphasizes the local origin of most of the STNP assemblage found in the Negev, corroborated by petrographic studies and instrumental neutron activation analyses (see below). To date there is not a single definition of what the STNP is or what its general characteristics are, but rather disperse studies and allusions on different vessel types coupled with the corresponding parallel in Buseirah. I suggest that, despite these limitations, it is possible to delineate some basic features of this ceramic family. The starting point is to look at those sets of uniform values that can be recognised in the pottery assemblage and that are not replicated in the assemblages of other social groups. Needless to say, much of this involves a process of subjective selection. The boundary between different pottery types is often imprecise, and the fluid contacts through trade, migrations and conflicts that were characteristic of the Late Iron southern Levant might cause some of the pottery types studied here to find similar parallels outside the area.

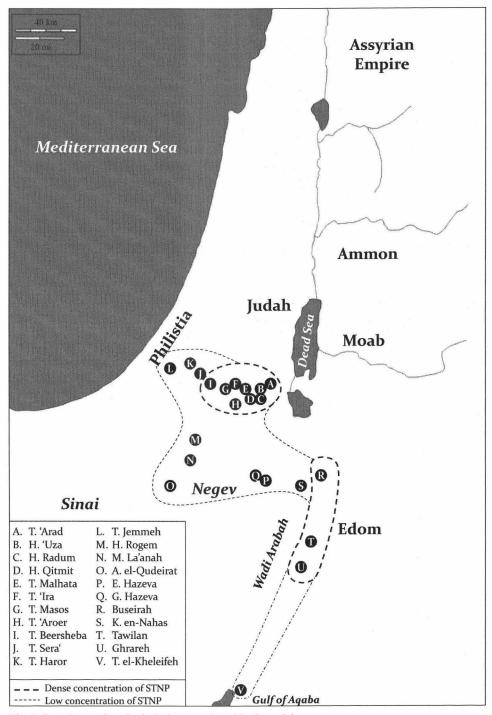


Fig. 1. Iron Age archaeological sites mentioned in the article.

This ceramic assemblage shares some traits that do not occur in other assemblages and that can be divided into four main categories: (1) geographical distribution; (2) morphology; (3) material composition; and (4) decoration.

- (1) Geographical distribution: On the whole, the pottery found in sites of Iron Age southern Transjordan and Negev share many forms with those of the neighbouring areas, such as central/northern Transjordan and Cisjordan. There are, however, several forms and particularly decorations that are restricted to Edom and the Negev. Although at the present stage of research it is not possible to discern the numerical proportion of STNP in each area, an overview of the evidence indicates that the Edomite plateau features the highest concentration of vessels, particularly Buseirah, although some sites in the Negev also present large quantities of these wares, e.g. Horvat Qitmit and Tel Malhata. This does not mean, however, that the Edomite plateau was the only area of manufacture of these vessels nor that it had temporal precedence over other areas.
- (2) Morphology: Vessels types whose morphology is only paralleled in southern Transjordanian and Negev sites comprise bowls with downturned, grooved and denticulated rims; cooking pots with a stepped-rim; and vessels, mainly carinated bowls, influenced by 'Assyrian ware' pottery. The term 'Edomite' given by some scholars to the cultic vessels found at Qitmit and 'En Hazeva (Beit-Arieh 1995b: 35–38) is a misnomer because most of the anthropomorphic cultic figurines discovered there find parallels in central Transjordan, in Ammonite and Moabite sites (Finkelstein 1995: 139–144; Bienkowski and Sedman 2001: 319; Gunneweg and Balla 2007).
- (3) Material composition: Petrographic studies and neutron activation analyses (NAA) demonstrate that certain vessel types found in the Edomite plateau and the Negev share the same compositional material, particularly cooking pots with stepped-rim, manufactured with clays from the Nubian sandstone formation in the Edomite highlands (although it is exposed also in the eastern Negev; see 'Cooking wares' below). Knowledge of the composition material is important for vessels found in the Negev, because they establish a link to the Edom area, highlighting the conscious decision of the local people in choosing these imported ceramics (or the raw material when the clay was transported to the site) and not other ones. This pattern is confirmed by the fact that in some cases the Negev potters seem to have used specific clays in a deliberate effort to imitate the clay's texture of the Transjordanian vessels (cf. the case of the globular bowls with everted rims made of local whitish-green loess clay; Singer-Avitz 1999: 33, 36). However, not all ceramics discovered in the Negev finding a composition similar to wares from Edom can be considered STNP. There are cases in which vessels clearly belonging to another ceramic group were produced east and west of the Arabah, such as pottery of the Negevite group (Gunneweg et al. 1991; Tebes 2006c: 97) and ovoid pithoi with folded rim of the 'Ajrud' type (Ben-Shlomo, Maeir and Mommsen 2008: 958, Table 1: SF32, 962). The reason that they are not classified inside the STNP group is simple: they do not fulfil the requirements regarding the other variables (geographical distribution, morphology and decoration).

(4) *Decoration*: The decorative patterns are perhaps the most noticeable characteristic of the STNP. The painted decoration, applied on several types of bowls and kraters, consists normally of tones of red, orange or black in geometric patterns, such as horizontal and vertical bands (often both in the same design), triangles, and nets, applied on the rim and on the outer body of vessels. Another typical attribute is the plastic decoration, in the form of indentations made with knives around the rim or body. Two points should be stressed. First, not all bowls are painted; on the contrary, a significant part of the STNP assemblage consists of plain bowls with characteristic rims (downturned, grooved and denticulated). Second, some vessel types, particularly bowls, share their basic shape with bowls from Iron Age central Transjordan and Cisjordan. However, they portray decorations, mostly in red/orange and black, present only in sites in Edom and the Negev (Bienkowski, Oakeshott and Berlin 2002: 240).

It should be noted from the onset that the use of these four criteria may give results that might be slightly different from what other scholars consider STNP attributes. I. Beit-Arieh, for example, identified as 'Edomite' some perforated incense cups found at Qitmit (Beit-Arieh 1995b: 34). Despite the ubiquitous presence of these vessels in Buseirah (Bowls Type Q: Bienkowski, Oakeshott and Berlin 2002: Fig. 9.33:1-10), this vessel type finds parallels throughout Transjordan and Cisjordan (Daviau 2001: 205, Fig. 1:3-5). There is also the case of vessel types whose morphology bears resemblance to specimens in neighbouring regions, but that I have identified as STNP because of their decoration or material composition. For example, STNP cooking pots rims are very much like many cooking pots found in the Ammonite area (see, for example, Herr and Clark 2008: 190), but the latter do not fulfil the material composition factor, itself very important when considering the presence of 'imported' cooking pots in the Negev. In the same vein, the morphology of most of the types of bowls and kraters finds parallels in Transjordan and Cisjordan, but their painted or plastic decoration is limited to Edom and the Negev.

## III. The STNP in the Negev

## 1. Why the Negev Pottery Assemblages

My criterion for incorporating a pottery assemblage into our study is that it should come from clear and well-dated archaeological contexts. Since I aim this study to be as exact as possible in terms of chronology, I will focus special attention on well-dated loci, avoiding as much as possible wares found out of context or in uncertain stratigraphic assemblages.

Comprehension of the chronology of Edom and its pottery is complicated by the fact that the Edomite sites excavated so far in southern Transjordan do not exhibit a solid vertical stratigraphy. A stratigraphic sequence of the STNP is, consequently, very difficult to determine, and in fact every attempt that has been made to determine a stratigraphic development of the Edomite sites has done so based on research on the pottery itself, not the other way around. The key source is the 'Qos-Gabr' royal seal impression found in Umm el-Biyara (Bennett 1966: 399-401, Pl. XXIIb). While this 7th century BCE impression only provides with a terminus post quem for the site and its pottery, since Umm el-Biyara is essentially a one-period site the date of the settlement cannot be too much earlier. The lack of any other epigraphic find that can be related to textual sources in Mesopotamia has led to the situation in which this only seal impression has served to date the whole Edomite wave of settlement to the Late Iron Age. Another important limitation has to do with the geography and political status of Edom during the Iron Age. The land of Edom was virtually untouched by the invasions of the Assyrians (701 BCE) and Babylonians (587–586 BCE) that vanquished the cities and countryside of Cisjordan (Bienkowski 2000; Bartlett 1989: 157). Evidence does exist, however, for the attack to Edom by Nabonidus en route to Tayma in northwestern Arabia, registered in the Nabonidus Chronicle and possibly reflected in a relief of Nabonidus found at as-Sila' (also known as Sala) north of Buseirah and destruction layers unearthed in a palace and temple in Buseirah, and less likely in Tawilan and Tell el-Kheleifeh (Crowell 2007).

The ceramic material retrieved from the Negev is not outstanding in its richness or diversity; however, the Negev is the only region outside southern Transjordan where STNP vessels have been found in considerable quantities. Research in the area west of the Arabah has been more thorough and consistent and, ironically, this has led to a situation in which knowledge of sites considered to be in the 'periphery' of the Edomite area of influence is far better than of sites located in the Edomite 'heartland'. Another reason for focusing on this area is that the Negev was target of at least two Assyrian and Babylonian military campaigns, and for that reason destruction layers are scattered throughout most of the local sites. Consequently, my point of departure for the analysis of the STNP will be clear archaeological assemblages found in Iron Age Negev sites. Particularly, two wellknown military events will be used as chronological anchors for dating the pottery assemblages: the Neo-Assyrian (Sennacherib) (701 BCE) (Blakely and Harding 2002; Finkelstein and Na'aman 2004) and the Neo-Babylonian (Nebuchadnezzar) destruction levels (597 BCE, 587-586 BCE) (Lipschits 2003: 334-336; 2005: 224-228). The key site for any typological comparison in Late Iron Judah is Lachish. Stratum III at Lachish is traditionally believed to have been destroyed by Sennacherib in 701 BCE and the succeeding Stratum II by Nebuchadnezzar in 587-586 BCE (Zimhoni 1997).

Horvat Qitmit is a single-period shrine that can be dated from the end of the 7th to the early 6th century BCE (Beit-Arieh 1995a) (see Table 1/Fig.1). The local pottery assemblage has parallels in Tel Goren V, Tel 'Aroer II, Tel 'Ira VII–VI and others; no Babylonian or Persian pottery was retrieved (Freud and Beit-Arieh 1995). No traces of human destruction were found in the site, and it seems that it was abandoned peacefully. Tel 'Aroer furnished three Late Iron strata (IV–II), from the early 7th to the early 6th century BCE (Biran and Cohen 1981; Biran 1993). The pottery assemblage of Stratum III closely resembles that of Lachish

III and Tel Beersheba II – for example, the presence of *lmlk* impressions – thus raising the date of Tel 'Aroer III to the late 8th century BCE (Singer-Avitz 1999: 56). No clear evidence of destruction exists for the last Stratum II, although the end of this level has been related to the Neo-Babylonian conquest (Biran 1993: 91; Lipschits 2003: 335). At 'Ain el-Oudeirat the remains of three superimposed fortresses were found: the earliest fortress (Stratum IV) was dated to the 10th century BCE, the middle fortress (Stratum III, with pottery parallels in Lachish III and Tel Beersheba II) to the 8th-7th centuries BCE, and the upper fortress (Stratum II, with pottery parallels in Lachish II and 'En Gedi V) to the 7thearly 6th centuries BCE. The destruction of the middle fortress has been dated to the mid-7th century BCE and that of the upper fortress to Nebuchadnezzar's campaign in 587-586 BCE (Cohen 1981: 100; 1993: 845-847; Cohen and Bernick-Greenberg 2007: 16–17). Late Iron occupation at *Tel 'Ira* encompassed Strata VII (8th century to first half of 7th century BCE) and VI (second half of 7th century BCE). Several types of bowls, jars and cooking pots from Stratum VII have parallels in Lachish III and Tel Beersheba II – both sites destroyed by Sennacherib in 701 BCE. Whereas some types at the latter sites do not appear in Stratum VII, some types of cooking pots and jars that occur in Lachish II are present in it. Then, Tel 'Ira VII would have been destroyed sometime in the half of the 7th century BCE (Beit-Arieh 1999). This scenario is not supported by others, who based on the similarity between the pottery assemblages of Tel 'Ira VII and Lachish III/Tel Beersheba II argue that the first site was destroyed by the Assyrians in 701 BCE (Singer-Avitz 2004: 86). The succeeding Stratum VI was destroyed around 600 BCE (Beit-Arieh 1999: 176-177; see also Freud 1999: 226–227) or 587–6 BCE (Singer-Avitz 2002: 182; Lipschits 2003: 335). The earliest relevant layers in the fort at Tel 'Arad are Strata X-VIII, which have been dated to the 8th century BCE (Herzog 2002: 27-40), furnishing a fairly similar pottery with most parallels in Lachish III, Tel Beersheba III-II, Tel 'Ira VI and Tel 'Aroer II (Herzog 2002: 97; Singer-Avitz 2002: 159). Herzog argued that Stratum VIII was destroyed by a conflagration at the end of the 8th century BCE (Herzog 2002: 98), and some scholars have constructed theories about an Edomite invasion, based on a local inscription mentioning the evil done by 'Edom' (see below). Yet, the most likely cause of this destruction was Sennacherib's campaign in 701 BCE (Singer-Avitz 2002: 280). Tel 'Arad was reconstructed later on and a succession of two strata (VII-VI) characterised the site during the 7th and early 6th centuries BCE (Herzog 2002: 40–49, 100). Both strata seem to have been destroyed over a short period of time in the early 6th century BCE (ibid.: 48–49) and since the pottery of Stratum VII lacks some ware types present in the 587–586 BCE destruction layers – such as Lachish II, Jerusalem and Tel 'Ira VI – it follows that Stratum VI is the layer that best fits the pottery assemblage of the Neo-Babylonian devastation (Singer-Avitz 2002: 182; Lipschits 2003: 335). The historical scenario that best fits the evidence of the destruction of Stratum VII is the first Neo-Babylonian intervention in 597 BCE.

The main occupation at *Tel Beersheba* during the Late Iron Age corresponds to Strata III-II (last third to end of the 8th century BCE). Stratum II was destroyed by a conflagration and since this layer's pottery is commonly believed to be very similar to that of Lachish III, it was thought to have been destroyed in 701 BCE (Aharoni 1973b: 6; 1973d: 107; Singer-Avitz 1999: 11-12). However, there has been attempts to push back the date of Stratum II's destruction, particularly to the time of Sargon II (e.g., Kenyon 1976; Na'aman 1980). In some reports, the archaeologists seem to suggest that Stratum III was destroyed around the middle of the 8th century BCE (Aharoni 1973d: 107-108; Herzog 1997: 289), but in other places they stress the continuity both in architecture and pottery between Strata III and II without mentioning any destruction of the earlier stratum (Aharoni 1973b: 5; Herzog 1993: 171). Blakely and Harding went one step further and suggested that Stratum III was destroyed by Tiglath-Pileser III in 734 BCE (2002: 29-30). Finkelstein and Na'aman strongly rejected such a view, on the grounds that, on the one hand, no evidence of such a general destruction of Stratum III was ever found and, on the other hand, the following Stratum II followed the general arrangement of Stratum III (2004: 65-66). Little in the way of architecture was preserved of the Stratum I: generally dated to the 7th century BCE, no evidence is known on how and when this stratum ended (Aharoni 1973b: 6-7).

The Iron Age fortress at *Horvat 'Uza* (Stratum III) was probably established by the middle of the 7th century BCE and destroyed at the end of the century or in the early 6th century BCE (Beit-Arieh 2007). The destruction of the site has been variously attributed to the Neo-Babylonian invasion in 586 BCE and to an attack of the Edomites, maybe around 609 BCE after the Egyptian invasion (Lipiński 2006: 405). Finally, in *Tel Masos*, only Area G was occupied in the Late Iron Age. Most ceramic parallels can be found in Lachish II, and therefore the area has been dated to the 7th–6th centuries BCE. There is disagreement concerning the end of this settlement, whether it was abandoned when the local inhabitants moved on to the safest location at Tel 'Ira (Lipschits 2003: 336) or destroyed in the events of 587–586 BCE or slightly earlier (600 BCE) in an Edomite incursion (Zimhoni 1983: 130).

I am aware that this methodology has its limitations. More importantly, it could be argued that the STNP should not be dated according to wares found in sites located in the 'periphery' of the land of Edom. However, this argument would be methodologically valid if southern Transjordan were the only place of manufacture of STNP and consequently all wares found in the Negev were imports. Yet this is not the case, because most of the STNP vessels found in the Negev were manufactured locally. The overall evidence indicates that the Negev should not be considered a cultural 'periphery' of the Edomite highlands (nor, for that matter, the Judaean highlands). Another important point is that, according to the evidence available so far, STNP vessels found in the Edomite plateau are not chronologically earlier than those discovered in the Negev. New excavations at Khirbet en-Nahas in the Faynan lowlands show not only that the earlier developments of this ceramic tradition goes back to the Iron IIA, but also that these antecedents find identical

#### JUAN MANUEL TEBES

parallels in Cisjordan (Tebes 2009). In other words, the emergence of the STNP assemblage seems to have been roughly contemporary at both sides of the Arabah, and the vessels found in southern Transjordan cannot claim to be the forerunners of those found in the Negev.

## 2. Typological Study

I aim to construct a classification of the STNP taking the best pottery types that appear in the archaeological reports. I will make use of the types developed by Oakeshott (1978), but incorporating them into four main functional groups: (1) Table wares; (2) Cooking wares; (3) Containers; (4) Stands. This methodological step has the advantage of continuing making use of a typology that has proved to be useful in the analyses of other sites' pottery, therefore allowing straightforward comparisons. Consequently the use of the Buseirah typology is entirely valid. Certainly, not all types occurring in it are present in the Negev sites (and, for that matter, in other southern Transjordanian sites), and these will not be listed in the typology. In the following I list the STNP types that occur only in well-stratified contexts in Iron Age Negev sites. No parallels found out of context, with a dubious stratigraphic origin, or published without explicitly mentioning their context of discovery, are discussed. In Table 2 I provide the synchronization between this typology and past classifications of 'Edomite' pottery. The ceramic material is illustrated in Figs. 2-4/Table 3 and the occurrence of STNP types in Iron Age Negev sites is summed up in Table 4.

Table 1. General stratigraphy of the Negev sites under discussion.

| DATE                                      | Horvat<br>Qitmit | Tel<br>'Aroer | 'Ain el-<br>Qudeirat | Tel<br>'Ira | Tel<br>'Arad | Tel<br>Beersheba | Horvat<br>'Uza | Tel<br>Masos |
|---|------------------|---------------|----------------------|-------------|--------------|------------------|----------------|--------------|
| 8th century                               |                  |               |                      |             |              |                  |                |              |
| BCE                                       |                  | IV            |                      |             | X-IX         | III              |                |              |
|   |                  | III           | III                  | VII         | VIII         | II               |                |              |
| Assyrian destruction, 701 BCE             |                  |               |                      | Paris A     |              |                  |                |              |
|   |                  |               | III                  |             |              |                  |                |              |
| 7th century<br>BCE                        |                  |               |                      |             | VII-VI       | I                |                |              |
|   | Shrine           | П             | II                   | VI          |              |                  | III            | Area G       |
| Babylonian<br>destruction,<br>587–586 BCE |                  |               |                      |             |              |                  |                |              |

Table 2. Comparison of the STNP types and other typologies.

| STNP<br>Type | Oakeshott 1978;<br>Bienkowski,<br>Oakeshott and<br>Berlin 2002 | Freud and Beit-<br>Arieh 1995 | Freud 1999                            | Singer-Avitz 2002         | Bernick-<br>Greenberg 2007 | Freud 2007                                      |
|--------------|--|-------------------------------|---------------------------------------|---------------------------|----------------------------|---|
| 1            | Bowls A  | Bowls 7: Edomite bowls        | Flat bowls with<br>straight wall      | В 7                       | EB1                        | Flat Bowls with<br>Straight Walls<br>(Platters) |
| 2            | Bowls E  |                               | Rounded carinated bowls               |                           |                            |   |
| 3            | Bowls S  |                               |                                       |                           |                            |   |
| 4            | Bowls O  | Bowls 8                       |                                       | B 18                      | EB2                        |   |
| 5            | Bowls J  | Bowls 5                       | Rounded bowls carinated under the rim | B 27, B 28, B 29,<br>B 30 | EB3b, EB5                  | Rounded Carinated<br>Small Bowls                |
| 6            | Bowls K  | Bowls 5                       |                                       | B 15                      | EB3a                       | Rounded Carinated<br>Small Bowls                |
| 7            | Bowls N  | Bowls 5                       |                                       | B 45                      | EK1, EK2                   |   |
| 8            | Bowls M  | Bowls 5                       |                                       |                           |                            |   |
| 9            | Bowls D6   |                               |                                       | B 34                      |                            |   |
| 10           | Cooking pots A   | Cooking-pots                  | 'Edomite' cooking-<br>pots            | CP7                       |                            | Cooking-pots,<br>Edomite Type                   |
| 11           | Cooking pots B   | Cooking-pots                  | 'Edomite' cooking-<br>pots            |                           | ECP1                       | Cooking-pots,<br>Edomite Type                   |
| 12           | Jars B   |                               |                                       |                           | ECP1                       |   |
| 13           | Jugs D   |                               | 'Edomite' jugs                        |                           |                            |   |
| 14           |  |                               |                                       |                           | Stand                      |   |

Table 3. References to pottery figures.

| STNP<br>Type | Location                           | Description  | Origin of Figure   | Figure<br>number |  |
|--------------|------------------------------------|--|--|------------------|--|
| 1.1.a        | Tel Masos, Area G, Locus 764       | Light brown clay   | Fritz and Kempinski 1983: Fig. 163:5   | 2:1              |  |
| 1.1.b        | Horvat Qitmit, Locus 30, Complex A | Grey, buff surface, white grits  | Freud and Beit-Arieh 1995: Fig. 4.1:12   | 2:2              |  |
| 1.1.c        | Tel 'Ira VII, Area E, Locus 191    | Red brown, (grey), buff surface, denticulated, red line under rim                  | Freud 1999: Fig. 6.84:4  | 2:3              |  |
| 1.2          | Tel Masos, Area G, Locus 772       | Brown clay, wheel burnish inside   | Fritz and Kempinski 1983: Fig. 163:4   | 2:4              |  |
| 2            | Tel 'Ira VII, Area E, Locus 191    | Grey-black, white grits, bar handle  | Freud 1999: Fig. 6.84:5  | 2:5              |  |
| 3            | Horvat Qitmit, Locus 30, Complex A | Greenish-white surface   | Freud and Beit-Arieh 1995: Fig. 4.1:29   | 2:6              |  |
| 4            | Tel Beersheba II, Locus 614        | N/D  | Singer-Avitz 1999: Fig. 9:20   | 2:7              |  |
| 5.1          | Tel Beersheba II, Locus 192        | Clay: Terra rosa   | Singer-Avitz 1999: Fig. 9:14   | 3:1              |  |
| 5.2.a        | Tel 'Arad VIII, Locus 641          | Red slip   | Singer-Avitz 2002: Fig. 37:9   | 3:2              |  |
| 5.2.b        | Tel Beersheba II, Locus 2406       | Clay: Terra rosa + sand + straw  | Singer-Avitz 1999: Fig. 9:3  | 3:3              |  |
| 5.2.c        | Tel 'Ira VI, Area C, Locus 330     | Light brown, many white and red grits, well fired, holes for repair                | Freud 1999: Fig. 6.67:10   | 3:4              |  |
| 5.2.c.α      | 'Ain el-Qudeirat II, Locus 903     | Red-brown clay, small inclusions, white and black decoration                       | Cohen and Bernick-Greenberg 2007: Pl. 11.79:11   | 3:5              |  |
| 5.3          | Tel 'Aroer II, Area A, Locus 130   | Light brown clay, red slipped and burnished. Black decoration                      | Na'aman and Thareani-Sussely 2006: Fig. 3:1  | 3:6              |  |
| 6            | Tel Beersheba II, Locus 1449       | Clay: loess  | Singer-Avitz 1999: Fig. 9:11   | 3:7              |  |
| 7            | 'Ain el-Qudeirat II, Locus 2150    | Gray clay, green surface, inclusions, red and black decoration, horizontal burnish | Cohen and Bernick-Greenberg 2007: Fig. 11.79:12  | 3:8              |  |
| 8            | Tel Beersheba II, Locus 1847       | N/D  | Singer-Avitz 2004: Fig. 1:1  | 3:9              |  |
| 9            | Tel Beersheba II, Locus 430        | N/D  | Singer-Avitz 1999: Fig. 10:34  | 4:1              |  |
| 10           | Tel 'Arad VI, Locus 637            | N/D  | Singer-Avitz 2002: Fig. 48:6   | 4:2              |  |
| 11           | Tel 'Aroer II, Area A, Locus 105   | Grey clay, many grey grits. White stripes  | Biran and Cohen 1981: Fig. 16:2  | 4:3              |  |
| 12           | Horvat Qitmit, Locus 30, Complex A | Reddish-brown, white surface, burnish outside                                      | Freud and Beit-Arieh 1995: Fig. 4.3:9.<br>Complete Parallel: Bienkowski, Oakeshott<br>and Berlin 2002: Fig. 9.45:2 | 4:4              |  |
| 13           | Tel Beersheba II, Locus 589        | Clay: Terra rosa   | Singer-Avitz 1999: Fig. 10:26  | 4:5              |  |
| 14           | Tel 'Aroer II, Locus 105           | Brown clay, few white grits. Black and red decoration                              | Biran and Cohen 1981: Fig. 14:11   | 4:6              |  |

Table 4. Occurrence of STNP types in Iron Age Negev sites

| Sites / STNP Types      | 1        | 2        | 3     | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|-------------------------|----------|----------|-------|---|---|---|---|---|---|----|----|----|----|----|
| 'Ain el-Qudeirat II     | ×        |          |       | × | × | × | × |   |   |    |    |    |    | ?  |
| Tel 'Arad X             |          |          |       |   | × |   | * |   |   |    |    |    |    |    |
| IX                      |          |          |       |   | × |   | * |   |   | *  |    |    |    |    |
| VIII                    |          |          |       | * | * |   |   |   |   |    |    |    |    |    |
| VII                     |          | *        |       |   | × | * |   |   |   | *  |    |    |    |    |
| VI                      |          |          |       |   | × |   |   |   | * | *  | *  |    |    |    |
| Tel 'Aroer IV           |          |          |       |   |   |   |   |   |   |    |    |    |    |    |
| III                     |          |          |       |   |   |   |   |   |   |    |    |    |    |    |
| II                      | ×        |          |       |   | × | × | × |   | * |    | *  |    |    | ×  |
| Tel Beersheba III       |          |          |       |   |   |   |   | × |   |    |    |    |    |    |
| II                      |          |          |       | * | * | * | * |   | * | *  |    |    | *  |    |
| I                       |          |          |       |   |   |   |   |   |   |    |    |    |    |    |
| Tel 'Ira VII            | ×        |          |       |   | * |   |   |   |   |    |    |    |    |    |
| VI                      | *        |          |       |   | * |   |   |   |   |    |    |    | *  |    |
| Tel Masos, Area G       | *        |          |       |   |   |   | × |   |   | *  |    |    |    |    |
| Horvat Qitmit           | ×        | *        | *     | × | × | * | × | * |   | *  | *  | *  |    |    |
| Horvat 'Uza III         | *        |          |       |   | * | × |   |   |   | *  | *  |    |    |    |
| Horvat Radum            |          |          |       |   |   |   |   |   |   |    |    |    |    |    |
| Note: Pointed pottervis | ranracan | ted by a | · '×' |   |   |   |   |   |   |    |    |    |    |    |

Note: Painted pottery is represented by an 'x'

## **Table wares**

STNP 1: Flat bowls ('platters'): The basic shape of these flat bowls is widespread in sites throughout Transjordan and Palestine. However, the painted decoration – bands of black and red around the rim and the body's inside and outer parts – and rims – downturned, grooved and denticulated – find parallels only in Edom and the Negev. Some are burnished. They are called by some 'Edomite bowls' (Freud and Beit-Arieh 1995: 213), and can be subdivided into subtypes on the form of base and rim.² Petrographic examinations made on specimens of this bowl type from Tel 'Ira show a local manufacture with loess clay tempered with fragments of land snail and rounded sandy quartz (Freud 1999: 194 n. 4; 195 n. 5). The local production was also confirmed by NAA performed on bowls from Qitmit (Gunneweg and Mommsen 1990: Table 1: Qitmit 20; 1995: Table 7.1: Qitmit 20).

### Parallels:

- (1) Flat bowls with ring base: Ring base and straight sides; they can have red slip and burnish and painted ledge rim. This form can be divided into several types based on their rims.
- (a) With rim turned down (Fig. 2:1): Tel Masos (Fritz and Kempinski 1983: Fig. 163:5, wheel burnish inside and no decoration). Very common in Buseirah (Bienkowski, Oakeshott and Berlin 2002: Fig. 9.2:1–10).
- (b) With grooved rim (Fig. 2:2): Horvat Qitmit (Freud and Beit-Arieh 1995: Fig. 4.1:12, unpainted). Few parallels from Buseirah (Bienkowski, Oakeshott and Berlin 2002: Fig. 9.1:1–15).
- (c) With denticulated rim (Fig. 2:3): Denticulations were made in the rim with a knife. Tel 'Arad VII (Singer-Avitz 2002: Fig. 10:B7), Tel 'Aroer II (Thareani 2010: Fig. 5:2), Tel 'Ira VII (Freud 1999: Fig. 6.84:4, with a red line under the rim but not surviving base). The type is common in Buseirah (Bienkowski, Oakeshott and Berlin 2002: Fig. 9.2:11–16).

# (2) Flat bowls with flat base (Fig. 2:4)

With rim turned down: Tel Masos (Fritz and Kempinski 1983: Fig. 163:4, undecorated and with wheel burnish inside). Buseirah produced similar bowls but

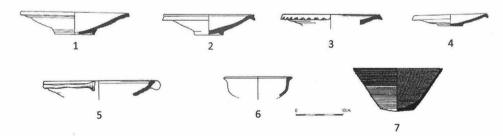


Fig. 2. STNP Bowl Types 1–4 (see Table 3). Figs. 2:1 and 2:4, courtesy of Harrassowitz; Figs. 2:2; 2:3; 2:5; 2:6 and 2:7, courtesy of the Institute of Archaeology, Tel Aviv University.

with rough base and rather poor finish (Bienkowski, Oakeshott and Berlin 2002: Fig. 9.3:12–15).

STNP 2: Bowls with triangular-section with bar handle or ridge (Fig. 2:5): This bowl with characteristic bar handle or ridge below the rim is limited only to Edom and the Negev. Some are red slipped. Bowls of this type are very common in Buseirah with many more variants in the vessel shape (Bienkowski, Oakeshott and Berlin 2002: Figs. 9.19; 9.20).

Parallels: Tel 'Ira VII (Freud 1999: Fig. 6.84:5, with a bar handle, undecorated), Horvat Qitmit (Freud and Beit-Arieh 1995: Figs. 4.10:12, fragment; 4.12:11).

STNP 3: Bowls with everted rim (Fig. 2:6): The STNP features of these bowls are their form (rounded or carinated body; everted, sometimes ledged, rims), the white-firing clay with which they were made and in some cases the painted decoration (grey, red and/or white bands around the body). Some may have had pedestal bases, therefore being chalices. Several of the examples from Buseirah bear two handles and others present painted decoration (Bienkowski, Oakeshott and Berlin 2002: 296, Fig. 9.33:1–10).

Parallels: Horvat Qitmit (Freud and Beit-Arieh 1995: Fig. 4.1:29, undecorated, handless).

STNP 4: Bowls with straight sides ('cups') (Fig. 2:7): These straight-sided or slightly concave bowls are called 'cups' in the Buseirah typology. The STNP character is defined by decoration and origin. In Buseirah this bowl type appears decorated with vertical and horizontal bands plus dots in between. Burnishing occurs in discontinuous lines in the exterior (Bienkowski, Oakeshott and Berlin 2002: 285, Fig. 9.30). Samples of Type 4 bowls from Qudeirat analysed with NAA show an origin in the NE Negev (Gunneweg and Mommsen 1995: Table 7.1: Negev 12 = Cohen and Bernick-Greenberg 2007: Pl. 11.125:21).

Parallels: 'Ain el-Qudeirat II (Cohen and Bernick-Greenberg 2007: Pls. 11.79:3; 11.79:4 = 11.125:21, with horizontal bands linked by vertical lines), Horvat Qitmit (Freud and Beit-Arieh 1995: Figs. 4.1:47, no painting nor grooves; 4.2:17, painted and grooved rim; 4.2:19, painted and downturned rim; 4.2:22, painted and pendant rim).

Examples from Tel Beersheba II (Aharoni 1973a: Fig. 59:44, with disk base; Singer-Avitz 1999: Fig. 9:20–22) and Tel 'Arad VIII (Singer-Avitz 2002: Fig. 10:B 18) lack any painted decoration, and possess instead grooves that, according to Singer-Avitz, attempted to imitate Buseirah's vessels.

STNP 5: Globular bowls with everted rims: These so-called 'fine ware' bowls (Bienkowski, Oakeshott and Berlin 2002: 282) are characterised by their very thin walls and profuse slipped decoration – which occurs only in vessels of this type found in the Negev and Edom – including bands, lines and dots in red, brown or black. They are made of local buff or whitish clay. They seem to imitate a specific

#### JUAN MANUEL TEBES

type of Assyrian carinated bowls (Amiran 1970: Pl. 99:4). Petrographic studies made on samples of this bowl type from Tel Beersheba reveal that most of them were made of whitish-green clay coming from local loess sources (except for one specimen made of *terra rosa* originating in Judah), probably an attempt to imitate the clay's texture of the Transjordanian 'Assyrian' vessels. Two bowls were found to be made of Taqiye marl clay, outcropping in the northern and central Negev and the Shephelah (Singer-Avitz 1999: 33, 36, 38). The same local production can be ascertained from NAA carried out on specimens from Qudeirat (Gunneweg and Mommsen 1995: Table 7.1: Negev 13 = Cohen and Bernick-Greenberg 2007: Pl. 11.125:23).

## Parallels:

(1) With curved sides (Fig. 3:1): Tel Beersheba II (Singer-Avitz 1999: Fig. 9:13–19, all undecorated: Fig. 9:15, with ring base; Fig. 9:14,16,18,19, with flat bases), Tel 'Arad Strata X, IX, VII and IV (Singer-Avitz 2002: Figs. 28:5; 48:3, some decorated in the exterior with red and/or black stripes). Tel 'Arad VIII also produced a larger, red slipped version of this bowl (Singer-Avitz 2002: Fig. 11:B 27). Very common in Buseirah (Bienkowski, Oakeshott and Berlin 2002: Fig. 9.25:1–13).

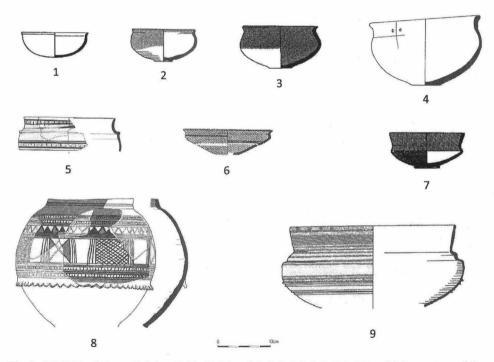


Fig. 3. STNP Bowl Types 5–8 (see Table 3). Figs. 3:1; 3:2; 3:3; 3:4; 3:6; 3:7 and 3:9, courtesy of the Institute of Archaeology, Tel Aviv University; Figs. 3:5 and 3:8, courtesy of the Israel Antiquities Authority.

- (2) With globular side: The differences in size found in the Buseirah parallels (Bienkowski, Oakeshott and Berlin 2002: Fig. 9.24) are matched in the Negev assemblages:
- (a) Small size (up to 10,5 cm in diameter) (Fig. 3:2): Tel 'Ira VII (Freud 1999: Fig. 6.86:8), Tel 'Arad Stratum X (fragments) and Stratum VIII (Singer-Avitz 2002: Figs. 11:B 28; 37:9), Horvat 'Uza III (Freud 2007: Fig. 3.15:1), Tel 'Aroer II (Biran and Cohen 1981: Fig. 15:18; Na'aman and Thareani-Sussely 2006: Fig. 3:3 = Thareani-Sussely 2007: Fig. 9:9 = Thareani 2010: Fig. 5:6, undecorated and bearing grooves in the exterior), Horvat Qitmit (Freud and Beit-Arieh 1995: Fig. 4.12:4).
- (b) Medium size (diameter between 11–15 cm) (Fig. 3:3): 'Ain el-Quderiat II (Cohen and Bernick-Greenberg 2007: Pls. 11.79:7 = 11.125:22, with red and black decoration), Tel 'Ira Stratum VII (Freud 1999: Figs. 6.80:4, with two black lines below the rim; 6.89:14, with horizontal black lines along the interior and exterior rim as well as on the exterior body; 6.67:6; 6:69.3; 6.80:5; 6.106:5–6, undecorated), Tel Masos (Fritz and Kempinski 1983: Fig. 164:7,8, undecorated), Horvat 'Uza III (Freud 2007: Fig. 3.35:1, undecorated), Tel Beersheba II (Singer-Avitz 1999: Fig. 9:1–4, undecorated), Tel 'Aroer II (Thareani 2010: Fig.5:7, undecorated; Biran and Cohen 1981: Fig. 15:19; Na'aman and Thareani-Sussely 2006: Fig. 3:4 = Thareani-Sussely 2007: Fig. 9:8 = Thareani 2010: Fig. 5:13, undecorated and bearing grooves in the exterior), Horvat Qitmit (Freud and Beit-Arieh 1995: Figs. 4.1:37,39,45; 4.5:2; 4.12:3,5, undecorated).
- $\alpha$ . With slightly protruding ridges: 'Ain el-Qudeirat II (Cohen and Bernick-Greenberg 2007: Pls. 11.79:10 = 11.125:23, painted rim fragments with small bar handles under the carination).
- (c) Large size (more than 15 cm in diameter) (Fig. 3:4): Tel 'Ira Stratum VI (Freud 1999: Figs. 6.67:10 = 6.40:5, undecorated) and Stratum VII (ibid.: Figs. 6.84:7; 6.88:6, undecorated), Tel 'Arad Stratum IX (fragments) and Stratum VIII (Singer-Avitz 2002: Figs. 11:B 29; 35:3), Horvat Qitmit (Freud and Beit-Arieh 1995: Figs. 4.1:33,36,42; 4.5:3; 4.6:2; 4.9:16–19; 4.11:7–10,13; 4.13:9–10; the only painted bowl is 4.11:7, with a black line under the rim), Tel Beersheba II (Singer-Avitz 1999: Fig. 9:5–8, undecorated).
- $\alpha$ . With slightly protruding ridges (Fig. 3:5): 'Ain el-Qudeirat II (Cohen and Bernick-Greenberg 2007: Pl. 11.79:11), Tel 'Aroer II (Na'aman and Thareani-Sussely 2006: Fig. 3:6 = Thaerani 2010: Fig. 1:12, with plastic decoration and black-red paint).
- (3) With carination (Fig. 3:6): Tel 'Aroer II (Na'aman and Thareani-Sussely 2006: Fig. 3:1 = Thareani-Sussely 2007: Fig. 9:10; Thareani 2010: Fig. 1:1, red slipped, burnished, with black decoration). Although not as ubiquitous as the two previous subtypes, they are an important component in the Buseirah assemblage (Bienkowski, Oakeshott and Berlin 2002: Fig. 9.25:14–17).

STNP 6: Bowls with angular carination (Fig. 3:7): These are bowls with an angular carination beginning in the middle, or even below the middle, part of the vessel. They are also imitations of 'Assyrian bowls' and the basic shape was copied throughout Cisjordan and Transjordan. However, the decoration is limited to Edom and the Negev. Some examples present ring-burnish outside on rim or on/below the carination (Bienkowski, Oakeshott and Berlin 2002: 282; Fig. 9.26:12–23; see also Amiran 1970: 291; Singer-Avitz 1999: 34; 2007: 184). Petrographic analysis carried on samples from Tel 'Aroer and Tel Beersheba found that the clays are made of *terra rosa* soil from Judah and Negev loess soil (Thareani-Sussely 2007: 133; Singer-Avitz 1999: 37).

Parallels: Tel 'Aroer II (Na'aman and Thareani-Sussely 2006: Fig. 3:5,7–9 = Thareani 2010: Figs. 1:9–11; 5:10–12; Biran and Cohen 1981: Fig. 14:4 = Thareani-Sussely 2007: Fig. 9:3; Biran and Cohen 1981: Fig. 14:3, profusely decorated with red and black paint, wheel burnished; Biran and Cohen 1981: Fig. 15:20, undecorated), 'Ain el-Qudeirat II (Cohen and Bernick-Greenberg 2007: Pls. 11.79:5 = 11.125:24; 11.79.6, decorated with red and black parallel horizontal bands with vertical lines in between), Tel Beersheba II (Singer-Avitz 1999: Fig. 9:10–12, undecorated; Fig. 9:11 bears a serrated incision made with a knife), Horvat Qitmit (Freud and Beit-Arieh 1995: Figs. 4.1:38,40; 4.6:1, undecorated), Horvat 'Uza III (Freud 2007: Fig. 3.24:3–4, undecorated), Tel 'Arad VII (Singer-Avitz 2002: Fig. 10:B 15, sherds).

STNP 7: Deep bowls with short neck ('kraters') (Fig. 3:8): The basic shape, with a short neck that is outright or curves slightly outwards, is found in central Transjordan, but parallels from Edom and the Negev are the only abundantly decorated (Buseirah parallels: Bienkowski, Oakeshott and Berlin 2002: 285; Fig. 9.28:9–13).

Parallels: 'Ain el-Qudeirat II (Cohen and Bernick-Greenberg 2007: Pls. 11.79:12 = 11.126:3 = Mazar 1985: Fig. 8 = Cohen 1993: 846 upper right; Cohen and Bernick-Greenberg 2007: Pls. 11.79:13 = 11.98:20, with elaborated decoration patterns, with a central zone on the outer body showing metopes filled with net and hourglass patterns, and above it triangles and horizontal bands linked by vertical lines. In the lower part of the body there is a denticulated fringe cut with a sharp instrument; Cohen and Bernick-Greenberg 2007: Pl. 11.79:14, with the same indentations, but this time on the shoulder and with the indentations pointing up), Tel Masos (Fritz and Kempinski 1983: Fig. 164:10, black and white bands, triangles and bars between the bands), Tel 'Aroer II (Biran and Cohen 1981: Fig. 14:1 = Thareani-Sussely 2007: Fig. 9:1; Thareani 2010: Fig. 6:2; Biran and Cohen 1981: Fig. 14:2 = Thareani 2010: Fig. 6:1; Biran 1993: 91 lower right, black and red decoration), Horvat Qitmit (Freud and Beit-Arieh 1995: Figs. 4.10:13; 4.12:32–35, with parts of the plastic decoration), Tel 'Arad X–IX (Singer-Avitz 2002: Figs. 12:B 45; 25:5, undecorated).

STNP 8: Carinated deep bowls with long flaring neck (Fig. 3:9): This is a distinctive STNP bowl, both morphologically and in decoration. It is characterised by a long, straight or slightly flaring neck, and a carination below the neck. Painted decoration is also common, with small circles and horizontal bars in red and black. Some of the vessels present discontinuous ring burnish (Buseirah: Bienkowski, Oakeshott and Berlin 2002: Fig. 9.28:1–6).

Parallels: Tel Beersheba Stratum II (Singer-Avitz 1999: Fig. 9:9, decorated with black and white bands) and Stratum III (2004: 81, Fig. 1:1, with a prominent rounded ridge between the neck and the body, plus two pair of ridges below the circumference), Horvat Qitmit (Freud and Beit-Arieh 1995: Fig. 4.5:4, undecorated).

STNP 9: Bowls with tripod base (Fig. 4:1): These are flat, carinated, open bowls (Buseirah: Bienkowski, Oakeshott and Berlin 2002: Fig. 9.18:7–9). Singer-Avitz identifies this type as an attempt to imitate Assyrian tripod bowls with three knobs at the base (1999: 37; 2007: 186–188). A black-ware tripod bowl from Tel 'Aroer was made of Lower Cretaceous shales, exposed in southern Transjordan and in the northeastern Negev craters (Na'aman and Thareani-Sussely 2006: 69; Singer-Avitz 2007: 189–190).

Parallels: Tel 'Aroer II (Na'aman and Thareani-Sussely 2006: Fig. 3:11, with wheel burnish), Tel Beersheba II (Singer-Avitz 1999: Fig. 10:34, with three rectangles attached to the base), Tel 'Arad VI (Singer-Avitz 2002: Fig. 11:B 34, with grooved legs).

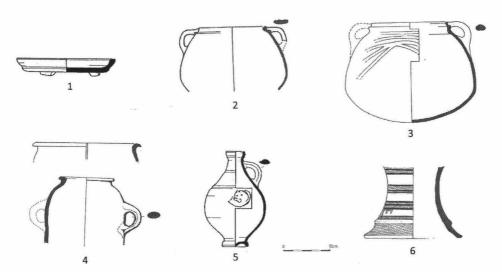


Fig. 4. STNP Bowl Type 9; Cooking ware Types 10–11; Container Types 12–13; Stand Type 14 (see Table 3). Figs. 4:1; 4:2; 4:4 and 4:5, courtesy of the Institute of Archaeology, Tel Aviv University; Figs. 4:3 and 4:6, courtesy of the Israel Exploration Society; Fig. 4:4 (parallel), courtesy of the Council for British Research in the Levant.

## Cooking wares

Petrographic analysis on cooking pots from Tel 'Aroer (Thareani-Sussely 2007: 133; Thareani 2010: 37), Tel 'Ira (Freud 1999: 218, n. 218) and Tel Malhata (Bienkowski and van der Steen 2001: 27, 36, n. 14) and NAA on cooking pots from Qitmit (Gunneweg and Mommsen 1990: Table 1: Qitmit 18, p. 13; 1995: Table 7.1: Qitmit 18, see also p. 286) show that most, if not all, of the STNP cooking pots were made with clays from Nubian sandstone typical of the Edomite plateau (but also outcropping in the eastern Negev; see below).

STNP 10: Open cooking pots, neckless, with short stepped and inverted rim (Fig. 4:2): In this type of cooking pots the rim continues the line of the shoulder, a feature present only in cooking pots found in Edom and the Negev. The examples from Buseirah lean inwards, and although most of them have handles, the lack of complete rims precludes knowing the exact number of handles (Bienkowski, Oakeshott and Berlin 2002: 307, Fig. 9.38).

Parallels: Tel Masos (Fritz and Kempinski 1983: Fig. 165:14), Tel 'Arad IX, VII–VI (Singer-Avitz 2002: Figs. 14:CP 7; 48:6), Tel Beersheba II (Aharoni 1973a: Fig. 68:4), Horvat Qitmit (Freud and Beit-Arieh 1995: Figs. 4.6:21–25; 4.9:32–34; 4.11:25,27; 4.12:21,23; 4.14:31), Horzat 'Uza III (Freud 2007: Figs. 3.26:11; 3.29:6; 3.36:2; 3.38:3), 'Ain el-Qudeirat II (Cohen and Bernick-Greenberg 2007: Pls. 11.80:1 = 11.115:16).

STNP 11: Cooking pots with short neck (Fig. 4:3): This is a similar cooking pot but with short neck. As Bienkowski, Oakeshott and Berlin note, the distinction between this type and Type 10 is rather artificial (2002: 307; Fig. 9.39).

Parallels: Tel 'Ira VI (Freud 1999: Fig. 6.94:8), Tel 'Aroer II (Biran and Cohen 1981: Fig. 16:2 = Thareani-Sussely 2007: Fig. 10:2; Thareani 2010: Fig. 5:18), Horvat Qitmit (Freud and Beit-Arieh 1995: Figs. 4.5:21; 4.12:22), Horvat 'Uza III (Freud 2007: Figs. 3.23:4; 3.40:7), 'Ain el-Qudeirat II (Cohen and Bernick-Greenberg 2007: Pls. 11.80:2 = 11.126:7).

## **Containers**

STNP 12: Ovoid jars with handles (Fig. 4:4): This is an ovoid jar type with a characteristic outcurving rim inflection, found only in Edom and the Negev. Jars of this type found in Buseirah bear two or four handles, and some of them horizontal bands and lines below the rim and the handles (Bienkowski, Oakeshott and Berlin 2002: 313, Fig. 9.45).

Parallels: Horvat Qitmit (Freud and Beit-Arieh 1995: Figs. 4.3:9; 4.6:26, fragments, painted on the rim).

STNP 13: Strainer Jugs (Fig. 4:5): The most striking features of this jug type are the narrow neck, one handle with two or three strands, plus strainer spout on the

shoulder. The strainer spot is known in other areas, particularly in the Philistine sites (Dothan 1982: 132–155, particularly Figs. 26–27), but the compositional material of the jugs from Buseirah is unique to them. They are known in Buseirah's typology as 'White Ware Jugs' and, as their name indicates, they are made from white-firing clay, which neutron activation analysis demonstrates originate in the Wadi Arabah (Bienkowski, Oakeshott and Berlin 2002: 329, Fig. 9.56:11–17). One Beersheba vessel was made with *terra rosa* clay, the type of soil found in the Judaean hills or foothills (Singer-Avitz 1999: 37).

Parallels: Tel Beersheba II (Singer-Avitz 1999: Fig. 10:26), Tel 'Ira VI (Freud 1999: Fig. 6.93:5, a base).

#### Stands

STNP 14: Stands (Fig. 4:6): Stands made of coarse clay and painted decoration in black and red lines were found in Buseirah but not classified by Oakeshott (1978: Pl. 23:3).

Parallels: Tel 'Aroer II (Biran and Cohen 1981: Fig. 14:11 = Thareani-Sussely 2007: Fig. 9:4; Thareani 2010: Fig. 6:6), 'Ain el-Qudeirat, Substrata IIIa-b (Cohen and Bernick-Greenberg 2007: Pls. 11.52:15 = 11.80:5).

## IV. Chronology and Origin of the STNP

Research on the STNP occurring in Negev sites suggests that the earliest examples appear in Tel 'Arad X, Tel Beersheba III–II and Tel 'Ira VII (see Table 1). The latter two strata were destroyed by the military campaign of Assyrian king Sennacherib in 701 BCE. Therefore, it can be concluded that this pottery group was already present in the Negev by the end of the 8th century BCE. How much earlier depends on whether the pottery found at the destruction levels of Tel Beersheba II and Tel 'Ira VII represents a novelty or was used during all the time-span of the layers. Attempts to push back the end of Tel Beersheba III-II and Tel 'Arad X to Tiglath-Pileser III's or Sargon II's times (see above) may have the effect of pushing back the date of the STNP as well. Nebuchadnezzar's campaign in 587–586 BCE marks the last archaeological anchor for accurately dating the STNP in the Negev. Layers of destruction in the Negev attributed to the Neo-Babylonian invasion have an important concentration of this pottery group. Therefore, the flourish of the STNP in the Negev corresponded to the 7th century BCE, those strata 'sandwiched' between the Neo-Assyrian and the Neo-Babylonian destructions. Settlements rebuilt after the Neo-Babylonian destruction have not provided them, and it can be assumed that the events of 587-586 BCE represent an accurate absolute date for the end of this pottery tradition in the Negev.

As already said, a sequence of the development of the STNP types is highly complicated due to the lack of vertical stratigraphy in most of the Late Iron sites in the Edomite highlands. Oakeshott (1978: 77–79), Hart (1989: 81–82) and Mazar (1985) supported the notion that the painted 'Edomite' pottery only appeared

in the final stage of its history. However, Bienkowski has shown that Hart's analysis of the pottery of Buseirah was based on a very small sample and, most importantly, rightly pointed out that 'variations in the pottery typology between sites are not necessarily a function of chronology' (1995b: 52). Bienkowski cited Zeitler's (1992) study of mountain-top sites in the area of Petra, where pottery with painted decoration was lacking, to show that this absence may be due to the inaccessibility of these mountain sites. The study of the STNP in the Negev supports this point. Findings of painted STNP in late 8th century BCE strata in the Negev suggest that this type of decoration occurred already in the first stages of its history. Singer-Avitz published a globular bowl from Tel Beersheba, decorated with red and white painting and partially burnished on the neck (Type 8). This bowl was found in Stratum II but attributed to the earlier Stratum III. Since the destruction of Tel Beersheba II is traditionally linked with the campaign of Sennacherib in 701 BCE, the discovery of this decorated bowl in a late 8th century BCE context demonstrates that painted STNP was already present in the earlier stages of its development. In the same vein, in Tel 'Ira archaeologists found Type 1 decorated bowls from Stratum VII, destroyed by Sennacherib, and Tel 'Arad provided carinated 'fine ware' bowls (Type 5) in Strata X-IX, which very likely predated the 701 BCE catastrophe.

Having reviewed all of the evidence, it is now possible to correlate the STNP findings in the Negev with the chronology of Buseirah and the rest of the Edomite sites. Pottery parallels from the Negev indicate that the earliest settlement in Buseirah might have started as early as the late 8th century BCE. However, the starting date for the popularity of decorated ceramics in the Edom and the Negev may go back to as early as the Iron Age IIA, as shown by new data coming from excavations in the Faynan region of Edom. In this zone, the site of Khirbet en-Nahas has provided pottery types that can reasonably be interpreted as the early antecedents of the STNP (Smith and Levy 2008). The Khirbet en-Nahas pottery assemblage - which lacks identical parallels in Buseirah - does not allow pushing back too much the date of the initial settlement in Buseirah. Very problematic is the reference of Edomite submission to Assyria contained in the Nimrud Slab of ca. 803 BCE (Pritchard 1969: 281), which would antedate for a century the earliest pottery found in Buseirah. A tentative solution would be to suppose that Buseirah existed already in the late 9th century BCE and no archaeological remains have yet been uncovered from that phase; or that at that time the political hegemony in the Edomite area was represented by another entity (based on the Faynan lowlands?) rather than Buseirah. Otherwise one would have to assume that the STNP already existed by the late 9th or early 8th century BCE and that it remained unchanged for a century. But, again, the earlier pottery assemblage of Khirbet en-Nahas does not allow such interpretation. The pottery evidence from the Negev also suggests that the STNP tradition continued down into the early 6th century BCE. However, a cuneiform tablet dated to Darius I (521 BCE) found in Tawilan (Crowell 2007: 84) illustrates the continuance of the sedentary settlement in that area until the last part of the century. Similar conclusions can be reached with respect to Tawilan, a site that provided a fairly similar pottery assemblage than Buseirah, although there is less certainty with respect to other sites in the southern plateau such as Umm el-Biyara, given their different pottery typologies.

# V. Production, Distribution and Consumption of STNP

Scholars have proposed several models for explaining the distribution of STNP in the Negev. While many of these proposals have much to commend, they nevertheless focus on a few specific pottery types and stress only one or a few factors for the spatial allocation of the ceramics. Moreover, in these studies the distinction between the spheres of production, distribution and consumption are often blurred, and frequently mentioned factors such as military campaigns, movements and settlement of population, trade, pastoral nomadic movements, patterns of consumption, elite emulation and ethnicity belong in fact to different ambits. Ceramics types and groups are the result of the typologies constructed by scholars. Any typology involves a classification, an arbitrary organization of something that is, by definition, unorganised (cf. Gifford 1960; Rouse 1960). A major problem for pottery typologies is that they tend to normalize a heterogeneous set of artefacts at the expense of the study of detailed variation in the different types. A ceramic group like the STNP, being composed of discrete entities, is neither homogeneous nor static. While each of its constituting parts is congruent inside the typology, they were part of different spheres of production, distribution, consumption and symbolic meaning than other types in the same ceramic group.

### 1. Production

#### Fabric

Our knowledge of the system of production of the STNP is hindered by the lack of remains of pottery workshops found in Negev sites dating to the Late Iron Age. Therefore, interpretations about the production should be based on vessel morphology, manufacturing techniques and fabrics. Based on these parameters, it is possible to postulate the existence of two traditions of pottery manufacture, which I would identify, following geographical considerations, as the 'Western' and 'Eastern' traditions.

The 'Western' tradition of pottery making is comprised of vessels manufactured in the northern Negev and the Judaean hills and foothills (Shephelah), with the use of distinct clays. The largest group was manufactured with *terra rosa* clay, at times tempered with coastal or wadi sand, outcropping in the mountainous regions within the Mediterranean climatic zones of the Levant, with the nearest sources in the Judaean hills and the Shephelah; and loess soil from the northern Negev and the southern Shephelah, tempered with fragments of land snail and sandy quartz. A few specimens were manufactured with marl clay originating in the Motza formation (Cenomanian), which outcrops in the Judaean hills and most specifically in the

Jerusalem region; and Taqiye marl clay (Paleocene), originating in the northern and central Negev and the Shephelah (see Cohen-Weinberger and Goren 2004: 10–11). The widest range of shapes was produced with these clays, comprising bowls and containers sharing forms, treatments and decorations with vessels from Buseirah.<sup>3</sup>

The 'Eastern' tradition consists of vessels – mostly cooking pots, but also a few bowls such as a Type 9 tripod bowl (see above) – made of clay from the Nubian sandstone formation (Lower Cretaceous), with a high proportion of rough quartz grains and shale elements. This soil is widely exposed in the Petra region and the Edomite plateau, and petrographic studies and NAA – based mostly on comparisons with Petra wasters – have traditionally located in this area their source of raw materials. However, Lower Cretaceous sandstones are not restricted to this area; it is in fact exposed in several erosional craters in the northern and central Negev (Makhtesh Hatira, Makhtesh Hazera, Makhtesh Ramon, Arif Mt.) and in a narrow belt along the western margins of the Arabah (Kolodner et al. 2009: 3). As there are known sources for this clay west of the Arabah valley, this would push westward the limit of the 'Eastern' tradition.

#### Production mode

Ethnographic studies have been used to build a range of models of pottery production; based on these models it is possible to classify the manufacture of STNP as production in an individual workshop industry. The presence of the fast and slow wheel, the utilization of a wide series of raw materials, the differing manufacturing techniques – particularly the construction of sophisticated Assyrian-like carinated vessels and the use of painted and plastic decoration –, suggest production of specialists based on a division of labour (probably production in the hands of men), a considerable capital investment and distribution through market mechanisms (Peacock 1981; Rice 1987: 184). The homogeneity in the raw material composition, manufacturing techniques, vessel shapes and dimensions is an indication of specialised mass production.

The minimal raw materials necessary to produce pottery are clay, water and fuel for firing. The multiplicity of raw materials employed is evidence that the potters were supplied by a complex network of transport. D.E. Arnold's classical study emphasised the distance to the clay and temper sources as the key factor in the potter's station: although in the cases he studied the distances varied between 1 km and 50 km, he found that in most cases the exploitable territory does not extend more than 10 km from the potting location (Arnold 1980). However, there is no clear direct connection between mining sources and the potting site, while transportation of clay from longer distances are also attested (Nicklin 1979: 442–446). Loess clay, as noted, was furnished by the northern Negev sources. The absence of STNP in areas north and west of the Beersheba valley suggests that *terra rosa* and marl clays were imported from their sources in the Judaean hills and the Shephelah – the distance between Beersheba and Jerusalem (Judaean hills) is about 73 km as the crow flies, and with Lachish (Shephelah) 38 km, although sources of *terra rosa* and marl clays could be considerably closer –, a rather unexpected situation given

that access to water and fuel, two other significant factors in the location of pottery workshops, is scarcer in the Negev. Therefore, local and non-local clays would have been mixed with water in the local workshops, probably in winter and spring time, when temperatures were milder, water was relatively more abundant and pottery shrinkage diminished. The importation of clays from the Judaean hills and the Shephelah vividly illustrates that the production of STNP in the Negev was fully integrated into the economic system of the Judaean kingdom and, probably, the Philistine cities. Regarding the cooking pots, given the long distance from the clay sources and the presence of vessels with the same morphology and fabrics in the Edomite plateau, they were probably transported as finished product to the western Negev region – the distance between Beersheba and Hazeva, for example, being about 66 km as the crow flies.

#### 2. Distribution

## Political/military control?

The view of the majority until not so long was that at some point in the 7th or early 6th centuries BCE (probably after Pharaoh Necao's raid in 609 BCE or after one of Nebuchadnezzar's invasions in 597 and 587 BCE) the Edomites took over some or the majority of the Judaean sites in the Negev. This view was supported by making allusion to some Hebrew Bible passages that may refer to some sort of military control of the Negev by the Edomites (2 Kgs 16:6; 2 Chron. 28:16–18) (Lindsay 1999; Beit-Arieh 1995a; 2003). This view gained momentarily some ground after the publication of a number of epigraphic finds from sites in the Negev that may allude to the growing threat of the Edomites. Among these finds it is worthy to mention Ostracon 40 found in Arad VIII, a letter between Judaean officials mentioning the 'evil' done by Edom (Aharoni 1970: 16-42); Ostracon 24 from Arad as well dated to 598-597 BCE containing an order to send troops to Ramat-negeb 'lest Edom should come there' (Aharoni 1970: 16-28); and another ostracon in Edomite script from Horvat 'Uza that might indicate some sort of Edomite military presence in the eastern Negev (Beit-Arieh and Cresson 1985). This material is supplemented by several references to the Edomite deity Qos or of personal names bearing Qos (Porter 2004: Table 4). Although attractive, the hypothesis of the military conquest seems to be at odds with some features of the archaeological evidence. To be sure, in some locations STNP constitutes an important part of the whole pottery assemblage (Malhata, Qitmit) and in others purportedly Edomising cult activities are present as major features (Qitmit, 'En Hazeva). But in the rest of the Negev sites small numbers of STNP, or Edomite inscriptions, are the only assumed indications of the presence of Edomite people. Moreover, although in several Late Iron Negev sites destruction levels - a major feature of military campaigns – are a conspicuous characteristic, their relationship with the alleged military campaigns of the Edomites is in most cases hypothetical at best.

## Trade / pastoral nomadic movements

The distribution of the STNP in the Negev may reflect the trade routes of that time and particularly the growth of the venues of transport of the incense brought from southern Arabia and carried to the ports in the southern coastal plain (Mazar 1985: 269; Finkelstein 1995: 140–141; Singer-Avitz 1999: 53–54; Bartlett 1999: 113; Tebes 2006b). In this area, trade is often thought to have been carried out by nomadic pastoral groups moving from one site to the other. Specifically, Bienkowski and van der Steen (2001) have proposed that the mixture and variety in the pottery assemblages of the Late Iron Negev and Edom reflect the constant movements and interactions of the local semipastoral groups that looked for grazing grounds. Several lines of evidence can account for this pattern: (1) Nomads do not leave considerable remains in the archaeological record. When found in archaeological sites, nomadic items are largely surpassed in quantity by the artefacts of the sedentary communities. (2) Incense brought from southern Arabia - the most probable commodity that might explain such burst in commercial activity - like other products was most likely transported in sacks and not in jars. Made of perishable materials, sacks (and the incense) do not survive in the archaeological record. (3) Ethnographic data from Roman-Byzantine times and the 19th century CE show that in these periods trade was largely dictated by the local Arab tribes (Bienkowski and van der Steen 2001). (4) STNP cooking pots were apparently the only vessel type not manufactured locally in the Negev, thereby being imports from Edom. (5) STNP was consistently found in three archaeological contexts associated with trade activities: caravanserais, extra-mural neighbourhoods and road shrines. At 'Aroer II, a building identified as a caravanserai and a neighbourhood located outside the fortification produced the largest proportion (nearly 90%) of STNP in the site (Thareani-Sussely 2007: 136-138; Thareani 2010: 41). Ceramic finds in these contexts include Type 5, 6 and 7 bowls, Type 14 stands and Type 11 cooking pots (Thareani-Sussely 2007: Figs. 9-10). So called 'Edomite' extra-settlement open-air shrines uncovered at Qitmit and Hazeva seem to have served as places of worship for seminomadic groups that travelled along the local trade routes (Finkelstein 1995: 139-144).

However, the role of the long-distance trade through the Arabah should not be overrated. Petrographic analysis showed that, with the exception of the cooking pots, all STNP vessels found in the Negev were locally-manufactured, even in trade-related archaeological contexts as the 'Aroer caravanserai (Thareani-Sussely 2007: 133). This casts doubt on the use of the typical STNP jar (Type 12) for carrying products over long distances: although its narrow, elongated form and the two or four handles made it ideal for land transport upon pack animals, this jar could better have been used for short travels connecting the local communities. This can be interpreted in two ways. The Negev potters could have copied the vessels imported from Edom, although to my knowledge no STNP jar found in the Negev has been reported to be manufactured in Edom. Another option is that most of the trade was short rather than long-distance, more oriented to the inter-town

exchange in the Negev than between the Negev and Edom. Although speculative, this possibility may find some support if cooking pots made with clays from Nubian sandstone are found to have been manufactured in the northeastern Negev. Clearly, more analyses need to be done on this pottery type. Most importantly, the whole picture seems to be largely skewed because of the more numerous analyses on pottery carried out in the Negev. Neutron activation analyses performed on pottery from Buseirah showed at least one sample originating west of Arabah valley, most probably in Hazeva (Gunneweg and Balla 2002: 485). This indicates that movements across the Arabah were in *both* directions, and that transit of Transjordanian pastoral people into the Negev was probably mirrored by movements of 'Negevite' groups into Edom. Thus the occurrence of STNP both in the Negev and Edom represents the movements of groups for whom the Arabah was not in any sense a political limit.

## 3. Consumption

## Food preparation and consumption

At several locations, STNP bowls and cooking pots were found in contexts identified as domestic or storage buildings, pointing to their use in the daily preparation/consumption and storing of foodstuff respectively. In 'Aroer II this pottery was used in domestic complexes inside the town, with remains of courtyards, ovens and silos (Areas B and H; Thareani 2010: 41–43); inside the 'Uza fortress in Complex 780, associated with installations and stone basins (Type 5 bowl and Type 10 cooking pot: Beit-Arieh and Cresson 2007: 38), in Complex 927, with installations and a millstone (Type 6 bowl and Type 11 cooking pot: ibid.: 33–34), and in Room 684, next to a *tabun* (Type 11 cooking pot: ibid.: 43); inside the 'Arad fortress, at Room 641 (Stratum VIII) abutting the eastern wall (Type 5 bowl; Herzog 2002: 40, Fig. 16) and at nearby Room 637 (Stratum VI) next to a stone mortar (Type 5 bowl and Type 10 cooking pot: ibid. 48: Fig. 19); at Tel 'Ira VII, in Room 521 with remains of a *tabun* (Type 5 bowl: Finkelstein and Beit-Arieh 1999: 81), in a casemate-type building abutting the town wall (Type 1, 2 and 5 bowls, Type 13 container: ibid.: 76), and in Room 402 (Stratum VI) with the remains of an oven (Type 5 bowl; Ayalon 1999: 47); and in Tel Beersheba II at a four-room house (430) next to the city gate (Type 9 bowl; Aharoni 1973c: 14) and in the pillared storehouses abutting the city wall (Rooms 221, 282, 283: Type 4 and 6 bowls; ibid.: 14–15).

Against the current view that sees the STNP as the hallmark of the presence of Edomite people, Whiting (2007) argued that what the presence of STNP in the Negev reflects is only a change in the ways of preparation and consumption of food among the local population. Her statistical analysis shows that, while the majority of the STNP that appeared in Negev sites consists of pottery for serving (bowls) and cooking (cooking pots), most of the 'Judaean' wares found in the same sites falls into the storage category. Moreover, the numerical proportion of STNP types

found in the Negev and Edom, as well as throughout the sites inside these areas, is very different. Not only did the STNP assemblage in Edom comprise a broader range of types, but also the distribution was more even among all the pottery types than in the Negev. In fact, four types comprise 70% of the total STNP assemblage in the Negev. Based on these numbers, Whiting reasoned that 'the material culture patterning once thought to show the presence of 'Edomite' people in the southern Levant, may instead be understood as a result of social practice', i.e. the embracing of new ways of preparing and consuming food (Whiting 2007: 133; see a critical review in Tebes 2010).

In order to understand how the prominence of bowls and cooking pots in the STNP repertoire in the Negev affected the local preparation and consumption of food, their morphological features need to be investigated. The typical repertoire of cooking pots concentrated on two open types, neckless or with short neck (Types 10 and 11), unlike the 'Judaean' pottery assemblage, in which both open and closed types were prevalent (e.g. Mazar and Mazar 1989: Fig. 6:5 vs. Shiloh 1986: Fig. 6:16). The diameter of the orifice is important in that the wider it is the easier is to insert and remove food; on the contrary, the narrower the orifice is the better it avoids boiling over and liquid evaporation (Rice 1987: 239-240). This might reflect different culinary practices: open cooking pots permit greater evaporation of liquids, enhancing the chances of burning the food and giving it a different, 'dryer' taste than open types. In addition to the preponderance of open orifices, the use of non-local sandstone clays shows a deliberate attempt to manipulate the taste of the foodstuff. The use of sandstone clay with a high proportion of quartz particles might have decreased firing shrinkage, thus permitting higher temperatures while cooking and boiling, although at the expenses of reducing heating effectiveness (ibid.: 96; Tite 1999: 219). Similarly, the preponderance of decorated flat, open bowls (Types 1 and 2), developing diameter at the expense of depth (Rice 1987: 240), might reveal a fondness for the preparation of 'dryer' meals. Food components react differently to heat, and these combined factors may have in practice promoted the use of different ingredients or diverse combinations of them.

# Elite emulation and conspicuous consumption

There exits ample evidence that some of the STNP bowls were used in elite emulation and conspicuous consumption. Food consumption can be used as a *social and political tool*, both to emulate the power emanating from the civilization powers of the time and to establish social bonds of solidarity between peers, but also to uphold unequal relations of status and power (van der Veen 2003: 413–414).

Ubiquitous production and consumption of flat, open bowls (Types 1 and 2), characterised by their painted and plastic decorations, could reveal a conspicuous manipulation of the display of food. It might be that the use of these open and shallow vessels was driven by the desire to highlight the display of high-valued food, in detriment of its quantity, among the guests. Visual presentation was also

determined by the polychrome painted and plastic decoration, covering the external and internal parts of these vessels and therefore directing the eye both to the food content as well as its containers, while the delicate surface texture, hardness and vessel profile highlighted the tactile performance (see Tite 1999: 220).

As noted first by Bennett (1978: 169-170), certain bowls types of Iron Age Transjordan, particularly our Types 5 and 6, bear a striking resemblance with Assyrian carinated vessels, dubbed 'Palace Ware' and associated in their original contexts with elite drinking rituals (Oates and Oates 2001: Figs. 23, 84, 158). Their period of flourishing is normally dated to the period of Assyrian hegemony in the southern Levant, since the last third of the 8th century BCE (e.g., Singer-Avitz 1999: 54-57; 2002: 159-180). Much like the pottery of Cisjordan (Singer-Avitz 2007: 194; Greer 2010), central Transjordan (Daviau and Graham 2009) and Syria (Whincop 2009: 224–225), the level of influence of the Assyrian vessels on the pottery assemblages of Buseirah and the Negev is outstanding. Not only were the Assyrian bowls continually copied in these areas, but also their influence can be seen in vessels that bore only little resemblance with the Assyrian originals. These Assyrian-style vessels were manufactured locally in sites that, there is no doubt, were not under direct Assyrian rule. Through their use, local consumers ethereally communicated with the political and cultural centre of the time (Assyria), in doing so fostering their social credentials in front of their peers and followers. However, it might be noted that the use of polychrome painted decoration in carinated vessels (and flat bowls) is unique to the STNP and is not replicated in the Assyrian pottery at all. This in contrast with other Levantine pottery types, where there seems to be a deliberate attempt to imitate, if not copy, form, material and decoration of Assyrian bowls (e.g. metal and red-slip bowls imitating Assyrian bronze vessels: Whincop 2009: 225; Greer 2010: 31). Producers and consumers of STNP, therefore, while adopting certain features of the Assyrian vessels, did not replicate them in toto; rather, they accommodated, reformulated, changed and discarded the new foreign cultural traits as they pleased, in doing so making a statement about their own distinct social identity (see below).

Even more, noticeable variations in the contexts of discovery of STNP would point to diverse ways and meanings in their conspicuous consumption. A foremost difference lies in the contexts of discovery east and west of the Arabah: whereas in the Edomite highlands the STNP is heavily concentrated in one site (Buseirah) characterised by monumental (royal) architecture, such as palaces and temples; in the Negev it is more evenly distributed and with no obvious relationship with elite contexts – rather, it is predominantly found in domestic, cultic and trade contexts. The reasons for the popularity of this ceramic in Buseirah might have more to do with sociopolitical developments occurring in the Edomite plateau at the end of the Late Iron Age than with chronological precedence. The low number of painted pottery in the southern Edomite plateau has been attributed to the remote location of most of the local sites as well as to the interest of the local population in avoiding the political control and taxation of the Buseirah elite (Lindner and Knauf 1997). Buseirah by this time became the centre of a loosely centralised polity (Porter 2004)

#### JUAN MANUEL TEBES

and the STNP vessels were probably used as tools for expanding the local rulers' political power. The distribution of 'prestige' objects, more prominently painted pottery, in villages all over the Edomite highland suggests that the Buseirah elite used the distribution and gift-giving of these items as a means to forge and solder alliances with local tribes and clans that lacked access to such goods (Porter 2004: 387–388; but see also Bienkowski 2011). In the Negev, where such level of local sociopolitical complexity did not occur or was rapidly aborted by the presence of a foreign state (Judah) that would not be content with it, STNP existed but did not enjoy the demand of a royal elite and their followers; rather, it seems to have been distributed, albeit in smaller numbers, among local tribal leaders, villagers, nomads, and merchants eager to consume vessels charged with a heavy social significance.

## Cultic activities

At the Qitmit shrine most of the STNP types were found (Type 1, 2, 3, 4, 5, 6, 7, 8, 10, 11 bowls and Type 12 container). Although they are regarded as utilitarian vessels, they were doubtless used in the daily cultic activities in the site. Qitmit has been identified as a shrine where worship to the 'Edomite' deity Qos took place, based on the findings of some inscriptions referring to this god found at the place (Beit-Arieh 1995b). However, owing to the location and characteristics of these sites, it has also been identified as a road sanctuary used by the local pastoral groups and caravans that passed through the area (Finkelstein 1995: 139–144; Bienkowski and van der Steen 2001: 28). In fact, the style of the cultic figurines found at both places is very eclectic and they bear resemblance to Ammonite and Moabite anthropomorphic vessels, and therefore an ethnic adscription is very difficult to assert (Bienkowski and Sedman 2001: 319).

#### Ethnic markers

Analysis of the most current anthropological literature on ethnicity demonstrates that there is not an easy and straightforward correlation between ethnic groups and material culture. Contrary to previous studies in which 'ethnic' groups were visualised as bounded, homogeneous entities, whose histories and geographical movements could be traced through studying their material assemblages, current scholarship stresses that ethnic feelings are, above all, 'aspects of social practices, which have to be continually constructed and generated, and are more effective when this is done through the use of shared ways of doing things' (Lucy 2005: 101; cf. also Jones 1997: 84–105; Emberling 1997). Ethnicity, thus, is a malleable phenomenon, constructed and re-constructed (albeit not infinitely) according to the needs of the social group's members, and enshrined in the specific social, economic and politic situations in which they lived.

How did the peoples of the Iron Age Negev and southern Transjordan view themselves and how were they were identified by the others? Biblical, Neo-Assyrian and Neo-Babylonian sources identify Edom with variant names as one single, autonomous entity existing in the Late Iron Age. The Hebrew Bible

mentions Edom as both a people and a polity several times, particularly since David's reign (for this, see Bartlett 1989). These references are very problematic: the political and religious agenda of the Deuteronomistic history and the late date of Chronicles signify that these sources cannot always be relied upon to depict the history of Judah's neighbours accurately. The first explicit mention to Edom in Assyrian inscriptions appears on the Nimrud Slab, dated to ca. 803 BCE (Pritchard 1969: 281), followed by similar documents referring to Edom and its kings as well (see Bienkowski 2000). However, it would be unwise to deduce that the whole population living in Edom and the Negev and sharing a purportedly 'Edomite' material culture would identify themselves with the categories imposed by the elite of Buseirah or their neighbours. As has been stressed once and again during the last decade, the character of the population of southern Transjordan and the Negev was basically tribal and segmentary (Lindner and Knauf 1997; Bienkowski and van der Steen 2001; Porter 2004; Bienkowski 2009). In this kind of societies the segments that constitute the social corpus (tribes, clans, families) are by and large flexible and accommodate their membership inside larger groups, such as tribal confederacies or tribal kingdoms, through the manipulation of genealogies (Fortes and Evans-Pritchard 1940; Gellner 1969; Baştuğ 1998). Pastoral societies in particular endure constant processes of tribal integration and disintegration, at times coalescing with other segments and at others separating in lesser groups (Rowton 1977: 183–184). Therefore one should not expect to find a rigid correlation between material culture and ethnic category.

Even more, a more careful analysis of the biblical references demonstrates that 'Edom' was not the only category under which the population of southern Transjordan and the Negev were identified by the Biblical authors. The alternative label of 'Seir' or 'sons of Seir' is also frequently used (e.g., the list of descendants of Seir, Gen 36:20-30), and whereas scholars have long assumed that Seir and Edom have always been two names for the same land (cf. Bartlett 1989: 41–44) it is also possible that Seir was the name of another tribal segment of the area, at times inside and at times outside of an Edomite supra-tribal system. Other possible tribal names may include Teman (Jer 49:20) and the 'land of the Temanites' (Gen 36:34), the 'land of Uz' (Lam 4:21) and the variety of sons and chiefs of Edom and Seir that appear in Gen 36:10–30, 40–42. Although most sites in the Negev seem to have lived under Judaean suzerainty during most part of the Late Iron Age, the whole area was occupied by different tribal groups, as demonstrated by the references in Biblical and Assyrian sources. In the Hebrew Bible a conglomerate of diverse tribal and clan names appear in the narratives and, particularly, the genealogies, some of them with more 'Judaean' pedigree than others, while others with none (Tebes 2006a: 13–16). It is also possible that among these people were included some tribal people living in the northwestern Negev and referred to by the Assyrian sources, such as Siruatti the Me'unite (Eph'al 1982: 30, 91) and Idibi'lu (Eph'al 1982: 28–29, 32, 36, 93), mentioned by Tiglath-Pileser III, and the city of Laban's sheikh mentioned by Sargon II (Eph'al 1982: 37, 91–93), allusions

that are frequently paralleled in some Hebrew Bible passages, such as 'the Arabs that dwelt in Gurbaal and the Me'unites' mentioned by 2 Chron. 26:6–7.

There is evidence that the local social groups created rules and cultural symbols aimed at strengthening the ethnic identity in contrast to others and increasing the links with people of the same background. There are clear indications that the elite of Buseirah promoted the cult of the god Qos in order to stress the social and political boundaries with other neighbouring polities – particularly Judah – and in doing so fostering their own political stature. Also, it is extremely likely that the presence of open-air shrines at Qitmit and Hazeva in the Negev, coupled with the several local epigraphic finds mentioning Qos or names composed with it, was seen by the autochthonous groups as symbols to define themselves in contrast to their neighbours (cf. Porter 2004). It is also possible that the manufacture and use of pottery types with certain peculiar attributes, the SJNP, resulted from an ideology of localism vis-à-vis foreign cultural influences coming from the north.

Anthropological research also shows that food ways can be used as a means to signify ethnic identity. Local cuisine is one of the most traditional aspects in a people's cultural traits, and while the archaeological discovery of the use of specific types of cooking pots and bowls should be understood *primarily* as reflecting the patterns of preparation and consumption of food, they can also be interpreted secondarily as transmitting a social identity, pertaining to class, religion, ethnicity or any other kind of character (e.g., van der Veen 2003; Lucy 2005: 105; Faust 2006: 39-40). In the situation current in the Late Iron Negev, the utilization by certain parts of the local population of vessels for cooking and serving that were different from the ones popular farther north (Judah) could be seen as an effort to create and maintain certain social boundaries. While we cannot be certain what specific meaning these boundaries had, it may be reasonable to think, following the Assyrian and Biblical sources that show distinct ethnic groups in the area, that these boundaries were of ethnic nature. Moreover, since the popularity of certain STNP bowls and cooking pots was replicated by a low demand of 'Judaean' vessels of the same type, it can be argued that the STNP was explicitly used to draw an ethnic boundary with the people living to the north. The uneven distribution of these archaeological traits can be explained by the ethnically mixed, heterogeneous population that lived in the Negev, while the occurrence of less STNP types in the local sites than in southern Transjordan was a consequence of the influence of the Judaean food ways west of the Arabah.

As we noted, the use of the STNP 10 and 11 cooking pots might reflect different culinary practices than in Judah proper. It has been suggested that cooking pots, as the ware type that best reflects the gastronomy of the pots' users, constitute key markers of ethnicity (e.g., Killebrew 2005: 219, 222–223). These cooking wares, which cannot be considered luxury items, could have been easily manufactured in the Negev but nonetheless they (or their clays) were imported from the Edomite plateau or the erosional cirques in the northeastern Negev. Although in most cases the proportion of these vessel types is small in the Negev pottery assemblages, there are cases where they comprised the bulk of the local cooking pots: in Malhata

III the STNP cooking pots comprised 85% (Beit-Arieh 1998: 35–36) and in Qitmit the 83% of the whole cooking pot assemblage (Freud and Beit-Arieh 1995: 254). It is possible that most of these pots were brought by villagers and pastoral groups during their itineraries across the Arabah, groups that used them for cooking their own distinct foodstuff during the journeys and when settling down.

The decorative patterns, in the form of painted and plastic decoration, are characteristics present only in the STNP and not in the 'Judaean' ceramics, and thus can be interpreted as transmitting a social meaning too. The pottery traditions popular in the central hill country of Palestine since the Early Iron Age lacked painted decoration, in contrast with contemporary ceramics of the neighbouring regions, such as Philistia, Phoenicia and Transjordan. Most recently, A. Faust has pointed out that whereas the absence of decoration can be attributed to low standards of living in the Iron I, the continuation of this trend in the Iron II cannot but be ascribed to the ideological level, probably an attempt to delineate an ethnic boundary between the Israelites and the neighbouring peoples that did use decorated pottery (Faust 2006: 41–48). In the same vein, and in keeping with several ethnographic studies (Hodder 1985: 155-159; Jones 1997: 113-116), it is possible to argue that the decoration present in the STNP represents a symbol, or better, a counter-symbol, aimed at challenging the notion of identity that the 'Judaean' ceramics carried with them. In other words, by manufacturing, sharing, cooking and consuming with decorated pottery, certain parts of the Negev population maintained a sense of local identity that was different, if not opposite, to the one coming from the north. A more complex process seems to have worked concerning the Assyrian pottery. As already noted, STNP carinated bowls emulated the morphology of the Assyrian 'Palace Ware' vessels, while at the same time maintaining local, distinct patterns of decoration. It is clear that the consumers of the carinated bows were not trying to 'become Assyrian', but rather were intending to strengthen their social status vis-à-vis their fellow guests.

The distribution of the STNP should not be understood as mirroring the presence of Edomites alone because, as shown by the Biblical and Assyrian sources, other local groups might very well have manufactured and used them. The heterogeneous ethnic background of the population living in the Negev and Edom during the Iron Age prevents one from assigning the manufacture and use of STNP to only one ethnic group; therefore, the label 'Edomite pottery' should be discarded for a term with no ethnic relationship. Thus the STNP represents a cultural tradition shared by some social groups living in the arid margins of the southern Levant which possibly developed in response to the expansion of the northern tradition of nondecorated pottery. When did this process begin? Since the pottery found at Khirbet en-Nahas – site where the early antecedents of the decorated STNP vessels can be found – can be dated as early as the 10th century BCE, it can be inferred that the development of the southern tradition of decorated pottery went hand in hand with the spreading out of the Judaean political and military hegemony over the zone. In fact, it is during the 10th century BCE that we have the first archaeological evidences of Judaean settlements in the northern Negev, in the form of small towns, villages and military forts (Herzog 2002). Thus, ironically, whereas the inhabitants of Iron I Cisjordan chose not to decorate their pottery as a meaningful symbol to stand in contrast with their neighbors that did paint their vessels, the expansion of the Cisjordanian pottery tradition into the southern margins caused the development of a series of pottery types with decoration as part of the cultural heritage of the autochthonous groups.

## VI. Conclusion

I defined STNP as those wares occurring in southern Transfordanian and Negev sites of the Late Iron Age that shared certain features defined by four main factors: geographical distribution, morphology, material composition, and decoration. Working against this background, I have distinguished fourteen types that find parallels only in the Negev. The STNP types found in the Negev find most of their parallels in Buseirah, but not in the mostly mountain-top sites in southern Edom. Not only does the term 'Southern Transjordan-Negev Pottery' avoid the ethnic connotation that the term 'Edomite' pottery presents, but also prevents considering the Negev as a cultural 'periphery' of a 'core' culture developed in the highlands of southern Transjordan. In many respects, Edom and the Negev seem to have formed a cultural 'province' with a shared history, socioeconomy and ethnicity. The lack of precise archaeological anchors in the Iron Age sites of southern Transjordan, coupled with their almost horizontal stratigraphy, led to the methodological step of studying the STNP found in the Negev. These sites bear long vertical stratigraphies that show a solid development of pottery typologies. Most significantly, the local sites provide two inestimable chronological linchpins: the destruction layers of the Neo-Assyrian and Neo-Babylonian campaigns in the kingdom of Judah. The most important point, however, is that while previous studies have stressed one or a few factors in the distribution of these ceramics, there is enough evidence to support the assumption that the STNP types operated in fact in different spheres of production, distribution, consumption and symbolism. This ceramic group cannot be treated as one single, monolithic group, and while one pottery type can appear operating in one sphere, others can be functioning in other (possibly conflicting) ambits. I have identified two traditions of pottery manufacture, with their distinct ceramic types, geographical distribution and use of raw materials. The distribution of the STNP types, also, was carried out under different distribution networks: trade, semi-nomadic movements, and migration of people. In the same vein, pottery consumption operated in different fields – food preparation and consumption, elite emulation, conspicuous consumption, cultic activities and ethnic symbolism – in which through a complex network of negotiation and re-negotiation conflated the consumer's desires and the potter's will.

## **Notes**

- 1. Pontifical Catholic University of Argentina University of Buenos Aires National Research Council. This article was initially written during my studies at the Pennsylvania State University under the direction of Ann E. Killebrew. My stay at Penn State was possible thanks to a Fulbright Fellowship. The paper was thoroughly revised and updated during my tenure as Fellow in the CONICET (Argentine National Research Council, 2010–2011) and as Carol and Eric Meyers Fellow at the W.F. Albright Institute of Archaeological Research (2010), Jerusalem. It was presented at the 2008 Annual Meeting of the American Schools of Oriental Research, Boston. I would like to thank Prof. Killebrew, Gonzalo Rubio, Kenneth Hirth and Piotr Bienkowski for reading previous versions of this paper, and Strata's reviewer for providing very valuable comments. However, I bear responsibility for the interpretations and errors that might arise in the article. Lastly, my thanks to the Institute of Archaeology, Tel Aviv University; Israel Antiquities Authority; Israel Exploration Society; Harrassowitz; and the Council for British Research in the Levant for granting me permission to publish the pottery figures.
- 2. A large number of parallels do not possess surviving bases and were not included in the study.
- 3. Thareani has noted in the 'Aroer II assemblage that burnishing seems to be statistically more preponderant in bowls manufactured in the Negev than in Edom proper, probably revealing an adjustment to the Judaean practice of burnishing vessels (Thareani 2010: 39), although it is known that the use of burnishing declines in Judah at the end of the Iron Age.

# **Bibliography**

Aharoni, Y., (1970). 'Three Hebrew Ostraca from Arad', BASOR 197: 16-42.

Aharoni, Y., (ed.) (1973a). Beer-sheba 1: Excavations at Tel Beer-sheba, 1969-1971 Seasons. Publications of the Institute of Archaeology of Tel Aviv University 2. Tel Aviv:

Institute of Archaeology, Tel Aviv University.

Aharoni, Y., (1973b). 'The Stratification of the Site'. Pp. 4–8 in Beer-sheba I: Excavations at Tel Beer-sheba, 1969-1971 Seasons, ed. Y. Aharoni. Publications of the Institute of Archaeology of Tel Aviv University 2. Tel Aviv: Institute of Archaeology, Tel Aviv University.

Aharoni, Y., (1973c). 'The Israelite City'. Pp. 13–18 in *Beer-sheba I: Excavations at Tel Beer-sheba*, 1969-1971. Seasons, ed. Y. Aharoni. Publications of the Institute of Archaeology of Tel Aviv University 2. Tel Aviv: Institute of Archaeology, Tel Aviv

University.

Aharoni, Y., (1973d). 'The History of the City and its Significance'. Pp. 106–114 in *Beer-sheba 1: Excavations at Tel Beer-sheba, 1969–1971 Seasons*, ed. Y. Aharoni. Publications of the Institute of Archaeology of Tel Aviv University 2. Tel Aviv: Institute of Archaeology, Tel Aviv University.

Amiran, R., (1970). Ancient Pottery of the Holy Land. From its Beginnings in the Neolithic Period to the End of the Iron Age. 1st. ed. in Hebrew: 1963. New Brunswick, NJ:

Rutgers University Press.

- Arnold, D. E., (1980). 'Localised Exchange: An Ethnoarchaeological Perspective'. Pp. 147–50 in *Models and Methods in Regional Exchange*, ed. R.E. Fry. SAA Papers 1. Washington DC: Society for American Archaeology.
- Ayalon, E., (1999). 'Area E'. Pp. 40–59 in *Tel 'Ira: A Stronghold in the Biblical Negev*, ed. I. Beit-Arieh. Monograph Series of the Institute of Archaeology 15. Tel Aviv: Tel Aviv University.
- Balla, M., and Gunneweg, J., (in press). 'The Search for the Manufacture Center of Cult Vessels Found in the Iron Age Shrine at 'En Hazeva in the Arava of Israel (by Instrumental Neutron Activation Analysis)', 'Atiqot (English series).
- Bartlett, J. R., (1989). Edom and the Edomites. JSOTSup Series 77. Sheffield: Sheffield Academic Press.
- Bartlett, J. R., (1999). 'Edomites and Idumaeans', PEQ 131: 102-114.
- Baştuğ, S., (1998). 'The Segmentary Lineage System: A Reappraisal'. Pp. 94–123 in *Changing Nomads in a Changing World*, eds. J. Ginat and A.M. Khazanov. Brighton and Portland: Sussex Academic Press, 1998.
- Beit-Arieh, I., (ed.) (1995a). *Ḥorvat Qitmit: An Edomite Shrine in the Biblical Negev*. Monograph Series of the Institute of Archaeology 11. Tel Aviv: Institute of Archaeology, Tel Aviv University.
- Beit-Arieh, I., (1995b). 'The Edomites in Cisjordan'. Pp. 33–40 in *You Shall Not Abhor an Edomite for He is Your Brother. Edom and Seir in History and Tradition*, ed. D.V. Edelman. SBLABS 3. Atlanta: Scholars Press.
- Beit-Arieh, I., (1998). 'The Excavations at Tel Malhata An Interim Report', *Qadmoniot* 31: 30–39 (Hebrew).
- Beit-Arieh, I., (1999). 'Stratigraphy and Historical Background'. Pp. 170–178 in *Tel 'Ira: A Stronghold in the Biblical Negev*, ed. I. Beit-Arieh. Monograph Series of the Institute of Archaeology 15. Tel Aviv: Tel Aviv University.
- Beit-Arieh, I., (2003). 'Judean-Edomite Rivalry in the Negev', *Qadmoniot* 36: 66–76 (Hebrew).
- Beit-Arieh, I., (2007). Horvat 'Uza and Horvat Radum: Two Fortresses in the Biblical Negev. Monograph Series of the Institute of Archaeology 25. Tel Aviv: Tel Aviv University.
- Beit-Arieh, I., and Cresson, B., (1985). 'An Edomite Ostracon from Horvat 'Uza', TA 12: 96–100.
- Beit-Arieh, I., and Cresson, B., (2007). 'Stratigraphy and Architecture'. Pp. 15–76 in *Horvat 'Uza and Horvat Radum: Two Fortresses in the Biblical Negev*, I. Beit-Arieh. Monograph Series of the Institute of Archaeology 25. Tel Aviv: Tel Aviv University.
- Ben-Shlomo, D., Maeir, A. M., and Mommsen, H., (2008). 'Neutron Activation and Petrographic Analysis of Selected Late Bronze and Iron Age Pottery from Tell es-Safi/Gath, Israel', *JAS* 35: 956–964.
- Bennett, C.-M., (1966). 'Fouilles d'Umm el-Biyara: Rapport préliminaire', *Revue Biblique* 73: 372–403.
- Bennett, C.-M., (1978). 'Some Reflections on Neo-Assyrian Influence in Transjordan'. Pp. 165–171 in *Archaeology in the Levant: Essays for Kathleen Kenyon*, ed. by R. Moorey and P. Parr. Warminster: Aris & Phillips.
- Bernick-Greenberg, H., (2007). 'The Ceramic Assemblages and the Wheel-Made Pottery Typology'. Pp. 131–210 in *Excavations at Kadesh Barnea* (*Tell el-Qudeirat*) 1976–1982. *Part 1: Text*, R. Cohen and H. Bernick-Greenberg. IAA Reports No. 34/1. Jerusalem: IAA.
- Bienkowski, P., (1992). 'The Date of Sedentary Occupation in Edom: Evidence from Umm el-Biyara, Tawilan and Buseirah'. Pp. 99–112 in *Early Edom and Moab: The Beginning of the Iron Age in Southern Jordan*, ed. P. Bienkowski. Sheffield Archaeological Monographs 7. Oxford: Collis.

- Bienkowski, P., (1995a). 'The Site and its Exploration'. Pp. 15–18 in *Excavations at Tawilan in Southern Jordan*, ed. C.–M. Bennett and P. Bienkowski. Academy Monographs in Archaeology 8. Oxford: British Institute at Amman for Archaeology and History by Oxford University Press.
- Bienkowski, P., (1995b). 'The Edomites: The Archaeological Evidence from Transjordan'. Pp. 41–92 in *You Shall Not Abhor an Edomite for He is Your Brother. Edom and Seir in History and Tradition*, ed. D. V. Edelman. SBLABS 3. Atlanta: Scholars Press.
- Bienkowski, P., (2000). 'Transjordan and Assyria'. Pp. 44–58 in *The Archaeology of Jordan and Beyond: Essays in Honor of James A. Sauer*, ed. L. E. Stager, J. A. Green and M. D. Coogan. Studies in the Archaeology and History of the Levant 1. Winona Lake: Eisenbrauns.
- Bienkowski, P., (2002). 'The Site and Its Exploration'. Pp. 37–46 in *Busayra Excavations* by Crystal-M. Bennett 1971–1980, ed. P. Bienkowski. British Academy Monographs in Archaeology 13. Oxford: Council for British Research in the Levant by Oxford University Press.
- Bienkowski, P., (2009). 'Tribalism' and 'Segmentary Society' in Iron Age Transjordan'. Pp. 7–26 in *Studies on Iron Age Moab and Neighbouring Areas in Honor of Michèle Daviau*, ed. P. Bienkowski. Ancient Near East Studies Supplement Series 29. Leuven: Peeters.
- Bienkowski, P., (2011). 'The Iron Age Landscape of Umm al-Biyara'. Pp. 114–126 in *Umm al-Biyara: Excavations by Crystal-M. Bennett in Petra 1960–1965*, ed. P. Bienkowski. Levant Supplement Series 10. Oxford: Oxbow and Council for British Research in the Levant
- Bienkowski, P., and Galor, K., (ed.) (2006). Crossing the Rift. Resources, Routes, Settlement Patterns and Interaction in the Wadi Arabah. Levant Supplementary Series Vol. 3. Oxford: Oxbow.
- Bienkowski, P., and Oakeshott, M. F., (2011). 'The Pottery'. Pp. 55–78 in *Umm al-Biyara: Excavations by Crystal-M. Bennett in Petra 1960–1965*, ed. P. Bienkowski. Levant Supplement Series 10. Oxford: Oxbow and Council for British Research in the Levant.
- Bienkowski, P., Oakeshott, M. F., and Berlin, A. M., 2002. 'The Pottery'. Pp. 233–351 in *Busayra Excavations by Crystal-M. Bennett 1971–1980*, ed. P. Bienkowski. British Academy Monographs in Archaeology 13. Oxford: Council for British Research in the Levant by Oxford University Press.
- Bienkowski, P., and Sedman, L., (2001). 'Busayra and Judah: Stylistic Parallels in the Material Culture'. Pp. 310–325 in *Studies in the Archaeology of the Iron Age in Israel and Jordan*, ed. A. Mazar. JSOTSup Series 331. Sheffield: Sheffield Academic Press.
- Bienkowski, P., and van der Steen, E. J., (2001). 'Tribes, Trade and Towns: A New Framework for the Late Iron Age in Southern Jordan and the Negev', *BASOR* 323: 21–47
- Biran, A., (1993). 'Aroer (in Judea)'. Pp. 89–92 in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, vol. 1, ed. E. Stern. Jerusalem: Israel Exploration Society.
- Biran, A., and Cohen, R. (1981). 'Aroer in the Negev', *Eretz Israel* 15: 84\*, 250–273 (Hebrew with English abstract).
- Blakely, J. A., and Hardin, J. W., (2002). 'Southwestern Judah in the Eighth Century B.C.E.', *BASOR* 326: 11–64.
- Cohen, R., (1981). 'Excavations at Kadesh-barnea 1976–1978', BA 44: 93–104.
- Cohen, R., (1993). 'Kadesh Barnea. The Israelite Fortress'. Pp. 843–847 in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, vol. 3, ed. E. Stern. Jerusalem: Israel Exploration Society.
- Cohen, R., and Bernick-Greenberg, H., (2007). Excavations at Kadesh Barnea (Tell el-Qudeirat) 1976–1982. Part 2: Plates, Plans and Sections. IAA Reports No. 34/2. Jerusalem: IAA.

- Cohen, R., and Cohen-Amin, R., (2004). *Ancient Settlements of the Negev Highlands*. Vol. 2: *The Iron Age and the Persian Periods*. IAA Reports No. 20. Jerusalem: IAA (Hebrew with English abstract).
- Cohen-Weinberger, A., and Goren, Y., (2004). 'Levantine-Egyptian Interactions During the 12th to the 15th Dynasties based on the Petrography of the Canaanite Pottery from Tell el-Dab'a', *Ägypten und Levante* 14: 1–32.
- Crowell, B. L., (2007). 'Nabonidus, as-Sila', and the Beginning of the End of Edom', BASOR 248: 75–88.
- Daviau, P. M. M., (2001). 'Family Religion: Evidence for the Paraphernalia of the Domestic Cult'. Pp. 129–229 in *The World of the Aramaeans II: Studies in History and Archaeology in Honour of Paul-Eugène Dion*, eds. P. M.M. Daviau, J. W. Wevers and M. Weigl. JSOT Supplement Series 324. Sheffield: Sheffield Academic Press.
- Daviau, P. M. M., and Graham, A. J., (2009). 'Black-Slipped and Burnished Pottery: A Special 7th-Century Technology in Jordan and Syria', *Levant* 41:41–58.
- Dothan, T., (1982). The Philistines and Their Material Culture. Jerusalem, Israel Exploration Society.
- Emberling, G., (1997). 'Ethnicity in Complex Societies: Archaeological Perspectives', *Journal of Archaeological Research* 5: 295–344.
- Eph'al, I., (1982). The Ancient Arabs: Nomads on the Borders of the Fertile Crescent 9th-5th Centuries B.C. Leiden: Brill.
- Faust, A., (2006). *Israel's Ethnogenesis: Settlement, Interaction, Expansion and Resistance*. London, Equinox.
- Finkelstein, I., (1995). Living on the Fringe. The Archaeology and History of the Negev, Sinai and Neighbouring Regions in the Bronze and Iron Ages. Monographs in Mediterranean Archaeology 6. Sheffield: Sheffield Academic Press.
- Finkelstein, I., and Beit-Arieh, Y., (1999). 'Area E'. Pp. 67–87 in *Tel 'Ira: A Stronghold in the Biblical Negev*, ed. I. Beit-Arieh. Monograph Series of the Institute of Archaeology 15. Tel Aviv: Tel Aviv University.
- Finkelstein, I., and Na'aman, N., (2004). 'The Judahite Shephelah in the Late 8th and Early 7th Centuries BCE', *Tel Aviv* 29: 60–79.
- Fortes, M., and Evans-Pritchard, E. E., (1940). 'Introduction'. Pp. 1–23 in *African Political Systems*, eds. M. Fortes and E. E. Evans-Pritchard. London: Oxford University Press.
- Freud, L. (1999). 'The Iron Age'. Pp. 189–289 in *Tel 'Ira: A Stronghold in the Biblical Negev*, ed. I. Beit-Arieh. Monograph Series of the Institute of Archaeology 15. Tel Aviv: Tel Aviv University.
- Freud, L., (2007). 'Iron Age Pottery'. Pp. 77–121 in *Horvat 'Uza and Horvat Radum: Two Fortresses in the Biblical Negev*, I. Beit-Arieh. Monograph Series of the Institute of Archaeology 25. Tel Aviv: Tel Aviv University.
- Freud, L., and Beit-Arieh, I., (1995). 'Pottery'. Pp. 209–257 in *Horvat Qitmit: An Edomite Shrine in the Biblical Negev*, ed. I. Beit-Arieh. Monograph Series of the Institute of Archaeology 11. Tel Aviv: Tel Aviv University.
- Fritz, V., and Kempinski, A., (1983). Ergebnisse der Ausgrabungen auf der Hirbet el-Mšāš (Têl Māsōś) 1972–1975. Vol. 2: Tafelband. Wiesbaden: Harrassowitz.
- Gellner, E., (1969. Saints of the Atlas. London: Weidenfeld and Nicholson.
- Gifford, J. C., (1960). 'The Type-Variety Method of Ceramic Classification as an Indicator of Cultural Phenomena', *American Antiquity* 25/3: 341–347.
- Glueck, N., (1935). Explorations in Eastern Palestine II. AASOR 15. New Haven: ASOR. Glueck, N., (1967). 'Some Edomite Pottery from Tell el-Kheleifeh, Parts I and II', BASOR 188: 8–38.
- Greer, J. S., (2010). 'An Israelite *Mizrāq* at Tel Dan?', *BASOR* 358: 27–45.
- Gunneweg, J., and Balla, M., (2002). 'Instrumental Neutron Activation Analysis, Busayra and Judah'. Pp. 483–485 in *Busayra: Excavations by Crystal-M. Bennett 1971–1980*,

ed. P. Bienkowski. British Academy Monographs in Archaeology 13. Oxford: Oxford

University Press.

Gunneweg, J., and Balla, M., (2007). 'The Provenance of Anthropomorphic Figurines found at Khirbat al-Mudayna in Moab as Compared to Similar Figurines found at Khirbet Qitmit in Israel, by Neutron Activation Analysis'. Pp. 223–232 in *Second International Conference on Science and Technology in Archaeology and Conservation (December 7-12, 2003, Jordan)*, ed. T.S. Akasheh. Granada: Fundación El Legado Andalusí.

Gunneweg, J., Beier, T., Diehl, U., Lambrecht, D., and Mommsen, H., (1991). 'Edomite', 'Negevite' and 'Midianite' Pottery from the Negev Desert and Jordan: Instrumental

Neutron Activation Analysis Results', Archaeometry 33: 239–253.

Gunneweg, J., and Mommsen, H., (1990). 'Instrumental Neutron Activation Analysis and the Origin of Some Cult Objects and Edomite Vessels from the Horvat Qitmit Shrine',

Archaeometry 32: 7–18.

- Gunneweg, J., and Mommsen, H., (1995). 'Instrumental Neutron Activation Analysis of Vessels and Cult Objects'. Pp. 280–286 in *Horvat Qitmit: An Edomite Shrine in the Biblical Negev*, ed. I. Beit-Arieh. Monograph Series of the Institute of Archaeology 11. Tel Aviv: Tel Aviv University.
- Hart, S., (1989). *The Archaeology of the Land of Edom*. Unpublished PhD Dissertation. Sydney: Macquarie University.
- Hart, S., (1995). 'The Pottery'. Pp. 53–66 in *Excavations at Tawilan in Southern Jordan*, ed. C.–M. Bennett and P. Bienkowski. British Academy Monographs in Archaeology 8. Oxford: British Institute at Amman for Archaeology and History by Oxford University Press.
- Herr, L. G., and Clark, D. R., (2008). 'Madaba Plains Project: Excavations at Tall al-'Umayri, 2006', ADAJ 52: 181–202.
- Herzog, Z., (1993). 'Tel Beersheba'. Pp. 167–173 in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, vol. 1, ed. E. Stern. Jerusalem: Israel Exploration Society.
- Herzog, Z., (1997). 'Beersheba'. Pp. 287–291 in The Oxford Encyclopedia of Archaeology in the Near East, vol. 1, ed. E.M. Meyers. New York and Oxford: Oxford University Press.
- Herzog, Z., (2002). 'The Fortress Mound at Tel Arad: An Interim Report', *Tel Aviv* 29: 3–109.
- Hodder, I., (1985). 'Boundaries as Strategies: An Ethnoarchaeological Study'. Pp. 141–159 in *The Archaeology of Frontiers and Boundaries*, eds. S.W. Green and S.M. Perlman. Orlando: Academic.
- Jones, S., (1997). The Archaeology of Ethnicity: Constructing Identities in the Past and Present. London & New York: Routledge.
- Kenyon, K. M., (1976). 'The Date of the Destruction of Iron Age Beersheba', *PEQ* 108: 63–64.
- Killebrew, A. E. (2005). Biblical Peoples and Ethnicity. An Archaeological Study of Egyptians, Canaanites, Philistines, and Early Israel, 1300–1100 B.C.E. SBL Archaeology and Biblical Studies 9. Atlanta: SBL.
- Kolodner, D., Avigad, D., Ireland, T.R., and Garfunkel, Z., (2009). 'Origin of Lower Cretaceous ('Nubian') sandstones of North-east Africa and Arabia from detrital zircon U-Pb SHRIMP dating', *Sedimentology* 56–7: 1–14.
- Lindner, M., and Knauf, E.A., (1997). 'Between the Plateau and the Rocks: Edomite Economic and Social Structure', *SHAJ* 6: 261–264.
- Lindsay, J., (1999). 'Edomite Westward Expansion: The Biblical Evidence', *Ancient Near Eastern Studies* 36: 48–89.
- Lipiński, E., (2006). On the Skirts of Canaan in the Iron Age: Historical and Topographical Researches. Orientalia Lovaniensia Analecta 153. Leuven: Peeters.

- Lipschits, O., (2003). 'Demographic Changes in Judah Between the Seventh and the Fifth Centuries B.C.E.' Pp. 323–376 in *Judah and the Judeans in the Neo-Babylonian Period*, ed. O. Lipschits and J. Blenkinsopp. Winona Lake, Ind.: Eisenbrauns.
- Lipschits, O., (2005). The Fall and Rise of Jerusalem: Judah under Babylonian Rule. Winona Lake, Ind.: Eisenbrauns.
- Lucy, S., (2005). 'Ethnic and Cultural Identities'. Pp. 86–109 in *The Archaeology of Identity: Approaches to Gender, Age, Status, Ethnicity and Religion*, ed. M. Díaz-Andreu, D. Lucy, S. Babić and D.N. Edwards. London & New York: Taylor & Francis. Mazar, E. (1985). Edomite Pottery at the End of the Iron Age', *IEJ* 35: 253–269.
- Mazar, E., and Mazar, B., (1989). Excavations in the South of the Temple Mount: The Ophel of Biblical Jerusalem. Qedem 29. Jerusalem. Institute of Archaeology, the Hebrew University of Jerusalem.
- Na'aman, N., (1980). 'The Inheritance of the Sons of Simeon', ZDPV 96: 136–152.
- Na'aman, N., and Thareani-Sussely, Y., (2006). 'Dating the Appearance of Imitations of Assyrian Ware in Southern Palestine', *Tel Aviv* 33: 61–82.
- Nicklin, K., (1979). 'The Location of Pottery Manufacture', Man 14:436–458.
- Oakeshott, M. F. (1978). A Study of the Iron Age II Pottery of East Jordan, with Special References to Unpublished Material from Edom. Unpublished PhD Dissertation. London: University of London.
- Oates, J., and Oates, D., (2001). *Nimrud: An Assyrian Imperial City Revealed*. London: British School of Archaeology in Iraq.
- Peacock, D. P. S. (1981). 'Archaeology, Ethnology and Ceramic Production.' Pp. 187–194 in *Production and Distribution: A Ceramic Viewpoint*, ed. H. Howard and E. L. Morris. Oxford: BAR International Series 120.
- Porter, B. W., (2004). 'Authority, Polity, and Tenuous Elites in Iron Age Edom (Jordan)', Oxford Journal of Archaeology 23: 373–395.
- Pritchard, J.B., (ed.) (1969). Ancient Near Eastern Texts Relating to the Old Testament. 3rd. ed. with Supplement. Princeton: Princeton University Press.
- Rice, P. M., (1987). *Pottery Analysis: A Sourcebook*. Chicago & London: University of Chicago Press.
- Rouse, I., (1960). 'The Classification of Artifacts in Archaeology', *American Antiquity* 25/3: 313–323.
- Rowton, M. B., (1977). 'Dimorphic Structure and the Parasocial Element', *JNES* 36: 181–198.
- Shiloh, Y., (1986). 'A Group of Hebrew Bullae from the City of David', *IEJ* 36: 16–38. Singer-Avitz, L., (1999). 'Beersheba A Gateway Community in Southern Arabian Long-Distance Trade in the Eighth Century B.C.E.' *Tel Aviv* 26: 1–75.
- Singer-Avitz, L., (2002). 'Arad: The Iron Age Pottery Assemblages', *Tel Aviv* 29: 110–214. Singer-Avitz, L., (2004). 'Busayra Painted Ware' at Tel Beersheba', *Tel Aviv* 31: 80–89.
- Singer-Avitz, L., (2007). 'On Pottery in Assyrian Style: A Rejoinder', *Tel Aviv* 34: 182–203. Smith, N. G., and Levy, T. E., (2008). 'The Iron Age Pottery from Khirbet en-Nahas,
- Smith, N. G., and Levy, T. E., (2008). 'The Iron Age Pottery from Khirbet en-Nahas Jordan: A Preliminary Study', *BASOR* 352: 41–91.
- Tebes, J. M., (2006a). 'You Shall Not Abhor an Edomite, for He is Your Brother': The Tradition of Esau and the Edomite Genealogies from an Anthropological Perspective', *JHS* 6: 1–30.
- Tebes, J. M., (2006b). 'Trade and Nomads: The Commercial Relations between the Negev, Edom, and the Mediterranean in the Late Iron Age', *Journal of the Serbian Archaeological Society* 22: 45–62.
- Tebes, J. M., (2006c). 'Iron Age 'Negevite' Pottery: A Reassessment', AntOr 4: 95–117.
- Tebes, J. M., (2009). 'The Pottery from Khirbet en-Nahas: Another View', *Wadi Arabah Project website*. http://www.wadiarabahproject.man.ac.uk/titlepage/news/Antiquity/Paper\_Pottery\_Faynan%5B1%5D.pdf

Tebes, J. M., (2010). Review of: Whiting, Ch. M. 2007. Complexity and Diversity in the Late Iron Age Southern Levant: The Investigations of 'Edomite' Archaeology and Scholarly Discourse. Oxford. PEO 142-2: 146-151.

Thareani. Y. (2010). 'The Spirit of Clay: "Edomite Pottery" and Social Awareness in the

Late Iron Age', *BASOR* 359: 35–55.

Thareani-Sussely. Y., (2007). 'Ancient Caravanserais: An Archaeological View from 'Aroer', Levant 39: 123-141.

Tite, M. S., (1999). 'Pottery Production, Distribution, and Consumption – The Contribution of the Physical Sciences', *JAMT* 6–3: 181–233. van der Veen, M., (2003). 'When is Food a Luxury?', *WA* 34: 405–427.

Whincop, M. R., (2009). Pots, People and Politics: A Reconsideration of the Role of Ceramics in Reconstructions of the Iron Age Northern Levant. BAR International Series 1902. Oxford: Archaeopress.

Whiting, C. M., (2007). Complexity and Diversity in the Late Iron Age Southern Levant: The Investigation of 'Edomite' Archaeology and Scholarly Discourse. BAR International

Series 1672. Oxford: Archaeopress.

Zeitler, J. P., (1992). "Edomite" Pottery from the Petra Region. Pp. 167–176 in Early Edom and Moab: The Beginning of the Iron Age in Southern Jordan, ed. P. Bienkowski. Sheffield Archaeological Monographs 7. Oxford: Collis.

Zimhoni, O., (1983). 'The Pottery.' Pp. 127–130 in Ergebnisse der Ausgrabungen auf der Hirbet el-Mšāš (Têl Māśōś) 1972–1975, ed. V. Fritz and A. Kempinski. Wiesbaden:

Harrassowitz.

Zimhoni, O., (1997). Studies in the Iron Age Pottery of Israel: Typological, Archaeological and Chronological Aspects. Sonia and Marco Nadler Institute of Archaeology of Tel Aviv University, Occasional Publications Series 2. Tel Aviv: Institute of Archaeology, Tel Aviv University.



# Flotation Procedures in the Southern Levant: A Summary of 20 Years of Work Part II

## EGON H. E. LASS

What follows is a continuation of a report the first part of which was published in the last edition of *Strata* 28 (2010). The first part contained a detailed description of methodologies and references to projects which have been successfully completed in other parts of the world. The present discussion focuses on Israel.

## Lod

In February through June, 2000, during salvage excavations at Early Bronze Age Lod on behalf of the Antiquities Authority, directed by Eli Yannai and Ofer Marder, 173 flotation samples were collected from 35 floors, ranging from one to 15 samples, depending on the size of the floor, and from six additional pits and installations. The total gross weight of the samples came to 1,810.8 kg, yielding a heavy fraction of 101.0 kg. The material culture that was sorted from the flotation samples included pottery, bone, micro- and macroflints, eggshells, snails, seashells and occasional finds, such as beads, slag, reed-impressed clay, fossils, etc. totalling 77,909 sorted items. The two categories that were significantly larger than all others were bones and flint microchips. The general tendency was toward congruence and compatibility, meaning that in most cases, if the bone distribution was a certain number, the microchip distribution tended to be close to that number, and if bone was clustered in a certain place, microchips tended to cluster in the same location (Figure 9).

The largest heavy fraction, number of bones, microchips, microflakes, macrochips and eggshell fragments, i.e. those items that indicate a domestic context, were found in area D, at the western end of the excavations. To a certain degree, the opposite was true of areas B1 and B2 at the eastern end of the excavations, where evidence of domestic activity was less intense. The finds indicated that the eastern part of the town may have been the public/industrial sector, whereas the western part was the private sector (Cf. the social and architectural models at the semi-micro level in Clarke 1977: 11).

The greatest number of flint microflakes per kg of soil occurred in area D. However, this large number of microflakes turned out to be only 3.4% of the microchips. In the eastern section of the town, where the number of microchips was lowest per kg of soil, the percentage of microflakes was the highest (4.3% in area B1, 4.6% in area B2). This may indicate either a very intense use of stone tools,

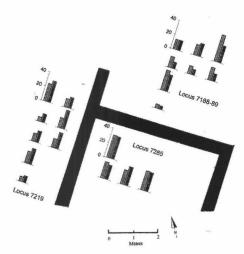


Fig. 9. Lod. Distribution of bones and microflints in and around an Early Bronze Age house, in items per kg of soil.

or a specialized refining in the final stages of tool making. The overall percentage of microflakes across the site was 3.6%. The Neolithic outdoor sites in Modi`in which yielded 6% and 6.5% are quite high when compared to the Lod samples. The micro-archaeological evidence at Lod indicates domestic flint tool use, but not a flint tool industry. Most of the tools were made elsewhere and underwent modification during their period of use in Lod. The macro-archaeological evidence may differ from this point of view.

Botanical remains attest to the known historical trends in the Early Bronze IB period: that there was a large scale wine and olive oil culture, that agricultural specialization caused a rise of complex societies and that there was a lively trade with Egypt via the Sinai Peninsula (Finkelstein and Gophna 1992: 12–14). Judging by the different sizes of grain, from very slim to plump forms, experimentation with grains was in its initial stages. Of the botanical remains that were handsorted out, 82% of the samples contained olive remains, 63% contained legume, 59% contained grains, 50% contained grape, and parenthetically, 65% contained coxcomb (my thanks to N. Lipschitz for identifying it), a kind of flower botanically known as Celosia cristata, leaving a seed that is characteristically smooth on one side and jagged on the other. It is here mentioned because of its rarity in other sites. None of the sampled excavations yielded as large a number of legumes as did Lod, and the fact that all categories were found in 50% or more of the samples is an attestation to a broad spectrum, local economy in which no authority is making demands on the populace to focus their agricultural production on a cash crop.

Studies at Lod were not limited to floor and installation samples. An extensive study of mudbrick included 117 flotation samples from 81 mudbrick walls, from which a total of 51,135 items were sorted, including potsherds, bone fragments,

#### FLOTATION PROCEDURES IN THE SOUTHERN LEVANT

microflints, microflakes, macroflints, seashell fragments, snails, and eggshell fragments; other rare finds included beads, metal fragments, fossils, etc. The total gross weight of the samples came to 1,163.6 kg, yielding a heavy fraction of 33.71 kg.

Every single wall yielded an abundance of cultural material. That is to say, all the building material of walls came from soil that had been culturally deposited, and no sample came from sterile soil. The largest mean number of items per sample came from Area A2, which was centrally located in the excavations. The smallest number of items per sample came from area B2, a peripheral area in the excavations to the west of which the soil appeared to have no deep stratification. The flint microflakes comprised 4% of all the microchips. A computation of percentages from separate areas showed that they varied from 3 to 5%. Of the botanical remains that were hand-sorted from the mudbrick samples 61% contained olive remains, 57% contained grains, 51 % contained legumes, 32% contained grape, and 43% contained coxcomb.

There were nine cases in which walls bordered floors, and the two could be compared. Five of the floors were richer in cultural material than their walls, which was the expected condition. Three of the floors were very close to their walls in cultural content, and one wall was substantially richer than its floor. Bricks were quarried from earlier strata in the vicinity of building sites, and the nature of these strata determined the nature of the bricks.

From the micro-archaeological point of view, Lod is a very rich site. The overall count of items per kg of soil reached 43, and in Area D came to 53.7. The main reason for this high number is that stone tools were an important part of life; the global reading of microchips only came to 18.9 per kg of soil, but even the number of bones at Lod was quite large. The overall quantity of the site was 19.9 per kg of soil. No analysis of the bones has been made, but eight otoliths found in the different areas indicate that fish was an occasional food.

The repertoire of activities at Lod was narrow, even monotonous. The fact that only one single floor in the entire area showed the signs of smelting demonstrates how very special this activity was. The rest of the populace did not appear to possess any unique skills. For instance, very seldom were bone and stone carved into decorative elements. In area D three superimposed floors were sampled, affording an opportunity to study diachronic development. None of the category distributions exhibit any abnormal change.

#### Suba

In May, 2001, fifty-one flotation samples were taken from six fine gridded floors in the cave at Suba, and an additional sample from an installation (The excavations were directed by Shimon Gibson and James D. Tabor). The number of samples from each floor ranged from 12 to 4 samples, according to the size of the floor. A total of 728.6 kg of soil were collected, yielding a heavy fraction of 250 kg. Soil from the Suba cave was heavy with clay, so that the first washing produced a thick,

dark brown soup. The infinitesimal particles of clay did not sink, but remained in suspension, so the sample had to be washed several times.

In order to understand the nature of the activities that took place in the cave, the main question was, whether those activities were of a domestic nature or not. Because the floors were made up of wadi gravels, the heavy fraction was unusually heavy. The number of bones, flints and eggshells were unusually small. They were too small to represent domestic activities. The few botanical remains, eggshell fragments and five fish bones did attest to very occasional meals, which were probably semi-vegetarian in nature. Comparatively speaking, no other site remotely had so many potsherds (Figure 10), and there was no question that pottery vessels were the main focus of activity in the cave, possibly connected to water, in a process like immersion and the ritual smashing of vessels when it was completed (Gibson 2004: 158–9).

Statistically speaking, items per kg of soil showed the true relationship in diachronic development. In Table 1 the loci are arranged in their stratigraphical position, beginning with the earliest locus, 165, at the bottom. Here the count of the potsherds is 15.3 per kg of soil. During the 1st century this count soars to 26.5 per kg of soil in Locus 163, when the sherd-connected activity is at its most intense. Thereafter, the count decreases in a smooth curve all the way up to Locus 155, where it stands at 10.3 potsherds per kg of soil. At the top of the stratigraphical column is Locus 180, which occurred centuries later in the Byzantine/Abbasid period. Whereas during the Late Roman period, all of the loci showed double digit pottery counts per kg of soil, in the Byzantine/Abbasid period the count is a

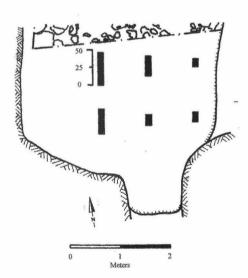


Fig. 10. Suba. Distribution of potsherds at the front of the cave, during their greatest intensity in the 1st century CE, in items per kg of soil.

#### FLOTATION PROCEDURES IN THE SOUTHERN LEVANT

Table 1. Suba. Diachronic development of potsherd magnitudes.

| Locus   | Number of samples | Potsherds per<br>kg of soil | Bones per kg<br>of soil |  |  |
|---------|-------------------|-----------------------------|-------------------------|--|--|
| 180     | 8                 | 0.3                         | 1.2                     |  |  |
| 155     | 11                | 10.3                        | 0.1                     |  |  |
| 156     | 12                | 12.2                        | 0.9                     |  |  |
| 157     | 8                 | 14.8                        | 0.2                     |  |  |
| 158/159 | 5                 | 16.2                        | 0.4                     |  |  |
| 161     | 9                 | 18.3                        | 0.07                    |  |  |
| 163     | 6                 | 26.5                        | 0.09                    |  |  |
| 165     | 1                 | 15.3                        | 0.1                     |  |  |
| Total   | 60                | 13.4                        | 0.4                     |  |  |

fraction per kg of soil. The most significant item is the bone count; when potsherds are at their apex, bones are at their nadir, but in the latest period they may actually represent occasional meat consumption, something unheard of in the Late Roman period.

The four loci in pool 2 are quite meagre in cultural material. Potsherds are either a fraction or single digit per kg of soil, and all other finds are few and far between. Calling them evidence of domestic activity is too far a stretch. After abandonment in the Iron Age, the pool was used as an occasional shelter, in which mostly vegetarian meals were processed. The distribution of botanical remains (charcoal, olive, grape, and grain) shows that the upper surface, Locus 231, bore the most evidence for food preparation. In the entire site, in all of its loci and periods, the evidence shows that domestic activity was not a primary concern, but that activity was focused on other pursuits.

### Motza

In August and September 2004, during archaeological excavations at Motza, directed by the late Carsten Peter Thiede and Egon H.E. Lass (Thiede, Lass, and Lewis 2005, Thiede and Lass 2005, 2006), 13 flotation samples weighing 123.9 kg were collected from two Mamluk floors onto which a 1 m fine grid had been imposed, yielding a heavy fraction of 22.4 kg. The floors were found substantially above the floor of a Crusader building, and most likely represented evidence of squatters. A total of 1,840 items were sorted out, including bone, flint macrochips, microchips, microflakes, eggshell, snails, and seashells. The greatest category was flint, 157 macrochips and 1602 microchips, of which 52 were microflakes, i.e. 3%. This denotes a typical percentage for domestic activities, in which stone tools were used and re-sharpened. It does not represent an industry of the entire tool

production process, in which the percentage of microflakes can be as high as 7%, as was seen in the industrial Neolithic deposits of Modi`in.

Unfortunately, the flint was not *in situ*, but had been transferred to the Mamluk floors from nearby Neolithic deposits. This places the whole analysis in question, because if microflints can be transferred, so can bones and eggshells. However, this study proceeded in good faith, taking for granted that the only thing transferred were flint chips. If other cultural deposits were indeed *in situ*, then the small size of bones, eggshells and fish scales would have kept them fairly close to the site of deposition, even after a sweeping (Figure 11).

In the botanical counts, the fine grids of Locus 47 showed 4 instances of charcoal and 1 of olive; those of Locus 48 showed 9 of charcoal, 9 of olive, 6 of grain, 4 of legume, and 1 of grape. This is probably fairly representative of a Moslem economy, in which olive oil was of primary concern, supplemented by grains and legumes. Grapes were of small interest, since no wine was made. Meat, poultry, and fish complemented botanical foods. Eggshell thickness, ranging from 0.21 to 0.43 mm, compared favourably to modern chicken eggs, with one lone fragment at 0.16 mm coming from a pigeon. The eggshells found at Motza were slightly thinner than modern ones, most likely because the chickens that lay them did not have the benefit of modern nutrients. The distribution shows that the chicken was well domesticated when these eggshells were deposited. The small range of eggshell thickness at Motza is one of the prime reasons for thinking that the material culture categories analysed here are from primary deposits.

The total items per kg of soil, 14.9, are quite low as archaeological sites go, particularly when the fertile surrounding region is considered. This does not attest to great wealth or a dense population. According to these flotation results, the squatters in the Crusader building at Motza were small in number and quite poor.

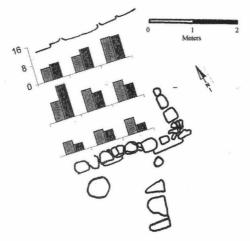


Fig. 11. Motza, Locus 48. Bone and eggshell distribution across a Mameluk floor, in items per kg of soil.

## **Tell Rehov**

In July 2007, during a season of excavation at Tel Rehov, directed by Amihai Mazar, 141 flotation samples were gathered, of which 65 went through the entire flotation process. The number of samples taken from each floor ranged from 5 to 18, depending on the size of the floor.

The total gross weight of the samples that were processed was 550.1 kg, and the heavy fraction weighed 117.6 kg. This weight was comparatively high because of the action of tufa-travertine, which is deposited from solutions in surface water that cling to any solid particles such as pebbles, shells, and roots, thus causing an unusually high weight of the heavy fraction. Among the finds were potsherds, bones, fishscales, snails, seashells, eggshells, flint chips, metal pellets, and slag pellets, making a total of 22,411 items. Botanical remains and other finds, such as beads, man-made artefacts, bitumen, arthropods, etc., were not included in these global statistics. The report was written without access to architectural plans.

The main material culture categories that were found at Tel Rehov during this flotation project were concerned with the preparation, consumption, and dumping of food, as well as the melting and pouring of metal. A number of beads were found, but carved bone and other *objects d'art* were extremely rare.

Among all of the sites sampled, in Tell Miqne, Lod, and Tell Rehov olives were more wide-spread than any other botanical remains. Those that were found in Area D1, the trench in the northwestern corner of the tell, in loci dated to the 11th century BCE, suggested a broad-spectrum economy, including grains, olives, grapes, and the only legumes that were found. Added to this, the loci contained the largest number of fish-bones by far, an astonishing 70% of all the bones found on floor 8833, accompanied by the greatest number of fish-scales and eggshells anywhere. Fish and eggs appear to have been a favourite combination in the ancient world. In Tell Rehov they were discarded together onto several floors, though the only true domestic context was the aforementioned L8833.

Locus 8803 was a street accumulation in which samples were collected in successive elevation levels; each level having its own basket number, allowing an analysis of diachronic change (Figure 12). The elevation of basket 88065 coincided with the elevation of an indoor floor of the adjacent building. The previous layer contained a lot of gravel, much more than all the other samples, and was most likely a result of re-surfacing the street. In consequence the use of the street increased both as a thoroughfare and a dumping ground, and traffic served to fragment the bones and other waste materials, so that the level of basket 88065 had more potsherds, bones, fish-bones, and fish-scales than any other sample in the sequence. At the time of basket 88019, the adjacent house was an abandoned ruin, but the street was still a dumping ground, shown by an increase in bones, fish-bones, fish-scales, and snails. Perhaps the snails liked the combination of less human inhabitants but more algae to feed on.

Area D2 at the bottom of the trench, dated to the 13th century BCE, was the locale of a copper melting operation. This activity was tightly focused on a channel,

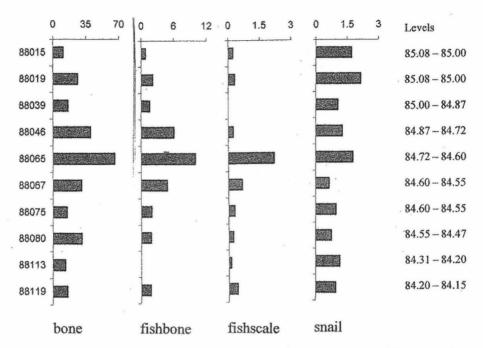


Fig. 12. Tell Rehov. Diachronic distributions of material culture in Street Locus 8803. At the left are basket numbers, at the top items per kg of soil, at the right elevations in MASL.

in which 820 spray pellets were found, plus 14 slag pellets. The relatively small number of slag pellets shows that the metal was quite pure and refined, possibly a product of ingots. It was gathered into crucibles and placed into the channel, where it was heated to melting temperature. The channel contained a lot of charcoal, burnt bones and olive lees, which were probably part of the fuel, but it did not contain copper in any form but small spray pellets, and was not the receptacle of the metal, but rather the firing chamber. The putative crucible would have been located at the south end of the channel, where the spray pellets were very dense. When the metal had melted in the crucible, it was carried slightly beyond the north end of the channel, away from the heat, and poured into a prepared form (or forms). Within the channel the density of copper pellets decreased as the crucible was carried north, but the density of the lighter slag pellets increased going north, and the two distributions were in opposition.

The use of flint tools was extremely sparse; 764 flint chips, or 1.4 flint chips per kg of soil in the 64 samples that were processed. Yet, the number of micro-flakes, 76, or 10% of the micro-chips, was unusually high. The high percentage of micro-flakes at Tel Rehov must mean that absolutely no stone tools were manufactured within the sampled areas, and the debitage was strictly from re-touching or attrition to the blade during work.

## FLOTATION PROCEDURES IN THE SOUTHERN LEVANT

In comparison to other sites, Tel Rehov is among the richer sites that have been sampled. In the number of bones per kg of soil, it is second only to Tell Ashkelon. The small number and nature of eggshells found at the site proves that no fowl had been domesticated during any of the periods that were excavated.

## Ashkelon

In the Leon Levy Expedition to Ashkelon, directed by Lawrence E. Stager and Daniel M. Master, thousands of soil samples have been collected since 1985 for flotation processing and analysis. This report is concerned with 525 samples (200 samples from grid 38; 325 samples from grid 50) dating to the 604 BCE destruction of Ashkelon by Nebuchadnezzar, including floors, occupational debris, and the immediate layers that preceded and followed it. In their stratigraphical table Stager, Schloen, and Master designated this as Period XII, Philistine (late Iron II) ca. 700–604 B.C. (2008: 216). The total gross weight of these samples was 8,137.37 kg, yielding a heavy fraction of 926.37 kg. The samples contained potsherds, bones, fish scales, flint chips, snails, and seashells (the collection of seashells, judged to be of minor relevance, was discontinued), in addition to numerous other finds. Not counting seashells, botanical remains and other occasional finds, the total of sorted items came to 294,259.

The overall message that the data conveyed was, that Ashkelon in the Iron II period was an exuberantly active site. It had more *objects d'art* than any other site that has been sampled so far. It yielded more iron and copper fragments, more beads, and more objects, such as weights and items that needed artistic modification, than all the other sites. Within the site, Grid 50 was substantially richer than Grid 38.

In Grid 50 (Figure 14), a thriving commercial sector, crowds wandered through the streets and either consumed the foods that they had purchased on the spot, or they were prepared for them (Strabo mentions processed fish in Taricheae, also known as Magdala [Geography 16.2.45] and Herodotus, speaking of the Egyptians, mentions dried and pickled fish [History 2.77]), leaving waste materials in close proximity. A case in point is the bowl that was found in the plaza. It was filled with 728 tiny fish vertebrae and one small eggshell fragment. The fish may have been anchovies that are seldom longer than 10 cm, and if every fish left behind 20 vertebrae, that would come to more than 30 fish. Since eggshells are usually not eaten, the one found in the bowl got there by accident. The combination of eggs and fish has already been mentioned as a favorite in the ancient world (see above). Was it the first example of fast foods? In spite of that, during the Iron II period neither chickens nor geese had been domesticated. In Grid 38 every 12 kg of soil yielded one eggshell fragment, compared to every 18 kg of soil in Grid 50, and most of these were from geese. The total number of eggshell fragments deposited during the sampled Iron II Period in Grids 38 and 50 was 522. The Persian period at Ashkelon has not been sampled yet, but a few data are available. Taken together, the samples contain 14 eggshell fragments per kg of soil, compared to 0.06 eggshell

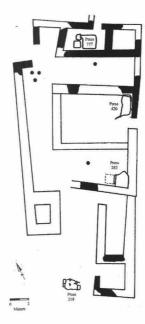


Fig. 13. Ashkelon. Grid 38, the Winery; circles indicate the approximate location of clay seals.

fragments per kg of soil in the Iron II period. It appears that during the Persian period there was a modest beginning for the domestication of chickens. In later periods, samples taken from a single fine grid contained more than a thousand eggshell fragments that ranged in thickness from 0.20 to 0.43 mm, all of which fall into the range of chicken eggshell. During the Iron II, eggs were rarely eaten at Ashkelon and were probably considered a delicacy.

In Grid 38 (Figure 13), an industrial sector for wine production, only the staff that managed the winery was present, which may account for the lesser quantities of debris (the *situlae* that were found in destruction debris and their implication for additional activities in the winery will not be discussed in this report, Cf. Stager, Schloen, and Master 2008: 282). From the botanical remains that did not float, but were picked out of the heavy fraction, there is no question that the economy at Ashkelon was weighted toward viticulture. No waves of grain predominated in the fields, though there were occasional olive groves. Among all of the samples that were sorted, 41 % contained grape-pips, 14% olive pits, 11% grain, and 6% legumes. This profile is very different from any of the sites that have been sampled so far.

The lack of grain at Ashkelon may be an indication for the surprising paucity of rodents. In Grid 38 only 10 out of 69 loci had evidence of rodents in them (though it must be admitted that only jawbones and teeth were cited). Out of those 10 loci, five had grain in them, the rest did not. In Grid 50 only 9 out of 67 loci had evidence of rodents. Of these four had grain in them, the rest did not.

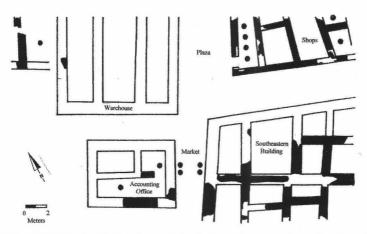


Fig. 14. Ashkelon. Grid 50, the Marketplace; circles indicate the approximate location of clay seals.

The relative number of clay seals in Grids 38 and 50 was practically equal. In Grid 38 every 470 kg of soil contained one clay seal, compared to every 445 kg in Grid 50. The majority of clay seals consisted of finger-printed, string-impressed clay fragments that did not have a seal impression in them. The sealed object probably had four or five seals on it, and perhaps only one or two had a seal impression. The relevant activity was not the sealing of the product, but the breaking and discarding of a seal, demonstrating actual usage of the product, which would have been a letter or a jar.

In Grid 38, four clay seals were found in a transverse room in the northern part of the winery, probably the location of an office in the western part of the room (Figure 13). One clay seal was found in the southern mid-section of the winery, close to a wine press. In Grid 50, one clay seal was found in the western annex to the warehouse, four were found in the first, westernmost shop, two were found in the fourth, easternmost shop, two were found in the 'Accounting Office,' and four were found in the market street (Figure 14). One of the latter was deposited in a small pit cut into a bench lining the street market, on which foods and wares were laid out for sale. It is, perhaps, the most extraordinary locus in the entire flotation corpus. The pit contained all of the botanical categories, one bulla, one string-impressed clay fragment, one bird figurine, one lead weight, one CU earring, one bone spatula, one grinding stone fragment, twelve beads, two ceramic stoppers, two faience sherds, two bi-chrome sherds, 30 copper fragments, 19 iron fragments, 79 otoliths (see below), and the usual other categories that are routinely graphed out. The pit cannot have served one purpose, because the finds are too diverse. Perhaps it was a favorite spot for certain knick-knacks that were eventually forgotten, and it may have become a convenient receptacle for refuse that was littering the bench.

it may have become a convenient receptacle for refuse that was littering the bench.

No actual installation for the melting or smelting of metal was found, but the many small round iron and copper pellets gave an indication that such activities were not unusual for the general populace. At the same time, the number of flint

micro-chips was one of the lowest found at any site. Perhaps there was no need for flint tools, since everyone was making them of metal, as can also be seen from the OT (Sam 13: 19–20):

Now there was no smith to be found throughout all the land of Israel; for the Philistines said, 'Lest the Hebrews make themselves swords or spears'; but every one of the Israelites went down to the Philistines to sharpen his plowshare, his mattock, his axe, or his sickle.

An attempt was made to solve the problem of flint chips and snails (whether they both occur naturally in the surrounding area, and hence have no cultural meaning, or whether they exist in the strata as a direct result of human activity) by collecting two control samples well to the north of Tell Ashkelon and processing them through flotation. It was seen that both samples contained tiny potsherds, and they were discarded. In a second attempt well to the east of the tell, in areas far apart from each other where absolutely no sign of human activity was evident on the surface or below it, two more samples were taken, and both contained tiny potsherds. It appears that potsherds have become a part of the surrounding geology, and nothing can be done about it. No flint was found in any of the samples, but it turned out that snails were far more numerous outside of the tell than in it. Human activity at Ashkelon apparently discouraged the presence of snails, but the few flint chips that were found in the tell did not occur naturally and are therefore a result of human activity, such as re-sharpening flint sickle blades.

Since Ashkelon is located on the Mediterranean shoreline it comes as no surprise that fish was one of the favourite foods. A very convenient way of identifying fish is by the otolith, a hard 'stone' found in the inner ear, which is made up of calcium carbonate and helps the fish to keep its balance. On the obverse side of an otolith is the *sulcus*, which consists of two parts; the anterior part is called the ostium, an oval (or partial oval) depression, which is connected to the posterior part, the cauda, a curving elongated channel (Lernau 1988: 241–242). The most popular fish in Iron II Ashkelon was from the Sciaenidae (Lernau 1988: 296 and Plate 143; Whitehead et al 1986: 865), bearing a very distinctive otolith that has a sulcus shaped like a tadpole, with a massive ostium and a downward curving cauda. All of the differently sized otoliths of this species look the same on the obverse side; on the reverse side, not one is like another, and there are 183 of them. Most of them are probably from the species Argirosomus regius, known by its popular name as meagre. The second most popular fish in Iron II Ashkelon was from the Mugilidae (Desse et al 1987: 7), or mullets, of which there were 147 otoliths. The otolith in this species is elongated, with a small triangular ostium and long cauda which is slightly curved at the end. The third most popular fish in Iron II Ashkelon was from the Cichlidae, or St. Peter's Fish (represented by 48 otoliths), a sweet-water mouth breeder from the Sea of Galilee with an oval otolith, serrated along the edges, bearing an ostium that is almost as long as the cauda. The fourth most popular fish in Iron II Ashkelon was from the Lethrinidae, or Emperor's fish (represented by 30 otoliths), with an oval otolith on which

#### FLOTATION PROCEDURES IN THE SOUTHERN LEVANT

the cauda is fairly straight and high. It occurs only in the Red Sea, not in the Mediterranean (Otoliths of the *Cichlidae* and *Lethrinidae* were identified on the internet on *Fishbase*, with the help of Omri Lernau). The other otoliths (23 in grid 38 and 244 in grid 50, for a total of 267) have not yet been identified. A fifth species, the *Sparidae*, a mollusc-crushing sea bream, has also been identified by its very characteristic jaw and teeth (Lernau 1988: 296 and Plate 145; Cf. Ben-Tuvia 1979). The statistical counts of the *Sparidae* have no relation to any of the other species, since teeth are much more numerous than otoliths. It is revealing that in a city next to the Mediterranean shore two of the most popular species of fish could only be transported in by caravan, one from the Sea of Galilee, and the other from the Red Sea. The high number of bones in Tell Rehov and Lod are examples of intensely domestic deposits. Ashkelon is much higher than both of these, and has a much larger sample. It supports the proposition that fish and other meat products were processed at an industrial scale.

The preliminary study of otoliths from the Iron I (a work still in progress) was deemed important enough to deserve more detailed treatment here. According to the work of Adam Aja (2009) the roughly 200 years of the Iron I in Grid 38 were separated into eight phases, going from phase 20b through 17a. Table 2 shows the distribution of otoliths across the eight phases. Of particular interest are the otoliths from fish that had to be brought in by caravan, Lethrinidae from the Red Sea and Cichlidae from the Sea of Galilee. There are two of each in phase 20b, the very beginning of the Iron I. They probably represent the last intrepid caravanners who were brave enough to ford the tumultuous countryside of that period, before they discovered that this was not a wise thing to do. There are no Cichlidae otoliths to be found throughout the next six phases, and in the very latest phase there is one, which may indicate a very tenuous resumption of trade along the northern route at the very end of the Iron I and the beginning of the Iron II periods. The northern route probably came from the Sea of Galilee or the Jordan River via the Jezreel Valley, across one of the Carmel passes, and down the Via Maris (Monson and Lancaster 2009:9 and passim). As to the southern route from Elath and the Red Sea up the Arabah Valley, by way of the Scorpion's Ascent and Beer Sheba, down to the Coastal Highway (ibid. 2009:17): in the first two phases it is non-existent. Then, from phase 19b through the six remaining phases all the way to the end of the Iron I in phase 17a, there is a scattering of Lethrinidae otoliths, indicating that trade to the south existed through most of the Iron I. As far as can be determined from the data, trade along both northern and southern routes persisted throughout the Iron II.

The Iron II architecture in Ashkelon was a direct expression of the economy. All of the architecture in Grid 38 was constructed for the purpose of producing wine, at least in the original plan, and if there were any spaces in the architecture that were not utilized for that express purpose, they existed in order to fulfil a need that was in some way germane to that purpose, such as feeding the staff of the winery. In later stages, other activities were represented, and not all of the wine presses remained active. In Grid 50 there is evidence for those who *procured*, e.g.

Table 2. Ashkelon, Grid 38. Number of otoliths found through eight phases. N represents number of flotation soil samples available in each phase.

| Phase | N   | Sciaenidae | Mugilidae | Lethrinidae<br>(Red Sea) | Cichlidae<br>(Sea of<br>Galilee) | Unknown |
|-------|-----|------------|-----------|--------------------------|----------------------------------|---------|
| 17a   | 63  | 27         | 14        | 10                       | 1                                | 31      |
| 17b   | 126 | 19         | 28        | 17                       | 0                                | 11      |
| 18a   | 176 | 44         | 26        | 45                       | 0                                | 33      |
| 18b   | 73  | 12         | 13        | 10                       | 0                                | 15      |
| 19a   | 72  | 4          | 4         | 7                        | 0                                | 0       |
| 19b   | 71  | 7          | 8         | 8                        | 0                                | 2       |
| 20a   | 25  | 3          | 3         | 0                        | 0                                | 2       |
| 20b   | 30  | 2          | 5         | 2                        | 2                                | 4       |

fishnet-weights for fishermen sold in the southern market; *processors*, those who processed fish in the southeastern building and in the outdoor markets, particularly in the vicinity of the corners of buildings; *marketers*, those who sold any number and variety of products in the shops, markets, and plaza, and *administrators*, in all of the places in which clay seals were found, which may have sealed records and correspondence pertaining to the products that underwent all of these processes.

## **Tell Migne**

Between the years 1982–1995, during the excavations at Tell Miqne, directed by Seymour Gitin and Trude Dothan, 188 soil samples were taken, targeted for the attention of a geomorphologist. Many of the small samples had been sifted into progressively smaller fractions, while some of the larger ones underwent the process of flotation. Because of the difference of methodology, the samples could not be compared to those of other sites that had been sampled for flotation. For instance, the items per kg of soil in Miqne (203) are comparable only to the sites that have inordinate numbers of flint chips, such as Tell Yaqush (110) and Feature 3 in Modi`in (253), but Miqne does not have particularly inordinate numbers, only a small gross weight. When sampling for flotation, it is customary to take a soil sample from a 1 m fine grid, weighing about 10 kg, often with a large pick, so that not only the floor surface but also its makeup is sampled. The Miqne samples were quite small and may have been taken from surfaces on which substantial cultural content was noted. This would explain the discrepancy between the number of items per kg of soil found in Miqne compared to other sites.

The total weight of all samples collected was 58.67 kg. The mean sample weight was 0.3 kg (since most of the samples did not undergo flotation, no heavy fraction totals were calculated). The samples contained potsherds, bones, snails,

#### FLOTATION PROCEDURES IN THE SOUTHERN LEVANT

seashells, macroflints, microflints, microflakes, and eggshells, yielding a total of 11.884 items.

The most vibrant areas for human activity in Tell Miqne were fields I and III. They had the greatest number of samples that contained reed-impressed clay, attesting roofed buildings and indoor activity. They showed the greatest evidence for fish preparation and consumption, in which the *Sparidae* were a distinct favourite. It is no surprise that there was overwhelming evidence for an olive oil industry (cf. Gitin 1990: 36–38; Finkelstein and Silberman 2002: 269). This was followed by substantial cultivation of grains. Lesser segments of the subsistence economy were viticulture and legumes. The only other identifiable botanical remains were the 4 instances of coxcomb, limited to Field I (my thanks to N. Lipschitz for identifying it at Lod). The economy was so focused on olive oil production, that other industries, such as pyro-technologies, bone carving, and bead manufacture appeared to be rare, at least so far as they were reflected in the samples.

Potsherds showed the greatest density in fields I and III, while snails were most numerous in the latter, but mysteriously avoided human activity in the former. Bones, microflints, and microflakes preponderated in Field I. Microflakes comprised 3% of the microflints, typical of a domestic distribution in which there is use and re-sharpening of flint tools, but no industry. The high percentage of microflakes in Field IV (6%) is based on small numbers and should be viewed with caution.

The distribution of eggshell thickness is comparatively wide, ranging from 0.13 to 0.65 mm. The lower numbers that peak at 0.16 mm are most likely from pigeons. Those that range up to 0.31 mm in thickness are from chickens and those that range up to 0.65 mm are from geese (cf. Mikhailov 1997; Sidell 1993).

## **Summary**

Table 3 presents a summary of all the sampled sites, including Parts I and II of this report. It is the raw data, from which all other calculations are derived, though it does not remotely present all of the categories that were sorted out, only the main ones, not including botanical remains.

At Early Bronze Age Lod a local economy, characterized by a broad spectrum procurement of resources, serving extended family life and small time entrepreneurs, found abundant expression. In Iron II Ashkelon the economy was focused on viticulture, processed seafood, and possibly other meat products. From the micro-archaeological perspective the best model would be a royal economy, internally imposed. This was evident not only in the initial stages of Grid 38 and its winery, but also in the markets of Grid 50, where grape dominated among botanical remains. It is possible, however, that the environment favoured the production of certain products more than it did others, resulting naturally in a single-track economy. Elsewhere at Tell Miqne and Tell Rehov it was focused on olive oil production. An imperialist economy imposed by foreign monarchs, characterised by focused crop production, such as grain for armies, has been encountered, but has not been described in this report.

Table 3. Absolute counts of material culture categories from flotation samples of 13 archaeological sites.

| Site                   | N   | Gross<br>Weight<br>(kg) | Heavy Fraction (kg) | Pottery | Bone    | Flint<br>Chips | Eggshell    | Snails | Items per<br>kg of soil |
|------------------------|-----|-------------------------|---------------------|---------|---------|----------------|-------------|--------|-------------------------|
| Yaqush                 | 258 | 1,750.5                 | Lost                |         | 6,289   | 123,373        |             | 62,822 | 110                     |
| Modi`in Feature<br>128 | 72  | 422.9                   | 90.5 (21%)          |         |         | 4,523          |             | 771    | 15.6                    |
| Modi`in Feature 9      | 208 | 803.9                   | 228.6 (28%)         |         |         | 28,653         |             | 2,500  | 44.6                    |
| Modi`in Feature 3      | 46  | 267                     | Lost                |         | 120     | 94,506         |             | 4,568  | 252.9                   |
| Modi`in Feature 98     | 130 | 781.8                   | 232.2 (30%)         |         | 806     | 995            | Not counted | 14,352 | 20.7                    |
| Tell el-Ful            | 71  | 326.1                   | 86.4 (26%)          | 477     | 3,710   | 1,777          | 544         | 1,765  | 26.1                    |
| Tell Farah (South)     | 109 | 998                     | 74.9 (8%)           | 2,295   | 9,082   | 6,886          | 4,291       | 3,593  | 26.2                    |
| Lod                    | 173 | 1,810.8                 | 101.0 (6%)          | 3,760   | 36,372  | 34,305         | 84          | 1,530  | 43.0                    |
| Suba                   | 51  | 728.6                   | 250 (34%)           | 11,075  | 219     | 437            | 291         | 874    | 17.4                    |
| Moza                   | 13  | 123.9                   | 22.4 (18%)          | 142     | 964     | 1,602          | 669         | 31     | 14.9                    |
| Tell Rehov             | 65  | 550.1                   | 117.6 (21%)         | 444     | 13,188  | 764            | 318         | 1,060  | 40.7                    |
| Tell Ashkelon          | 525 | 8,137.4                 | 926.4 (11%)         | 22,971  | 227,920 | 617            | 522         | 2,818  | 36.3                    |
| Tell Miqne             | 188 | 58.7                    | Not taken           | 981     | 8,869   | 666            | 104         | 812    | 203                     |

#### FLOTATION PROCEDURES IN THE SOUTHERN LEVANT

Of the 13 sites that were sampled, two were pre-historic and one a historic stone tool production site, one was a cave, and ten included domestic contexts. An attempt has been made to show both the nature and range of activities that were represented by the data, or the broad focal points of the changing economies through time. It was assumed throughout that these pursuits were worthwhile, and there is a hope that they will continue. No fact can be deemed too small or too mundane, because somewhere, sometime, that fact will satisfy someone's need to know. So far none of the data collected have undergone a detailed study by the appropriate expert, such as an osteologist, or been published in a comprehensive specialist report. While flotation is being done during many excavations in the Levant, the result is a narrow focus on botanical remains. Every year dozens of floors are excavated without the scrutiny that flotation analysis makes possible. The aged researcher who wrote this report (in the words of an esteemed colleague) plans 'to hit the wall running.' Do enough archaeologists working in the Levant consider these studies to be worthwhile, and are there any other people out there who have the almost infinite patience and forbearance required to carry on the work?

## Acknowledgements

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## **Bibliography**

Aja, A. (2009). *Philistine Domestic Architecture in the Iron Age I*. Harvard University, Cambridge. Unpublished PhD dissertation.

Ben-Tuvia, A., (1979). Studies of the population and fisheries of *Spartus aurata* in the Bardawil Lagoon, eastern Mediterranean. *Investigación Pesquera* 43(1): 43–67.

Clarke, D. L., (1977). Spatial Information in Archaeology. Pp. 1–32, in *Spatial Archaeology*, ed. D. L. Clarke. New York: Academic Press.

Desse, J., Desse-Berset, N. and Rocheteau, M., (1987). Fiches D'Ostéologie Animale pour L'Archeologie. Serie A: Poissons. No. 2, Contribution À L'Ostéométrie Du Mulet.

Centre de Recherches Archéologiques du CNRS.

Finkelstein, I. and Gophna, R., (1992). Settlement, Demographic, and Economic Patterns in the Highlands of Palestine in the Chalcolithic and Early Bronze Periods and the Beginning of Urbanism. Bulletin of the American Schools of Oriental Research 289:

Finkelstein, I. and Silberman, N. A., (2002). The Bible Unearthed: Archaeology's New Vision of Ancient Israel and the Origin of its Sacred Texts. New York: Simon and

Gibson, S., (2004). The Cave of John the Baptist. Century, London.

- Gitin, S., (1990). Ekron of the Philistines, Part II: Olive Oil Suppliers to the World. Biblical Archaeology Review 16: 2.
- Grene, D., (1987). Translation of Herodotus, *The History*. The University of Chicago Press. Jones, H. L., (1930). Translation, The Geography of Strabo. Loeb Classical Library. London: Heinemann.
- Lernau, H., (1988). Fish Remains. Pp. 241–242; 296; Plates 143 and 145 in B. Rothenberg, The Egyptian Mining Temple at Timna. Institute of Archaeo-Metalurgical Studies, Institute of Archaeology, University College London.
- Mikhailov, K. E., (1997). Avian Eggshells: an Atlas of Scanning Electron Micrographs. British Ornitologists' Club. Occasional Publications No. 3.
- Monson, J. M. and Lancaster, S. P. (2009). Regions on the Run: Introductory Map Studies in the Land of the Bible (Biblical Backgrounds, Inc. Rockford, IL).
- Sidell, E. J., (1993). A Methodology for the Identification of Archaeological Eggshell. MASCA, The University Museum of Archaeology and Anthropology, University of Pennsylvania, Philadelphia.
- Stager, L. E., Schloen, J. D., and Master, D. M. (eds.), (2008). Ashkelon I: Introduction and Overview (1985 – 2006). Winona Lake, Indiana: Eisenbrauns.
- Thiede, C.P., Lass, E.H.E., and Lewis, R., (2005). The Excavation of a Crusader Building at Motza. Bulletin of the Anglo-Israel Archaeological Society 23: 9–27.
- Thiede, C.P., Lass, E.H.E., (2005). Moza. HA-ESI 117. Electronic Media publications: Israel Antiquity Authority.
- Thiede, C.P., Lass, E.H.E., (2006). Moza. HA-ESI 118. Electronic Media publications: Israel Antiquity Authority.
- Whitehead, P. J. P., and Bauchot, M. -L., Hureau, J. -C., Nielson, J., and Tortonese, E., (1986). Fishes of the North-eastern Atlantic and the Mediterranean. Volume II. UNESCO.

# A Forgotten Diary and Photograph Collection as Valuable Records for the Historical and Archaeological Study of Israel and Transjordan

## **BART WAGEMAKERS**

A Dutch traveller recorded his journey through the Levant in the mid-1950s by writing an account of his travels as well as taking photographs. This interesting document fell into oblivion for almost 55 years, and its existence finally came to light only recently. The record – which concerns Israel and Transjordan in particular – reflects the historical and archaeological state of affairs at the time and can therefore be considered to be valuable for scientific research in this area. This article casts a glance at the document and reveals the significance of the account and the photographic material.

## The diary and photograph collection

As an employee of the National Museum of Antiquities in Leyden, the Netherlands, I happened to meet Leo Boer¹ (Fig. 1) on an ordinary day in 1999. He approached me with some questions while he was visiting an exhibition. During our conversation, the subject gradually changed, and 30 minutes after we had started talking we were discussing topics such as the land of Israel, biblical archaeology and the Dead Sea Scrolls. It seems that Boer had studied for the priesthood at the Pontificium Institutum Biblicum (Pontificial Biblical Institute) at Rome in the mid-1950s. In the course of his studies, he had the opportunity to stay at the École Biblique et Archéologique Française de Jérusalem for one year (1953-1954), where he concentrated on studying the Bible, joined the third excavation led by Roland de Vaux at Qumran, and participated in many archaeological excursions organised by the École. During this year, Boer kept a diary and took about 800 photographs. Remarkably, he never thought about his travel account or his photographic material after he returned to Rome and, some years later, to the Netherlands.

Initially, Boer made brief notes about events, encounters and experiences in two small notebooks. A few times a week, he wrote out most of these notes into accurate accounts. Although he had ceased to think about his photographs, Boer did make a list of the photographs he had taken. This included the numbers of the

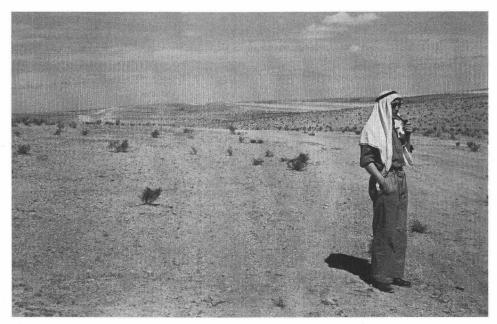


Fig. 1. Leo Boer. All the following photographs were taken by Leo Boer, unless otherwise stated.

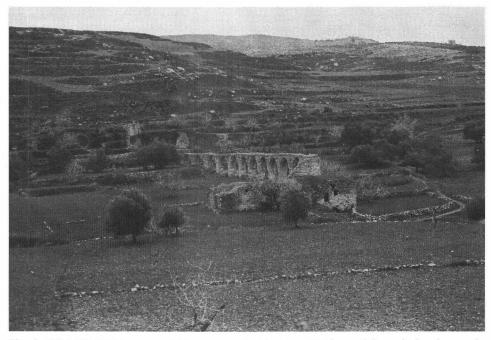


Fig. 2. (12.1.1954) This assumed Roman aqueduct between Nablus and Samaria has been only sporadically photographed from this side.

pictures, captions and the dates when they were taken. Moreover, in his account of his travels, Boer refers to the numbers of the corresponding photographs.

While reading Boer's document and admiring his photographs, I realised that they comprised a significant document with regard to the political, religious and archaeological situation in Israel and Transjordan in the middle of the 20th century. In addition, a considerable number of his photographs were taken from positions from which none of the previously published pictures from the same period had been taken (Fig. 2). Moreover, most of these locations have since changed irreversibly, which makes the purchased material even more valuable.

The account can be divided into the following sections: Boer's journey to East Jerusalem; his stay at the École and in Jerusalem; archaeological hikes; monthly excursions; and journeys through Transjordan and Israel. This article aims to provide a short overview of this inspiring document, and will review the categories mentioned above.

## From Rome to East Jerusalem

Travelling from Rome to East Jerusalem 60 years ago was not as easy as it is today. Boer left Rome on Sunday 4 October 1953 and arrived in Jerusalem 10 days later. From Rome he travelled by train to Naples, and from there he took a boat which was headed for Beirut. Three days after the ship had left Naples, it passed Alexandria, where some of the passengers went ashore. After a stop of six hours, the ship headed for Beirut, where it arrived on 8 October. Boer stayed in Beirut for three days at a monastery run by Franciscan friars, and visited Baalbek (Fig. 3), among other sites. Then, on 11 October, he was brought to Damascus in a taxi, where he stayed with Franciscans for another two days. Finally, Boer took a taxi to East Jerusalem via Amman, where he arrived at the École on 14 October at 3 p.m.

A few issues are striking in Boer's account of the journey to East Jerusalem. He describes in detail the encounters that he had on this journey, especially the ones on the ship, in which he emphasises the religious and cultural background of his discussion partners. It seems that there were a lot of ministers on board. This document also reveals the political circumstances in Egypt at the time. Boer writes that when the boat arrived at the berth in the harbour at Alexandria, the chief of the harbour police dropped by. He welcomed the passengers to Egypt in a variety of languages, and assured them that the situation was under control at the time thanks to Muhammad Naguib, the first president of Egypt (1953-1954). Boer noticed that the defeat of King Farouk was illustrated by the empty royal palace that was located a little bit further on from the boat. Finally, Boer refers twice to cases of anti-Semitism, although both cases involve only brief remarks. The first anti-Semitic incident concerned a fellow passenger – a Muslim from Cairo – whom Boer visited because the man was ill. Boer writes that the man 'had been under the weather much in his lifetime, because his wife was a Jewess'. Further on, when Boer writes about his journey from Baalbek to Damascus, he writes: 'Useless

formalities at the border. Everything went well. Hate against Jews'. Unfortunately, an explanation for this note is lacking.

## Boer's stay in Jerusalem and at the École

The diary illustrates the political circumstances in Jerusalem in the mid-1950s very well. The École (Fig. 4) was located in the Transjordanian sector of the city and was separated from the Jewish section by a length of no man's land. The crossing point was situated at the Mandelbaum Gate (Fig. 5), about 150 m to the north of the École. Travelling from one section to the other required certain formalities, such as being in possession of two passports because it was not possible to have both an Israeli and a Transjordan visa on one passport.

Boer starts his account with a description of the condition of the housing at the École, which was not very good from his point of view. He was staying with 11 other students in a separate building with one faucet and one shower (a rope fastened to a bucket) which sometimes provided warm water. The door to Boer's room – which was also the front door – was too high at the bottom, too low at the top, and too small. There was no heating in the room. The cook at the institute used to be a veterinary surgeon. The story went that he often dished up meat from female camels that had been prepared for hours in a pressure-cooker. Nevertheless, it was inedible, causing many of the residents to go to the Dom Polsky hostel for dinner on a regular basis (Fig. 6).

His stay at the institute offered Boer the opportunity to meet well-known scholars and persons who were at the beginning of their promising scholarly careers. He was in touch with scholars such as Roland de Vaux (who, at the time, was also the director of the École), Louis-Hughes Vincent and Józef Milik.<sup>2</sup> Boer studied together with Maurice Baillet, who was a student at the École from 1952 to 1954 and the eighth member of the 'Cave 4 team' from 1958 onwards, and was present at his farewell party on 23 April 1954. Furthermore, he spent a great deal of time with Ernest-Marie Laperrousaz, who participated in the excavations at Khirbet Qumran under the guidance of de Vaux during these years.

Biblical and archaeological expertise came together, not only in the École, but across the whole of Jerusalem. This was an outstanding and inspiring environment for a 26-year old student. For example, Boer encountered Isac Leo Seeligmann, who had joined the Bible Department of the Hebrew University in 1950, had several conversations with Frank Cross who had just been appointed as the 'annual professor' at the American Schools of Oriental Research for 1953–1954 and was its acting director at the same time, met Kathleen Mary Kenyon (who had been the Honorary Director of the British School of Archaeology in Jerusalem since 1951) twice at Tell es-Sultan nearby Jericho where she was excavating at the time (Kenyon 1954, 1957, 1960–1983), and was guided through the Homo Carmelitanus at the Rockefeller Museum by Dorothy Garrod. Garrod directed the renowned campaign in 1929 when several caves at the foot of Mount Carmel were explored and the remains of human skeletons were discovered (Garrod 1937, 1962).

### A FORGOTTEN DIARY AND PHOTOGRAPH COLLECTION AS VALUABLE RECORDS

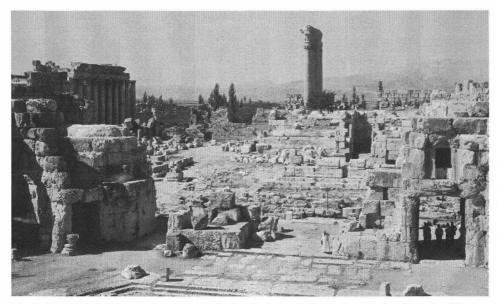


Fig. 3. (11.10.1953) The grand court in Baalbek with the 22 m high columns of the Temple of Jupiter in the background. This photograph was taken from the direction of the Hexagonal Court.

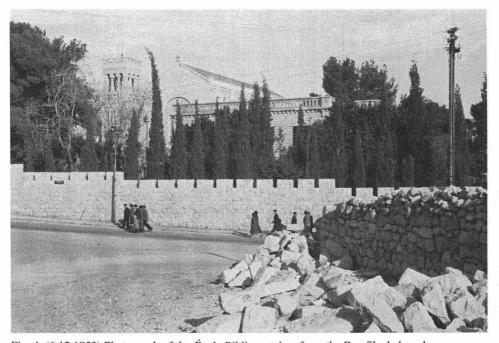


Fig. 4. (6.12.1953) Photograph of the École Biblique, taken from the Ben Shadad road.



Fig. 5. (24.12.1953) The Mandelbaum Gate, on the border between the Transjordan and Israeli sectors. On the right is a signalling board which directs people to the right at the crossing.



Fig. 6. (Bart Wagemakers, 18.1.2011) Dom Polski at Hahoma Hashlishit Street 8, which is still a Polish guest house today.

Finally, Boer had the opportunity to acquire archaeological experience during his time at the École. Despite the fact that he was a student of Biblical studies, he was expected to join in the excavation at Khirbet Qumran for one week, where he participated in de Vaux's third expedition from 20 to 27 March 1954. It became apparent only recently that his visit to Qumran was important with regard to the present research in the field of Qumran archaeology. Boer took more than 20 photographs at the settlement during that week, and some of them seem to be of great significance. Thanks to two of his photographs, existing theories concerning the 'dining room' and the 'pantry' belonging to the Qumran community – L.77 and 86 – need to be reconsidered (Wagemakers and Taylor 2011).

## Historical and archaeological walks

The École used to organise walks to historical and archaeological locations in Jerusalem at an average rate of one every two weeks. Unfortunately, Boer does not describe the walks in his diary in great detail. As he mentions the destinations and dates of walks, we know that they visited (among other sites) the Ophel, the Church of the Holy Sepulchre, Gethsemane, the Mount of Olives, the Garden Tomb, Cedron Valley, Hezekiah's Tunnel, Aceldama, Robinson's Arch and the 'former Jewish Quarter'. Despite the fact that a comprehensive account is lacking, we do have the photographs which Boer took during his visits to these locations at our disposal (Fig. 7).

## Monthly excursions

At the École, Father Lemoine was responsible for conducting the excursions. Once a month, a voluntary daytrip was organised, although the trips were frequently postponed in 1953–1954 because of poor weather conditions. Most of the excursions were rather intensive: the participants left early in the morning, travelled long distances by a private bus, and did not return until the evening. Boer's accounts of the excursions, of which there were five in total, are very detailed, but this is not the proper place to explore their content in its entirety. Nevertheless, in order to illustrate these kinds of excursions, I will list some of the locations which Boer visited and add some of the remarks from Boer's account. Please note that the remarks represent the (archaeological) views of the time. The references to the relevant literature are my own.

The first excursion that Boer joined was to Tell el-Ful (Gibeah).<sup>3</sup> William Foxwell Albright excavated the site in 1922 and found (among other things) the foundations of a building which he attributed to King Saul (Albright 1924: 8). In 1927, parts of the walls collapsed as a result of an earthquake. According to Boer, the site was nothing more than 'a pile of stones' in 1953, although he was in the position to photograph a corner of Saul's building (Fig. 8).

The first stop in the second daytrip was Et Tell (Ai), located 2.5 km northeast of Bethel (Beitin). Judith Marquet-Krause excavated the site in 1933, 1934 and 1935



Fig. 7. (1.6.1954) The 'former Jewish Quarter' at the southeast sector of the Old City in Jerusalem. The Sidna Omar minaret is visible in the background. The domes of both the Tifaret Yisrael Synagogue and the Hurva Synagogue – which used to embellish the skyline of this quarter – are lacking because they were demolished in the war of 1948.



Fig. 8. (12.11.1953) A corner of Saul's building in Tell el-Ful (compare with Albright 1924: 59, Fig. 7). About 10 years after Boer took this photograph, King Hussein of Transjordan decided to build a palace on top of this tell. This building project came to a standstill due to the Six-Day War in 1967.

(Marquet-Krause 1935, 1949). Boer describes the results of the campaign in fairly elaborate detail and mentions *inter alia* three walls, a gate, an ancient sanctuary containing three constructions from different periods, a palace, and a few houses dating from the Iron Age. Later that day, the group drove to Khirbet el-Maqatir – 1 km due west of Et Tell – where they looked for the outlines and pieces of mosaic from a fourth-century church and a monastery dating from the sixth century. Burğ Beitin was the next stop. There they saw a second-century *temenos* and a large part of a Crusader tower measuring  $42 \times 32.60$  m. Unfortunately, the 'modern' town of Beitin had been built on top of the exact location of biblical Bethel, meaning that little could be seen of the campaign which Albright directed there in 1934 (Albright 1934a and b, 1968).<sup>4</sup>

After they visited Jebel el 'Asūr (Baal-Hazor), the group was surprised by a heavy rain shower and had a break in et-Tayyibe. There had not yet been any excavation in this village, but they were able to see the ruins of a Byzantine church and St. Elias, a Crusader castle which was handed over to Boniface of Montferrat by Baldwin IV in 1185. Just outside the town stood the fifth century church of St. George which had been restored by crusaders (Fig. 9).

The destination of another excursion was Hebron and the sites along the road. As the road to Bethlehem and Hebron, which started at the Jaffa Gate in Jerusalem, ran through Israeli territory, the Jordanians decided to build a new road in 1952. Thanks to these building activities, a part of Pilate's water pipe running from 'Ein 'Arrub (Qiriath 'Arbaia) to Jerusalem was uncovered 1 km from Sur Baher (Fig. 10). The group stopped at Solomon's pools<sup>5</sup> (Fig. 11) after visiting the cistern of 'Ein 'Arrub. In Hebron, the group was able to enter the mosque despite being non-Muslims thanks to the permission of the Jordanian Ministry of Awqaf. After they visited the pool of Hebron (2 Sam. 4: 12), the bus brought them to Jebel Rumeide where they saw the city walls of ancient Hebron, topped by the Deir Arbain monastery. In the afternoon, they arrived at Ramat el Khalil, which is ancient Mamre. Boer refers to the excavations of Evaristus Mader some 25 years earlier (Mader 1957), as he summarises the following conclusions: (1) an enclosure, which measured  $65 \times 49$  m, dated from the time of Herod (Mader 1957: 77-78); (2) at the time of Emperor Hadrian (117-136), a temple was built which was dedicated to Hermes (Mader 1957: 81); (3) the 'altar of Abraham' had been found (Mader 1957: 103-106); (4) a church was built on the orders of Constantine I (323-337) (Mader 1957: 99-115); and (5) the ancient floor found beneath the first construction dates from the period of the Kings (Mader 1957: 48).

## Transjordan and Israel

During Boer's stay at the École, the institute organised two extended trips: one through Transjordan (18–29 October 1953) and one through Israel (26 April–13 May 1954). Despite the different destinations, there are many corresponding components in the two journeys. In both cases, the group (Fig. 12) was led by

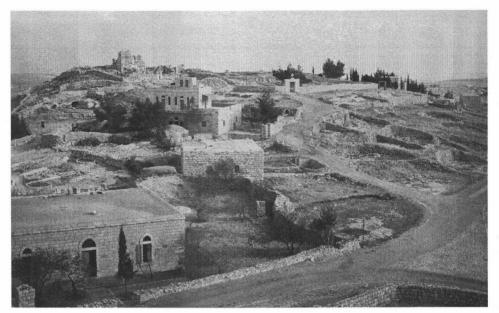


Fig. 9. (26.11.1953) Et-Tayyibe, with the church of St. George in the background.



Fig. 10. (9.12.1953) A first-century water pipe near Sur Baher in southeast Jerusalem.

## A FORGOTTEN DIARY AND PHOTOGRAPH COLLECTION AS VALUABLE RECORDS

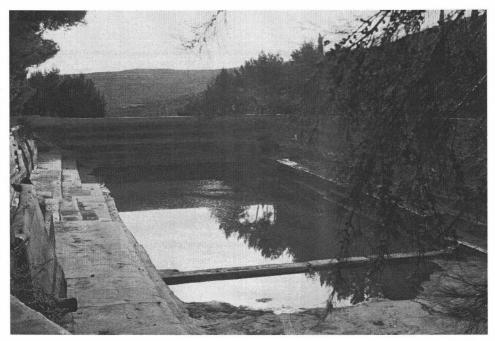


Fig. 11. (9.12.1953) The lowest pool of the three in Solomon's Pools. Boer writes that the pool is '177 m long, 83 till 45 m broad, and reaches at some places a depth of 12 m. The water-basin is almost dry'.



Fig. 12. (28.04.1954) The group from the École walking through the remains of the stables at Megiddo during their trip through Israel.

Louis Lemoine, visited numerous archaeological sites, came into contact with many local people, travelled long distances every day, and – despite the full programme – reserved a relatively large amount of time for lunch. As the account of the journeys is too extensive to discuss here, I will restrict myself to some general remarks:

- (1) Travelling through Transjordan and visiting its archaeological sites required some particular proceedings. The group had to, for instance, be in possession of recommendations from the local police or, even better, from the Arab Legion (the Transjordan army). In addition, the leader of the group was supposed to put some time aside to drink coffee with the responsible local authority before visiting the site;
- (2) On several occasions, the group encountered a hostile, 'anti-Western' attitude from the local residents. At times, this tension led to the cancellation of an intended visit to a site or village, such as the intended visit to Halhul (Alula), which is located in the neighbourhood of Hebron. At other times, the group did visit their destination, but only in the company of armed policemen or soldiers (Fig. 13). A good example is their visit to the city of Hebron itself. Boer writes that, before entering the city, a policeman got onto the bus as a precaution. According to Boer, the inhabitants could be aggressive towards Westerners, and the group was strictly forbidden from taking photographs of the residents. In addition, during an excursion in the Negev, the group was provided with an armed escort, although Boer does not say whether this was for the same reason as in the cases mentioned above. The fact is that during the visit to the caves of Marisa, near Beth Govrin (Eleutheropolis), the armed escort got the party to leave immediately after shots were heard at close range;
- (3) When the group arrived at sites in Transjordan, they were frequently welcomed by members of the Antiquities Guard who were acting upon the instructions of Mr. Lancaster Harding, the Director-General of the Department of Antiquities. As a result of his recommendations, not only was the group granted access to every part of the sites, they were also given free entrance: 'Do not forget', Boer writes, 'that the admission fee of Petra is even 1 Dinar'. Unfortunately, Lancaster Harding was not there when they visited the recently-built Museum of Antiquities in Amman in order to thank him for his help (Fig. 14);
- (4) The group had good relationships with police posts in Transjordan: on several occasions, they are and slept at the posts;
- (5) Some of the Israeli sites could not be visited in the 1950s, because of the presence of the army. The ruins of a Crusader castle in Antipatris (Fig. 15), for example, were not accessible because soldiers had settled there. The famous Byzantine Monastery of the Cross on the outskirts of Jerusalem also became a military station. The group was also prohibited from visiting 'Atlit (Bucolonpolis), which housed 'one of the best preserved Crusader castles in the region', because the army had a camp with depots at the site.

#### A FORGOTTEN DIARY AND PHOTOGRAPH COLLECTION AS VALUABLE RECORDS



Fig. 13. (12.5.1954) During their visit to Tell ed-Duweir (Lachish), the group was also accompanied by armed soldiers. Here they are standing on the wall of the palace located at the northern corner of the site.



Fig. 14. (29.10.1953) Photograph taken to the south from the citadel in Amman. In the centre is a second-century Roman theatre.



Fig. 15. (27.4.1954) The ruins of Crusader castle Migdal Aphek in Antipatris, which accommodated soldiers in the mid-1950s.



Fig. 16. (26.10.1953) The group was discouraged from visiting Tell Kheleifeh (Ezion-Geber), which was situated in no man's land, by the British army because of the tense state of affairs. Instead of visiting the site, the group had the opportunity to take a look at this stone with its Greek inscription.

## The archaeological situation in the 1950s

From the account, it seems that archaeology, especially in Israel, prospered in the 1950s. Boer visited several sites during their excavation and frequently mentions or illustrates recent discoveries. The following is a description of a few examples.

When Boer was travelling through Jordan with the group from the École and visited Aila (Aqaba) on 26 October 1953, an English Major showed them a stone with a Greek inscription that had been found by soldiers just a few days earlier. The text was hard to read, and after trying very hard to do so for an hour they decided to give up (Fig. 16).

On 9 December 1953, during one of the monthly excursions, the group encountered a burial chamber in the stony bottom of the road from 'Ein ed Dirwe to Beth Zur (Khirbet et Tubeiqa). This chamber had been discovered only a few months earlier. The entrance, a set of steps, was closed, but the ceiling had collapsed. Boer counted 12 tombs, and noted that some of the bones were exposed. The wall of this cavern was decorated with a symbol of the Christian cross. This was all he could say at the time.

Walking in the vicinity of Khirbet Mazmil, near 'Ein Karem, the group's attention was drawn by eight heaps of stones, known by the local population as Ruğum (Fig. 17). This location had been excavated by Ruth Amiran over the past year, but without any striking conclusions. Boer postulates that the area which contained the heaps of stones could have functioned as a *bamah*, a 'high place'. The heaps could then be explained using the ancient tradition of throwing stones at cursed places. In this instance, Boer is probably representing the views of one of the scholars in the group.

When the participants in the trip through Israel were in the vicinity of Tiberias on 2 May 1954, they passed an excavation which was raising a lot of questions in the archaeological world at the time. In his account, Boer calls it the 'Place of the Bath' (the quotation marks are his), as it seems that the location did not yet have an official name. Some Arabic layers had already been excavated at the site, but the place also included Byzantine elements. According to Boer, the location contained a hall measuring  $20 \times 5.50$  m. The floor of the hall was paved with mosaics of flowers, birds and other animals, including two donkey heads and an elephant. Other mosaics featured birds and fishes. The images were placed in a kind of framework, which was more restrictive than the ones in Tabgha, which are older. In addition, the site had a complicated system of waterworks and several hypocausts. A construction with pipes was used to heat the second floor. There was a water reservoir with two canals, in which archaeologists found 15 jars. The opening of all of these jars pointed in the same direction. Finally, 24 columns were found that had been re-used in other buildings.

It is certain that the group visited the ruins of the bathhouse in ancient Tiberias, which had been excavated by Bezalel Rabani in the early-1950s (Rabani 1953), because there are many similarities between the details in Boer's account and the archaeological reports.<sup>6</sup> At the time when Boer visited this place, several Islamic

layers, a Byzantine layer and a layer from the late Roman period had already been revealed. Both halls that had been discovered in the bathhouse were decorated with mosaic floors dating from the sixth century, from the second building phase of this complex (Hirschfeld and Galor 2007: 217, 220). The list of representations that Rabani provided included animals (elephants, leopards, griffins, donkeys, birds and fishes) and flowers. In addition, Rabani exposed a brick oven that was connected to a hypocaust cellar with vaults through which pipes ran (Rabani 1953: 265). The water reservoir containing the 15 jars has now been identified as a fish pond which might have been used to breed fish and has been dated to the third century (Hirschfeld and Galor 2007: 215).

In addition to these 'recent' discoveries, Boer also describes the existing views from the archaeological debate which was ongoing in those days. In his account of his visit of Et Tell (Ha Ai), for instance, Boer mentions a difference of opinion. Judith Marquet-Krause, who led the excavations from 1933 till 1935, found a double wall behind which the inhabitants could entrench themselves. The first wall was 5 to 6 m thick and the second one – at a distance of 2.5 m from the first – 1 to 2 m (Fig. 18). In her opinion, the space between the walls had been used as a corridor (Marquet-Krause 1949: 21–22, 31–32). Boer writes that de Vaux disagreed with her and postulated that this construction was similar to the defence system at Tell Fara, and that the space used to be filled with sand in order to prevent the walls from collapsing.

Elsewhere, when Boer describes the ascent of the Jebel 'Asūr (Baal Hazor), he refers to the theory of F.-M. Abel, who stated that Judas Maccabee had died here (1 Macc 9: 14–19; Abel 1949: 162–163 note 15). On the other hand, Boer continues, de Vaux challenged this view and pointed to Bir-Zeit (which is more to the east and on the other side of the Jerusalem-Nablus road) as the right spot (de Vaux 1946: 260–262).

## Conclusion

As demonstrated in this overview, Leo Boer's document offers valuable access to the historical and archaeological past of Israel and Transjordan. The combination of the account and the photographic material gives an outstanding impression of the state of affairs almost 60 years ago. Unfortunately, Boer died in 2009, and so he is unable to witness the scholarly benefits that have resulted from the document which he stored in his garage for all those years.

## **Notes**

1. For 10 years, I was in contact with Leo Boer, during which time we had very interesting conversations. Unfortunately, Leo passed away on 9 November 2009. I wish to express my gratitude to him and his wife Annemie who entrusted me with the diary and the photographs. I am also grateful to Annemie who gave me permission to publish both of them.

## A FORGOTTEN DIARY AND PHOTOGRAPH COLLECTION AS VALUABLE RECORDS



Fig. 17 (26.4.1954) Possible 'high places' in the surroundings of Khirbet Mazmil, near 'Ein Karem.



Fig. 18 (26.11.1953) Two walls of Et Tell separated by a corridor. When this photograph is compared with Plate XXVII, 2 by Marquet-Krause (1949), it becomes clear that these two form part of a set of three walls.

- 2. The latter arrived again in Jerusalem in September 1953 in order to work on the fragments of the Dead Sea Scrolls that were found in Cave 4.
  - 3. For the identification of Tell el-Ful as Gibeah, see Albright 1924: 28–43.
- 4. Strangely enough, the excavation team did not find building installations of any kind in the Byzantine, Roman, Hellenistic or Persian levels when they started work at the location of the 1934 camp during the second campaign in 1954. When the archaeologist asked the land owners about the absence of these installations, they informed him 'that they had already dug up this area to secure stone for the erection of the new boundary wall between this old camp site and Area I of the former dig' (Albright 1968: 7).
- 5. According to Boer, the pools were wrongly ascribed to Solomon. The historic waterworks (Ecclesiastes 2: 4-6) should be situated in the surroundings of En-Roghel in the Cedron Valley.
- 6. In addition to these parallels, there is also a difference between the account and the reports. Whereas Boer mentions one hall of size 20 × 5.50 m, Rabani writes about two halls of  $10 \times 20$  m and  $5.50 \times 9$  m respectively (Rabani 1953: 265).
- 7. Hirschfeld and Galor mention two fish ponds in this area of ancient Tiberias: one is located in Area C and the other under the bathhouse in Area A (see fig. 2 in Hirschfeld 2007: 213). When reading Boer's description, it is clear that he saw the pool beneath the bathhouse.

## **Bibliography**

Abel, F.-M., (1949). Les Livres des Maccabées (Paris).

Albright, W. F., (1924). Excavations and Results at Tell el Fûl (Gibeah of Saul) (The Annual of the American Schools of Oriental Research, 4; New Haven).

Albright, W. F., (1934a). 'The First Month of Excavation at Bethel', *BASOR* 55: 23–25. Albright, W. F., (1934b). 'The Kyle Memorial Excavation at Bethel', *BASOR* 56: 2–15. Albright, W. F., (1968). 'The Kyle Memorial Excavations at Bethel'. Pp. 4–9 in J. Kelso, W. F. Albright, P. W. Lapp and L. A. Sinclair (eds.) The Excavation of Bethel (1934– 1960): (Joint Expedition of the Pittsburg Theological Seminary and the American School of Oriental Research in Jerusalem) (The Annual of the American Schools of Oriental Research, 39; Cambridge, Mass.).

Garrod, D.A. E., and Bate, D. M. A., (1937). The Stone Age of Mount Carmel. Excavatations

at the Wady el-Mughara, vol. I (Oxford).

Garrod, D., (1962). The Middle Palaeolithic of the Near East and the Problem of Mount Carmel Man (London).

Hirschfeld, Y., and Galor, K., (2007). 'New Excavations in Roman, Byzantine, and Early Islamic Tiberias'. Pp. 207–30 in J. Zangenberg, H. W. Attridge and D. B. Martin (eds.) Religion, Ethnicity, and Identity in Ancient Galilee: a Region in Transition (Tübingen).

Kenyon, K. M., (1954). 'Excavations at Jericho, 1954', PEQ 86: 45-63.

Kenyon, K. M., (1957). Digging up Jericho (London).

Kenyon, K. M., (1960–1983). Excavations at Jericho, Vol. I–V (London).

Mader, E., (1957). Mambre: die Ergebnisse der Ausgrabungen im heiligen Bezirk Râmet el-Halîl in Südpalästina, 1926–1928 (Freiburg im Breisgau).

Marquet-Krause, J., and Dussaud, R., (1935). La deuxième Campagne de Fouilles à Ay (1934): Rapport Sommaire (Paris).

### A FORGOTTEN DIARY AND PHOTOGRAPH COLLECTION AS VALUABLE RECORDS

Marquet-Krause, J., and Dussaud, R., (1949). Les Fouilles de 'Ay (Et-Tell), 1933-1935, Enterprises par E. de Rothschild: la Resurrection d'une grande Cité biblique (Bibliothèque Archéologique et Historique, 45; Paris).

Rabani, B., (1953). 'Notes and News', Israel Exploration Journal 3: 265.

Vaux, R. de, (1946). 'Notes Archéologiques et Topographiques', *RB* 3: 260–74. Wagemakers, B., and Taylor, J. E., (2011). 'New Photographs of the Qumran Excavations from 1954 and Interpretations of L.77 and L.86', *PEQ* 143: 134–56.

## **Book Reviews**

**Yossi Garfinkel, D. Ben-Shlomo, D. and N. Korn**, *Sha'ar HaGolan 3: The Symbolic Dimensions of the Yarmukian Culture: Canonization in Neolithic Art*. The Institute of Archaeology and The Hebrew University of Jerusalem, in Cooperation with the Israel Exploration Society, 2010. Jerusalem. Pp. xv + 353. \$68. ISBN: 9789652210814.

This book is the third in a series of seven intended monographs describing the site and material culture of Sha'ar HaGolan, the type-site for the Yarmukian culture. Its subject is the figurines from the site, made famous by a travelling exhibition and a popular illustrated book. The first volume, *Neolithic Art in Context* was published in 2002 and the second, *The Rise of Urban Concepts in the Ancient Near East*, in 2009. Four further volumes are planned, covering pottery and lithics, among other subjects.

The subject of figurines has been given some previous attention in the first monograph, and in Garfinkel's more populist tome, The Yarmukians, but most of what is contained in this publication, which focuses purely on figurines, is novel material. The structure of the book is very straightforward. The introduction starts by setting out the authors' theoretical basis for their ideas about canonisation in Levantine Neolithic art in general. This revolves around population pressures and the need for planning in society, which led to standardisation of belief and artistic endeavour, as well as organised settlements. This is followed with a brief, but comprehensive description of trends in finds from Sha'ar HaGolan, from the excavations, and also from the informal finds curated by the local kibbutz. Problems with chronology and authenticity are openly acknowledged.

The main body of the volume is made up of detailed descriptions of the titular art objects, with drawings, photographs and findspot data. This section is sub-divided into categories: Clay Statues, Cowrie-Eye Clay Figurines, Pebble Figurines, Other Anthropomorphic Clay Figurines and Vessels, and Various Anthropomorphic Stone Figurines. Additional chapters on the spatial distribution of the finds, and on zoomorphic figurines, appear at the end. The figurine data is supplemented with information of a similar standard from other southern Levantine Neolithic sites for comparison, including 'Ain Ghazal, Munhata and Çatalhöyük. The conventions used to categorise each type are explained at the beginning of each chapter. The simple referencing system used to connect words to illustrations is effective.

The second part concerns comparative analysis: The two categories subjected to this investigation are the cowrie-eye figures and the pebble figurines, which are the two most numerous, and presumably common, art objects found. A large quantity of comparative data is provided for both types of object, taking the

#### BOOK REVIEWS

same description-and-illustration form as the Sha'ar HaGolan data. Examples of Neolithic figurines from across the Levant, Mesopotamia, Anatolia, Greece and the Balkans are used, in order to demonstrate the ubiquity of the two forms. Typologies of the two forms are provided, with the rationale behind them. There is some discussion of function and representation, but the authors have refrained from hypothesising on what (or who) the images represent, and their ultimate purpose.

The value of this book is the large quantity of high-quality data contained within. For those studying Neolithic figurines, it is an excellent resource. Not only are the items discussed, but every one is depicted, both in drawings and photographs. Where possible, data on context is included, down to site grid references. Speaking as someone who has carried out secondary research on Near Eastern excavated material, I find this approach particularly laudable, and it has the potential to stimulate some interesting work on Yarmukian art in the future. The text is rather light on concrete interpretations, which may disappoint some readers, especially students looking for more general articles about Neolithic figurines. However, as an accessible collection of well-presented data, it succeeds.

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**Koert van Bekkum**, From Conquest to Coexistence: Ideology and Antiquarian Intent in the Historiography of Israel's Settlement in Canaan. Culture and History of the Ancient Near East, 45. Leiden: Brill, 2011. Pp xxii + 694. € 191.00 / US\$ 270.00. ISBN-13: 978-9-0041-9480-9; ISBN 10: 90-04-19480 0.

Koert van Bekkum's voluminous study on the conquest of the Land narrated in the Book of Joshua (9:1–13:7) originates from a doctoral dissertation submitted to Theological University, Kampen, the Netherlands, in 2010. The work claims that the narrative of conquest contained in Joshua 9: 1–13:7 is a historiographical account composed between the late 10th and 8th century B.C.E. It was written in Jerusalem by scribes associated with the Davidic monarchy using written sources and oral traditions of memories from the Late Bronze Age, which the scribes lined up to the historical realities of Iron Age Israel. Throughout the book the author calls for and demonstrates that it is possible to maintain a fruitful dialogue between the claims of the biblical text of Joshua and the archaeology of the Levant.

The book is organised into four parts. Part 1 ('Text and Artefact', pp. 7–92) revisits the main issues in the historiography of the settlement debate, particularly where biblical accounts and archaeology meet and/or diverge. Part 2 ('Monologue of Text', 95–423) provides a translation of Joshua 9:1–13:7, with critical annotations, and submits the biblical text to a careful literary (synchronic) study. Part 3 ('Monologue of Artefact', pp. 427–572) introduces archaeological evidence of destruction, or the lack of, for (most of) the Bronze and Iron Age tels

identified from the list of vanquished kings and towns in Joshua 12. It discusses the lower and upper limits of the geography of the conquest (especially in regards to the 'remaining land' in Josh.13), the chronology of conquest as it relates to the boundaries of conquered and remaining land and also touches upon the social life of the southern Levant as it can be reconstructed from archaeological findings. Part 4 ('Dialogue of Text and Artefact', pp. 575–592) brings together the insights gleaned from the synchronic and diachronic study of Joshua's conquests – those materialised under his leadership and those remaining to be done under the leadership of YHWH (through David). An Epilogue (pp.593–597), followed by an Appendix containing a synchronic outline of the text (pp. 599–610), Bibliography (pp. 611–652) and a comprehensive Index (pp. 653–691) conclude this rich study.

As someone currently writing a book on the biblical memory of Joshua (The Conquest of Memory: Israel's Identity and the Commemoration of the Past in Joshua 1-12, anticipated to be forthcoming from Sheffield Phoenix Press, Sheffield, UK) there is much to praise in van Bekkum's study, in terms of both method and content. The author's focus on Joshua 9:1-13:7, for example, is a noteworthy corrective to many literary studies of Joshua's Conquest Narrative that either conclude prematurely at chapter 11 or treat chapter 12 only summarily. Van Bekkum shows that this narrative segment, which he isolates on a thematic and structural basis, weaves into its texture a host of theological sub-themes reaching the margins of the Conquest Narrative and extending throughout the Book of Joshua into Genesis and all the way to the Book of Kings. The textual relationship between Joshua and the Primary History (Genesis-2 Kings) is and will remain disputed even after this study, even if van Bekkum carefully argues his choices. His excellent command of the geography of the Land of Israel and the conventions of ancient Near Eastern historiography serve him well when drawing out the temporal and spatial features of Joshua's stories of conquest or when pinpointing the ideological spin put on this account of victory.

But am I convinced by van Bekkum's overall argument? The answer is 'only in part'. I agree that the memory of conflict between indigenous enclaves and a Yahwistic group of outsiders identified as 'Israel' led by their hero, Joshua, could have reached the scribes sometime after the reign of King David. I also find plausible that these memories contained fairly accurate, though schematic, Bronze Age information about local kings and pre-Israelite nations, as well as details about an existing treaty of non-aggression with one Hivite enclave (the Gibeonites) or even knowledge about where the Bronze Age Egyptian boundaries of the Province of Asia used to lie. However, I believe that van Bekkum's decision to link the 10th to late 9th century data - textual references to the Philistines and their five city states, the attestation of Sidon, corvee labour of non-Israelites (the Gibeonites), the parallels between the confines of David's empire (2 Sam. 8–10, 24) and the boundaries of the 'remaining land' in Joshua 13: 2-6 - to the time of the composition of this conquest's history is arbitrary. This Iron Age data, just like the Bronze Age data, could have functioned as historical memory in support of later programs. This conviction derives in part from the fact that the study leaves

ambiguous the factors that triggered the writing of the conquest history in the 10th to early 8th century. If I were to accept a composition date not too long after the death of King David, I do not see any clear reasons why a Jerusalem-based group of scribes evaded the biggest achievement of their times – Solomon's Temple – in favour of alternative sacred locations (the altar in Gibeon)? The implications of dating a portion such as Joshua 9:1–13:7 from a larger unified story regrettably have not been drawn out for the whole conquest narrative. Maybe this was done intentionally in order to offer van Bekkum another opportunity to display his erudition in a future study.

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**Amnon Ben-Tor**, *Back To Masada*: Israel Exploration Society, Jerusalem, 2009. Pp. 314 incl. maps, plans. \$40.00. ISBN: 9652210757; 978-9-6522-1075-3.

The story of Masada has fascinated even those who normally care little about ancient history. It has become a symbol of the modern nation of Israel standing against overwhelming odds and has led to what some call the 'Masada myth'. Even the Jewish historian Josephus, who cared little for those he saw as insurgents and criminals, wrote admiringly of the mass suicide of the defenders before the Romans were able to engulf them. Speculation about the excavations has fuelled conspiracy theories, one of which formed the centrepiece for best-selling author Kathy Reich's *Cross Bones*.

The site of Masada was excavated under the direction of Yigael Yadin in the years 1963–65. Few archaeological digs have excited so much interest: the nation seemed on the edge of its chair, waiting eagerly for reports from the news media who pressed Yadin for new details on almost a daily basis. Yadin wrote a popular account (1966). Yet apart from a scattering of articles and a preliminary volume reporting on the excavations, the official report was delayed for many years. Finally, between 1989 and 2007 eight volumes gave the full report on all aspects of the dig.

The author, Amnon Ben-Tor, was a protégé of Yigael Yadin (e.g., eventually taking Yadin's Hazor excavations forward) and participated in the Masada dig as a site supervisor. He now writes up the Masada excavations, being able to go greatly beyond the earlier volume of Yadin. This volume summarises the eight professional volumes, reducing them to a single volume aimed at the educated general reader. Furthermore, he has done a good job of reducing the technical volumes into a well-illustrated and readable handbook. In producing this manual he has not skimped on technical information or detail. A lot of information is packed into the text but in an understandable format for those who are archaeologically literate.

Even for the biblical scholar a great deal of technical detail can be found here, whether of the pottery and other artefacts, the architecture of buildings, the stratigraphy, the written objects in a variety of languages, and even the coins. There is also a section on the history of Masada, drawing on historical accounts (especially Josephus) as well as archaeology. This includes a survey of Masada in the Byzantine period (pp. 255–68). Other aspects of interpretation are also discussed, such as the date of the Roman siege of Masada (pp. 253–54). Although taking only two pages, the essential information is given, but also the reason why scholars have not been able to pin the date down to either 73 or 74 CE is explained. Such succinct but very useful discussions are characteristic of the book.

Only occasionally is the discussion disappointing, such as why Yadin referred to the defenders of Masada as 'Zealots' (pp. 3-4, 282-86). Ben-Tor correctly notes that Josephus refers to them as Sicarii, a group that grew out of the 'Fourth Philosophy' according to Josephus (Ant. 18.1.1 §§4–10; 18.1.6 §23). The Zealots in Josephus are a group that arose after the 66-70 war began (Grabbe 2000: 207-8). Some scholars, however, have elected to use 'Zealot' to mean anyone who resisted Roman rule for religious reasons (e.g. Hengel 1989). This is misleading in my view, but I believe Yadin was simply following this usage. I think Ben-Tor might imply this, but he does not say this clearly that I can find.

Ben-Tor also includes (rightly, in my opinion) a chapter on the 'Masada myth' and those who argue that some discoveries at Masada were suppressed. Although he says he will talk about the archaeology, on which he is a specialist, he cannot restrain himself from commenting on the broader 'Masada myth'. No doubt some issues of this chapter will remain controversial (though lack of evidence is never disproof to a conspiracy theorist; indeed, lack of evidence is seen as proof of the conspiracy!) but the author presents some relevant information and at least partially answers critics. Those who think archaeology is cut and dried objective fact should read this chapter (pp. 269–309).

All in all Amnon Ben-Tor has presented a very useful volume, clearly written and summarizing a lot of technical information in a convenient-and relatively inexpensive-volume. I believe Yadin would have been proud of his achievement.

# **Bibliography**

Grabbe, Lester L., (2000) Judaic Religion in the Second Temple Period: Belief and Practice

from the Exile to Yavneh (London and New York: Routledge).

Hengel, Martin, (1989) The Zealots: Investigations into the Jewish Freedom Movement in the Period from Herod I until 70 AD (Edinburgh: T & T Clark); (1976) ET of Die Zeloten: Untersuchungen zur jüdischen Freiheitsbewegung in der Zeit von Herodes I. bis 70 n. Chr. 2nd edition; AGAJU 1 (Leiden: Brill).

Reichs, Kathy, (2005) Cross Bones (London: William Heinemann).

Yadin, Yigal, (1966) Masada: Herod's Fortress and the Zealots' Last Stand (New York: Random House).

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Benjamin Sass and Joachim Marzahn, Aramaic and Figural Stamp Impressions on Bricks of the Sixth Century B.C. from Babylon. Drawings by Noga Z'evi (Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 127; Ausgrabungen der Deutschen Orient-Gesellschaft in Babylon 10). Wiesbaden: Harrassowitz Verlag, 2010. ISBN 978-3-447-06184-1; ISSN 1860-1812.

This splendid volume provides for the first time a comprehensive catalogue and publication of the Aramaic stamp impressions on bricks found during German excavations at Babylon in 1899–1917. As so often in modern publications of items found long ago, there is in the book full attention to and considerable detail on the archival aspect of the material in Berlin, where extensive excavation-related documentation survives, including on-site photographs and squeezes.

The bricks can be dated to the period from Nebuchadnezzar II to Nabonidus (605–539 BCE). The materials are mostly in Berlin's Vorderasiatisches Museum, with smaller numbers now in Philadelphia, London and Istanbul. The main catalogue (Chapter 3) contains 131 items under the heading 'Aramaic and Figural Impressions', while the number of impressed bricks containing Aramaic letters is 87. In many cases the same impression survives in several examples (up to 22–24 examples). Naturally these are collated and listed as one entry in the catalogue, since the 131 separate impressions are the focus of the catalogue, not each brick (though information on each brick is also provided). The total number of all items bearing Aramaic and figural impressions is 330. (There are also some items which bear only cuneiform signs [2], some which have royal cuneiform inscriptions [15], and some which are unaccounted for, though mentioned in the original excavation records).

The stamping of bricks with writing was a distinctively Mesopotamian practice, going back to the third millennium BCE. The cuneiform impressions known otherwise are mostly royal inscriptions, commemorative in character. Figural impressions are rarer. Rarer still is the survival of the actual stamps, bearing the inverted writing which was to be impressed into the soft brick. Surviving stamps bearing cuneiform writing are of terracotta; there are none surviving which bear Aramaic in reverse, though there are some figural stamps of bronze.

Since Aramaic came to be widely used in Mesopotamia alongside cuneiform, it is not surprising to find Aramaic impressions, though these appear only in this sixth-century context and they are all very short. The present volume constitutes a comprehensive and definitive publication of all the Aramaic and figural material. Full documentation is provided for each impression, with photographs of all the exemplars and, perhaps most valuably, drawings (by Noga Z'evi) of each impression. The Aramaic is also transliterated. The fact that the 49 different surviving legends contain only personal names (and some acronyms), in four cases preceded by the possessive *l*-, 'for, belonging to' (or possibly 'produced by'), should not distract from the importance of this collection even on the linguistic level. Chapter 7 (p. 173) contains a linguistic commentary based on the orthography of the names (consonantal interchange, *matres lectionis*, possessive

*l*-), while the 42 different personal names are fully studied in the same chapter, with concluding comments on ethno-linguistic distribution in the context of the debate about the Aramaisation of Babylonia (placed in doubt by M. P. Streck): there are 15 Akkadian names, 8 or 9 Aramaic (counting only those of clear affiliation).

Another area of research which will benefit greatly from this publication is that of Aramaic epigraphy (Chapter 6). In effect a large gap in our knowledge of the monumental Aramaic script of the sixth century BCE is at least in part filled, with this body of material standing alongside an unprovenanced Aramaic inscription published by André Caquot in 1971 (dating according to Joseph Naveh). This evidence suggests the continuation of the Aramaic monumental script after the demise of the Aramaean kingdoms. There is in chapter 11 an interesting, though inevitably inconclusive, discussion of the purpose behind the stamping of bricks with these Aramaic impressions. They may have marked the destination of the bricks, perhaps with the name of the building official responsible for a particular project. There is the tantalizing possibility of linking particular names to particular parts of the site (chapter 10).

Though production quality is high, there are a few infelicities of English ('not always permits' instead of 'does not always permit' on p. 10) and printing errors  $(A\delta\alpha\delta\nu\alpha\delta\iota\nu\alpha\chi\eta\zeta)$  instead of  $A\delta\alpha\delta\nu\alpha\delta\iota\nu\alpha\chi\eta\zeta$  on p. 11). Note may be made of one omission from the Bibliography noticed by the reviewer, Naveh 1982 (*Early History of the Alphabet*, Jerusalem), which is cited on p. 151.

This is a fine publication which clears up one of the many pieces of unfinished 20th century business in our field and provides an excellent basis for future research.

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Katell Berthelot and Daniel Stökl Ben Ezra (eds.), Aramaica Qumranica: Proceedings of the Conference on the Aramaic Texts from Qumran in Aix-en-Provence 30 June-2 July 2008. Studies on the Texts of the Desert of Judah, Volume 94. Leiden and Boston: Brill, 2010. Pp. xii + 624, incl. illustrations. € 180.00 / US\$ 255.00. ISBN 13 978 90 04 8786 3; 10 90 04 18786 3

This volume will significantly refine our understanding of the corpus of Aramaic texts from Qumran. In addition, it is certain to extend our knowledge of eschatology, apocalypticism and messianism at Qumran, if not also our awareness of divination, astronomy, metrology, physiognomy, astrology and exorcism in the Second Temple Judean environment. Each of the twenty-two conference papers is accompanied by a précis of its contents, and is followed by an account of the respondents' subsequent discussion. The book is dedicated to the memory of the late Hanan Eshel, whose contribution to these conversations is preserved. While the collection focuses primarily upon linguistic, exegetical and textual

developments, the character of the corpus, distinctions of genre and the largely non-sectarian provenance of the texts are further examined. The reconstruction of potential historical backgrounds, if not also the cultural memory of the society (or societies) who produced and preserved these scrolls are among the most engaging, if not thought-provoking, contributions.

Katell Berthelot and Daniel Stökl Ben Ezra introduce the collection by explaining that from the 900 scrolls recovered at Khirbet Qumran, 129 of these appear to have been written in Aramaic. Those 87 sufficiently well-preserved scrolls include targums, narrative compositions, apocryphal accounts, apocalyptic and other visionary texts, proverbs, a list of false prophets, an exorcism, an astrological text with a Brontologion (a Babylonian thunder omen) and accompanying horoscope, among others. Nor is the use of the Aramaic language itself particularly uniform in this diverse corpus, so that while several of the texts indicate acquaintance of Mesopotamian and Persian traditions, they are nevertheless written in a Western dialect of Aramaic.

In Part I, 'General Approaches', Devorah Dimant examines the diverse themes and genres within the corpus, highlighting its distinctive profile, which is characterised by the prevalence of pseudepigraphic works attributed to the patriarchs (or situate themselves within the Babylonian and Persian exile) and the extensive use of non-biblical elaborations. Émile Puech next presents the manuscripts originally assigned to Jean Starcky, which range from apocalyptic, pseudepigraphic, prophetic and visionary texts: other interesting finds include 4Q554, 554a and 555, labelled 'the New Jerusalem', fragments of 4Q 559 (Biblical Chronography) and 4Q561, a separate horoscope.

In Part II: 'Linguistica et Onomastica', Steven Fassberg examines the morphology of the verbal system and concludes that Qumran Aramaic is a western dialect that remains close to official Aramaic of the Persian period (i.e. Standard Literary Aramaic), yet bears witness to innovations that presage later Aramaic dialects, if not also the subsequent development of Jewish literary Aramaic. Jan Joosten examines the formula 'in front of/before (qdm) the king' while Ursula Schattner-Rieser discusses how linguistic archaisms may help determine dating the compositions. The next stimulating paper was given by André Lemaire, who examines the names of Gilgamesh and the monster, Humbaba, attested also in the Book of the Giants. In addition, he makes a separate argument regarding the Prayer of Nabonidus - which may be related to North-Arabic/Idumean traditions developed after Nabonidus' stay in Teiman. Both these cases are then used to demonstrate that contact existed between the late scribal cuneiform culture and the Babylonian Jewish diaspora. Equally valuable is the contribution of Michael Langlois, who lists the twenty watchers from I Enoch (who descended from heaven and mated with 'the daughters of men'). This is a highly informative piece in which the Aramaic names of the angels are compared with their parallels in Greek, Ethiopic and Syriac sources, while their relationship to Ugaritic deities is also considered.

In Part III: 'Exegesis and Genres' Katell Berthelot examines those texts from the subsequent canonical biblical traditions (excluding Genesis) known in this corpus. This is followed by Armin Lange's argument in 'The False Prophets Who Arose against Our God (4Q339)'. Lange advocates that line 9 of this text should be reconstructed to read: יוחנן בן שמ], thus referring to John Hyrcanus I, rather than Elisha Qimron's later suggestion of : נביאה די מן גב], 'the prophet who is from Givon'. 4Q339 is a challenging bilingual Aramaic-Hebrew fragment, written and preserved only on a scrap of leather and which, if Lange's reconstruction is accepted, provides a significant indication of Hellenistic influence in the cultural memory of ancient Judaism. Next, Thierry Legrand suggests that several exegetical techniques used in *Genesis Apocryphon* are comparable with those found in the Targumin. However, as a form of 're-written bible', the Apocryphon is considerably more free and expansive in its development of Genesis. Three separate discussions of the Birth of Noah traditions in *Genesis Apocryphon*, 4Q Birth of Noah (4Q534–536), I Enoch 106-107 and 1Q19 then follow. First: Loren Stuckenbruck demonstrates that although there is clearly a genetic relationship between these three witnesses. it is too complex to reconstruct from such fragmentary remains. Second: Esther Eshel evaluates the shared terminology employed, while making particularly astute observations on the significance of the horoscope and its relationship to predicting the child's future. Third: Matthias Weigold examines the popularity of these 'wunderkind' birth traditions. He suggests (following Devorah Dimant) that Noah is a prototypical figure of a righteous survivor, but (as Michael Stone has advanced), that his role was to bridge the flood epic and to act as a repository of antediluvian secret knowledge. Weigold concludes that these developed in response to the exegetical difficulties in Genesis 5: 28–29, to explain how Lamech knew about the destiny of his son, if not also to provide a compelling ideology for the meaning of Noah's name. To complete this section Moshe Bernstein critiques the use of generic terms, such as 'midrash', 'targum', 're-written bible' and 'parabiblical' to describe the Genesis Apocryphon, which may be better understood as a Mischgattung: a composite and multi-generic collection. Jörg Frey then evaluates the criteria for examining the so-called 'literary testament', where the final speech of an important (male) biblical figure is developed as an authoritative discourse.

Part IV, 'Science and Esoterics', consists of two papers: Jonathan Ben-Dov discusses the significance of 'Translation and Concealment'. He argues that the resonances of scientific culture in Second Temple Aramaic texts presupposes their early Mesopotamian origins, whilst Greek influence is discernable only in the later material, confirming also that such traditions appear restricted to a small circle of initiates. Samuel Thomas develops the descriptions of religious esoterism, suggesting that a correspondence between the possession of secret knowledge and the *yahad's* self-understanding was evident. All discussions of the zodiac calendar (on pp.42–44, 68, 383–384, 387–388, 403, 422 and 561) and its accompanying brontologian were made without reference to the recently acclaimed research of Helen Jacobus, which did not appear in time for this conference: '4Q318: A Jewish Zodiac Calendar at Qumran', published in *The Dead Sea Scrolls: Texts and Contexts*, ed. C. Hempel (Studies on the Texts of the Desert of Judah 90) Leiden: Brill, 2010: a paper that has since won the 2011 Sean Dever Memorial Prize.

In the penultimate section 'apocalyptica et eschatologica', Florentino García Martínez explains that the Aramaic scrolls from Qumran mainly feature a predominant interest in 'pre-Mosaic' protagonists, or else in a diaspora setting. He continues to explain why the categories of sectarian/non-sectarian and biblical/ non-biblical are largely irrelevant, where the inspiration of the Aramaic texts in shaping the Qumran group as 'apocalyptic community', is of greater significance. Lorenzo DiTommaso next provides a new theory of apocalypticism, in which the temporal and spatial dimensions of the apocalypse provide the defining criteria within the ideology of the scrolls. Hugo Antonissen then evaluates 'Architectural Representation Technique in New Jerusalem, Ezekiel and the Temple Scroll', which he considers has drawn on earlier Mesopotamian convention. Finally, Daniel Stökl Ben Ezra examines the messianic figures in 4Q541 (Apocryphon of Levi<sup>b</sup>? ar), 4Q588 (4Qpap Vision<sup>b</sup> ar), 4Q246 (Apocryphon of Daniel ar) and 4Q534 (4Q Messianic ar), with attention to the chronological development of each manuscript, comparative terminology, the actions of each protagonist and the relationship of each description to the relevant biblical sources.

In conclusion, Part VI consists of a synopsis of the implications of these insights, where John Collins observes that distinctions between scrolls that are clearly 'sectarian', and those that reflect 'common Judaism', are still valid, but might be better served by accommodating a third, in-between category: that of 'proto-sectarian' texts. The impression of the largely pre-Maccabean origin of the Western Aramaic texts, if not also their Persian and Mesopotamian background, is of considerable interest, while the inexplicable absence of legal traditions from this corpus is even more intriguing. Although an index of sources is provided, an index of subject areas would have been helpful for non-DSS scholars, and also students. The editors are to be commended for producing an exceptionally fine volume, which makes a substantial improvement to our understanding of the context and nature of the Aramaic scrolls from Qumran: a highly enigmatic, albeit distinct corpus.

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**Albert I. Baumgarten, Hanan Eshel, Ranon Katzoff and Shani Tzoref (eds.)**, *Halakhah in Light of Epigraphy*. Journal of Ancient Judaism Supplements 3. Göttingen: Vandenhoeck & Ruprecht, 2011. Pp. 303. €.69.95. ISBN 3525550170; 978-3-5255-5017-5.

This volume contains the proceedings of a conference held in Bar Ilan University in 2008 and sponsored by their Jeselsohn Center for the Study of Ancient Jewish Epigraphy. The director of the Center at the time of the conference was Hanan Eshel, now of blessed memory. The most potentially misleading aspect of the book is addressed by the editors in their introduction: 'epigraphy' is defined here,

as the editors say, 'broadly,' by which they apparently mean that the term includes all writing, including the texts found at Qumran. The book admirably performs the purpose stated by the editors in the introduction: it demonstrates the observance of Jewish law, fundamentally the same system articulated later by the Rabbis, in the Roman period. This is accomplished effectively, since on the whole the articles do not try too hard to argue the point; instead, they all demonstrate that knowledge of halakhah is often a necessary pre-requisite for understanding earlier sources, just as knowledge of earlier sources enhances our understanding of halakhic sources. Taken as a whole, the volume should convince all interested parties that the study of Second Temple texts and that of rabbinic literature have to go hand in hand.

The first section contains five articles on 'Halakhah and the Scrolls from Qumran'. Moshe Benovitz reconstructs an ancient stage in the laws of the Sukkot festival based on the book of Nehemiah and the Temple Scroll, combined with traditions embedded within rabbinic literature resurrected by critical tools. Vered Noam triangulates from Qumran texts and rabbinic literature, which agree that Gentiles are impure but disagree as to why, to reach the conclusion that the law itself was ancient. Shared by Qumran and the Rabbis is not just the legal tradition, but the interpretation of Numbers 31:23, taken by both sets of texts as the basis for the law. Eyal Regev provides a valuable survey of the halakhic positions found in Josephus and Philo which agree with the Pharisees, the Sadducees, or the Qumran texts; Regev then suggests that the two authors – and probably other Jews as well - were consciously picking and choosing whom to follow in every given case. This assumes a remarkable *halakhic* sophistication on the part of these authors, which they themselves never mention, but is a suggestion worth considering further. Lawrence Schiffman surveys the laws of forbidden foods in Qumran texts and rabbinic literature.

Finally, Aharon Shemesh uses the laws of incest at Qumran as a way to explore important issues in the early history of *halakhah*: he argues well that the Sadducees and the Qumran sect insisted on consistent application of biblical exegesis as the foundation of the legal system, whereas the Pharisees were content to follow the 'traditions of the fathers'. The rabbinic texts show two approaches within the latter position: the school of R. Ishmael, according to Shemesh, simply acknowledge the existence of laws other than those that are Scriptural in basis, whereas the school of R. Akiva insists on deriving everything from the biblical text, even if the exegesis required takes torturous paths. These ideas are not new, but Shemesh's use of the Qumran material throws the rabbinic positions into clearer perspective.

The second section contains four articles on 'Halakhah and Quotidian Documents from the Judean Desert'. First, a very valuable article by Hanan Eshel z'l, which is not actually about halakhah at all, but about the texts discovered in the past 60 years in caves in the Judean Desert. Since the texts found in Wadi Murabba'at, Nahal Hever, and elsewhere in the Judean Desert south of Qumran were published decades apart in various volumes and journals, it is very difficult to get a comprehensive picture of the various texts, their places of origin, and their contents. Eshel surveys the textual finds masterfully, providing a convenient

entry-point into the world of these texts. Steven Fraade surveys attestations of the term parnas in epigraphic sources, and then analyzes the same term in rabbinic literature in that light. The differences between the uses are more striking than the similarities, but bringing the two corpora into mutual dialogue allows Fraade to ask perceptive questions of each one. Shamma Friedman studies the get (divorce document) from Masada (actually found in Wadi Murabba'at), and shows that its formulary is essentially continued in that of the medieval get, as well. Friedman points out that the get as described in the Mishnah differs in important ways, and he sees this as an attempt at reform which did not succeed. Concluding this section, David Goodblatt reviews the methods by which legal documents, letters, and coins, were dated in late Second Temple times and the period from the destruction of the Temple until the time of the Mishnah. He finds that texts dates generally refer either to a regnal year or to an 'independence era' – either to the Great Revolt in 67 or Bar Koseba's revolt in 132. The early rabbinic texts entirely avoid the possibility of the latter method of dating, although the *Tannaim*, some of whom lived through Bar Koseba's revolt, would certainly have been aware of it. Goodblatt suggests that this might have been a conscious effort on the part of the Rabbis to suppress memories of the ideology of the revolt, although he is cautious in suggesting this.

The final section is entitled 'Halakhah and Epigraphic Sources'. Here Yonatan Adler opens with a thorough discussion of the finds of tefillin from the Judean Desert (especially Qumran). He concludes that some of the rabbinic laws of tefillin are late – post-dating Bar Koseba – because those who wrote earlier tefillin seem to be entirely unaware of prescriptions regarding the order in which the biblical sections should appear, for example. Adler also shows that some possibilities cited and rejected in the halakhic midrashim reflect Jewish law as practiced by others, and so in these cases (and others?) the midrash is apparently polemical. Chaim Ben David insightfully analyzes the structure of the Rehov halakhic mosaic, arguing that the order of the paragraphs within the text, which is unmatched in rabbinic literature, reflects in particular the perspective of the Galilean populace of Rehov. Tal Ilan then argues that in ancient Israel and through rabbinic times, there was no ban on burying Jews in the cemetery as non-Jews. This argument relies on two types of evidence. The first is an argument from silence: the rabbinic authorities never proscribed such burials. The second is positive evidence, in the form of mixed cemeteries. Ilan's argument is convincing regarding the Diaspora, but falters within Israel on the cemetery at Bet She'arim, which is overwhelmingly Jewish. Ilan claims that one grave there is non-Jewish, but who is to say that the Jews were happy that he was buried there? Still, this paper is valuable for the data brought to bear on the question and the possible conclusion (although this is not the one Ilan suggests) that the 'Jewish-only' cemetery arose in third-century Palestine. The next paper is a detailed study of P. Oxyrhynchus 849 by Ze'ev Safrai and Chana Safrai z'l (Chana died prior to the conference). This fascinating text records a discussion that Jesus had with a priest, mostly surrounding halakhic issues, and the Safrais provide a detailed commentary on every line. In some

cases rabbinic literature can illuminate this text, but in other cases the text helps unearth details buried within rabbinic literature and bring them out into the light of day. Finally, Guy Stiebel surveys aspects of the archaeology of Masasda, which enable him to reconstruct how the massive amounts of bread needed at Masada were baked. The archaeological and epigraphic data also provide evidence for the observance of purity laws at Masada.

There is obviously no way to evaluate the significant value of the book as a whole. It should be said that the editors did little work to convert this from a collection of the papers authored by the individual authors into a book: there are no indexes at all, for example, somewhat reducing its usefulness. The papers are generally clearly written, but some of them contain passages which an editorial hand should have touched. Still, the quality of the papers makes the book worthwhile. The article by Eshel is a very important resource, since the texts from the Judean Desert have been published in such a haphazard way, and no convenient handbook has yet been published. The contributions of Regev, Shemesh, and Friedman are the most thought-provoking with regard to the development of the *halakhic* system; Goodblatt raises some very interesting questions regarding the covert politics of rabbinic literature; the Safrais' paper re-emphasises the centrality of *halakhah* in some varieties of early Christianity. The other papers, too, are worthwhile in that they illuminate specific textual and *halakhic* details. In all, this volume is an important contribution to a growing library of scholarship.

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**R. Greenberg and A. Keinan**, *Israeli Archaeological Activity in the West Bank 1967–2007: A Sourcebook*. The West Bank and East Jerusalem Archaeological Database Project. Jerusalem: Ostracon, 2009. Pp 180 + CD Rom. ISBN 978-9-6591-4680-2.

The volume under review is one of ongoing products of a project initiated and directed by R. Greenberg whose aim is to provide data on the Israeli archaeological activities in the West Bank (including East Jerusalem; aka 'Judea and Samaria'; 'Occupied Territories') since 1967. It comprises the following parts:

Forward (pp. 1-2).

Part 1 (pp. 3–10) provides the historical background of the archaeological activities in the West Bank during the period that is surveyed.

Part 2 (pp. 11–32) describes the methods used in constructing the data base of sites and examples of GIS analyses.

Part 3 (pp. 33-150) is a gazetteer of the relevant sites.

Part 4 (pp. 151–172) lists the bibliography for the gazetteer.

Part 5 (pp. 173–180) is an index of the excavated sites.

In addition, a CD-ROM with the data base files is attached to the volume.

Greenberg and Keinan are to be commended for attempting to gather as much information on all the Israeli archaeological activities in the areas under Israeli control since 1967. This is all the more stressed due to the fact that the authors were somewhat courageous in their activities, as it required a very determined, at times unpopular, and politically quite defined approach to continue on this project. Much of the information on these activities was not available to the public for many years, and according to the authors, when they requested the data it was not made readily available to them by the official government office in charge of these activities, the 'Staff Officer for Archaeology in Judea and Samaria'. Thus, the data that they provide in many cases previously unavailable and fills in lacunae as to the archaeological work in this region and the authors are to be thanked for this. In addition, it should be noted that this data base in an ongoing, continuously updated project, and online updates can be found at: http://alt-arch.org/publications.php.

This said, there are several comments on the volume:

- 1. The amount of data that is presented for each site, is, unfortunately (although clearly not the fault of the authors) rather limited. Thus, attempts, as on pages 22–28, seem rather limited in utility and one wonders whether these really have any archaeological utility, even if this information can be used to get an idea of the extent of the activity and the types and periods of site.
- 2. While, as stated above, the data base is being continuously updated, quite a few mistakes were seen in the gazetteer. Several examples can suffice:
- 3. P. 62: Entry No. 274 (site name: Khallated-Dinnabiya) is notes as an excavation of Hirschfeld. In fact, it was excavated by H. Goldfus (who is quoted in the bibliography of this item).
  - (a) P. 72: On entry No. 360, excavated by A. Eitan, reference to some of the publications relating to this site are not quoted. In addition, the name suggested for the site by the excavator ('Vered Yericho') even if baseless from an historical point of view, should at least be mentioned in the entry, to facilitate comparison with the publications about this site.
  - (b) P. 98: On entry No. 599 ('Jaffa St.') this is a site that the present reviewer (misspelled as 'Maier') has excavated and is noted as one of the excavators. However, the various publications relating to this excavation are not provided.
  - (c) E. Eisenberg's excavations at Hebron (Tel-Rumeida) are not mentioned.
  - (d) Likewise, many of the publications by A. Ofer his excavations at Tel-Rumeida are missing as well.
  - (e) Many of Adam Zertal's publications on his excavations and surveys in northern Samaria are not included. In particular, the English versions of his volumes on his survey are not included only the Hebrew ones. Since this publication is aimed, primarily, at non-Hebrew readers, this is regretable.

(f) In recent years, the office of the Staff Officer for Archaeology in Judea and Samaria (mainly authored by Y. Magen) has published a series of volumes on various archaeological activities in the region. Many of these volumes are not mentioned in the volume under review, which is a pity, since this is just the data that the entire project was aimed at obtaining!

Most of these comments are matters that can be corrected and updated on the online database, so in fact, they should be related to as minor issues. Also the quality of book (very low quality soft cover) is regrettable, since it will mean that the volume will not survive continuous use in research libraries.

Finally, as Greenberg and Keinan acknowledge in the beginning of the volume, the data collected in this project is to be seen in a clearly political context. Here the authors are to be commended for courageously stepping outside of the all-too-cosy academic 'comfort zone,' and wading into the perilous, and messy, political waters of the near East. At the same time, this reviewer was left wondering if such political activism was taken on by many more archaeologists in the near East, whether or not this would have a deleterious effect on the quality, and agendas, of the archaeological research conducted throughout the region.

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**David P. Wright**, Inventing God's Law: How the Covenant Code of the Bible Used and Revised the Laws of Hammurabi . Oxford: Oxford University Press, 2009. Pp. xiv + 589. £43.00. ISBN 13: 978-0-1953-0475-6.

The common view regarding the birth of the Covenant Code basically maintains that it is the result of a long process of development and accretion, and its contacts with the Mesopotamian legal tradition were based on oral traditions common in Syria-Canaan early in the second millennium BCE. CC thus reflects early, if not the earliest, layers of Israelite traditions.

Wright totally changes the accepted view in three counts: date, avenues of contact and authorship. In his view, CC is 'directly, primarily, and throughout dependent upon the Laws of Hammurabi' (p. 3), and this is reflected both in the structure as well as the contents of the laws, both the casuistic and the apodictic. The casuistic laws of CC are dependent on the legal part of LH, mainly the second part (§§ 115–272), while the apodictic laws are derived from the prologue and epilogue of LH. CC, however, in its selective character, 'reshapes the political and theological landscape of the Laws of Hammurabi', being thus an ideological document with a political agenda aimed as a response to the political and cultural milieu of the NA period, between 740 to 640, the time of the height of Assyrian domination in the West. Since this period also witnessed much copying of the LH, this is the time where Wright locates the birth of CC and its heavy borrowing from

the LH. Finally, Wright sees CC as a creation of a single hand, and not an accretion of traditions along long time. Wright thus sees the type of connection between CC and LH on the literary level: both documents were literary works, and the author of CC seems thus to have been an educated person, versed in the literary works of the time.

Wright proposes to bolster this thesis of his in Part II of his book, a series of chapters which each tackles one legal theme from CC in comparison to its assumed parallel in the LH, attempting to show how the author of CC reshaped and transformed the cuneiform materials legally and ideologically. The discussion in these chapters is very detailed and quite technical, and it goes into minute details and arguments, some very intricate indeed. To make reading easy, Wright starts by presenting in a nutshell his thesis in the introduction of the book (Chapter 1: 'The Basic Thesis and Background', pp. 3–28) and follows this by Part I, in which, in two chapters, he outlines the 'Primary Evidence for Dependence: Sequential Correspondence and Date', again in summary, and then closes this part by looking, in Chapter 4, into the 'Opportunity and Date for the Use of Hammurabi's and Other Cuneiform Laws'. The book ends with a chapter of 'Conclusions', a bibliographical list and a series of indexes.

In terms of richness of materials and arguments, as well as form and outline, this book is well executed: it is well organised, with charts and tablets all over, and the discussion and style are clear and forthright. In view of the intricate argumentation in this book and the richness of materials presented and discussed, a review of it, to be fair, must take the form of a monograph, at least, especially when – I regret to say – I totally reject the author's thesis and arguments. Naturally, this is impossible in the present conditions. Therefore, I must limit myself to some details to illustrate my view of the matter.

Unlike my impression upon first being exposed to Wright's thesis in his preliminary studies, I am now far from being convinced by the main thesis of this book, and the author's arguments have not convinced me at all. Wright's discussion, especially in part 2 of his book, appears sometimes to violate Ockham's razor proposition (aka 'principle of simplicity') that assumptions should be reduced to their minimum. To put it other way, I often had the feeling that the author has shot an arrow and now he is doing his best to draw the target around it. The author makes heavy use of mainly two compositional techniques to account for similarities, which in turn would bolster his thesis: similar technical terms and the principle of cross-referencing. Applying these guiding principles, he arrives at suggestions and conclusions that, in my view, would not stand in face of a simpler interpretation.

I do agree with Wright's view regarding a genetic connection between CC and cuneiform sources. I also think that the author of CC was imbued with Mesopotamian legal traditions and definitely knew Akkadian first hand. I find Wright's discussion on pp. 99ff. of the corroboration regarding the biblical author's knowledge of Akkadian convincing, except that he focuses on first millennium evidence and ignores or plays down second millennium evidence. It is undeniable that the

biblical writers made use of many cuneiform sources, both literary and others, which they incorporated in their work, usually after ideological and theological reshaping. And this is all the more so when it comes to CC which reflects stunning resemblances in some of its laws to Mesopotamian counterparts. When it comes to CC, I agree with Wright that a straight literary dependence is preferable to the oral tradition explanation, and despite the enormous time gap between the legal sources of the 2nd millennium BC and CC, the author(s) of the latter did make use of such sources, relics of which have been unearthed in various places in Israel.

However, I find it difficult to accept the thesis of this book, that CC depends 'directly, primarily, and throughout' on LH, with some additions from other law collections (LE, MAL and HL). Even if the correspondences between CC and LH pointed out by the writer, especially in terms of the assumed similar sequences of the laws in both collections, are specific and clear – and they are not always convincing, to put it mildly - it seems to me quite unnecessary to pinpoint one specific legal source, LH, which happens to be the best preserved source, as the one from which the biblical author borrowed his laws and ideas. This is too much of a coincidence, and it has already been stated in Saul Lieberman's intelligent words quoted p. 365 n.8. Wright himself, by suggesting that a few laws in CC may derive from other legal collections and sources besides LH, such as LE from the first part of the eighteenth century BCE, as well as from some 'unknown Akkadian law' (pp. 217f.), somehow shakes his central assumption of a primary dependence of LH. How may we fit these sources with the thesis that CC is a product of the seventh century BCE? Also, we do have copies of LH from the first millennium, but quite a few of them reflect different recensions from the one on the stele. It is again a matter of a very convenient coincidence that CC's author picked up for his use the copy that reflects the same recension on the stele, again the one that by chance happens to be the most preserved one. When it comes to the order of the laws in both collections, the similarity of which is the main pillar of Wright's argument, he himself admits that quite a few laws in CC do not follow the assumed order. See the summary on p. 49. But then he heavily applies the principle of cross-referencing to settle the problem.

In the limited space here I wish to demonstrate how the author applies the two compositional techniques of similar technical terms and the principle of cross-referencing. One example is the author's attempt to deal with the intrusion of the law of negligence in Exodus 21: 33–34, which has no counterpart in LH and elsewhere, and thus in a way violates the thesis of similar order (pp. 213ff.). Defining the notion of negligence a bit differently, he suggests LH 229–230 as the parallel laws that may have influenced CC, especially since in both cases the negligence ends up in some 'falling': in CC an animal falls into a pit, while in LH a poorly-built house falls (and kills the owner/his son). The difference in contents does not seem to be a bother to the author, who next goes on to Gilgamesh (sic!) to find the coupling of opening a pit ( $\Box \Box \Box pet \hat{u} m + b \bar{u} r u m$ ) with falling into it ( $\Box \Box m = a m + b \bar{u} r u m$ ). 'Hence, the idea of 'falling' in LH 229–230 could have produced a new law about 'falling' in CC' (p. 214). In the sequel he notices the similarity

between the phrasing of the apodosis in v. 34, with its sequence of two verbs (... ישיב...), with the apodosis of LH 125 (ušallamma...irīab...), which leads him to the supposition '...that a connection between LH 125 and verse 34 is possible' (p. 216). But the 'apodosis of verse 34 is also similar to the wording of LH 267...', although here the verb is nadānum, not râbum/השיב. Now, since 'LH 125 (irīab) and 267 (inaddin) have no express objects', whereas Exodus 21: 34 supplies ישיב 'silver' to ישיב, to solve the problem created thereby let us substract the word 'silver' from the biblical verse, 'leaving the ruling quite similar to LH 125 and 267'. Nevertheless that later he does find the word 'silver' as an objective complement in other laws in LH, his discussion seems forced and prejudged, and the sequel which presents other possible sources for the syntagm būra(m) petû(m) (LE 53, LH 55–56, NBL 3, p. 217f., although in the latter case 'the purpose for and phenomenology of cistern opening in each case is different'), all outside the assumed similar order of laws, does not inspire confidence in the conclusions reached.

The technique of similar terminology, ergo direct dependence, is best demonstrated by the author's discussion (p. 34 and fuller discussion on p. 146) of the pattern of three necessities required to be given by the husband/owner of a female slave in Ex. 21: 10, which he suggests to originate in LH 178 (and 148) (together with the verb *našûm* Gtn). But, as is well known, this threesome pattern is very common and is attested in many variegated sources in various places and periods (including a few attestations in the Bible, see Hosea 2: 7; Ezekiel 16: 18–19; Qohelet 9: 7–9). So why locate its origin in LH? The same can be said of the verb *našûm* Gtn, which is very common in legal documents of all sorts.

The methodological principle I am trying to formulate here is that if the resemblance adduced (in sequence of details, idioms and expressions, underlying ideas, etc.) is common to other sources and can be traced in other periods and places, and Wright himself adduces quite a few other sources as possible contributors to CC, the close similarity between CC and LH is then indeed a mere coincidence, and therefore there is no justification in pointing to a specific source as the main contributor. In my view, and following the principle of simplicity, many features alluded to by Wright could very well be an expression of general Mesopotamian thinking and common literary conventions. The same structure and sequence of the laws, the same expressions, idioms, and words, verbs and legal terms were all a shared lore all over the ANE along its 3000 year of history.

Although I totally reject Wright's thesis in this book for the reasons outlined above and given that I do see matters quite differently in this issue regarding the undeniable similarities and dependence of CC upon the cuneiform literary heritage, the value of Wright's contribution cannot be overestimated. He offers the scholar in the field a valuable tool for further work which includes all the relevant sources, thoroughly discussed and analyzed. He conveniently outlines the issues and problems involved in the study of CC, while highlighting the main discussions and solutions. Finally he also provides a thorough review of the vast literature in the field, again for the convenience of the reader. I definitely see myself leafing

and browsing often through the pages of this book and I am sure I shall continue arguing with the author's views expressed therein, thereby hopefully enriching my insights.

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**Sophie Démare-Lafont and André Lemaire (eds.)**, *Trois millénaires de formulaires juridiques*. Hautes Études Orientales 48, Moyen et Proche Orient 4. Paris: Librairie Droz, 2010. Pp 480, incl. 16 b/w illustrations. €91.08. ISBN 978-2-60001-355-0.

This handsome volume is dedicated to the phraseology of legal contracts recorded in various Semitic languages used in Syro-Palestine and some neighbouring regions (Egypt, Yemen), from the second millennium BCE to the beginning of the Middle Ages, with a particular focus on changes and continuity in the standardised formularies. It publishes the proceedings of a symposium held in 2006 at the École pratique des hautes études in Paris. In fifteen chapters (with two exceptions, all in French), established experts discuss the topic on the basis of a wealth of primary sources: from Akkadian, Ugaritic and Aramaic clay tablets to Aramaic and Nabataean papyri, from South Arabian, Nabataean and Palmyrene inscriptions to Syriac parchments, from the Talmud to the Hebrew and Arabic documents of the Cairo Geniza. The book provides an important contribution to the history of law and will be of interest to anyone interested in the cultural and social history of the ancient world. The chapters feature numerous text samples, usually with a detailed commentary, and provide an excellent introduction to the primary sources. It is slightly disappointing that (with the exception of one chapter) the different materials and scripts used to record legal affairs are not illustrated by photographs.

The editors are Sophie Démare-Lafont, a legal historian best known for her work on the law traditions of the cuneiform world, and Andre Lemaire, a prominent specialist in Old Aramaic. They explain in the introduction why the geographical focus of the collection lies on Syro-Palestine rather than on the Middle East more generally (pp. 7–11): the availability of text corpora from that region allows to study legal traditions, their transmission and evolution over a period of three millennia.

The first chapter deals with cuneiform tablets from Mari, on the Euphrates near the Syrian-Iraqi border, in the early 2nd millennium BC. In his analysis of property sale contracts, Dominique Charpin pays special attention to divergences from the formulary attested in Southern Mesopotamian documents which he sees as reflections of local Amorite traditions (pp. 13–42). The next three contributions deal with clay tablets of the 14th–13th centuries BC from Syria. Sophie Démare-Lafont offers a survey of the different genres of legal documents attested in Emar on the Middle Euphrates and a detailed discussion of how debts were secured (pp.

43–84). The other two chapters deal with Ugarit, the Mediterranean harbour city. Wilfred van Soldt deals with legal texts in Akkadian language (pp. 85–124, in English) while Dennis Pardee and Robert Hawley discuss those in Ugaritic (pp. 125–140).

The following five chapters deal with documents of the Assyrian, Neo-Babylonian, Persian and Seleucid empires, from the 8th to the 3rd century BC. Pierre Villard surveys the formularies of the Neo-Assyrian legal texts in cuneiform script from the 8th and 7th centuries BCE (pp. 141–161, with 41 text samples in an appendix on pp. 162–185). André Lemaire's contribution is a companion piece, as it deals with legal texts from the same period and from the same sites but inscribed on clay tablets in Aramaic alphabet script (pp. 187–224). The texts in both scripts use the same legal phrases although the documentation in Aramaic is far more restricted and mostly concerns debts. Lemaire's chapter contains an overview over recent publications of new material from Syria to which E. Lipinski's monograph *Studies in Aramaic Inscriptions and Onomastics, Volume III: Ma'lana* (Orientalia Lovaniensia Analecta 200, Leuven 2010), can now be added.

Lemaire also publishes five new tablets from illicit excavations (pp. 191-204, with photographs on pp. 220–224), two of which can be identified with certainty as originating from Dur-Katlimmu (modern Tell Sheikh Hamad on the Habur) because of the typical personal names with the divine element Salmanu (šlmn). As one of the excavation epigraphers, I find it regrettable that there is yet more evidence for lootings in this important city. The discussion of Aramaic legal texts continues in Hélène Nutkowitz's chapter on the papyri from the island of Elephantine at the First Cataract of the Nile during the Persian rule over Egypt. She concentrates on marriage contracts and testaments, offering editions and analyses of two examples from 449 and 404 BCE (pp. 225-260). We return to the cuneiform world with Francis Joannès' survey of the legal texts in Neo-Babylonian cuneiform script from the 7th to the 3rd centuries BCE, covering the periods of Neo-Assyrian, Neo-Babylonian, Persian and Seleucid rule over Southern Mesopotamia (pp. 261– 278); despite the political changes, the legal traditions prevail and the contrast with the very different formularies used in Northern Mesopotamia and also Syria (cf. Villard on p. 141) is striking. With the next chapter, we return to Aramaic documents from the Persian period. Jan Dušek's contribution deals with the papyri from a cave in Wadi Daliyeh, also known as the 'Samaria Papyri', dating to the years 375-332 BCE and probably hidden from Alexander's advancing army. Dušek offers a detailed discussion of the slave sale contracts (pp. 279–316).

The next three chapters bring the value of very different primary sources to our attention, namely monumental inscriptions which publicise legal acts. François Bron surveys the relatively meagre evidence from South Arabian inscriptions and draws attention to sources from the 2nd or 3rd century CE that have only recently come to light in clandestine excavations in Yemen: archival texts inscribed in a cursive script on wooden sticks (pp. 317–319). Mahdi Abdelaziz briefly discusses the legal information contained in Nabataean inscriptions before turning to his main topic, the Nabataean papyri from the Cave of Letters at Naḥal Ḥever on the

Dead Sea (known as the Babatha Archive after its protagonist, a Jewish woman). The texts date to the years 93–132 CE and were apparently hidden during the Bar Kochba revolt (pp. 321–336). For her overview of the legal formulary of the 3rd century CE, Eleanora Cussini combines evidence from Syriac contracts on parchment and subscriptions added to Greek contacts with citations of sale contracts in Palmyrene monumental funerary inscriptions (pp. 337–355).

In the final three contributions, we turn to rabbinical law and the Medieval Jewish world. Liliane Vana analyses the *get* (bill of divorce) as a legal and social institution and as a document type (pp. 357–389). The last two chapters deal with the rich legal documentation from the geniza of the Ben Ezra synagogue at Medieval Cairo (al-Fustat).

Lastly, Judith Olszowy-Schlanger offers a survey of the different genres of legal documents attested in Hebrew (pp. 391–410) while Geoffrey Khan provides editions of two Arabic house sale contracts from 1126 CE and 796 CE (pp. 411–423).

In the conclusions, the editors give a helpful overview over the formularies discussed in the preceding chapters, bringing together the components of the legal documents in a comparative analysis (pp. 425–433). The volume concludes with a list of bibliographical abbreviations (pp. 435–441), indices of primary sources (pp. 443–453) and place names (pp. 453–456), a useful selection of legal terms (pp. 456–468) and a thematic index (pp. 469–470). All contributors are to be congratulated on this informative and well produced book.

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**Hershel Shanks**, *Freeing the Dead Sea Scrolls*, and other Adventures of an Archaeology Outsider. Continuum International, 2010. Pp. 251. \$27.95. ISBN: 978-1-4411-5217-6.

Hershel Shanks is Mr. Biblical Archaeology – both a compliment and a criticism. He founded Biblical Archaeology Review forty-five years ago and has seen it grow to a circulation of 130,000: a phenomenal achievement. On the other hand, today, connecting archaeology with the Bible is unacceptable to the purist. But the Bible will not go away, and journals that have dropped the biblical connection are not reaching the public.

Whilst acknowledging the new trend, Shanks has retained the biblical association, and the great amateur public is with him, they love his journal. Not so some of the professionals, who resent the grip he holds on the subject. By publishing their works in popular form, Shanks performs them a service but he also publishes his own views on professional matters – and he can do that without peer review. His background is that of a successful lawyer and he sees archaeology through that lens. He saw the rights of publishing the Dead Sea Scrolls before the scholars had

completed their work, and he got his fingers burnt in the case of Elisha Qimron, whom he failed to acknowledge: a case which cost Shanks \$100,000 in 1994. By way of defence, Shanks explains this defeat by reiterating that the Israeli courts are different from the American. His commitment to archaeology is real. At the age of forty he came to Israel and caught the Jerusalem syndrome hard and it has remained with him ever since. He explored the water tunnel attributed to Hezekiah and still writes about it, not having yet uncovered the secret of its winding passage. He discovered the City of David, before its full significance was apparent, and wrote a fine little guide within a few months of arrival. This work, he claims, inspired the full-scale expedition by Yigael Shiloh. It was not the whole story but it helped to induce Mendel Kaplan and others to fund the dig.

Less happy have been Shanks's excursions into the murky world of forgeries. Having committed himself to defend recent suspected inscriptions, he is ingenious in exposing the weaknesses of those arguing against the authenticity of the Ivory Pomegranate (in the Israel Museum), the James, brother of Jesus, Ossuary, and the Yehoash Tablet. Expert opinion is still divided on these issues, and Shanks weighs in on the side of authenticity, using legal tricks, like derogatory thumbnail sketches ('a hitherto unknown expert', 'ever the smart aleck', 'brought no relevant expertise to the committee', etc.), of those on the other side. This approach has earned Shanks the enmity of the Israel Antiquities Authority (IAA) and other specialists, although now appears to be on the path of reconciliation and has made his peace with Shuka Dorfman, head of the IAA.

At the good age of 80, Shanks, as sprightly as ever, wants above all to be loved by the establishment, with whom he has conducted a deep love-hate relationship for many years. This autobiography is his attempt to be loved for what he has done. He did work hard to make the Scrolls available to a wider public, when scholars were hiding behind their reputations, but this was hardly an adventure. It was the dedicated lawyer exploiting loopholes in the public interest: an achievement that is well described, even though not all the experts will agree on, or approve of his self-interest(s). Unfortunately, his harping on the authenticity of dubious artefacts goes against the professional grain of archaeological endeavours: Here Shanks is the lawyer, the advocate of one (his own) point of view, which is hardly an adventure. All in all, the great adventure has been that Shanks had the good sense and drive to keep archaeology in the public eye, and has not abandoned the popular biblical connection, for which he is to be thanked. This book, which may look like a premature obituary, should be seen in the opposite light: Forty years in the law, forty years of BAR, and then what about the next forty years? We expect further ideas, further challenges and further adventures.

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**Hershel Shanks**, *Jerusalem Forgery Conference*, *Special Report*. Washington: Biblical Archaeology Society, 2010. Pp. 83, incl. 17 photographs and 2 drawings, \$ 39.95.

This is the report of a three-day conference called by Hershel Shanks in January 2007. In attendance were seventeen scholars of wide repute in the field, from Israel, Germany, USA, France and England. They were called to discuss the authenticity or otherwise of five inscriptions, those of the 'James...brother of Jesus' Ossuary, the Ivory Pomegranate in the Israel Museum, the Yehoash tablet, the Moabite (octagonal) Stone and two Moussaieff ostraca (the first known as 'Three Shekels', and the other as 'The Widow's Plea'). Shanks summarises the outcome of the conference as follows (p.5), the Moabite Stone is authentic, the James Ossuary inscription is very probably authentic, the Pomegranate Inscription is very probably authentic, the Yehoash Tablet is controversial, some thought it a forgery, some did not know, and some material scientists thought it authentic, the two Moussaieff ostraca are probably forgeries. We can dismiss the Moussaieff ostraca and the Moabite Stone, which have not been the focus of the recent Forgery Trial in Jerusalem. The Conference had no problem in declaring the Moabite Stone (unfortunately named, it is a squat octagonal basalt piece later than the Mesha Stone) to be genuine and the two Moussaieff ostraca to be forgeries, without too much discussion.

The James Ossuary inscription was another matter, and Shanks' summary of it as being very probably authentic is supported by the Report, which states that Ada Yardeni, Andre Lemaire and Bezalel Porten (all present at the conference) supported it. Gabriel Barkay (also present) accepted the expert opinions of Yardeni and Lemaire. Shanks had consulted Joseph Naveh on the inscription, and as Naveh expressed no opinion, Shanks took that as agreement to authenticity. Emile Peuch (absent) had agreed authenticity but doubted that the Jesus is the one from Nazareth. Frank Cross (absent) had declared the inscription a fake. Ronny Reich (present) thought that only the fact that it was too good to be true, should not brand it a forgery, while Andrew Vaughn (also present) agreed. Also discussed was whether only the second part, referring to Jesus, was forged. That had been suggested by Kyle McCarter (absent) but rejected strongly by Yardeni and Cross. Though agreed as a possibility by Vaughn, the conference as a whole rejected this suggestion. As for the scientific evidence, regarding patina and so on, nothing conclusive was reached as the scientists from the Israel Geological Society were not present and both Wolf Krumbein and Mertin Heidi, German material scientists (both present) agreed that the cultural aspects of the palaeography were more decisive than the material ones, as the stonework had been contaminated by police inspections and later cleanings. From all this Shanks considered that the balance of opinion was that the Ossuary Inscription was probably authentic.

The Ivory Pomegranate was condemned by Aaron Demsky, who had originally declared the inscription to be a forgery, as agreed with Shmuel Ahituv (both

present at the conference). The palaeography was to be dated to Iron Age II, about 400 years after the ivory carving of Late Bronze Age. The writing shows a space between two of the words which was atypical of the earlier period when a dot would have been used. Nevertheless, Lemaire thought (as Nahman Avigad before him) the work to be of the earlier date and authentic. The argument seemed to hinge on whether one of the letters had infringed on an old break in the pomegranate, as any late forger would have stopped the letter short of the break, whereas an original inscription, made before the break, would have run onto the break. There was considerable discussion on this point and the balance was that the inscriber had deliberately stopped short of the break, so it was a later inscription, but whether this was just a later dedication, and therefore unusual and authentic, or much later, and therefore a forgery, was not resolved.

On the Yehoash Tablet, opinion was decidedly divided, as Shanks acknowledges. On the one side were Edward Greenstein, Avi Hurwitz, and Israel Ephal (all present) and Frank Cross and Kyle McCarter (absent) who thought it a forgery, while against them stood Chaim Cohen (present). Yardeni was undecided but Christopher Rollston (absent) was clear that it was a forgery, as was Andrew Vaughn. As for the material evidence, Krumbein (present) thought the stone was ancient while Yuval Goren had held the opposite view, but he was not present to be challenged. However all agreed that later cleaning and inspection will have contaminated the surface of the tablet and that the material evidence was therefore not conclusive. A clear vote of forgery was expressed by Hanan Eshel (present) who doubted the authenticity of all the factors, philology, lettering, stone, the whole thing, which was quite unlike any other known Iron Age inscription. Several other scholars, such as Barkay, Alan Millard (both present) and David Noel Freedman (absent) were more cautious and thought the Yehoash tablet was authentic or an early copy of an authentic inscription.

On the broader issues, the conference concluded that all unprovenanced material must be treated with extreme suspicion but that it should be published if at all practical, so as not to be lost to scholarship. Publication with reservations would preclude false claims and help if later information were to reveal authenticity. The conference favoured the idea of standard protocols for dealing with unprovenanced material and a three—man committee (Vaughn, Krumbein, Millard) was established, though their procedure was not reported.

The report concludes with statements by Ahituv on the Moabite (octagonal) Stone; by Barkay, citing ten points for consideration in all cases; by Cohen on the Yehoash Tablet; by Demsky on NW Semitic inscriptions and the Pomegranate in particular; by Freedman on fakes in general; by Greenstein on the Tablet; by Hurvitz on ditto; by Krumbein on patina; by Lemaire, on all the pieces; by Millard on the Tablet; by Ronny Reich on the Tablet; by Rosenfeld and Feldman (not there) on material aspects of the Tablet and the Ossuary; by Shanks on legal versus expert appraisals; by Vaughn on the conference as a whole; by Yardeni on the Tablet and the Ossuary. A final report by Gerald Richards (absent) on two photographs by Oded Golan – one of the accused on trial – completed the proceedings.

In calling this conference and publishing this report, Shanks has ensured that the trial in Jerusalem would never be the end of the matter. The law could perhaps decide if this or that person was involved in a forgery, but could not in itself conclude whether one piece or another was a forgery. That would be in the hands of the experts and this report demonstrates that their opinions were not in any way unanimous. Shanks would like to think that the balance was in favour of authenticity for the James Ossuary, the Ivory Pomegranate and the Yehoash Tablet, but that is not at all conclusive from the experts gathered at the Conference.

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Mark J. Boda and Jamie Novotny (eds.), From the Foundations to the Crenellations. Essays on Temple Building in the Ancient Near East and Hebrew Bible. Alter Orient und Altes Testament, 366. Münster: Ugarit-Verlag, 2010. Pp xxxviii + 629. € 128. ISBN 978-3-86835-031-9.

Temples were the focal point of most societies in the ancient Near East, and as such deserve the attention of any scholar in the field. Collecting 21 contributions on temple building in ancient Near East texts and in the Hebrew Bible, this volume sets out to provide up-to-date information on scholarly treatments of temple building in textual sources and the texts' relationship to archaeological remains. The ten essays on the ancient Near East cover the entirety of texts from the early third millennium up to Hellenistic Babylonia, while the essays on the Hebrew Bible are more focussed on individual literary aspects of temple building reports. Richard Ellis, to whom the volume is dedicated, writes the final essay as a response to the other contributions. Since it is impossible in a short review to comment on all twenty-one contributions with equal emphasis, I will briefly summarise their main arguments and select a handful of essays for closer commentary. It is immediately obvious that the essays on ANE temple-building are more concerned with realia of temple building. The essays on the biblical texts provide literary analyses of texts that use temple building as a motif. This creates somewhat of an imbalance, addressed only partially by the contributions of Ambos and Schaudig.

In the first essay, R. E. Averbeck lists the available evidence for temple building in the 3rd millennium. M. Fitzgerald in contrast focuses on the various functions of temple building in a wide range of different Akkadian texts. D.S. Pitt lists the variety of terms for temple buildings in Elamite areas, where the situation is particularly difficult: inscribed bricks mention a plethora of terms that are difficult to interpret because of the lack of substantial building remains. G.A. Beckman quotes eleven Hittite texts about temple building and the installation of new cult items in temples, which show that each of these activities is itself cultic. W.T. Pitard's article on Northwest Semitic Literature focuses on the Baal Cycle and RS 94.2953, arguing that the text insists on divine permission to underscore the legitimacy of succession

of the temple in the real world. This is further supported by the fact that Pitard finds the closest structural parallel not in the story of Solomon building the temple (1 Kings 5-8), but in the narrative about the disputed succession (1 Kings 1). J. Novotny gives a very instructive overview of the reasons for temple (re-) building in Assyria from the Ur III period (21st-20th century BCE) until Sîn-šarru-iškun (late 7th century BCE). The next essay is by H. Schaudig on the restoration of temples in the Neo-Babylonian period, focussing particularly on foundation deposits. Foundation texts are also examined in the extensive contribution by M.C. Root on Achaemenid Iranian texts from the fall of Babylon until Darius I (522–486 BCE). There are, of course, very few Achaemenid buildings that can be confidently identified as temples, but Root argues that our distinction between temples and palaces may often be false. In what is the shortest contribution to the volume, T. Boy focuses on the Temples in Hellenistic Babylonia. The penultimate essay of the first section by C. Ambos studies first millennium building rituals, which were used in order to avert dangers of building work, while S. Dalley provides a general overview of temple building in the ancient Near East.

The biblical section commences with an essay by P. Pitkänen on the building of the tabernacle in Exodus 25-40, in which Pitkänen assumes a pre-monarchic date for the text on the basis of the necessary, but by no means sufficient, argument that the elements of the building report in Exodus follow the scheme for ancient Near Eastern temple building reports. Hurowitz himself carefully analyses the narrative about Solomon's temple as narrated in 1 Kings, arguing that the authors likely had access to original records pointing to a date of composition in the late pre-exilic period. M. Boda shows that 1 Chronicles includes much material on elements of worship because the Chronicler needs to justify temple worship as it exists at a time when the second temple has been standing for centuries. L. Fried writes on the building of the second temple in Ezra 1-6. While she agrees with Williamson that Ezra 1-6 is a Hellenistic addition to the already combined work Ezra 7 -Nehemiah 13, she nonetheless believes that it incorporates many details from the early Persian period, such as the fact that Sheshbazzar laid the foundation stone, but that he was no longer involved in the inauguration of the temple. According to Fried, this is because it took twenty-two years to build, on account of labour shortages and lack of funds. We have come to expect high quality readings by Fried and are not disappointed here, even if at times she is overly confident in the information the biblical text provides.

M.S. Odell writes on Ezekiel's great temple vision, or more precisely on the temple reform in Ezekiel 43:7–9. She considers Ezekiel's temple as a new foundation, rather than as a restoration story, because there is no search for the original foundations, an aspect that Schaudig describes as a fundamental part of Neo-Babylonian rebuilding narratives. Additionally, rather than stressing divine separation, she emphasises divine hospitality and access to sanctification as central aspects of the book. J. Kessler contributes an essay on Haggai, in which he challenges Tadmor's and Bedford's interpretation that the people and their leaders did not start rebuilding the temple because they thought the time had not yet come.

Kessler argues that the people are not described as pious in Haggai, and therefore the book constructs a reality in which the people know that they should have started, but refuse to do so. Further, Kessler sees Hag 2: 10–19 as referring not to the initiating of the rebuilding as such, but to a ritual close to the completion of the rebuilding efforts, since the event has such an impact on the people's situation. He therefore regards it as a Judean equivalent of the placing of the 'first'/'former' stone. A. Laato first focuses on five expressions in Zechariah's temple building oracle (4:6b–10a), explaining them by reference to similar expressions in Mesopotamian temple building literature, before contextualising this within his reconstruction of religious and political events in post-exilic Judah.

The penultimate essay in the Hebrew Bible section is by R.C. Van Leeuwen, who studies how the concept of a household impacts the way that deities and temples are thought of in the ancient Near East and the Hebrew Bible. B. Levine reviews the eight essays on temple building in the Hebrew Bible, adding important comments, in particular his note on the expression <code>lwdghrh</code> ('great mountain') for temple and its Akkadian and Sumerian cognates <code>šadû/kur</code>, an expression found in the names of many Mesopotamian temples. The last word is given to the recipient of this <code>Festschrift</code>, Richard S. Ellis, who has had so much influence on the study of foundation deposits and temples in the ancient Near East. There are extensive appendices listing the Aramaic, Akkadian, Hittite, Phoenician, Persian, Sumerian, Ugaritic and Elamite sources and publication details, as well as giving short bibliographies on those biblical passages which mention temple building. The usual indices help the reader to navigate the volume.

Anybody working on temples in the ancient Near East, including ancient Israel, should read the essays in this volume, particularly those on ANE texts, since they provide the necessary foundation to understand the genre of temple-building texts and references to building rituals in both non-biblical and biblical texts. The essays that were most useful to this reviewer were those by Ambos, Schaudig and Hurowitz. The first two provided helpful readings of Neo-Babylonian building rituals, while Hurowitz's article show-cased his ability to bring his vast knowledge of ANE texts to interpreting biblical texts. I can warmly recommend this book which will be the first port of call for future research on temple building in the ancient Near East.

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**J. David Schloen (ed.)**, Exploring the Longue Durée: Essays in Honor of Lawrence E. Stager. Winona Lake, Indiana: Eisenbrauns, 2009. Pp. xxii + 538. \$69.50. ISBN10: 1-57506-161-9; ISBN13: 978-1-57506-161-0.

This Festschrift, written in honour of Lawrence E. Stager on the occasion of his 65th birthday, contains 50 relatively short articles. The majority of the contributors (archaeologist, biblical scholars, philologists, and historians) are working at North

American and Israeli institutes of higher education but European scholarship is also represented. As befitting a *Festschrift* to Stager, most of the articles belong in the realm of archaeology and feature technical and specialised discussions of archaeological artefacts. The articles appear in alphabetical order according to author's surname rather than according to topic. The volume is well presented with a wealth of maps, drawings and photographs illustrating the discussed artefacts and geographical areas. The editor, J. David Schloen, opens the volume with an overview of Stager's scholarship.

Tristan J. Barako, 'Solomon's Patrimonial Kingdom: A View from the Land of Gilead', surveys the biblical and archaeological evidence from the excavation conducted at Rumeith in the northern part of Transjordan, and argues that the findings corroborates Stager's reconstruction of the Solomonic kingdom. In particular, Barako suggests that Rumeith was one of the sixty fortified cities allotted to Ben-geber who administered Solomon's sixth district (1 Kings 4:13).

Manfred Bietak and Karin Kopetzky, 'The Dolphin Jug: A Typological and Chronological Assessment', compare the so-called 'dolphin jug, found in 1921among the disturbed rubble in one of the chambers of the pyramid of Amenemhat I, with similar jugs unearthed in other excavations. Based on this comparison, they date the dolphin jug to the fourteenth Dynasty (1710–1650 BC).

Elizabeth Bloch-Smith, 'Assyrians Abet Israelite Cultic Reforms: Sennacherib and the Centralization of the Israelite Cult', surveys the archaeology associated with the claimed Neo-Assyrian destruction of Israel. She argues that, contrary to the Assyrian claims, they rarely left the major routes and thus left peripheral villages unharmed. Instead, they focused on destroying well-fortified strategic sites (e.g. Hazor, Lachish).

Aaron J. Brody, "Those Who Add House to House': Household Archaeology and the Use of Domestic Space in an Iron II Residential Compound at Tell en-Nafbeh', examines one household compound at Tell en-Nafbeh to find out what light it can shed upon life in the extended family in ancient Israel. Brody explores the use of different rooms in the compound, as evidenced by the types of pottery found in them, and suggests that three nuclear families, part of one extended family, shared that compound.

Aaron A. Burke, 'More Light on Old Reliefs: New Kingdom Egyptian Siege Tactics and Asiatic Resistance', argues that a close study of the New Kingdom reliefs yields insight into both Levantine and Egyptian conduct of siege warfare during the Late Bronze Age.

Susan L. Cohen, 'Cores, Peripheries, and Ports of Power: Theories of Canaanite Development in the Early Second Millennium B.C.E.', examines the Canaanite participation in international trade across the Mediterranean in the early second millennium BC and explores the effect foreign import had on the development of social and economic relationship between city states and their rural surroundings.

Michael D. Coogan, 'The Social Worlds of the Book of Job', argues that the descriptions in the book of Job shed light upon the social realities and values of its authors. For example, Coogan maintains that careful attention to the way in

which the authors describe the fictional Job's dwelling place (permanent rather than temporary) reveals that the authors lived in agricultural towns.

Frank Moore Cross, 'Telltale Remnants of Oral Epic in the Older Sources of the Tetrateuch: Double and Triple Proper Names in Early Hebrew Sources and in Homeric and Ugaritic Epic Poetry', argues that the use of multiple names of identical persons, tribes, or places in the J and E strand of Genesis-Numbers demonstrates that J and E drew on earlier oral epic traditions.

William G. Dever, 'Merenptah's 'Israel,' the Bible's, and Ours', criticises much of recent biblical scholarship on the inscriptions by Merenptah, and argues that little prevents us from identifying the people denoted 'Israel' in the inscription with what Dever calls the 'proto-Israelites' of early Israel.

Trude Dothan and Alexandra S. Drenka, 'Linchpins Revisited' contribute with a short study on the recently excavated fragmentary bronze head of unknown provenance. They compare it with the bronze linchpin found at Ekron and the larger one from Ashkelon and argue that the fragmentary one shows Canaanite influence.

Avraham Faust, 'Cities, Villages, and Farmsteads: The Landscape of Leviticus 25:29–31', challenges the common view that Lev 25:29–31 differentiates between people living in walled cities versus those living in unwalled villages. As shown by archaeology, what is at stake is not the existence of a wall but whether a person lived in a settlement or in scattered farmhouses.

Israel Finkelstein, 'Destructions: Megiddo As a Case Study', studies the four destruction layers at Meggido, and shows that the destroyer's aim was total desolation.

Seymour Gitin, 'The Late Iron Age II Incense Altars from Ashkelon', dates the three incense burning altars of sandstone, uncovered at Ashkelon, to the seventh century BCE. He proposes that the appearance of this type of Israelite altars in Philistia is better explained by the Neo-Assyrian policy of population transfer following the destruction of Israel in the eighth century BCE.

Ram Gophna and Shmuel Liphschitz, 'Palmachim-Giv`at Ha`esev: A Navigational Landmark for Ancient Mariners?', suggests that the tiny coastal site at Giv'at Ha'esev served as a navigational landmark.

Sophocles Hadjisavvas, 'Wine for the Elite, Oil for the Masses: Some Aspects of Early Agricultural Technology in Cyprus', looks at the Cypriotic archaeological remains related to production of wine and olive oil. He suggests that the unusually high capacity of the olive press at Idalion shows that, by the fourth century BCE, the consumption of olive oil had ceased to be the privilege of the elite classes.

Baruch Halpern, 'The Dawn of an Age: Megiddo in the Iron Age I', surveys various theories relating to the transition into Iron Age I in Canaan (e.g. Alt, Mendenhall, Finkelstein) which all suggest that Israelite pastoralists overwhelmed urban Canaanite centres. Using Megiddo as a test case, Halpern argues that the changes in the Canaanite city-states in the eleventh or the twelfth centuries BCE reflect a rebellion of the local elites rather than a 'peasant revolt'.

Paul D. Hanson, 'Compositional Techniques in the Book of Haggai', analyzes Hag 1:1–15 and explores the way in which earlier temple traditions have impacted not only the message but also the structure of Haggai.

Ronald Hendel, 'Other Edens', nuances Stager's insight regarding the shared symbolic geography of the city and temple of Jerusalem and the Garden of Eden. He suggests that the myth of Eden portrays the world as it is, i.e. where human toils and are exiled from paradise, while the temple ritual presents an ideal picture of the world as it ought to be, i.e. as a 'return to paradise'.

Timothy P. Harrison, 'Lifting the Veil on a 'Dark Age': Tayinat and the North Orontes Valley during the Early Iron Age', argues, on the basis of the archaeological evidence in the North Orontes valley, that there was a large degree of continuity between the Hittite Empire of the Bronze Age and the later smaller states in the area, yet, interspersed between these small Hittite states, are other settlements that betray Aegean influence.

Larry G. Herr, 'The House of the Father at Iron I Tall al-'Umayri, Jordan', explores what the layout and content of the dwelling places from Iron I at Tall al-'Umayri can tell us about the way in which extended households lived together.

Theodore Hiebert, 'Israel's Ancestors Were Not Nomads', argues that the biblical creation traditions, primeval traditions, ancestral traditions, and Exodus traditions, together reveal that Israel understood itself as originating from an agricultural society. Stager's reconstruction of the agrarian origins of Israel based on his archaeological investigations thus receives support from Israel's own self-understanding.

John S. Holladay, 'How Much Is That in . . . ? Monetization, Money, Royal States, and Empires', looks at economical aspects of the ancient Near East. Based on lists of paid tribute, for example, Holladay concludes that states must have had significant quantities of gold and silver in 'banks'. This, in turn, suggests that pre-exilic Judah was not as poor as many scholars tend to think, and that its economy must have been more varied than 'bread, olives, and wine alone'.

Jeremy M. Hutton, 'The Levitical Diaspora (I): A Sociological Comparison with Morocco's Ahansal', detects commonality between the structure and social function of the family in the north African Ahansal tribe and the system of Levitical cities (Josh 21:10–40; 1 Chron 6:39–66). The former can therefore serve as a heuristic model for the study of the Levites. For instance, the distribution of the Levitical cities might reflect the Levites' function as intertribal arbitrator.

Vassos Karageorghis, 'A Cypriot Workshop of Middle Bronze Age Askoi', studies the form and shape of a group of zoomorphic vases (askos) from Cyprus that were probably produced in the same workshop.

Philip J. King, 'Slavery in Antiquity', provides a concise survey of the social institution of slavery as portrayed in the HB (Exod 21:1–11; Lev 25:39–55; Deut 15:12–18; Jer 34:8–22) and the NT (1 Cor 7:21–24; Phil).

Thomas E. Levy, 'Ethnic Identity in Biblical Edom, Israel, and Midian: Some Insights from Mortuary Contexts in the Lowlands of Edom', uses the material remains from the tenth-century BCE cemetery at Wadi Fidan (modern day

southern Jordan) to argue that Edom as a distinct ethnic identity came into being as the result of conflicts between neighbouring groups (e.g. the Midianites and the Israelites).

David Lipovitch, 'A Reconstruction of Achaemenid-Period Ashkelon Based on the Faunal Evidence', examines the zooarchaeological data. For instance, looking at the identifiable remains from sheep and goats (constituting 88% of the faunal evidence), Lipovitch notes that while the proportion of sheep fell, the proportion of goats rose. He suggests that this change may reflect a stress on the economy, as goats need less maintenance than sheep.

Aren M. Maeir, 'Hazael, Birhadad, and the  $\mu rf$ ', challenges Eph'al's suggestion that the word  $\mu rf$  in line 10 of the 'Zakkur Inscription' refers to the tactic of tunnelling under a city during a siege. Recent excavations of Gath suggest that the older understanding of the word as referring to a trench is preferable.

Nicolò Marchetti, 'Divination at Ebla during the Old Syrian Period: The Archaeological Evidence', argues that the clay figurines for divination activities from Ebla show that extispicy at Ebla included hepatoscopy, inspection of intestines and teratological observations.

Mario A. S. Martin, 'Egyptian Fingerprints at Late Bronze Age Ashkelon: Egyptian-Style Beer Jars', explores the Egyptian features of a specific type of beer jars unearthed at an Egyptian fort close to Ashkelon. As they all contain a whole in the bottom, it is unlikely that they contained liquid. Rather, they were utilised during the beer making process. These jars further help us to date the Egyptian withdrawal from Ashkelon.

Daniel M. Master, 'From the Buqê'ah to Ashkelon', uses the data from various excavations (the Buqê'ah Valley, the Beersheba Valley, Jerusalem, Gibeon, Ekron, and Ashkelon) to argue that Judah's economy was shocked but not radically altered after Sennacherib's attacks. Those cities along the Mediterranean coast that survived the attacks actually prospered again soon afterwards.

Amihai Mazar, 'The Iron Age Dwellings at Tell Qasile', surveys the settlement history of Tell Qasile. He looks at the ways in which the domestic architecture changes from strata to strata and explores what that tells us about the different social layers at the site. Mazar further suggests that, as the economy of the town was dominated by maritime trade, most of the houses probably belonged to merchants, ship-owners, and seaman.

Alan Millard, 'The Armor of Goliath', defends Stager's suggestion that the description of Goliath's armour in 1 Sam 17:4–7 reflects typical Mycenaean weaponry in the eleventh century BCE, up and against the dominant scholarly view that the depiction of Goliath's armour suggests a seventh century BCE date of composition.

Paul G. Mosca, 'Facts or Factoids? Some Historical Observations on the Trophy Inscription from Kition (KAI 288)', provides a new translation of the so-called Kition Trophy Inscription, unearthed at modern Larnaca, and argues that, contrary to earlier claim, it sheds little new light upon the political and military events that took place during early years of Milk-yaton's reign.

Nadav Na'aman, 'Ashkelon under the Assyrian Empire', investigates the references to Ashkelon in Neo-Assyrian sources and what light they shed on the history of Ashkelon. Na'aman concludes that despite its relatively small size, Ashkelon was an important city in the Levant in the first half of the first millennium BCE.

Lorenzo Nigro, 'The Built Tombs on the Spring Hill and the Palace of the Lords of Jericho ('dmr rh') in the Middle Bronze Age', uses the remains of the tombs found at Spring Hill (Jericho) for reconstructing the history of Jericho in the Middle Bronze Age, with focus on its relationship between Egypt.

Dennis Pardee, 'A New Join of Fragments of the Baal Cycle', describes, identifies, transliterates and translates fragment RS 3.364. He argues that this fragment, hitherto assumed to be the only remains of a tablet, actually belongs to another tablet (RS 3.363 [CTA 3]).

Émile Puech, 'L'inscription phénicienne du pithos d'Amathonte et son contexte', discusses the exact reading of the six letters appearing on a pithos found in the temple of Aphrodite at Amathonte on Cyprus and how this inscription increases our understanding of the relationship between Cyprus and Phoenicia.

Itamar Singer, 'A Fragmentary Tablet from Tel Aphek with Unknown Script', analyzes the script written on a tablet from Tel Aphek and argues that it may constitute a (hitherto unknown) type of Philistine (or Sea People) script.

Piotr Steinkeller, 'Camels in Ur III Babylonia?', argues that the expression GÚ.URU.GU in an Ur III tablet from Puzriš-Dagan denotes the two-humped Bactrian camel which was brought as a gift to King §ulgi. Since we do not have any more references to this animal, Steinkeller concludes that camel breeding did not take roots in Babylonia in the Ur III period.

Ephraim Stern, 'A Persian-period Hoard of Bullae from Samaria', surveys the motifs (animals, humans, flowers) depicted on a group of bullae of unknown provenance and date. Stern compares the motifs with those on bullae and coins from fourth-century Samaria (Wadi ed-Daliyeh). As the former group share many common features with the latter group, Stern concludes that both groups stem from fourth-century Samaria.

Michael Sugerman, 'Trade and Power in Late Bronze Age Canaan', appeals to the trade networks to and from Canaan as he challenges the commonly held view that the rulers of the Canaan city states were governing on behalf of Egypt. He also criticises Finkelstein and Na'aman for depending too much on documentary sources when researching the power structure in the Canaanite city states.

Ron E. Tappy, 'East of Ashkelon: The Setting and Settling of the Judean Lowlands in the Iron Age IIA', analyzes and compares the data (settlement patterns, material remains, access routes) from Tel Zayit and Lachish. He argues that this region (the Shephelah) interacted economically with both the port cities (e.g. Ashkelon) and the towns in the hill country to their east.

Karel van der Toorn, 'The Books of the Hebrew Bible As Material Artifacts (sic!)', explores the material aspects of the production of written texts in the ancient Near East. For example, how long time and how much did it cost a scribe

to produce a copy of the Gilgamesh Epic? He further emphasises that the HB is a collection of scrolls (and not 'books'), and that scrolls and books were produced and used in different ways.

David Ussishkin, 'The Temple Mount in Jerusalem during the First Temple Period: An Archaeologist's View', summarises the topographical data, the archaeological evidence, and the data that can be gleaned from the Hebrew Bible, that together can help us to reconstruct the Temple Mount during the tenth century BCE. He concludes that Temple Mount was a significant cultic place already before the extensions of Jerusalem in the eighth century BCE.

David S. Vanderhooft, 'The Israelite *mišpāhâ*, the Priestly Writings, and Changing Valences in Israel's Kinship Terminology', argues that the Pentateuchal P source presents a model of kinship organisation that is based on an accurate description the social conditions of pre-exilic Israelite monarchy. As such, it sheds light upon family structure in pre-exilic times.

Samuel R. Wolff and Gerald Finkielsztejn, 'Two New Hellenistic Lead Weights of the Tanit Series', describe and discuss two inscribed weights, one from Ashdod-Yam and one from Gezer, and argues that, given their motifs, they belong to a series of weights from Tyre from the 2nd century BCE.

Assaf Yasur-Landau, 'Behavioral Patterns in Transition: Eleventh-Century B.C.E. Innovation in Domestic Textile Production', surveys the changes in material culture in the coastal area in Philistia during the eleventh century BCE. For example, innovations in both cooking and textile production, with new kinds of cooking pots and new styles of loom weights, took place.

Adam Zertal and Dror Ben-Yosef, 'Bedhat esh-Sha'ab: An Iron Age I Enclosure in the Jordan Valley', describe the findings from the excavation at Bedhat esh-Sha'ab: the setting and shape of the site and its settlement, its outer walls and its pottery. Zertal and Ben-Yosef conclude that this site was used during the Iron Age as a place where people gathered for ceremonies. They compare it tentatively with the Hebrew term *gilgal* which appears to have been a camp used for religious activities (cf. Deut 11: 30; Josh 5: 9; 9: 6; 1 Sam 7: 16).

Taken together, this is a very valuable collection of articles that belong in every research library.

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**Izaak J. de Hulster and Rüdiger Schmitt (eds.)**, *Iconography and Biblical Studies: Proceedings of the Iconography Sessions at the Joint EABS/SBL Conference*, 22–26 *July 2007*, *Vienna*, *Austria*. Alter Orient und Altes Testament 361. Münster: Ugarit-Verlag, 2009. € 84. Pp. xii + 239. ISBN 978-3-86835-018-0.

From huge wall reliefs down to tiny seal impressions, examples of iconography from the ancient Near East have long been known to museum visitors as well as

scholars, and their number increases steadily as archaeological work proceeds. Their testimony is mostly 'silent', however, in the sense that they are generally unaccompanied by explanatory text. The identification of humans or gods depicted and the significance of many elements in the scenes depicted thus remains a topic of continuing scholarly dispute and discussion.

In recent decades the attempt to apply some of this material to the illustration and interpretation of the biblical text has gathered pace, not exclusively but particularly under the influence of what is now commonly called the Freiburg school. Othmar Keel and his colleagues, research students and now their students in turn have published extensively in this field. Not only have they collected and categorised major groups of material that formerly were treated in isolation but they have also written many books and commentaries that apply insights from their research on an increasing body of biblical books and themes. It would be fair to say that this has now all reached the point where we may speak of a new sub-discipline of biblical research.

The volume under review reflects an inevitable by-product of this newly emergent field, namely the organisation of special sessions at international conferences with the consequent publication of their papers. On the present showing, it is less clear whether this particular development is to be welcomed. Apart form the fact that the papers are inevitably very disparate, they also vary considerably in quality, include a good deal of repetition of previously established arguments and conclusions and in some cases are trivial, being the result of pressure to produce a conference paper when there was not time for the sustained research that should undergird publication.

The first named editor has two papers, both concerned primarily with questions of method. In principle that is fine: the subject as a whole certainly needs constantly to reflect on how to proceed if on the one hand it is to treat the primary data responsibly and on the other to say something worthwhile. The sort of paper (included elsewhere in the volume) which says effectively that in a particular verse of the Bible God is depicted as smiting his enemies and here is a picture from somewhere of a smiting deity is too banal to be of value; it adds nothing to our understanding of the text. But it is regrettable to find that both of de Hulster's papers are effectively summaries or restatements of elements of his extensive monograph published in the same year as the present volume (*Iconographic Exegesis and Third Isaiah*; Tübingen: Mohr Siebeck), so that they take us no further forward.

Another frustrating contribution is by Meindert Dijkstra. With considerable skill and learning he offers an explanation of a seal-impression from Tall Zar'a in Jordan as probably 'a walking caprine animal carrying a symbol on or above its back, be it a sun disk or another astral symbol' (p. 41). That would look well in a report of the excavations. For the sake of the volume's title, however, he then goes on needlessly to discuss whether this is related to the reference to 'the hind of the dawn' in Psalm 22:1, only to conclude that it probably does not. He is certainly correct, but it is difficult then to understand why he should have raised the question in the first place.

The value of the application of insights from iconography to biblical interpretation will be most apparent when they open up a new avenue for exegesis or help to

arbitrate between conflicting possibilities. There are two excellent examples of this in the volume. In the only contribution to focus on the New Testament, Annette Weissenrieder discusses the significance of the crown of thorns with which Jesus was mocked during his passion. Long ago one of my main Hebrew teachers, Henry Hart, proposed on the basis of the depiction of Hellenistic kings on coins that it was intended as a lampoon on the radiating crown. (Weissenrieder mentions Hart once in a footnote without, perhaps, realising how pioneering an approach this application of iconographical exegesis was back in 1952.) To this, she adds as other possibilities that it could have been the crown worn by a victor at some contest (this is taken to be the perspective of the Freiburg school) or that it might recall the acclamation of the emperor. Her solution is that the crown was therefore multivalent in significance. This demonstrates proper scholarly caution, and in these post-modern days the possibility should be allowed, but one might have supposed that the Roman soldiers would be more likely to have had one or another idea primarily in mind.

The other fine study here (and the longest) was not prepared for the conference but invited separately by the editors. (Is there a lesson here?) Brent Strawn, who has already published a major work on leonine iconography in relation to the Bible, here turns his attention to the familiar expression that God acted in the Exodus 'with a mighty hand and an outstretched arm'. Against those who often cite depictions of Egyptian kings with arms stretched out to smite, he observes that in most (though not all) biblical passages it often has a benign meaning, and for this he compares rather depictions of the Aten and other Egyptian deities whose rays are evidently extended in blessing. By collocating both approaches, Strawn believes he can reach an 'integrative comparative approach' that allows the use of both types of depiction to be applied as appropriate to the differing biblical uses. Space precludes a summary of the other papers in the volume, though one must note with disappointment that Keel, who was also invited as a mark of esteem to contribute to the volume, writes only a short contribution in which he rather tetchily responds to some criticism of one of his own theories by F. Hartenstein.

There is thus no hiding the fact that this volume is rather a mixed bag (and it would have benefitted also by being worked over by somebody with a native command of English). The relatively new method of applying considerations based on the study of iconography to the biblical text is full of potential despite the many uncertainties and consequent hazards that attend it. But it is clear that worthwhile results can only be the consequence of prolonged research with expertise in several complementary fields. This does not necessarily make it a good topic for a conference, where contributors may be working under pressure of time to prepare a paper in the relevant field. It would be a great shame if the positive impetus coming from this fresh approach were to attract for itself a bad reputation by the over-hasty publication of half-baked proposals.

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**Yonatan Mizrachi,** *Archaeology in the Shadow of the Conflict: The Mound of Ancient Jerusalem (City of David) in Silwan*. Jerusalem: Emek Shaveh Publications, 2010. Pp. 47 (paperback). \$5.00. ISBN 978-3-86575-532-3.

The City of David is one of the names given in the Bible to the city of Jerusalem which king David captured. Regardless of one's views about the historical reliability of the Biblical narratives, the name has been revived in modern academic parlance for the modest-sized area which has rightly been identified as the setting for that event. It is a relatively low-lying ridge that lies to the south of the Temple Mount (hence outside the current 'Old City' of Jerusalem), and it is much more restricted than the whole area which Jerusalem became even in pre-exilic times. It is bounded on its eastern, southern and western sides by the Kidron, Hinnom and Tyropean valleys respectively. It is well known to tourists as being cut through by Hezekiah's Tunnel, the eastern entrance to which is also not far from the stepped-stone structure, which is a famous and dominant landmark.

In modern times it may also be identified as being a part of the village of Silwan. The larger part of this village is on the steep eastern slopes of the Kidron valley, but nevertheless the western part has also been well populated. This has long been a source of potential tension, therefore. The desire to explore the area archaeologically stretches back to the nineteenth century and has been frequently pursued by scholars of many nationalities. Until recent times, however, this has had to proceed with caution and to some extent in restricted areas due to respect for current habitation. Dame Kathleen Kenyon's extensive excavations in the 1960s, for instance, have often been criticised in more recent times precisely because her room for manoevre was more restricted in several areas than might otherwise have been desirable.

In addition to this general humanitarian concern, however, more overtly political considerations have come into play in more recent years which further exacerbate the problems. Silwan is part of the wider 'East Jerusalem' which was captured from Jordan by the Israelis in 1967 and which has since been annexed—a closer form of appropriation than the general situation in the West Bank. This in itself is controversial, of course. The particular ancient historical resonances of the area, however, have made it a target for some aggressive settler activity, behind which stands a wealthy organisation (the Elad Foundation) dedicated to the expansion of Jewish settlement in East Jerusalem. The legal rights and wrongs of their activities are not for me to comment on here, and court decisions have gone different ways over property and land disputes, but it is not surprising that such activities are viewed with deep suspicion, to put it at its mildest, by many local residents. This Elad Foundation, which has been given an element of managerial authority in this area on behalf of the Nature and Parks Authority, also supports several relatively recent archaeological projects. Some have achieved high international profile, such as the work of Eilat Mazar, who claims to have found the palace of David, but that is only one among several. A visitors' centre has been built and there are plans for extensive new car parking within the Kidron Valley and other such tourist developments. Given that the focus (though not the sole focus, it should be said) of much of this work is on 'biblical' Jerusalem, it is difficult to dissociate the motivation for this work by those who fund it, at least, from their wider political aims.

The present booklet addresses this minefield. The difficulty for the author, who presents his aims as eirenic, is that it has now become more or less impossible to separate the archaeology from the politics. In three sections, he presents first an introduction to the history and archaeology of the site and suggests that it should be presented to the public in a social-scientific rather than events-based manner. That is to say, archaeology tells us much about the way of life of ancient peoples, so that we should concentrate on economic, popular religious and similar concerns throughout the long march of history rather than the putative association of structures with biblical narratives. In response, I can only say that this should be both/and, not either/or. I agree entirely that archaeology rarely attests specific events, and to search for such is methodologically flawed. What we learn primarily from these ancient materials is indeed the development of society which gives the context within which historical events transpired. This is illuminating and interesting, and in my experience most visitors welcome such insights. Equally, it is entirely wrong to privilege one period of history over another in an exclusive manner. On the other hand, however, it is naive to think that Jewish and Christian visitors will not have a particular interest in the periods which feature in their scriptures, just as one may hope that in due course there will be a greater cultural interest in the significant role which Jerusalem has also played in the Islamic faith. In my opinion, this element of the booklet is unrealistic, if not disingenuous. The perceived wrongs of the present situation will not be overcome by such means.

In the second section, Mizrachi deals briefly with 'the archaeological site and the local residents'. Several of the issues are not exclusive to Silwan, of course. The problems of accommodating mass tourism with all its peculiar demands and the way of life of local inhabitants raises tensions in a great many towns, cities and villages all over the world. There is no simple solution, and it is right that the voice of the local people should be heard and their inconvenience understood. But there are potential benefits (primarily economic) as well, hardly acknowledged here, so that in itself this section does not ultimately get us much further forward either.

It is the third section that brings us to the heart of the matter, therefore, namely 'archaeology and politics'. Here are some of the points that are made: whether they like it or not, archaeologists working in this area are supporting Israeli claims to sovereignty, something not accepted by the Palestinians or under international law; the funding of the excavations comes from a 'right wing foundation' (p. 23) which has a modern political agenda, and the results as well as the sites excavated are used to further that aim; as the use of the name 'City of David' makes clear, concentration is on only part of the site's history (namely that which associates it most closely with ancient Israel and Judaism); other periods, whether earlier or later, are downplayed, which is contrary to sound method, and it is used to buttress modern political claims; at least one area is being cleared of housing (on the

ground that the houses were built without permits) in order to recreate 'the King's Garden' and provide parking; some of the archaeological methods used, such as tunnelling, are contrary to best practice; and receipt of funding from a politically-motivated organisation prejudices the archaeologist's professional standing.

It is difficult to comment impartially on all this. There are several aspects which cut across universally acceptable criteria. For instance, some acts may be sanctioned by Israeli law while those who refuse to acknowledge the annexation of East Jerusalem do not accept that this is the appropriate law in question. It is not the place of a review in an archaeological journal to comment on such matters. More broadly, however, it seems to me that the very real issues at stake might have been presented in a slightly different manner in order to aid clarity and get to the heart of the matter. In such an admittedly complex situation, what are the realistic options?

- (1) I have heard it stated by one prominent archaeologist that the site is of such universal historical and cultural importance that the presentation of it to the world at large should take precedence over the interest of the relatively few remaining inhabitants. With proper compensation they should be obliged to move and the whole site developed as an archaeological park or the like. My response to such a proposal is that (a) it is inhumane, (b) one wonders whether the policy would apply also to the new Jewish settlers who have moved in, and (c) it is unlikely that the presentation would avoid becoming a form of propaganda in terms of a claim that this should be part of Israel because it was so in ancient times. One meets that claim both explicitly and implicitly all too often. It fails, of course, both because it selects arbitrarily which of the several sets of ancient inhabitants it favours and because it assumes a number of questionable legal principles about ownership.
- (2) The present policy might be continued, whereby the political aims are more overt on the part of the funders and the archaeologists go along with it because of the interest of the material to which they unexpectedly have access. The law is invoked as it suits the larger aim rather than on a wholly impartial and equal basis. The advantage to some local residents (e.g. those who sell and move out) is used to appease any uneasy conscience. To this, my own response is first to admit that the material being excavated is indeed of the greatest possible interest and importance. Even if some of the claims being made may turn out eventually to be exaggerated, there is a huge amount of new and sometimes quite unexpected data being provided and it will take time to assimilate this all into reconstruction of our understanding of Jerusalem's past. Despite this, questions from a different angle impose themselves, because this booklet is certainly correct to point to the political dimensions of the work viewed as a whole. Such considerations have always been recognised with regard to the Temple Mount, and although a certain amount is being done by tunnelling, there has never been any suggestion that the site should be dug fully, even though it would obviously be of the greatest interest from a historical perspective to do so. In my opinion, given the parlous state of negotiations and sensitivities in the modern world, it would be wiser, as well as more humane, to exercise a like restraint in the similarly sensitive site of the City of David.

#### BOOK REVIEWS

(3) A policy of restraint might be voluntarily adopted. This is probably unrealistic, given the political capital that is now invested in the site, but in my opinion it remains the best solution, and there are examples of its implementation elsewhere in Israel. It would empty of its force the charge of archaeology being manipulated for purposes other than the academic and it would be a concession to the need for restoration of human trust. The material underground will not go away and one day we may hope that it can be explored in a calmer and more cooperative atmosphere. In the meantime, there are some things which are of greater value than our thirst for salvageable knowledge.

In conclusion, there are elements of this booklet which I find unconvincing, and some which seem to me not to present the problem in the clearest or most helpful manner. But that it draws attention to a genuine problem which has to be addressed with a degree of humanity rather than strident claim and counter-claim is obvious, and we should be grateful for the opportunity it affords to debate these matters in a rational manner. It may be noted in addition that to aid in this process the booklet is available for free electronic downloading at www.alt-arch.org, and that Hebrew and Arabic versions are available as well as English.

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#### **Books Received**

**David Amit, Orit Peleg-Barkat and Guy Stiebel (eds.)**, New Studies in the Archaeology of Jerusalem and its Region: Collected Papers IV. Jerusalem: Israel Antiquities Authority and Hebrew University of Jerusalem, 2010.

**Erika Fischer**, *Tellel-Far'ah* (Süd): Ägyptisch-levantinische Beziehungen im späten 2. Jahrtausend v.Chr. Orbis Biblicus et Orientalis, Band 247 1. Academic Press Fribourg and Vandenhoeck & Ruprecht, 2011. Pp ix + 441, incl. 213 figures. €96, \$130. ISBN 978-3-7278-1691-8; 978-3-5255-4368-9.

**Haim Goren**, *Dead Sea Level: Science, Exploration and Imperial Interests in the Near East*. Tauris Historical Geography Series, Volume VI. London: IB Tauris, 2010. Pp 384. £59.50. ISBN: 9781848854963.

Charlotte Hempel (ed.), *The Dead Sea Scrolls: Texts and Context* Studies on the Texts of the Desert of Judah, Vol. 90. Leiden and Biggleswade: Brill, 2010. Pp xvi + 552, incl. maps. €162.00 / \$230.00. ISBN: 9004167846; 978-9-0041-6784-1.

#### **BOOK REVIEWS**

Othmar Keel, Corpus der Stempelsiegel-Amulette aus Palästina/Israel Von den Anfängen bis zur Perserzeit. Von Bahan bis Tell Eton Mit Beiträgen von Daphna Ben-Tor, Baruch Brandl und Robert Wenning. OBO Series Archaeologica 29, Katalog Band II. Fribourg and Göttingen: Academic Press and Vandenhoeck & Ruprecht, 2010. Pp xiv + 650, incl. plates. \$160. ISBN 978-3-7278-1655-0 (Academic Press Fribourg) ISBN 978-3-525-54362-7 (Vandenhoeck & Ruprecht).

**Jodi Magness**, Stone and Dung, Oil and Spit: Jewish Daily Life in the Time of Jesus. Eerdmans. Pp 375. \$25. ISBN: 978-0-8028-6558-8.

**Paolo Matthiae, Frances Pinnock, Lorenzo Nigro, Nicolò Marchetti (eds.)**, Proceedings of the 6th International Congress of the Archaeology of the Ancient Near East 5 May – 10 May 2008, Sapienza, Università di Roma.

Volume 1: Near Eastern Archaeology in the Past, Present and Future. Heritage and Identity Ethnoarchaeological and Interdisciplinary Approach, Results and Perspectives Visual Expression and Craft Production in the Definition of Social Relations and Status, with the collaboration of Licia Romano. Wiesbaden: Harrassowitz, 2010. Pp xxvii + 1026, incl. figures. € 128 / \$ 179. ISBN 978-3-4470-6175-9.

Volume 2: Excavations, Surveys and Restorations: Reports on Recent Field Archaeology in the Near East, with the collaboration of Licia Romano. Wiesbaden: Harrassowitz, 2010. Pp. xxv + 768, incl. figures. € 98 / \$ 139. ISBN 978-3-4470-6216-9.

**Ronny Reich**, *The City of David*, *Excavating the City of David*, *Where Jerusalem's History Began*. Israel Exploration Society, 2011. ISBN 978-965-221-082.

**Hershel Shanks**, *Ancient Israel: From Abraham to the Destruction of the Temple*. Third Edition. Biblical Archaeological Society, 2010. Pp 440, incl. 41 illustrations, 10 colour plates, 17 maps & charts. \$29.95. ISBN: 978-1-935335-41-2.

### Summaries of Lectures

#### LONDON LECTURE SERIES

A Day in the Life of Gaon Solomon Ben Judah – The Humblest Man in Jerusalem

BEN OUTHWAITE (Cambridge University)

Who was Solomon ben Judah? Few people will have heard of this 11th-century head of the rabbinical academy of Jerusalem (the Palestinian Yeshivah), yet thanks to the discovery of the Cairo Genizah, a vast treasure trove of manuscripts recovered from an Egyptian synagogue at the very end of the 19th century, we now know more about the Gaon Solomon ben Judah and the world he lived in than practically any other medieval Jewish figure. Prohibited by rabbinical law from effacing God's name, the Jewish community of Old Cairo went further by storing, rather than destroying, any scrap of paper or parchment that might have a name of God on it. When the scholar Solomon Schechter arrived in 1897, he was so amazed by the contents of the community's storeroom (Genizah) that he boxed it up and shipped it back to Cambridge, there to be pored over by generations of Genizah scholars.

Pages from Bibles, prayer books, all the major codes of Jewish law are preserved in the Genizah, but what is truly remarkable is the extent to which the community had preserved not just its religious works, but its own history. Letters, legal deeds, marriage contracts and shopping lists all found their way into the Genizah. And from this astounding array of primary sources, one semi-tragic, forlorn, humble yet fierce, pious yet politically astute figure stands (slightly stooping from his bad knees), Solomon 'son of the scholar' Judah, unwilling ascendant to the supreme

title of Gaon of the Holy City. From a hundred letters written by him, and from dozens more addressed to or about him, we can build up a complete portrait of a fascinating individual, beset by enemies, struggling to keep the Jewish traditions of Jerusalem alive in a changing, increasingly desperate world.

## The Desert Role in the Formation of Ancient Israel

#### **UZI AVNER**

(the Arava Institute for Environmental Studies/Ben-Gurion University)

In addition to the biblical narrative, scholars have suggested several theories about the formation of ancient Israel. Although opinions differ, today it is widely accepted that ancient Israel was created during a long and complex process, involving several different ethnic groups from north, east and south, from Egypt and from Canaan itself. Naturally, each group attempted to influence the culture of the nation as it was formed. A close look into the Bible and into Iron Age Israel shows that the desert played an important role in the culture of the people, far more than might be expected from just 40 years of wandering following the Exodus from Egypt. Not only did social frames (tribes), social values, ethics and laws originate in the desert, but, most importantly, Israelite religion contained many desert characteristics. The Israelite God, YHWH, is a desert God not only in the Bible: his name is associated with the desert also in Egyptian inscriptions of the Late New Kingdom, prior to the Exodus.

Discussion of the above elements shows that the desert played a profound role in the creation of Israelite culture. It seems that the desert groups managed to influence the other groups, mainly in the domain of spiritual culture, despite being inferior in their material culture. The desert also played an important role in shaping the history of Israel for millennia.

# Fashionably Foreign: Exploring the Canaanites' Fascination with Egyptian Culture 2000–1150 BCE

RACHAEL SPARKS (University College London)

The Middle Bronze Age was a period of prosperity and growth for Canaan. Local elites reshaped what it meant to be Canaanite through the development of new styles of material culture, including the selective importation of foreign goods. Egypt was a source of inspiration at this time, a process encouraged by the development of close commercial and cultural ties with Canaanite settlements in the Egyptian Delta. In the Late Bronze Age a backlash against the political power of these immigrants led to a more confrontational relationship, culminating in the conquest of the region and its new role as a vassal of the Egyptian empire. There was now political mileage to be made from adopting Egyptian culture, resulting in more visible Egyptianisation of Canaanite elites. This lecture explored the changing impact of this foreign influence on the Canaanites themselves, and how archaeology can bring us closer to understanding ancient ideas of identity and culture.

#### Pagan Images in Late Antique Palestinian Synagogues

SACHA STERN (University College London)

Pagan and Greek mythological images have been found in large numbers in the mosaic floors and friezes of late antique Palestinian synagogues. These images have long been perceived as a contradiction to the Jewish identity of these structures, and hence as a 'problem' that historians have sought to deal with in various ways. In this lecture, the phenomenon of pagan images in Palestinian synagogues was assessed in relation to the broader context of images and their use in ancient and late antique society. An attempt was made to explain why and how images of this kind began to appear in the third century, and then ceased being used in synagogues after the end of antiquity.

#### The Textiles Found at Masada – an Insight into the Material Culture of Classical Antiquity

#### HERO GRANGER-TAYLOR

Fragments of many different types of textiles have been discovered at Masada. Rather than the tumultuous events for which Masada is most famous, most of these objects reflect the daily life of the people who lived there. The majority of the textiles probably belonged to the people who occupied Masada during the First Revolt against the Romans (66 to 73 or 74 CE), the 'sicarii' and their families and other groups who seem to have eventually joined them.

Textile fragments have been discovered at many different contexts on the site. Taken as a whole this corpus represents almost the complete range of textile types made and used at the time. Within three overarching categories - clothing, domestic textiles and utilitarian textiles - the precise function of many of the original fabrics can be recognised from their fragmentary remains. Items that were discussed in the talk include mantles tunics, cloaks, loincloths, (tallitot), footwrappers, hairnets, textile amour, banners cushion and mattress covers. sacks and animal equipment.

A catalogue of the Masada textiles will be published as Volume IX in the Masada Final Reports series.

#### The Assyrian Empire and its Vassals at the Close of the 8th Century BCE: The Siege of Jerusalem in Context

## KAREN RADNER (University College London)

The troops of Sennacherib of Assyria famously laid siege to Jerusalem in 701 BCE but withdrew without taking the city (2 Kings 18:13–19:37; Isaiah 36–37) – a pivotal moment in Jewish history and theology. This lecture analysed the dealings of the Assyrian empire with the kingdom of Judah from an Assyrian point of view, using this relationship as a case study for the interactions of the empire and its vassal states in the period of consolidation that followed the conquests of the 8th century.

#### A Day of Worship in a Babylonian Temple

## CAROLINE WAERZEGGERS (University College London)

Day in day out, in temples throughout Babylonia, a great variety of priests performed the worship of the gods: cultic singers, exorcists, bakers, butchers, gatekeepers and dozens of other specialists maintained the divine households and provisioned the altars with offerings, the central act of Babylonian religious practice. Authorised by hereditary right and subject to purity rules, the priesthood constituted a distinct group within society. One of the requirements demanded upon admission to priestly office was the possession of a prebend, a legal title that lent its owner the right to receive income from the temple in return for performing a cultic service. However, conventions of present-day scholarly discourse have literally written the priesthood out of our appraisal of this ancient society. By focusing on the economic aspects of the prebend as a type of income rather than a right to serve in the cult, priestly activity

has been relegated to the realm of property management on a par with the ownership of houses, fields, slaves or any other kind of sale commodity known in this society. This lecture made a contribution to restore attention to the cultic function of 'prebend owners', and redressed the current neglect of practice in Babylonian religion. This was attempted by studying the priesthood of a particularly well-documented temple – the Ezida of Borsippa.

The British Museum houses several thousand cuneiform texts that once belonged to the archives of priests who worked in the Ezida temple of Borsippa in the period between c. 750 and 484 BCE. Discovered in the 19th century, these texts have largely remained unstudied. Upon closer scrutiny, the corpus proves to be a veritable treasure trove of data about the cult and its attendant priesthood in one of Babylonia's prime locations of worship. The lecture followed the priests during one day of worship, discussing along the way their ritual activities, professional organization and social background.

#### The Familiar foreign: Egyptian Travellers to the Levant in the New Kingdom

## ELIZABETH FROOD (Oxford University)

Travel within Egypt and abroad had been a core element in elite status and selfpresentation since the earliest periods of the country's history. This lecture explored themes relating to mobility and place in biographical inscriptions of officials of the New Kingdom (ca. 1539-1075 BCE), a period when Egyptian views of the outside world and definitions of its borders underwent significant reformulation. Egyptian individuals deployed a wide range of forms to articulate their experiences of travel in Western Asia, ranging from detailed narratives and scenes to long lists of localities. These personal geographies offer insights into broader Egyptian conceptions of the world, especially when compared with literary texts and other genres which codify knowledge in list form and which may have influenced the biographies. Material relating to the Sinai is of particular comparative value as the region was considered both part of and separate from Egypt, raising questions for the definition of the foreign. In some examples, the sense of place acts as a central catalyst in the construction and transformation of personal status and identity.

## Archaeology in Israel: Achievements and Current State of Research

AMIHAI MAZAR (Hebrew University)

lecture surveyed developments in Israeli archaeological research over the past fifty years. From its modest beginnings during the 1920s, when research subjects were mainly related to Jewish antiquities from the Roman and Byzantine periods, Israeli archaeology has developed immensely in recent decades. Five university departments of archaeology, and the dynamic Israel Antiquities Authority, annually carry out hundreds of surveys, excavations and other archaeological studies. New approaches to studying the past incorporate major developments in archaeological science and the expertise of colleagues with a variety of specialist skills. The integration into archaeology of the social and exact sciences, and new approaches to understanding the relationship between texts and material culture, have opened up new avenues for understanding and interpreting aspects of past cultures in the land of Israel. The lecture presented examples of achievements over the past fifty years, indicating those debates which remain open and those for which a solution can now be suggested.

#### The Literary Legacy of Ugarit: Some Examples of the Antecedents of Biblical Tradition

NICOLAS WYATT (University of Edinburgh)

The tell at Ras Shamra, ancient Ugarit, lies on the Syrian littoral, and constituted an important national capital and commercial hub in the Middle and Late Bronze (second millennium BCE). Perhaps its most important distinctive feature is its literary archive written in the local language, Ugaritic, a close relative of archaic Hebrew. The discovery of these texts has had a considerable impact on biblical studies, and has contributed important insights to recent biblical scholarship and its understanding of the early religious history of Israel and Judah, and of the literary tropes of the Bible. This lecture will discuss four Ugaritic texts and their significance for our understanding of the Bible tradition.

#### MANCHESTER LECTURE SERIES

The Bible and Archaeology – Where Are We Now?

HUGH WILLIAMSON (Oxford University)

Arguments continue to rage about the proper association of archaeology with Biblical studies. Some continue to believe that archaeology should be used mainly as a handmaiden to Biblical history, supporting the written text and illustrating it where appropriate. Others take the completely opposite view and think that the history of Israel should be written exclusively on the basis of archaeology (this being first-hand evidence) and the Biblical account can then be seen to be largely erroneous and should be corrected accordingly. And, of course, many others sit somewhere between one or other of these extremes.

#### SUMMARIES OF LECTURES

This lecture was a personal take on this dispute, drawing on the lecturer's experiences of excavation at Lachish and Jezreel while being professionally a teacher of the Hebrew Bible. He suggested that the current debate has important issues of method to raise about the proper approach to ancient history but that both sides are guilty of misrepresenting one aspect of the topic or another; archaeology and textual study can be better viewed as complementary rather than as exclusive undertakings.

## Some Thoughts on the Bible's Buried Secrets

WALTER HOUSTON (Oxford University)

The talk addressed questions raised by the BBC2 television series 'The Bible's Buried Secrets', and examined its effectiveness and reliability as a popular introduction to current scholarship on the history of ancient Israel and Judah and its possible theological implications.



# Reports from Jerusalem 2010–2011

#### REPORT 25 - SEPTEMBER 2010

#### **Ancient treasures in Gaza**

There was a report last August about the difficulties of presenting archaeological remains in and around Gaza city. Much work has been done in the area in the past and much remains to be done, but at present organized digs are difficult to arrange and stray finds or rescue digs are open to unpreventable looting. In addition, contractors are loathe to report any finds to the Palestinian Ministry of Tourism and Antiquities, as they will send a team of investigators and the building work will be held up for long periods. As a result discoveries are not notified and small finds are just covered over or looted by the contractors.

The Director of the Ministry, Mohammed Kheila, points out that funds for rescue work have been allocated, but his staff is small and unable to deal with all the many sites, both on private and public projects. Hayam al-Bitar, head of the Hamas Government Museums Department, says that they try and educate the public in the importance of the ancient findings and arrange suitable exhibitions, but they are hampered by lack of appropriate materials for cleaning and preservation due to the Israeli embargo on non-essential goods.

### Philistine Temple at Tel es-Safi, near Kiryat Gat

Tel es-Safi (Tel Tsafit), identified as Biblical Gath, is being excavated by a team from Bar-Ilan University under the direction of Prof. Aren Maier. A Philistine temple building has been excavated, dating to the 10th century BCE, including two large column bases that would have supported pillars to the roof, and may have defined the inner sanctum of the temple. Several walls on the site appear to have collapsed outwards due to a severe earthquake. Prof. Maier speculates that it may have been the earthquake of c.750 BCE mentioned in the books of Isaiah (2:19, 21) and Amos (1:1, 4:11: 6:11, 9:1), and speculates that, judging by the damaged walls, it may have been of an intensity of 8 on today's Richter scale. The excavators also found evidence of the siege equipment used by Hazael of Damascus in his destruction of Gath in around 830 BCE.

### Reopening of Israel Museum in Jerusalem

There was a special ceremony in early August for archaeologists to celebrate the opening of the archaeological wing of the Museum, recently renovated on a large scale. All the existing exhibits have been newly presented in a most attractive new setting. Of special interest is a new room that presents details of some of the famous pioneers of archaeological work in Israel/Palestine. Individual sections are devoted to the work of Sir William Flinders Petrie, to Felicien de Saulcy (who worked in Jerusalem, Herodion and Airaq al-Amir) and Conrad Schick, several of whose Temple models are shown. There is also a section on the work of the Palestine Exploration Fund; for example the original theodolite, used for the Survey of Western Palestine by Charles Warren and others, is exhibited.

#### Heavy gold coin from Tel Kedesh

The heaviest gold coin ever found in Israel was uncovered recently at the dig in Kedesh led by Sharon Herbert and Andrea Berlin of the University of Michigan and University of Minnesota. Dating to the time of the Ptolemaic dynasty, ruling from Alexandria, the obverse shows the head of Queen Arsinoe Philadelphus, wife (and half-sister) of Ptolemy II, and the reverse has two overlapping cornucopia, symbols of plenty. The unusual size and weight (27.71 g), suggest that the coin, minted in Alexandria, was used for ceremonial purposes to honour the queen, rather than as currency. It was minted by one of her successors, Ptolemy V, in 191 BCE.

According to Dr. Donald Ariel, head of the IAA Coin Department, the coin – a mnaieion – had a nominal value of one mina, equivalent to 100 silver drachmas, and would have been equivalent in value to half-a-year's average senior salary, about \$80,000 today. Tell Kedesh, south of Kiryat Shemona, has been shown to be the administrative seat of the satrap (governor) during the Persian period and continued as such under the Ptolemies who reigned over Israel/Palestine after the death of Alexander the Great, until they were ousted by the Seleucids in 198 BCE. The coin was found by the central administrative building that housed public rooms and an archive.

### Cameo of Eros from Givati car park site, Jerusalem

The large building site opposite the City of David Visitors' Centre has recently offered up another piece of jewellery (previously there were gold and pearl earrings) of the Roman period. This time it is a small figure of Eros in relief cut into semi-precious pale blue onyx placed on a dark brown onyx background. The piece is only 1 cm. long and 0.7 cm. wide. It may have been enclosed in an oblong metal setting and used as a ring or even an earring. The figure of Eros is resting with his left hand on a reversed torch, an image that symbolises the loss of life, according to Dr Doron Ben Ami and Yana Tchekhanovets, who are leading the excavation of the site by the IAA.

### A Moabite temple

Last week an announcement from Amman reported on the finding of numerous sacred vessels within an Iron Age shrine (c.1200–539 BCE) at Khirbet 'Ataroz (Biblical Ataroth) near to Madaba, south-west of Amman. According to Ziad al-Saad, Jordan Antiquities Chief, the structure measured 9 m. by 4 m., had a raised platform and two antechambers, and stood in an open courtyard of 12 m. by 12 m. The excavation turned up over 300 sacred vessels and figurines, including a bull figurine depicting the god Hadad, circular clay vessels, lamps and altars. The dig is being conducted with La Sierra University of California and the pieces will be exhibited in Jordan's new Archaeological Museum on the Acropolis in Amman. We await further news of this important find.

#### REPORT 26 - OCTOBER 2010

### Herod's private theatre at Herodion

In the wake of the rediscovery of the tomb of Herod, Prof. Ehud Netzer has now fully excavated a room identified as Herod's private box at the centre of the 400-seat theatre on the eastern slopes of Herodion. It was decorated by Italian artists sent from Rome in about the year 15 BCE, some eleven years before Herod died, at which point the theatre went out of use. The plastered private box was decorated with painted 'windows' looking to a Nile scene and a seascape with a sailing vessel, as well as human and animal figures. The theatre is being restored by the Hebrew University and it is hoped that it will be open to the public next year, but it can already by seen in outline from the upper part of Herodion.

### Figure of Tyche at Sussita

In a private house in the Hellenistic city of Sussita (Hippos), above the eastern shore of Lake Kinneret (the Sea of Galilee), Prof. Arthur Segal and Dr. Michael Eisenberg of Haifa University have found a fragment of fresco depicting Tyche, the goddess of fortune (and city goddess), together with the figure of a maenad, associated with the god Dionysus in his rites, dated to the 3rd century or early 4th century CE. This large house and its decoration remained in use in the Byzantine period and thus, according to the finds, these cultic images were not removed with the coming of Christianity, when several churches were built in Sussita.

### Ring of Apollo found at Dor

A ring of the early Hellenistic period (late 4th century BCE) was found at Tel Dor, on the coast, north of Caesarea. According to Dr. Ayelet Gilboa, of Haifa

University, it is a rare find and shows that high-quality jewellery was appreciated and affordable in a provincial port like Dor. The head on the ring was identified as an image of Apollo, the sun god – and god of healing, prophecy and music. It is an embossed image on a bronze signet ring used as a seal honouring the god. It was found in the same area as a gemstone with the miniature head of Alexander the Great and an elaborate mosaic floor that formed part of a major public building or large residence, uncovered during an earlier season.

### Samaritan Synagogue south of Bet She'an

In an excavation south of Beth Shean directed for the Israel Antiquities Authority (IAA) by Dr. Walid Atrash and Yaakov Harel, a mosaic floor from a Samaritan synagogue dating to the 5th century CE was uncovered. This would have remained until the Muslim Conquest of 634 CE. The ruins of the large hall of the synagogue face Mt. Gerizim, the holy site of the Samaritan Temple, and the mosaic has an inscription that the archaeologists read as: 'This is the temple...', which would refer either to this synagogue (if it were called a 'temple') or to the one formerly on Mount Gerizim site itself.

This synagogue is one of several in the Beth Shean area, once a major centre of Samaritans, and lies close to Nablus (Shechem), not far from the village that is still home to the remaining Samaritan community.

### 10,000th birthday of Jericho

The city council of Jericho is anxious to attract tourists to the earliest city in the known world, dating back to 8000 BCE. Besides the actual remains of the ancient city, now undergoing its fifth major excavation, this time by an Italian team, the local authority is promoting two other ancient features to interest tourists. One is an ancient sycamore tree with a massive hollow trunk two metres in diameter that, according to local legend, is the tree climbed by Zacchaeus, the short tax collector who, according to the Gospel of Luke (19:1–10), was trying to get a better view of Jesus. A new museum and visitors' centre is planned, adjoining the tree. However, there is another dead, glass-covered sycamore in the courtyard of the nearby Greek Orthodox Church that claims the same venerable history.

The second feature for development is the colourful mosaic paving of the Hisham Palace, adjoining north Jericho, where the largest local mosaic is being uncovered for public display. Both the museum and the mosaic depend on raising the necessary finance, for the building and for a weather shield for the mosaic. Another problem is that Jericho, located in the Palestinian National Authority, is currently not open to holders of Israeli passports, but it is hoped this may change in the near future.

### Forgery trial draws to a close

After five years, the defence has completed its case and Judge Aharon Farkash is due to give his verdict in the local Jerusalem Court before the end of the year, after considering the opinions of many legal and scientific experts and 12,000 pages of evidence. The case has boiled down to a focus on two major artefacts: the Yehoash tablet and the inscribed Ossuary of James, brother of Jesus, and to two defendants, Oded Golan, a Tel Aviv collector, and Robert Deutsch, a dealer and expert on ancient seals. The judge has already said that he will find it nearly impossible to reach a decision where the experts themselves cannot agree, and that he does not see that the prosecution has proved beyond reasonable doubt that, if there is forgery, the defendants have carried it out. The prosecution was brought by the IAA, who must await the verdict with some trepidation.

#### REPORT 27 - NOVEMBER 2010

### **Israel Antiquities Authority**

Last month the Reshut haAtigot (Israel Antiquities Authority, IAA) celebrated its 20th anniversary. Before that it had been the Israel Department of Antiquities within the Ministry of Education, but in 1990 it became an independent body with its own budget and leadership structure. As will be known from these reports, the IAA has figured in most of the archaeological work in Israel and is responsible for much of the recovery and restoration of the important sites in the country. The IAA now numbers a permanent staff of about 450 men and women, many of them highly qualified experts in their various fields. The work is directed from Jerusalem but spread among local offices throughout the country. There are storage depots and workshops in several locations and new headquarters are in the process of being constructed in Jerusalem, adjacent to the Israel Museum and the Bible Lands Museum, which will concentrate all the various activities in one ambitious building. Besides the straightforward work of site excavation, and particularly rescue digs, the IAA has an active department for publications, preservation and restoration work. Education is important and staff are encouraged to undertake further professional training, to upgrade their academic degrees, and are sent abroad to lecture at international conferences.

### Dead Sea Scrolls coming on line

As part of its 20th anniversary celebrations, the Israel Antiquities Authority announced its plan to digitalise the complete remains of the Dead Sea Scrolls to make them available to the public on line. In order to do this the IAA has teamed up with Google's Israel Research and Design Centre in a \$3.5 million project. The

technology will enable each layer of each fragment to be viewed in colour and will make it unnecessary for the original pieces to be handled any more. It is planned to start the work before the end of the year and Google will then find a way to present the material on the Internet, together with transcriptions, translations and associated material. It is hoped that the first images will be available in Spring 2011 and work will then proceed continuously on the 30,000 fragments that have to be recorded in this way.

#### Mosaic floor at Tel Shikmona

The site of Tel Shimona was partly excavated from the 1950's to the 1970's and then fell into neglect and became used as a refuse tip. A new expedition by the University of Haifa, which is nearby, has cleaned the site and, on digging further, has uncovered some extensive floor mosaics of the 6th century CE. The site lies by the sea shore west of Haifa, and was part of a major city in the area between the 4th century BCE and the Muslim conquest of 7th century CE. The previous finds included an Egyptian tomb, a Persian fortress and many elite items of Middle Bronze age. The mosaic presently being exposed and cleaned belonged to an ecclesiastical structure of the Byzantine period and will be exhibited as part of a public archaeological park connected to Hecht Park (connected with the Hecht Museum in the University building).

### Professor Ehud Netzer, in memoriam

On 28th October Ehud Netzer died, aged 76. His sudden death came as a great shock to all archaeologists in Israel and no doubt further afield as well. Netzer had retired as Professor of Archaeology at the Hebrew University recently but was still very active in expeditions in Israel and Albania and was busy on further publications of his work. He was the world expert on the colossal constructions of Herod the Great and had spent thirty years at the site of Herodion, some of it looking for the king's tomb, which he finally located in 2007. As a result he travelled around the world describing this remarkable discovery. He continued his work at the site and was in a meeting with the Hebrew University to finalise plans to exhibit the frescoes he had uncovered at Herod's private theatre at the site. It was then that he leaned against an unsafe wooden barrier and fell down 3 metres backwards, causing a massive concussion from which he never recovered. This was a tragic end to a distinguished career that started as a site architect under Yadin at Masada, and finished clarifying most of the important monuments of the Hasmonean and Herodian periods in Israel.

#### REPORT 28 - JANUARY 2011

### Non-destructive investigation by x-ray

Prof. Yuval Goren of Tel Aviv University has pioneered a method of investigating clay and other materials by non-destructive methods, using X-ray fluorescence spectrometry. Having built up a data-base of results from former intrusive methods, he can now organise the analysis by merely scanning the object and comparing the results with the previous data. The scans will then show the type of clay or other material and its geographical origin. He is thus able to examine new finds and also older museum specimens without the need to break off a piece or cut off a sample. The method has been used on the Late Bronze Age fragment of a cuneiform letter from the City of David excavations that is dated to the El-Amarna period. Prof. Goren's analysis shows that the tablet material is the Terra Rossa soil from around Jerusalem and it is therefore most probable that the item was written by a scribe in the Jerusalem area and may indeed have been part of a letter dictated by the Jebusite king Abdi-Heba to Egypt, to the court of Amenhotep III or IV at El-Amarna, and the fragment may have been part of the copy retained by the sender.

### Aelia Capitolina: a Roman bathing pool in Jerusalem

During excavations for a new mikveh (ritual bath) in the Jewish Quarter of the Old City, a rescue dig by the IAA, directed by Dr. Ofer Sion, uncovered a large bathing pool that had been used by the Tenth Legion (Fretensis) of the Roman army in about 200 CE. Evidence of the Roman build was the large number of floor and roof tiles with the stamp of the legion, and the many stamped roof tiles show that the facility was completely roofed. The location in the Jewish Quarter, some distance from the presumed army HQ in the Armenian Quarter, shows that the occupying soldiers were spread out throughout the city. The Tenth Legion was involved in the destruction of Jerusalem and the Temple and later in the rebuilding of the city by Hadrian, sparking the abortive Bar-Kochba revolt of 132–5 CE, when it was renamed Aelia Capitolina.

The excavators were amused to find one of the roof tiles impressed with the paw marks of a dog. Presumably the cur had walked over the wet tiles that had been spread out and left to dry.

### Monastery of St. George in Wadi Qelt, west of Jericho

On 30th November a ceremony was held at the Monastery to celebrate the completion of a new road to St. George's that had been built by the Ministry of Tourism and other bodies to improve access, at the request of the Greek Orthodox Patriarch Theophilos III. The present road had suffered damage from flash floods and a minor earthquake over the last few years, and the new one will make it easier

for pilgrims and tourists alike to visit this remarkable 5th-7th century complex of buildings that appear to hang from the side of the steep desert mountain over the lush green wadi below.

It is thought that the original buildings were constructed above a 4th-century synagogue. They were destroyed during the Persian invasion of Jerusalem in 614 CE and later restored by the Crusaders. The interior boasts some very fine icons and frescoes. Today, St. George's is one of only six monasteries still active in the Judean desert area.

### Funding for restoration of historic sites

In the context of the National Heritage Plan announced last February, the first tranche of 91 million shekels (16 million sterling) has now been allocated for work to 16 major sites, ancient and modern. One of the archaeological sites is Herodion, where work was recently halted due to the tragic death of Ehud Netzer. It can now continue with restoration of the unique frescoes at the small theatre that will be preserved and made ready for presentation to the public by experts from the Hebrew University.

Another site will be the large Byzantine-period synagogue at Umm el-Kanatir, in the Golan heights, which is being restored piece by piece using computerised technology organized by Yeshu Drei and archaeologist Haim Ben-David.

### Sudden fierce storm, destruction and discovery

Winter in Israel started with a destructive storm on 12th and 13th December that wreaked havoc along the Mediterranean coast in particular. Many sites were affected but worst of all was Caesarea. Some of the foundations of the northern aqueduct were exposed and parts of the Crusader city wall suffered fractures due to subsidence. The Crusader-period breakwater, that protected the southern arm of the Herodian harbour, was broken into three pieces and the port wall left unprotected from southern wave damage. Repair work will have to begin very shortly to avoid major damage to the ancient port. At Ashdod-Yam, the ancient fortress close to the shore suffered damage. In ancient Ashkelon, at the national park, there was damage to a mosaic floor and a row of several columns was overturned. On the beach ten metres below, the storm that hit the cliffs exposed and toppled a classic white marble Roman statue about 1.2m high. It was headless and without arms but depicted a fine female figure in a carefully folded toga and sandals and has been presumed to be of Aphrodite. It is from a bath house, exposed at the head of the cliffs, and may have been part of the dedication of the baths that are dated to c. 300 CE.

### Early Homo Sapiens from Cave in Israel, 400,000 Years Ago?

In 2000 Prof. Avi Gopher and Dr. Ran Barkai of Tel Aviv University discovered the Qesem Cave where they claim to have found the earliest evidence of modern human beings. The cave is near Rosh Ha'ayin, about 20 km. east of Tel Aviv, and the archaeologists have located a series of human teeth that they claim are closer to the dental apparatus associated with anatomically modern Homo Sapiens, rather than the Neanderthals. They have found in the cave evidence of flint knapping, the mining of sub-surface materials for flint production, hunting and the cutting and sharing of animal meat, evidence of regular burning and so on, all activities associated with anatomically modern Homo Sapiens.

The claim is that these findings antedate the earliest evidence of anatomically modern Homo Sapiens from Africa and thus the scholars claim that the species existed at the Qesem cave many years earlier than presently realised. The dating of the teeth to between 400,000 and 300,000 years ago is however not yet at all clear and further results from the ongoing excavations are awaited before reaching any firm conclusions.

#### REPORT 29 - FEBRUARY 2011

### Jordan baptismal site reopened

On 18th January a ceremony was held to mark the re-opening of the site on the western side of the River Jordan where John the Baptist is supposed to have baptised Jesus. It had been closed for over forty years as a military zone and has now been released by the army and renovated by the Israel Nature and Parks Authority who have improved access for pilgrims and tourists. The site is known in Arabic as Qasr al-Yehud (Castle of the Jew) and now pilgrims can enter it from both the Israeli and Jordanian side, though crossing between them is not possible as it is fenced off mid-river to mark the boundary between the two countries.

The ceremony, marking also the Feast of the Epiphany, was led by Theophilos III, Patriarch of the Greek Orthodox Church of Jerusalem, and was attended by an estimated 15,000 pilgrims, most of whom watched the ceremony on screens while the lucky few got to immerse themselves in the river in white cloaks.

The site is also deemed by some to represent the place where the Children of Israel are said to have crossed into Canaan by the fords, under the leadership of Joshua.

### The passing of Vendyl Jones

Vendyl Jones, who was said to have spent much of his life looking for the Ark of the Covenant, passed away in late December 2010. He had been a pastor in the

Baptist Church and was drawn to Jewish texts and practices by his reading of the Bible, so much so that he called himself a Noahide, that is, one who keeps the seven Jewish commandments for Gentiles. In 1964 he came across literature on the Copper Scroll and started searching for the treasures of the Temple. His fame rested on his identity with the 'Indiana Jones' played by Harrison Ford, but Vendyl denied the connection. In Israel his enduring image was photographs of him in the press digging in the soil with a trowel in one hand and the Bible in the other. He claimed to have found samples of the 'ketoret' incense used in the Temple. It was a reddish powder and was confirmed by tests at the Weizmann Institute, though disputed by other scholars.

### Drainage channel and street of ancient Jerusalem

After the work of seven years, the surface water drain from near the Temple Mount to the Pool of Siloam has been cleared and will shortly be opened to tourists. The work has been conducted by Prof. Ronny Reich and Eli Shukron for the Israel Antiquities Authority (IAA) and has opened up a stepped street above the channel that goes back to the early Roman period. Remnants of pottery and other domestic waste suggest that the channel, which is from 1m. to 2m. high under the street, was used by refugees escaping from the destruction of Jerusalem and the Temple in 70 CE. Josephus carries a vivid account of the Roman forces searching for the escapees, enslaving some and killing others.

Parts of the tunnel had already been uncovered by Charles Warren, at the Western Wall end, and by Bliss and Dickie at the Siloam end, but this is the first time that it has been possible to see the two ends as one continuous passageway and sewer. The present section runs for 600 metres and it is presumed that it extends further northwards for an equal distance to the Damascus Gate.

### Jerusalem leper hospital to be Arts Centre

The former Hansen Hospital, named after the doctor who isolated the germ that caused leprosy, is to be renovated as the City centre for the visual arts. It stands on a large piece of ground opposite the Jerusalem Theatre in the prosperous Talbiyeh neighbourhood. It is a pleasant three-storey structure with balconies around a central courtyard and its interest to archaeologists is that it was built in 1887 by the German architect Conrad Schick (1822–1901), who came to the city as a missionary and died there as an early explorer and archaeologist. He is known as the builder of models of the Temple Mount and the surveyor of maps of Jerusalem. It was a set of his pupils who first saw and drew his attention to the Siloam Inscription in the water tunnel. As an architect he was responsible for the layout of one of the early neighbourhoods outside the old City, the Mea Shearim housing complex, now largely inhabited by members of the ultra-orthodox Jewish community. One wonders if they realise that their homes were planned and built by a former Christian missionary.

### Byzantine Church in the Judaean Hills

Due to the discovery of illegal plunder from the site, the chief IAA investigator of archaeological theft, Amir Ganor, started a dig at the ruins of Hirbet Madras, south-west of Jerusalem and just north of Beit Guvrin, where he uncovered the floor of a 6th-century CE structure that was thought to be a synagogue but, thanks to many stones carved with crosses, is now seen to have been a church. It has a magnificent mosaic floor of geometric patterns that incorporate representations of lions, foxes, peacocks and fish. The church is built over another structure, probably five centuries earlier, of the early Roman period, that might have been a village synagogue. There are also underground tunnels alongside that may have served as hiding places for the Jews during the Bar-Kochba Revolt (132–135 CE), as found at Beit Guvrin nearby. Steps from the church lead down into a small burial cave that the excavators think was considered to be the holy resting place of the Prophet Zechariah, but the reasons for this are obscure.

The site, which is now on an isolated hilltop, will be covered over again, until plans and funding become available to secure it and open it to the public.

#### REPORT 30 - MARCH 2011

### Bethlehem Church, UNESCO Heritage Site?

The Palestine Authority has recently applied to UNESCO to designate the Church of the Nativity in Bethlehem a World Heritage site. If agreed, this would be the first heritage site in the Palestine Authority area. At present the Authority's area is not recognised by the United Nations as a state so their sites cannot get heritage status, but the applicants hope that the historical importance of the Church will override that consideration. At present several sites in Israel have UNESCO Heritage status, including Megiddo, Tel Dan, Masada and the Bauhaus buildings of Tel Aviv, and several more are under consideration.

#### Jericho's ancient tower

Recently the Neolithic tower at Tel Jericho has been described as 'the world's first skyscraper' and claimed to be a marker of the summer solstice. The tower is dated to c. 8500 BCE and is the first known stone monument to be built by humankind. It is conical in shape and 8.5 metres high. It has an internal staircase and was plastered externally. In the past it had been considered to be a fortification, a place of refuge during flooding, a ritual centre or a symbol of communal power. Now Ron Barkai and Roy Liran, archaeologists at Tel Aviv University, claim to have found a distinct line of sight between the stair aperture of the tower and the mountain called Qarantal that lies directly west of the ancient site. By computer

analysis they have worked out that at the summer solstice, the longest day of the year, at this early period the mountain cast a shadow on the tower just before sunset.

This finding leads them to suggest that the tower was built, at great expense of labour, as a symbol used to demonstrate to villagers the advantage of giving up their hunting ways and settling down to a life of farming around the oasis.

#### Atlantis and Tarshish identified?

Prof. Richard Freund claims to have discovered Atlantis, the mythical city mentioned by Plato as being just beyond the Pillars of Hercules and disappearing into the sea after a violent earthquake. In a film by Simcha Jacobovici, who has done a number of popular films related to biblical subjects, Freund claims that Atlantis was a site off the coast of southern Spain, shown by aerial photos to be three concentric circles of sunken land around an island port. For extra interest Jacobovici has said that this Atlantis was the Tarshish known from the Bible, which mentions the ships of Tarshish (Ezek. 27 and elsewhere) and that Jonah took a boat to Tarshish (Jon. 1:3), which some scholars have equated with Tartessos in southern Spain.

Freund is professor at the University of Hartford and co-director of the ongoing dig at Betsaida with Ron Arav. As for Tartessos, in Spain, this has been equated with Tarshish because Herodotus mentions it as a port reached by the Phoenicians (1:163), but it is much simpler and probably more correct to say that the biblical Tarshish is the port of Tarsus, on the southern coast of Turkey, near to Phoenicia, whose local name is exactly as the Hebrew.

### New ground-penetrating technology

A new 'algorithmic toolkit' developed by Professor of Geophysics Lev Eppelbaum and his team at Tel Aviv University will be able to reveal underground archaeological remains free of interference from later obstructions like pipes, cables and modern construction. A clear picture, free of local 'noise', will emerge and enable archaeologists to work in densely built-up cities without the need for preliminary excavation. The system is called 'Multi-physical-archaeological-models', or Multi-PAM for short, and will cut expenditure of time and costs by many factors, but so far few details of how the apparatus works have emerged.

## Three brief notices: Second Temple coins, headless Roman statue, Byzantine Mosaic

1. During a raid in Mazra'a, south of Nahariyah, police found a cache of ceramics and coins of the Second Temple period in the yard of a family who had been suspected of hiding weapons. The find has been taken to the local museum and further details are expected to be announced.

- 2. After the storm of 20th February, a headless Roman-style statue was found on the beach at Caesarea. It was nearly a metre tall and possibly of the goddess Aphrodite. This follows a similar find made at Ashkelon after a previous storm this winter.
- 3. In the Gaza strip, archaeologists from the École Biblique of Jerusalem have uncovered a fine mosaic floor of the Byzantine period at the site of the St. Hilarion Monastery at Umm al-'Amr. The work is supported by the French Consulate General and UNESCO and will include restoration and safeguarding the mosaic from damage by the public and the elements.

#### REPORT 31 - MAY 2011

### Demonstrations over graves in Jaffa

Problems continue with the ultra-orthodox trying to prevent the digging up of human remains for development and archaeological research. The latest incident has centred on the Andromeda Hill site in Jaffa, where 150 skeletons have been uncovered during archaeological digs that have been going on for some time before the building of the 'Eden Hotel' luxury project. The digs were proceeding over the last year, and have also uncovered many pig bones among the human remains which, in the view of the Israel Antiquities Authority (IAA), indicated that the burials were of a pagan nature and would not be of interest to the 'Atra Kadisha', the ultra-orthodox Jewish movement. It seems that previous excavations in the area in 1993–1994 turned up a jar containing a foetus burial that was dated to c.1900 BCE. In the view of the IAA that find was conclusive evidence of the pagan nature of the area's population.

Last June protests were held, both near the site and in Manhattan near the home of the US developer, and in late March of this year, hundreds of followers of the Atra Kadisha movement held a mock funeral for the remains. Whenever human bones of any nature are uncovered by the IAA, they are treated reverentially and handed to the relevant funeral authorities after examination, and very rarely retained for further research.

### Return of ancient Christian artefacts demanded by Jordan

The story goes that a Bedouin farmer found a cache of small metal plates, bound by leaden rings, formed into codices, about 70 in number, in Northern Jordan between 2005 and 2007, and had them smuggled into Israel for sale. Another Bedouin, Hassan Saeda, living in Northern Israel, is holding them and claims that they are his family heirloom. It is said that Israeli archaeologists (having been contacted by Saeda, who has been trying to sell the artefacts), say that the pieces are forgeries.

The Jordanian authorities, however, claim that the codices or miniature books are extremely important and of significance equal to that of the Dead Sea Scrolls, but so far the IAA have declined to comment, having no detailed knowledge of them. Nevertheless, David Ellington, a British historian, is said to have told the BBC that the codices are a major discovery of Christian History and that he hoped to have them moved to Jordan for examination. The codices are apparently in Hebrew and Greek or written in a code so far undeciphered, though the language is clear.

It seems that a report on the matter was printed in the Daily Telegraph recently, and there has been much speculation about them on the internet, so readers in the UK may have more knowledge of this matter, as all details on the subject are very scanty in Israel, and no-one seems to have seen the pieces, which may well seem surprising if they really are so important.

### Jacobovici discovers 'Nails of the Cross'

Simcha Jacobovici, the Canadian-Israeli maker of popular films on Biblical Archaeology, hit the headlines in mid-April by announcing that he had retrieved two Roman nails from the IAA storerooms and that they were the nails of the cross on which Jesus was crucified. He said that the nails had come from the ossuary of Caiaphas, the High Priest who had handed Jesus over to the Roman authorities. The ossuary had been reported by the IAA but no details of the nails had been given or even recorded and Jacobovici was of the opinion that they were very significant, claiming that they had been buried with the remains of Caiaphas to indicate his guilt in arresting and reporting Jesus to the Romans. Jacobovici has made films on the Death of Jesus and on the Exodus, and Israeli archaeologists have said that although his latest claims make good TV, they do not make good history.

#### **REPORT 32 – JUNE 2011**

#### Bethsaida - Stratum VII

Excavations at Bethsaida, which lies close to the northern shore of Lake Kinneret in the Galilee, re-started in June of this year. The work there has been conducted under the direction of Professors Rami Arav and Richard Freund for the last 25 years and has uncovered impressive remains of the Iron Age City that may have been the capital of the petty kingdom of Geshur.

Work this season will reach the foundations of the city, Stratum VII, which is currently dated to the middle of 10th century BCE. This is the period of the possible kingdom of David and Solomon, whose existence is doubted by the Tel Aviv School of archaeologists, in opposition to the biblical account. This is a

subject of debate at present and it is hoped that evidence this season from Stratum VII may help to throw light on the problem.

### **Hebrew University Museum – 70th Anniversary**

A special exhibition has been mounted by the Hebrew University Museum of Jewish Antiquities on Mount Scopus to mark its 70th anniversary, having been founded in the time of Prof Sukenik. Besides many items such as inscriptions, pottery and coins from the well-known excavations sponsored by the university, there are on show ceiling tiles from the Dura-Europos synagogue of the 3rd century CE, whose colourful frescoes are preserved in the National Museum of Damascus, the synagogue having originally been located in what is today Eastern Syria. The ceiling tiles are highly decorated and some of them mention the names of Samuel the Cohen, Abraham the treasurer and Samuel ben Supharah, who were presumably involved in the building of the synagogue.

### Acre - Byzantine structure uncovered

The recent uncovering of an impressive building in the city of Acre, the ancient port north of Haifa, has prompted the speculation that this might be the remains of a church of the 6th century CE. The building was constructed of ashlar stonework and included a courtyard with a well and terracotta pipework. If they are the remains of a church, it will be the first one discovered in the city, according to Nurit Feig of the Israel Antiquities Authority (IAA), who directed the excavation, and would add weight to the recorded fact that the Bishops of Acre and Caesarea attended international congresses in the city during the Byzantine period. According to Vatican archives an Italian pilgrim visited the churches of Acre in 570 CE, but no other public buildings of the period have so far been discovered in Acre.

The newly excavated building was found to contain a mosaic, roof tiles, pottery and coins. It was founded on a Hellenistic layer that included Rhodian amphorae and locally made pottery. The find cannot yet be opened to the public but will be fenced off and protected by sand and a textile covering while the adjoining mall and car park are completed.

### Austrian Hospice – salvage dig

A rescue dig is in progress at the Austrian Hospice, famous for its coffee, cream and Sachertorte, on the Via Dolorosa in the Old City, Jerusalem. The site is close to the triumphal arch built for Hadrian's visit to Aelia Capitolina in 135 CE, and the eastern Cardo of the city. The Austrian Hospice began rebuilding a low retaining wall on their north-eastern boundary, which had collapsed a few years ago. When excavating for a new foundation, older structures were immediately revealed and the IAA were called in. To date they have uncovered a substantial archway from the Ottoman period and a well-preserved medieval vaulted chamber. Considerable

remains of 14th century CE imported tableware, including bowls from Italy and the Far East, indicate that this was an area occupied by well-heeled inhabitants, indeed an elite medieval society. The work continues.

### Egyptologist held for selling and smuggling antiquities

It was reported that a retired US university lecturer in Egyptology was guiding a group of about twenty American tourists around the sites of two tells in the Galilee and was selling them valuable archaeological artefacts for them to take out of the country. The suspect guide was detained at Ben Gurion airport by Customs and IAA officials but allowed to leave after signing a confession and posting a large deposit to ensure his return for future trial. The tourists were stopped at the Egyptian border at Taba, where they were found to be taking out valuable items. The photographs of the antiquities found on the guide and in his hotel room show fairly standard series of Roman oil lamps and bronze and silver coins of the Second Temple period.

The information released by the police and the IAA is sketchy pending the trial, and it is believed that the IAA are using the case to warn tourists against buying antiquities from unauthorised dealers and taking them out of the country, which is a criminal offence with a penalty of up to three years imprisonment.

### Opening of Ophel City walls site

21st June saw the official opening of a new archaeological park to the north-east of the City of David Centre. The excavations were directed by Dr. Eilat Mazar of the Hebrew University, who described the remains as being possibly situated around the Water Gate mentioned in Nehemiah 3:26. These descriptions are still controversial and it is hoped that more information will be available in the next Report.

#### REPORT 33 - JULY 2011

### National heritage sites

Some time ago it was reported that the Government was committed to funding restoration and protection works to a number of sites of special national and historical significance and these comprised 150 locations. The Prime Minister has now signed an order to allocate funds to the first nine of such sites, which marks the beginning of this major project. The 'starter' sites include an historic railway station near the Sea of Galilee, the Shai Agnon House in Jerusalem, the battlefield at Yad Mordechai in the Negev (where the Egyptians were halted in 1948) and the first agricultural school in Israel. The total costs involved at this stage are over 30

million shekels (£5.5 million pounds). The lucky sites are all fairly modern ones which, curiously, are less well protected than many ancient ones, and it is hoped that the turn of the archaeological areas will come soon.

### Tel Shikmona, best example of four-roomed house

As mentioned previously, the ancient site of Shikmona, at the foot of the Carmel range to the west of Haifa, which was partly excavated forty years ago, is undergoing re-excavation by the University of Haifa, under the direction of Drs. Shay Bar and Michael Eisenberg. They reported that an outline of a four-roomed house, the type-cast Israelite dwelling, had been seen on photographs of the long neglected and dirt-covered site, which spanned from the Late Bronze Age to the Islamic period. Present rehabilitation work on the site shows it to have started as a fairly modest village that grew into a prosperous centre, trading with nearby Cyprus and Lebanon for luxury goods such as elite pottery and vessels to transport the purple dye of the shells of the Phoenician coast. The ground floor of the four-roomed house is in near perfect condition; it is dated to the early Iron Age, and will be preserved and incorporated into a national park planned for the site.

### Second Temple stolen ossuary declared authentic

Three years ago the Israel Antiquities Authority (IAA) recovered an inscribed ossuary that had been stolen from an unknown tomb. The inscription read 'Miriam, bat Yeshua ben Caiaphus, Cohanei Ma'aziah miBeth-Imri', in Aramaic. The importance of the inscription suggested a possible forgery but it was recently authenticated by Dr. Boaz Zissu of Bar-Ilan and Prof. Yuval Goren of Tel Aviv Universities. They found that the ossuary came from a burial cave in the valley of Elah, near Beth Shemesh, southwest of Jerusalem. The High Priest Caiaphas is known from the trial of Jesus, but it was not known that his family was associated with the priests of Ma'aziah, who formed one of the 24 courses of priests that served their allotted two weeks in the First Temple according to 1 Chron. 24:18. The name Beth-Imri might refer to a family of the Ma'aziah clan, or it might refer to the name of a village in the north Hebron hills called to-day Beth-Ummar. The ossuary is in good condition, complete with lid, and it is decorated on the face with two six-spoked rosettes, symbols of everlasting life.

### Computer Programme to identify authorship

Prof. Moshe Koppel of Bar-Ilan University is an expert on authorship attribution and has perfected, with others, a computer system of analysis called Authorship Attribution Algorithms (AAA), which is based on style and wording and is used to analyse authorship of criminal and other suspicious documents and which, he says, can also be used to identify authorship of Biblical texts.

Although much work on Biblical analysis has been done by individual scholars in the past, they are sometimes accused of personal bias, which, according to Koppel, cannot be levelled at his computer programme. The researchers have taken sections of the books of Jeremiah and Ezekiel and jumbled them up together, then analysed them by their AAA method, and the computer was able to accurately separate the two authors. However, further results have not yet been published but it seems that Koppel and his team have started work on the several books of the Tanakh. Further results are awaited.

### **Golden Bell Found In Drainage Channel From Temple Mount**

Much excitement has been generated by an announcement of the finding of a small golden bell in the debris of the drainage channel under the walkway that leads from the Temple Mount, in the area of Robinson's Arch, to the Siloam pool. This stepped walkway has been excavated by Prof. Ronny Reich and Eli Shukron over the last few years and it is hoped to open it to the public shortly. In the past, discarded items of clothing and food vessels were found, which indicated that the walkway had been used as an escape route during the Roman sack of Jerusalem in 70 CE. Now a small golden bell, about the size of a 5 pence piece, has been recovered by Eli Shukron from between layers of debris in the drainage channel below the walkway. The bell is of pure gold and has a tiny ring at the top for attachment to a garment, and the assumption is that it was one of the bells attached to the skirt of the garment of one of the priests, or even the High Priest himself, in the late Second Temple period. Such an ornament is mentioned in the description of the High-Priestly garments for the Tabernacle in Exod. 28: 33 & 34. However, it is not clear that such an ornament was worn by anyone except the High Priest and it is difficult to understand how such a garment came to be worn outside the area of the Temple itself, unless it was at the time of tumult during the Roman destruction of the Temple and the city.

### Ophel Archaeological Park, Jerusalem

After preliminary mention of the site in report no. 32, when it was inaugurated some weeks ago, it is now clear that the Ophel park will not be open to the public for at least another month. The site incorporates lengthy walkways among the Israelite and Byzantine walls linking the City of David area to the south of the Temple Mount, and the centrepiece is an Iron Age gateway that the excavators suggest may be the Water Gate mentioned in Nehemiah 3:26. It is certainly an impressive structure and still stands 4m high.

#### REPORT 34 - AUGUST 2011

### **Boundary stone found in Lower Galilee**

A local visitor to the small community of Timrat, which lies a few kilometres west of Nazareth, happened to come across a large stone inscribed in black with the three Hebrew letters reading 'Shabbat'. Mordechai Aviam, head of Archaeology at the nearby Kinneret College, has suggested that this was a marker for the Shabbat boundary around the village, marking the extent allowed for walking beyond the village on the Sabbath in the Mishnaic period. The letters are large and clear and extend over a length of half a metre. Boundary markers have been discovered at other locations but are inscribed in Greek and, according to Aviam, this is the first one to be found in Hebrew. The stone is dated to the Roman/Byzantine period when the village would have been inhabited, and volunteer teams are now being sent to the area to search for more examples.

### Ancient Shechem to be opened to the public

A team from the Netherlands and the Palestinian Authority has been working since 1997 at Tel Balata, the site of the ancient city of Shechem, and they plan to open the site to the public next year. It is hoped that the remains uncovered, and in some cases reconstructed by the Drew-McCormick Expedition directed by G. E. Wright in the early 1960s, will soon be available to be seen by visitors. Tel Balata, just east of modern Nablus, has been the site of a Palestinian refugee camp and in the last few years has become a centre of old car sales and a dumping ground for second-hand and stolen vehicles. All this is being cleared away by the present expedition, supported by a team from UNESCO, and it is hoped that the site can be presented next year in a form useful to scholars and attractive to tourists.

### Jerusalem sewage ditch yields up more treasures

From the waste water channel that runs from the Temple Mount to the Siloam Pool, in which the small golden bell was recently found, a Roman sword with part of an attached belt and a small inscribed stone were recently uncovered in the silt by Eli Shukron, working for the Israel Antiquities Authority (IAA). The sword had a two-foot iron blade and is a military type that Shukron believes may have been stolen from the Roman garrison by a rebel Jew and then abandoned in the escape passage. The inscribed stone, from the same period, of the Roman destruction of the City in 70 CE, shows a menorah of five branches on a triple leg base. It is a fairly rough rendition and unclear why only five branches are shown though it may be that the artist did not want to reproduce the exact form of the menorah, since that might have been considered sacrilegious outside the Temple. The sword was

found fused to its leather scabbard, badly decayed but with two ring buckles that had attached it to a soldier's belt.

#### Phasaelis city uncovered

At a site 20 km. north of Jericho, Hananiah Hizmi, working for the Archaeological Department of the Authority for Judaea and Samaria, is uncovering the 15 acres of a town planned by Herod the Great and started in the year 8 BCE, according to Josephus. It was the last of Herod's great projects (he died in 4 BCE) and was being built as an agricultural complex in the name of his brother Phasael. In this desert area, water was a problem and Herod's engineers managed to bring it in by a thousand-metre long ground-level aqueduct from the springs now called Petzael. The site had been covered by Palestinian and Bedouin dwellings and, as alternative accommodation has been provided, the huts have been cleared and the remains of the city uncovered. They include a water basin of 40m by 30m and 6m deep which was used to store the spring water and distribute it to adjoining fields. So far only two months of work have been spent on site and it is clear that much more time needs to be expended, as it is hoped to uncover all the residential and public buildings of this 'new town' in the desert. If the remains come up as expected, this will be another example of a Herodian miracle, the building of a viable community in desert surroundings. The site continued in occupation for some time, as the excavators found the remains of a Byzantine Church with a mosaic floor. Today the name is preserved as the location goes under the title of El Fasayil and there is a small Jewish village at the springs called Petzael.

### Bathhouse Hercules in the Jezre'el Valley

In preparation for the building of a railway connection between Bet Shean and Haifa (partly for the benefit of Jordanian access to that port), a rescue dig at Horvat Tarbanet, west of Afula, has uncovered a bright white marble torso and two fragments that are clearly part of a statue of the Greek hero Hercules. It is headless and portrays a highly muscular body with a lion's pelt draped over the left arm (the animal's head is visible), similar to the well-known Hercules Farnese statue of the Roman period. The find was made by Walid Atrash of the IAA, who claims it to be of exceptional artistic quality. The torso, which stands about half-a-metre high, was found by a bathhouse pool that had two rows of benches and a water-pumping system. The statue probably stood in a niche by the pool. It is dated to the late Roman period and it has been suggested that it was later deliberately smashed – hence the fragments – by iconoclasts in Byzantine or Islamic times.

Stephen Gabriel Rosenberg, W. F. Albright Institute of Archaeological Research, Jerusalem

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## **CONTENTS**

| Editorial  | 5   |
|--|-----|
| 50 Years of the AIAS: Special Commemorative Reviews  |     |
| Amihai Mazar, Israeli Archaeology: Achievements and the Current State of Research  | 9   |
| Ilan Shachar, The Coins of Ancient Israel - Discoveries of the Last 50 Years   |     |
| Dennis Mizzi, 60 Years of Qumran Archaeology   | 31  |
| Research Articles  |     |
| Ram Gophna and Yitzhak Paz, On Rural Aspects of the Urban Settlement System in Southwestern Canaan during the Early Bronze Age III                     | 51  |
| Juan Manuel Tebes, The Potter's Will: Spheres of Production, Distribution and Consumption of the Late Iron Age Southern Transjordan-Negev Pottery      | 61  |
| Egon H. E. Lass, Flotation Procedures in the Southern Levant: A Summary of 20 Years of Work, Part II   | 103 |
| Archaeological Memoir  |     |
| Bart Wagemakers, A Forgotten Diary and Photograph Collection as Valuable Records for the Historical and Archaeological Study of Israel and Transjordan | 121 |
| Book Reviews   | 141 |
| Summaries of Lectures  | 181 |
| Reports from Jerusalem, by Stephen Rosenberg   |     |
| Notes for Contributors and Membership Form   | 207 |