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STONES AND STORIES

AN INTRODUCTION
TO ARCHAEOLOGY
AND THE BIBLE

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PREFACE

Studying and writing are solitary, but not lonely, crafts. My studying and writing days are full of quiet conversations with colleagues from whose writings I learn, and with past and present students to whose questions I listen.

Stones & Stories is dedicated to all my students – graduates and undergraduates at universities, seminarians at divinity schools, adult learners in religious congregations and general readers. Thank you for your motivation, for your inspiration, for your companionship on the journey of learning.

In the bibliography of Stones & Stories I acknowledge my colleagues who have taught me about archaeology and the Bible. I also want to thank those who made time to talk with me – in passing or at length -- about this project.

Kelley Hays-Gilpin (Northern Arizona University)
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P.M. Michele Daviau (University of Toronto)
James K. Hoffmeier (Trinity International University)
David N. Freedman (1922-2008)
Eric H. Cline (George Washington University)
John Kaltner (Rhodes College)

The generous gift of time which colleagues gave to me is a wonderful example of the rich collegiality which can take place in the world of academics. They do not need to agree with me to spend time with me. They do not need to endorse Stones & Stories to take an interest in it.

I also could not have completed Stones & Stories if the Hayden Interlibrary Loan Librarians (Arizona State University) had not kept the books coming, and my friend, Burak Kayhan, had not kept my computer running.

Finally, I am grateful to my editors at Augsburg Fortress Publishing House: Michael West, Niel Elliott and Joshua Messner. Their engagement with me during the process of writing and re-writing Stones & Stories has made it a better book.

Stones & Stories began as a conversation with Niels C. Nielsen, Jr. who founded and chaired the Department of Religious Studies at Rice University where I got my first real teaching job. He was one of those remarkable colleagues who enriched my life as a scholar and teacher in many ways.

One day, during a discussion of the program in biblical and Near Eastern studies I was creating for the department, Nielsen asked me: *Don, have you ever been to the Holy Land?* He was a firm believer in travel as learning.

No, Niels, I answered, I haven't.

You need to go! he told me.

I know.

A couple of semesters passed, and I still had no plans to travel. *What are you doing about getting to the Holy Land?* Niels asked.

Niels, I confessed when I was a student, I was too poor to travel, now that I am teaching I am too busy.

The third time we had a conversation about going to the world of the Bible, Niels called me into his office and announced: *Don, I have a grant of \$10,000 for you. Do you think you could spend it in the Holy Land?*

I was off to travel Egypt, Jordan and Israel. With the grant money

I was able to design a travel study program called *The Bible: on location*, and a classroom course called *Archaeology and the Bible* which I taught and continue to teach. My travel, research, and teaching are the foundation of Stones & Stories.

BIBLE, OLD TESTAMENT, NEW TESTAMENT

Many Christians use the word *Bible* to refer to the *Old Testament* and the *New Testament*. In Stones & Stories: an introduction to archaeology and the Bible I use *Bible* as a synonym for *Old Testament*. Therefore this introduction to archaeology and the Bible focuses primarily on the excavation of Old Testament, not New Testament, sites.

Stones & Stories explains the different schools or theories of how to excavate. It is not a survey of sites. Sites like Gezer, Arad and Qumran are described to demonstrate various theories of excavation. Hopefully instructors will choose other sites as well from both the Common Era and Before the Common Era to show their students how to apply these theories.

DATES AND SPELLINGS

Spellings for the names of rulers of Egypt and dates for their reigns in Stones & Stories follow John Baines and Jaromir Malek, Atlas of Ancient Egypt (1980).

Dates before the Common Era are marked with the suffix: *B.C.E.* For example: *Alexander of Macedonia (356-232 B.C.E.)*. Dates during the Common Era do not have a suffix. For example: *David N. Freedman (1922-2008)*.

Spellings for the names of rulers of Mesopotamia and dates for their reigns follow Michael Roaf, Cultural Atlas of Mesopotamia and the Ancient Near East (1990).

Spellings for the names of the rulers of Israel and Judah and dates for their reigns follow J. Maxwell Miller and John H. Hayes, A History of Ancient Israel and Judah (2006).

A *tell* (Hebrew: *tel*; Arabic: *tell*, *tall*) is an artificial hill or mound formed by the eroded debris from an ancient settlement. Spellings for sites follow Anson F. Rainey and R. Steven Notley, The Sacred Bridge: Carta's atlas of the biblical world (2006). If Rainey and Notley give both spellings, for example, *Tell Arad* and *Tel Arad*, or do not list the site in their index, I use *Tell* or *Tall* if the site is in an Arabic speaking country, *Tel* if the site is in Israel.

Archaeologists working in the world of the Bible created a calendar using the raw materials used for tools and weapons, for example, *Stone Age*, *Chalcolithic* (Greek: *chalco* = copper; *lithic* = stone) *Age*, *Bronze Age*, *Iron Age*. The dates for these periods reflect the consensus of early archaeologists on when these materials first came into use. Subsequent research has made modifications in these dates, but the calendar dates have not been changed. Dates for the Archaeological Calendar in Stones & Stories follow The Anchor Bible Dictionary (1992) edited by David N. Freedman.

TRANSLATIONS

Citations from the Bible in Stones & Stories follow the numbering of the New Revised Standard Version (1989). The translations are mine. There are two kinds of translations. One tries to produce a faithful picture – a literal or functional equivalent -- of the original language in a new language. The NRSV, for example, is such a translation. These translations focus on the text. My translations are dynamic equivalents. I focus on the audience and try and use language that will help readers better understand what they are reading.

The titles for the various traditions from the Bible that appear in Stones & Stories and the text divisions are my own, and not those in the New Revised Standard Version. For example, I identify a *Trial of Nineveh* and the text divisions as Nah 3:1-7. The NRSV titles the passage: *Oracles against Nineveh* and identifies the text divisions as Nah 2:1—3:19. Likewise, I identify a hero story which I title: *A Woman Delivers Thebez from Abimelech* and identify the text divisions as Judg 9:50-57. The NRSV titles the passage: *The Downfall of Abimelech* and identifies the text divisions as Judg 9:22-57. My titles and text divisions are based on the form of the tradition and the intention of the genre to which it belongs, rather than the content of the passage. The intention of genre *hero story* is to describe divine deliverance, so I always use the verb *deliver* in the title. I also identify the hero, here *a woman*; the enemy, here *Abimelech*; and the victim, here *Thebez*.

During the Late Bronze period (1500-1200 B.C.E.) *Hebrews* were displaced households (Akkadian: *'apiru*) whose common bond was not ethnic, but social. War and famine were common causes of their social dislocation. These Hebrews often fought as mercenaries or supported their household by raiding.

The *Hebrews* who founded the villages in the hills west of the Jordan River Valley and north of Jerusalem at the beginning of the Iron Age (1200-1100 B.C.E.) were from cities along the coast, not nomads from the desert. What these villagers had in common was that they were

social survivors who fled the famine, plague, and war which brought the Bronze Age to an end. They were not warriors, they were farmers and herders. They left centralized, surplus states and created decentralized, subsistence village federation called *Israel*. Politically these villagers were *Israelites*; culturally they were *Hebrews*.

The Hebrews' name for their divine patron is written with the four consonants: Yod He Waw He (Exod 2:23–4:23). Scholars label this name the *Tetragrammaton* (Greek: *tetra* = four; *gramma* = letters). Originally, Hebrews probably pronounced the Tetragrammaton as *Yahweh*. Eventually, observant Jews stopped pronouncing or writing the name. This ritual of silence reminded them that the name of their divine patron was too holy for them to speak or write (Exod 20:7; Ps 68:4).

As a substitute Jews refer to *Yahweh* simply as *Lord* (Hebrew: 'Adonai) or as *The Name* (Hebrew: *haShem*). When scribes began to punctuate or point biblical scrolls, they wrote the vowels above and below the lines of consonants to help cantors sing the words correctly. The Tetragrammaton was punctuated with the vowels for 'Adonai, not the vowels for *Yahweh*.

Christian scribes unfamiliar with the Jewish convention of punctuating YHWH with the vowels from 'Adonai (AOAI) wrote out the name as Y-A-W-O-H-AI or *Jehovah*. *Jehovah* appears as the divine name in the King James Version of the Bible, and is used as the name for God by the Jehovah's Witnesses tradition of Christianity (http://www.watchtower.org/e/na/article_01.htm). Most English translations of the Bible today, however, use *LORD* rather than *Yahweh*. Similarly, some Jewish and Christian scholars substitute the consonants – YHWH – for the divine name (Henry O. Thompson 1992; Ringgren, Freedman, O'Connor 1986).

Like the majority of scholars when I use the proper name for the divine patron of ancient Israel in *Stones & Stories* I write *Yahweh* (Mark S. Smith 1990: 1-40; 2001: 67-82). One practical reason for this convention is that when I ask students to read aloud, they can pronounce *Yahweh*; they cannot pronounce *YHWH*. In my experience observant Jewish students comfortably substitute *the Name*, *Lord* or *HaShem* for *Yahweh* when they read aloud in class.

GLOSSARY

The Glossary defines common technical terms used in *Stones & Stories*. Each term is also defined when it is first used in the book itself. *The Concise Oxford Dictionary of Archaeology* by Timothy Darvill is a good general reference for terms not covered in the glossary here.

Compound technical terms in Stones & Stories -- like *guffa* bucket -- are made up of two words with the same meaning. One word is English, the other is not. For example, *guffa* is the Arabic word for *bucket*. These compounds are a tool for learning the vocabulary of archaeology. Archaeologists would simply say: *Be sure the tag on every guffa (not guffa bucket) of pottery is filled out completely and correctly before sending it to the ceramicist to be read.*

Enjoy using Stones & Stories in your adventure to better understand and to appreciate the world of the Bible as much as I have enjoyed writing it! Your time and your effort will bring your Bible to life.

INTRODUCTION



The Introduction explains the task of introductions to archaeology and the Bible; how various introductions are organized, and how Stones & Stories: an introduction to archaeology & the Bible is organized.

THE TASK OF INTRODUCTIONS TO ARCHAEOLOGY AND THE BIBLE

The three R's of archaeology are to recover, to read and to reconstruct the cultural property of now extinct cultures (Magneess 2002: 4-13; Darvill 2002). Archaeologists listen to the stories that stones – like architecture, art, pottery, jewelry, weapons and tools -- have to tell. Stones & Stories: an introduction to archaeology & the Bible describes how archaeologists listen, what they are hearing, and what a difference it makes for understanding the Bible.

Archaeology is not the plunder of the treasures of ancient cultures; nor proving that the Bible's descriptions of people and events are historically accurate; nor a legal remedy for determining which people today have a legal right to the land.

Until the 18th century, the Bible was the primary source for understanding the worlds -- and the world-views -- of ancient Israel. Both archaeologists and biblical scholars treated the Bible as history and worked to demonstrate that the history in the stories was reliable. Then the stones began to tell stories that were different from the Bible. There were stories in the stones that were not in the Bible; and there were stories in the Bible that were not in the stones (Finkelstein and Silberman 2000, 2006; Davies <http://www.npr.org/templates/story/story.php?storyId=5401536>).

Despite the perception of conflict between archaeology and the Bible that so often captures public attention, archaeologists and biblical scholars have learned a great deal together about the world of the Bible – and about the Bible itself. Together archaeology and the Bible unlock the most profound responses to the challenges that confront humans who want not only to make a living, but also to make a difference in the world

that is their home.

Archaeology in the world of the Bible does not prove the Bible wrong, anymore than biblical archaeology proves the Bible right. Archaeology offers new ways of defining the Bible in relationship with its own world, and using it more effectively in the world today. Archaeology provides different perspectives on the way the people of ancient Israel responded to their experiences, and consequently provides models for responding differently to experience today.

Culture is the tool that humans use to understand and respond to their experiences – good and bad. Every stone tells a story about how a now gone people looked at their world, and responded to their experiences. Archaeologists are the curators of this amazing legacy.

Archaeologists today have recovered more artifacts from the world of the Bible than were available since the great cultures that produced them vanished. Yet, although there are introductions to Bible, and there are introductions to archaeology, there is still a need for a readable, affordable and portable introduction to archaeology and the Bible.

WILLIAM G. DEVER

There is also a need for an introduction to archaeology and the Bible that celebrates what Biblical Archaeologists have accomplished, and continue to accomplish. Popular controversies like the minimalist-maximalist debate often make it seem as if archaeologists working in the world of the Bible have learned nothing of value for understanding the Bible.



Maximalist scholars -- such as William G. Dever -- regard the Bible as the heritage of a Hebrew culture that first appeared in the hills north of Jerusalem after 1200 B.C.E. Minimalist scholars -- such as Niels P. Lemche -- regard the Bible as the ingenious strategy of an elite community of Jews who were trying to prevent the assimilation of Judaism into the dominant Greco-Roman culture after 333 B.C.E.

NIELS P. LEMCHE

Admittedly, Biblical Archaeologists have not definitively demonstrated that the biblical traditions about Israel's ancestors – Abraham and Sarah, Jacob, Leah, and



Rachel – and the biblical traditions about the appearance of the Hebrews in Syria-Palestine – are history. Nonetheless, they have learned a great deal.

HOW STONES & STORIES IS ORGANIZED

The need for a good book is clear; how to write that book is not (Dessel 2003:67-98). There are introductions to archaeology organized around the archaeological calendar (Kenyon and Moorey 1987; Mazaar 1990; Ben Tor 1992; Levy, ed. 1998; Stern 2001; Miller and Hayes 2006); the canon of the Bible (Albright and Freedman, eds. 1956-present; King 1988, 1992); daily life in the world of the Bible (Sasson, ed. 1995; King and Stager, 2001; Zevit 2001), archaeological sites (Stern, ed. 1993; Meyers, ed. 1997), travel (Murphy-O'Connor 1992; West 1995; Feiler 2001); the history of archaeology (Silberman 1982; King 1983; Hallote 2006); and popular interest ("Mysteries of the Bible" on History Channel; Pearlman 1986; Cline 2007).

Stones & Stories: an introduction to archaeology & the Bible is a companion volume to Old Testament Parallels: laws & stories from the ancient Near East which Victor H. Matthews and I published, and is now in its third revised and enlarged edition (2006). Old Testament Parallels deals with word art – the languages and literatures of the world of the Bible; Stones & Stories deals with the other fascinating artifacts recovered from that same world. As Albright, the Father of Biblical Archaeology, wrote *...writing without artifacts is like flesh without a skeleton, and artifacts without writing are a skeleton without flesh* (Albright 1969: 2).



For a long time Biblical Archaeologists were more committed to the practice of fieldwork, than to the theory of archaeology. Two of the most significant accomplishments of Biblical Archaeologists are the development of a ceramic calendar and of a scientific method of excavating and recording material remains one layer of settlement at a time (Dever 1988: 339).



WILLIAM F. ALBRIGHT
(1891–1971)

Nonetheless, biblical archaeology still needs *...a deliberate and profound intellectual reorientation -- the development of a systematic body of theory as this was understood in other branches of archaeology or in the social sciences generally....* (Dever OEANE 1:316). Theory determines

practice, and there really is no such thing as just digging and letting ...*the pots speak* (Hodder and Hutson 2003: 16). Artifacts speak only when they are questioned (Stager 1985:1; Ricoeur 1980:17). The answers that archaeologists get are shaped by the questions they ask. Biblical Archaeologists all make assumptions about their sites and have implicit research designs for their excavations. The task today is to clearly organize what is taken for granted into a theory of Biblical Archaeology that can be easily understood and applied consistently to the material remains. Therefore, Stones & Stories is outlined by the theories of archaeology that developed during the nineteenth and twentieth centuries: Popular Archaeology (Part One), Cultural History (Part Two), Annales Archaeology (Part Three), Processual Archaeology (Part Four) and Post-Processual Archaeology (Part Five). This schools-of-archaeology approach parallels the outline of the widely used general introduction to archaeology: Reading the Past: current approaches to interpretation in archaeology (1986-2003) by Hodder and Scott Hutson.

Schools of archaeology are created by the questions that archaeologists ask to interpret the significance of the artifacts they recover (Hodder 2003: 20). Each school is a blend of material and ideal questions. Material questions are about the ritual of making things – about what the peoples of the past did with their raw materials. Ideal questions are about the world views of the people who make things – about how the peoples of the past explained their experiences in their artifacts.

For a long time Biblical Archaeologists also built too few networks with their colleagues excavating other cultures in other parts of the world. Therefore Stones & Stories also emphasizes the importance of integrating archaeology in the world of the Bible with archaeology throughout the world. The work of Fernand Braudel (1902-1985), Lewis R. Binford and Hodder needs to be as familiar to students of archaeology and the Bible as the work of Albright, Kenyon and Dever.

Academic disciplines like archaeology are paradigms based on research which both solves problems and raises new problems and proposes new theories (Kuhn 1970). Paradigms are not only theories, but also a consensus about what works among those in any discipline. When paradigms no longer evaluate evidence accurately, nor produce effective solutions, they shift. Each of the five parts of Stones & Stories represents a paradigm shift in how and why to excavate the world of the Bible.

PART ONE: SCHOOL OF POPULAR ARCHAEOLOGY

The School of Popular Archeology identifies a diverse family of pilgrims, emperors, travelers, antiquities dealers and missionaries who left their homes for the world of the Bible. They were more inspired by passion than science. Yet, despite what were certainly undisciplined approaches by today's standards, their legacy to archaeology and the Bible remains significant.

The archaeology of antiquities dealers, for example, discusses the adventures of Giovanni B. Belzoni (1778 -1823) in the Valley of the Pharaohs or Kings and what these excavations revealed about the complex and sophisticated understanding of the afterlife in Egypt, in stark contrast to the minimalist view of afterlife in the Bible. It also reviews the ethical issues raised by the lifetime of collecting by Moshe Dayan (1915-1981). Should scholars, universities and museums buy or accept artifacts of unknown origin from collectors regardless of their value for better understanding the world of the Bible? The chapter concludes with a discussion of the proposal by Roderick McIntosh and Susan McIntosh, the excavators of Jenne-jeno in Mali (Africa), that archaeologists seriously consider negotiating with *good collectors* – antiquities dealers who promote scholarship and national pride by acquiring and selling cultural legacies.

PART TWO: SCHOOL OF CULTURAL HISTORY

The School of Cultural History chronicles the ideas and events of the rich and famous men reflected in unique political, diplomatic or military events. It wants to reconstruct what happened, and why it happened. Biblical archaeologists are, by and large, cultural historians. They want to reconstruct the significant events that took place at a site, and identify the causes of those events. The chapter on Gezer, for example, looks at cultural historical question: *Do the material remains support the biblical tradition that Gezer was part of the state structure of Solomon's Israel during 1000-900 B.C.E.?*

PART THREE: SCHOOL OF ANNALES ARCHAEOLOGY

The School of Annales Archaeology was founded by Marc Bloch (1886-1944) and Lucien Febvre (1878-1956) to study slowly developing and long lasting social institutions (French: *la longue durée*) like farming, herding pottery making and architecture. The school uses a wide variety of social sciences to reconstruct the daily life of everyday people. The chapter on architecture, for example, describes how Stager applied Annales Archaeology to the study of early Israel (Stager1985).

PART FOUR: SCHOOL OF PROCESSUAL ARCHAEOLOGY

The School of Processual Archaeology is shaped by the Enlightenment and by Modernism. Processual Archaeologists are confident that the human mind, properly disciplined, can accurately reconstruct the past. They also assume that the world of the Bible was a single world view or metahistory that explains how great men helped their cultures adapt to the changes in environment.

Processual archaeologists are positivists who follow the scientific method. Nothing can be taken for granted. Everything must be supported by evidence and experiment. In the chapter on Tel Mique, for example, Trude Dothan and Seymour Gitin apply the scientific method by testing the hypothesis: *Was the transition from the Late Bronze period (1500-1200 B.C.E.) to the early Iron period (1200-1000 B.C.E.) in Syria-Palestine uniform and spontaneous.*

Despite the importance of Processual Archaeology for excavators working in other parts of the world, archaeologists working in Syria-Palestine in the 1960s were not struggling with whether they were Processual Archaeologists or Cultural Historians. They were trying to decide whether they were *Biblical Archaeologists* or *Syro-Palestinian Archaeologists*. The close relationship that had existed between archaeology and biblical studies in the United States since the time of Albright (Albright 1942) was repeatedly challenged by Dever (Dever 1973, 1985, 1992). He argued that the Albright School of Biblical Archaeology was so committed to proving that the Bible was historically accurate that it completely ignored the developments in theory and method which Processual Archaeology brought to the discipline. Dever also alleged that Albright School ignored Processual Archaeology because it assumed that ancient Israel did not evolve like other cultures in Syria-Palestine – it was unique and could not be studied using scientific method.

PART FIVE: SCHOOL OF POST-PROCESSUAL ARCHAEOLOGY

By the 1980s Dever had prevailed. Archaeology in Syria-Palestine was no longer an amateur enterprise, but a separate and professional and Processual discipline (Dever 2005:80). Curiously, however, just as biblical archaeologists began using Processual Archaeology, Processual Archaeologists working in other parts of the world began to re-evaluate their method. This on-going critique is called *Post-Processual Archaeology* by Hodder.

The School of Post-Processual Archaeology applies the principles of post-modernism, and studies the world of the Bible by reconstructing the lives of ordinary men and women (Ackerman 66 (2003): 173-184; Meyers 66 (2003): 185-197). A chapter on how to use the Archaeology of Households to better understand a remarkable hero story in the book of

Judges introduces Post-Processual Archaeology. A Woman Delivers Thebez from Abimelech (Judg 9:22-57) celebrates an unnamed woman for delivering her city from its enemy with an extraordinary weapon. The mill she uses to feed her household becomes the weapon she uses to defend it.

Biblical Archaeology today not only provides an enriched understanding of the world of the Bible, but of the Bible itself. Stones & Stories is a standing invitation to teachers, students and the reading public to put archaeology and biblical studies back to work as partners in the exciting task of understanding these ancient peoples, and their remarkable ways of looking at their lives, using the earth, and thinking about God.



WHAT YOU HAVE LEARNED

- Introductions to archaeology and the Bible describe how archaeologists listen to the stories that stones – like architecture, art, pottery, jewelry, weapons and tools -- have to tell, what they are hearing, and what a difference it makes for understanding the Bible.
- There are introductions to archaeology organized around the archaeological calendar, the canon of the Bible, daily life in the world of the Bible, archaeological sites, travel, the history of archaeology and popular interest.
- Stones & Stories is organized around five theories of archaeology – the schools of popular archaeology, cultural history, Annales archaeology, Processual archaeology and Post-Processual archaeology. Each school asks different questions about artifacts recovered from the world of the Bible.

Part One Popular Archaeology



Part One introduces the School of Popular Archeology -- a diverse family of pilgrims, emperors, travelers, antiquities dealers and missionaries who left their homes for the world of the Bible. They were more inspired by passion than science. Yet, despite what were certainly undisciplined approaches by today's standards, their legacy to archaeology and the Bible remains significant.

CHAPTER 1

ARCHAEOLOGY OF PILGRIMS



Chapter 1 describes why pilgrims in every culture return to their homelands and how they contribute to the understanding of the Bible. The chapter also describes what geographers who study the land and artifacts like the Annals of Merneptah contribute to the understanding of the Bible, and what they and pilgrims have in common.

WHY PILGRIMS IN EVERY CULTURE RETURN TO THEIR HOMELANDS

Long before archaeology became an academic discipline, material remains in the world of the Bible caught the interest of pilgrims, emperors, travelers, antiquities dealers and missionaries (Hobson 1987:1-47). Each asked different questions about the artifacts they saw.

In The Sacred and the Profane: the nature of religion (1957-1987) the anthropologist Mircea Eliade (1907-1986) describes how traditional cultures create sacred space. To take profane space and make it sacred these cultures locate the sacred center of the land. At this spot the umbilical cord of the culture's godmother is connected to the land, and through this sacred center life continues to flow into their land.

Pilgrimage is an ancient ritual for refreshing the connection between a household and the sacred center (Greek: *omphalos*)



In shaman cultures a totem animal is a godparent who teaches its people a signature skill that they will need to survive. For example, the raven is clever. In nature ravens are attracted by anything shiny, and can cleverly steal coins or jewels from humans. The raven became the totem of the Tlingit people in the Pacific Northwest who tell the story about how raven stole a shiny piece of the sun and gave it to them so that they could have fire. The Tlingit considered themselves clever because the raven taught them how to kindle a fire.

in its land. When the life of any household in the culture is at risk pilgrims make their way to the sacred center to restore the flow of life from there to their households.

Sometimes the sacred center is revealed by a sign. For example in 1345 the Mexica people arrived at Tenochtitlan – the place of the cactus - which is Mexico City today. The Mexicas saw an island in the middle of the lake, and an eagle sitting on a cactus eating a snake – the sign that identified the sacred center in their land.

Sometimes the totem animal of a people identifies the sacred center of their land. They hunt their totem and the place at which they make the kill identifies the sacred center of their land.

Sometimes a domestic animal identifies the sacred center. People release one of their herd animals, and wherever it stops to graze is the sacred center of their land.

Once people identify the sacred center then all the roads and buildings in their land are aligned with it. Every household and every structure has a designated link to its sacred center. Life flows along that route from the sacred center into every household in the land.

Symptoms that the life of a household is at risk are war, famine, plague, or the inability of the women to conceive or to carry their children to term. These crises occur because something is blocking the flow of life from the sacred center to the household. That life channel is like a garden hose. Turn on the water, and run the hose out into the yard. If there is no water at the nozzle, then follow the hose back toward the hose bib and find the kink. Clear the kink and the water is on its way.

Similarly, when something is blocking the flow of life to a household, pilgrims make their way back along the route connecting the land of the household to the sacred center to find the *kink* that is blocking the flow of life and putting the household at risk. When the pilgrimage is complete, the flow of life is restored, and the connection between the land of the household and its sacred center is refreshed.

Jewish, Christian and Muslim pilgrims were first-wave archaeologists. They were not content just to walk their faith in their own lands. They wanted to walk in the lands where that faith was born. The material remains from the days when their teachers lived offered a privileged window into what it meant to be a Jew, a Christian or a Muslim. If believers could walk, then the stones could teach.

To excavate the geography of the Bible and develop a comprehensive road map of the world of the Bible is a journey of a thousand miles. Pilgrims took the first step.

Pilgrim journals are not only geographies, they are also ethnographies. Pilgrim journals not only describe places, they also describe people.

Finally pilgrims recorded the condition of the artifacts they saw. Their descriptions are sometimes the only records of certain material remains that vandalism and nature have now destroyed.

WHAT PILGRIMS HAVE CONTRIBUTED TO THE UNDERSTANDING OF THE BIBLE

MOSES BASOLA (1480-1560)

Moses Basola (1480-1560) was a Jewish pilgrim from Soncino (Italy), where his father was a proofreader at a Hebrew language publishing house (David, ed. 1999). Basola made a pilgrimage from Fano (Italy) to the world of the Bible in 1521-1523. He sailed from Italy to Greece, to Cyprus, to Libya, to Lebanon and to Syria.

Basola begins his journal by describing his voyage from Italy to Libya. He describes the weather, the geography and the Jewish communities at each port. In Cyprus, he notes that meat is cheap, eggs and birds are plentiful, and bread is expensive. He finds few Jews in Cyprus, and he does not like those he meets.

In Libya Basola hires a camel driver and a body guard and continues his pilgrimage on land. He makes Safed (Israel) his base. He describes this center of Jewish spirituality as a city full of good things, especially good food. From Safed he visits the graves of twenty-four biblical prophets and teachers.

Jerusalem was a high point of Basola's pilgrimage. He writes about Jewish life in the city, especially about synagogue rituals. He also describes the two prayers he recites at graves, and offers travel advice.

After his pilgrimage Basola went on to lead a full and diverse life. In 1535 he was ordained a rabbi and became an expert in Jewish Law (Hebrew: *halakah*) and spirituality (Hebrew: *kabbalah*). He became the headmaster of a Hebrew school for boys (Hebrew: *yeshiva*), and in 1540 he and his son founded a bank.

At the end of his life Basola once again left Soncino for the world of the Bible. He was convinced that the Messiah was about to come and

that he should await his arrival in Safed. Basola made it safely back to Safed where he died at eighty.

ABU IBN BATTUTA (1304-1369)

Muslims not only made pilgrimages to biblical sites like Jerusalem, but also to those associated with the life of Muhammad (570-632) and with the Qu'ran. Pilgrimage to Mecca is one of the Five Pillars or essential rituals of Muslim life. The first pillar is the profession of faith (Arabic: *Shahadah*) that Allah alone is God and that Muhammad is his final prophet. The second pillar is generosity to the poor (Arabic: *Zakat*). The third pillar is to pray five times each day (Arabic: *Salat*). The fourth pillar is fasting (Arabic: *Siyam*) during the month of Ramadan to remember the giving of the Qur'an to Muhammad. The fifth pillar reminds Muslims to pilgrimage (Arabic: *Hajj*) to Mecca once in their lifetimes. They are to make the journey during *Zul Hijjah* – the month for pilgrimage -- and the twelfth and last month in the Muslim calendar. Mecca (Saudi Arabia) is the site of Muhammad's birth, and, for Muslims, also the birthplace of the human race.



For Muslims the Qur'an – the recitation -- is the word of Allah – Islam's unique name for God. It describes what Muslims believe and how Muslims are expected to behave. In Muslim tradition the angel Gabriel recited the Qur'an to Muhammad during the last twenty-three years of his life. For Muslims Muhammad is the last of the prophets and his Qur'an is the last revelation of Allah completing the teachings in Torah, Psalms, and the Gospels.

In 1325 Abu Ibn Battuta (1304-1369), a Muslim attorney from Morocco, set out for Mecca along the North African coast. Along the way he visited Cairo and Damascus (Bullis 2000). When he completed his pilgrimage, he did not go home, but continued to travel for thirty years and eventually covered some 75,000 miles.

ABU IBN BATTUTA (1304-1369)

Ibn Battuta profiles more than two thousand people whom he met or whose tombs he visited in his journal, Travels in Asia and Africa 1325-1345 (Arabic: *Rihla*). He made four pilgrimages to Mecca, and visited more than forty countries. He met some sixty rulers, served as an advisor to two dozen of them. His descriptions of life in Turkey, Asia, Africa, the Maldives (SW of Sri Lanka in the Indian Ocean), the Malay Peninsula (Myanmar, Thailand, Malaysia) and India are still an important



sourcebook for the anthropology of these once faraway places. His word-portraits describe the lives of the rich and the powerful in these lands.

HELENA (250-330)

Christian pilgrims continued the Jewish tradition of walking the world of the Bible (www.christusrex.org/www1/ofm/pilgr/bord/). They left their homelands to ...*walk in the footsteps of their Master* as the teacher Origen (185-254) defined the ritual ("In Joannem" VI, no. 24).



HELENA (250-330)

In the closing months of a prolonged civil war the Roman emperor Constantine (272-337) converted to Christianity. Subsequently, in 313 Constantine issued the Edict of Milan that established Christianity as the new official Roman world-view.

Although Roman bureaucrats rushed to embrace Christianity, few understood what it meant to be a Christian. Constantine delegated his mother, Helena (250-330), to re-educate these government Christians. Helena decided to use the devotion of pilgrimage as a travel study -- a kind of civics course in the new official religion of the empire.



Rome remained part of the Byzantine Empire until 476, when Odacer, ruler of the Scirian tribes from Eastern Europe (Poland), conquered the city. Constantinople survived until May 29, 1453. Mehmed II, sultan of the Ottoman Empire, conquered the city on the feast day of St. Theodosia. Theodosia was martyred in 717 while defending an icon of Jesus hanging over the Bronze Gate into the Emperor's Palace from Christians who considered icons to be idols. Constantine XI, the last Byzantine emperor, died in the battle. Ordinary Byzantines were at the Church of St. Theodosia celebrating her feast day when the city fell. Constantinople became the new capital of the Ottoman Empire.

In 1922 the Ottoman Empire became the Republic of Turkey. In 1930 Constantinople was renamed *Istanbul*.

(<http://www.fordham.edu/halsall/byzantium/>)

Well financed and highly motivated, Helena set out to design a grand tour of the world of the Bible. To encourage Roman Christians to make pilgrimages to the places mentioned in the Bible she interviewed Christian communities to learn how they were connected with the Bible. Then she built churches, monasteries and convents with guest houses to provide for them.

In 330 Constantine moved the capital of the Christian Roman Empire from Rome (Italy) to Byzantium (Turkey). Byzantium was founded by Byzantias in 667 B.C.E. Constantine renamed the city *Constantinople*. Thus the *Roman Empire* became the *Byzantine* or *Christian Empire*.

Pilgrimage was already an important ritual in pre-Christian Hellenistic culture. Now it became a popular sacrament of Christian renewal. Christians made pilgrimages to learn how to be better Christians. The devotion became so important that even when it was physically impossible for Christians to make the actual pilgrimage, they walked a virtual pilgrimage in their local churches. These *Stations of the Cross* – as they were called – were marked on the walls of churches throughout Europe. At each station Christians paused to remember what Jesus had taught and what Jesus had done.



The Hexapla was a six column version of the Bible. The Hebrew Bible and its Greek translations were copied side by side. The Hebrew Bible in Hebrew was in the first column; the Hebrew Bible transliterated into Greek characters was in the second, the Greek translation of Aquila, the Greek translation of Symmachus, the Septuagint Greek translation and the Greek translation of Theodotion were in the third, fourth, fifth and sixth columns (<http://rosetta.reltech.org/TC/extras/Hexapla.html>).



Eliezer ben Yehuda (1858-1922) was a major influence in the revival of Hebrew as a spoken language called *Ivrit*. During the 19th century, Hebrew was written, but not spoken. For Ben-Yehuda the revival of Hebrew as a spoken language, was essential if a substantial number of Jews were to return to Palestine and create a Jewish culture there. Therefore, he encouraged Jews to speak Hebrew in their homes, and Jewish teachers to teach in Hebrew in their schools. Because there were no words in the Tanak, the Mishnah and the Talmud for ordinary things like dolls, ice-cream, jelly, omelets, towels and bicycles, he compiled a seventeen volume dictionary: [A Complete Dictionary of Ancient and Modern Hebrew](#). On November 29, 1922, only shortly before ben-Yehuda's death, the British government of Palestine recognized Ivrit as the official language of the Jews there. Ben-Yehuda's dream had been fulfilled. (http://www.jewishvirtuallibrary.org/jsource/biography/ben_yehuda.html).

Like Helena early Christian pilgrims used the Bible as a map. Gradually other guides (Greek: *onomastica* = lists of place names) began to develop. The most significant was published by Eusebius (275-339), a bishop of Caesarea Maritima (Israel).

The outline for Eusebius' Onomasticon was a Jewish list of sites that developed in Jerusalem. This Jewish geography identified sites mentioned in the Torah and Prophets portions of the Bible.

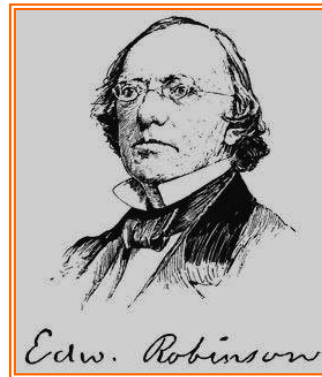
Origen and his students added Greek place-names from the Hexapla Bibles to the Jewish geography. Eusebius and his students added place names from the Gospels and other Roman itineraries as well as notes on geography and tombs.

To identify sites in the Syria-Palestine of his day Eusebius matched the sound of the place name in his day with the sound of the place name in biblical Hebrew. His method is still used by archaeologists to identify sites (Elitzur 2004).

Edward Robinson who traveled in the world of the Bible in 1837 rediscovered the technique of using popular place names to identify sites named in the Bible (Robinson 1841: I, 376). Like Eusebius, Robinson believed that the ancient Semitic place names were accurately reflected in the Arabic place names used in his day (Davis 2004: 6).

Although sound parallels can be helpful in excavating the geography of the Bible, comparisons between the names of sites today and biblical sites are not always reliable. For example, in June 1949 the Committee for Assigning Hebrew Names in the Negev established by David Ben Gurion (1886-1973) changed the Arabic names for mountains, valleys, springs, and wells into *Ivrit* or the Hebrew spoken in the state of Israel today.

EDWARD ROBINSON (1794-1863)



Sometimes the committee matched the sound of the Arabic and Hebrew place names; sometimes it changed the names to associate them with a biblical tradition or some natural characteristic of the site. *Seil Imran* -- *Aqueduct of the Wool-Makers*, for example, became *Nahal Amram* -- *Valley of Amran*, the father



Syria-Palestine, like *Levant* (Arabic: *esh-Sham*) or *Greater Syria* is a geographical, not a political term. Herodotus identifies *Palestine* as the part of *Syria* between Lebanon and Egypt (Herodotus, History I: 105; II: 104; III: 5.91; IV: 39; VII: 89). The term *Greater Syria* was used by the Ottoman rulers of Turkey to designate the land in Lebanon, Syria, Jordan, and Israel today. William Foxwell Albright also considered Syria-Palestine to be a single cultural region (Davis 2004: 64). Consequently The Oxford Encyclopedia of Archaeology in the Near East (1997) edited by Eric M. Meyers adopted this geographical convention as well.

of Moses and Aaron. *Jabal Haruf* -- *Mountain of the Ewe* -- became *Har Harif* -- *Sharp Mountain*. *Jabal Ideid* -- *Sprawling Mountain* was renamed *Har Karkom* -- *Mount Crocus* because crocuses grow there. <http://www.erezt.com/archive/jan3000.htm>). Consequently, the Ivrit place names in Israel today are seldom helpful in understanding the geography of the Bible.

EGERIA

The earliest surviving journal of a pilgrimage to Syria-Palestine was written by a pilgrim from France during 332-333. The pilgrim traveled to Italy, to Serbia, to Constantinople and to Jerusalem. Like a Roman itinerary the journal lists places and their distances from one another. This Itinerary from Bordeaux to Jerusalem (Latin: *Itinerarium Burdigalense*) is the earliest record of the stories about the world of the Bible that would have an enduring legacy in Christian piety, preaching and teaching (Wilson, ed. 1971).

From 381-384 a woman named *Egeria* wrote letters describing the places she visited (Wilkenson 1977). These Travels of Egeria (Latin: *Itinerarium Egeriae*) joined the Bible and the Onomasticon as archaeological resources that Europeans could use to better understand the world of the Bible (<http://198.62.75.1/www1/jhs/TSspegrla.html>).

Egeria never introduces herself in her letters. She certainly had courage to travel to this remote area of the empire, and enough time and money to spend three years away from home. To travel the twelve hundred miles between Constantinople and Jerusalem alone would have taken eight weeks if she made twenty miles a day. Egeria spent three years in Jerusalem and then returned to Constantinople.

The letters of Egeria were written to women back home in Spain. Although she addresses the women as *my sisters*, it is unlikely that Egeria was a nun. She never asks for money or complains about not being able to meet her expenses. Traveling monks and nuns in her day were almost always poorly funded by their monasteries and convents. Also few nuns in her day would receive permission to stay out of the convent for three full years.

Egeria obviously knew how to read and write, but the language in her letters is colloquial, not learned. On the one hand, Egeria may have written simply, and avoided references to classical Greek and Roman literature, because the letter-writing style of her day used popular, not academic language. On the other hand, she may have written simply because the women to whom she was writing were not educated.

Therefore, her writing style is not a clear indication that Egeria was self taught.

In 1884 Gian-Franceso Gamurrini (1835-1923) found some of her letters in the library of a monastery of the Brotherhood of St. Mary in Italy. This eleventh century manuscript – the Codex Aretinus -- had been copied by monks at the Monastery of Monte Cassino. Only about four months of letters had survived. Nonetheless, Valerius, a Spanish monk who lived around 650, described the contents of the missing letters. The surviving letters were all written after Egeria arrived in Jerusalem. Besides describing her pilgrimage to Sinai, she also describes the differences between the way Christians celebrate the Eucharist in Jerusalem and the way Christians celebrate the Eucharist in Europe (<http://go.owu.edu/~o5medww/egeria/index.htm>).

Egeria wanted her sisters to see exactly what she had seen. Her letters are full of enthusiastic comments on ordinary things, people, buildings, mountains; but what interests her most are how the sites she visits are connected with her understanding of the Bible.

Egeria's description of her visit to the Mountain of God in the Sinai Desert (Travels of Egeria #3-7) is a good example of pilgrim archaeology.

TRAVELS OF EGERIA
(AUTHOR'S TRANSLATION)

We reached the mountains late on Saturday. The monks who lived there were very hospitable. There is also a church and a priest there.

Early on Sunday we began our climb with the priest and the monks. It is hard work to climb these mountains. You cannot go up gently on a switch back trail; you climb straight up the whole way, as if up a wall. Then you must come straight down each mountain until you reach the very foot of the middle mountain which is called *Sinai*. Nonetheless -- thanks be to Christ -- and helped by the prayers of the holy men who accompanied us, we arrived on the summit of the Mountain of God in the morning. Here is where the covenant was given. Here is where the Glory of the Lord descended and set the mountain on fire (Exod 19:18).

The climb was difficult. I had to climb on foot. It would have been impossible in the saddle. Yet I did not feel the toil, because I realized that the desire which I had was being fulfilled at God's bidding.

On the Mountain of God there is now a church, not great in size. The summit of the mountain itself is not very great. Nevertheless, the church itself is great in grace.

When -- thanks be to God -- we arrived at the summit, and reached the door of the church, the priest came from his cell and met us. He was a healthy old man, a monk all his life. When the passage from the Book of Exodus had been read, we celebrated the Eucharist and received communion.

As we were coming out of the church, the priests of the place gave us *eulogiae*, -- the first fruits harvested on the mountain and specially blessed. Although Mt. Sinai is rocky -- there are no bushes on it -- yet down below, near the foot of the mountain there are little plots of soil where the monks diligently plant trees and orchards, and set up chapels with cells near to them, so that they may gather fruits which they have cultivated with their own hands.

I asked the monks to show us other sites mentioned in the Bible, so they showed us the cave where Moses stayed when he had climbed the Mountain of God for the second time in order to get another set of tablets after he had broken the first set when the people sinned (Exod 34:4). They also showed us the other sites which we desired to see, and those which they themselves well knew.

From the place where we were standing, my sisters, outside the walls of the church on the summit of the Mountain of God, those mountains that we could scarcely climb at first seemed to be so far below us when compared with the Mountain of God where we were standing. They appeared to be little hills, although they were so very great, that I thought that I had never seen higher, except that the Mountain of God excelled them by far. From there we could see Egypt and Palestine, and the Red Sea and the eastern end of the Mediterranean Sea, which leads to Alexandria and the endless lands of the Saracen tribes, all so far below us as to be scarcely credible, but the monks pointed out each one of them to us.

Having then fulfilled the desire with which we had hastened to ascend, we began our descent from the summit of the Mountain of God. We climbed down to another mountain joined to the Mountain of God, which is called *Horeb*. Mt. Horeb is where Elijah the prophet fled from Ahab, ruler of Israel, and where God spoke to him: *What are you doing here, Elijah?* (1 Kgs 19:9).

The cave where Elijah hid is near the door of the church on the mountain. A stone altar also is shown which Elijah built to offer sacrifice to God. We celebrated the Eucharist there, and also read the passage from the book of Kings. It was our custom that, when we had arrived at those places which I wanted to visit, the appropriate passage from the Bible should always be read...

Although it was already afternoon, there were still three miles left before we could get out of the mountains. We wanted to reach the entrance to the valley because there were many monks' cells there and a church near the burning bush. So after we climbed down from the Mountain of God we arrived at the burning bush in the middle of the afternoon. There is a very pleasant garden in front of the church, containing excellent and abundant water. Near there is where Moses stood when God said to him: *Take off your sandals* (Exod 3:5).

It was too late in the day to celebrate the Eucharist, so we simply prayed in the church and also at the bush in the garden, and read the passage from the book of Exodus. Then, we ate with the monks in the garden before the bush. We also spent the night there, and next day, rising very early, we asked the priests to celebrate the Eucharist for us.

For a complete translation see: John Wilkinson, Egeria's Travels to the Holy Land: newly translated, with supporting documents. Warminster: Aris & Phillips, 1999.

Mountains are sacred sites in many cultures (Wilkinson 2003: 206-209;). Even when the cultures around mountains change, reverence for the mountains remains (Bradley 2000). Among the holy mountains in the world of the Bible are: Nemrud Dagi (Turkey), Mt. Casios (Turkey), Mt. Sinai (Egypt), Mt. Hermon (Israel, Syria, Lebanon), and Jebel Sheikh Barakat (Syria).

The Sinai range, in its prime, was home to some one thousand monks. The mountains rise to 7500 feet and receive two and one-half to three inches each year – a climate that allowed monks to grow fruit and vegetables around their cells. Their gardens and orchards were small – some twenty feet by twenty feet -- but sufficient.

The monk's trail that pilgrims followed to the top of Mt. Sinai (Arabic: *Jebel Musa*) was a physical initiation to biblical spirituality. The trail was punctuated with viewpoints and wayside shrines linked to the Bible. There was the Valley of the Golden Calf; the site where Moses herded the livestock of Jethro; the cave where Moses stayed; the cave where Elijah stayed; the site where Aaron and the seventy elders witnessed the Covenant between Yahweh and Israel; the site of the Israelites' camp; and the rock where Moses broke the first set of tablets (Coleman and Elsner 1994: 86).

Today, the church next to the burning bush where Egeria prayed is the chapel of the Monastery of St. Catherine of Alexandria founded in 527. Emperor Justinian (483-565) fortified the monastery, and its walls were subsequently repaired by Napoleon Bonaparte (1769-1821). The architecture at the Mountain of God has changed, but pilgrims continue to gather at the same places described by Egeria.

CAESAREA-MARITIMA (ISRAEL)

About 470 the Christians of Caesarea Maritima, a Roman city on the eastern coast of the Mediterranean Sea, built a large octagonal martyrion shrine on the platform where Herod (73-4 B.C.E.) had constructed a Temple to Roma and Augustus in 22 B.C.E.. Eight-sided buildings mark sites of significance in a faith tradition and were pilgrimage destinations. The bones of a saint were buried directly under the dome at the center of the martyrion in Caesarea Maritima. Pilgrim Christians came to the tomb to pray for protection and healing.

MARTYRION OF ST. CORNELIUS, CAESAREA-MARITIMA
DRAWING BY ANNA IAMIM
HOLUM NEA 67 (2004) 193

Since 1989 Kenneth G.



Holum has directed the Combined Caesarea Expeditions. This international archaeological project has on-going land and underwater excavations. Holum used the New Testament and the journals of three pilgrim archaeologists to identify the saint buried in the martyrion at Caesarea Maritima as Cornelius, a Roman centurion and the first non-Jew to become a Christian (Holum 2004: 184-199).

The Acts of Apostles (Acts 10:1-33) describes Cornelius welcoming Peter into his house at Caesarea Maritima. The journal of one pilgrim describes how Christians at Caesarea Maritima took pilgrims to the place where Cornelius was baptized. In 385 the journal of another pilgrim describes attending mass in the Church of St. Cornelius built over his house. The Christians of Caesarea Maritima were now honoring Cornelius as a martyr and as one of their first bishops. About 570 the journal of a third pilgrim describes taking a small stone relic as a souvenir of the Martyrion of St. Cornelius.

Martin Luther (1483-1546) and other leaders of the Christian Reformation challenged the importance of visiting the lands of the Bible. They taught that the only pilgrimage that enriched the lives of Christians was the pilgrimage of the soul (Davis 2004: 3-4). John Bunyan (1628-1688) created a detailed guide for this devotion of spiritual pilgrimage in Pilgrim's Progress (1678). Nonetheless, pilgrims from every tradition of Christianity continue to make their way to the world of the Bible.

WHAT GEOGRAPHERS WHO STUDY THE LAND CONTRIBUTE TO THE UNDERSTANDING OF THE BIBLE

Geographers like Robinson and Eli Smith (1801-1857) inherited the work pioneered by pilgrims in the world of the Bible. Robinson was the first American to do archaeological work in Syria-Palestine. Like most biblical archaeologists Robinson combined his scientific skills as an archaeologist with a profound personal faith. These early scholars were also pilgrims. In 1838 he identified many biblical sites in Syria-Palestine. This geographical work was an important impetus to biblical studies in the United States. He made a second trip in 1852. After his death Robinson's writings and maps were preserved at Hamilton College (Clinton NY) and at Union Theological Seminary (New York City) where he taught.

During the twentieth century geographers Yohanan Aharoni (1919-1976), Michael Avi-Yonah (1904-1974) and Anson F. Rainey continued to work with both the geography of land itself, with the geography described in the Bible, and with the geography in parallel Near Eastern traditions like the Annals of Merneptah (1224-1214 B.C.E.)

Merneptah was not a pilgrim; he was a pharaoh. He did not make a pilgrimage through Syria-Palestine; he invaded it. He did not write a journal describing his travels, but in his annals he published the names of his enemies in Syria-Palestine. One of those enemies is Israel.

Annals were published by monarchs as yearly reports of their stewardship to their divine patrons. The two themes common to annals are the monarchs' reports on their foreign policy and on their domestic policy. They describe how they have fed the people and protected the land that their divine patrons placed in their care.

William F. Petrie excavated Merneptah's funeral chapel in the Valley of the Pharaohs during 1896 and recovered his annals inscribed on a granite stela ten feet high and five feet wide. The stela is preserved today in the Egyptian Museum in Cairo. It was originally inscribed by Amenhotep III, but was recycled by Merneptah to celebrate his military campaigns. The stela was erected during year five of his reign (1219 B.C.E.).

STELA OF MERNEPTAH
EGYPTIAN MUSEUM, CAIRO
1224-1214 BCE
GREY GRANITE
10 FT HIGH X 5 FT WIDE
VALLEY OF THE PHAROHS (KV8)

The annals primarily commemorate Merneptah's victory over the Labu and Meshwesh peoples in Libya and the Aqawasa, Turusa, Luku, Sardana and Sklusa Sea Peoples who fought with them against Egypt. The final lines of the annals, however, celebrate an earlier military campaign in Syria-Palestine. Here Merneptah celebrates his defeat of the city of Ashkelon, the city of Gezer, the city of Yanoam and the people of Israel.



ANNALS OF MERNEPTAH
(Matthews & Benjamin 2006: 97-98)

The rulers of my enemies now prostrate before me begging for peace;
Not one of my enemies raises a head in revolt.

- ▶ I devastated Tehenu (Libya) in the west;
I made peace with the land of Hatti (Turkey) in the north.
- ▶▶ I plundered Canaan (Syria-Palestine) from one end to the other.
- ▶▶▶ I took slaves from the city of Ashkelon;
I conquered the city of Gezer.
- ▶▶▶ I razed the city of Yanoam to the ground;
I slaughtered the people of Israel and burned their grain.
- ▶▶ I left the land of Hurru (Syria-Palestine) a widow.
- ▶ All lands have been pacified;
Every rebel is now prostrate before Merneptah.

The section of the annals where Israel appears uses a literary device called a *chiasm* after the Greek letter *chi* which is printed *X* (Ahlström and Edelman 1985 *JNES* 44:59-61; Rainey 2006: 99-100). The top shape of the letter is mirrored by its base shape just as – *I plundered the land of Canaan from one end to the other* mirrors *I left the land of Hurru a widow*.



Tyre (Lebanon) was a significant economic power in Syria-Palestine from 3000 B.C.E. until 640. It is about thirty miles north of the city of Acre (Israel) and the Carmel Mountains. Cloth dyed deep purple was a major trade commodity for Tyre. Piles of murex snail shells, from which the dye was harvested, and a dye factory have been excavated just outside the city walls. The murex shell also represents Tyre on its coins, and the pungent smell of dye manufacturing became the city's characteristic aroma. Originally, the word *Canaan* was used for the purple dye; then the word was applied to cloth dyed purple; then to the merchants who sold the cloth; and eventually to the

In hieroglyphics a throw stick or Egyptian boomerang and three mountains identify Ashkelon, Gezer and Yanoam as foreign cities. Israel, however, is identified as a foreign people by the hieroglyphics of a throw stick, a man, a woman and three vertical lines.

Rainey uses the annals to place the homeland of early Israel east of the Jordan River where he locates the city of Yanoam (Rainey and Notley 2006: 99-100). He argues that the order of the four names follows Merneptah's march into Syria-Palestine north along the coast where he conquers

Ashkelon and Gezer, and then east across the Jordan River where he conquers Yanoam and Israel. For Rainey the annals emphasize that Merneptah conquered both the peoples west and east of the Jordan River. Only at a later period do the people of Israel conquered by

Merneptah cross the Jordan River to the west and settle in the hills there, adopting the farming, herding, building and pottery making practices of the indigenous peoples of Syria-Palestine.

THE PEOPLE OF ISRAEL
MERNEPTAH STELA



Gosta W. Ahlstrom (1918-1992), Dianna Edelman, Michael G. Hasel and William G. Dever, however, use the geography in the annals to locate early Israel in the mountains west of the Jordan River (Hasel 1994: 52-54) For them the annals emphasize that Merneptah conquered both the peoples on the plains: Ashkelon, Gezer and Yanoam, and the people in the hills: Israel (Ahlstrom and Edelman JNES 44 (1985): 61).

Both the three cities and the one people in the annals are natives of Syria-Palestine, and all are significant military threats to Egypt (Hasel 1994:45-61). The material remains recovered from the villages in the hills west of the river are virtually identical with the cultures throughout Syria-Palestine. These artifacts are neither foreign, nor military. These early Hebrews were not strangers from across the river.

The Hebrews were social survivors who fled the famine, plague, and war that brought the Bronze Age to an end. These Hebrews did not wage war; they survived war. They fled the centralized, surplus economies of the great cities of Syria-Palestine and founded a decentralized subsistence economy of some three hundred villages in the hills along the Jordan River.

The hills themselves were of no economic interest to Egypt, but the Hebrews threatened the economic interests of Egypt by raiding its caravans, plundering harvests and rustling cattle from nearby villages. The Amarna Letters written to Amenhotep III and Akhenaton (1352-1335 B.C.E.) by their governors in Syria-Palestine are full of complaints about *'apiru* raiders.

The story Abraham Negotiates with Lot (Gen 13:5-14:24) describes Abraham as an *'apiru* raider when he delivers Sodom and Melchizedek from Elam. When the father of the household of Gilead excommunicates Jephthah, he joins a tribe of *'apiru* raiders and supports himself plundering caravans (Judg 11:1-40). In the Covenant between Abigail and David (1 Sam 25:2-43) Nabal, Abigail's husband, accuses David of being an *'apiru* raider who extorts households to protect their herds. The *'apiru* raiders in the Amarna Letters are not identical with the Hebrews in the Bible, but the social unrest that the Amarna Letters describe is comparable to the social unrest in Syria-Palestine described in the Bible.

CONCLUSION

Archaeology is an academic discipline; pilgrimage is a devotion. The standards that pilgrims and archaeologists use to identify sites are different. Archaeologists want to know: *What happened here?* Pilgrims want to know: *Is this where we tell the story?* A pilgrim's experience of the land is not intellectual; it is physical (Coleman and Elsner 1994: 73-89). Pilgrims make the journey, tell the story and say the prayer to join the present to the past and create a community of faith across time (Nelson 2006: 8).

Nonetheless pilgrims and archaeologists both bring the Bible down to earth. They assume the peoples in the Bible were real people and that biblical place names are real places -- not like Atlantis, Shangri La, the Land of Oz, Mordor or the Shire. They both believe that the land can teach them how these ancient people lived, and how the land taught these ancient people to think about life.



WHAT YOU HAVE LEARNED

- Pilgrims return to the sacred center of their homelands to refresh the channel through which divine life flows to their households
- Pilgrims contribute to the understanding of the Bible by visiting sites, telling stories and saying prayers
- Geographers who study the land and other geographical artifacts answer questions like: *Where did the first Hebrews in Syria-Palestine build their villages?*

CHAPTER 2

ARCHAEOLOGY OF EMPERORS



Chapter 2 describes why emperors included archaeologists and other scholars in their armies, and how these imperial archaeologists contributed to the understanding of the world of the Bible. The chapter also explains who first translated hieroglyphics, and how he did it; who first translated cuneiform, and how did they did it. Finally, it shows where is the work of these early archaeologists of language continued today, and how does that work contribute to understanding the world of the Bible.

When emperors came to power in France, Britain and Germany (1700-1918), they identified themselves as the heirs of the pharaohs of ancient Egypt and the Great Kings of Mesopotamia. To endorse their claims they dispatched archaeologists to study their imperial ancestors and to collect artifacts for their imperial museums. In the stones and stories of these ancient peoples, Europeans found vivid illustrations of their national character that explained and justified the unique position of their culture in the world (Silberman 1982). Despite the competition, intrigue and conspiracy which characterized the archaeology of emperors, it inspired two important legacies for archaeology and the Bible: museums and the understanding of ancient languages.

MUSEUMS

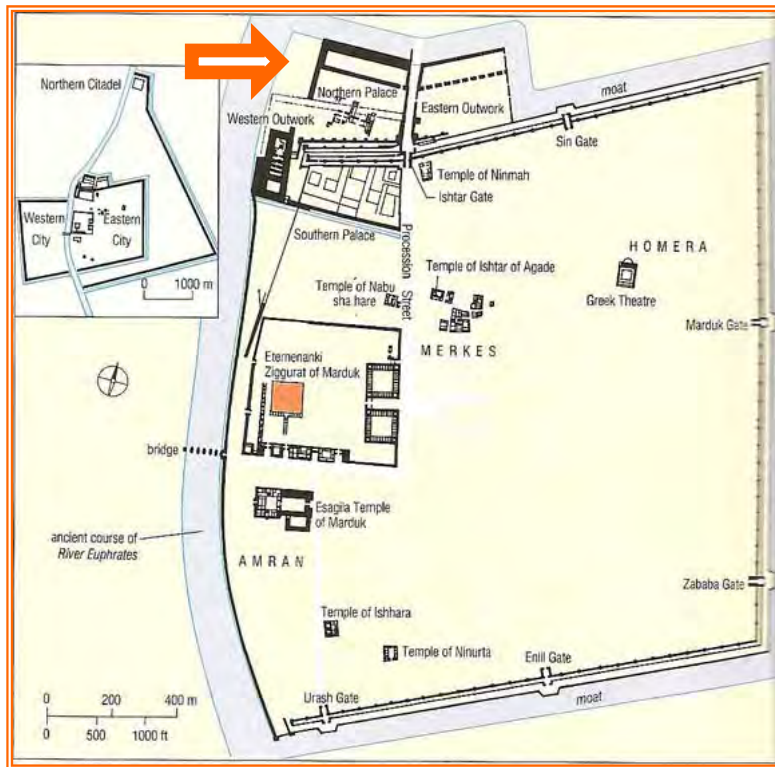
Archaeologists may have found a precedent for the imperial museums of Europe in the ancient city of Babylon. Nebuchadnezzar II (604-562 B.C.E.), Great King of Babylon, may have been the first emperor to use archaeology to justify his authority (Casson 1974: 53-57).

The Euphrates River ran through the middle of the city of Babylon. The five hundred acres of the old city was on the east bank; a much smaller new city was on the west bank. Both the old city and the new city were fortified by two walls some twenty-four feet apart. The inner wall was twenty-one feet thick; the outer wall was twelve feet thick. Both walls were reinforced with towers every sixty feet. The River Euphrates

was diverted into a forty foot wide moat around the outer wall. Nebuchadnezzar's antiquities museum, filled with monuments and trophies, was in his Northern Palace outside the double city wall. (<http://proteus.brown.edu/mesopotamianarchaeology/1310>).

Nebuchadnezzar may also have built the Hanging Gardens at the Northern Palace. The artificial mountain that was the base for the park was almost seventy-five feet high. Seven vaulted chambers with thick walls created a foundation for the gardens. Pumps raised water from the Euphrates River to irrigate the gardens.

MAP OF BABYLON
ROAF 1999: 192



Nebuchadnezzar used the slaves, gold, silver, lead and wood from his wars in Mesopotamia, Syria-Palestine and Egypt to restore and enlarge Babylon and other cities. Members of the household of David deported from Judah between 597-586 B.C.E., for example, were assigned to restore a section of Nippur on the Chebar canal (Ezek 1:1-3). More than fifteen million bricks, thirteen inches square and three inches thick, were used in the restoration of Babylon (Roaf 1990:199). He lavishly redecorated the Esagila sanctuary and the Etemenanki ziggurat, both dedicated to Marduk, the divine

patron of Babylon.

The Etemenanki was seven stories high – six platforms supporting a sanctuary on the seventh. The first story was about three hundred square feet. The sacred space surrounding the Etemenanki was bordered by a temenos wall warning pilgrims to enter only if their households were in good standing. Behind the wall there was housing for the priests who served at the sanctuary and administered the treasury of Babylon.

Nebuchadnezzar had several palaces in Babylon. The Southern Palace was at the corner of the old city just inside the double city wall. Nebuchadnezzar added five courtyards to this palace, quarters for his body guards, housing for administrators, a formal throne room and a residence for himself and his diplomatic wives. The architectural features of the palace were luxurious: kiln fired brick, cedar beams, ceramic tile walls, gold, silver and precious stones.



SPHINX
PYRAMID OF KHUFU (2551-2528 B.C.E.)
ENGRAVING BY VIVANT DENON
JOURNEY IN UPPER AND LOWER EGYPT, 1880



Napoleon's invasion of Egypt in 1798 – part of his on-going campaign challenging the British Empire -- was a military disaster. Almost immediately after French troops had disembarked, the British fleet sank much of the French fleet, stranding the French in Egypt. The French troops force-marched from Alexandria to Cairo in sweltering desert heat wearing Alpine wool uniforms and without canteens. Hundreds died. Egyptians rioting in Cairo killed more French soldiers, and subsequently led to the looting and desecration of Al-Azhar Mosque by French troops. Napoleon returned to France just one year after the invasion leaving his generals to deal with both the increasingly hostile Egyptians and the on-coming British forces (Burleigh 2007).

In 1798 Napoleon Bonaparte (1769-1821) launched an invasion of Egypt (Cole 2007; Strathern 2007). Like Alexander of Macedonia who made Hellenistic culture an international culture, Napoleon wanted to make French culture an international culture. Therefore, he not only brought soldiers to conquer Egypt, but also artists, scientists, engineers, naturalists and archaeologists to study Egypt and integrate the culture of ancient Egypt into French culture.

In his campaign through Italy in 1797 Napoleon had sent back crate after crate of confiscated paintings and artworks to the Louvre Museum (Paris). The painting of the Mona Lisa by Leonardo da Vinci (1452-1519) was one of his war prizes. In Egypt he found even greater treasures. The lure of the past and the new science of archaeology fascinated Napoleon and he wanted to reap the rich harvest of Egypt's antiquities, so he formed the Scientific and Artistic Commission to excavate ancient Egypt.

The French artist Dominique-Vivant Denon, for example, accompanied the army of General Desaix south along the Nile River. With remarkable accuracy Denon made drawings – often drawing while battles raged around him -- of the great temples at Karnak and Luxor. Meanwhile other scholars moved north along the Nile River to excavate temples and palaces, draw maps and collect artifacts.

The Scientific and Artistic Commission published its findings as Description de L'Egypte (1809). This comprehensive, ten-volume work laid the foundations for Egyptology, and kindled new interest at European universities in the study of the world of the Bible (Gillispie and Dewachter, eds. 1987). Long after Napoleon's armies surrendered to the British and withdrew from the Near East, students of archaeology and the Bible would continue to benefit from the work of these French scholars and artists.

Today the Near Eastern collection of antiquities in Louvre Museum is joined by the collections in the British Museum (London), in the Pergamon Museum (Berlin), and in the Vatican Museum (Rome). These museums are, in some way, all the legacy of the archaeology of emperors.



US AND CANADIAN MUSEUMS WITH EGYPTIAN COLLECTIONS

Kelsey Museum, University of Michigan, Ann Arbor
Michael C. Carlos Museum, Emory University, Atlanta
Hearst Museum, Berkeley
Museum of Fine Arts, Boston
Brooklyn Museum
Oriental Institute, University of Chicago
Detroit Institute of Arts
Nelson-Atkins Museum, Kansas City
Metropolitan Museum of Art, New York
University of Pennsylvania, Philadelphia
Rosicrucian Museum, San Jose
Royal Ontario Museum, Toronto

The United States was not yet an empire during the eighteenth and nineteenth centuries. Emperors did not fill its museums, but wealthy business people did. From 1903-1912, for example, Thomas Munroe

Davis, financed and participated in excavations that explored the Valley of the Pharaohs and identified the tombs of Hatshepsut (1473-1458 B.C.E.), Thutmose IV (1401-1391 B.C.E.) and Horemhab (1319-1307 B.C.E.) and the parents of Queen Tiye (1398-1338 B.C.E.). Their artifacts are now in the Museum of Fine Arts (Boston), the Metropolitan Museum of Art (New York) and the Cairo Museum (Egypt). Davis was one of the first Westerners to voluntarily leave Egypt's antiquities in their country of origin. The interest and financial investment of business people like Davis allowed the Near Eastern collections at the Metropolitan Museum; the Museum of Art (Brooklyn); the Museum of Art and the Oriental Institute (Chicago) to rival those of Europe (Thomas 1995).

Executives of not-for-profits like the American Board of Commissioners of Foreign Missions in Mosul (Iraq) Small colleges in New England like Dwight Henry Marsh sent antiquities turned down by the curators of the British Museum and the Louvre to colleges in New Hampshire, Maine, Vermont and Massachusetts. Amherst, Bowdoin, Middlebury, the University of Vermont and Williams all house Ashurnasirpal reliefs recovered from Nimrud by Austen Henry Layard. Marsh hoped the antiquities would persuade students that the Bible was historically reliable, and that the God of the Bible was more worthy of their faith than the divine patrons of any other ancient culture. There are no statistics for the number of students converted to or reinforced in the Christian faith by these artifacts, but they may have inspired the impressive number of undergraduates from these small colleges have gone on to careers in biblical and Near Eastern studies (Ackerman 2008).

Although Europe's flagship museums began as imperial treasure chests, they evolved into irreplaceable archives of the life and times in the world of the Bible. Museum collections in Europe and the United States were responsible for creating an on-going fascination with the world of the Bible among ordinary people, who came to admire their artifacts, and among students and their teachers who dedicated their lives to study these material remains, and among wealthy patrons who contributed the money to preserve and display them. They created an intense interest in the world of the Bible and access to its cultural legacy. Without these museums the world of the Bible would have been familiar only to a dedicated community of hearty pilgrims, and a wealthy network of intrepid travelers.

The moral questions of who owns the artifacts in museums today and what should be done with them are far from answered. Yet many of the countries whose cultural legacies are on view in these museums survive on money that tourists and scholars spend to visit them, and the money that the museums continue to spend for on-going exhibitions of

artifacts from the world of the Bible. Like foreign workers who faithfully send home a portion of their pay to their families, antiquities in museums faithfully send home visitors and students to spend the money that their countries of origins need to survive.

Just as pilgrims brought the attention of archaeologists to the importance of the land in understanding the world of the Bible, emperors brought the attention of archaeologists to the importance of understanding the hieroglyphic and cuneiform languages of the world of the Bible. Languages themselves are artifacts. No less than pottery, architecture, tools and jewelry, languages reflect world views – ways of understanding and of processing human experience.

SEMITIC AND INDO-EUROPEAN LANGUAGE FAMILIES

Two important language families appear in the world of the Bible. One is Indo-European and the other is Semitic. Hittite and Persian are the only Indo-European languages in the world of the Bible. They are related to the languages of India to the east, and of Britain, Germany, Italy, and the Baltic and Slavic countries to the west.

Semitic languages are divided into east Semitic languages and northwest Semitic languages. Akkadian is the only east Semitic language. It was named for Akkad in southern Mesopotamia, where the first inscriptions in this language were recovered by archaeologists. Babylonian and Assyrian are dialects of Akkadian. Babylonia was the cultural heartland of Mesopotamia where the art and literature characteristic of all Mesopotamian cultures developed. Assyria (1000–614 B.C.E.) was a culture that developed the technologies of government and military science, but borrowed heavily from Babylonia for its art and literature. Mari, north of Babylon on the Euphrates River near Deir-ez-Zor in Iraq today, served as a gateway for Babylonian culture to enter Syria-Palestine during the Middle Bronze Period (2000–1550 B.C.E.).

The most widespread Northwest Semitic language was Aramaic. It was written with an alphabet of just twenty-two letters instead of the hundreds of Akkadian symbols. Aramaic replaced Akkadian as the language of diplomacy after 1000 B.C.E. Arameans were associated with Aram (Syria), and particularly Damascus, but appeared throughout Mesopotamia and Syria-Palestine. Aramaic, Phoenician, Hebrew and Ugaritic are all dialects of the Northwest Semitic family of languages. Most of the Bible was written in Hebrew, although part of the book of Daniel (Dan 2:4–7:28) and a few other sections were written in Aramaic (Gen 31:47; Jer 10:11; Ezra 4:8–6:18; 7:12–26).

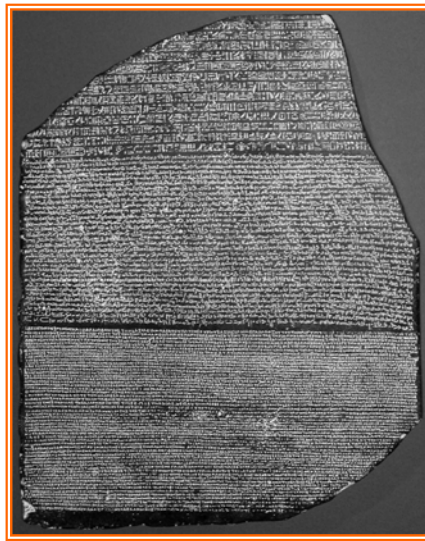
HIEROGLYPHICS

The most important artifact recovered by Napoleon's Scientific and Artistic Commission was the Rosetta Stone. While they were repairing the fortifications at Fort Julien near the Egyptian port city of Rosetta (Arabic: *Rashid*), French military engineers under the command of Capt. Pierre-Francois Bouchard discovered the stone on July 15, 1799. It is dark grey and pink grano diorite. It weighs sixteen-hundred pounds and is forty-five inches high, twenty-eight inches wide and ten inches thick.

The Rosetta Stone was originally erected to call on Egyptians to worship their thirteen year-old pharaoh, Ptolemy V Epiphanes (204-181 B.C.E.) on the first anniversary of his coronation in 196 B.C.E. The priests ordered the inscription to be written three times; once in classic Egyptian hieroglyphics, once in Demotic Egyptian longhand and once in Greek.

ROSETTA STONE
BRITISH MUSEUM

Egyptians used a hieroglyphic form of writing that underwent several stages of development (Bakir 1978; Gardiner 1957; Davies 1958; Budge 1978). Hieroglyphic Egyptian used carved or painted figures to write on stone that evolved into a cursive or longhand writing known as *Demotic* Egyptian. It appeared about 650 B.C.E. and was used for business, legal, scientific, literary and religious documents written on papyrus paper. Although the use of Demotic Egyptian in wood and stone inscriptions is not unknown, its use on the Rosetta Stone is exceptional.



In the days of the Rosetta Stone Egyptian hieroglyphics were used primarily in inscriptions on temple walls and tombs. Sometimes the glyphs or word-pictures are very detailed and painted in color; sometimes they are simple outlines. When Theodosius I (347-395) decreed that Christianity was the only religion that could be practiced in the Byzantine Empire, pre-Christian sanctuaries like the temples in Egypt were closed, and the ability to read and write Egyptian hieroglyphics was lost.

Greek was the language of the rulers of Egypt after 331 B.C.E. when Greek-speaking Alexander of Macedonia ---Alexander the Great -- conquered Egypt from the Persians who had ruled there for some two hundred years (525-331 B.C.E.). Like Nebuchadnezzar II before him Alexander carved his own annals into the walls of the sanctuaries at Luxor to create a living museum identifying his empire with the empire of ancient Egypt.

Ptolemy, one of Alexander's generals, became governor of Egypt after Alexander's death in 323 B.C.E. In 305 B.C.E. Ptolemy declared himself Pharaoh Ptolemy I Soter. The Greek-speaking Ptolemies ruled Egypt for 300 years (305-30 B.C.E). Ptolemy V Epiphanes, honored by the Rosetta Stone, is one of Ptolemy I Soter's successors.

After Napoleon's defeat, the Treaty of Alexandria (1801) required the French to surrender the Rosetta Stone and other Egyptian artifacts to the British. These antiquities then became part of the Egyptian Collection at the British Museum.

In 1822 French linguist Jean F. Champollion (1790-1832) used the Demotic Egyptian inscription on the Rosetta Stone to translate its hieroglyphic Egyptian inscription.

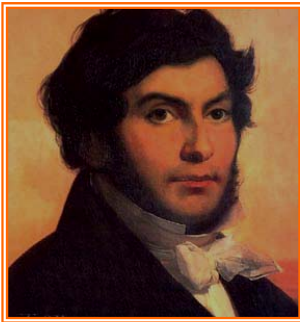
Champollion was a prodigy. He taught himself Hebrew, Arabic, Syriac, Chaldean (Iraq) and Chinese. When he was ten, he began his formal education and the study of Coptic (Egypt), Ethiopic (Ethiopia), Sanskrit (India), Zend (Iran), Pahlevi (Iran) and Persian (Iran). When he was sixteen he read a research report to the Grenoble Academy proposing that Coptic was the same language spoken by the ancient Egyptians. When he was eighteen he was appointed to teach history and politics at Grenoble. When he was twenty he completed his Ph.D. and began publishing. Introduction to Egypt Under the Pharaohs (1811) and Egypt of the Pharaohs: geography, religion, language and history of the Egyptians before the invasion of Cambyses (1814) were among his most important works.

As Champollion had argued at the Grenoble Academy, Coptic is the direct descendant of Egyptian hieroglyphics. The Coptic alphabet is a slightly modified form of the Greek alphabet, with some additional letters. As a living language Coptic flourished throughout Egypt during 400-1700. During the European Renaissance scholars traveled to Egypt to learn Coptic from native speakers. Coptic survives today as the liturgical language of the Coptic Orthodox Church.

Champollion matched seven Demotic Egyptian words on the Rosetta Stone with their Coptic equivalents. Then he matched the Coptic words with their hieroglyphic Egyptian equivalents. For the first time, inscriptions from the days of the pharaohs could be translated by Europeans. Champollion became the *Father of Egyptology*.

After Champollion had translated the Rosetta Stone the French government hired him to visit the museums in Turin, Livorno, Rome, Naples and Florence (Italy) to study how they preserved and exhibited their antiquities. In 1826 he was appointed curator of the Egyptian Collection at the Louvre which opened to the public in 1827.

During 1828-1829 Champollion and his student from Pisa (Italy), Ippolito Rosellini (1800-1843), conducted a survey of Egypt. Champollion took detailed notes and made sketches that Rosellini later converted into engravings. Their field work updated and enlarged the Description d'Égypte published by Napoleon's Scientific and Artistic Commission.



JEAN F. CHAMPOLLION (1790-1832)

The Egyptian language deciphered by Champollion is an Afro-Asiatic language related to Berber and Semitic languages like Hebrew, Amharic and Arabic. Egyptian developed in Africa as early as 3,200 B.C.E.

CUNEIFORM

France anchored its claim to the imperial heritage in the world of the Bible by colonizing Egypt. Britain colonized Mesopotamia. Like the empires of Egypt and Mesopotamia before them, they divided Syria-Palestine -- the homeland of ancient Israel. Once the colonization of these ancient lands was complete, the work of scholars began. Champollion's success in reading the language of ancient Egypt for France was paralleled by the work of George Friedrich Grotefend (Germany), Henry Rawlinson (Britain), Edward Hincks (Ireland) and Jules Oppert (German) who deciphered the Mesopotamian writing system of cuneiform.

The earliest cuneiform inscriptions were pictographs or icons. These pictographs evolved into signs or patterns created by wedges. Most of the cuneiform signs were so stylized that they bore little resemblance to the original pictographs.

Originally, each cuneiform sign stood for one or more related words whose correct meaning was determined by their context. For example, a cuneiform star stood for both *a star in the night sky* and *a member of the divine assembly*. Likewise a cuneiform foot stood for both the verbs *to stand* and *to go*.

GEORGE FRIEDRICH GROTEFEND (1775-1853)



Cuneiform developed some six hundred signs. Eventually signs could represent either words or syllables. A few signs could also indicate that the sign following it referred to a particular category like *a city* or *a people*. The remarkable thing about the cuneiform system is that, for all its complexity, it had sufficient flexibility to permit its adaptation to a large number of extremely different languages (Daniels 1996: 141-159; Rogers 1915, i: 1-273).

George F. Grotefend (1775-1853), a language teacher, was the first European who tried to decipher cuneiform writing. To translate Egyptian hieroglyphics Champollion used one inscription written three times in two different languages. In his attempt to translate cuneiform Grotefend also used one inscription written in three different languages all using cuneiform.

The inscription Grotefend chose was on a trade route through the Zagros Mountains between Babylon (Iraq) and Ecbatana (Iran). These annals for the year 519 B.C.E. were carved by Darius I (521-546 B.C.E.), Great King of Persia, high up on the face of Mt. Behistun. The visual effect is as imposing as the faces of the four American presidents carved on Mt. Rushmore in South Dakota.



ANNALS OF DARIUS I (521-546 B.C.E.)
MT BEHISTUN

The annals describe how Darius successfully preserved the unity of the Persian Empire by defeating his enemies and becoming Great King after the death of Cambyses (530-521 B.C.E.). Darius promulgated his annals throughout the empire, even as far south as the Island of Elephantine in Egypt. Persia had



stationed a detachment of soldiers from Judah to guard Egypt's southern border against Nubia (Sudan). Among the official documents of the detachment was a copy of these annals of Darius written in the Aramaic language on papyrus.

MT. BEHISTUN DETAIL

Grotefend correctly identified the languages on Mt Behistun as Persian (Iran), Babylonian (Iraq) and Elamite (Iran). He was also able to identify some personal names that appeared in the inscription. Nonetheless, he was ultimately unsuccessful in translating the inscription, and learning how to read cuneiform itself.

In 1846 Henry Rawlinson finally learned how to read cuneiform. Rawlinson was a British army intelligence officer serving in the Middle East. While stationed in Persia (Iran), he learned Persian and took a great interest in the archaeological ruins at Persepolis and other ancient sites.

Rawlinson was a cryptographer, a specialist in breaking military codes. He decided to use his skills to decipher the cuneiform code. Learning to read an ancient language, like learning to decipher a military code, requires both intelligence and instinct. Intelligence made it clear to Rawlinson that the Annals of Darius were written in three different languages using the same script. Instinct suggested that the content in each language was identical.

Rawlinson went to Mt. Behistun to make his own copy the annals. He balanced a home-made ladder on a twelve-inch ledge. Behind him was a sheer drop of several hundred feet. Although Rawlinson was not initially able to copy the entire inscription, he did copy enough to use as the basis for a presentation to the Royal Asiatic Society of London in 1839 (Rawlinson 1852).



HENRY RAWLINSON (1810-1895)

Working independently of Rawlinson, Edward Hincks (1792-1866) argued correctly that cuneiform writing had been invented by the Sumerians, but was then used for writing Babylonian, Assyrian and Elamite (Larson 1997: 339-356). He also discovered that each cuneiform symbol represented a syllable or sound, not a word; that cuneiform symbols were polyphonic – they could have more than one meaning; the sound value of the vowels when cuneiform was used to write Persian; and the meaning of determinatives – name of a city, name of a people, for example -- used in cuneiform. His greatest achievement, however, was translating cuneiform when it was

used to write Akkadian.

To prove whether the work of Hincks, Rawlinson and Oppert was reliable or not, William Henry Fox Talbot suggested that the four of them simultaneously and independently translate a recently discovered annal of Tiglath-Pileser I (1114-1076 B.C.E.). The contest took place in London in 1857. The translations of Hincks and Rawlinson were almost identical, which satisfied other Assyriologists that cuneiform could be accurately translated.

CHICAGO ASSYRIAN DICTIONARY

The work of deciphering ancient languages by intrepid archaeologists of language like Grotefend, Hincks, Rawlinson and Oppert still continues. Today, however, the patrons of these translation projects are no longer emperors, but museums. The Oriental Institute at the University of Chicago began work on the Chicago Assyrian Dictionary (CAD) in 1921 (<http://oi.uchicago.edu>). The University of Pennsylvania Museum of Archaeology and Anthropology began work on the Pennsylvania Sumerian Dictionary (PSD) in 1974 (<http://psd.museum.upenn.edu>).

William R. Harper (1856-1906), a professor of Semitic Languages, not only founded the University of Chicago and served as its first president, but also created a Semitics Department that would become an international center of excellence in Near Eastern Studies.

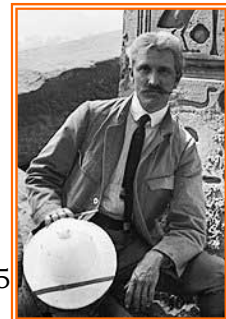


WILLIAM RAINEY HARPER (1856-1906)

Harper had been president of the Chautauqua Institution (New York) where he met John D. Rockefeller, the owner of the Standard Oil Company. Rockefeller convinced him to start a university in the Midwest that could rival schools like Yale University (Connecticut) on the east coast. With Rockefeller's financial help, Harper founded the University of Chicago in 1891. During his tenure the university attracted some one-hundred and twenty distinguished faculty to the growing ten building campus.

JAMES H. BREASTED (1865-1935)
TEMPLE OF AMADA
NUBIA, 1906

One promising young scholar hired by Harper was James H. Breasted. Breasted was the first



American to receive a Ph.D. in Egyptology, and the first teacher of Egyptology in the United States. He championed the impact of the Near East on western cultures. In 1919 he established the Oriental Institute to reconstruct the connections between the eastern Mediterranean cultures -- Egypt, Mesopotamia and Syria-Palestine -- and the western Mediterranean cultures -- Greece and Rome. In 1921 he launched the Chicago Assyrian Dictionary as a comprehensive resource for the various dialects of Akkadian, the earliest known Semitic language recorded in cuneiform on tablets between 2400 B.C.E.--100.

Today the Oriental Institute is a complex of laboratories, museum galleries, libraries and offices. Over 60,000 people visit the museum each year, and hundreds of scholars come to consult its collections of antiquities. By compiling dictionaries and developing special techniques for copying ancient texts the Oriental Institute continues to be on the forefront of epigraphy -- the copying and interpreting inscriptions and associated pictures. Since 1924, the Epigraphic Survey has been located at Chicago House in Luxor (Egypt), where its staff of Egyptologists and artists record the rapidly eroding inscriptions carved on the monuments of ancient Egypt.

PENNSYLVANIA SUMERIAN DICTIONARY

The Sumerian Dictionary project was begun in 1974 by Åke Sjöberg and Erle Leichty. Using thousands of note cards containing a single, hand-copied Sumerian sign Sjöberg and Leichty began reconstructing its uses and meanings.

Initially the Sumerian Dictionary was to be hardcopy volumes like the Chicago Assyrian Dictionary at the University of Chicago. It took until 1998 to produce four volumes, covering only a small portion of the Sumerian signs catalogue.

Today the dictionary is primarily digital and published on-line. Steve Tinney is now the director of a seven-member team responsible for the project. This electronic dictionary is an updatable collection of signs with their definitions. Each entry is linked by a search engine to scanned images of the tablets where the sign appears.

Sumerian does not belong to either the Semitic or Indo-European language families common in the ancient Near East. It is unique. Therefore, the Sumerian Dictionary is more than just a translation tool. To understand each word requires a detailed encyclopedia-style entry explaining how each word was used and its shades of meaning.

The Sumerians settled and farmed in Mesopotamia between the Tigris and Euphrates Rivers as early as 3200 B.C.E. This talented people invented the cuneiform writing system. Sumerian cuneiform or *wedge writing* is a way of carving wedge-shapes (Latin *cuneus*) into clay, wax, stone or metal tablets (Kramer 1956).

Some 30,000 Sumerian cuneiform tablets and fragments are now at the University of Pennsylvania Museum of Archaeology and Anthropology. They were not copied for the royal library at Nippur (Iraq) as excavators first thought, but for use as home school texts for the children of Nippur's elite. It is surprising that these tablets survived. Typically school texts were recycled at the end of each class. The soft clay tablets were collected, rolled into a ball and then left soaking in water until the next class.

There are tablets as small as 2x4 inches and as large as 8x12 inches. Initially Sumerian merchants recorded transactions by using soft clay tablets impressed with symbols representing the goods they were selling or transporting. Eventually the contents of tablets dealt with every aspect of Sumerian life -- finance, medicine, herding, childbearing, mathematics, astronomy, and politics. Merchants, teachers, priests and politicians throughout the world of the Bible would eventually use cuneiform and thousands of their clay tablets would survive. Most surviving Sumerian tablets were written between 3000-2000 B.C.E.

Sumerian culture was preserved by the Semitic peoples of Babylon and Assyria who followed the Sumerians in Mesopotamia. Because Sumerian is an *isolate* language -- without language relatives, living or dead -- scholars translate Sumerian using tablets written in both Sumerian and Akkadian, a better known Semitic language. Like hieroglyphics, cuneiform writing remained in use for almost four thousand years.

Hieroglyphics is a writing system developed for a single language: Egyptian. Cuneiform is a writing system developed for the Sumerian language (Glassner 2003). Subsequently, however, cuneiform was used to write a whole range of different languages: Akkadian (Iraq), Babylonian (Iraq), Assyrian (Iraq), Hurrian (Iraq), Eblaite (Syria), Ugaritic (Syria), Hittite (Turkey), Luwian (Turkey), Palaic (Turkey), Urartian (Armenia), Elamite (Iran) and Persian (Iran). Ugaritic (Syria) was written in a cuneiform writing system that developed independently from the cuneiform writing system developed by the Sumerians.

TEACHING ON SLANDER AND PRE-MARITAL PROMISCUITY (DEUT 22:13-27)

On-going work on cuneiform languages like the Chicago Assyrian Dictionary and the Pennsylvania Sumerian Dictionary continues to enrich the understanding of the world of the Bible in many ways. Some ways are quite simple, others are more complicated.

There are some 130,000 cuneiform tablets in the British Museum. In 2007 Michael Jursa was studying a group of tablets containing receipts for business transactions. Among them was a receipt for a deposit of gold on a tablet just over two inches wide.

NEBU-SHARRUSU-UKIN TABLET
(British Museum)

Nabu-sharrusu-ukin, the prime minister, gave twenty-six ounces of gold to Arad-Banitu, the minister of finance, to deposit at the Temple of Esagila -- dedicated to Marduk, the divine patron of Babylon.

In the presence of Bel-usat, son of Alpaya, a royal bodyguard, and in the presence of Nadin, son of Marduk-zer-ibni, Arad-Banitu deposited the gold at the Temple of Esagila on Month Eleven, Day Eighteen, Year Ten of the reign of Nebuchadnezzar, Great King of Babylon (595 B.C.E.)

In the book of Jeremiah (Jer 39:3) the same Nebuchadnezzar II appoints Nebu-shazban to negotiate the surrender of Jerusalem with Zedekiah, king of Judah in 587 B.C.E. In cuneiform on the tablet the official's name is spelled: *Nabu-sharrusu-ukin*; in Hebrew in the Bible his name is spelled: *Nebu-shazban*. The differences in spelling are somewhat parallel to *Guillermo* in Spanish being spelled *William* in English. For Biblical Archaeologists, who are maximalists, the parallel is one small part in their larger argument that the Bible reliably reflects real people and real events. Teachers composing stories to help Jews preserve their identity in a Hellenistic world would probably not have known the name of the Babylonian official who negotiated the surrender of Jerusalem some 300 years earlier. This is a example of a simple contributions that archaeologists of language make to the understanding of the world of the Bible.

Work on cuneiform languages has had a more profound impact on understanding the subtlety and complexities of the legal systems in the Near East. These legal systems had a marked influence on the legal

traditions in the books of Deuteronomy, Leviticus, the Qur'an and *Shari'a* (Westbrook 1985).

NEBU-SHARRUSU-UKIN TABLET
BRITISH MUSEUM



Shari'a is a way of life that developed during the first two-hundred years of Islam (600-800), but is common only in a minority of Muslim cultures today – Nigeria, Sudan, Iran, Libya, Saudi Arabia. Rooted in the Qur'an, *Shari'a* has also been influenced by legal traditions in the Bible; from Bedouin traditions; from commercial regulations from Mecca and Medina which were early Islamic communities, from Roman law which governed the Byzantine Empire to which Arabia belonged, and from legal systems in the countries conquered by Muslims. Although *Shari'a* covers many aspects of Muslim private and public life, it has become notorious for the use of stoning as a punishment for women who commit adultery. The sentence of stoning cannot be imposed unless either the defendant confesses, or four men -- or eight women -- testify that they witnessed the adultery (Qur'an 24:13). The large number of witnesses required makes enforcing the sentence of stoning almost impossible.

THE RIGHT WAY (ARABIC: *SHARI'A*)
Quran 45: 18-20 (Ali 1993: 428)

We have put you on the right way (Arabic: *Shari'a*) in the matter of divine law. So follow it, and do not follow the wishes of those who are ignorant. They will not avail you in the least against God. Surely the wicked are each other's friends, but God befriends those who fear and follow the right path. These are precepts of wisdom for men, and guidance and grace for people who believe with certainty.

After a woman named Suriya confessed to committing adultery with Abdul Jabbar, Taliban leaders stoned her to death on May 1, 2000. The stoning was carried out at Mazar-e-Sharif sports stadium in Kabul (Afghanistan) before several thousand spectators. Abdul Jabbar was not punished.

Shari'a was also enforced in March, 2002 when Amina Lawal was sentenced to death by stoning for committing adultery and having a child with her partner. On September 23, 2003, however, an Islamic Court of five judges in Katsina (Nigeria) overturned the sentence. The right of appeal varies from place to place throughout the Islamic world, but is not uncommon.

Reading the Bible or the Qur'an without archaeology can create serious misunderstandings of their legal traditions that lead to the imposing cruel, unusual or excessive punishments. Before the work of archaeologists of language it was generally assumed that legal teachings in the Bible described the only possible punishment for the crime in the indictment. Therefore the teaching: *If the father of a household is convicted of adultery with the mother of another household, both of them shall be put to death* (Deut 22:22) was assumed to mean that the only sentence that an assembly could impose for adultery was death. The archaeology of language is now beginning to show that these legal teachings stipulate the maximum sentence for a crime, not the only sentence.

During the spring of 1737 B.C.E. in Nippur (Iraq) a marriage covenant was negotiated between the woman Enlil-issu and the man Ama-sukkal. The covenant stipulated that the household of Ama-sukkal would pay Enlil-issu a dowry of nine ounces of silver upon signing the covenant, but that Ama-sukkal would continue to live with the household of her father until they consummated their marriage. The covenant also stipulated that either Enlil-issu or Ama-sukkal had the right to abrogate the covenant. After ten years their marriage had still not been ratified, so the couple appeared in court seeking a divorce. As the Code of Hammurabi (CH #130) indicates lengthy delays between contracting a marriage and consummating a marriage were not unusual.

Enlil-issu accused Ama-sukkal of sexual promiscuity and misrepresenting her eligibility for marriage; Ama-sukkal accused Enlil-issu of slandering her. If Enlil-issu prevailed he would not have to return the dowry to the household of Ama-sukkal, and he would not have to pay a cancellation penalty of eleven ounces of silver to divorce her. If he did not prevail Enlil-issu would have to ratify his marriage to Ama-sukkal and pay a fine for the false accusation.

A cuneiform tablet preserves the transcript of the trial (Hilprecht 1893-1914: 6/2:58; Gadd, Legrain et al. 1928: 5:256; Hallo and Younger 2003: 3.199). The trial is significant for the understanding of both Near Eastern legal systems in general and legal systems in Bible in particular (Hallo 1964:95-105).

Village (Akkadian: *babtum*) assemblies in the world of the Bible were typically composed of fathers of households. Here, however, Enlil-issu and Ama-sukkal appear before an assembly composed of mothers of households (Akkadian: *sibatum*). The village assembly was the court of first resort. Here citizens were judged by their neighbors. So, there must have been good grounds for them to argue their cases before an assembly

of mothers, rather than fathers. Since Enlil-issu is alleging that Ama-sukkal lied to him about her virginity, women, rather than men, were more appropriate jurors to physically determine whether his accusation was true or false.

THE TRIAL OF A SLANDERED BRIDE
(UET 5)

To call the court to order the bronze *Sharur* scepter of Ninurta -- the divine patron who feeds and protects Nippur -- was placed in its stand; and the mothers of the households in the neighborhood took their places.

The mothers did not find Ama-sukkal guilty of slander against Enlil-issu; they did, however, find Enlil-issu guilty of slander against Ama-sukkal.

When he heard the verdict, Enlil-issu addressed the court. *You may convict me of slander, but I will not ratify my marriage covenant with her. I would rather go to jail and pay a fine.*

There is also a teaching on a slandered bride in the book of Deuteronomy (Deut 22: 13-21). In Babylon the woman is physically examined by the mothers of households before the marriage is consummated. In the Bible the fathers of household examine the blood stained sheets after the marriage is consummated.

In the Bible a husband convicted of falsely accusing his wife of adultery is flogged, pays a fine of thirty-six ounces of silver, and cannot divorce his wife. In Babylon, a husband convicted of falsely accusing his wife of lying about her virginity must return his wife's dowry, pay a fine for false accusation and consummate their marriage.

There is a teaching on false witness in the book of Deuteronomy (Deut 19:16-21): *...you shall punish the witness just as the witness intended to punish the defendant.* If the teaching were applied it would be expected that any husband bearing false witness against a wife for adultery would be sentenced to death.

Nonetheless, the trial of a slandered bride from Nippur demonstrates that men and women convicted of false witness are subject to a variety of sentences. For example, the village assembly sentences Enlil-issu to ratify his marriage covenant with Ama-sukkal. They can also be sentenced to pay a fine or to go to jail. For example, Enlil-issu does not appeal his conviction, but he does appeal his sentence. He wants to pay a fine or go to jail. He does not want to consummate his marriage with Ama-sukkal.

In the teaching on slander and pre-marital promiscuity in the book of Deuteronomy the sentence imposed on the husband may also demonstrate that death sentence is the maximum sentence, not the only sentence. The husband is convicted of slander and sentenced to be shamed – to lose his social status -- by flogging, by paying a fine and by losing his right to divorce his wife (Wells 2005). He could have been sentenced to death, but was not. Therefore, if the wife was guilty of adultery, she could have been sentenced to death, but, like her husband, could also receive a lesser sentence.

The ability of archaeologists to read cuneiform tablets from the world of the Bible enriches the understanding of the legal system in ancient Israel. So there is now less evidence that the legal system lacked gender equality, or that it required mandatory sentencing. Parallels like the tablet from Nippur demonstrate that the intention of these legal teachings may not have been to instruct village assemblies to punish women more severely than men or to always impose the death penalty for capital offenses. The teachings may simply instruct village assemblies to punish men and women appropriately, and to choose among sentences, not mechanically impose a single sentence.

CONCLUSION

The archaeology of languages begun by European emperors and continued today by museum schools is an important partner in any reliable interpretation of the Bible. Using archaeology and the Bible together, for example, makes it clear that legal systems in Judaism, Christianity and Islam which impose cruel and unusual punishments on women for their sexual behavior cannot appeal to the Bible or to the world of the Bible to justify their legal practice. The archaeology of language is intensive. Biblical exegesis is complex. The results, however, could ultimately separate religion from violence.



WHAT YOU HAVE LEARNED

- Unfortunately, emperors used archaeology to link the accomplishments of the empires of Mesopotamia and Egypt with their empires and justify their desires to rule to world.
- Fortunately, emperors enriched the understanding and appreciation of the world of the Bible by creating collections of artifacts in their national museums and by making it possible for scholars to translate ancient languages.
- In 1822 French linguist Jean F. Champollion (France) used an inscription on the Rosetta Stone to translate hieroglyphic Egyptian.
- Beginning in 1839 George F. Grotefend (Germany), Henry Rawlinson (Britain), Edward Hincks (Ireland) and Jules Oppert (German) used an inscription on Mt Behustin (Iran) to translate Mesopotamian cuneiform.
- Scholars working on the Chicago Assyrian Dictionary (University of Chicago) and the Pennsylvania Sumerian Dictionary (University of Pennsylvania) continue the work of these early archaeologists of language to better understand cuneiform cultures in the world of the Bible in both simple and profound ways.

CHAPTER 3 ARCHAEOLOGY OF TRAVELERS



Chapter 3 explains the difference between good *Orientalism* and bad *Orientalism* and what inspired travelers to visit the world of the Bible. It also explains the connection between Getrude Bell the traveler become Gertrude Bell the archaeologist, and when foreign travelers and archaeologists were no longer welcome in Iraq, who continued to care for the artifacts of Babylon and Nineveh. Finally, it shows why did Westerners idealize archaeologists working in Iraq, but demonize the people of the ancient cultures they were studying, and how archaeology contributes to the understanding of the role that Nineveh plays in the book of Jonah.

Faith inspired pilgrims to leave their homes in Europe and Africa and to go the lands where the ancestors of their religious traditions lived and taught. The quest for military and economic power inspired emperors to send their armies into the world of the Bible. Curiosity and adventure inspired travelers to leave their homes for the world of the Bible faraway.

Travelers often shared a common awareness that the Orient that inspired them was a fragile world that was rapidly being destroyed. What they had traveled to see would soon be gone. To preserve their experience for generations who would be unable to follow in their footsteps, pioneering travelers often committed themselves not only to visiting, but to



Orientalism has two meanings (Said 1978-2003).

First, *Orientalism* or *Assyriology* refers to the academic discipline which studies the Near Eastern cultures of Mesopotamia and its neighbors. William Foxwell Albright, for example, considered himself to be an *Orientalist* – a student of Near Eastern cultures.

Second, *Orientalism* refers to a racial prejudice which developed after 1900 against Near Eastern cultures. This *Orientalism* considers western European cultures to be intellectual, dynamic and inclusive. In contrast, it considers Near Eastern cultures to be impulsive, stagnant and intolerant. As a prejudice *Orientalism* influences not only public opinion, but also scholarship and art.

preserving these wonderful worlds.

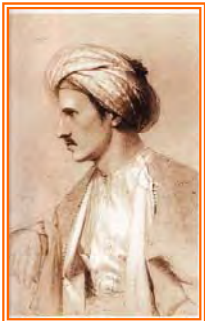
Edward W. Lane (1801-1876) preserved his travels in monumental cultural studies like Description of Egypt (2000) and an Arabic-English Lexicon (1863). David Roberts (1796-1864) preserved his travels in paintings. Gertrude Bell (1868-1926) preserved her travels in the Baghdad Archaeological Museum – known today as the Iraq Museum, Baghdad.

Regardless of how travelers preserved the material remains of the cultures they admired, their memorials reflect as much, and sometimes more, about their own attitudes than about the cultures themselves. The Orientalism of David Roberts, for example, portrayed the people and places in the world of the Bible as much less sophisticated and less corrupted than his European contemporaries. His paintings idealized what he saw with a melancholy for the passing of such an innocent world.

Bell saw in the cultures of Mesopotamia as prototypes of the British Empire which was her home. She sponsored excavations to recover and restore the material remains of those great times as an endorsement of her own times. She paid her respect to the ancestors of Britain's own greatness, with whom she was more comfortable than she was with her contemporaries.

EDWARD W. LANE (1801-1876)

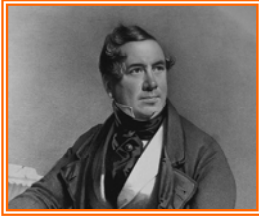
Edward W. Lane (1801-1876) visited Egypt for the first time in 1825. He wrote: *I was not visiting Egypt merely as a traveler, to examine its pyramids and temples and grottoes, and, after satisfying my curiosity, to quit it for other scenes and pleasures; I was about to throw myself entirely among strangers; to adopt their language, their customs and their dress; and, in associating almost exclusively with the natives, to prosecute the study of their literature* (Jason Thompson 2008).



EDWARD W. LANE (1801-1876)
© SAUDI ARAMCO WORLD MARCH/APRIL 2008

Lane became a renowned student of the culture of Egypt. He wrote a fascinating study of Egyptian society – An Account of the Manners and Customs of the Modern Egyptians (1836) – a classic that is still in print. His Arabic-English dictionary is still a basic, irreplaceable reference work.

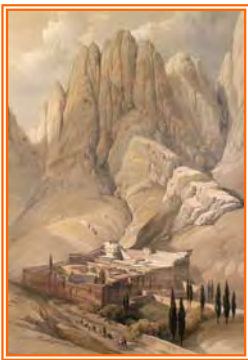
DAVID ROBERTS (1796-1864)



DAVID ROBERTS (1796-1864)

Napoleon's highly publicized conquest of Egypt in 1798 greatly increased the interest of European artists in the world of the Bible. One was David Roberts from Scotland. Roberts was Lane's friend and sought his advice to prepare for his own travels into the world of the Bible.

When he was forty-two years old Roberts traveled to Egypt and Syria-Palestine. He kept a journal of his travels in pictures of places mentioned in the Bible. In 1838 he exhibited Departure of the Israelites from Egypt and subsequently published his drawings as lithographs made by Louis Haghe (1829-1898). Eventually Roberts published six volumes entitled: The Holy Land, Syria, Idumea, Arabia, Egypt, and Nubia. This extensive work made him famous. His work not only reflected the romantic influence of Orientalism, but also offered a unique record of the condition of major archaeological sites before their restoration or disappearance.



The popularity of Roberts' drawings contributed to the establishment of the British Palestine Exploration Fund (PEF) in 1865 (<http://www.pef.org.uk/>; Chapman 1990: 8-36). The PEF was founded in 1865 by a group of academics and clergy. The purpose of the PEF is to promote research into the archaeology, history, manners, customs, culture, topography, geology and natural sciences of Syria-Palestine.

MONASTERY OF ST CATHERINE
DAVID ROBERTS

The PEF asked Roberts to draw a set of maps for Syria-Palestine. This project was completed and published in a twenty-six page volume in 1880. Gen. Edmund H. Allenby (1861-1936) used Roberts' maps when the British Army occupied Jerusalem in 1917 (Isbouts 2007: 344-351).

GERTRUDE BELL (1868-1926)

In 1921 Winston Churchill assembled a commission of experts on the Middle East to determine the future of Iraq. He invited ninety-nine men and one woman -- Gertrude Bell. Bell almost single-handedly drew the borders of Iraq for Churchill's government. She also chose Faisal ibn

Hussein (1883-1935) to be its first ruler. Bell remained in Iraq for years after Faisal's coronation in 1923 as his personal adviser.

Bell was born in England (Cohen and Joukowsky, eds. 2004). Her grandfather was Isaac Lowthian Bell, a wealthy manufacturer. When she was only sixteen, she enrolled in Oxford and graduated just two years later *summa cum laude* in history.

Bell began her career as an intrepid world traveler. She spoke English, Arabic, French, German, Italian, Persian (Iran) and Turkish. She became an accomplished mountaineer in Switzerland's Alps.

GERTRUDE BELL (1868-1926)

After Bell graduated from Oxford, she traveled to Tehran (Iraq) where her uncle, Frank Lascelles, worked for the British government. Bell kept a journal of her experiences which she later published as Persian Pictures (1894).



In 1899 Bell traveled through Syria-Palestine. On one trip she disguised herself as a Bedouin male and went in search of the Druze Bedouin. She succeeded in reaching the sacred mountain of the Druze (Arabic: Jebel Druze), and became a close friend of Yahya Beg, the Druze ruler.

Bell made a second trip to the lands of both the Druze and Beni Sakhr Bedouin, who treated her as an honored guest. Bell's travel diaries like The Desert and the Sown (1907) were filled with riveting images of daily life in the desert and captured the imaginations of Western travelers.



Bell evolved from being an observant traveler into an archaeologist of some accomplishment on her trip to Turkey with William M. Ramsey (1851-1939). Ramsey was a classical scholar and archaeologist who specialized in the geography, antiquities and history of Asia Minor (Turkey). Bell co-authored their excavation report --- A Thousand and One Churches (1909).

GERTRUDE BELL
BABYLON (1909)

In 1909 Bell travelled to the Hittite city of Carchemish (Turkey) and located the ruins of Ukhaider, a palace southwest of Baghdad built by Isa ibn Musa, a nephew of Caliph Al-Mansur (712-775) during 774-775 (Saoud 2002). At Carchemish, she worked closely with T.E. Lawrence (1888-1935).

Bell was also only the second European woman after Anne Blunt (1837-1917) to visit Ha'il (Saudi Arabia). Ha'il is a rest stop for Iraqi pilgrims en route to Mecca.

During World War I (1914-1918) Bell worked as a British intelligence officer and helped T.E. Lawrence, her former colleague from the excavation at Carchemish, to organize the Arab Revolt against the Turkish government. Britain awarded Bell the Order of the Empire for her service.

After the war Bell founded the Baghdad Archaeological Museum, today known as the Iraqi National Museum in Baghdad. The museum opened in June 1926. She was the first director of the museum. As director Bell insisted that artifacts should remain in Iraq, and not be exported to collections in Europe.



BAGHDAD ARCHAEOLOGICAL MUSEUM

George A. Barton (1859-1942) asked the Archaeology Institute of America (AIA) to found a school of archaeology in Baghdad (<http://www.asor.org/baghistory.html>). The AIA sent Albert T. Clay (1866-1925) to Baghdad to establish the school. He proposed that the school open with a director and an annual professor. Curiously, Clay decided to affiliate the school with the American Schools of Oriental Research (ASOR), rather than with AIA.

Bell, who was not only the director of the Baghdad Museum but also Honorary Director of Antiquities in Iraq, was sympathetic with the need for a school of archaeology in Baghdad. Therefore, she provided ASOR with office, classroom and library space at the museum. She was not, however, impressed with Clay.

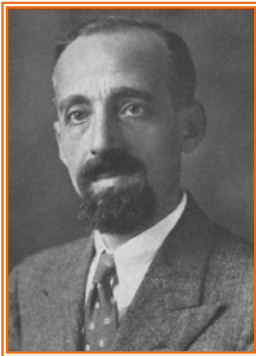
DIARY OF GERTRUDE BELL

October 31, 1923 ...Professor Clay is going to inaugurate an American school of archaeology. He has no money until several people die who have life interests in the sum that is ultimately to come to the school, and he's quite vague about everything, however that's his business not mine. He gave a lecture on Babylonian archaeology on Monday, under my auspices. We had an enormous audience including lots of Baghdadis. How much even the English people understood I don't know. He's the most muddly old thing and incidentally never finishes a sentence. I was of opinion that you had to know a considerable amount yourself to be aware of what he was driving at. But there's a very genuine interest here in the ancient history of the country and people always flock to lectures.

Edward Chiera (1885-1933) was Annual Professor at ASOR in 1924-1925. He had studied Semitic languages at the University of Pennsylvania, and worked on the University of Chicago Assyrian Dictionary Project.

DIARY OF GERTRUDE BELL

April 22, 1925 ...I have just been up to Kirkuk. J.M. [Wilson] and I flew up there by air mail yesterday morning and came back today. We went up to inspect a little excavation which is being done under the auspices of the Museum by ...Chiera, an Italian who is professor of Assyriology at some American university. It is the home of some rich private person who lived about 800 B.C., very comfortable, with a nice big bathroom lined with bitumen so that you could splash about ...we discovered the drain the afternoon we were there. It has fine big rooms and an open courtyard but it all came to a bad end for in every room the floor is covered with a thick layer of ashes, the remains of the wooden roof which fell in when the house was burnt down. Dr. Chiera has found a great quantity of tablets and we hope when they are deciphered to get the history of the well-to-do family which built and lived in the house. There are other similar houses round, forming the suburbs of a town represented by a comparatively big mound a couple of hundred yards away or more. Nothing in this part of the world has been excavated ever; it is all full of unanswered questions and I hope this tiny trial dig may turn people's minds in this direction.



Chiera planned to survey southern Iraq, but Bell asked him to direct a salvage excavation at Nuzi (Arabic: *Yorghān Tepe*). The site was being looted for Baghdad's antiquities markets. So he excavated at Nuzi (1927-1928) and then at Khorsabad (1928-1929).

EDWARD CHIERA (1885-1933)

Chiera had an ardent desire to make research interesting to the general public, and he had the

skills of a good teacher to make it happen. They Wrote on Clay (1938), his introduction to archaeology, is a fascinating combination of archeology and storytelling. He describes a find of clay tablets that had been recently discovered in Iraq as part of an absorbing excursion into the daily life of the long gone culture of Babylon. This remarkable little volume opens with a letter to his wife.

A LETTER OF EDWARD CHIERA TO HIS WIFE

This evening I made my usual pilgrimage to the mound covering the ancient temple tower. It is only a few hundred yards from our camp, and it is pleasant to ascend to the summit of that tower, which dominates the landscape. This I generally do in the evening, after supper, in the bright moonlight. Today I have come with the ambition of jotting down my impressions, for the spectacle moves me deeply.

Seen from below, it does not look so high as might be expected of a Babylonian temple tower. Did not that of Babylon pretend to reach to heaven? One gets the answer after ascending it. Though rather low (it can hardly be more than five hundred feet), still from the top the eye sweeps over an enormous distance on the boundless, flat plain. Nothing breaks the view, and the plain finally melts into the horizon. About twenty miles away rises the high mound of Cutha. This city was sacred to Nergal, the god of pestilence and of the underworld. The ruins of Babylon are nearer. All around the tower small heaps of dirt represent all that remains of Kish, one of the oldest cities of Mesopotamia.

On all sides is desert. The yellowish soil is arid and thirsty, and no plant can survive the parching heat of the summer; sheep and camels must feed on whatever remains of the grass that has managed to sprout in the few weeks after the rains. The large network of canals, which in ancient times distributed the waters of the Euphrates over all this land, is now represented by a series of small mounds of dirt, running in all directions. Even the Euphrates has abandoned this land by changing its course. In ancient times it came very near to the city, giving water in abundance and affording an easy way of communication.

...Not a column or an arch still stands to demonstrate the permanency of human work. Everything has crumbled into dust. The very temple tower, the most imposing of all these ancient constructions, has entirely lost its original shape. Where are now its seven stages? Where the large stairway that led to the top? Where the shrine that crowned it? We see nothing but a mound of earth -- all that remains of the millions of its bricks. On the very top some traces of walls. But these are shapeless: time and neglect have completed their work.

...It is now quite dark. ...But a certain fascination holds me here. I should like to find a reason for all this desolation. Why should a flourishing city, the seat of an empire, have completely disappeared? Is it the fulfillment of a prophetic curse that changed a superb temple into a den of jackals? Did the actions of the people who lived here have anything to do with this, or is it the fatal destiny of mankind that all its civilizations must crumble when they reach their peak? And what are we doing here, trying to wrest from the past its secrets, when probably we ourselves and our own achievements may become an object of search for peoples to come (Chiera 1938: xi-xv)?

Chiera's pioneering work at Nuzi motivated ASOR to partner with various universities in a series of important excavations throughout Iraq. Harvard University joined ASOR to continue his excavations at Nuzi (1927-1931). The University of Pennsylvania joined with ASOR to excavate Tepe Gawra (1927-1938), Tell Billa (1930-1937), Khafajah (1937-1938) and Fara (1931).

ASOR's roster of directors and annual professors includes E. A. Speiser, Nelson Glueck, Samuel Noah Kramer, Albrecht Goetze and Thorkild Jacobsen. Their work is still the foundation for Near Eastern studies today. The ASOR Library, endowed by Morris Jastrow, Jr. (1866-1921), was one of the first research libraries in Iraq and the core of the library at the Iraq Museum today.

Bell never married, and she had no children. When she committed suicide in Baghdad on July 12, 1926, her many friends celebrated her funeral in style, and buried her in Baghdad, the city she loved. The museum which she founded is a legacy not only to this remarkable woman, but also to all the archaeologists whose artifacts fill its halls and vaults. For all the riches of the British Museum, the Louvre, the Metropolitan Museum and other western collections, the Iraq Museum has primacy.

Among the unique antiquities in the Iraq Museum are artifacts from the throne room of Ashurnasirpal II at Nimrud. The site was discovered by Austen H. Layard (1817-1894) in 1848, and then excavated by Max Mallowan (1904-1978) in 1950. Its collection also includes exquisite artifacts from the royal tombs of Nimrud, excavated by Muzahim Mahmu in 1989-1991.

The Iraq Museum is the best place in the world to understand and to appreciate the cultural grandeur of Mesopotamia. Unfortunately, since its foundation few westerners have had the chance to visit the museum. The last traveling exhibition from the Iraq Museum visited only Geneva (Switzerland) and Hildesheim (Germany) in 1977-1978. Most of the museum's most significant holdings -- the Warka Mask and Warka Vase from Uruk, the pottery from Samarra, the gold from Nimrud and the copper head of Naram-Sin from Nineveh -- remained in Baghdad.

After 1968 the Baath government of Saddam Hussein (1937-2006) restricted the work of European and North American archaeologists and universities in Iraq. Consequently, ASOR redirected its funding and faculty from Iraq to Lebanon, Syria, Turkey and Iran. The government eventually did allow ASOR to resume excavations at Tell Hamide, Tell Abu Duwari, Abu Salabikh and Tell al-Deylam. Work continued at these

sites intermittently until the war between Iraq and Iran (1980-1988) and the Gulf Wars (1990-1991, 2003) when all foreign archaeologists left Iraq.

DONNY GEORGE YOKHANNA

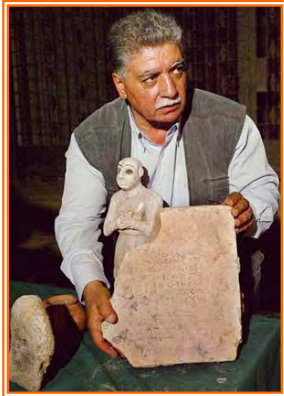
After foreign archaeologists left, Iraqi archaeologists and curators at the Iraq Museum continued the work of recovering and preserving the country's cultural heritage. Donny George Youkhanna is internationally the most well known and respected. For more than thirty years George – as he is known outside Iraq -- was a constant presence in the work of the museum.

When the second Gulf War was imminent, George unsuccessfully tried to convince the Board of Directors to protect its collection (<http://www.charlierose.com/shows/2007/01/19/2>). Consequently, the museum was looted April 10-12, 2003 and some 15,000 artifacts were lost (<http://oi.uchicago.edu/OI/IRAQ>). Subsequently as Director General of Iraq's Museums and chair of the Iraqi State Board of Antiquities and Heritage, George worked with the American military and civil command in Iraq which allowed him to play an important role in the recovery or location of almost half of the stolen artifacts. In addition, gold jewelry and other precious items from the royal tombs at Nimrud, and objects from the royal cemetery at Ur were found where they were hidden for safety in a vault below the Central Bank in Baghdad before the onset of the first Gulf War in 1990.

As a respected member of the international community of museum curators, George was also successful in acquiring grants from the US State Department, the Packard Humanities Institute of Los Altos CA (<http://www.packhum.org>) and the Iraqi Culture Ministry for the museum. The roof was repaired, the telephone system updated, the fences upgraded, guard houses built, the plumbing fixed, the windows washed, the locks coordinated, the air-conditioning repaired, surveillance cameras installed, an electronic security system activated and date palms planted in the courtyards.

With the help of Iraqi curators newly trained in Jordan and Italy, the Centro Ricerche Archeologiche e Scavi di Torino per il Medio Oriente e l'Asia (Italy) restored both the Assyrian and the Islamic galleries at the museum (http://www.centroscavitorino.it/en/progetti/iraq/baghdad_museo.html). These two galleries contain large and almost immovable objects. The Assyrian Hall has monumental sculptures, including stone panels from the royal palace at Nineveh and two winged bulls. The Islamic Hall contains an ancient *mithrab* -- the niche in a mosque that indicates the

direction of Mecca -- from the Al-Mansur Mosque in Baghdad.
(<http://www.theartnewspaper.com/article.asp?id=6981>).



DONNY GEORGE YOKHANNA

Despite George's personal desire to play a leadership role at the Iraq Museum after Saddam Hussein, he made the decision on July 30, 2006 to retire from the Iraq Museum, to take his family out of Iraq and to accept a teaching position at the State University of New York at Stony Brook.

Policy and personality disputes began to develop between George and the Ministry of Tourism and Antiquities after it was turned over to the party of Moqtada al-Sadr. Al-Sadr, a Shiite cleric from a poor neighborhood of Baghdad, opposed the U.S. occupation of Iraq. He drew much of his popularity from the reverence many Iraqi Shiites felt toward his father, Grand Ayatollah Mohammed Sadiq Sadr, who was assassinated in 1999 by Saddam Hussein. George had been a member of the Baath Party of Saddam Hussein, so the Ministry considered him politically suspect. He was also Orthodox Christian, not Muslim, so he was religiously suspect. He had extensive international contacts, so he was patriotically suspect. The Ministry also failed to fully fund pay for the 1400 antiquities police who guarded sites throughout the country, and consequently looting resumed. George was also under pressure to focus the resources of the museum on Islamic heritage and away from the Bronze Age cultures (3000-1200 B.C.E.) for which the Museum is famous. As public safety in Baghdad became worse, George had his staff move the Museum's collection into vaults, and then welded the doors shut. He turned the entire museum into a vault, just as the Ministry wanted him to re-open it to the public.

NINEVEH

The Iraq Museum preserves artifacts from cultures as diverse as Uruk, Elam, Akkad, Assur, Babylon, Urartia, Media and Persia. Assyria and the Assyrian city of Nineveh had a major impact on both the world of the Bible. Assyria was a port of trade during the Middle Bronze period (2000-1500 B.C.E.), a warrior state in the Late Bronze period (1500-1200 B.C.E.), and an empire during the Iron Age (1000-600 B.C.E.). Politically, Assyria reinvented itself again and again, and its material culture is both impressive and aesthetic. Nonetheless, to achieve the beauty of its art and the sophistication of political administration Assyria was obsessed with unparalleled violence in deeds, words, and images. This was the side of Nineveh and Assyria that the Bible remembers.

Interpretations of Nineveh in particular and Assyrian culture in general, have had a long history of contradictory scholarly and public interpretations in Europe and North America (Frahm 2006: 74-94). When Westerners considered Nineveh to be good, they considered the city to be very, very good, but when they considered Nineveh to be bad; they considered the city to be horrid.

For example, a Trial of Nineveh (Nah 3:1-7) sentences the city to be shamed as a prisoner of war. Nineveh will be paraded naked before all the states in the Assyrian empire so that they can publically insult and torture their former queen as if she were a witch (Sweeney 2000: 436-446; Abusch 2002).

Biblical traditions like the Trial of Nineveh in the Book of Nahum not only indict states like Assyria for their political crimes, but also have created a barbaric legacy against women and women's bodies in Western cultures influenced by the Bible. The metaphors of Yahweh portrayed as male punishing Nineveh portrayed as female has created an unfortunate precedent in Western cultures for identifying all that is male as good, and all that is female as bad. Because the Bible uses male metaphors for Yahweh, it is easy for males to feel empowered to brutally control women and their sexuality. Such misuse of the Bible against women is an important focus of feminist biblical scholarship today (Keefe 2001: 9-35).

Until 1800 understanding of Near Eastern cultures like Assyria was based solely on the Bible and the Greek-Roman classics. Jerusalem, Athens and Rome were insiders. They were noble cities. Nineveh was the outsider. It was a city of chaos. Jerusalem taught Europe its faith. Rome taught Europe how to think and how to govern. Nineveh, in contrast,

A TRIAL OF NINEVEH
(NAH 3:1-7)

Indictment

Nineveh -- City of Blood! City of Lies! City built on the plunder of others -- endless plunder! The crack of whip, the rumble of wheel, the galloping horse and the bounding chariot! Cavalry charging, swords flashing, spears shining, the dead in piles, heaps of corpses, dead bodies without end-- they stumble over the bodies! Your countless, gracefully alluring affairs have made you the Witch Queen. Therefore, Yahweh Sabaoth indicts you for seducing and enslaving nations and peoples.

Sentence

I will lift up your skirts over your head. I will let the nations see your breasts and all peoples see your reproductive organs. I will throw excrement at you to shame you, and make an example of you. Then all who see you will shrink from you and say, "Nineveh is dead. Who will mourn for her?" Where shall I seek mourners for you?

demonstrated how power could be abused.

Although Europeans were shocked by the brutality of Nineveh, they nonetheless admired its military, political and architectural accomplishments. For prophets like Isaiah, Jeremiah and Ezekiel, Nineveh was the worst of enemies; nonetheless these prophets announced that Yahweh had sent Assyria to punish the people of Judah for their breach of covenant.

In time archaeologists like Paul-Emile Botta and Layard excavated the material remains of Assyrian cultures at Khorsbad (Arabic: *Dur Sharrukin*), Nimrud (Arabic: *Kalhu*) and Nineveh (Arabic: *Tell Kuyunjik*; *Nebi Yunus*). Likewise, their languages were translated, and their works of art were restored. Yet even after these ancient peoples began to speak for themselves, the interpretation of Assyria's material remains was far from uniform. Pastors and biblical scholars used the Bible to argue that Assyria's material remains confirmed the historical reliability of the Bible. Art historians used Greco-Roman architecture and sculpture to argue the architecture and sculpture of Assyria were inferior and primitive. Nineveh was still a city both despised and admired.

ASSYRIANS SKIN PRISONERS ALIVE
NINEVEH
701 B.C.E.
ALABASTER
BRITISH MUSEUM
© ART RESOURCE



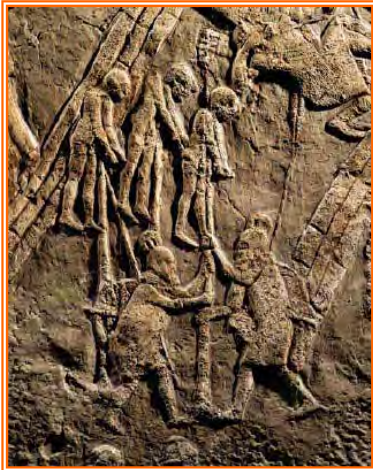
Curiously, although popular Orientalism romanticized archaeologists working at Khorsbad, Nimrud and Nineveh, Assyrian culture as a whole was demonized. The greatest obstacles to romanticizing Assyria culture were the annals of the Great Kings of Assyria which glorified the horrors of war and the torture of prisoners. These annals were the earliest traditions recovered and translated and they scandalized Westerners. Westerners viewed war as an honorable competition governed by humane rules of engagement. The reality of war, of course, was neither honorable, nor humane. The Great Kings, in contrast, were brutally honest about the price of peace and the cost of power. They had paid a great price to feed their people and protect their land and they recorded that price in gruesome detail.

When Ashurnasirpal II (883-859 B.C.E.) conquered Tela, his

annals reported that he beheaded some of his prisoners of war and stacked their heads in piles or hung them from trees; that he maimed other prisoners by cutting off their noses, or their ears, or their thumbs, or gouging out their eyes; that he burned teenage boys and girls alive; and that he razed the city to the ground. When Sennacharib conquered Lachish in 701 B.C.E. during his campaign in Judah, he celebrated the victory in his trophy room at Nineveh. The reliefs were carved into the walls on alabaster panels. The artists showed starving women and children evacuating the city and prisoners being impaled and skinned alive.

Eventually archaeologists began to recover not only royal annals, but also creation stories from Nineveh (Smith 1872). George E. Smith (1840-1876) translated some ten or twelve baked clay tablets about six inches high that were recovered during the 1848-1849 season at Nineveh by Layard. The creation stories on the tablets were written in Akkadian cuneiform and were about three hundred lines long. These Stories of Gilgamesh, the origins of which date to the Early Bronze period (3400-2000 B.C.E.), were popular during the reign of Ashurbanipal (668-627 B.C.E.).

The stories tell how Gilgamesh rules Uruk (Iraq) with too iron a hand, so the divine assembly sends Enkidu to be his companion on a journey of self-discovery. Their heroic exploits teach Gilgamesh how to rule himself so that he will better rule his people. He experiences powerlessness, loneliness, friendship, love, loss, revenge and finally, when Enkidu is killed, death (Mitchell 2004: 1-64; Abusch 2001). Portions are parallel to the Flood Stories in the book of Genesis (Gen 6:1—11:26), and reveal a softer, gentler side to Assyrian culture than the annals of its Great Kings.



ASSYRIANS IMPALE THEIR PRISONERS
NINEVEH
701 B.C.E.
ALABASTER
BRITISH MUSEUM
© ART RESOURCE

In addition to the recovery of the Stories of Gilgamesh, archaeologists also began to recover artifacts reflecting not only a glorification of violence, but also reflecting gentleness and civility. These works clearly called into question the caricature of Nineveh as an Oriental despot which existed only to conquer, enslave and plunder its neighbors. The culture that produced these

works of art could see beauty and reflect it.

Assyrian masters produced exquisite miniatures in ivory and elegant jewelry in gold. Assyrian ivory work is unsurpassed in the Near East. Layard recovered a small ivory inlay just over four inches high. The inlay was originally installed in a piece of wooden furniture. The artist showed a woman of the ruling household wearing an Egyptian wig looking over the banister of a second story window. She is a strong woman behind a strong man like Bathsheba behind Solomon or Jezebel behind Ahab.



WOMAN AT THE WINDOW
IVORY
4.25 INCHES
NIMRUD
BRITISH MUSEUM
© ART RESOURCE

From the sludge at the bottom of a well at Nimrud Mallowan recovered another ivory inlay that he called the *Mona Lisa of Nimrud* because of her subtle smile. The artist again rendered the features of this royal woman in stunning detail. Her full wig is topped with a crown inlaid with jewels. Like the *Woman at the Window*, the *Mona Lisa of Nimrud* was originally set into a piece of wooden furniture.

The Nimrud ivories, like much else in the Iraq Museum, suffered as a result of the Gulf Wars and the looting of the museum. Some ivories like the *Lion Attacking a Nubian* were stolen and have not yet been returned. Other ivories like the *Mona Lisa of Nimrud*, which is now split vertically into three pieces, have been damaged from being packed, stored and unpacked. Some of the finest ivories were stored in water tight containers in the vaults of the Central Bank in Baghdad during the first Gulf War. Those vaults were flooded to protect their contents from looters during the second Gulf War. The water hid the containers, and created a barrier making it impossible for the antiquities to be easily recovered by looters.

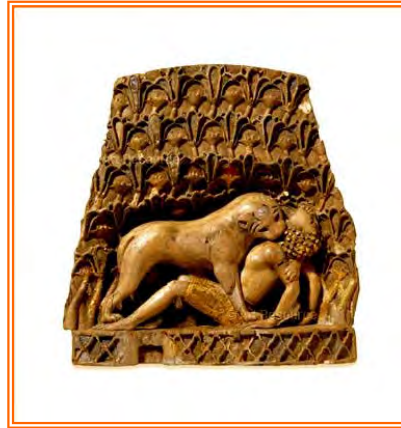
MONA LISA OF NIMRUD
IVORY
NIMRUD
720 B.C.E.
IRAQ MUSEUM
© ART RESOURCE



Only during one brief period was Assyrian culture considered superior to the cultures of the Bible or of

Greece and Rome. Pan-Babylonianism influenced the study of the Near East from 1900 until the defeat of the Nazi Third Reich at the end of World War II (1939-1945). Friedrich Delitzsch (1850-1922), the founder of Pan-Babylonianism, argued that since Assyria was an older culture than the worlds of ancient Israel, Greece and Rome, it reflected a less contaminated, more pristine example of human life. In fact, his *Babel und Bible* lecture suggested that the only value in the Bible was what it had inherited from Assyria (Delitzsch 1902). Delitzsch's work was fundamentally anti-Semitic. He wanted to show that non-Semitic or Aryan cultures like Sumer and Mitanni – and not Semitic cultures like Assyria and ancient Israel -- laid the foundation for human culture.

LION ATTACKS AN AFRICAN
NIMRUD
800-750 B.C.E.
IVORY
4.25x4.25 INCHES
IRAQ MUSEUM
© ART RESOURCE



NINEVEH IN THE BOOK OF JONAH (JONAH 1:1–4:11)

The book of Jonah reflects the same painful contradictions about Nineveh in the world of the Bible that have appeared in popular and academic attitudes toward Assyria in the past two hundred years. Jonah wants Nineveh punished; Yahweh wants Nineveh forgiven. The book of Jonah leaves it to its audiences to decide which is most fitting.

A theodicy is a tradition that struggles to reconcile faith in a divine patron, who is good, with a world that is evil. Both the book of Job and the book of Jonah are theodicies (Benjamin 2004: 450-459). The book of Job asks: *Why do good people suffer?* The book of Jonah asks: *Why do bad people go unpunished?*

Again and again, the Hebrews became strangers in strange lands: when the Assyrians destroyed Samaria in 721 B.C.E., when the Babylonians destroyed Jerusalem in 586 B.C.E., and when the Greeks conquered Syria-Palestine in 332 B.C.E. They were outraged that Yahweh had not protected them from their enemies. Jonah is their voice.

The book of Jonah begins, as all stories begin, when a crisis disturbs the peace. The life of the Faithful Prophet is turned upside down when the Creator of the Heavens, the Sea, and the Land commissions him to preach against Nineveh. The Great City represents, not only the

city of Nineveh, but also all the enemies from whom Yahweh did not protect Judah.

Jonah flees on board the ship *Sea Dragon* bound for Tarshish – the end of the earth. He will not give Nineveh the opportunity to repent. The Creator pursues Jonah with a storm, and Jonah offers himself as a human sacrifice to save the crew who throw him overboard.

Before Jonah drowns the Creator sends a Great Fish – a Sea Dragon – to fetch Jonah. Once Jonah is safely on dry land the Creator repeats the commission: *Go to the Great City. Cry out against Nineveh!*

Reluctantly, Jonah gets up and goes to Nineveh. For three days he preaches: *You have only forty days to turn around!* The people of Nineveh, whose reputation for arrogance was legendary, repent in sackcloth and ashes. Even the Great King of Nineveh takes off his robes, puts on burlap and sits with the beggars in the city's garbage. He also issues a proclamation: *By order of the Great King and the city assembly no human or animal, large or small, will eat or drink anything. Every human and animal will wear nothing but burlap. They will cry out as loud as they can to the Creator of the Heavens, the Sea, and the Land. All the citizens of Nineveh will turn from evil and from violence. Who knows? Perhaps the Creator of the Heavens, the Sea, and the Land will turn around, will change heart, and will recall this burning anger so that we will not be annihilated?*

The people of Nineveh turn away from the evil destroying their lives, and Yahweh turns away from the evil destroying their city. Jonah, ironically, turns on Yahweh in anger, not back to Yahweh in repentance. Each acts in exactly the opposite way that the audience expects.

In most stories, the denouement repairs the damage caused by the crisis and climax episodes. Parables, in contrast, are consciously thought-provoking. They simply end with a question. The parable of Jonah asks: *Should the Creator, who forgives the Faithful Prophet, not forgive the City?*

NABI YUNIS MOSQUE
NINEVEH

Islam pays tribute to Jonah at the Mosque of Nabi Yunis – the Mosque of Prophet Jonah -- where Nineveh once stood. For Muslims Nineveh was not only the city where Jonah preached, it is now the place where, according to



Muslim tradition, he is buried. Like his Creator, the Faithful Prophet obviously forgave the Great City.

CONCLUSION

People who burn books, loot museums or steal artifacts destroy the collective human memory of its past. They seal the door to the past, condemning the present to begin again the slow and painful evolution from chaos to civility. Destroying the memory of a culture strips the present of its identity as mercilessly as Alzheimer's disease. The archaeology of travelers is the priceless memory of what it was like to go where they went and to see what they saw. That memory offers people today the opportunity to see more clearly just how important it is for humans to know who they were, so that they can better identify who they should be in order to survive.

The archaeology of travelers like Lane, Roberts and Bell left not only records of how the world of the Bible appeared in their time, but also made an on-going contribution to how cultures and faith traditions think about themselves today. The archaeology of travelers opens a door in the wall separating the past and present. The access of the present to the past and the past to the present provides one of the most important guarantees that what people have learned in the past will continue to enrich the present. The journals, photographs, paintings and museums of travelers allow the past to endure in the present, and the present to look back into the past for guidance. The relationship between the present and the past is not static. What Lane, Roberts and Bell saw when they looked at the past is not what travelers and archaeologists today see when they look at that same past. Each generation sees its past with different eyes. By handing on their experience travelers in the past allow those in the present to sharpen their vision about what it means to be human.



WHAT YOU HAVE LEARNED

- Good *Orientalism* is an academic discipline which studies the cultures of Mesopotamia; bad *Orientalism* is a racial prejudice which depicts Near Eastern as primitive and barbaric in contrast with Western cultures.
- Curiosity and adventure inspired travelers to leave their homes for the world of the Bible.
- Gertrude Bell began her career as an intrepid world traveler. She spoke English, Arabic, French, German, Italian, Persian and Turkish. She became an accomplished mountaineer in Switzerland's Alps. She developed into an archaeologist of some accomplishment and specialized in Roman and early Islamic architecture in Anatolia, Syria, Jordan, and Iraq. Bell founded the Baghdad Archaeological Museum.
- Westerners demonized Assyrian culture because the earliest artifacts recovered were the annals of the Great Kings of Assyria which glorified the horrors of war and the torture of prisoners. Westerners viewed war as an honorable competition governed by humane rules of engagement.
- The book of Jonah reflects the same painful contradictions about Nineveh that have appeared in popular and academic attitudes toward Assyria in the past two hundred years. Jonah wants Nineveh punished; Yahweh wants Nineveh forgiven. The book of Jonah leaves it to its audiences to decide which is most fitting.

CHAPTER 4 ARCHAEOLOGY OF ANTIQUITIES DEALERS



Chapter 4 explains what have collectors and antiquities dealers done for and against the understanding of the world of the Bible, and how 18th century antiquities dealers like Giovanni B. Belzoni inspired Europeans with a desire for things Egyptian. It also describes how a 20th century war hero and politician like Moshe Dayan become a notorious antiquities dealer, and what archaeologists like Roderick and Susan McIntosh mean by good antiquities dealers and how it would change the relationship between archaeologists and antiquities dealers?

GIOVANNI B. BELZONI (1778-1823)

Giovanni B. Belzoni was born Padua (Italy). He left Padua to seek his fortune in Rome where he studied at a Franciscan monastery to learn how to maintain and repair Rome's fountains. When Napoleon invaded Italy, Belzoni fled to England where he made his living as a circus strongman.



Belzoni was six feet, seven inches tall. He was billed as *The Great Belzoni* or the *Patagonian Samson*. As a finale to his strong man act Belzoni would lift a dozen people sitting on platform – including his wife -- into the air, and then walk around the stage.

GIOVANNI B. BELZONI (1778 -1823)



Patagonia was a remote area of Argentina. Ferdinand Magellan (1480-1521) named the region (Portuguese: *Patagao*). In his journal Antonio Pigafetta (1491-1534),

one of only eighteen sailors who survived Magellan's voyage, describes an indigenous Tehuelche male as ...*so tall that we reached only to his waist*.

JOURNAL OF ANTONIO PIGAFETTA (1491-1534)

One day we suddenly saw a naked man of giant stature on the shore of the port, dancing, singing, and throwing dust on his head. The captain general sent one of our men to the giant so that he might perform the same actions as a sign of peace. Having done that, the man led the giant ...into the presence of the captain-general. When the giant was in the captain-general's and our presence, he marveled greatly, and made signs with one finger raised upward, believing that we had come from the sky. He was so tall that we reached only to his waist, and he was well proportioned. His face was large and painted red all over, while about his eyes he was painted yellow; and he had two hearts painted on the middle of his cheeks. His scanty hair was painted white. He was dressed in the skins of animals skillfully sewn together (Pigafetta 1969: 51-52; <http://www.fordham.edu/halsall/mod/1519magellan.html>).

Patagonian became a synonym in Europe for *giant*. European maps of Patagonia labeled it the *Land of Giants* (Latin: *regio gigantum*). By Shakespeare's day (1564-1616) Patagonia was familiar enough for him to include Setebos, the divine patron of the Tehuelche people, in his play: *The Tempest* (1611).

The Tehuelche people were tall by European standards, but they were not giants. They were about five feet, nine inches tall; Europeans of the period were five feet, five inches tall (<http://researchnews.osu.edu/archive/medimen.htm>).



MUHAMMED ALI (1769–1849)
PASHA OF EGYPT

Belzoni left the circus in 1815 and went to Cairo to market an ox-driven water pump he had invented to Muhammad Ali (1769-1849), the Pasha of Egypt. Ali governed Egypt for the Ottoman Emperor in Constantinople. The Ottoman Empire was founded in the fifteenth century and lasted until 1922 when it was replaced by the Republic of Turkey.

Muhammad Ali had unified Egypt under a strong central government. Ali was committed to developing Egypt into a state as technologically advanced as any in Europe. In 1835 William Brown Hodgson, an attorney from Savannah (Georgia) wrote: *He desires to raise Egypt to the level of European civilization.... The patronage which he gives to the arts and sciences; his encouragement of Europeans of talent; his*

printing presses; polytechnic, elementary, and medical schools; his factories and internal improvements, are evidence of enlightened views in civil administration (<http://www.sunnah.org/history/mhdalip.htm>).

Although Ali was not interested in Belzoni's pump, Belzoni stayed in Egypt. Here Belzoni met Johann L. Burckhardt (1784-1817), a daring Swiss traveler, who had taught himself Arabic, the Qur'an and Islamic law. Burckhardt disguised himself during his journeys. Sometimes he was an Arab sheik; sometimes a merchant; sometimes a teacher. He was the first Westerner to visit Petra (Jordan) and the temple built by Ramesses II at Abu Simbul (Egypt).

Burckhardt fascinated Belzoni with stories of his travels and his description of a colossal bust of Ramesses II in the Valley of the Pharaohs. Belzoni asked Henry Salt (1780-1827), then British consul in Egypt, to hire him to move the statue to the British Museum. Salt was not only a diplomat, but also a portrait painter and, like Belzoni, a collector of Egypt's antiquities. Salt amassed three significant collections of Egyptian antiquities. He sold one to the British Museum; another to the Louvre Museum; a third was auctioned to the public.



HENRY SALT (1780-1827)

Salt authorized Belzoni to move the statue of Ramesses to the British Museum. Belzoni's skills were suited to the challenges posed by Egypt's antiquities. He knew how to use his physical strength and his knowledge of engineering to move great pieces. Belzoni was a maverick; he



Archaeologists abbreviate *King's Valley* as KV to designate tombs in the Valley of the Kings. The abbreviation WV is used for tombs in the Western Valley (Arabic: *Wadi el-Gurud*). The tombs are then numbered in the order of discovery beginning with Ramesses VII (KV 1). As many as sixty-four possible tombs (KV 63, KV 64) have been identified by archaeologists.

could think outside the box. In just three weeks work with only four poles and some rope, Belzoni lifted several columns out of his way and loaded the statue safely on a boat bound for England. *He handles masses of this kind with as much facility as others handle pebbles, and the Egyptians who see him a giant in figure, for he is over six feet and a half tall, believe him to be a sorcerer* Burkhardt wrote.

Salt subsequently hired Belzoni to collect and ship artifacts from the temples at Edfu, Philae and Elephantine for the British Museum. Belzoni was also the first European to visit the oasis of Siwah, and to

identify the city of Berenice on the Red Sea.

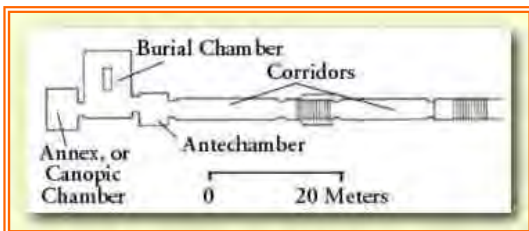
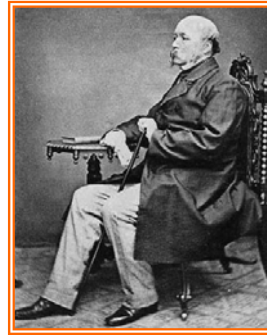
Belzoni also worked in the Valley of the Pharaohs (Hobson 1987: 94-95). He located the forty-seven tombs counted by Strabo (64 B.C.E.-24) and Diodorus Siculus (90-30 B.C.E.) in antiquity. Belzoni also identified eight more tombs. In 1816 Belzoni discovered the tomb of Aya (1323-1319 B.C.E.) designated WV 23.

JOHN G. WILKINSON (1797-1875)

John G. Wilkinson (1797-1875) developed the system of identifying the royal tombs in the Valley of the Pharaohs with the labels: KV for *King's Valley* or WV for *West Valley*. Gardiner was English. His travels in Egypt for more than a decade earned him the title: *the Father of British Egyptology* to distinguish him from Champollion, the French scholar honored as the *Father of Egyptology*.

Wilkinson's notes and paintings of Egypt's antiquities are still a valuable archive of the condition of these monuments in his day. His Manners and Customs of the Ancient Egyptians (1837) was the standard introduction to ancient Egypt until

the beginning of the twentieth century (Thompson 1992).



TOMB OF AYA
WV 23



Belzoni discovered the tomb of Aya (1323-1319 B.C.E.), and carved his name and the date of his discovery on a rock near the entrance to claim his prize. Aya and his wife, Tiya, were the parents of Nefertiti, the wife of Akhenaton (1353-1335 B.C.E.).

Aya's tomb has a simple, straight axis with an offset burial chamber. There are no great halls with pillars and no ritual shafts common in royal tombs of the period.

AYA (1323-1319 B.C.E.)

Another remarkable monument identified by Belzoni in the Valley of the Pharaohs was the tomb of Seti I (KV 17). Seti I (1306-1290 B.C.E.) was the predecessor of Ramesses II, who was most

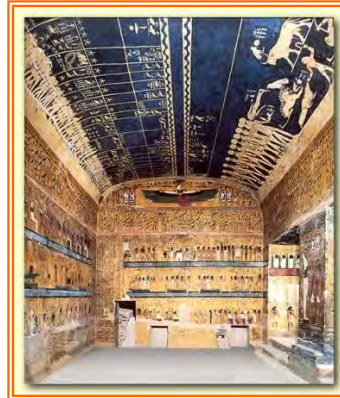
likely the pharaoh in the Book of Exodus. Ramesses I inaugurated the nineteenth dynasty (1307-1196 B.C.E.) and was its first pharaoh. Seti, however, was the actual political, military and cultural genius of the New Kingdom (Stierlin 1995: 142). He led a successful campaign into Syria-Palestine (1312 B.C.E.) conquering Kadesh (Syria), and re-establishing Egypt's dominance in the region. He cut a covenant with Mursilis, Great King of the Hittites (Turkey), establishing a peace in Syria-Palestine that allowed trade to flourish (Collins 2007). He revived the arts by launching building projects throughout Egypt. Seti's tomb was his finest work.

Few of the tombs in the Valley of the Pharaohs were finished at the time of burial. Generally, this characteristic is explained by saying that the pharaoh building the tomb died before the work on the tomb was complete, and once the funeral took place the tomb was sealed without finishing it. It is also possible, however, that the tombs consciously were left unfinished because of a tradition that the work would be completed in the afterlife as a way of demonstrating the Egyptian belief in the continuity between the human plane and the divine plane.

The tomb of Seti I is one of the few tombs in the Valley of the Pharaohs that was actually completed before it was sealed. It is also the longest tomb -- more than one-hundred thirty yards -- and goes deeper into the ground than any other tomb.

BURIAL CHAMBER OF SETI I (1306-1290 B.C.E.)
KV 17

In the tomb Belzoni found an elegant empty alabaster sarcophagus -- a translucent stone coffin. Alabaster is a form of gypsum -- a smooth, white stone. The Egyptians used it for lamps because light shined through the stone highlighting its grain. The alabaster in Seti's coffin allowed the light to shine through it illuminating the passages advising him on how to move safely from the human plane into the afterlife carved into the coffin.





JOURNAL OF GIOVANNI B. BELZONI (1778-1823)

...what we found ...merits the most particular attention, not having its equal in the world, and being such as we had no idea could exist. It is a sarcophagus of the finest oriental alabaster, nine feet five inches long, and three feet seven inches wide. Its thickness is only two inches; and it is transparent when a light is placed in the inside of it. It is minutely sculptured within and without with several hundred figures, which do not exceed two inches in height, and represent as I suppose, the whole of the funeral procession and ceremonies relating to the deceased. I cannot give an adequate idea of this beautiful and invaluable piece of antiquity, and can only say that nothing has been brought into Europe from Egypt that can be compared with it (Belzoni 1820).

The Egyptians developed a number of handbooks describing the journey from death to life. The best known is the Book of Coming Forth by Day or the Book of the Dead. Other traditions are preserved in the Pyramid Texts, the Coffin Texts and, here on the sarcophagus of Seti, the Book of the Gates.

Egyptians patterned their descriptions on the journey from death to the afterlife on the journey of the sun from dusk to dawn. It took twelve hours. Each hour was a gate. Each hour had its divine guardians. The guidebooks would tell the dead what members of Egypt's divine assembly guarded each gate. The handbooks would also tell the dead what questions these members of the divine assembly would ask, and how to answer their questions correctly. These directions were written on the inside of the coffin lid where the dead could easily refer to them during the journey.

If the dead followed the directions in the Book of the Gates and greeted the members of the divine assembly respectfully, and answered their questions correctly, they could proceed into the next hour of their journey. If the dead cleared all twelve gates they would arrive successfully in the afterlife. If they did not, they would be condemned to a life of exile from both the human plane and the divine plane.

The sarcophagus of Seti I is preserved today in the London Museum established by John Sloane (1753-1815), Sloane was a famous British architect and antiquities collector whose own house is an architectural masterpiece. Sloane himself designed the house and lived there among his art and antiquities like the sarcophagus of Seti. When he died, the house and his collections became a public museum (<http://www.sloane.org/>).

When Belzoni returned to England in 1821 he built full scale replicas of the royal tombs he had uncovered in the Valley of the Pharaohs. Thousands of people paid to visit these exhibits he had constructed in Piccadilly Square. He also published his Narrative of the Operations and Recent Discoveries Within the Pyramids, Temples, Tombs and Excavations, in Egypt and Nubia (1822).

MOSHE DYAN

Flamboyant collectors like Belzoni continue to punctuate the history of archaeology in the world of the Bible. Perhaps the most controversial collector in the twentieth century was Moshe Dayan.

Dayan was born in Kibbutz Degania Alef (Israel). Before World War II he fought for Jewish independence against the British in Palestine. He was captured and spent three years in prison (1939-1941). The British released him to fight for them against the French forces fighting with Germany in Syria and Lebanon (1941-1945). He lost his eye during this campaign, and wore a signature patch.

MOSHE DAYAN (1915-1981)

During Israel's War of Independence (1948), the Sinai Campaign (1956), and the Six Days War (1967), Dayan distinguished himself as a commander. During the Yom Kippur War (1973), however, he was Minister of Defense, and many Israelis held him responsible for Israel's lack of preparedness and poor performance. His reputation never recovered.



Nonetheless, Dayan returned to politics as Foreign Minister (1977-1980) with Prime Minister Menachem Begin (1913-1992). As foreign minister, he was instrumental in drawing up the Camp David Accords (1978), a peace agreement with Egypt. Begin, however, did not entrust him with the responsibility of implementing the historic agreement, so he resigned.

Dayan not only collected antiquities himself, he also bought, exchanged, sold and was given antiquities in Israel and abroad (Kletter 2002). Dayan's thirty year collecting career (1951-1981) began at Tell el-Hesi, the same site where Flinders Petrie directed the first archaeological excavation in Israel in 1890. A chance find of an Iron Age jar ignited his life-long passion for collecting. In the beginning he collected from sites in the Negev and the Sinai which were under his military command. Later he collected from sites throughout Israel, the West Bank and Gaza.

As a general Dayan had access to sites off limits to civilian archaeologists. He also commanded resources – soldiers, trucks, helicopters, warehouses – that civilian archaeologists could not afford. He also enjoyed private resources. His family helped him. Antiquities dealers helped him.

ZOOMORPHIC JAR
TELL EL-YEHUDIYEH WARE
TEL POLEG
MOSHE DAYAN COLLECTION



The public loved Dayan, and no one in the government or the legal system or the professional community of archaeologists could successfully challenge his antiquities collecting. Even archaeologists of the stature of Yigael Yadin (1917-1984) and Avraham Biran (1909-2008) were powerless to control his collecting and dealing in antiquities (Slater 1992: 326-327). A conspiracy of silence allowed him to remove antiquities from than thirty-five sites over a period of some thirty years. Israel finally passed a comprehensive antiquities law in 1978, but even that law does not prohibit dealing or selling antiquities.

Dayan often competed with archaeologists excavating at the same sites where he was collecting. He had a passion for the hunt, and for possessing ancient material remains. He had no interest in understanding either the ways in which the artifacts he collected were manufactured, or how they reflected the world views of the maker cultures. Unlike Belzoni, who recorded when and where he collected his artifacts, Dayan collected, but he did not locate, date or interpret the artifacts in his collection. There was no official inventory of his personal collection, and there is no official record of where the pieces in his collection were found. He enjoyed the antiquities that he stored and restored in warehouses and on display in his house in the Zahala neighborhood of Tel Aviv (Israel), but did not share them with the public.

Like many collectors Dayan had an uncanny ability to know where to dig for antiquities. He also had a very accurate ability to recognize forgeries. And he knew the market value of the antiquities he collected, and where to find the buyers who would pay the most.

ANTHROPOID COFFINS
DEIR EL BALAH
TERRA COTTA
MOSHE DAYAN COLLECTION



Dayan demonstrated a fierce identification with the world of the Bible. He understood himself as the heir of that past that he collected. Nonetheless, he was not a person of faith. Devout Jews, Christians and Muslims also identify with the world of the Bible. Their identification defines both what they teach, and how they act. His identification was historical. His knowledge of the world of the Bible was mostly a projection of his own experience. What he did, he assumed the great figures in the world of the Bible did. Few other cultures have such a magnetic influence on their students as the world of the Bible. The Maya in the Americas do not become a way of life for their students. Not does the world of the Pharaohs of Egypt create faith traditions in the world today, nor historical admirers like Dayan. The material remains from the world of the Bible have a remarkable power to inspire even outside Judaism, Christianity and Islam.

Dayan considered his collecting to be humanitarian. He told both his friends and his accusers in the Israeli Knesset that he was rescuing antiquities that would otherwise be ignored or destroyed, and that he intended to donate his collection to the Israel Museum.



\$2,000,000 US dollars in 1981 were worth \$4,500,000 in 2006.

(<http://oregonstate.edu/cla/polisci/faculty-research/sahr/sahr.htm>)

Except for a few gifts that Dayan gave to private individuals, his collection remained intact until his death. His wife then negotiated with the Israel Museum for the collection (Silberman 1989:127-128). She

appraised the artifacts to be worth two million dollars. Eventually she accepted a million dollars for the collection and donated the rest. The purchase was privately funded. Nonetheless, public and private pressure from both archaeologists and ordinary Israelis influenced the Israel Museum's decision neither to display Dayan's collection as a whole, nor even identify pieces from the collection in its catalogues. An internet archive like Art Resource, however, still labels some thirty of images as *The Dayan Collection* (<http://www.artres.com>).

Although antiquities dealers like Dayan made few direct contributions to the interpretation of the Bible, they all contributed to the development of the discipline of archaeology even when those contributions were reverse contributions. Dayan's collecting, for example, contributed a great deal to the development of public policies for the collecting, buying and selling antiquities.

The collecting begun by antiquities dealers like Belzoni was either ignored altogether or tolerated. The trafficking in antiquities by dealers

like Dayan outraged both professionals and the general public. The free market for antiquities needed regulation, and perhaps no one more than Dayan, demonstrated that need for antiquities from the world of the Bible.

By today's standards what antiquities dealers did, and some continue to do, is a scandal. Nonetheless, scandal often casts a light on what needs to be done. Condemning the past or the people of the past distracts from the commitment of creating more effective policies for the preservation and distribution of cultural heritage. What was learned from what Dayan did, or what his contemporaries failed to do to stop him, is infinitely more important, than condemning him or them.

RODERICK J. MCINTOSH AND SUSAN KEECH MCINTOSH

The American Schools of Oriental Research – a professional organization of archaeologists and biblical scholars working in the world of the Bible – takes a zero tolerance approach to collecting antiquities. ASOR does not accept advertising or endorsements of any kind from collectors of antiquities (<http://www.asor.org/policy.htm>). Therefore there are no advertisements from collectors in ASOR's journal for the general public -- Near Eastern Archaeology (1998-present), formerly Biblical Archaeology (1938-1997).

Hershel Shanks, the editor of the popular Biblical Archaeology Review, continues to do investigative reporting on unethical collectors of antiquities from the world of the Bible. The Biblical Archaeology Review and its parent corporation, the Biblical Archaeology Society, however, accept endorsements and advertising from reputable collectors (<http://www.bib-arch.org/>).

In 1977, 1981 and 1994 Roderick J. McIntosh and Susan Keech McIntosh excavated Jenne-jeno and neighboring sites (<http://www.ruf.rice.edu/~anth/arch/brochure/>) in Mali (Africa). The city of Jenne on the Niger Delta of the Middle Niger River between Mopti and Segou was a major trade depot for 500 years. Today, the stunning mud architecture of Jenne is a legacy of its early trade ties with North Africa.

Less than two miles southeast of Jenne is the tell of Jenne-jeno – *Old Jenne*. The site was settled in 200 B.C.E. and occupied for some 1600 years. The archaeology of Jenne-jeno clearly showed that a city with extensive trade routes developed here long before the arrival of Arab peoples from North Africa in 700.

The terracotta statues from Jenne-jeno are usually quite detailed. The statues have jewelry, clothing, and body art created by scarring. The statues may represent human ancestors or divine patrons.



MOURNER
METROPOLITAN MUSEUM OF ART
1300
MALI, INLAND NIGER DELTA
TERRACOTTA
10 INCHES HIGH
JENNE-JENO, MALI

Illegal trade in antiquities from Jenne-jeno and other sites in Mali is rampant. Consequently, the McIntoshes have been consistently proactive with the government of Mali and the United Nations Educational, Scientific and Cultural Organization (<http://whc.unesco.org/>) to help safeguard Mali's rich heritage. The endeavor has led to the development of a policy for identifying and working with *good collectors* of antiquities to eliminate illegal collecting and trafficking in antiquities (McIntosh, McIntosh and Togola 1995). Alpha Oumar Konare, president of Mali (1992-2002), said that Mali regards good collectors and public trust museums as natural partners in its goal of sharing Mali's antiquities with the world.

The policy of identifying good collectors is not widely embraced by archaeologists (McIntosh 2000). Many consider all collectors to be relicts of an era when empires exploited the resources of their colonies. For archaeologists the value of any artifact is defined by its place in the cultural heritage in its country of origin, and not by the aesthetic value assigned to it by art collectors.

For the McIntoshes good collectors must begin collecting because of their admiration for the maker culture, and because they want to use their collection to help others better understand and to appreciate the world view of that culture. Consequently, good collectors allow both scholars and the public access to their collections. They do not hide their collections just for their own personal enjoyment, or for fear of public criticism.

Good collectors also only buy artifacts that have been both legally and professionally excavated. They do not collect beautiful artifacts that have been looted. The reputation of a seller is never a substitute for the documentation of the origin of any artifact or for appropriate export permits.

Good collectors do not destroy duplicate artifacts to increase the

value of those artifacts in collections.

Good collectors are committed to policing the collecting community in order to prevent the development of syndicates that traffic in illegally obtained antiquities obtained by the wanton destruction of ancient sites. Consequently, they support the enforcement of policies like the 1970 UNESCO Convention on Cultural Property (<http://exchanges.state.gov/culprop/unesco01.html>), the 1970 University of Pennsylvania Museum's *Philadelphia Declaration* and the 1989-1994 International Council of Museums Code of Professional Ethics. They are also pro-active in opposing any policy or practice in their own countries that allows for one government to remove the cultural property of others. Cultural property is neither plunder nor the spoils of war.

Good collectors actively encourage departments of antiquities to station representatives in communities near ancient sites to develop education and outreach programs with local leaders, schools and citizens groups to raise their consciousness to preserve those sites. Departments of antiquities need to demonstrate to these communities that they are committed to the preservation of cultural property, and the prosecution of those who plunder and destroy the cultural heritage of their country. Good collectors help these departments educate the public to realize that their cultural heritage defines their culture today, and that preserving and studying their cultural property also contributes to their local economy through tourism.

CONCLUSION

The evolution of the archaeology of collectors is a work in progress. The legacy of Belzoni, of Dayan and of the good and bad collectors today has contributed significantly to understanding the world of the Bible. The question today for museum curators, professors, publishers and the museum going public, however, is *At what cost?* The on-going challenge for both collectors and archaeologists now is still to find effective and responsible ways to recover the past, and to interpret the past, and to publicize the past. Otherwise the material remains of past cultures will continue to be destroyed either by ignorance or by greed.



WHAT YOU HAVE LEARNED

- Giovanni B. Belzoni created markets of fascination for the antiquities they collected and brought to Europe. In response patrons of the arts sponsored exhibits at museums and departments of Near Eastern studies at universities. Even the general public began to travel to the world of the Bible.
- Trafficking in antiquities by high profile antiquities dealers like Moshe Dayan outraged both professionals and the general public. The free market for antiquities needed regulation, and perhaps no one more than Dayan, demonstrated that need for antiquities from the world of the Bible.
- Roderick and Susan Keech McIntosh have developed a code of ethics for good collectors who must, among other things, begin collecting because of their admiration for the maker culture, and because they want to use their collection to help others better understand and to appreciate the world view of that culture.

CHAPTER 5 ARCHAEOLOGY OF MISSIONARIES



Chapter 5 explains why Christian missionaries made the same journey as pilgrims who walked the lands of the Bible to better understand their Jewish, Christian and Muslim faith. It also describes how an inscription recovered by a missionary in Jordan in 1868 continue to influence the study of the culture, languages, politics and worship of ancient Israel and its neighboring states today. The chapter also shows how did fire pits, altars and pedestals represent the presence of a divine patron in the world of the Bible, and how the erosion of red clay by sudden and unexpected floods during an invasion of Moab convince the ruler of Israel that he was a new Moses. Finally, it describes what missionaries contributed to successful archaeological excavations today.

Missionaries from Europe, the United States and Canada set out for the world of the Bible inspired by their Christian faith. Among these intrepid Christians were also women who travelled to Egypt, Sinai and Syria-Palestine to minister to women and their children (Warzeski 2005).

Although missionaries set out to convert peoples of Muslim faith to Christianity, even the most zealous often found themselves converted by the people they set out to convert. They did not abandon their faith, but they did abandon their colonial attitudes that the peoples of the world of the Bible in their day were primitive and pagan. They learned the languages of the places where they lived, and they developed a profound respect for the peoples who lived there.

In many ways Western missionaries were ethnoarchaeologists. They recognized a cultural link between the nineteenth century peasants in the world of the Bible and the way of life in Israel, Judah, Moab and Edom during the Iron Age. Consequently, they developed a spirituality of respect for the people whom they served. They considered these indigeneous peoples to be living descendants of the biblical households of Abraham and Sarah and of Jacob, Leah and Rachel. They offered their Western caregivers a living connection with the Bible and brought the

world of the Bible to life.

One missionary who made a significant archaeological contribution to the understanding of the world of the Bible was F.A. Klein. His respect, not only for the Bedouin with whom he lived, but also his respect for their past, was obvious to his hosts. Therefore, in 1868 they took him to see writing on a stone, and he became the first European to see the Annals of Mesha – the longest inscription recovered, so far, in Syria-Palestine.

Klein's relationship with the Bedouin peoples of Jordan set in motion a dynamic and on-going current of study in a wide variety of fields. Recovering, restoring and translating the Annals of Mesha allowed archaeologists of language and historians of ancient Israel to better understand its relationship to surrounding states. Moab and Israel, for example, use almost the same language, have remarkably similar understandings of their divine patrons, and wage war using almost identical strategies. Comparing and contrasting the Annals of Mesha, ruler of Moab with the Annals of Jehoram, his counterpart in Israel continues to provide insights into the ways in which ancient rulers told the stories of their reigns. For example, Jehoram wanted to be remembered not simply for protecting the land and people of Israel from Moab, but to be remembered as a new Moses leading the Hebrews out of Egypt and into the Promised Land. Finally, Klein's own faith-based ministry almost 150 years ago continues to contribute to the study of how the Hebrews worshiped Yahweh. One artifact revealed by the Bedouin people to their Western physician and friend continues to be a rich source of understanding and appreciation of the world of the Bible.

ANNALS FOR MESHA OF MOAB

About 835 B.C.E. Mesha, the ruler of Moab, inscribed his annals on a curved topped, rectangular block of basalt stone (Smelik 1992: 82). The stela is three feet high and two feet wide (Smelik 2003:137-138). The thirty-four lines are written in the Moabite language which used an early alphabet also used for Hebrew. The grammar, syntax and vocabulary of Moabite and Hebrew are also very similar (Jackson 1989:96-130; Garr 1985). Today the stela is known as the *Moabite Stone* or the *Mesha Stela*.



Bedouin or *Bedu* is Arabic for *people of the desert*. Today most of Jordan's Bedouin live east of the Desert Highway that runs north and south along the ridge above the Dead Sea.

The clan is the base community in Bedouin culture. Bedouin who belong to the same clan consider themselves to be one large family. Each clan has a *sheikh* responsible for making decisions and resolving conflicts. A tribe (Arabic: *qabilah*) is an alliance of clans committed to protecting one another from their enemies.

F.A. Klein was an Anglican missionary born in Alsace-Lorraine (Germany). He had come to Syria-Palestine as a medical missionary with the Church Missionary Society (Horn 1986). He lived in Jerusalem, but traveled on both sides of the Jordan River. He spoke Arabic and was one of the few Westerners who could travel safely east of the Jordan River. Not even the Turkish government could guarantee the safety of visitors



\$400 US dollars in 1868 were worth \$5600 in 2006. \$480 dollars were worth \$6700. \$4000 dollars were worth \$56,000 (<http://oregonstate.edu/cla/polisci/faculty-research/sahr/sahr.htm>)

traveling among the Bedouin peoples there. In August 1868, Klein rode on horseback to treat sick Bedouin around Dhiban (Hebrew: *Dibon*) in the biblical land of Moab (Morton 1989: 239-246; Routledge 2004).

Klein reached the camp of Beni Hamidam Bedouin just north of the Arnon River. He was escorted by the son of the *sheikh* of the Beni Sakhr, the most powerful Bedouin tribe east of the Jordan River.

The Beni Hamidam told Klein there was a stone with writing on it in the ruins of Dhiban. They took Klein to see the stone. He could not read the writing, but he drew a sketch of the inscription, and offered to buy it from the Beni Hamidam for \$400. They agreed.

Klein returned to Jerusalem and asked J. Heinrich Petermann, the Consul of Prussia (Germany), to ask the Berlin Museum if it wanted to purchase the stela. The museum agreed. Klein and his friend, the *sheik* of the Beni Sakhr, however, failed to finalize the sale with the Beni Hamidan. Subsequently, the Bedouin raised their asking price from \$400 to \$4000.



A squeeze is created by pressing a sheet of soft, wet paper into the engraved writing on a stone with a brush. When the paper has dried, it can be peeled away from the stone producing a reverse image of the inscription.

The consul hired Saba Qa'war, who was teaching in Jerusalem, to meet with the Beni Hamidan. Although it took months, the Beni Hamidan eventually agreed to sell the stela for \$480. Arrangements were made to ship the stela from the land of the Beni Hamidan through the land of the Beni Attiyah to Jerusalem. When the time came,

however, the Beni Attiyah refused to permit the caravan to cross their land. So the deal collapsed for a second time, and the Prussian government dropped the project.

Subsequently, Charles Clermont-Ganneau, a scholar from France who was working in Jerusalem as a translator, took an interest in the stela. In 1869 he arranged for Salim el-Qarigo to travel to Dhiban and copy seven lines of the inscription. When he saw the copy, Clermont-Ganneau knew the artifact was authentic. So he hired Ya'qub Karavaca to go to Dhiban and make a paper squeeze of the inscription.

Although the Beni Hamidan agreed to let Karavaca make the squeeze, a fight broke out while he was working. Karavaca was wounded. Before escaping, he tore the paper off the stela while it was still wet.

The attention that the Europeans were giving the stela convinced the Beni Hamidan that the stone had life-giving power. They decided to heat the stela in a fire and then smash it into pieces with cold water. Each clan took fragments of the stela and buried them in their grain siloes to transfer the living-giving power of the stone into the seed they would plant (Horn 1986: 52-53).

Clermont-Ganneau and Charles Warren both tried to recover as many fragments of the stela as possible. Clermont-Ganneau bought thirty-eight fragments of the stela containing a total of six-hundred thirteen letters out of a total of about one-thousand letters. Warren bought eighteen fragments containing fifty-nine letters. Konstantin Schlottmann (1819-1897) bought one additional fragment.



Charles Warren (1840-1927) was an officer in the British Royal Engineers. In 1867 the Palestine Exploration Fund sent Warren to Jerusalem where he met Clermont-Ganneau. Warren conducted the first major excavations of Jerusalem. His most significant discovery was a tunnel leading under the ancient city wall to the Gihon Spring, now known as *Warren's Shaft*. Later in life Warren became chief of the London Metropolitan Police when the Jack the Ripper murders were committed (1886-1888).

A third of the stela had been permanently destroyed. Nonetheless by 1870 Clermont-Ganneau had reassembled the fragments. Using the damaged squeeze he reconstructed the stela and most of the inscription for the Louvre Museum.

Archaeologists who are cultural historians studied the Annals of Mesha to understand why the events they describe happened and to re-construct what the great men who caused these events were thinking (Miller 1989).



ANNALS OF MESHA
(Matthews and Benjamin 2006: 167-169, revised)

I am Mesha, ruler of Moab and conqueror of Dibon. My father, Chemoshyat, ruled Moab for thirty years, and then I became ruler. . . .

Omri, ruler of Israel, invaded Moab year after year because Chemosh, the divine patron of Moab, was angry with the people. When the son of Omri succeeded him during my reign, he bragged: *I too will invade Moab*. However, I defeated the son of Omri and drove Israel out of our land forever. Omri and his son ruled the Madaba plains for forty years, but Chemosh dwells there in my time. I built the city of Baal-Ma'on with its reservoir and the city of Qiryaten. Long ago the tribe of Gad conquered Ataroth, but I defeated the tribe and captured the city of Ataroth which the ruler of Israel had fortified. I sacrificed all of the people of Ataroth to Chemosh. I brought the altar of Israel (Moabite: *'ar'al dwdh*) from the sanctuary of Ataroth and installed it before Chemosh in the sanctuary of Qiryat. Finally, I settled the tribes of Sharon and Maharith in the land which I had taken from Israel to claim it for Moab. At that time, Chemosh said to me, *Go and take Nebo from Israel*. So I deployed my soldiers at night and attacked Nebo from dawn until noon. I won a great victory and I sacrificed seven thousand men, women, and children from Nebo to Chemosh. I brought sacred vessels from the sanctuary of Yahweh at Nebo and laid them before Chemosh. The ruler of Israel was invading Moab from Jahaz, which he had fortified. Chemosh, my divine patron, drove him out before me. I settled the households of two-hundred of my best soldiers in Jahaz to claim it for Dibon.

I built Qarhoh with gates and towers, a palace and reservoirs. I also decreed: *Every household in Qarhoh is to have its own cistern*. I had my prisoners of war from Israel dig the cisterns of Qarhoh. I built Aroer and a highway through the Arnon valley. I also rebuilt the cities of Beth-bamoth and Bezer for fifty households from Dibon. I reigned in peace over hundreds of villages which I had conquered.

...Chemosh was lord in Moab during my time. . . .

HEARTHES

One of the most fascinating phrases in the Annals of Mesha is the two word description of piece of liturgical furniture (Moabite: *'ar'a dwdh*) that Mesha confiscates from the sanctuary of Yahweh in Ataroth (Arabic: *Khirbat 'Ataruz*) and transports to the sanctuary of Kemosh in Qiryat. One word (Moabite: *'ar'al*) identifies the piece of furniture, the other word (Moabite: *dwdh*) identifies either the household that donated it to the sanctuary or the member of the divine assembly to whom it is dedicated.

The translation: *...I brought back the fire-hearth of his Uncle from there, and I hauled it before the face of Kemosh in Kerioth...* (Smelik 2003: 137-138) identifies the furniture as a hearth dedicated to Yahweh, the *Uncle* or divine patron of Israel. The translation: *...I confiscated from there its*

Davidic altar hearth and I dragged it before Chemos in Kerioth... (Rainey and Notley 2006: 211-212) identifies the furniture as a hearth donated to the sanctuary of Yahweh by the household of David or in honor of the household of David. The translation: ... *I brought the altar of Israel from the sanctuary of Ataroth and installed it before Chemosh in the sanctuary of Qiryat* simply identifies it as treasure taken from Israel Moab's enemy, and leaves the question of whether it was donated by the household of David or dedicated to Yahweh, Israel's divine patron or uncle open. The translation is a dynamic equivalent. It focuses on the audience and uses language that will help the audience better understand the connotations of the inscription. What was important to Mesha was that the trophy belonged to Israel, not who donated it or to whom it was dedicated.



SANCTUARY BLDG 350
TEL MIQNE
ILAN SZTULMAN

Archaeologists uncovered a hearth at the north end of the main hall of Building 350 at Tel Mique (Dothan 1990). The hearth was reinstalled at least three times. The floor of each hearth was paved with river rock. The thick layer of ashes

and charcoal covering the floor of the hearth contained animal bones including the only chicken bones recovered in Syria-Palestine.



HEARTH
TEL MIQNE
ILAN SZTULMAN

The hearth sanctuary was built and used during the Iron I period (1200-1000 B.C.E.) at Tel Mique. By 1000 B.C.E. it had been decommissioned.

Hearth sanctuaries were common in western Mediterranean cultures. At Pylos (Greece), for example, a hearth sanctuary was part of a megaron -- a building with a large central hall, side rooms and an open porch.

HEARTH SANCTUARY
PALACE OF NESTOR AT PYLOS (GREECE)
JONG, PRINCETON UNIVERSITY

The only known parallel in Syria-Palestine to this sanctuary hearth at Tel Migne, however, is a sanctuary hearth at Tel Qasile. Like Ekron, Tel Qasile was also a Philistine city. Ataroth was not a Philistine city. Therefore, it is unlikely that there was a hearth sanctuary at Ataroth that Mesha dismantled and then reassembled at Qiryat. Nonetheless, he may have confiscated an altar of sacrifice or a pedestal like the Ark of the Covenant.

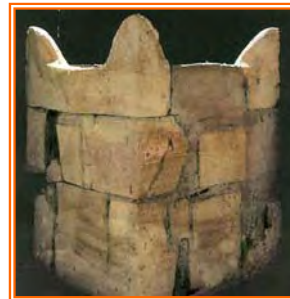


ALTAR OF SACRIFICE

The altar of sacrifice at Ataroth may have looked like the altars at Beersheba or Arad excavated by Yohanan Aharoni (1913-1976). Beersheba and Arad were fortresses guarding the southern border of Judah. Those entering Judah were, no doubt, required to pay their respects to Yahweh at these altars to guarantee their good conduct during their stay. These sanctuaries are an institution similar to passport control stations at national borders today. By removing the altar at Ataroth Mesha was removing the border station and reincorporating the city into Moab.

The Beersheba altar is a cube a little more than five feet square (Aharoni 1974). The corners on the top course of sandstones are raised to form horns (Exod 27:1; 2 Chr 6:13). There is a snake engraved on one of the stones at the base of the altar (Num 21:8-9; Kgs 18:4)

ALTAR OF SACRIFICE
SANDSTONE
BEERSHEBA



The altar had been taken apart and recycled to repair a warehouse wall. The warehouse was subsequently destroyed during the invasion of Judah



by Sennacherib, Great King of Assyria, in 701 B.C.E. (2 Kgs 18:22).

ALTAR OF SACRIFICE
STONES AND BRICKS
ARAD

The Arad altar stood in the courtyard (Hebrew: *ulam*) of a sanctuary to Yahweh (Aharoni 1968 [31]: 18-31). The base of the altar was almost nine feet square. It was some five feet high.

PEDESTAL FOR YAHWEH

If the furniture Mesha confiscated at Atarot was not an altar of sacrifice, it may have been a pedestal for Yahweh. The Ark of the Covenant is a portable pedestal on which Yahweh stands (Benjamin 2004: 181-183). Cultures in the world of the Bible carried their divine patrons on pedestals in processions to visit the land and their people. These pedestals were not images, but vehicles. In Egypt the pedestals were shaped like boats. In Syria-Palestine they were great lions or bulls.

Yahweh rode on two different pedestals. One pedestal was the Ark of the Covenant. The Ark of the Covenant was a gold-plated dais or platform. Yahweh stood invisible between two cherubim, with the faces of humans, the bodies of lions, the feet of oxen, and the wings of eagles.

Yahweh's other pedestal was a great bull, which a Trial of Aaron (Exod 32:1-35) calls a *Golden Calf*. Aaron uses the jewelry of the Hebrews to gold-plate a wooden statue of a great bull on whose back Yahweh would ride into battle. Jeroboam of Israel commissioned two bull pedestals for Yahweh. He erected one in the sanctuary at Dan and the other in the sanctuary at Bethel.

In the Inauguration of Isaiah at Jerusalem (Isa 6:1-13) seraphim snakes, rather than cherubim, guard Yahweh (Benjamin 2004: 342-346). The seraphim are comparable to the *uraeus* snakes that guard pharaoh. Like a hearth the seraphim are associated with fire. They have the body of a snake with the flames of a fire and the wings of an eagle.

When Yahweh commissions Isaiah as a prophet, he is outfitted by the seraphim for his new role with lips of iron. They manufacture this unique tool using the charcoal burner in the sanctuary as a forge. Ironworking played a significant role in the development of cultures in Syria-Palestine. Iron became a metaphor for states that were economically sound. These new iron lips prepared Isaiah to help the rulers of Judah make economically sound decisions in their struggle with Assyria.

In the Ark of the Covenant Stories (1 Sam 4:1-7:1) the Philistines defeat the Hebrews on the first day of battle. The next day Hophni and Phinehas carry the Ark of the Covenant into battle to force Yahweh to defend them. Their plan fails. Yahweh will lead the Hebrews, but will not be led by them. Hophni and Phinehas are killed. The Hebrews retreat.

Just as Mesha captures his trophy and places it like a prisoner of war before Chemosh in Qiryat, the Philistines capture the Ark of the Covenant and place it like a prisoner of war at the feet of Dagon. During the night, however, the statue of Dagon falls prostrate before the Ark of the Covenant. The people of Ashdod put the statue back on its pedestal. The next night the statue of Dagon again prostrates before the ark, breaking off its hands and head in the process.

Statues of the divine assembly were dedicated by placing a weapon in their upraised hand or inlaying their eyes with semiprecious stones. When warriors overran a city, they executed the statue of its divine patron by cutting off its hands, its nose, its eyes or its head. For example, archaeologists have recovered a decapitated basalt statue of the divine patron of Hazor, a city overlooking the Huleh plain north of the Sea of Galilee.

MASSEBAH STANDING STONE

Chang-Ho Ji is currently directing excavations at *Khirbat 'Ataruz* (Jordan). The site may well prove to be the site Israel's sanctuary at Ataroth in the Annals of Mesha. The identity of Mesha's war prize may be easier to establish once the excavations there are complete.

Among the liturgical furniture recovered at the sanctuary to date are a hearth, and two large inscribed pots used to burn incense before a set of *masseboth* standing stones. One *massebah* stone is still on the site; the other is missing. The missing stone may have been the trophy claimed by Mesha.

ANNALS FOR JEHOAM OF ISRAEL, 849-842 B.C.E. (2 Kgs 3:1-27)

There are parallels between the Annals of Mesha and the Annals of Jehoram of Israel, 849-842 B.C.E. (2 Kgs 3:1-27). Both traditions describe Mesha as a covenant partner of Omri of Israel (886-875 B.C.E.). Both explain military defeat as a divine punishment (Judg 3:12). Both describe sacrificing prisoners of war, and both describe using prisoners of war to rebuild captured cities.

The Annals of Mesha, however, describe events not mentioned in the Bible and the Bible describes events not mentioned in the Annals of Mesha. The Annals of Jehoram of Israel describe a campaign against Mesha by Israel, Judah and Edom to punish Mesha for abrogating his covenant with them (2 Kgs 3:4). Israel and Judah were covenant partners during the reigns of Ahab, Ahaziah and Jehoram. The covenant between Israel and Judah was ratified by the marriage of Ataliah, a

daughter of Ahab and Jezebel, and Jehoram, heir to throne of Judah (2 Kgs 3:16-26).

The Annals of Mesha say nothing about a military campaign by Israel, Judah and Edom against Moab. Instead, they describe Mesha's invasion of Israel and occupation of the province of Gad (Jordan). In the Annals of Mesha, Israel invades Moab from the north; in the Annals of Jehoram, Israel, Judah and Edom invade Moab from the south.



ANNALS OF JEHORAM OF ISRAEL, 849-842 B.C.E.
(2 Kgs 3:1-27)

In the eighteenth year of Jehoshaphat of Judah (874-850 B.C.E.), Jehoram, heir of Ahab (873-851 B.C.E.), became ruler of Israel in Samaria (849-842 B.C.E.)....

Now Mesha of Moab was a great herder, who paid the ruler of Israel the lambs and rams' wool of one hundred herds every year. But when Ahab died, the ruler of Moab rebelled against the ruler of Israel.

So Jehoram marched out of Samaria and mustered all Israel. He sent a message to Jehoshaphat, the ruler of Judah, *The ruler of Moab has rebelled. Will you go with me into battle against Moab?*

Jehoshaphat answered, *I will. I am with you. My army is your army. My horses are your horses.* Then he asked, *By which way shall we march?*

Jehoram answered, *Along the Edom Highway.*

So the rulers of Israel, Judah and Edom set out to war. When they had forced marched for seven days, there was no water left for their soldiers or for their animals.

Then the ruler of Israel said: *Yahweh intends to hand the three of us over to Moab.*

But Jehoshaphat said, *Is there no prophet of Yahweh here, through whom we determine what Yahweh wills?*

Then a slave of the ruler of Israel answered, *Elisha son of Shaphat, who is a follower of Elijah, is here.*

Jehoshaphat said, *The word of Yahweh is with him.* So the rulers of Israel, Judah and Edom went to meet with him.

Elisha said to the ruler of Israel, *I do not want anything to do with you. Go to your father's prophets or to your mother's prophets.*

But the ruler of Israel asked him, *Does Yahweh intend to hand the three of us over to Moab?*

Elisha said, *I swear on the life of Yahweh Sabaoth, my divine patron, if it were not because of my respect for Jehoshaphat of Judah, I would not even look at you. Nonetheless, get me a musician.*

While the musician played, the spirit of Yahweh came on the prophet who said: *Thus says Yahweh: I will fill this dry river bed with pools of water. You shall see neither wind nor rain, but the river bed shall be full of water, so that you and your animals can drink. This is nothing for Yahweh, who will also hand Moab over to you. You shall conquer every fortified royal city. You shall cut down every good tree. You shall damn up every spring of water. You shall dump rocks on every farm's land.*

The next day, about the time of the morning offering, water suddenly began to flow from the direction of Edom, until the river bed was filled with water.

When the people of Moab heard that three armies had come up to attack them, they called up every able-bodied man. They sent these soldiers, from the youngest to the oldest, to the border.

When the soldiers of Moab rose early in the morning, and the sun shone upon the water, they saw it was as red as blood. They said, *This is blood. The three rulers must have fought and killed one another. So we can plunder their camps.*

When the soldiers of Moab entered the camp of Israel, the Israelites ambushed and routed them. The Israelites continued the attack by invading Moab. They conquered every fortified royal city. They dumped rocks on every farm's land. They damned up every spring of water. They cut down every good tree.

Only the walled city of Kir-hareseth remained under the control of the ruler of Moab, and even it was surrounded and under attack by slingers. When the ruler of Moab saw that the battle was going against him, he ordered seven hundred soldiers to break through Edom's line, but they could not.

Then the ruler of Moab took his firstborn son, and sacrificed him on the wall of Kir-hareseth. Divine wrath came upon the soldiers of Israel, so they withdrew from Moab and returned to their own land.

A RIVER OF BLOOD

Both the Annals of Mesha and the Annals of Jehoram are describing the same military campaign, but from two different perspectives (Smelik 1992: 73-74). The Annals of Jehoram describe the campaign as the exodus revisited (Smelik 1992:89-90). Since Moses marches the Hebrews from south to north, Jehoram marches his armies from south to north. Just as Yahweh miraculously delivers the Hebrews from dying of thirst in the desert, Yahweh saves the armies of Jehoram from dying of thirst. Just as Yahweh turns the Nile River blood red, Yahweh also turns the water in Moab blood red. Just as Moses and the Hebrews route their enemies east of the Jordan River, Jehoram and his armies route the army of Mesha. And just as only after pharaoh sacrifices the firstborn of Egypt, including the heir to his own household,

do the Hebrews withdraw, only after Mesha sacrifices his firstborn do the soldiers of Israel withdraw.

The description of the war in the Annals of Jehoram is symbolic, not strategic, but the events are credible. Events like the unexpected appearance of a river of blood and the offering of a human sacrifice happen in the world of the Bible. They are credible events.

Landscape archaeologists studying the climate and land east of the Jordan River have reconstructed how a river of blood could suddenly fill a dry river bed. During the wet season (Hebrew: *horep*) from October-March winds moving from west to east across the Dead Sea create microburst storms that dump inches of water on the high, treeless plateaus in such a short period of time that most floods off into the valleys below (Frick 1992 v: 119-126). With little vegetation to slow the water long enough for it to soak into the shallow, highland soil; the normally dry river beds are quickly and unexpectedly flooded. In the Annals of Jehoram the event miraculously provides the armies of Israel, Judah and Edom with badly needed water, and temporarily cuts the army of Moab off from their camps.

The heavy rains also cut into the red soil for which Edom (Hebrew: *'adamah*) is named. As occurred in the Nile River and its canals in the book of Exodus (Exod 7:14-24) the suspended soil turns the water red. The soldiers of Moab assume that a civil war had broken out between the armies of Israel, Judah and Edom, and the dead had stained the water with their blood.

Assuming the camp of Israel had been abandoned the soldiers of Moab are easily ambushed as they rush in to plunder it. The counter-attack continues until the army of Moab is surrounded behind the walls of Kir-hareseth.

HUMAN SACRIFICE

Mesha orders his soldiers to try and break through the siege line. The attempt fails. Having exhausted all human alternatives Mesha throws the people of Moab on the mercy of Chemosh, their divine patron. He sacrifices his heir on the city wall in full view of Israel, Judah and Edom. Chemosh intervenes and the armies of Israel, Judah and Edom withdraw.

Archaeologists working in both Mediterranean and Mesoamerican cultures as well as a variety of other cultures have studied the significance of human sacrifice (Chilton 2008; Bremmer, ed. 2007). Some studies of human sacrifice in western Mediterranean cultures connect

the ritual with the evolution of humans as hunters (Burkert 1972). Sacrifice processed the guilt which humans experienced in killing fellow animals. It allowed humans to deify their victims as an act of reconciliation for killing them, and to reaffirm their common bond as fellow animals.

Other studies of human sacrifice in western Mediterranean cultures argue that sacrifice was a strategy for controlling aggression or competition which consistently threatens to destroy human communities (Girard 1972). Human sacrifice focused this aggression on a single member of the community. By sacrificing one human being the community vented its hostility, thereby protected other members. Once the victims were dead, they were often deified, as an act of restitution. The portion served to each household during the meal following the sacrifice reestablished the social structure that was threatened by the violence neutralized by the sacrifice.

Studies of human sacrifice in Mesoamerican cultures focus on the ritual of Atl Caualo for Tlaloc, the divine patron of nature in Aztec culture. The Aztecs ate the produce of Tlaloc, and then Tlaloc ate the children of the Aztecs. The ritual was performed at the end of the dry season to pray for enough rain to ensure successful harvests and to remind them that only life creates life (Arnold 1991:226).

The creation stories for Atl Caualo teach that for Tlaloc to be able to release life-giving power, she had to be dismembered. In order to give birth, she had to be split in two (Sullivan 1972). In these stories the creators, Quetzalcoatl and Tezcatlipoca, change into great snakes. Like midwives they take her arms as her legs split and she gives birth. The violence here is not only murder, but labor.

Human sacrifice was a re-enactment of the labor that gave birth to the earth. Mother Earth labors to bring forth her children. Evidence of the violence or labor of creation is reflected in the landscape. When Tlaloc writhed in labor the earth quaked and volcanoes erupted. Therefore, at these points of pain the Aztecs offered human sacrifice to reenact the labor of their birth (Arnold 1991: 225).

Everything the Aztecs needed grew from the body of Tlaloc. Trees, flowers and plants were the hair on her head and skin. Springs and waterfalls flowed from her eyes. Rivers flowed from caves that were her mouth. The mountains and the valleys were her nose. Aztec culture transformed these natural features into sacred space (Corrasco 1991: 33). They changed these natural places into sacred places – places where

they as humans assumed divine roles by re-enacting the creation of the land, and their own human creation.

Human sacrifice in Aztec culture also created parallels between rain and blood. Blood was the water that supported human life. Rain was the blood that supported the land's life. To obtain the rain needed to water the land required watering the land with their children's blood (Arnold 1991: 227). The weeping that accompanied human sacrifice was another sympathetic ritual that brought the land back to life. Shedding human blood and crying human tears brought the rain which brought the land back to life (Arnold 1991: 228).

Perhaps the most helpful parallels for understanding human sacrifice come from Near Eastern creation stories recovered by archaeologists working in Mesopotamia. In the Annals of Jehoram and the hero story Jephthah Delivers Israel from Ammon (Judg 11:1-40) a human sacrifice is offered during a war. In creation stories like the Stories of Atrahasis human sacrifice is offered during creation. These parallels suggest that human sacrifice is a ritual of new beginnings. The chaos of the old world – war – is ending; the cosmos of the new world – creation – is beginning.

The Stories of Atrahasis begin in a world populated only by divine warriors (Akkadian: *iggigi*) and elders (Akkadian: *anunnaki*). Eventually the divine warriors revolt, refusing to do all the work necessary to keep their world running properly. Ea-Enki negotiates a settlement with them, in which workers (Akkadian: *lullu*) will be created to take care of the world, especially by dredging its canals. The elders ratify Ea-Enki's proposal, but assign Nintu-Mami the actual task of carrying out the project.

The stories describe the labor of Nintu-Mami with different accounts of how she carried out the task. One account compares Ea-Enki with a menstruating woman, who bathes three times during the menstrual cycle: first when the new moon appears, then seven days later, and finally fourteen days later when the full moon appears. Then the divine assembly sacrifices Wei-la, one of its own, to create the *lullu*, the people primeval. Life comes from life. The life of We-ila becomes the life of the *lullu*. Human sacrifice is the intercourse which mixes of the body of Ea-Enki with the blood of We-ila.



STORIES OF ATRAHASIS
(Matthews and Benjamin 2006:33-42)

Nintu said to the divine assembly: *I cannot do Ea-Enki's work.*
Only Ea-Enki has the clay to create.
Ea-Enki spoke: *I will bathe to mark my time . . .*
At the new moon, the seventh day, and the full moon, I will wash.
Let the divine assembly sacrifice We-ila.
Let them bathe in his blood.
Let Nintu thin my clay with his blood.
Let Nintu mix clay with blood, the human with the divine.
Let the drum mark off the days,
Count down the time.
Let We-ila's blood give these workers life,
Let the midwife call out to them: *Live!*
The divine assembly agreed,
The anunnaki elders consented.

Generally, fathers of households in the world of the Bible did not sacrifice their firstborn. They sacrificed animals or took vows instead. But some, like Jephthah and Mesha, did (Levenson 1993:17). Even in ancient Israel the firstborn belonged to Yahweh (Exod 22:28). Repeated denials in the Bible that only strangers and heretics offered human sacrifice only make it more likely that the Hebrews themselves offered human sacrifices to Yahweh (Noort 2007; Sales 1957; Mosca 1975; Heider 1985).

The careful work of archaeologists in the Mediterranean and Mesoamerica has made it clearer that Mesha's human sacrifice was regarded in his world as something extreme or barbaric; it was an act of faith that demonstrated the complete dependence of his household upon Chemosh, its divine patron. Human sacrifice in the world of the Bible was a profession of faith that the life of the household was a divine gift, not a human accomplishment. Although human sacrifice itself is no longer an acceptable ritual today, on-going research, inspired in part by the Annals of Mesha, does result in a better understanding and appreciation of the quite still genuine sentiments that inspired human sacrifice in past cultures.

CONCLUSION

Klein was a missionary, not an archaeologist. Nonetheless, his patient commitment to understanding the Bedouin people who showed

him the Annals of Mesha led to one of the most significant archaeological discoveries in the last 150 years. The Bedu people who helped the archaeologists of Klein's day continue to help the archaeologists of today to better understand the world of the Bible. Archaeologists today do not go into the field to convert the people who live around ancient sites, but because of the influence of missionaries like Klein most archaeologists today allow local people to collaborate in various ways in their excavations. A patient commitment to understanding and learning from the local people around a site is essential to the success of any excavation today.



WHAT YOU HAVE LEARNED

- Christian missionaries from Europe and the Americas came to the world of the Bible to convert Muslims to the Christian faith.
- F.A. Klein was a missionary to the Bedouin in Jordan, and in 1868 the first Westerner to see the Annals of Mesha carved on a black basalt stela. It is the longest inscription recovered from Syria-Palestine to date.
- Archaeologists continue to study the language and contents of the Annals of Mesha to better understand the world of the Bible that the inscription reflects.
- Cultures like ancient Israel who prohibit images of their divine patrons often kindle fires, build altars or construct pedestals to indicate that their divine patron is present.
- The Plagues Stories (7:14-13:10) describe Moses turning the Nile River blood red. When red clay suspended in flood water surrounded the army of Israel protecting it from the army of Moab, Jehoram, the ruler of Israel, considered it a repetition of the plague on Egypt and considered himself to be the new Moses.
- Missionaries demonstrated that a patient commitment to understanding and learning from the local people around a site is essential to the success of any excavation today.

Part Two

Cultural History



- Part Two is an introduction to the School of Cultural History.
 - Chapter 6 describes how Cultural Historians reconstruct the important political and military events at a site using written artifacts to interpret the material artifacts they recover.
 - Chapter 7 describes a specific kind of Cultural History called *Biblical Archaeology*. Biblical Archaeologists use the Bible to interpret material artifacts.
 - Chapter 8 describes the Wheeler-Kenyon method which every school of archaeology today uses to recover and record artifacts.
 - Chapters 9-10 look at Arad and Qumran, two important sites excavated by Biblical Archaeologists and what these sites contributed to the understanding of the Bible.
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CHAPTER 6 CULTURAL HISTORY



Chapter 6 describes the most important resource that Cultural Historians and Biblical Archaeologists use to interpret the material remains they recover and their most important contribution to the interpretation of the Bible. It also explains what Cultural Historians do when written artifacts and material artifacts tell different stories and how do Cultural Historians use written artifacts to interpret material artifacts today. Finally, the chapter shows how Cultural Historians used written artifacts to interpret the material artifacts recovered from the 701 B.C.E. and 586 B.C.E. destruction layers at Lachish (Israel).

Archaeology has partnered both with history and with anthropology. In North America, with the notable exception of Boston University, archaeology is taught in anthropology departments. At Boston University and at universities in Europe archaeology is taught in history departments. Cultural History (German: *Kulturgeschichte*) is a school of archaeology which partners with history or political science (Webster 2008; Rouse 1953). History is the study of the human past using written records (Miller 1988:3). Cultural Historians considered writings to be their primary tool for understanding material remains (Drake OEANE 3:28-30).

Biblical Archaeologists are Cultural Historians who use the Bible to interpret the material remains from ancient Israel and surrounding cultures. Most archaeologists working in the world of the Bible after 1918 were Cultural Historians or Biblical Archaeologists. The Bible took priority in the research agendas and the paradigms they created to interpret the artifacts they recovered.

STORIES INTERPRET STONES

For Biblical Archaeologists the Bible and other Near Eastern writings were the primary interpretive tools in their analysis of material

remains. The invention of writing in Mesopotamia, Egypt and Syria-Palestine; the development of the Bible; and the remarkable archive of Near Eastern traditions recovered by archaeologists between 1800-present were among the most important reasons for giving these writings the pride of place in interpreting material remains in the world of the Bible. This cross fertilization dramatically increased the understanding of both the world of the Bible and the Bible itself for Cultural Historians and for the general public.

For example, Sennacherib, the Great King of Assyria, inscribed annals for eight military campaigns on a six-sided clay prism about fifteen inches high. They are written in the Assyrian dialect of the Akkadian language using the cuneiform script. Colonel R. Taylor, British Consul General at Baghdad, acquired the prism in 1830. The British Museum later bought it from his widow in 1855.

According to the prism Hezekiah declared Judah's independence from Assyria after 715 B.C.E. Consequently Sennacherib sent an army into Judah in 701 BCE to put down the revolt. He laid siege to Jerusalem and devastated the surrounding countryside. Biblical Archaeologists used the Taylor Prism and the Bible to interpret the material remains recovered from destruction layers at sites like Lachish.

TAYLOR PRISM
SENNACHERIB (704-681 B.C.E.)
BRITISH MUSEUM
© ERICH LESSING, ART RESOURCE





THIRD YEAR OF THE REIGN OF SENNACHERIB
(Matthews and Benjamin 2006: 190-192)

Because Hezekiah of Judah did not submit to my yoke, I laid siege to forty-six of his fortified cities, walled forts, and to the countless villages in their vicinity. I conquered them using earthen ramps and battering rams. These siege engines were supported by infantry who tunneled under the walls. I took 200,150 prisoners of war, young and old, male and female, from these places. I also plundered more horses, mules, donkeys, camels, large and small cattle than we could count. I imprisoned Hezekiah in Jerusalem like a bird in a cage. I erected siege works to prevent anyone escaping through the city gates. The cities in Judah which I captured I gave to Mitinti, king of Ashdod, and to Padi, king of Ekron, and to Sillibel, king of Gaza. Thus I reduced the land of Hezekiah in this campaign, and I also increased Hezekiah's annual tribute payments.

Hezekiah, who was overwhelmed by my terror-inspiring splendor, was deserted by his elite troops, which he had brought into Jerusalem. He was forced to send me four-hundred twenty pounds of gold, eleven-thousand two-hundred pounds of silver, precious stones, couches and chairs inlaid with ivory, elephant hides, ebony wood, box wood, and all kinds of valuable treasures, his daughters,

The annals report that because Hezekiah had not submitted to Assyria, Sennacherib laid siege to forty-six fortified cities in Judah, deported 200,150 people and laid siege to Jerusalem (Mitchell 1988: 59). The annals of Hezekiah for this war of independence are reported in the books of Samuel-Kings (2 Kgs 18:17-19:36) and the book of Isaiah (Isa 36:1—37:37). The Bible reports that the Assyrians suffered staggering casualties during a mysterious night event, and then lifted the siege of Jerusalem. Sennacherib does not report that he took Jerusalem, but makes an inventory of the ransom in gold, silver, iron, precious stones and woods, ivory inlaid furniture, weapons and musicians that Hezekiah paid for the city. Curiously the annals on the prism do not mention to siege and capture of Lachish by Sennacherib, which are described in vivid detail on reliefs in his trophy room at Nineveh.

Cultural Historians like James L. Starkey (1895-1938), G. Lancaster Harding and Olga Tufnell (1905-1985) excavated at Lachish from 1932-1938. David Ussishkin (Tel Aviv University), Gabriel Barkay, Chista Clamer, Yehudah Dagan, John Woodhead (British School of Archaeology, Jerusalem) and Orna Ziumhoni excavated there from 1973-1983. Both teams relied closely on the timeline and description of events in the written artifacts for their interpretation of the material remains from Lachish.

For example, there is a brief mention of the siege in a trial of

Jerusalem in the book of Jeremiah (Jer 34:1—35:19). Jeremiah promulgates verdict when *...the Great King of Babylon had laid siege to Jerusalem, Lachish and Azekah – the only walled cities left in Judah* (Jer 34:7). In the indictment Jeremiah charges the citizens of Jerusalem with freeing their slaves as a ritual of repentance asking Yahweh to deliver the city, and then, once the siege was lifted, they enslaved them again.

According to the reconstruction of events using both material remains and biblical tradition, Nebuchadnezer lays siege to Jerusalem, Lachish and Azekah. Azekah is eighteen miles southwest of Jerusalem, Lachish is thirty miles away.

At some point during the siege the citizens of Jerusalem free their slaves in hope of deliverance, and, in fact, the Babylonians withdraw. The citizens of Jerusalem break their oath and retake their slaves. The Babylonian withdrawal, however, was not an answer to their prayer, but Nebuchadnezzar's decision to use the soldiers surrounding Jerusalem in the final assault on Lachish. The Babylonians return after the fall of Lachish to resume their assault on Jerusalem.

Starkey recovered nineteen letters written on broken pieces of pottery buried in the ruins of a guard room at Lachish when Nebuchadnezzar destroyed the city. In one letter the commander of Lachish writes: *...this letter certifies to the commanding officer in Jerusalem that I remain on duty to carry out your orders. Judah's signal fire at Lachish still burns, even after the only other remaining signal fire at Azekah has gone out.* This written artifact is used to argue that Azekah fell before Lachish. Therefore, the sequence is first Azekah, then Lachish, then Jerusalem.



AZEKAH LETTER FROM LACHISH
ISRAEL MUSEUM
586 B.C.E.
CLAY
© ERIC LESSING, ART RESOURCE

STORY CALENDARS AND STONE CALENDARS

A significant contribution of Cultural Historians to the study of world of the Bible is the calendar that they reconstructed. These calendars were an important tool for sorting material remains, and for focusing the interpretation of a site.

Gradually, the calendars built around political and economic events in written artifacts were replaced by ceramic calendars built around the raw material, the shape and the decoration used in pottery. Repeated, careful excavations developed sequences for the development of pottery types from its first appearance in the Neolithic period (6000-3800 B.C.E.) to the pottery used in Syria-Palestine during the Crusades (1096-1291). Pottery not only provided a chronology for a particular site, but the chronologies from more than one site could be used to recreate the chronology of an entire region (Wright 1962: 24).



WILLIAM F. PETRIE (1853-1942)

William Matthew Flinders Petrie (1853-1942) had no formal schooling. He began his career in archaeology as a surveyor. Petrie's father was also a surveyor who taught him how to use the most advanced equipment of the time. This early training instilled in Petrie a respect for measurement and accuracy which would influence his work in archaeology.

Petrie pioneered archaeology as a science by carefully identifying settlement layers. He was among the first to map the exact location of the material remains that he excavated. He also recognized that pottery could be used to create a calendar for dating these remains. Finally, Petrie discovered the earliest form of the Proto-Sinaitic alphabet, which was a major contribution to the study of the origins of writing in the Near East. He is honored today as the *Father of Modern Egyptology* – to distinguish him from Jean F. Champollion who is honored as the *Father of Egyptology* and John G. Wilkinson who is honored as the *Father of British Egyptology*.



POTTERY GRAVE GOODS

The measurement of ancient monuments always fascinated Petrie and from 1880-1883 he surveyed the pyramid of Khufu (2551-2528 B.C.E.) on the Giza Plain. In 1892 Petrie became the first Edwards Professor of Egyptian Archaeology and Philology at University College (London). Today the Petrie Museum at University

College (<http://www.petrie.ucl.ac.uk/museum/petrie.html>) houses his inspiring collection of Egyptian and Sudanese artifacts.

Petrie excavated many important sites in Egypt: Hawara, Meydum, Abydos, Amarna, Ballas, Naqada, Gerza and Tarkhan. There were over two thousand undated graves at Naqada. While excavating these graves Petrie began to classify them using the different styles of pottery placed with the bodies as grave goods. The first benchmark he established was the difference in style between pre-dynastic pottery (4500-3000 B.C.E.) before Pharaoh Narmer (3000 B.C.E.) united southern and northern Egypt into a state, and dynastic pottery (2920 B.C.E. -- 311).

The signature of pre-dynastic pottery is a ledge-shaped wavy handle on either side of the upper body of a pot. These handles were finger grips. Over time, the wavy handles became narrower.

The body of the pre-dynastic pots also changed. In the beginning the body of these pots was round. At the end of the period the body was cylinder shaped. Petrie dated the round shaped pottery with large wavy handles earlier than the cylinder shaped pottery with narrow handles. He also noted that the crossed-line decoration on the cylinder shaped jars was a later addition. This design imitated the knotted cord slings that formed a net to hold vessels for carrying or for hanging. Petrie designed a pottery sequence labeling the oldest pottery 80 and the youngest pottery 30.

WAVY-HANDLED, CYLINDER SHAPED JAR
PRE-DYNASTIC PERIOD
NAQADA IIA2 PERIOD
© CLEVELAND MUSEUM OF ART



Pre-dynastic pottery was manufactured by kneading clay tempered or strengthened with sand. Potters rolled the clay into a rope and then coiled it on a flat stone to shape the pot. The surface of the jar was polished to seal it, and then air-dried to a leathery consistency, decorated with paint, and fired. The wavy-handle design on the upper body was produced by pinching the wet clay.

Petrie left Egypt and directed the first American excavation in Syria-Palestine at Tel el-Hesi (Israel) in 1890. There he found many of the same types of pottery that he had dated in Egypt. Petrie continued to develop his pottery chronology, which soon replaced written artifacts as the most reliable tool for dating material artifacts (Currid 1999: 79-88).

During four seasons (1926, 1928, 1930, 1932) of excavating Tell Beit Mirsim, William F. Albright completed the Petrie pottery calendar for the Bronze Age and the Iron Age in Syria-Palestine (Running and Freedman 1975: 143-163). Albright's student, G. Ernest Wright (1909-1974), continued to refine the calendar. The pioneering work of Petrie, Albright and Wright was eventually synthesized in Ancient Pottery of the Holy Land from its Beginnings in the Neolithic Period to the End of the Iron Age (1970) by Ruth Amiran. Amiran's work is still the basic handbook for dating pottery in Syria-Palestine.

Pottery in the world of the Bible was functional. Clay vessels were produced to be useful rather than decorative. There were pots for storing grain, liquids; pots for cooking, eating or mixing; and small pots for storing cosmetics and perfumes (Borowski 1982).

Pottery can break, but it is seldom destroyed. Pieces of broken pottery or sherds all describe something about the composition, shape, decoration and purpose of the original pot. Diagnostic sherds – rims, handle, and bases – allow archaeologists to reconstruct the original pot. Body sherds – from any other part of the pot except its rim, handle or base – are less informative about the original.

Pottery making was a trade that passed from one generation to the next, perpetuating the shapes of pots and the methods of production. Evolution of pottery was slow. Archaeologists can date pots by their shape and manufacturing characteristics. Pottery is unique to the cultures that make it, or to the time periods when it is made. The kind of clay; the additives that harden the clay and keep it from shrinking and cracking; the shape of pots; and the decoration are culture-specific or time-specific. Therefore, once these indicators are linked to a particular culture or a particular period of time, they create a reliable calendar for dating other artifacts.

The date of a stratum corresponds to the latest piece of pottery found there. The most recent pottery found on a floor indicates the most recent date when the building was occupied.

During excavation sherds are collected into buckets. Each bucket has a number identifying the place or locus where the pottery was collected.

Each piece of pottery is dipped in water to see if the water highlights any writing. If the sherd is blank then it is brushed clean and laid out in a tray with the other pieces of pottery from the same bucket.

When the pieces are dry, pottery experts on the excavation team date or read the pieces in the tray. Generally all the pieces are similar in construction and decoration, but occasionally there will be pieces from another culture or time-period. These pieces are noted, and a reason for their presence in the tray is suggested. For example, they may have been heirloom or keepsake pieces. They may have been imported pieces. The stratum to which they originally belonged may have been disturbed by digging.

STONES VERSUS STORIES; STORIES VERSUS STONES

An on-going challenge for Cultural Historians working in the world of the Bible is how to resolve contradictions between material remains and written remains. For example, the preached tradition understands the books of Joshua and Judges to be a description of how miraculous military victories confirmed the Hebrews' faith in Yahweh. Nonetheless, Kathleen Kenyon (1906-1978), who excavated Jericho from 1952-1959, could not confirm that there was a city at the site when the Hebrews were in Syria-Palestine. Instead the material remains indicate that the Hyksos' city of Jericho was destroyed in 1350 B.C.E. -- more than 250 years before Joshua (1200-1000 B.C.E.) -- and that the site remained abandoned until 716 B.C.E. when Hezekiah of Judah rebuilt it.

Some archaeologists working in the Near East resolve the conflict by separating the study of written artifacts from the study of material artifacts altogether. They emphasize that written artifacts and material artifacts have too little in common to accurately interpret one another.

DIFFERENCES BETWEEN STONES AND STORIES

Among the striking differences between written and material artifacts is the fact that written remains reflect the world view of the elite, but not the world view of the culture as a whole. Material remains reflect a more populist world view. The book of Deuteronomy, for example, reflects the elite world view that the Hebrews should worship Yahweh and celebrate Passover only in Jerusalem. Material remains from Arad (Israel) and Elephantine (Egypt), however, reflect a populist world view that Hebrews worshiped Yahweh and celebrated Passover not only in Jerusalem, but also in Arad and Elephantine.

Likewise, in the Bible, Yahweh, the divine patron of ancient Israel, is unmarried and male. Nonetheless pilgrims, who visited the sanctuaries at Kuntillet 'Ajrud and Khirbet el-Qom, addressed Yahweh as a divine couple. They wrote their prayers on broken pieces of pottery to both Yahweh -- their godfather -- and Asherah -- their godmother (Zevit 2001: 350-438).

Similarly, material remains are artifacts of a single time and place. Written remains, however, are artifacts of multiple times and multiple places. There is the time and place when and where written remains develop. There are the times and places which appear in the written remains themselves. Then there are the times and places where the written remains, as they appear in the Bible today, were told. Each of these calendars and geographies must be taken into account when interpreting these written remains. Establishing a reliable interface between the complex calendars and geographies of written artifacts with the contrastingly simply calendar and geography of material artifacts is a complicated, and sometimes impossible, project.

Another significant difference between written and material remains is that chance determines what material remains are preserved. Settlement layers at a site are haphazard, not choreographed. The artifacts of ordinary people may be preserved while those of the elite may perish, or the elite may survive, and the ordinary perish. What is recovered from an excavation is also, regardless of the expertise of the excavation team, haphazard. The Dead Sea Scrolls were discovered by herders looking for lost sheep. Howard Carter (1874-1939) was looking for the tomb of Tutankhamen, but had given up hope of finding the tomb, when, unexpectedly, he found it (<http://www.crystalinks.com/tutstomb.html>).



THE TOMB OF TUTAKHAMEN
Howard Carter (1954:31)

The history of the Valley, as I have endeavoured to show... has never lacked the dramatic element, and in this, the latest episode, it has held to its traditions. For consider the circumstances. This was to be our final season in the Valley. Six full seasons we had excavated there, and season after season had drawn a blank; we had worked for months at a stretch and found nothing, and only an excavator knows how desperately depressing that can be; we had almost made up our minds that we were beaten, and were preparing to leave the Valley and try our luck elsewhere; and then—hardly had we set hoe to ground in our last despairing effort than we made a discovery that far exceeded our wildest dreams. Surely, never before in the whole history of excavation has a full digging season been compressed within the space of five days.

In contrast, conscious editorial choice determines what written artifacts are preserved. The Bible is the work of decision making. What was chosen and what was left created the canon of the Bible. The

traditions that were chosen were not necessarily the best traditions. How the traditions are used in the Bible does not necessarily reflect the intentions of those who developed the traditions. Again, trying to establish a productive relationship between artifacts of chance and artifacts of purpose is a challenging, if not impossible, project.

Historical models of ancient cultures in written remains are different from archaeological models in material remains. Historical models are designed around the lives of great men and the events to which they contribute. Archaeological models are designed around the artistic development of styles of architecture, pottery or metalwork which define a particular stratum or settlement layer. Most material artifacts are records of daily life, and not spectacular events. Focusing on only the material remains that enlighten the lives of the rich and famous ignores most of what archaeologists recover in the field. The Bible, for example, narrates not only Solomon's rise to power as the successor of David, but also attributes to him teaching traditions like the Book of Proverbs, Ecclesiastes and the Song of Solomon. The material remains from the city of Gezer, described by the Bible as the dowry of a pharaoh's daughter to Solomon, clarifies little and confirms little about this biblical Solomon.

Finally, written artifacts are permanent. They can be studied and re-studied by scholars with different abilities, and with different methods. Feminist scholars reconstruct the character of Bathsheba in a Trial of David (2 Sam 10:1—12:31) much differently than their patriarchal colleagues. Nonetheless, interpretations of written artifacts do not destroy the artifacts. Feminist scholars do not have to wonder what was there when a Trial of David was previously read and interpreted by their patriarchal colleagues. The artifact remains constant.

The context of material artifacts (Latin: *in situ*) is destroyed by the archaeologists who excavate the site. Even the records of archaeologists, no matter how carefully kept, only preserve what *they* did, what questions *they* asked, what artifacts *they* studied. The rest is lost. Archaeologists with better tools, better skills and different questions cannot ever see what their predecessors saw, or dig where their predecessors dug.

CONCLUSION

Today Cultural Historians still consider the relationship between written artifacts and material artifacts to be important for accurately understanding maker cultures. They do not ignore the Bible in interpreting material remains; but they no longer use the Bible as their

primary tool for interpreting material remains; and they no longer use material remains only to prove the historicity of the Bible. The Bible is a cultural artifact of an Iron Age culture, just like other material remains recovered by archaeologists. Cultural Historians construct their models from the ground up, initially using only material remains. Once that artifact model is in place, then they can evaluate that model for both its historical significance and for its relationship to the Bible

Likewise, Cultural Historians today place less emphasis on events, and more emphasis on social systems. Cultures develop not so much in response to what strong men do, but rather in response to how environments change. An earthquake had a greater impact on life in Judah from 740-700 B.C.E. than the prophet Isaiah.

Social institutions and behavioral patterns adapt in response to ecological changes like drought or ironworking technology. Environmental change is seldom simple. More often environmental changes interact with one another producing compound change agents to which cultures must respond in order to survive. To understand a culture it is less important to understand its great men, and more important to understand the systems which it developed to survive and flourish as its environment changes. Therefore, Cultural Historians are equally sensitive to how cultures responded to changes in their environments, and to how they responded to political or economic changes.

Originally, Cultural Historians immediately brought written and material artifacts into conversation with one another to establish an interpretation of a site. Today Cultural Historians develop two separate models for interpreting a site – a model based on written artifacts, and a model based on material artifacts. Once these two models have been developed and tested, then Cultural Historians begin to draw them into conversation with one another. The result is the creation of various paradigms for understanding a single site, rather than the creation of a single definitive interpretation.



WHAT YOU LEARNED

- For Cultural Historians written artifacts are the most important resource for interpreting material artifacts.
- For Biblical Archaeologists biblical traditions are the most important resource for interpreting material artifacts.
- Cultural Historians used the Bible, the Annals of Sennacharib and a collection of letters recovered at Lachich to interpret the two destruction lays at the site.
- When written and material artifacts tell different stories, there is often little possibility for resolving the conflict, so Cultural Historians offer two different reconstructions of events.
- Today Cultural Historians first reconstruct the story in the material artifacts, and only then use written artifacts to evaluate it.

CHAPTER 7

BIBLICAL ARCHAEOLOGY



Chapter 7 describes how did William F. Albright defined the goal of Biblical Archaeology, and how is Biblical Archaeology related to Biblical Theology. It also explains how Biblical Archaeologists reconstruct the origins of ancient Israel, and how the 'apiru related to the Hebrews. Finally, the chapter shows how do the Annals of Merneptah contribute to the understanding of the origins of Israel and why Biblical Archaeologists now describe the Hebrews as farmers and herders rather than as warriors.

As the director of the American School of Oriental Research at Johns Hopkins University (1929-1959), William F. Albright pioneered the Biblical Archaeology Movement. The first American to excavate in Syria-Palestine was William Flinders Petrie. He began his work at Tell el-Hesi in 1890. Before Albright, however, few biblical scholars were archaeologists. They let others dig. Then they applied their findings to the world of the Bible. Albright inspired biblical scholars to direct their own excavations. He convinced them that archaeology was crucial to an accurate understanding of the world of the Bible.

Albright was born in Chile to Methodist missionary parents: Wilbur Finley and Zephine Viola Foxwell Albright. He was the oldest of six children. In 1913 Albright earned his Ph.D. from Johns Hopkins University under the direction of Paul Haupt (1858-1926) and became an expert in Semitic languages and pottery analysis. In 1921 he married Ruth Norton, who also earned her Ph.D. from Johns Hopkins University. She was a specialist in Sanskrit linguistics and folklore.

Books by Albright like The Archaeology of Palestine (1949-1960), From Stone Age to Christianity (1940), The Biblical Period from Abraham to Ezra (1963) and Yahweh and the Gods of Canaan (1968) dominated biblical scholarship in the United States during much of the twentieth century. Albright's students like G. Ernest Wright, Frank M. Cross and

David N. Freedman and Cyrus Gordon (1908-2001) became internationally respected scholars of the world of the Bible.

Albright launched the Biblical Archaeology Movement to demonstrate that the Bible was historically accurate. This was the defining characteristic of biblical archaeology. For example, he used archaeology to argue that Abraham and Sarah, Isaac and Rebecca, and Jacob, Leah and Rachel were real people who lived during the Middle Bronze period (2000-1550 B.C.E.). For him archaeology demonstrated that the ancestor stories in the Book of Genesis (Gen 11:27—37:2) are their historically accurate biographies. Similarly, Albright identified the destruction layers in Syria-Palestine during the Iron I period (1200-1150 B.C.E.) -- such as those at Tell Beit Mirsim near Hebron where he excavated from 1926 to 1932 -- as evidence that the hero stories in the Books of Joshua-Judges are historically accurate reports of the invasion of Syria-Palestine by the Hebrews.

The inspiration for biblical archaeology came from the Biblical Theology Movement. For biblical theologians a foundational teaching of both Judaism and Christianity is that God intervenes in human history (Davis 2004: viii). They consider Judaism and Christianity to be historical or linear religions. In contrast other faith traditions are mythical or cyclical religions (Eliade 1959: 67-113). This apologetic use of archaeology in support of the preached interpretation of the Bible was also a defining characteristic of biblical archaeology. The Bible sets the agenda for Biblical Archaeology. The goal of Biblical Archaeology is to demonstrate that the Bible is a historically reliable witness to the events it describes. This is a basic teaching of churches in tradition of Reformation Christianity in the United States, for which biblical archaeologists sought to provide evidence.

For example, in 1922 Leonard Woolley was directing an excavation of the royal tombs at Ur (Arabic: *Tell al Muqayyar*) north of Basra (Iraq), when he uncovered an eight foot thick layer of clean clay. He considered this layer unmistakable evidence that the Flood Stories in the Book of Genesis (Gen 6:1—11:26) were historically accurate. For a time Biblical Archaeologists and the general public almost universally agreed with him.

Until 1970 Biblical Archaeology was the unchallenged paradigm for excavations in Syria-Palestine. Since then the paradigm has been continually revised by archaeologists, anthropologists, historians and biblical scholars. Signs of significant change are reflected in name changes for the discipline. The *Biblical Archaeology* of yesterday is the *Archaeology of Syria-Palestine* today. Yesterdays courses in *Biblical*

Archaeology are today's courses in *Archaeology and the Bible*.

Nonetheless, the general public, and not a few archaeologists, remain as unwaveringly enthusiastic about Albright's Biblical Archaeology as it has ever been (Thompson 1987: 281-418). Publications like the Biblical Archaeology Review -- founded by Hershel Shanks in 1976 -- are widely read. Popular presentations by archaeologists working in Syria-Palestine are well attended. Travel study programs to the world of the Bible are well enrolled. Likewise, in North America financial support for excavations in the world of the Bible continues to be strong from religiously affiliated institutions and individuals. These generous sponsors expect their protégés to focus their fieldwork on improving the understanding of the Bible.

Wright was one of Albright's early students, and became a leading biblical archaeologist, especially skilled in the study and dating of pottery. Wright was a staunch defender of the relevance of the Bible to the Christian faith. He was the son of a Presbyterian minister and received his B.A. from the College of Wooster (Ohio). He received his Bachelor of Divinity from McCormick Theological Seminary (1934), the same year he was ordained in the Presbyterian Church. He studied with Albright at Johns Hopkins University, where he received his M.A. (1936) and PhD. (1937). He taught Old Testament History and Theology at McCormick Seminary (1939-1958), and then became Parkman Professor (1958-1974) and Curator of the Semitic Museum (1961-1974) at the Harvard Divinity School. Like Albright, his mentor, Wright published to prove the historical reliability of the Bible: God Who Acts: biblical theology as recital (1952); Biblical Archaeology (1957); Shechem: biography of a biblical city (1965); and The Old Testament and Theology (1969). He directed the Drew-McCormick Archaeological Expedition to Shechem in Israel (1956-1974); the Hebrew Union College Biblical and Archaeological School Expedition at Tel Gezer in Israel (1964-1965); and the Joint American Expedition to Idalion in Cyprus (1971-1974).



JOHN BRIGHT (1908-1995)

Another influential Albright student was John Bright (1908-1995) who received his bachelor of divinity at the Union Theological Seminary, Virginia (1931). Bright was the Cyrus H. McCormick Professor of Hebrew and the Interpretation of the Old Testament at Union Theological Seminary in Virginia (1940-1975). His books include: The Kingdom of God: the biblical concept and its meaning for the Church (1953) and Covenant and Promise: the prophetic understanding of the future in pre-exilic Israel (1976). But the work for which Bright is most well known is

A History of Israel (1959-2000). It is a consistent application of Albright's assumption that what the Bible describes is historically reliable.

Archaeology, for Albright, could not prove Israel's faith, but archaeology could demonstrate that Israel's faith was not mindless superstition. Books on archaeology and the Bible published from 1950-1970, like Archaeology of Palestine (1949) by Albright, Archaeology in the Holy Land (1960) by Kathleen Kenyon and The Archaeology of the Land of Israel (1982) by Yohanan Aharoni, use archaeology to demonstrate the historical accuracy of the Bible. These works are political histories of Syria-Palestine, highlighting ancient Israel, that refine the time lines and significant events identified in the Bible with archaeology. These archaeologists accepted the biblical traditions as reliable reflections of past events and their relationships with one another (Alhstrom 1993:10).

Kenneth A. Kitchen is a scholar of ancient Egypt. His work focuses on the reign of Ramesses II (1290-1224 B.C.E.) and the Third Intermediate Period in Egypt (1100-650 B.C.E.). His publications include Ramesside Inscriptions (2000), The Third Intermediate Period in Egypt 1100-650 BC (1996), and Poetry of Ancient Egypt (1999). In 2003, however, he published On the Reliability of the Old Testament, a defense of the historical and chronological accuracy of the Bible in a style reminiscent of the biblical archaeology of Albright and Wright.

KENNETH A. KITCHEN



In On the Reliability of the Old Testament Kitchen targets the positions of Niels P. Lemche, Thomas Thompson, Philip Davies, Keith Whitelam and Israel Finkelstein who consider the Bible to have developed by Jews attempting to avoid assimilation into the Hellenistic culture that Alexander of Macedonia (356-323 B.C.E.), brought to the ancient Near East (Lemche http://www.bibleinterp.com/articles/Conservative_Scholarship.htm). For them the traditions in the Bible created an identity for Hellenized Jews, but had little or no historical content. Therefore, this school of biblical interpretation is called *biblical minimalism* (Davies <http://www.bibleinterp.com/articles/Minimalism.htm>).

ORIGINS OF EARLY ISRAEL

An early and on-going focus for Biblical Archaeologists has been the search for evidence that there were Hebrew slaves in Egypt who at some point fled into Syria-Palestine. Their research has greatly enriched the understanding of the Iron I period (Iron IA: 1200-1150 B.C.E.) which represented a recovery in Syria-Palestine from the chaos of the Late

Bronze period (1550-1200 B.C.E.).

At the beginning of the Late Bronze period Syria-Palestine belonged to Egypt's sphere of influence. Egyptian troops stationed throughout the region maintained an order that allowed farmers and herders to tend their fields and flocks; that allowed merchants to move their goods safely along caravan routes; and, most important, that allowed Egypt to tax the produce of Syria-Palestine. As political and social conditions in Egypt itself began to fall apart, however, law and order in Syria-Palestine vanished. Egyptian troops were recalled, and rogue bands of warriors (Egyptian: *'apiru*; *shasu*) raided and pillaged the land, making it almost impossible for farmers and herders and tax collectors to do anything.

Late Bronze period pharaohs like Amenophis II (1427-1401 B.C.E.) conducted military campaigns in Syria-Palestine. Amenophis waged his first campaign in 1420 B.C.E. and the second in 1418 B.C.E. His annals list 3600 *'apiru* and 15,200 *shasu* among his prisoners of war.



THE ANNALS OF AMENOPHIS II
(Memphis Stela: 29-33)

Amenophis II returned to the city of Memphis, after he had conquered every foreign state and land.

Through the power of Amun-Re, our godfather, who loves him and who delivers him from his enemies, and who gave him victory, His Majesty brought with him:

127 *Retenu* prisoners from Syria-Palestine
179 Covenant partners of the *Retenu*
3,600 *'apiru* prisoners
15,200 *shasu* prisoners
36,000 prisoners from Damascus
15,070 prisoners from Nagasu....
Household belongings too numerous to count
Goats, sheep and cattle too numerous to count
60 gold and silver chariots
1032 painted chariots
13,500 weapons

Amenhotep II reenacted his battles with his *'apiru* and *shasu* prisoners. Some were publicly hung on the bow of his barge, or the walls of temples. Others were beheaded.

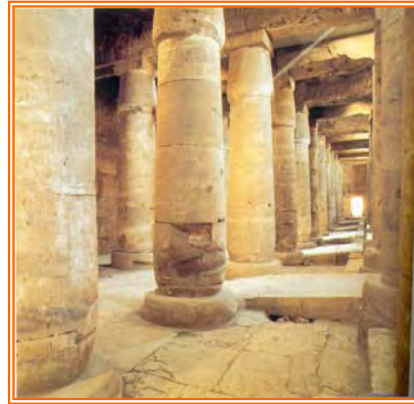
The Akkadian words: *'apiru*, *habiru* or *hapiru* do not refer just to the biblical Hebrews, but the Hebrews are probably an example of the kind of people it describes (Lemche 1985:421-429). The *'apiru* appear in too many different regions of Syria-Palestine and during too many different time periods for the words to have referred only to the Hebrews associated with the villages that appeared during the Iron I period in

the hills north of Jerusalem.

The word '*apiru* is not the proper name of a particular people, but a derogatory word that refers to a particular social class. The common bond between the '*apiru* was social, not ethnic. The '*apiru* were herders and farmers who had abandoned their pastures and farms, and fled the settled areas of Syria-Palestine for remote locations. They were a people-out-of-place, who supported their households by raiding herds, harvests and caravans. The Egyptians also used the word to identify any peoples who lived in the deserts or wilderness areas of Syria-Palestine.

The word: *shashu* is not Semitic. It is an Egyptian word meaning *landless*. Egyptians used it to refer to a variety of nomadic or semi-nomadic people. There is no evidence, however, that the Egyptians referred to the Hebrews as *shasu*. The word also appears in the Annals of Sethos I (1294-1285 BCE) that were inscribed on either side of the north doorway into the Great Hypostyle Hall at Karnak temple in Thebes (Egypt). The first three scenes describe Sethos' march across the Sinai north along the Coast Highway. His army clears the area of *shasu* who were raiding caravans from the Delta into the Philistine Plain. (Halla and Younger 2003, vol ii: 23)

HYPOSTYLE HALL, KARNAK
1320 B.C.E.
STIERLIN 1995: 140



As political and social conditions in Egypt itself began to fall apart, however, law and order in Syria-Palestine vanished. Egyptian troops were recalled, and rogue bands of warriors (Egyptian: '*apiru*; *shasu*) raided and pillaged the land, making it almost impossible for farmers and herders and tax collectors to do anything. Egyptian governors in Syria-Palestine like Biridiya governor of Megiddo and Labayu the governor of Shechem, wrote urgent letters to Pharaohs Amenophis III and Akhenaten (1353-1335 B.C.E.) accusing one another of treason, and pleading with the pharaohs to send troops (Matthews and Benjamin 2006: 146-150).

The material remains recovered by archaeologists from Late Bronze period sites create an epitaph for the once-great Bronze Age culture. The trade empires of Mycenae, Hatti and Egypt collapsed, setting into motion massive population movements, military disasters and the destabilization of Egypt's empire in Syria-Palestine. Cities were destroyed and not rebuilt. Potters returned to hand-shaping thick walled pots from clays that were full of impurities; that cracked when fired; and that were poorly

mended. As the empires died the people that these empires had ruled for so long were plunged into a life or death struggle with an unkind land in a dangerous world.

During the Iron I period long-time peoples of Syria-Palestine tried new ways of living to renew the vitality of this dying land. A major element in this transition to the Iron I period cultures from Bronze Age cultures was the establishment of hundreds of small villages, renewing a landscape that had been sparsely inhabited in the Late Bronze period.



ANNALS OF SETHOS I, YEAR ONE (1306 B.C.E.)
(Karnak Temple, KRI I 6.15-7.9)

With the help of Re, our godfather who is the Sun of Egypt and the Moon of All Lands,
And Montu who cannot be defeated by any enemy,
And Baal the Brave, who does not leave a single survivor on the battlefield,
Sethos I extended the boundaries of Egypt to every horizon.

Not a single caravan could get past the bandits along the Coast Highway
Without being attacked from the hills by *shasu* outlaws,
Until His Majesty captured every last one of them,
Not a single *shasu* escaped.

Adaptation was the signature of the cultures of the Iron I period. Cultures with distinct social, economic and political institutions appeared. Bronze Age culture in Syria-Palestine was homogenous. Iron I



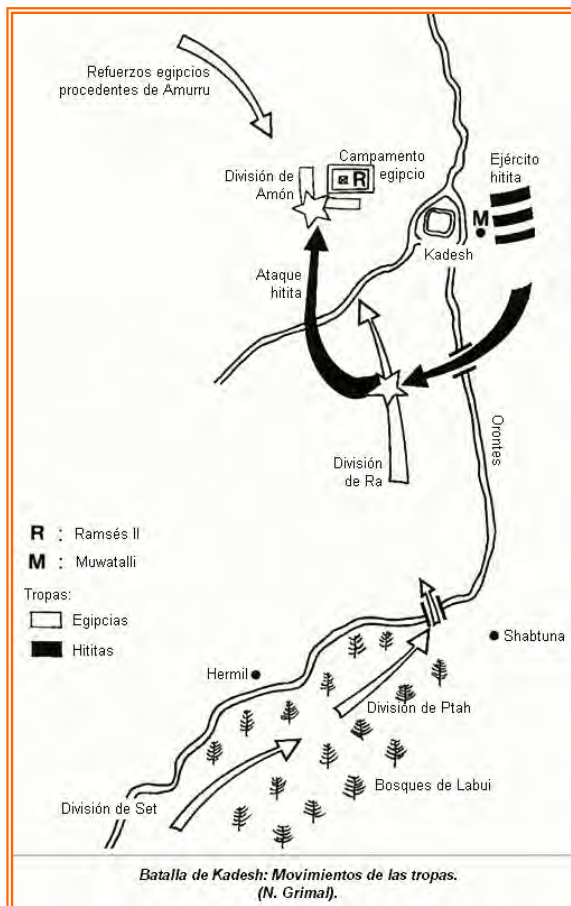
period cultures, in contrast, were diverse. The peoples of each region of Syria-Palestine developed unique ways to adapt to their life in different lands. There was no dominant political or economic system. The business of feeding and protecting the people and of caring for the land and its people was local.

SETHOS I
HALL OF ANCESTORS
1306-1290 B.C.E.
RELIEF
© STIERLIN 1995: 147

During the Iron II period (1000-586 B.C.E.) the diverse cultures of the Iron I period would become the states of Ammon, Moab and Edom east of the Jordan River; Israel and Judah west of the Jordan River; and Philistia, Tyre and Sidon along the coast of the Mediterranean Sea. The social world of each was customized to fit its unique geography and population (Bloch-Smith and Nakhai 1999).

The states that were developing in Ammon, Moab, Edom, Israel and Judah were innovative. Their institutions had not previously appeared in Syria-Palestine. The states that were developing in Philistia, Tyre and Sidon, however, were conservative following models developed during the Bronze Age.

Although life shifted from the macro economics of the Egyptian



empire to the micro economics of Gilead or of the Jezreel Valley or of the Shephelah Foothills, there is a clear continuity between the culture of the Late Bronze period and Iron I period. The only clearly identified outsiders were the Sea Peoples who settled the plain along the coast of the Mediterranean Sea.

BATTLE OF KADESH

Two common social institutions shared by all micro cultures in Syria-Palestine were villages and states. Both appear in the Bible (Matthews and Benjamin 1993). The social world of early Israel (1200-1000 B.C.E.) was a village culture that developed during the Iron I period. The monarchy was a city culture or state that developed during the Iron II period

(1000-586 B.C.E.). Villages are a social institution in a decentralized and subsistence culture. States are a social institution in a centralized and

surplus culture.

The first Hebrew villages appeared in the hills of Judah, west of the Jordan River and north of Jerusalem. Their initial growth took place around 1200 B.C.E. No dates for the ancient world are absolutely accurate, but three prominent wars help calendar the appearance of these Hebrew villages: the Battle of Kadesh (1286 B.C.E.), the wars of Merneptah (1224-1214 B.C.E.), and the Battle between Ramesses and the Sea Peoples (1190 B.C.E.).

The Battle of Kadesh took place around 1286 BCE. Pharaoh Ramesses II of Egypt and Hattusilis III, the Great King of the Hittites, battled on the Orontes River in Syria. For more than one hundred years, Egypt and Hatti had wrestled for political and economic control of Syria-Palestine. The conflict drained the resources of both states. Following this famous, but inconclusive, battle at Kadesh a treaty was negotiated.

Both Egyptian and Hittite versions of the treaty have been recovered. Ramesses II had the treaty carved in hieroglyphics on the walls of no less than five temples (Hornung and Bryan 2002:20). One was on the walls of the Temple of Amon in Karnak and another on the walls of the Ramesseum, his funeral chapel in the Valley of the Pharaohs. The Hittite version is written on clay tablets in Akkadian cuneiform, which was the diplomatic language of the ancient Near East. Archaeologists recovered these tablets from the archives of Hattusas, the Hittite capital.



The Treaty of Ramesses II and Hattusilis III was a remarkable political and military accomplishment (Matthews and Benjamin 2006: 91-96). It was motivated both by the need of both Egypt and Hatti for economic recovery and by the increasing military threat of the Sea Peoples migrating into the eastern Mediterranean. The treaty ended the war and liberated the people of Syria-Palestine from both Egyptian and Hittite domination. Peace ensued for virtually the next fifty years.

BATTLE OF KADESH
RAMESSEUM
SANDSTONE

The withdrawal of the Egyptians and the Hittites from

Syria-Palestine was not an unqualified blessing for its indigenous peoples. Population dropped dramatically. Cities and villages were destroyed, trade caravans vanished and sixty percent of the people of Syria-Palestine died from starvation due to crop failures. Famine led inevitably to the outbreak of wars and endemic diseases aggravated by shifting populations. These disasters were not isolated and sporadic, but ongoing. Some villagers in Syria-Palestine took advantage of their freedom and tried to insure their households against an uncertain future by migrating into the hills where they reestablished abandoned villages or founded new ones of their own. Among these refugees were the Hebrews, the ancestors of biblical Israel.

Merneptah (1224-1214 BCE) celebrated his wars on a stela originally inscribed by Amenhotep III (1398-1361 B.C.E.). In 1896, excavators recovered this granite column, which is more than seven feet high and three feet wide, from Merneptah's funeral chapel in the Valley of the Pharaohs. It is now in the Egyptian Museum in Cairo. The stela contains the only mention of Israel yet discovered from the Egypt of this period. As a result, it has been used to argue that the Israel which Merneptah encounters in Syria-Palestine before 1200 B.C.E. was founded by the Hebrews who must have fled Egypt.

RAMESSEUM
VALLEY OF THE PHARAOHS



The Battle with the Sea Peoples (1190 B.C.E.) is celebrated on the outside walls of Medinet



INAUGURATION OF JOSHUA
(Josh 1:1-9)

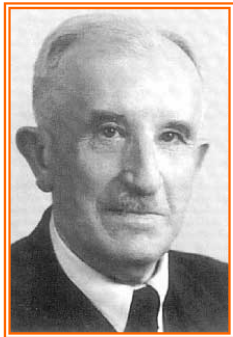
After the death of Moses, the Servant of Yahweh, Yahweh spoke to Joshua son of Nun, who had helped Moses. "My servant Moses is dead. Now cross the Jordan River with the people into the land... You will walk the land I promised to Moses. The land of the Hittites will be your land -- east to the Mediterranean Sea, south to the Sinai Desert, north to the Lebanon Mountains and the Euphrates River. No one shall be able to stand against you all the days of your life. I was with Moses. I will be with you. I will not fail you or forsake you. Be strong and courageous; for you shall put this people in possession of the land that I swore to their ancestors to give them...."

Habu, the funeral chapel of Ramesses III (1194-1163 B.C.E.) in the

Valley of the Pharaohs. Following their invasion of Egypt some of the Sea Peoples settled along the coast of Syria-Palestine to become the Philistines of the Bible.

Therefore, based on archaeological dates for the Battle of Kadesh (1286 BCE), the wars of Merneptah (1224-1214 BCE), and the Battle with the Sea Peoples (1190 B.C.E.), the appearance of the Hebrews in Syria Palestine is now dated to 1200 B.C.E. after the end of the Late Bronze period and before peoples like the Philistines and the Hebrews began to affect seriously the foreign policies of Egypt in Syria-Palestine.

The biblical Hebrews were a micro culture that settled hundreds of new villages in the hills along the west side of the Jordan River north of Jerusalem. A long-standing tradition of interpreting the Books of Joshua-Judges describes the Hebrews as foreign warriors who invaded Syria-Palestine from the west. Some archaeologists and historians like Albright, Wright and Bright considered the archaeology of Syria-Palestine to support this understanding of the appearance of the Hebrews in Syria-Palestine as a conquest.

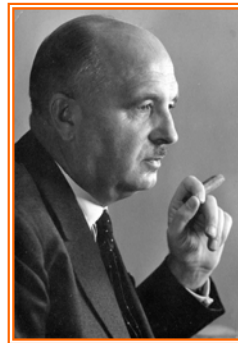


In contrast to the conquest theory of Albright, Albrecht Alt (1883-1956) and Martin Noth (1902-1960) proposed that the Hebrews peacefully emigrated west from the Jordan River into unsettled areas of Syria-Palestine. There were few battles. Violence between these Hebrews and other peoples occurred only when the original Hebrew villages begin to expand.

ALBRECHT ALT (1883-1956)

Noth was born in Germany. He considered himself an historian of ancient Israel. Noth argued that early Israel was an amphictyony – a league of twelve tribes whose lands surrounded a central sanctuary like Shechem or Hebron. One tribe protected and provided for the sanctuary for one month each year. In A History of Pentateuchal Traditions (1948) he argued that the traditions of ancient Israel preserved in the first six books of the Bible – a hexateuch – were organized around five basic themes: *Guidance out of Egypt*, *Guidance into the Arable Land*, *Promise to the Patriarchs*, *Guidance in the Wilderness* and *Revelation at Sinai*.

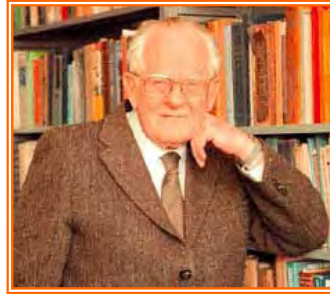
MARTIN NOTH (1902-1960)



A third explanation of the appearance of the Hebrews in Syria-Palestine was presented by George Mendenhall and Norman K. Gottwald. Both described the appearance of the Hebrews in Syria-Palestine as a social revolution. Once Egypt's military support for the rulers of the states in Syria-Palestine was withdrawn, villagers stopped farming and herding for them. They revolted against the surplus state culture that had enslaved them during the Bronze Age. After the cities along the coast that governed their villages were destroyed, they moved east toward the Jordan River and established a decentralized or *retribalized* subsistence culture (Gottwald 1979).

GEORGE MENDENHALL

Explaining the appearance of Israel in Syria-Palestine as a conquest, immigration or revolt did not ignore archaeology, but none of these explanations used archaeology as a central argument. They were theories drawn from biblical studies, and not archaeological field work. As the material remains from excavations in Syria-Palestine were more closely studied during the last half of the twentieth century, however, it became more and more clear that the Bible is the only evidence for an invasion or conquest of Syria-Palestine by the Hebrews from the east during the Iron I period. Archaeology shows that herders migrated into Syria-Palestine from the Sinai Desert and elsewhere during both the Bronze Age and the Iron Age. Archaeology does not show that the villages in the hills of Judah were founded by foreigners or warriors. No material remains identify the Hebrews as warriors who invaded Syria-Palestine or as revolutionaries who overthrew its great cities. At least twice during the Iron I period wars destroyed many cities and villages in Syria-Palestine, yet there is nothing in the archaeological record linking the Hebrews to these destructions. These villagers were natives in Syria-Palestine and they were farmers and herders. The economy of these villagers was agricultural, not military. They left almost no weapons. They built few fortifications or monumental buildings. Giloh, south of Jerusalem, is a major exception. Their writing, language and material culture link them to cultures found throughout Syria-Palestine.



Archaeology also suggests that the Hebrews who founded the villages in the hills west of the Jordan River Valley were from cities along the coast, not nomads from the desert. The villages, however, were not founded by the cities of the plains along the coast of the Mediterranean Sea and in the foothills inland. These had been destroyed before the villages began to appear. Consequently, these villagers did not wage war in the hills to the east; they survived the wars on the plains and foothills

to the west. What these villagers had in common was that they were social survivors who fled the famine, plague, and war which brought the Bronze Age to an end. They were peoples who for environmental or economic reasons emigrated from the cities of Syria-Palestine and settled into a politically less complex culture in the hills. They left a centralized, surplus state culture and created a decentralized, subsistence village culture called *Israel* (Chaney 1983: 39-94). Politically they were *Israelites*; culturally they were *Hebrews*. They were adaptable, they were survivors and they were masters at crafting the words that preserves the worldview of this amazing people.

Archaeologists have identified more than three hundred village sites in the hills which date from the Iron I period. Ninety percent were new foundations. For example, in one sample of 136 villages, 97 did not exist before 1200 BCE. Similar villages appear east of the Jordan, which the Bible calls the *Gilead*. The villages were small and scattered. Most were only one-acre parcels of land. There were some 50-300 inhabitants per village. For example, Ai was a modest 2 $\frac{3}{4}$ acre village founded about 1220 BCE on the site of a 27 $\frac{1}{2}$ acre city destroyed at the end of the Early Bronze period (3000-2000 BCE). The nearest village was Khirbet Raddana, four miles west.

Archaeology shows the Hebrews were remarkably successful at maximizing their labor and spreading their risks. Between 1000 and 800 BCE their population expanded to 80,000, and more than 100 new villages were founded in the hills of Samaria, Galilee to the north, and the Beersheba basin to the south. Every household shared in the labor intensive work of terracing, planting, and processing the grain and fruit. More and more agriculturally marginal land was turned into productive farms and vineyards. What was not consumed was stored in huge buildings like those at Raddana, Shiloh, and Tel Masos as a check against famine.



AMARNA LETTER 244:1–30
(Matthews and Benjamin 1997: 138)

Pharaoh, ruler of the heavens and earth
From: Biridiya, governor of Megiddo

I am your slave, and I renew my covenant with you as my pharaoh by bowing before you seven times seven times.

Pharaoh should know that, since he recalled his archers to Egypt, Labayu, the governor of Shechem, has not stopped raiding the land of Megiddo. The people of Megiddo cannot leave the city to shear your sheep for fear of Labayu's soldiers.

Because you have not replaced the archers, Labayu is now strong enough to attack the city of Megiddo itself. If Pharaoh does not reinforce the city, Labayu will capture it.

The people of Megiddo are already suffering from hunger and disease. I beg Pharaoh to send 150 soldiers to protect Megiddo from Labayu or he will certainly capture the city.

The Hebrews cleared new areas of *maquis* brush and cultivated the land, using wooden or iron blades. They farmed a combination of wheat and barley, depending on the quality of the soil, temperature, and rainfall. They tended fig and olive trees and skillfully managed grape vines on terraced hillside plots.

Maquis brush is a stand of various evergreen shrubs and trees from three to nine feet tall. These stands include the Carob (Latin: *Ceratonia siliqua*), Pistacio (Latin: *Pistacia lentiscus*), the Buckthorn (Latin: *Rhamnus alaternus*), the Hawthorn (Latin: *Crataegus*), the Bay Laurel (Latin: *Laurus nobilis*), the Myrtle (Latin: *Myrtus communis*), the Broom (Latin: *Spartium junceum*) and the Sandarac (Latin: *Tetraclinis articulata*).

MAQUIS BRUSH

A significant influence on the social structure of early Israel was where its pioneers chose to live. They fled from the coast with



its trade routes, commercial centers, and farms, where no one was safe, and they founded new villages in the hills just north of Jerusalem. Here the land was safe, but it was barren and rugged and demanding, all of which would affect the society which developed there and the roles which men and women would play in it. Here in the hills there would be no surplus to fuel the economy.

CONCLUSION

During the Late Bronze period (1550-1200 B.C.E.) people in the panhandle of Syria-Palestine abandoned large cities (more than 50 acres) inland in the hills and migrated to unfortified smaller cities (less than 12 acres) dominated by Egypt along the coast. Population declined. The rich were very rich, and the poor were very poor. Sanctuary architecture was diverse. International trade increased. An alphabet replaced picture-writing. 'Apiru mercenaries terrorized governors loyal to Pharaoh Akhenaten (1353-1335 B.C.E.), and Pharaoh Merneptah conquered Ashkelon, Gezer, Yanoam and Israel.

The Death of the Firstborn of Egypt (Exod 1:7—13:16) and the Creation of the Firstborn of Israel (Exod 13:17—Num 27:11) are set in the Late Bronze period, although they appear in the Bible as they were told in the Iron II period (1150- 587 B.C.E) when Israel built a fort near the largest and most plentiful spring in the Sinai at Kadesh Barnea, which is prominent in the stories.

The surplus economies of the Bronze Age were built by monarchs, taxes, soldiers, cities and slaves. Monarchs provided a centralized government for the great cities. Soldiers controlled its population and expanded its borders. Slaves produced goods for trade. It was an efficient, but brutal, system. Taxation, slavery and war painfully affected the lives of all but a minority of the people who lived in these states. When great wars of commerce and conquest brought down the international trade empires of Mycenae, Hatti, and Egypt about 1200 B.C.E., survivors in Syria-Palestine had neither the resources, nor the desire, to rebuild the social system which had enslaved them. Therefore, the economy of early Israel was not a surplus or slave economy, but a subsistence economy. There would be no monarchs, no soldiers, no slaves, no taxes, no cities and no standing army. It was a demanding and idealistic society. Nonetheless, it lasted almost 200 years.



WHAT YOU HAVE LEARNED

- For William F. Albright the goal of Biblical Archaeology was to demonstrate that the traditions in the Bible were historically reliable.
- The Biblical Archaeology Movement sought to provide concrete evidence for that position of the Biblical Theology Movement that Christianity was rooted in unique historical events, not in the recurring cycles of nature.
- Many Biblical Archaeologists today find the origins of the people of Israel in refugees who tried to insure their households against an uncertain future in the cities along the Coast Highway in Syria-Palestine by migrating into the hills where they reestablished abandoned villages or founded new ones of their own.
- The early Hebrews were displaced households (Akkadian: *'apiru*) whose common bond was not ethnic, but social.
- The Annals of Merneptah describe his conquest of the people of Israel, which helps archeologists date and local the first Hebrew villages in Syria-Palestine.
- The economy of the early Hebrew villages was agricultural, not military. They left almost no weapons. The Hebrews built few fortifications or monumental buildings.

CHAPTER 8

WHEELER-KENYON METHOD



Chapter 8 describes the goal of the Wheeler-Kenyon method, and the differences between the sondage, horizontal and Wheeler-Kenyon methods of excavating a site, and why is accurate record keeping such an essential part of the Wheeler-Kenyon method. It also explains the important elements contained in an excavation proposal, how pottery is collected and analyzed during the excavation, and defines terms like Theodolit, probe trench, square, locus, balk, guffa, shifter and dump.

Regardless of what school of archaeology is used to interpret artifacts all archaeologists follow some variation of the Wheeler-Kenyon Method to excavate a site. The method is named for British archaeologists Mortimer Wheeler (1890-1976) and Kathleen Kenyon. Wheeler developed the method during 1930-1935 while excavating Roman village of Verulamium (England). Kenyon was a member of Wheeler's team at Verulamium. She later refined his method and used it during her excavations at Jericho (1952-1958). Although Wheeler and Kenyon codified the various parts of the system into a coherent process, the method was the end result of the work of a number of archaeologists like William M. Petrie, Augustus H. Pitt-Rivers (1827-1900), William F. Bade (1871-1936) and George A. Reisner (1867-1942).



AUGUSTUS H. PITT-RIVERS (1827-1900)

Petrie made several important contributions to the Wheeler-Kenyon Method. Most of Petrie's predecessors were simply interested in salvaging museum quality antiquities. He was much more interested in ordinary objects that helped reconstruct the history of a site. He considered small objects, like pottery, to be more useful than museum objects in interpreting a site.

Excavations take artifacts out of context. Petrie realized that without a context artifacts are meaningless. Therefore, he stressed the importance of carefully recording the context from which artifacts were removed. Curiously, however, he was unfortunately selective in his own excavations. He did not record all the artifacts, but only those he identified as important to his pottery chronology (Davis 2004: 29). The first archaeologist to meticulously record his excavations was Pitt Rivers (Wheeler 1954:15-28).

Using different styles of pottery, Petrie developed a ceramic calendar that allowed him to date the various levels of occupation at a site using changes in the clay used for pottery, in the shapes, in the decoration and in the firing. This pioneering work done by Petrie in understanding the ceramic typology was perfected and put by use throughout Syria-Palestine by Louis-Hugues Vincent, William F. Albright and Nelson Glueck.



As a surveyor Petrie also began drawing top plans and taking topographical information to include in his excavation reports. He was also one of the first archaeologists to make extensive use of photography to preserve the context of the artifacts from a site.

GEORGE A. REISNER (1867-1942)



Stratigraphy is one of the major interpretive principles of field archaeology, borrowed from geology. It is assumed that material remains left by human beings create levels like the sediment left in the geological record – one on top of the other. Each layer of material remains is called a “level” (Latin: *stratum* [singular] or “*strata*” [plural]) and identified by a Roman numeral. Ground level, for example, is “*stratum I*”. Upper levels must have accumulated later than lower levels. The material from one level, however, can mixed with another by earthquakes, burrowing animals, or humans burying garbage or recycling stones. (Kenyon and Moore 1987: 185).

Petrie was also aware that tells (Hebrew: *tel*; Arabic: *tell*, *tall*) were architectural, not geological features. They were created by successive eroded layers of settlement (Latin: *stratum*, *strata*). George A. Reisner (1867-1942) was the first to study a tell as a record of human occupation (Davis 2004: 42-44) when he excavated at Sebaste (1908-1910). The tell for Reisner was not just a series of artifacts, but a record of human settlement.

Only about 10% of a site is architecture; 90% is debris. By

analyzing not only the architecture on the site, but also the debris on the site, Reisner reconstructed the process that formed the tell.

Reisner identified different types of debris. Geological debris is deposited by natural events like wind and water. Building debris is left by workers like the chips of stone masons. Garbage debris is the remains of livestock or meals. Unfortunately Reisner's insights were overlooked, and had to be rediscovered by Wheeler (Davis 2004: 44).

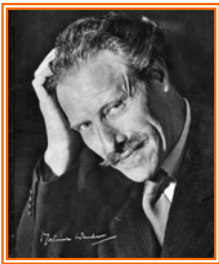
Badè directed excavations at Mizpah of Benjamin (Hebrew: *Tell en-Nasbeh*) using what was then called the *Reisner-Fisher* method. Clarence H. Fisher was an accomplished archaeologist who focused on the architecture of a site. Albright studied with him in Jerusalem.

WILLIAM F. BADÈ (1871-1936)

Bade cleared about two thirds of the site, and then divided tells into squares thirty feet on a side. He excavated the squares in strips, which were then back-filled. Badè drew plans, took photographs, and hand wrote descriptions of some twenty-three-thousand artifacts. His fieldwork was superior to that used by Elihu Grant working during the same period at Beth-Shemesh and by Gerald M. FitzGerald excavating at Beth-Shean.



Aaron Brody is now the director of the The Badè Project - a collaborative effort of students and faculty at the Graduate Theological Union and UC Berkeley to make available in digital format the holdings of the Badè Museum for study and teaching (<http://bade.psr.edu/bade/project.html>).



MORTIMER WHEELER (1890-1976)

Wheeler was born in Glasgow (Scotland) and became Lecturer in Archeology at the University College of Cardiff (Wales) and then Professor of Roman Archeology at the University of London (1948-55) where he had studied. His fieldwork focused on both South Asia (India, Pakistan) and Great Britain at Verulamium (UK), a city built by the Romans and Maiden Castle (UK), the largest Iron Age hilltop fortress in Europe.

Wheeler's books -- Archaeology from the Earth (1954), Early India and Pakistan (1959), Civilizations of the Indus Valley and Beyond (1966), Still Digging (1955), and Alms for Oblivion: an antiquarian's scrapbook

(1966) – had a wide public audience. He was also a charismatic television personality who raised public awareness about all that can be learned about human development from archaeology and anthropology.

Kenyon was the daughter of Frederick Kenyon. Her father was both a biblical scholar and the director of the British Museum (Cohen and Joukowsky 2004). She did her undergraduate degree in history at Oxford.

In 1929 Kenyon worked as photographer on an excavation at the Great Zimbabwe directed by Gertrude Caton-Thompson. When she returned to England, she joined Mortimer and Tessa Wheeler on their excavation at Verulamium (1930-1935).

From 1931-1934 Kenyon excavated at Samaria under the direction of John and Grace Crowfoot. Using the techniques of the day she dug a north-south trench across the tell exposing Iron II (1000-586 B.C.E.) and Roman (37 B.C.E.-324) settlement layers. Artifacts from her trench at Samaria were used to date material from the Iron Age throughout Syria-Palestine. Her work also allowed archaeologists to more accurately date Roman terra sigillata pottery (Kenyon 1957).

Kenyon was a member of the Council of the British School of Archaeology in Jerusalem where she taught from 1948 to 1962. In 1962 she became president of St. Hugh's College, Oxford. She was also the first woman to become president of the Oxford Archaeological Society. In January, 1951 she traveled to Jordan and undertook excavations at Jericho (1952-1958) on behalf of the school. Her work at Jericho revolutionized the understanding of Neolithic cultures in Syria-Palestine.

From 1961 to 1967 Kenyon excavated in Jerusalem. Her field school helped to train a generation of archaeologists, who went on to teach in Britain, Australia, Canada, the United States, Denmark and elsewhere. Among those whom Kenyon mentored was P. Roger Moorey. He was director of the Ashmolean Museum of Art and Archaeology at Oxford University for nineteen years (<http://www.ashmolean.org>). The Ashmolean Museum preserves an outstanding research collection of Near Eastern artifacts. Moorey wrote extensively on the archaeology of Iran, Iraq, Syria-Palestine, Egypt and Turkey. Ancient Mesopotamian Materials and Industries: the archaeological evidence (1994) was among his significant publications.

Moorey worked with Kenyon on the excavations which she directed for the British School of Archaeology in Jerusalem (<http://www.cbri.org.uk/>). She influenced his interest in archaeology

and the Bible. The results of their collaboration enriched Moorey's publications for the general public: Archaeology, Artefacts and the Bible (1969) and his Century of Biblical Archaeology (1991). He edited a commemorative volume with Peter Parr for her: Archaeology in the Levant: essays for Kathleen Kenyon (1978), and published a revised edition of her book: The Bible and Recent Archaeology (1987). Kenyon encouraged Moorey to found the journal Levant which he edited for eighteen years (<http://www.art.man.ac.uk/ARTHIST/levant.htm>).

Prior to the work of Petrie, Wheeler and Kenyon some archaeologists used the sondage method. They dug long deep trenches through their tells. Petrie realized that these vertical trenches prevented archaeologists from accurately drawing top plans of the strata cut by the trenches. Other archaeologists excavated horizontally across the entire surface of a site. Layers of occupation were simply peeled off an excavation site. While horizontal excavations gave maximum exposure to a site, they destroyed the chronology of the site's development. The Wheeler-Kenyon Method vertically excavates squares most only fifteen feet on a side (Mazar 1992:1-34; Laughlin 2000:17-32).

Excavations destroy the sites they excavate. Archaeologists cannot go back to a previously excavated site and see exactly what the original excavators saw. Record keeping should provide all the information archaeologists who were not present at the original excavations need to know to reconstruct the site in three dimensions. Therefore, the Wheeler-Kenyon method establishes guidelines for both digging and recording.

Procedures for digging include identifying the site, choosing squares to excavate and probing those squares. Procedures for recording excavations include surveying the site, square supervisors' journals, locus sheets, balk drawings and photographs.

To begin the process of excavating dig directors must select a site, and submit a proposal to the Department of Antiquities responsible for the site. Requirements for proposals vary, but all require a clear statement of purpose. For example, a consortium of institutions under the direction of Steven M. Ortiz and Sam Wolff resumed work at Tel Gezer in 2006 (<http://www.gezerproject.org/>). The project is re-investigating the Iron Age levels of occupation (Strata V-XIII).

Most Departments of Antiquities also require the archaeologists to outline not only the schedule for their excavations, but also the schedule for their publications. When archaeologists fail to publish their annual and final reports on a site scholarly assessment of the work is crippled, and popular appreciation of the site is manipulated by amateur

enthusiasts (Cline 2007: ix-xv). The first excavations at Qumran (1951-1958), for example, were directed by Roland De Vaux. Unfortunately, the final report of De Vaux's excavations has yet to be published, and many artifacts and records from Qumran now at the Ecole Biblique in Jerusalem are still unavailable to scholars (Atkinson 2008). The painstaking work of completing the final report on De Vaux's excavations undertaken by Robert Donceel and Pauline Donceel-Voute can be more labor intensive than the original excavations themselves (Donceel and Donceel-Voute 1994).



EUROPEAN ARCHAEOLOGIST WITH LOCAL EXCAVATION TEAM

Proposals also establish a formula for the preservation and display of both the artifacts and the site. International antiquities law reflected in the UNESCO Convention on Cultural Property (1970), the University of Pennsylvania Museum *Philadelphia Declaration* (1970) and the International Council of Museums Code of Professional Ethics (1989) clearly assign ownership of all artifacts to the government of the country where they were recovered. Nonetheless, proposals can negotiate long-term loans or traveling exhibitions of artifacts to museums and universities sponsoring the excavations.

Some, but not all, Departments of Antiquities require that excavations proposed by foreign archaeologists and institutions include an archaeologist from their own country on staff in a senior position. Departments want to guarantee that the terms of the proposal or license will be fulfilled, and that the cultural heritage of their country will be professionally preserved.

Dig directors are also responsible for assembling a team for the excavation. Some team members are professional; some are not. Amateur team members include volunteers and hired workers.

CAMP DOROT FOR STUDENT VOLUNTEERS
TEL MIQNE

Historically, workers were hired from communities neighboring the excavation site. Today most excavations depend on student volunteers from the sponsoring universities, and volunteers from the general public for whom archaeology is a personal passion. Even



excavations with volunteers from abroad try to hire as many local workers as possible in order to educate communities around the site on the importance of their cultural heritage.

Students pay for their own transportation to the site. They also pay tuition to their universities in order to receive academic credit for their work. The work day for students is divided between classroom or travel study and the excavation.

SOIL BUCKETS AND RAILROAD CART TO DUMP



The make up of the professional staff for an excavation depends on the goals stated in the proposal. All teams will have professionals like a ceramicist who is a specialist in reading pottery recovered from the site. Some, like sites settled after the Persian period (539-323 B.C.E.) when coins came into use, will have a numismatist who is a specialist in reading coins. The professional team excavating the bakeries in the workers' village on the Giza plain beside the pyramids included an archaeobotanist to study seeds found at the site.



The first step at the site itself is to clear off the overgrowth. The initial overgrowth at a site, when the excavation begins, and the seasonal overgrowth, when an excavation resumes, can prevent archaeologists from getting a clear picture of the site as a whole. Workers generally use only hand tools for the project. Power tools and tractors can inadvertently damage the surface of the tell or the artifacts themselves.



SIFTER AND SMALL FINDS

Once the site is cleared the dig director needs to select a site to dump the soil removed from the squares. One challenge of finding a good place for the dump is that it is easily accessible from the squares. At some site workers install a narrow gauge railroad



and use mine carts to move the soil from the squares to the dump. Workers at most sites use wheelbarrows to move the soil. Another challenge of finding a good place for the dump is to be sure that it will not be necessary to move the dump and excavate beneath it at some point later.

Small finds like seals, beads, pins, and whorls are often overlooked during normal digging. Even though they are small they still contribute to the overall understanding of a site. Therefore, the dig director also needs to find a site for shifting. The dig director establishes a formula for how many buckets of soil from each square will be sifted for small artifacts. The bucket of soil is dumped into a frame with a fine mesh screen bottom which workers shake back and forth. The soil drops through the screen as dust revealing the small finds hidden in it. As with the dump site it is important to locate the sift site someplace that will not need to be excavated later.

After the site is clear a surveyor lays a grid over the site using a Theodolite. The Theodolite is a small mounted telescope which rotates both horizontally and vertically. It is used to measure angles in surveying, meteorology, and navigation.

Site surveyors create a geological top plan of the entire site which will serve as a tool to identify the squares to be opened, and to label the artifacts removed from each square. Their grid also serves to locate the site within larger geological maps for the region and to position it correctly on Global Positioning Systems (GPS).



SURVEYOR READING A THEODOLITE

Significant artifacts and natural features of the tell can also be accurately positioned by using an infra red beam. The beam is focused on the artifact, and then its coordinates are read into the GPS fixing its location. This database can subsequently be used to reconstruct accurate virtual models of the site and of artifacts once they have been removed.

Dig directors use the surveyor's grid to assign supervisors and their teams to excavate certain squares. The choices are determined by the goals of the excavation set down in the proposal. Usually the choices are a mix of squares from different areas of the site, which would be connected with different aspects of daily life. Historically archaeologists were interested primarily in large, public, monumental architecture – the

gates, the walls, the palaces and the sanctuaries at a site. Today most directors include squares that will represent the lives of ordinary people as well.

SURVEYOR'S GRID
SHILOH



Workers then open a probe trench to test if, in fact, there are remains in the square relevant to the goals of the excavation. A probe trench is typically three feet wide and fifteen feet long. For example, large, public buildings are often found on the acropolis – the highest elevation on a site. Gates not only reflect the

defense resources of a city, but generally also its judicial institutions. Sanctuaries are connected with the economic system.



PILLAR DRUMS IN 3X15 FT PROBE TRENCH

Once a square has been probed the square supervisor directs workers to carefully remove the top layer of soil from stratum one. Strata are often labeled with Roman (Stratum I), rather than Arabic numbers (Stratum1).

HOE, BRUSH, BUCKETS



Workers use only simple hand tools to dig out a square. They use a traditional bucket made from an automobile tire (Arabic: *gufa*) or a contemporary plastic bucket to lift the soil out of the square and measure it. For example, the dig director will stipulate that every fifth or eighth bucket of soil will be sifted or washed in a flotation tank.

Each side of the square is five meters or some fifteen feet long. Each square is separated from the other by a balk of unexcavated soil that is one meter or some three feet wide. These balks preserve the chronology of a site. Archaeologists use balks to record the vertical relationship of one stratum or time period to another and the



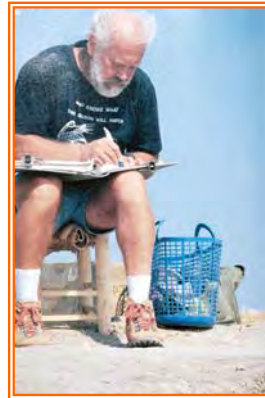
relationship of any buildings or architecture to each time period. This significantly improves the ability of the excavators to date artifacts (Callaway 1979). Balks also allow archaeologists to compare the location of artifacts in one square to the location of artifacts in another.

15 FT SQUARES (L)

Recording begins with the journal kept by the square supervisor. As workers dig, bucket and brush their way through a settlement layer, the supervisor records not only the findings, but the first impressions of the team about what the findings reveal about life at the site.

Another recording responsibility of the square supervisor is completing locus sheets. As each artifact is uncovered, the supervisor assigns it a number and then completes a detailed questionnaire about it. At some excavations these sheets are filled in by hand, other sites use computers.

SQUARE SUPERVISOR
ASHKELON



In 1983 the Cobb Institute at Mississippi State University joined the Lahav Research Project at Tell Halif (Israel). After eight seasons in the field fifteen settlement layers had been identified including the Early Bronze period (3000 to 2300 B.C.E.), the Late Bronze period (1550 to 1200 B.C.E.), the Israelite Iron II period (900 to 700 B.C.E.), the Roman period (37 B.C.E. – 324) and Byzantine period (324-640).

During the 1999 season of the Lahav Research Project at Tell Halif, Joe D. Seger, the dig director, tested newly applied digital methods of

field recording and reporting, with the intention of better meeting the needs of archaeologists working in the world of the Bible.



JOE D. SEGER, MISSISSIPPI UNIVERSITY
LAHAV RESEARCH PROJECT

The 1999 field season of the Lahav Research Project at Tell Halif [LRP] was designed to test newly applied digital methods of field recording and reporting, with the intention of better meeting the needs of Middle Eastern archaeology at the end of the 1990s.

...the quantity of artifacts recovered even by a small team often overwhelms traditional means of dissemination and sets a demand for new, efficient ways of reporting in visual, graphic form.

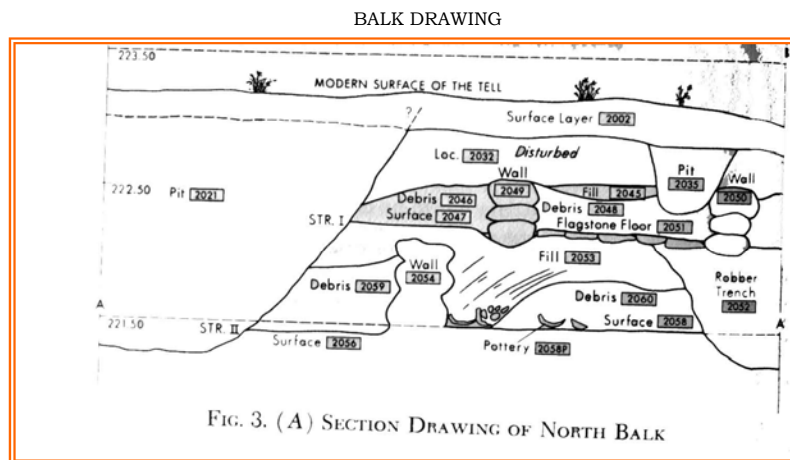
These were the questions which faced the LRP at the end of the 1993 season: how can we manage the data more efficiently while in the field, and how can we disseminate that data quickly and efficiently to others in the discipline?

We began the season, accordingly, with several notebook computers in the field, each linked to a server (also a notebook), a fact which permits both the control of the input of data and allows any member of the staff to track progress in laboratory treatment, photography, disposition, etc. Because the server assigns sequential numbers as requests from the field are made to register an object find, a material culture sample, or a new locus, the field and laboratory staff are guaranteed that accidents of duplicate numberings will not occur. Simultaneously, progress in the field and in the lab can be tracked from any of the several laptops on such matters as the drawing or photography of an object, as well as the formal description assigned by specialists. Every entry becomes part of the common database immediately and is available by search for a specific item or by browsing the database entries. Significantly, reports on aspects of the excavation, recording, or reporting can, therefore, be generated quickly. And, we believe, the fact that a supervisor in the field-or an artist in the lab-can simply select descriptive terms from drop-down windows saves time and brings greater accuracy to the recording procedures.

Another important feature of the computerized database is that it allows the introduction of 3D analysis and simulation into a dig while it is still in progress. By using the data entered into the database by field personnel, we are able to construct a computerized view of the progress and finds in the field. Each area, locus, and basket is represented as a volumetric area. Each object, when found in-situ, is also recorded in three-dimensional coordinates and shown in the 3D browser window. The significant insights rewarded through use of the 3D display are magnified as the dig season progresses. Early, there is not enough data to create any kind of visual anomalies, but we have been using it as a visual error checking device for data entry and recording errors. Later, as more data is introduced to the system, visual clues are created by the grouping of objects and architecture. The 3D browser is still in its infancy and we are currently only tracking object finds found in-situ although we are planning to add architectural analysis and reconstruction to the program very soon. We will offer a complete description of our processes and methods as soon as possible.

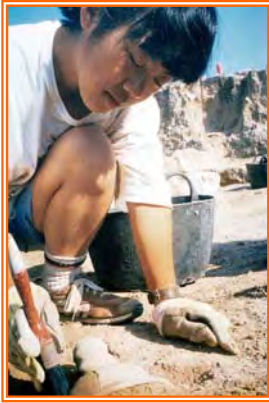
Reporting responsibilities mark the other main problem this 1999 experimental season addresses. We have shown in previous work that modern digital communication devices permit archaeologists to report findings far more completely than ever before; in fact, in displaying the Persian and Iron Age figurines discovered in the 1992 and 1993 seasons on the DigMaster website, we made available to web browsers more than 5,000 color photographs and drawings and 84 QuicktimeVR object movies of the ceramic and stone figurines, something impossible except through digital and electronic media. This DigMaster web publication project, however, occurred well after the seasons had ended. In the 1999 LRP field season, the attempt is to prepare basic excavation data and graphic representations of all artifacts, architecture, and field photographs while yet in the field, all of which will be made available, as far as possible, on a daily basis on this web page.

The benefits of this experiment in dissemination of LRP excavation data are several. First, if successful, we will have demonstrated the viability of rapid (nearly immediate) reporting. Colleagues and staff members not on location will see high resolution images of the excavation as it progresses and of the artifacts recovered in the excavation; we believe that the images will be sufficiently detailed to permit close study on monitor. Second, the numbers of photographs that can be contained and disseminated in digital format will have demonstrated the viability of *total publication*, something not economically permitted in traditional publication (<http://www.cobb.msstate.edu/dig/LRP-1999-01/overview.html>).



When workers reach bed rock, square supervisors also draw the three-foot wide balks framing the square. These balk drawings are like a slice of cake. Each layer of settlement is clearly indicated as are the artifacts connected with the stratum. In addition to artifacts that are still intact like walls, wells, floors, pits, silos, there are also destruction layers of ash or of mud, and backfill used to level previous destruction before re-building. Robber trenches also appear in balk drawings. These silhouettes of stones in the soil were created when villagers recycled stones from old buildings or walls to construct new buildings or walls.

After each stratum has been cleared, and the journal entries and locus sheets have been completed, then the site is carefully brushed and photographed. To get a good top plan photograph of a square, photographers have to be creative. Sometime they use scaffolding to construct towers. Sometimes they float their cameras above the square using a balloon. Special fish-eye lenses also allow photographers to capture the entire scope of the square and its surroundings.



BRUSHING AND PHOTOGRAPHING A SQUARE



At the end of each day in the field workers wash and dry pottery that the ceramicist will read. Pottery from each locus is carefully collected in buckets and taken back to camp. Each piece of pottery is dipped in water, which will highlight any writing if it was used as an ostrakon.

Blank sherds are then laid in trays along with their bucket tags to dry. Each tray is read by the ceramicist. Significant diagnostic sherds will be drawn and photographed. The rest of the sherds are then bagged and labeled and stored for future reference.

DIPPING, DRYING, READING, DRAWING POTTERY
TEL MIQNE



As the excavation proceeds sections of the site are designated for restoration and preservation. The artifacts are cleaned and repaired, and then either reinstalled on the site as part of an archaeological park, or moved to museums for display. At Hazor a particularly well preserved pillared warehouse or stable was moved off its original site and reconstructed elsewhere on the site. This allowed visitors to see a good example of this architecture, and it allowed the archaeologists to continue excavating the original site.

PILLARED WAREHOUSE RELOCATED
FROM ORIGINAL SITE
HAZOR

CONCLUSION

The Wheeler-Kenyon method stabilized the recovery of artifacts from ancient sites. It was a reliable scientific process for handling the cultural heritage of the past, and preserving it responsibly for future study and enjoyment. Sadly it did not put an end to the piracy and treasure-hunting of antiquities by private collectors, but it did begin an entirely new era in the Near Eastern studies. The development of the Wheeler-Kenyon method was an outstanding accomplishment of Biblical Archaeologists working in the world of the Bible during the twentieth century.





WHAT YOU HAVE LEARNED

- Sondage excavations cut a single trench across the entire site from the surface down to bedrock. Horizontal excavations remove one layer at a time across the entire surface of the site. Wheeler-Kenyon excavations open a series of squares 15 ft on a side and separated from one another by a 3 ft wide balk.
- Excavations destroy the context essential for interpreting artifacts. The site survey, square supervisor's journal, locus sheets, balk drawings and photographs required by the Wheeler-Kenyon method allow later scholars to reconstruct that context.
- Excavation proposals should identify a site; state a clear goal for the dig; list the names of the team; calendar the dig schedule and the publication schedule; and describe how the artifacts and the site will be preserved and publicized.
- Pottery from each stratum in a square is collected in buckets and identified by a locus tag. At the pottery center broken pieces are dipped in water to see if there is writing on them. The contents of each bucket is transferred to a tray and read by a ceramicist who dates the pottery, notes any unusual pieces and identifies pieces that will be drawn. The contents of the tray is then bagged, tagged and stored.
- A Theodolite is a telescope used by surveyors. A probe trench is generally 3 ft wide and opened to test a site for a full square. A square is 15 ft on each side and dug from the surface to bedrock. A balk is a 3ft wide wall left between balks to provide a record of the strata excavated. A locus is the context where an artifact is found. A guffa is a bucket made from an automobile tire used to remove dirt and pottery from a square. A shifter is a framed piece of narrow mesh screen which archaeologists use to recover small finds from a square. A dump is where dirt removed from squares is collected.
- The goal of the Wheeler-Kenyon method is to allow scholars to recreate a three dimensional model of the site after the excavation is complete.

CHAPTER 9 ARAD



Chapter 9 explains why the School of Annales Archaeology is the preferred method for interpreting the Chalcolithic and Early Bronze period artifacts from Arad, and how the villagers who founded Arad exploited the natural geography. It also describes why the state of Judah wanted a military presence at Arad during the Iron II period and where to find the *House of Yahweh* referred to on one of the Arad ostraca. Finally, the chapter shows what was unusual about the sanctuary to Yahweh at Arad and when and by whom was Arad destroyed?

Arad, Lachish, Dan and Qumran are among the most significant excavations conducted by Biblical Archaeologists during the twentieth century. Their goal was to reconstruct the history of human settlement at the site, and to use the Bible and other Near Eastern written artifacts to interpret the material remains they recovered.

ARAD (3100-2650 B.C.E.)



In 1962-1967 Yohanan Aharoni and Ruth Amiran directed large, general excavations at Tel Arad. In 1977 Ze'ev Herzog directed a smaller, more focused excavation.

Aharoni and Amiran excavated the five Chalcolithic and Bronze Age villages and cities at Tel Arad in the Negev desert using Cultural History, Biblical Archaeology and Annales

Archaeology (see Part Three below). Each school expects archaeologists to carefully remove and record each settlement stratum. The goal for Cultural Historians is to link the material remains with written artifacts. The goal for Biblical Archaeologists is to link the material remains with

the Bible. The goal for *Annales Archaeologists* is to understand the long term development of social institutions like trade, architecture, village and city development, water management, military science and daily life.

Tel Arad is a unique, 25 acre, geological site in the Negev desert. The landscape is a natural fan-shaped amphitheater. The soil just below the surface hardens when wet allowing rain water to sheet off the slopes and into a large circular cistern constructed between 3100-2650 B.C.E. (EBII) at the base of the amphitheater. The cistern held 66,000 gallons of water (King and Stager 2001: 127-129). The quality of this soil and the sophistication of the water management system developed at Arad during the Bronze Age took the best possible advantage of the seven inches of rainfall at the site each year (Ornit and Amiran OEANE i: 169-174).

Like the villages in the Beersheba Valley less than 20 miles away the earliest villages at Tel Arad (Stratum V) were built in clusters between 4000-3400 B.C.E. during the Chalcolithic Age. There were no large public buildings; there was no wall; and there was no overall plan orienting one village with the other.

The first written artifact was recovered from the second settlement at Tel Arad (Stratum IV). The artifact was a broken piece of Egyptian pottery with an oval cartouche containing the name of Pharaoh Narmer drawn on it.

Aharoni and Amiran used written artifacts like the Narmer cartouche to reconstruct the significant events in the development of a site. This written artifact told them two things about the village which would play a critical role in the interpretation of the material remains at the site.

First, the second human settlement at Arad was built during the Bronze Age (3200-3000 B.C.E.) when Narmer was pharaoh of Egypt. It was in existence at that point when the villages along the Nile were being united into a state that would last 3,000 years.

Second, the village traded with Egypt's copper mining communities more than 180 miles away in the Sinai. The jar with Pharaoh Narmer's name on it was manufactured by Egyptians from Sinai clay, and contained Egyptian goods sent to the village to trade for wine and olive oil. Although the people at Arad lived in the desert, they were not isolated. The village was an integral part of an important political and economic network.

The third and fourth settlements (Strata III-IV) were cities. There were public buildings – a palace and a sanctuary; there was a wall; there

was a sophisticated water system.



ARAD STICK FIGURES

The sanctuary provided a second written artifact from Arad. A shaped stone had been erected in the ground of the Great Room at the sanctuary. Artists had carved two stick figures with human bodies and ears of grain for heads on the stela. One figure was lying down, the other was standing up.

The drawings on the Bronze Age stela at Arad may be icons for the Stories of Tammuz and Istar known from written artifacts from Mesopotamia (Matthews and Benjamin 2006: 329-334). Tammuz or Dumuzi is the divine gardener who, at the end of the dry season in the world of the Bible, waters the parched soil of Ishtar or Inanna – Mother Earth -- with rain. His rain -- like sperm -- fathers crop-children who rise like the dead from the body of their mother to stand straight and tall on the earth. The Stories of Tammuz and Istar were the stories of the daily lives of the farmers at Arad, who, like midwives, tended their divine patrons during their annual ritual of giving birth.

CISTERN
ARAD
3100-2650 B.C.E.
66,000 gallons

The wall around the city followed the contour of the amphitheater. The inside and outside surfaces were made of two rows of carefully set stones. The space between these inside and outside walls was filled with rubble. The wall was over a mile long, 12-15 feet high and 6-8 feet thick. There were two main gates, several smaller gates, and some 35-40 round and rectangular towers along the wall.



Private houses were built using a common blueprint called the *Arad House* design. Besides what they learned from the actual houses they excavated, Aharoni and Amiran also recovered a model Arad House from the site. The roof on the model was flat – something that could not be definitively established from the excavations of the houses themselves.

Wheat, barley, peas, lentils and flax seeds for flour and cereals; and olive pits for oil also covered the courtyards of Arad Houses. These seeds and pits had been carbonized in the fire that destroyed the Arad Houses. There were also bones from sheep and goats herded for their wool, milk, yogurt and hides; bones of draft animals like oxen used to pull plows; and bones of the donkeys used to carry trade goods to and from the cities. Annales Archaeologists use these material remains to reconstruct slowly developing social institutions like the economies of both daily life, and foreign trade in these cities at Arad.

Besides the cartouche of Narmer, and the icons for the Stories of Tammuz and Ishtar, Aharoni and Amiran recovered a third group of written artifacts: seals for notarizing commercial transactions. There are two styles of seals are recovered by archaeologists working in the world of the Bible: stamp or scarab seals and cylinder seals. Scarab seals developed in Egypt; cylinder seals in Mesopotamia. Both were found at Arad. Therefore, the people of Arad had economic ties as far away as Mesopotamia in the north and as far away as Egypt to the east.

A deep layer of ashes covered the first cities at Arad indicating that they were attacked and burned in 2800 B.C.E. Nevertheless, there were survivors, because the city was immediately resettled (Stratum III). Eventually, however, drought or economic competition forced them to abandon the site about 2650 B.C.E. Arad remained uninhabited for the next 1,500 years.

ARAD (1000-586 B.C.E.)

Because artifacts from the Chalcolithic and Bronze Age villages and cities at Arad reflect almost two thousand years of human activity, and because so few of the material remains there were written artifacts, Aharoni and Amiran studied the site primarily as Annales Archeologists. In contrast there were abundant written artifacts from Arad during the Iron Age, therefore they studied these periods of the site as Biblical Archaeologists. The village and two Iron Age forts reflect only about 400 years of human activity, and there were abundant written artifacts available on site and from elsewhere to interpret its other material remains.

Not all written artifacts are helpful in understanding the village and the two forts at Arad during the Iron Age. In the book of Numbers (Num 21:1, 33:40) the people of Arad prevent the Hebrews from entering Syria-Palestine from the south. In the book of Joshua (Josh 12:14) Arad is on a list of cities conquered by the Hebrews. In the book of Judges (Judg 1:16) the people at Negev Arad are called *Kenites*. There is a village founded after 1100 B.C.E. (Stratum XII) just beneath the first Ft. Arad. Biblical Archaeologists, however, have been unable to synchronize these

biblical traditions with the material remains in the village. Furthermore, there is no evidence that this village was destroyed. In time it was fortified with a casemate wall.

The people who finally resettled Arad were soldiers from Judah. They came to build a fort. They named their fort *Arad* which archaeologists found cut into a broken piece of pottery at the site. Curiously, the soldiers wrote the name backwards four times.

What brought the soldiers of Judah to Arad was not only its watershed, but also its location along the Edom Highway. The highway was a lifeline for the economy and the military security of Judah. Forts like Arad, Ramoth-negeb (Hebrew: *horvat 'uza*) and Kinah (Arabic: *khirbet taiyib*) guarded the Edom Highway like stagecoach stops and cavalry forts in the American west (2 Kgs 3:8). This east-west trade route connected the Coast Highway in the west (Josh 19:8; 1 Sam 30:27) with the Royal Highway in the east. From Arad, the Edom Highway descends to the northern end of the Jebel Usdum Mountains and from there into the Arabah Valley.

The first Ft. Arad was not large (Stratum XI). It was about 165 feet wide and 180 feet long and surrounded by a casemate wall. The outer wall of the casemate is about five feet thick; the inner wall of the casemate is four and one-half feet thick. The casemates in the eastern wall were used as barracks for the soldiers assigned to the fort. Four towers reinforced the western wall.

In 925 B.C.E. Shoshenq I (945-924 B.C.E.) invaded Syria-Palestine from Egypt. His annals describe his march and the cities he conquered. Shoshenq's annals list Arad as one of his conquests. A destruction layer (Stratum X) containing pottery dated to the tenth century confirms that the first Ft. Arad was destroyed sometime after 1000 B.C.E.



MAIN GATE OF SECOND FT. ARAD
ARAD

[HTTP://EBIBLETOOLS.COM/ISRAEL/ARAD/INDEX.HTML](http://EBIBLETOOLS.COM/ISRAEL/ARAD/INDEX.HTML)

After the destruction of the first Ft. Arad a second Ft. Arad was built at the site (Strata VI-X). This fort was square --170 feet on each side -- and surrounded by a solid wall. The outside surface of the wall has a saw-toothed pattern. This off-set, in-set design strengthened the

wall like corrugation strengthens a steel plate. The design also gives the wall a more aesthetic appearance.

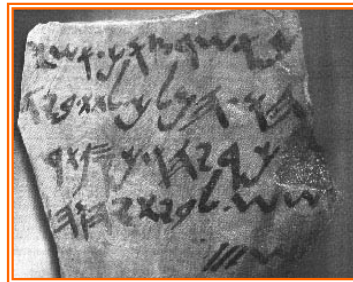
At the outside base of the wall there is a glacis – a slopping, layered, packed earth ramp with a plastered surface. The glacis sheeted water off the wall and away from its foundations to prevent erosion.

A significant change inside the second Ft. Arad was the construction of a broad-room sanctuary. Letters recovered at the fort make it clear that the Hebrew rulers of Judah were responsible for the garrison at Ft. Arad, and that Yahweh was the divine patron of the garrison.

Biblical archaeologists also noted that the sanctuary at Arad followed the same design used to construct the Temple for Yahweh in Jerusalem. The Temple in Jerusalem was a rectangular building some 140 feet long and 85 feet wide. It was divided into three parts. The entrance was a Courtyard about 35 feet long. The Great Room was about 70 feet long. The Holy of Holies was 35 feet long. The sanctuary at Arad also has a courtyard, a great room and a holy of holies.

The Annals of Solomon record his construction of a *House of Yahweh*, a reference to which is found in one of the letters recovered at Arad. By building a temple for Yahweh, Solomon officially took possession of the land that Yahweh promised to Abraham and Sarah. Once Yahweh had a house, then Israel officially became a state.

HOUSE OF YAHWEH IN JERUSALEM
ARAD
1000-586 B.C.E.
POTTERY



Few architectural remains of the Temple in Jerusalem, which was destroyed by the Babylonians in 586 B.C.E. after they destroyed Arad, have been recovered. Nonetheless, archaeologists are able to reconstruct the design of the Temple from similar temples excavated elsewhere in the world of the Bible.

Curiously the detailed descriptions of the Temple, like those in the books of Samuel-Kings (1 Kgs 6:1–7:51) and the book of Ezekiel (40:1–48:35), are not much help in reconstructing the Temple. These traditions were not intended to be architectural blueprints. In traditional cultures crafts like those used in the construction of the Temple were handed on through deliberately long and carefully guarded apprenticeships. Guilds

did not develop how-to handbooks for their members. The description of the Temple, like the description of the ark of Noah, affirms what was done, not how to do it.

Therefore, there is little reason to question that the sanctuary at Ft. Arad – like the great Temple in Jerusalem whose design the sanctuary imitated -- was dedicated to Yahweh (Aharoni 1968).

In front of the sanctuary was a paved rectangular Courtyard. The Courtyard was almost 40 feet long and 25 feet wide. There is a large altar on the east side of the Courtyard. It was built from undressed fieldstones. The base of the altar was a little over seven feet square and some five feet high. The top of the altar was covered by a single large stone. A groove had been carved along the edge of the stone to collect blood and juice from the sacrifices as they were prepared on the altar.

Again as Biblical Archaeologists Aharoni and Amiran note that the altar in the Courtyard at Ft. Arad also corresponds to the building code in the book of Exodus. The code opens with a cluster of stipulations dealing with worship. The use of precious metals like gold and silver as well as sacred sculpture are prohibited (Exod 20:22–23). Altars were to be built of earth (Exod 20:24). Stone altars were permitted as long as the stone was uncut (Exod 20:25). Yahweh is the sculptor of uncut stone, humans the sculptors of dressed stone. The altars are to focus on the work of Yahweh, not human work.

Altars were not to be installed on a raised platform (Exod 20:26). Platforms would give the congregation a better view of the liturgy, but they would also give the congregation a view of the genitals of the priests around the altar as well. The stipulation is not concerned with scandalizing the congregation, but rather violating the protocol for a sanctuary of Yahweh. Yahweh is the creator of land and children. The Hebrews must be careful to acknowledge these prerogatives by never appearing before Yahweh with their feet covered or their genitals uncovered (Deut 28:57; 1 Kgs 15:23; 2 Chr 16:12; Isa 6:2; 7:20, Ruth 3:4–7). Only landowners wore sandals, and the fathers of households uncovered their genitals only when preparing to father a child.

A door in the long, eastern wall of the sanctuary led into the Great Room of the sanctuary. There was a low plastered bench around the base of the wall. Four steps led from the Great Room into the Holy of Holies in the center of the western wall. A set of incense altars stood on either side of these steps.

Unlike the rest of Ft. Arad the sanctuary was decommissioned, but not destroyed. The two standing stones in the Holy of Holies were laid on their sides. The walls were knocked down to fill in the Courtyard, the Great Room and the Holy of Holies, and then back filled with earth. Biblical Archaeologists note that the sanctuary at Arad may have been dismantled in obedience to the decree of Hezekiah of Judah in 715 B.C.E. that Yahweh should be worshipped only in the Temple in Jerusalem, and that all other sanctuaries to Yahweh in Judah should be closed (2 Kgs 18:22).

TWIN INCENSE ALTARS AND TWIN STELAE
ARAD
WWW.BIBLELIEUX.COM/ARAD.HTM



OSTRACON 2
(MATTHEWS AND BENJAMIN 2006:198-200)

To: Eliashib, commanding officer at Arad
From: . . . commanding officer at. . .

Issue the Kittim 2 *bat* rations of wine and 300 loaves of bread for the next four days, and another *homer*-ration of wine for the rest of the garrison. Deliver the rations tomorrow. Do not be late. Fill some of the jars with old wine, if there is any left.



OSTRACON 24
(MATTHEWS AND BENJAMIN 2006:198-200)

To . . . commanding officer at Arad
From . . . commanding officer at Jerusalem

. . . dispatch five soldiers from Arad and from Kinah . . . send them to Ramoth-negeb, under the command of Malkiyahu, the son of Qerabur, and he shall turn them over to Elisha, the son of Jeremiah, in Ramoth-negeb, before anything happens to the city. You are to carry out these orders of the king of Judah under penalty of death. This is my last warning: Get those soldiers to Elisha before Edom attacks.

More than two hundred artifacts with Hebrew and Aramaic writing

on them were recovered from Ft. Arad. Some are only 2.5 inches high. This is the largest collection of written artifacts excavated in any one place in Israel to date (Aharoni and Naveh 1981). Most of the writing is on broken pieces of pottery; some writing is on whole pots. There are also nineteen letters and seals recovered from the house of Eliashib, the commander of the fort. The majority of the letters date to 650-600 B.C.E. when Judah was continuously threatened by Babylon.

There are tax records for grain, olive oil and wine delivered to Ft. Arad from villages in Judah. There is a proclamation announcing the coronation of a new ruler in Judah.

There are orders for Eliashib to issue rations to the Kittim, who were mercenaries from Crete and Cyprus. A four-day ration for 75 soldiers was 300 loaves of bread and eighty-five quarts of wine. Therefore, each soldier received one loaf of bread per day (Jer 37:21) and eight ounces of wine. New wine was recently fermented (Deut 32:14). Old wine was stale or, at least, past the date when it was best to drink it (Ps 69:21).

There is an order to reinforce Ramoth-negeb, six miles southeast of Arad. Arad was the headquarters for its sector of the Negeb. Apparently, when Babylon invaded Judah from the north in 594 BCE, Edom invaded from the south (Ps 137:7-9; Lam 4:22). Whether or not the troops from Arad and Kinah, four miles northeast of Arad, were successfully deployed to Ramoth-negeb is unclear. Archaeologists found the broken piece of pottery on which the order was written lying in the ashes of the fire that destroyed the fort – a silent, desperate moment frozen in time.

CONCLUSION

The excavations at Arad are a good example of what archaeology can and cannot do. On the one hand the Annales Archaeology of the Chalcolithic and Bronze Age villages and cities at Arad can reconstruct the development of slowly developing social institutions like architecture and food production. There are so few written artifacts, however, that Cultural History cannot connect these villages and cities with significant political or military events of the period. On the other hand the Biblical Archaeology of the rich archive of written artifacts from the site of the forts at Arad, and relevant traditions from the Bible can reconstruct the role which Arad played in the political and military events of Judah during the later Iron Age period. Nonetheless Biblical Archaeology cannot yet synchronize the stones and stories for the Late Bronze or early Iron Age periods at Arad. The stones tell one story, the Bible tells another. How to understand and appreciate both remains a work in progress.



WHAT YOU HAVE LEARNED

- Only two written artifacts were recovered from Chalcolithic and Early Bronze Arad. Annales Archaeology interprets the social institutions like architecture and trade represented by material artifacts without using written artifacts.
- Chalcolithic villagers selected the site for Arad for two reasons. A unique geological formation hardened when wet allowing water to run off. The fan shaped natural amphitheater would sheet the run off easily into a cistern at its base.
- Judah stationed troops at Arad to protect the strategic east-west highway where it was located.
- One Arad ostraca refers to the Temple in Jerusalem as the *House of Yahweh* – an expression which also appears in the Bible.
- The sanctuary of Yahweh at Arad has two incense altars and two standing stones indicating that the soldiers honored Yahweh as a divine couple, not a single male.
- During the war between Babylon and Judah the Edomites became covenant partners with the Babylonians attacking and destroying Arad in 586 B.C.E.

CHAPTER 10 QUMRAN



Chapter 10 describes how the excavation at Qumran is an example of the School of Cultural History or Biblical Archaeology. It also explains how the people of Judah survived in the non Jewish worlds of Persia and Greece and why the community at Qumran considered the household of Hashmon as foreign rulers of Judah like the Persians and the Greeks. Then the chapter shows how Roland DeVaux, who excavated Qumran, used his personal experiences and cultural background to interpret Qumran as a Jewish monastic community preparing for the endtime; and what other interpretations have been suggested. Finally, it tells why *purity* for the community at Qumran had little to do with hygiene; how purity guidelines were used at Qumran; and how DeVaux and other scholars interpret the elaborate water system at Qumran.

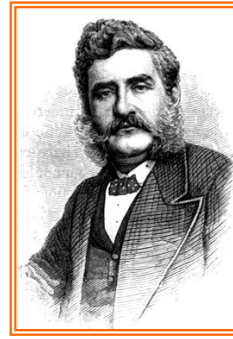
Until the discovery of the Dead Sea Scrolls (1947-1956), the oldest manuscripts of the Bible were from the year 1000. One scroll from Qumran containing the book of Isaiah was copied around 200 B.C.E. Consequently the Dead Sea Scrolls contain copies of the Bible that were 1200 years older than had previously been available to scholars. It was now possible to see just what was happening during those turbulent years when Syria-Palestine was ruled by outsiders; first the Persians (538-332 BCE), then the Greeks (323-170 BCE) and then the Romans (63 BCE-640); and by insiders --the Hasmoneans (170-63 B.C.E.) -- who, for some in Judah, ruled like outsiders.

PERSIAN YEHUD
(538 -332 B.C.E.)

Hormuzd Rassam (1826-1910) was a Christian from Mosul and the first Western-trained archaeologist in the British Mandate of Iraq. In 1852 he succeeded Austin H. Layard as the director of British Museum's excavations at Nineveh and Kalhu.

HORMUZD RASSAM (1826-1910)

One of the most remarkable artifacts Rassam recovered from the Esagila, the Temple for Marduk, the divine patron of Babylon, was a cylinder about nine inches long. It was inscribed with a decree of Cyrus II, Great King of Persia (559-530 B.C.E.). The decree was written in the Akkadian language using cuneiform script



(<http://www.kchanson.com/ancdocs/meso/cyrus.html>). Few Persians understood Akkadian, but it was the official language in which all formal documents were published. Cyrus promulgated the decree shortly after his conquest of Babylon in 539 B.C.E. The promulgation of the decree inaugurated the Persian Period (538-332 B.C.E.) in Syria-Palestine (Meyers 1994: 25-32).



CYRUS CYLINDER BRITISH MUSEUM
539-530 B.C.E.
TERRACOTTA
9 IN LONG
BABYLON
© ART RESOURCE

In his decree Cyrus indicts Nabonidus, Great King of Babylon (555-539 B.C.E.), for failing to protect and provide for the land and people of Babylon. He then orders the repatriation of the hostages in Babylon, whom Nebuchadnezzar and Nabonidus had deported from the lands that they had conquered. Households from Judah had been deported between 597-586 B.C.E. following their failed revolts against Babylon (2 Kgs 24:1—25:21; Jer 34:1-7).

The Decree of Cyrus also provides subsidies to emancipated peoples so that they can rebuild their cities and the sanctuaries of their divine patrons (Ezra 1:1-4; 6:3-5). The Second Temple in Jerusalem was not actually completed until 516 B.C.E. during the reign of Darius I (522-486 BCE). The book of Ezra (Ezra 6:1-15) describes how Darius searched the royal archives for the Decree of Cyrus. The book of Isaiah (Isa 44:28; 45:1) celebrates the Decree of Cyrus and bestows the title of *Anointed* or *Messiah* on Cyrus. He is the only non-Israelite to be given such an honor.

The Cyrus Cylinder, preserved today at the British Museum in London, is one of Iran's most revered artifacts. There is even a replica of

the cylinder at United Nations headquarters in New York City. The decree is a charter of human rights 2000 years older than the Magna Carta of England. It is a call for religious and ethnic freedom. It banned slavery and oppression; the confiscation of property by force or without compensation; and it gave states the freedom to choose whether or not they wanted to join the Persian Empire.



THE DECREE OF CYRUS
(Matthews and Benjamin 2006: 207-209)

I entered Babylon as a friend of Marduk and took my seat in the palace. Every day I offered sacrifice to Marduk, who made the people love and obey me. Therefore, I ordered my soldiers not to loot the streets of Babylon, nor to molest the people of Sumer and Akkad. I no longer enslaved the people of Babylon to work for the state, and I helped them to rebuild their sanctuaries, which had fallen into ruin.... Every ruler from the Mediterranean Sea to the Persian Gulf, rulers who dwell in palaces in the east and rulers who live in tents in the west, came to Babylon to bring me tribute and to kiss my feet.

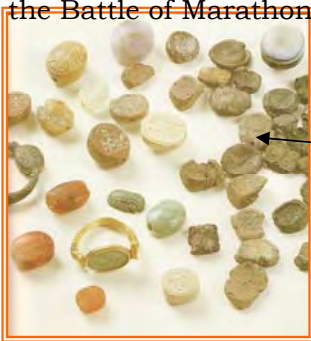
I returned the statues of the divine patrons of Ashur, Susa, Agade, Eshnunna, Zamban, Meturnu, Der, and Gutium to their own sanctuaries. When I found the sanctuaries across the Tigris in ruins, I rebuilt them. I also repatriated the people of these lands and rebuilt their houses. Finally, at Marduk's command, I allowed statues of the divine patrons of Sumer and Akkad, which Nabonidus had moved to Babylon, to be returned to their own sanctuaries... which I rebuilt.

May all the members of the divine assembly whose statues I have returned to their sanctuaries ask Bel and Nebo for a long life for me every day. May they remember me to Marduk, my divine patron, with the prayer: *Remember Cyrus, the ruler who reveres you, and his son, Cambyses.*

The beginning of the Persian period in Syria-Palestine was marked by hope and renewal. The Persians appointed local leaders as governors to oversee daily life in the province. Zerubbabel, Nehemiah and Ezra are governors mentioned in the Bible. The names of others like Elnathan and his wife Shelomith, who was Zerubabel's daughter, have been identified from their seal impressions (Latin: *bullae*) recovered by archaeologists (Avigad 1976; Meyers 1985).

Bullae seal impressions were created when papyrus scrolls were rolled up, tied with a string and secured with a seal pressed into a bit of wet clay.

As the people of Judah were being resettled in the province of Yehud a series of wars between Persia and Greece began. In 512 B.C.E. the army of Darius I crossed the Bosphorus Straits and marched up the Danube River. Soon, however, Ionia and Cyprus started a revolt against Persia (499 B.C.E.), and the ships of Athens defeated the Persian fleet at the Battle of Marathon (490 B.C.E.). Because Persia had its military resources deployed against the Greeks, Egypt and Babylon also declared their own independence.



BULLAE SEAL IMPRESSIONS
800-500 B.C.E.
JUDAH

Greece was not only winning military wars against Persia, but also winning cultural wars as well (Stern 1982). Persia's colonies in Syria-Palestine used Greek coins – like tetradrachmas -- to buy and sell. They bought Greek goods – like black-glazed Attic wares -- at trading posts along the coast of the Mediterranean Sea. Even the Persians themselves hired Greek soldiers to fight for them. The Persian Empire in Egypt and Syria-Palestine became increasingly Greek.



The Hebrews of Yehud assimilated Greek culture. Consequently, the signature rituals of Hebrew life began to disappear as more and more people in Judah ate and worked and married as if they were Greeks.

TETRADRACHMAS
ALEXANDER, ANTIOCHUS IV,
UNIVERSITY OF PENNSYLVANIA MUSEUM



Reform came in the development of the books of Zechariah and Ezra. The Judaism in the stories began to challenge the Hellenism in the stones of Yehud. Reformers placed their hope in the creation of a new and divine world governed by biblical principles (Zech 5:1-4). They looked at their leaders -- Ezra and Nehemiah -- as the new Moses and the new Aaron (Meyers and Meyers 1987: 277-292).

The traditions in the books of Zechariah, Ezra and Nehemiah are not set in the time of Alexander, when the signature rituals of Hebrew life were challenged by the Greeks, but in the time when Cyrus emancipated the people of Judah from exile in Babylon and allowed them to return home when Hebrew lifestyle was challenged by the Persians. The time in

the books of Ezra and Nehemiah, for example, returns to Jerusalem from Babylon in 458 B.C.E. (Ezra 7:7-8). Nehemiah returns in 445 B.C.E. (Neh 1:1). The time when these traditions developed and were told, however, is later. Ezra and Nehemiah are portrayed as the new Moses and the new Aaron in the time of the Persians in order to inspire the people of Judah in the time of the Greeks. The books want their audiences to consider: *How did we preserve our identity in the time of the Persians? How should we preserve our identity in the time of the Greeks?*



ATTIC BLACK WARE
UNIVERSITY OF PENNSYLVANIA MUSEUM

The people of Yehud were also swept up into the wars of liberation that broke out in Egypt, Cyprus and Syria-Palestine. By 350 B.C.E. Hazor, Megiddo, Ein Gedi and Jericho had been destroyed by one side or the other. Consequently, when Alexander actually invaded Syria-Palestine in 332 B.C.E. the transfer of power from Persia to Greece occurred peacefully. The people of Egypt welcomed him as a new pharaoh. The people of Jerusalem decorated the city with wreaths, put on white linen garments and marched out of the city behind the priests in their hyacinth blue and gold vestments to welcome Alexander (Josephus, Antiquities xi: 326-339). Only Tyre, Gaza and Samaria mounted a military defense against Alexander. Assimilation and civil strife had already conquered the land (Meyers 1994: 32-42). Syria-Palestine was now Hellenistic by law, not just in fact.

GREEK JUDAH
(332-170 BCE)

When Alexander died, his generals subdivided the empire. Ptolemy ruled Egypt; Seleucus ruled Persia, Mesopotamia and Syria. Judah would be claimed first by Ptolemy, and then by Seleucus. The west had come to the east, and the stones in Judah and the stories in Ecclesiastes and Daniel offer a window into this painful struggle for survival and cultural identity.

The teachers who developed the book of Daniel and its audiences in Judah spoke Greek, Aramaic, and Hebrew. The Hebrew (Dan 1:1–2:4+8:1–14:46), Aramaic (Dan 2:4–7:28) and Greek (Dan 13:1–14:46) traditions in the book of Daniel testify not only to their language skills, but also to their assessment of the political climate for the people of Judah after Alexander's invasion.

The book of Daniel is composed of two kinds of stories. It begins (Dan 1:1—6:29) and ends (Dan 13:1—14:46) with *teaching stories*. The core of the book (Dan 7:1—12:13) is a series of apocalypse stories. Today *apocalypse stories* threaten the powerful of an impending end-of-the-world battle between God and Satan, after which an elite will govern a one-thousand-year empire in God's name. In the world of the Bible apocalypse stories console the powerless by assuring them that their suffering will end soon and that in the end good, not evil, will prevail. The core of the book of Daniel is made up of apocalypse stories consoling the people of Judah.

During the first Hellenistic period (332-168 B.C.E.) the relationship between the people of Judah and the Greeks deteriorated. In the beginning the people of Judah were welcome in the Hellenistic world as teachers, as advisers, and as interpreters of dreams. The teaching stories with which the book of Daniel opens view the role of the people of Judah in this new Hellenistic world positively. Therefore these stories are told in Aramaic, which was the common language used by both the people of Judah and the Greeks. The stories encourage the people of Judah to live like Daniel lived by making themselves useful to their foreign rulers without losing their cultural identity (Benjamin 2004: 404-427).

Slowly, conditions in Syria-Palestine began to change. Greeks began to discriminate against the people of Judah. A single apocalypse story told in Aramaic (Dan 7:1–28) was added to the teaching stories in the book of Daniel to encourage the people of Judah to participate in the Hellenistic world, but to do so with caution. Aramaic was the common language spoken by both the people of Judah and the Greeks. This Hellenistic world was about to be destroyed by the Ancient One (Dan 7:9). Like Daniel, the people of Judah must now prepare to follow the Son of Man (Dan 7:13) into a new world where all the peoples of the earth would be welcome and equal.

The status of the people of Judah in the Hellenistic world continued to deteriorate. Greeks began to consider the Semitic lifestyle of the people of Judah to be barbaric, their way of doing business to be primitive, and their worldview to be treason. Consequently, Antiochus Epiphanes IV the Seleucid ruler of Syria-Palestine (175–164 B.C.E.), mounted a campaign to Hellenize the people of Judah.

Hellenism was a worldview that developed in western Mediterranean cultures like Greece and Rome, and it is the worldview of western European cultures like the United States and Canada today. Hellenism was the official world view (Greek: *oikumene*) of the Empire of

Alexander, and it was radically different from the Semitic worldview of the people of Judah.

The language of Hellenism was Greek, a form of Indo-European speech like English and French. Greek speakers considered Semitic languages like Hebrew and Aramaic which use guttural sounds pronounced deep in the throat to be no more sophisticated than the growling of dogs. Greeks spoke Aramaic in the world of the Bible because it was the diplomatic language used by peoples in Semitic cultures there to communicate with one another. They did not, however, consider Aramaic to be comparable to their native Greek language.

The traditions of Hellenism were handed on in the Iliad and the Odyssey of Homer. Hellenists considered traditions like the Enuma Elish Stories and the Bible to be crude and barbaric.

The base community in Hellenism was the city (Greek: *polis*), whose hundreds, and sometimes thousands, of citizens created a centralized and surplus economy with vast trade networks bringing luxury goods from the ends of the earth. The base community in ancient Israel was the household (Hebrew: *bet 'ab*), whose thirty to fifty members created a decentralized and subsistence economy with little trade and virtually no luxury goods.

Hellenism considered the human body to be the most exquisite divine creation. Consequently, Hellenistic piety expected everyone to exercise and groom their bodies with devotion. The baths and the games were rituals in which Greeks exercised stewardship of this divine gift. Likewise, the Greeks developed a high-energy diet based on pork.

The people of Judah were not prudish. They did not hate their bodies. For them, however, Yahweh's greatest creation was not the human body, but the cosmos, of which the human body was only a part. Consequently, the people of Judah cared for their bodies just as they cared for their lands and for their herds. They pruned their vines to increase their fertility, and they circumcised their sons so that they might father more children. Circumcision outraged the Greeks. They considered it a mutilation of a divine work.

The diet of the people of Judah was ascetic. They did not eat pork. Eating modestly and fasting regularly reminded them that the physical power to bring in a harvest or to parent a child was a divine gift, and not a human achievement.

Pigs had been domesticated during the Neolithic period (8500–4300 B.C.E.) in the world of the Bible. Initially, pigs were moved out of the mainstream food chain for economic reasons. They competed too strongly with humans for water and grain. By the Bronze Age (3300–1200 B.C.E.), however, they were again herded in villages with good rainfall, which could produce enough grain for both the pigs and the villagers. Furthermore, centralized urban economies could not easily store, transport, and divide pork for redistribution. Pigs were also reintroduced into Syria-Palestine by the Philistines (1200–1000 B.C.E.), and by the Greeks (332 B.C.E.–640).

The people of Judah, however, did not shun pork for economic reasons (Lev 11; Deut 14; Isa 65–66; Tob 1:10–11; Jdt 10:5; 12:1–2; 1 Macc 1:62–63; 2 Macc 5:27; 6:8–31; 7:10). Pork was a key ingredient in the high-protein diet of the Greeks and other Western Mediterranean peoples, and was an important tool in the toning and sculpting of the human body. Building strong bodies violated the Semitic sense of humility. The people of Judah considered it to be a human attempt to take over a divine work. They believed that those who arrogantly overfed themselves, in due time would starve (Deut 8:2–16; Ps 55:19; Prov 3:34; 15:33; 18:12). Only those who fasted, would thrive (2 Sam 22:28; Ps 18:27).

Some Hellenists understood and appreciated the Semitic worldview, and converted to a Semitic way of life as *God-fearers*. Even more people of Judah converted to Hellenism, and embraced a Greek lifestyle. Most Hellenists, and many people of Judah, however, considered the worldview of the other to be foolish and the worst form of heresy and treason.

To continue its dialogue with these changing political conditions, the book of Daniel added more apocalypse stories (Dan 1:1–2:4 +8:1–12:13). These final additions were told in Hebrew, the ancient language of the people of Judah, in order to encourage the people of Judah to withdraw from the Aramaic-speaking world of their Greek rulers. Both Aramaic and Hebrew language traditions appear together today in the book of Daniel to recall the painful evolution of the people of Judah from full participation to radical alienation from the Greek world. The pairing of Aramaic and Hebrew language traditions is not a call for Aramaic Greek speakers and Hebrew speakers to reconcile their differences, but to emphasize that the people of Judah had done their best to fit in, but for their own survival they needed now to segregate themselves from the conquerors they once admired.

The culmination of the campaign of Antiochus Epiphanes to Hellenize the people Judah was granting Jerusalem the status of a *polis* city and celebrating the event by erecting a statue of Zeus – for which he had posed -- in the House of Yahweh. He also sacrificed pork to Zeus in the Temple during the dedication ceremonies in December 167 B.C.E. This was the *abomination that makes desolate* or *abomination of desolation* (Dan 11:31; 12:11; 1 Macc 1:54; 2 Macc 6:1–50). The act by which Antiochus Epiphanes had intended to inaugurate a Hellenistic state in Judah that would live forever would, in fact, destroy it.

The book of Daniel sentenced Antiochus Epiphanes to death in *two thousand three hundred evenings and mornings* (Dan 8:14). He would be dead in some three and one-half years. Other traditions in the book of Daniel like an Ordination of a Son of Man (Dan 7:25) and the Resurrection of the Dead (Dan 12:7) place similar limits on his reign. The book of Daniel is emphatic. The end of the reign of Antiochus Epiphanes has already been determined by Yahweh and the divine assembly. The people of Judah have only to be patient.

HASMONEAN JUDAH
(170--63 B.C.E.)

The book of Daniel is critical, not only of Antiochus Epiphanes, but also of any human solution to the crisis created by Antiochus Epiphanes. From its perspective, the matter will be settled on the divine plane, not on the human plane. The book of Daniel does not support revolutionaries. It refers to them as a *human hand* (Dan 8:25) or *little help* (Dan 11:34). It encourages the people of Judah to see the immediate crisis surrounding the administration of Syria-Palestine by Antiochus Epiphanes on the larger scale. By putting it in perspective, they may better survive the persecution. It wants them to let Antiochus self-destruct rather than taking any direct action against him. His overvaulting ambition will destroy him. Resistance will only postpone his inevitable collapse.

In fact, the people of Judah did not patiently wait for Yahweh and the divine assembly to deal with Antiochus Epiphanes. They fought for their own independence, and created their own independent state. The books of the Maccabees, Josephus and the stones in the land of Judah tell the stories of this war of independence and the dawn of the second Hellenistic period (167-63 B.C.E.).

The household of Hashmon led the successful revolt against Antiochus Epiphanes. These Hasmoneans founded a state that they governed until the Roman general Pompey (106-48 B.C.E.) occupied Judah in 63 B.C.E. to end the civil war between John Hyrcanus II and



Aristobulus II. The brothers both claimed the right to follow their mother onto the throne of Judah. Pompey arrested Aristobulus and appointed John Hyrcanus as the religious leader of the new Roman province of Judea.

The founding of an independent state of Judah did not bring the conflict between Hellenistic and Semitic world views to an end. The Hasmoneans opposed the Hellenism of Antiochus Epiphanes, but, in turn, they were opposed by other communities in Judah that considered them to be too Hellenistic.

One community opposed to the household of Hashmon made an exodus from Jerusalem about 100 B.C.E. They traveled down the Jericho road and into the desert along the eastern shore of the Dead Sea. On the site of an earlier fortress (630-580 B.C.E.) along the Wadi Qumran they built a settlement. The ruins today are seven miles south of Jericho and twenty miles north of Ein Gedi. The settlement was built on a marl clay terrace more than 1100 feet below sea level at the foot of cliffs where the caves containing the Dead Sea Scrolls were found (Magneess 2002: 32-38).

LOCATION OF QUMRAN SETTLEMENT
© MAGNESS 2002: XI

The first excavations at Qumran (1951-1958) were directed by Roland De Vaux. De Vaux's interpretation of the stones at Qumran was primarily dependant upon written artifacts like Josephus, Pliny, Philo and the Dead Sea Scrolls. He was a Cultural Historian and a Biblical Archaeologist.

Two important conclusions guided De Vaux's interpretation of the site. First, he concluded that the scrolls recovered from eleven caves in area around the ruins were stored there by the Qumran community. Second, he concluded that the Qumran community was a Jewish monastic order similar to the Essenes described by Flavius Josephus (38-93) in Jewish War (2:119-161), by Pliny the Elder (23-79) in Natural History (5-73) and by Philo in (30 B.C.E.-45) Every Good Man is Free (75-91). De Vaux established the parallel between the Essenes and the community at Qumran despite the fact that none of these ancient writings mention Qumran by name, nor attribute to the Essenes the

unorthodox use of a solar calendar to date religious feast days, nor a belief in predestination – all of which characterize the community in the Dead Sea Scrolls.

De Vaux's critics have pointed out that his reconstruction of the community life at Qumran reflects more of his personal life experience as a Dominican friar, and the cultural ideals of his native France than a sober assessment of the artifacts recovered from Qumran itself. The pattern of daily life which De Vaux proposes for the members of the Qumran are not much different from the community life of the Catholic Order of Preachers founded by Dominic de Guzman (1170-1221) to which De Vaux himself belonged. He even labeled artifacts at Qumran with terms uniquely monastic like *refectory* and *scriptorium*. Likewise his critics consider his interpretation of Qumran to be modeled on the ideals of the French intellectualism of his day reflected in A.C. Sertillanges, The Intellectual Life: its spirit, conditions, and methods (1923) and the Petit Larousse Illustré (1959). The ideal life for French intellectuals like De Vaux was a combination of asceticism and learning.

Scholars like Golb, Hirschfeld, Magen and Peleg challenge De Vaux's Qumran-Essene hypothesis; scholars like Eshel, Broshi, Ullmann-Margalit and Magness defend it. Unfortunately, until the final report of De Vaux's excavation is published, and all the artifacts and records from Qumran now at the Ecole Biblique in Jerusalem (<http://ebaf.edu>) are available to scholars, little consensus on the interpretation of Qumran and the Dead Sea Scrolls can be established (Atkinson 2008).



QUMRAN RUINS

Norman Golb challenges both of De Vaux's assumptions. He argues that the Dead Sea Scrolls were not copied or kept by the community at Qumran, but were from the libraries of various communities in Jerusalem, who hid them when the first war between Judah and Rome (66-70) was imminent (Golb 1980, 1995). Golb also argues that the community members were not peace loving ascetics, but fighters who, like the militant Sicarii at Masada, fought the Romans to their deaths.

In 1993-2004 Itzak Magen and Yuval Peleg directed new excavations at Qumran. They also challenged De Vaux's assumption that the structures were used by a community who developed an elaborate water system used for ritual bathing (Hebrew: *miqvaot*). Magen

and Peleg argued that the water system at Qumran was part of a pottery factory. The cisterns were used to wash the clay before using it to make pots (Magen and Peleg 2006).

From 1996-2002 Yizhar Hirschfeld directed a large scale excavation at En-Gedi and a regional study of both shores of the Dead Sea (Hirschfeld 2004). The similarity between En-Gedi and other settlements contemporaneous with Qumran also convinced him that De Vaux's Qumran-Essene hypothesis was wrong, and that the Dead Sea Scrolls were not copied and stored by a Jewish monastic community at Qumran.

Qumran, Hirschfeld concluded, would have had no attraction for Jewish monks seeking to flee the world, because it was a thriving center of commerce owned by a wealthy Herodian household. Qumran was just one of many plantations (Latin: *villa rustica*) that formed a sophisticated commercial complex exporting its products to Syria-Palestine, the Sinai, Egypt and Rome.

When the household of Hashmon (170-63 B.C.E.) and then Herod (63-4 B.C.E.) ruled Judah, there was an economic renaissance in the communities along the shores of the Dead Sea. Jericho, Qumran, En Gedi, Masada, En Boqeq on the west; Callirrhoe and Macherus on the east were all centers for the production of farm products and the mining of salt and bitumen (Hirschfeld 2004: 11-12). A network of routes and harbors connected all these settlements to one another, to the regional capital at Jericho, to the state capital of Jerusalem, and linked the entire region with settlements in the Hills of Judah to the west and the mountains of Moab to the east.

- Agriculture along the Dead Sea was diversified. There were plantations of tree crops that produced dates, balsam, incense, grapes, citrus and other fruit. Farmers also raised plant crops like wheat, barley and vegetables.

Date palms are indigenous to the Dead Sea Valley. They cope well with the extreme climate and brackish water. Dates were processed into date honey which was a staple in Mediterranean diets. Date palms also filter salt from the ground water, and their branches provide shade from the sun. Farmers used them to create micro-climates where they planted wheat, barley and vegetables. Finally, date palms are an abundant source of raw materials used in the construction of buildings, furniture, tools and other commodities. They were the most important cash crop in the region.



DEAD SEA COMMERCE
 © HIRSCHFELD 2004: 3

Farmers also harvested resin from balsam trees. Factories converted the resin into luxury cosmetics like perfume and ointment. Grape vines and citrus trees also thrived in the soil and climate along the Dead Sea as well as a wide variety of vegetables.

Plantations also mined salt and bitumen from the Dead Sea. Salt and asphalt production are the primary industries by which the peoples of the Dead Sea valley traditionally have made their living. Today, potash is taken from the Dead Sea for fertilizers and explosives. In the world of the Bible, these salt blocks were used to start fires (Pilch 1999: 4-5). Asphalt was used as an adhesive to haft stone blades to wooden handles, and as caulking for boat hulls. Since both salt and asphalt were such important economic

commodities, they appear in the Stories of Lot and his Daughters (Gen 19:1-38) as divine endowments.



JODI MAGNESS
THE ARCHAEOLOGY OF QUMRAN AND THE DEAD SEA SCROLLS
(2002: 15-16)

I find myself – an American Jewish woman – in the curious position of defending the interpretation proposed by de Vaux who was a French Dominican priest! But this book is not about my personal beliefs and background or about de Vaux's. It is about the archaeological evidence. Obviously, de Vaux's interpretation of Qumran was influenced by his background (who isn't?). De Vaux's bias is evident in his use of monastic terms to describe some of the rooms and installations at Qumran (such as "refectory" and "scriptorium"). But the objections that have been raised by de Vaux's critics have obscured the fact that his interpretation of the site is basically correct.

In 2001-2002 Hana Eshel and Magen Broshi directed excavations focused on finding where the members of the Qumran community lived. They found three artificial caves used as dwellings, and a circle of stones used as a tent site. The trails between these caves and Qumran were littered with first century Common Era coins and sandal nails (Broshi and Eshel 2004). Their conclusions supported those of De Vaux that Qumran and the caves are related to one another.

Similarly Jodi Magness and Edna Ullmann-Margalit also support De Vaux's conclusion that Qumran was a Jewish monastery, and that the community there copied and cared for the scrolls found in the caves (Magness 2002; Ullmann-Margalit 2008). For Magness the ritual baths, the common dining room, and the ritual disposal of meal bones point to a religious community, not a pottery factory or a commercial plantation. Likewise, for her, the three ink wells recovered at Qumran link the site with the Dead Sea Scrolls recovered from the caves.

Among the Dead Sea Scrolls are the earliest copies of sections from almost all twenty-four books of the Bible. Only Esther and Nehemiah are missing. Before the discovery of the Dead Sea Scrolls in 1947, the earliest existing scrolls were copied around 1000. The Dead Sea Scrolls were copied between 200 B.C.E. - 68, more than one thousand years earlier.

By comparing the text of the Bible today with the Dead Sea scrolls biblical scholars have learned much about how the Bible developed. Since the year 100 there has been only one official Hebrew text (Hebrew: *masorah*). The Dead Sea Scrolls, for example, include more than one version of the Hebrew text which indicates that there was not a single

authoritative version of the Bible between 200 B.C.E. and 100. Some of these alternative versions have been preserved in Greek, Latin, and Syriac translations.

There was also no established canon at the time of the Dead Sea Scrolls -- no official list identifying which books belonged to the Bible, and which did not. Clearly some books of the Bible were more popular than others during the period. There are eight or more copies of Genesis, Exodus, Leviticus, Numbers, Deuteronomy, Isaiah, Hosea, Joel, Amos, Obadiah, Jonah, Micah, Nahum, Habakkuk, Zephaniah, Haggai, Zechariah, Malachi, Psalms, and Daniel. Deuteronomy, Isaiah and Psalms were the most popular, and most copied, books in the Dead Sea Scrolls.

The Dead Sea Scrolls also include books containing the teachings which scholars have named: the Damascus Document, the Community Rule or Manual of Discipline and the War Scroll. The teachings and traditions in the scrolls do not mention Essenes. They simply refer to *The Community* (Hebrew: *yahad*). The founder of the Community was *The Teacher of Righteousness* and its leaders were the *Heirs of Zadok*, the high priest during the reigns of David and Solomon (1000-925 B.C.E.).



After the end of the first war between Judah and Rome (70) a school of Jewish scholars developed at Jabneh on the coast of the Mediterranean Sea. These scholars edited a fixed text of the Hebrew Bible which would be the standard or model (Hebrew: *masorah*) for copyists. Their work is known as the *Masoretic Text*. Prior to the Masoretic Text different copies of the same passage in scrolls like those from Qumran differ from each other in spelling and wording.

The ritual of initiation for candidates who wanted to become members of the Community lasted more than two years. They forfeited their personal property to the Community, and took vows to obey the heirs of Zadok. Some members were married and lived active lives in the villages and cities of Judah. Others lived contemplative lives of celibacy and simplicity in the desert.

The Dead Sea Scrolls demonstrate how the Community understood the Bible and applied it to their daily life. The Community distinguished itself especially by its theology of forgiveness, its liturgical calendar, and its belief that the Hasmonean state of Judah was about to end (Greek: *eschaton*).

The Community did not believe that the sacrifices offered at the Jerusalem Temple by the Hasmonean priests forgave sins. The members of The Community atoned for their sin by prayer and by living a simple life.

The Community also followed a solar calendar, rather than a lunar calendar which meant that their feast days did not coincide with those celebrated throughout the Hasmonean state of Judah.

When the Household of Hashmon won its war of independence from the Greek rulers of Syria-Palestine in 170 B.C.E., it celebrated the victory by rededicating the Temple in Jerusalem. Jews today remember the event in the celebration of Hanukah. The Community in the Dead Sea Scrolls, however, considered the Hasmonean Temple to be as heretical as the *abomination of desolation* in the book of Daniel (Dan 11:31). Therefore, just as the *Ancient of Days* had brought down the Temple of Antiochus Epiphanes IV, the Greek ruler of Syria-Palestine, the Temple dedicated by the Household of Hashmon would also be destroyed.

The daily life of the Community in the Dead Sea Scrolls imitated the daily life of the Hebrews during their forty year exodus from Egypt into the desert. They waited in the desert for two messiahs. The *Messiah of Israel* would rule a new state; the *Messiah of Aaron* would rule a new Temple. When these two messiahs appeared, the Community would serve as a cadre for the *Sons of Light*. They would be the key officers and personnel who would train these divine warriors and lead them in a forty year war against the Hasmonean *Sons of Darkness* and their allies.

In The Sacred and the Profane: the nature of religion (1959) Eliade assigns religion the role of synchronizing the human or profane plane with the divine or sacred plane. Spiritual people (Latin: *homo religiosus*) follow ways of life that harmonize these two dimensions of human experience – the human and the divine.

The guidelines for synchronizing the human and the divine in the Dead Sea Scrolls and other communities in Judah were called *laws of purity* (Neusner 1994). The biblical inspiration for these lifestyle guidelines (Hebrew: *halakah*) are preserved in teachings on clean and unclean in books like Exodus, Leviticus (Lev 11:1—16:34) and Numbers.

Clean, pure, wise, unclean, impure and *foolish* were labels that taught people in the world of the Bible a specific way of looking at life. Some formal education did take place in schools, whose teachers explained why certain ways of doing things were clean, and others were

unclean, for example, but most education was informal. Labeling was the principal means of informal education (Benjamin 2004: 105-113).

The labels *clean* or *pure* in the books of Exodus, Leviticus, and Numbers, and *wise* in the books of Proverbs, Ecclesiastes, and Job, are parallel. They describe acceptable, honorable or spiritual human behavior. The clean, the pure and the wise successfully harmonize their lives on the human plane with the lives of their divine patrons on the divine plane. Everything they do here imitates something that their divine patrons are doing there

The labels *unclean*, *impure* and *foolish* describe unacceptable or shameful behavior. Unclean or impure behavior had little or nothing to do with attitudes toward hygiene today. They defined status and were analogous to credit ratings today. The unclean, the impure and the foolish did not harmonize the human plane with the divine plane – the sacred with the profane. Consequently they put their households and villages at risk socially and economically.

Clean behavior entitled households to life. The clean ate moderately, did not get drunk, worked hard, made good friends, sought advice before acting, held their temper, paid their taxes, and imposed fair legal judgments. The clean were careful in dealing with one another during menstruation, sexual intercourse, childbirth, and death. The clean were equally conscientious about what food they ate, what clothes they wore, what animals they herded, and what crops they planted in their fields.

Clean was the label for a household in good standing, licensed to make a living in the village, and entitled to the support of other households in the village. Clean households cared for their own members and were prepared to help their neighbors. Only the clean were entitled to buy, sell, trade, arrange marriages, serve in assemblies, and send warriors to the tribe. Only the clean were entitled to make wills, appoint heirs, and serve as legal guardians for households endangered by drought, war, and epidemic. The clean were in place and functioning well because they harmonized the sacred and the profane in their daily lives.

Unclean was a label for households sentenced to death by placing its land and children at risk. The unclean ate too much, drank too much, were lazy, quarrelsome, selfish, and thought nothing about lying to the village assembly. They were thoughtless in their sexual relationships, and disrespectful of the newborn and the dead. The herds of the unclean were mangy, and their farms run-down.

Unclean households did not fulfill their responsibilities to their own members or their neighbors. The unclean were on probation. The unclean were out of place and not functioning properly. Consequently, both their contributions to the village and their eligibility for its support were suspended. The unclean label downgraded the status of a household, until it demonstrated that it was once again contributing to the village.



The material remains at Qumran reveal that not only the Community in the Dead Sea Scrolls, but also the community at Qumran, were both seriously committed to harmonizing their lives on the human plane with the actions of Yahweh on the divine plane. Purity guidelines defined all their actions.

WATER SYSTEM AT QUMRAN

The water system at Qumran is the clearest record in the stones of the community's commitment to harmonize their daily lives with the actions on the divine plane. Water installations at the site catch and store far more water than would be needed for the members' survival.

An aqueduct (see arrow) diverted water from the Wadi Qumran into the northwest corner of the site and filled pools throughout the site. In front of each pool there was a settling basin which slowed the flow of the water until the silt in it had slowly dropped to the bottom of the pool (Magness 2002 54).

The first settling basin (see arrow) just inside the settlement was broad and shallow adjoined by a small stepped pool. From this settling pool the water flowed south through a channel, filling the round Iron Age cistern and the two rectangular pools nearby.

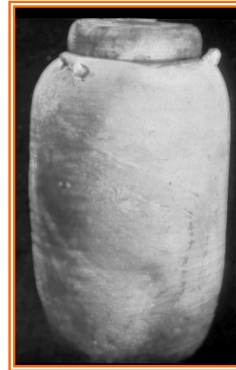
At the end of the water system was a large ritual bath (Hebrew: *mikveh*). The stairs leading into the pool are divided by a floor level banister. One side of the stairs was used for entering the bath; the other side for leaving it. The stairs into the pool lead members away from their old lives; the stairs out of the pool lead them to renewed lives.

Earthquakes were common in Syria-Palestine. In 31 B.C.E. a violent earthquake severely damaged the settlement at Qumran. Huge cracks appeared in the walls of the water system, but the community did

not abandon the site (Magness 2002: 63-69). They repaired and remodeled the site.

The material remains at Qumran show how important it was for the community to be self sufficient if its members were to avoid contact with outsiders. For example, they manufactured their own pottery. There are remains at the site of the vats the members used to cure their clay before using it to make pots. There are remains of the fast wheel they used to throw their pots and of the kilns where they fired them.

Potters also developed a unique pot found both at Qumran and in the caves around the site. The large mouth of the pot and its lid shape allowed members of the community to handle liquids according to the ritual guidelines they established for themselves. At some point the pots were also used to store the scrolls found in the caves.



SCROLL JAR
QUMRAN

COMMON ROOM
QUMRAN



Common life was also a value for the community at Qumran. To provide space for assemblies of the community they built a large room. The large room was also used for eating. A pantry containing the remains of some 1,000 eating bowls adjoined the large room. One of the water channels at the site was able to be diverted to flood the floor of the large room to clean or to purify it.



EARTHQUAKE DAMAGE TO RITUAL BATH (L)
UNDAMAGED RITUAL BATH (R)
QUMRAN



There is also a cemetery at Qumran containing as many as 1100 graves. Most of the dead are male, and have been buried with their heads to the north, their feet to the south. Each grave is covered with stones.

CEMETERY OF QUMRAN

DEDICATION OF THE CITY OF IMMANUEL (EZEK 40:1–48:35)

Today's idea that the world will come to an abrupt end, and then eternity will begin, would have been foreign to the Hebrews in general and to the Hebrews who were members of the Qumran community. They expected every old world to be replaced by a new world.

Another significant difference between the world view in the world of Bible and today's world view is how to solve problems. Today problems are solved by looking into the future. In the world of the Bible problems are solved by looking into the past. Today, it is assumed that the future development of wind and solar energy will control the overuse of fossil fuels like oil. In the world of the Bible it is assumed that the Creator endowed humans not only with the cosmos, but also with all they needed to know to live in it. Problems arise when humans forget. So when the community at Qumran has a problem surviving in a Judah ruled by the household of Hasmoneus, they reflect on their past for models. The most significant models for them were preserved in the Bible.

The book of Ezekiel, for example, surveys a new land, designs a new temple, promulgates a new code of law, and establishes a new liturgy for such a new world (Ezek 40:1–48:35). Like the child celebrated in the book of Isaiah (Isa 7:14), the city described in the book of Ezekiel is named *Immanuel* (Ezek 48:35).

The end-time community at Qumran may have been inspired by traditions like those preserved today in the book of Ezekiel. Their inspiration motivated them to build at Qumran a microcosm – a model of a new world that would replace the old world created by the household of Hashmon in Jerusalem.

In more than one way the stones of Qumran imitate the characteristics of the stories in the book of Ezekiel (Magness 2002:50). In both the city of Immanuel and the settlement at Qumran there was an abundance of water. Likewise the city of Immanuel and the settlement at Qumran were not where people lived, but sacred centers (Greek: *omphalos*) where people prayed. Finally, the lives of the people of Immanuel, and the lives of the community at Qumran were lives of radical simplicity, and thoroughly synchronized with the divine plane.

During the first war between Babylon and Judah (597-586 B.C.E.), the Babylonians deported the members of the household of David – anyone connected officially with the government in Jerusalem. Then the Babylonians redistributed their land in Judah to households who had not participated in the revolt (Hebrew: *'am ha'ares*).

The book of Ezekiel was an attempt to assess the reasons for the collapse of the Judah ruled by the household of David (Benjamin 2004: 400-403). The book of Ezekiel also proposes a vision for a new world for the people of Judah – a world without monarchs and without royal policies like those pursued by the household of David which were responsible for the wars between Babylon and Judah, which took away the land and children that Yahweh had bestowed upon the people of Judah. The book of Ezekiel also attempted to reeducate the members of the household of David so that when they returned from exile they would commit themselves to lives of radical simplicity and lives thoroughly synchronized with the divine plane.

The Hasmonean kings and queens who ruled Judah from 170-64 B.C.E. were no more successful than the household of David who ruled Judah from 1000-586 B.C.E. Instead of providing for the people of Judah, both taxed them into starvation. Instead of protecting them, they plunged repeated into wars that they could not win.

Just as the book of Ezekiel was an effort to re-educate the household of David, the daily life of the community at Qumran was an effort to re-educate the household of Hasmoneus. There are some significant parallels between the traditions in the book of Ezekiel and at Qumran in the way both understood human behavior and divine blessing in the new worlds they were trying to create.

In the Dedication of the City of Immanuel Ezekiel is taken away from the Jerusalem built by the household of David to a mountain on the divine plane where Yahweh -- described as *...one, whose appearance was like bronze, with a architect's line of flax and measuring reed in his hand* - is prefabricating a city (Ezek 40: 3). When the armies of Babylon have destroyed the old Jerusalem, Yahweh will move the City of Immanuel -- the new Jerusalem -- from the divine plane to the human plane. Similarly, Qumran is a set apart from the old Jerusalem built by the household of Hasmoneus. Qumran is a prototype for the new Jerusalem built by Yahweh in the desert.

The book of Ezekiel proposes a code of honor for the household of David in the City of Immanuel (Ezek 46:1-24) which is similar the purity guidelines for the community in the Dead Sea Scrolls. The fathers of the households in the New Jerusalem will not be monarchs, but priests. These fathers have only limited authority. They are to live modestly and deed their land only to children born inside the household. No member of the household can serve as a priest for more than seven years, and no other household is to be evicted from its land to support the household of David. In this New Jerusalem, the household of David is to ponder and to celebrate the great stories of how Yahweh delivered the Hebrews from slavery and endowed them with land. They do not live in the temple compound, but enter Yahweh's sacred space only to offer the morning sacrifice and to lead pilgrims in procession to the temple.

Once Yahweh officially takes possession of the city, the *Hand of Yahweh*, Ezekiel's guide, escorts him to the dedication of the city's spectacular new water system (Ezek 47:1-12). The first stop on the tour is the Gihon Spring in the Kidron Valley. Early in the Iron Age, Jerusalem was located on a low, fifteen-acre ridge of land called Mt. Ophel, cut out of the central hills by the Kidron Valley on the east and the Central Valley on the west. Today, this spur juts out to the south of the Temple Mount constructed by Herod on Mt. Moriah, and is outside the Old City walls built by Suleiman (1494-1566). The Gihon Spring is Jerusalem's principal water source, and is located at the foot of the Mt. Ophel ridge in the Kidron Valley (1 Kgs 1:33). In antiquity the Gihon Spring was a siphon spring that pumped intermittently for about thirty minutes every four or five hours.

The provisions at Qumran for large quantities of water stored throughout the settlement may be an attempt to image the vision in the book of Ezekiel. Ezekiel watches the Gihon Spring pump enough water to turn the Kidron Valley into a massive reservoir, which then overflows and runs down the road from Jerusalem to Jericho. Even when the freshwater from the spring reaches the saltwater in the Dead Sea, the Gihon continues to pump. In this new city the Gihon Spring pumps enough freshwater to sweeten the saltwater of the Dead Sea, from the spring at Qumran to the oasis of En-Gedi just north of the fortress of Masada. *When the freshwater enters the Dead Sea it becomes fresh. Wherever the river goes, every living creature that swarms will live, and there will be very many fish, once these waters reach there. It will become fresh, and everything will live where the river goes* (Ezek 47:8–10).

Nonetheless, Yahweh is environmentally sensitive. Enough salt marshes will be preserved that the communities which historically have depended on the salt marshes in this forbidding terrain are protected. *Its swamps and marshes will not become fresh. They are to be left salt* (Ezek 47:11).

When Ezekiel's great time voyage ends, he has seen what Yahweh sees. The war and the exile brought the old world built by the household of David to an end, but those same events set the new world built by Yahweh into existence. The time voyage puts the tragic events of his world into perspective. Despite the elaborate detail with which Ezekiel recounts his experience of the City of Immanuel, the voyage has a single and simple message for the people of Judah: *Yahweh, not the household of David, and not the Great King of Babylon, is the architect of all human events. It is Yahweh, and only Yahweh, who protects the land and feeds the people.* The Community in the Dead Sea Scrolls and the stones at Qumran may have had much the same to say about the household of Hashmon in Jerusalem.



WHAT YOU HAVE LEARNED

- As a Cultural Historian and Biblical Archaeologists DeVaux used written artifacts like the Dead Sea Scrolls to interpret the material artifacts from Qumran.
- Initially the people of Judah assimilated both Persian and Greek lifestyles to survive, but ultimately returned to their historic lifestyle set down in Torah.
- The community at Qumran withdrew its endorsement of the Household of Hashmon even though it was native to Judah and responsible for liberating Judah from its Greek conquerors. Once in power, however, the Hasmoneans The Hasmoneans also abandoned the traditional liturgical calendar and began celebrating feasts at different times of the year. They also expelled the household which historically had served as priests for the Temple in Jerusalem, and appointed priests from another household, and arrested and tortured the priest who was the Teacher of the community at Qumran.
- DeVaux used his personal experience in a Catholic monastery to describe the daily life of the community at Qumran as a Jewish monastery. He also used the ideals of his native French intellectualism to describe the ideals of the community at Qumran as a commitment to simplicity and a life of learning.
- Besides DeVaux' interpretation of the artifacts at Qumran as a Jewish monastery, other scholars have interpreted them as a pottery factory and an agricultural plantation.
- For DeVaux the elaborate water system at Qumran was used for ritual bathing to renew the members' commitment to their covenant. In the pottery factory the water and cisterns were used to wash clay. In the agricultural plantation the water was used to irrigate crops.

Part Three

Annales Archaeology



- Part Three is an introduction to the School of Annales Archaeology.
- Chapter 11 describes how tThe School of Annales Archaeology was founded by Marc Bloch (1886-1944) and Lucien Febvre (1878-1956) studies slowly developing and long lasting social institutions (French: *la longue durée*) like farming, herding pottery making and architecture.
- Chapters 12, 13, 14 look at agriculture, pottery and architecture as models of the long lasting institutions reconstructed by Annales Archaeologists.

CHAPTER 11 ANNALES ARCHAEOLOGY



Chapter 11 describes important differences between the School of Cultural History and the School of Annales Archaeology, and identifies some important figures in the development of Annales Archaeology. It also explains what three kinds of processes are going on simultaneously in any culture.

For R.G. Collingwood in The Idea of History (1946) cultural historians want to understand why events happened and to re-construct what the great men who caused these events were thinking. They chronicle the ideas and events of the rich and famous reflected in unique political, diplomatic or military events (French: *evenements*).

The Annales School was founded by Marc Bloch and Lucien Febvre while they were teaching at the University of Strasbourg in 1929. Bloch studied the history of France; Febvre studied the history of Spain.



MARC BLOCH (1886-1944)



LUCIEN FEBVRE (1878-1956)

Bloch and Febvre were more interested in the daily lives of ordinary people and more slowly developing and long lasting social institutions (French: *la longue durée*) like farming, herding, architecture and ways of thinking about birth and death (Knapp1992). For Annales Archaeologists only by reconstructing these long-term and slowly changing ways of looking at

life is it possible to accurately interpret the material remains of past cultures. The key to the past is not in the rapidly changing events like military conquests, but rather in those slowly changing social institutions that remained the same for generations. To accurately understand the past it is more important to understand how they farmed, than whom they fought.

The Annales School was named for L'Année Sociologique, a journal of sociology founded by Emile Durkheim (1858-1917) in 1898. Durkheim



pioneered the discipline of sociology in Rules of the Sociological Method (1895), and he created the first department of sociology in Europe at the University of Bordeaux (France).

FERNAND BRAUDEL (1902-1985)

Febvre's most famous student was Fernand Braudel. His seminal work is The Mediterranean and the Mediterranean World in the Age of Philip II (1949). Braudel began *writing* this study from memory which he was a prisoner of war during World War II! He emphasized the contribution of economics and geography to the interpretation of any period of history, and inaugurated a second trajectory of the Annales School (1960-1980).

Braudel's most famous student was Emmanuel Le Roy Ladurie. Le Roy Ladurie pioneered a third trajectory of the Annales School called *micro-history*. Micro-historians study an event, locality, family or individual to reveal the underlying structures of daily life in a particular period. In The Peasants of Languedoc (1974) Le Roy Ladurie reconstructed daily life in Languedoc (France) from 1500-1900. He analyzed records of tithes, wages, taxes, rents and profits.

The focus of micro-history is not on the powerful that were collecting tithes, taxes, rents and profits, but on the powerless that were paying them. Le Roy Ladurie reconstructed the history of Languedoc by describing the world views of ordinary people – world views that developed slowly and changed little over time.



EMMANUEL LE ROY LADURIE

Annales archaeologists working in the world of the Bible today excavate society as a whole, not a specific site. They focus on broad sweeps of time and create generalizations. They try to determine when humans began to farm, herd and make pots, and how long it took for these activities to develop

and then to change. To construct these grand cultural visions Annales archaeologists collaborate with their colleagues in economics, linguistics, sociology, anthropology, psychology and the natural sciences.



Thomas E. Levy assembled thirty archaeologists to use the Annales method to report on the state of the archaeology of society in Syria-Palestine (Levy, ed. 1998). These essays all use some form of the interdisciplinary School of Annales Archaeology.

THOMAS E. LEVY

For Annales archaeologists every stratum in an excavation is layered. A layer of occupation is not a snapshot of a single moment in the life of a village or city, but a mix of short, medium and long term processes all paused at very different points in their development.

Some processes like wars develop quickly and last only a short time. Whether a war lasts a year -- as the war between Assyria and Judah that destroyed the city of Lachish (701 B.C.E.), or ten years -- as the war between Judah and Babylon that destroyed the city of Jerusalem (597-586 B.C.E.) -- war is a short term process or *event* (French: *evenements*).

Some processes like village lifestyle or climate change evolve more slowly and last longer. Grain recovered in a destruction layer at Jericho reflects some two hundred years of climate change at the site between 1750-1560 B.C.E. Annales archaeologists call these medium term processes *crossroads* institutions (French: *conjunctures*).

Some processes like architecture, farming, herding and burial customs develop very slowly and then remain virtually unchanged for long periods of time. From 100 B.C.E.--68 the people of Qumran buried their dead to emphasize their on-going relationship with the living just as in 8000 B.C.E. the people of Jericho just a few miles north buried their dead to emphasize their on-going relationship with the living. What each culture did with dead bodies was different, but the burials reflected a slowly developing and long-lived world view that the living and the dead are still in touch with one another. Annales archaeologists call these processes *long lasting* (French: *la longue durée*) social institutions.



WHAT YOU HAVE LEARNED

- Cultural Historians reconstruct the short term processes (French: *evenements*) like wars and building projects at a site. Annales Archaeologists reconstruct long term processes (French: *longue duree*) like the development of pottery and farming techniques at a site.
 - The Annales School was founded by Marc Bloch and Lucien Febvre. Bloch studied the history of France; Febvre studied the history of Spain. Febvre's most famous student was Fernand Braudel. His seminal work is The Mediterranean and the Mediterranean World in the Age of Philip II (1949).
 - For Annales archaeologists every stratum in an excavation is a mix of short, medium and long term processes all paused at very different points in their development.
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CHAPTER 12 AGRICULTURE



Chapter 12 describes agriculture, the first example of a long lasting institution reconstructed by Annales Archaeologists. It shows how Neolithic peoples changed the course of human history, how Neolithic people hunted gazelle, and how Neolithic people prepared for, and then celebrate their hunt. It also explains what it means to say that the economy of Hebrew and other Iron Age villages in the world of the Bible was *dimorphic*. Finally it shows what invention allowed the Hebrews to farm hillsides and what invention allowed the Hebrews to build villages in locations without natural water sources.

NEOLITHIC (10,300-4300 B.C.E.) AGRICULTURE

The Medieval Period (410–1450) in Western Europe began with the collapse of the Roman Empire, and ended with the collapse of the Byzantine Empire. The Renaissance (1300-1600) followed. Medieval culture taught humans to respect what they did not understand. It was a culture of mystery. Renaissance culture taught humans to use their intelligence to understand the world where they lived. It was a culture of discovery.

Like the Renaissance the Natufian (10,300-8500 B.C.E.) and Neolithic (8500-4300 B.C.E.) periods in the world of the Bible were characterized by discovery and creativity. Slowly developing, but long lasting, ways to farm, to herd, to build houses, to make tools, to make pottery and to bury the dead appear for the first time in the settlements of these remarkable cultures. The practical inventions of Natufian and Neolithic peoples not only produced radical changes in their daily life; they also inspired dramatic changes in the way that they



The term *medieval* comes from the Latin meaning *middle ages* -- a period when there was heightened interest in the art and history.

The Medieval Period begins with the collapse of the Roman Empire in 410. It ends in 1453 when Turkish forces captured Constantinople.

understood life (McCarter 2007).

Natufian culture was pioneered by people who discovered how to cultivate grain and build houses. It developed at the eastern end of the Mediterranean Sea just before the end of the Pleistocene era. It was a unique Stone Age culture whose villages, farming and hunting techniques were the prototypes of both the cities of the Neolithic period and the agriculture that supported them.



DOROTHY ANNIE GARROD
1892-1968

Dorothy Garrod (1892-1968) was the first woman professor at Cambridge University (Cohen and Joukowsky, eds. 2004). She named these resourceful people *Natufians* after excavating the Wadi en Natuf at Shukba between Jerusalem and Tel Aviv (Garrod 1957). Neolithic culture ended when humans began to replace their flint tools and weapons with tools and weapons molded from copper, and the Chalcolithic Age began. No written traditions from Natufian Cultures have been recovered. Their stories are told only in stones.

A major climate change occurred in the world of the Bible around 12,500 B.C.E. This Younger Dryas geological period – named for an alpine wildflower (Latin: *dryas*) -- was a severe thirteen hundred year drought during which glaciers retreated back toward the poles. There



Chalco is the Greek word for *Copper*. *Lithic* is the Greek word for *flint*. During the Chalcolithic Age copper and flint were the raw materials used to manufacture tools and weapons.

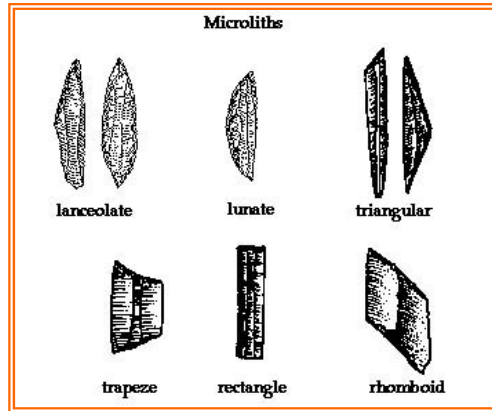
was no snow to maintain the ice pack, and the glacier melt caused the level of the Mediterranean Sea to rise, and the coastline stabilized to its present contours. The Coastal Plain along the eastern end of the Mediterranean Sea became narrower and was covered by sparse forest and grasslands, with

swamps in low lying areas.

The Younger Dryas destroyed the wild cereals, legumes, almonds, acorns, pistachios and cereals gathered by the Natufians, who reacted by clearing scrub and planting seeds. Gordon Hillman spent over twenty years investigating the remains of ancient food plants at a unique site at Abu Hureyra (Iraq). Seeds survived at Abu Hureyra because they had been accidentally charred in house fires before they were buried. They are the oldest cultivated seeds recovered by archaeologists. Wild seed varieties gathered as food gradually vanished at Abu Hureyra, before the cultivated varieties appeared. Those wild seeds most dependent on water

were the first to die out, followed by the more hardy ones. This was a clue as to why the Natufian hunter-gatherer people turned to cultivating some of the foods they had previously collected from the wild. The wild grasses and seeds that the people relied on for food died out, and they were forced to start cultivating the most easily-grown of them in order to survive (Simmons 2007).

The Natufians did not irrigate their crops. They took wild seeds and sowed them where natural soil moisture allowed them to germinate and grow. Wild stands of these cereals could not have continued to grow unaided in such locations because they would have been overgrown by native scrub. Therefore, these first farmers had to clear out the competing vegetation.



To harvest and process their crops the Natufians developed a technique to produce short blades or microliths by carefully knapping flint or obsidian. Microliths are geometric in shape -- triangles, new-moons or trapezoids. The shape of a microlith can be used to date it.

Sickle blades appear for the first time in the Natufian period. Archaeologists recovered a sickle from one of the houses at Yiftahel (Israel). The handle was made from a cow's rib, the blade was flint. The blade shows no signs of having been used to harvest grain.



CORE OF OBSIDIAN STONE

Abrasives like silica in the stems of plants generally create wear patterns on blades used by farmers (Howard 1999). The characteristic sickle-gloss shows that they have been used to cut the silica-rich stems of cereals and forms which is an indirect proof for early agriculture. Natufian and Neolithic peoples also made stone mortars, grinders and storage pits.

The Younger Dryas period also killed the great animals of the Pleistocene era -- mammoths, mastodons, giant bison, and ground sloths. Therefore the Natufians began to hunt smaller game.

Archaeologists have also recovered stone shaft straighteners or planes. These grooved stones were heated and then used in bending and

straightening arrow shafts which indicate that the Natufians had bows and arrows.

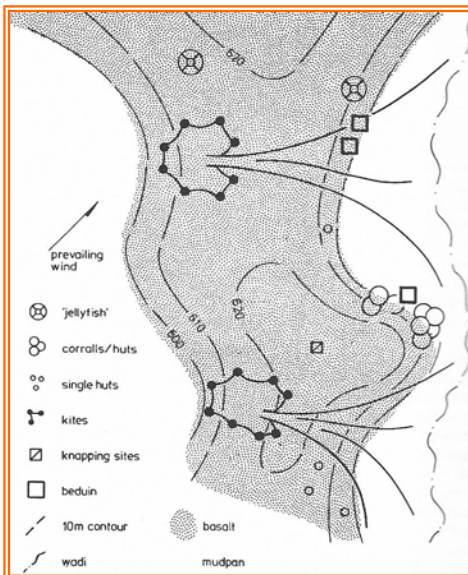


NATIVE AMERICAN SHAFT STRAIGHTENERS
© TEXAS BEYOND HISTORY: VIRTUAL MUSEUM
OF TEXAS CULTURAL HERITAGE

Two types of gazelle were popular with the Natufians, as well as deer, wild cattle, boar, asses and ibex. Water fowl and freshwater fish were hunted in the Jordan River Valley (Firmage 1992).

The Natufians at Nahal Oren (Israel) seemed to have domesticated gazelles. Gazelle bones, including many immature animals, were numerous at the site. At some point they changed from herding gazelles to herding goats. Goats graze more diverse plants than gazelles, and so were, no doubt, easier to herd. At most Natufian sites, however, gazelles were hunted not herded.

The proportion of gazelle, deer or antelope bones at a site is a measure of the role that hunting played in ancient economies. Before animals were domesticated at Jericho (Palestine) between 8500-7500 B.C.E., for example, 37% of the meat consumed was gazelle. Between 7500-6000 B.C.E., after animals were domesticated, less than 18% of the meat consumed at Jericho was gazelle. Between 2000-1550 B.C.E. only about 3.5% of meat consumed was gazelle.



KITES LANDSCAPE
JAWA (JORDAN)
© HELMS AND BETTS 1987, FIG. 7

The principal method of hunting gazelle in Syria, Jordan, the Negev (Israel), the Sinai (Egypt) and Saudi Arabia involved use of large, triangle-shaped corrals into which the gazelle would be driven. During the 1920's air-mail pilots named these structures *kites*. Natufians built one large kite around the Azraq Oasis (Jordan), on the boundary between the bush steppe and the black basalt desert, just west of the village of Azraq Duruz.

The kite head was a pit several hundred yards in circumference enclosed by a stone wall. Low walls one or two miles long formed the tails of the kite or antennae (Wilkinson, T.J. 2003: 175-176). These tail walls were often only one or two stones high. Although far too low to serve as real barriers, gazelle avoided these rows of stones rather than jump them.

Natufians built their kites along the migration routes followed by gazelle. Key locations were around watering holes, or where natural obstacles forced the gazelle off course. The gazelle would be herded between the widely separated tails, and then driven toward the head of the kite corral usually situated just beyond a slight rise and out of sight. Around the corral and along the tails were blinds where hunters waited. Trapped in the head of the corral the gazelle would be killed (Helms and Betts 1987).

In a lament in the Book of Psalms (Ps 104:11) mourners beg Yahweh to hunt their enemies like gazelle into a kite corral (Hebrew: *mad-hepa*).

LAMENT (PS 140:0-11)

Complaint

Those who surround me wag their heads;

Petition

Let their lies overwhelm them!

Let burning coals fall on them!

Let them be flung into pits like gazelle, no more to rise!

Do not let liars rule the land;

Let death hunt down the violent like gazelle into a kite trap (Hebrew: *mad-hepa*).



GAZELLE
ISRAEL MUSEUM
10,000 B.C.E.
LIMESTONE (2 7/8 x 5 7/8 IN)
UMM EZ-ZUWEITINA CAVE
© TREASURES OF THE HOLY LAND: ANCIENT ART FROM
THE ISRAEL MUSEUM 1986: 39

The Natufians used animal bones to make harpoons and fish-hooks. Stone and bone were also worked into pendants and other ornaments. Ostrich egg shells were turned into

containers. There are a few human figurines made of limestone, but the favorite subject was the gazelle.

Neolithic people decorated the inside walls of their houses with spectacular paintings of their divine patrons, their human ancestors, people dying and rising from the dead, flowers, geometric patterns, imprints of hands, stars, erupting volcanoes and hunts of wild animals.

To pray
for success
before hunts
and to
celebrate
success after
hunts
Neolithic
hunters
shaped and



then *hunted* small statues of gazelle and other animals, and made elaborate wall painting of successful hunts. In one large wall painting at Catal Hayuk (Turkey) – the *River Fork Tell* -- a wild bull over six feet long is surrounded by hunters. The horns of such a great bull have been recovered at Ubeidiya (Israel). The span between the tips of the two horns is over five feet.

NEOLITHIC BULL HUNT
6500 B.C.E.
WALL PAINTING
BULL IS 6 FT LONG
CATAL HAYUK

Ubeidiya is in the north of the Jordan River Valley southeast of the Sea of Galilee, a remnant of the prehistoric Lake Ubeidiya (http://catal.arch.cam.ac.uk/temper/site_ubeidiya.asp). Excavations at the site have revealed over sixty settlement layers between 1,500,000 - 700,000 B.C.E. Due to later earthquake activity these archaeological layers are now not horizontal, but almost vertical.



HORNS OF PREHISTORIC BULL
ISRAEL MUSEUM
PALEOLITHIC PERIOD (1,500,000-100,000 B.C.E.)
SPAN IS 5 ¼ FT
UBEIDIYA

Besides painting animals on walls and sketching them on stones, Neolithic artists also learned to shape animals in



Human beings today (Latin: *Homo Sapiens*) are descended from bipedal primates --usually called *hominids* (Latin: *Homo Erectus*) -- that first appeared in Africa some 5, 000,000 years ago. The earliest hominid remains have been excavated in East Africa -- in Kenya; at Olduvai Gorge in Tanzania excavated by Louis and Mary Leakey; and at Hadar, Ethiopia where Donald Johanson excavated *Lucy* (Latin: *Australopithecus afarensis*), a female hominid skeleton 3.2 million years old.

The earliest hominid tools were also discovered in East Africa. These hand axes were rounded at one end to fit in the palm, pointed at the other end, chipped and fractured to a cutting edge. Outside Africa the earliest hand axes -- about 1, 500,000 years old -- were unearthed at the extensive site of 'Ubeidiya (Israel), a vanished lake just south of the Sea of Galilee today. These excavations are evidence for the migration of early hominids out of Africa and into Syria-Palestine.

both clay and stone. A wonderful collection has been uncovered at a sanctuary in the Uvda Valley (Israel), a rich alluvial valley in the mountains northwest of Eilat. Abundant rainfall created a savannah where Neolithic people gathered grain and hunted deer, gazelle, ass and birds. The sites in the Uvda Valley were excavated by Ora Yogev and U. Avner for the Israel Antiquities Authority (<http://www.jewishvirtuallibrary.org/jsource/Archaeology/eilat.html>).

One open-air sanctuary in the Uvda Valley has a courtyard forty feet on a side surrounded by a low stone wall (<http://mfa.gov.il/mfa/go.asp?MFAH00v30>). Its corners are oriented to the four points of the compass. There were three cone-shaped jars full of ashes in the courtyard and in the Holy of Holies there were sixteen upright stones each eight-twelve inches tall.

Near the sanctuary is a mosaic of sixteen life-size animals, made of small, rectangular pieces of limestone embedded into the ground. Fifteen leopards with square heads, huge eyes, four legs and upward-curving tails face east. One antelope with twisted horns faces west. These animal sculptures were not simply works of art or a record of a hunt. The stylized designed and geographical installation of these figures indicates that they were icons that channeled power from the divine plane to the human plane allowing Neolithic people to manage their daily life.

IRON AGE AGRICULTURE

Once Natufian and Neolithic peoples had invented agriculture, farming and herding in the world of the Bible remained remarkably stable throughout the succeeding Chalcolithic and Bronze Ages. Political

and economic change brought the Late Bronze period (1500-1200 B.C.E.) to an end and the Iron Age (1200-586 B.C.E.) to a beginning. When the Egyptians lost both military and economic control of Syria-Palestine, villagers there stopped farming and herding for them. They revolted against the surplus state culture that the Egyptians had imposed on them. After the cities along the coast that governed their villages were destroyed, villagers moved east toward the Jordan River and established a decentralized subsistence culture in the hills north of Jerusalem. These villagers are the Hebrews who become the ancestors of ancient Israel.

There is little artifact evidence that the villages in the hills of Judah were founded by Hebrews who were outsiders or by warriors. They were natives of Syria-Palestine and they were farmers and herders. The economy of their villages was agricultural, not military. They left almost no weapons. They built few fortifications or monumental buildings. Their writing, language and material culture link them to cultures found throughout Syria-Palestine.

Archaeology also suggests that the Hebrews who founded the villages in the hills west of the Jordan River Valley were from cities along the coast, not nomads from the desert. They were social survivors who fled the famine, plague, and war which brought the Bronze Age to an end.

Hebrew farmers and herders were remarkably successful at maximizing their labor and spreading their risks. They cleared new areas of *maquis* brush and cultivated the land, using wooden or iron blades. They farmed a combination of wheat and barley, depending on the quality of the soil, temperature, and rainfall. They tended fig and olive trees and skillfully managed grape vines on terraced hillside plots.

To feed a growing population required more farmland, so landscape archaeologists determined that Iron Age villagers cleared the land of brush and trees – oak (Latin: *quercus ithaburensis*, *quercus calliprinos*), cypress, pine (Latin: *pinus halepensis*) and terebinth (Latin: *pistacia palestina*) -- so they could plant grapes, olives and cereal crops (Josh 17:16-18). This deforestation dramatically changed the appearance of the region.



The words for both the oak (Hebrew: **'al-lon**, **'el-on**) and the terebinth (Hebrew: **'el-a**, **'al-la**) are built on **'el** -- a word meaning "powerful," "divine" or "our Creator." These great trees were divine gifts or divine images (Isa 44:14-17).

The fertile red topsoil (Latin: *terra rossa*) in the hills was just over eighteen inches deep. *Terra rossa* is a Mediterranean soil containing red

iron-rich clay usually deposited on top of limestone bedrock. The clay content of this soil allowed it to hold moisture well, but it also eroded easily.

To convert the cleared slopes into level fields and to slow the process of erosion, villagers built retaining walls to create terraces (Hebrew: *merome sadeh*, Judg 5:18; *sede terumot*, 2 Sam 1:21). These terraces (Hebrew: *merome sadeh*, Judg 5:18; *sede terumot*, 2 Sam 1:21) were benches built on the slopes of hills. Walls were constructed parallel to the contours of the slopes. Infill or slope wash created deep, fertile soil beds behind the walls, and villagers used these for farming.

Iron Age villagers also learned to quarry ore and to forge iron. Although they continued to use bronze tools and weapons, iron required much less time and much less fuel to produce. They cast iron into axe heads to more easily clear the land. They shaped tips for their picks to more easily dig canals and cisterns for collecting rain water. They molded iron tips for their plows to more easily loosen the soil for farming.



IRON TOOL HEADS AND PLOW POINTS
UNIVERSITY OF PENNSYLVANIA MUSEUM
701-586 B.C.E.
BETH SHEMESH



Villagers without natural springs and wells depended on good water management to survive. Cenomanian limestone was formed 100,000,000 years ago at the bottom of seas more than four hundred feet deeper than they are today. Some villagers dug cisterns into the Cenomanian limestone bedrock because when moisture wets this kind of limestone it becomes water tight. Others lined their cisterns with plaster.

To make plaster villagers dug large kilns into hillsides. They filled the kilns with fire wood and limestone chunks. They had to keep these kilns fired for some three to six days at over 1600 degrees Fahrenheit to turn limestone into lime. Two tons of limestone and two tons of wood were needed to produce one ton of lime (Herr and Clark 2001). When lime is soaked in water before it is mixed with plaster and used to line cisterns, it becomes *slaked* or water tight.

Village economy in the world of the Bible was *dimorphic* – a combination of farming and herding (King and Stager 2001: 112-122). Some villagers farmed, some herded. Hebrew herds included both black goats and fat-tailed Awassi sheep (Borowski 2003: 25-34).

Sheep and goats are acclimated to the dry, hot climate of Syria-Palestine. They graze on grass during the wet season, and stubble left in the fields during the dry season. The Hebrews also kept bulls, cows, oxen and asses. Farmers used oxen to pull plows. They rode asses.

Sheep and goats were herded for their milk, their meat, their hides and their wool. Herders sheared their sheep at the end of the wet season. After their sheep were shorn herders paid their debts. Mesha, the ruler of Moab, pays his taxes to Israel in wool (2 Kgs 3:4). After Nabal's herds have been safely shorn, David asks him to pay him and his warriors for protecting the herders (1 Sam. 25:2).

Goats are good companion grazers for sheep. Their grazing habits compliment one another. Sheep, for example, pull up grass – roots and all – as they graze. Goats, however, simply browse the leaves of grass, and move quickly through a pasture without overgrazing it. In a mixed herd sheep will follow the goats as they browse doing less damage to pasture (Gong, Hodgson, Lambert and Gordon 1996). Likewise, goats eat weeds and other plants that sheep cannot digest.

Land ownership was governed by a theology common throughout the world of the Bible. Many cultures believed that all farmlands and pastures belonged to their divine patrons. These divine patrons then assigned farms and pastures (Hebrew: *nahalah*) to each household. These lands could be inherited, but not sold.

Households could mortgage their farms and pastures, but only if they were able to repay the mortgage in less than seven years. At the end of that period, the land would revert to the original owner (Lev 25:8-55).

In the Stories of Elisha in the books of Samuel-Kings (2 Kgs 8:1-6) Elisha tells a woman from Shunam to mortgage her land during a drought and to migrate to Philistia. Seven years later when she returned to Shunam, her creditor returned the land to her.

Jeremiah uses the statute of limitations on mortgages as a pantomime or symbolic action. When the Babylonians invaded Judah, he went through enemy lines to reclaim land in Anathoth that his household had mortgaged even though it was about to be overrun (Jer 32:6--44). His pantomime challenged audiences to believe that despite the sense of impending doom settling over Judah as the Babylonians advanced, the people needed to have

hope that Yahweh would restore their land and children.

CONCLUSION

Farming and herding practices in the world of the Bible were already centuries old when the first Hebrew villages appeared in



WHAT YOU HAVE LEARNED

- With their inventions of agriculture and pottery Neolithic peoples changed the course of human history.
- Neolithic hunters invented a blind called a *kite* to hunt gazelle. They stampeded herds between narrowing lines of rocks leading to a deep pit surrounded by a wall.
- To pray for success before hunts and to celebrate success after hunts Neolithic hunters shaped and then *hunted* small statues of gazelle and other animals, and made elaborate wall painting of successful hunts.
- The economy of Hebrew villages was *dimorphic* because villagers both farmed and herded to support their households.
- To more easily farm steep hillsides Hebrew villagers built terraces to level the soil.
- To build villages in locations without natural water resources the Hebrews learned to seal the walls of their cisterns with waterproof plaster.

Syria-Palestine. Although their world view was a radical departure from world view reflected in the great cities of the Late Bronze period, farming and herding in early Israel remained remarkably consistent with farming and herding in the Bronze Age and the Neolithic Period before it. Farming and herding were long lasting social institutions that developed very slowly, and changed very little regardless of the shifts taking place in the short terms events and crossroads processes developing around them.

CHAPTER 13

POTTERY



Chapter 13 describes the development of pottery, a second example of a long lasting institution studied by Annales Archaeologists. It shows how the invention of the potter's wheel which improved the quality of pots, and what else, besides decoration, a *slip* or *glaze* did for pots. It also explains why pottery statues of Godmothers portray them with large breasts, distended abdomens and heavy legs and hips; why Neolithic potters shaped images of their households from sticks and clay. The chapter also shows why the stories of Adam and Eve describe Yahweh creating as a potter, but what Yahweh uses that a human potter does not. It tells how the Bible thinks about the soul, in contrast to Greek philosophers who considered the soul (Greek: *psyche*) as the unique spiritual component of every human being. Finally, the chapter demonstrates what the *ba* soul and the *ka* soul reflect in Egyptian psychology.

Natufian peoples shaped vessels, tools, baskets and statues from wood, reeds, stone and bone. As early as 5500 BCE, Neolithic peoples in Syria-Palestine discovered how to *throw* pottery (Wood 1992 v 427-428; Franken 1992, v 428-433). *Throwing* derives from the Old Saxon term to *twist*. These potters knew how to distinguish between clay and other soils. They also knew how to mix and knead their clay so that it could be shaped into coils that they twisted on woven mats.

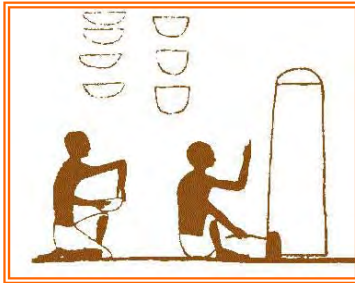


KNEADING CLAY
WALL PAINTING
© VICTOR BRYANT

The handles or spouts of some pots were decorated with notches or incisions. After pots were shaped, they were carefully dried to a leather-hard consistency without cracking or shrinking. Some dried pots were painted with simple lines or geometric designs.

A slip or glaze was applied to the outside surface of some pots to help waterproof the pot and make it more attractive. These coatings of colored, opaque, or transparent material were made from fine grained

clays or sand containing trace elements of metals such as copper, iron or lapis lazuli. The glaze on some pots was polished or burnished into the clay with a stone to give pots a lustrous sheen, and to prevent the glaze from flaking off when the pots were fired.



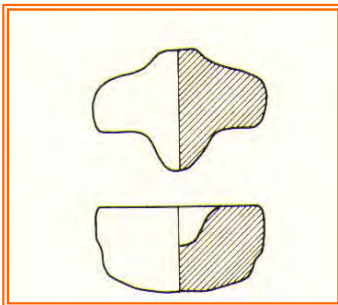
LIGHTING A KILN
WALL PAINTING
© VICTOR BRYANT

Neolithic potters originally fired on open hearths. Later pottery was fired in enclosed kilns or ovens. Neolithic pottery from Jericho, for example, was fired in kilns, not in open fires (Franken 1992). Animal dung was used as a fuel to raise temperatures in the kiln to 1300-1700 degrees Fahrenheit to create a dark red glow in the clay.

SLOW WHEEL
UNIVERSITY OF PENNSYLVANIA
STONE
BETH SHEMESH



The potter's wheel developed gradually. Neolithic potters probably graduated from coiling their pots on a mat to using a shallow bowl to build a coiled pot. The slow wheel was a simple turntable. Potters attached a wooden platform where potters shaped the clay to a stone bearing that fit into a stone socket. These wheels did not turn easily, and were only be used for easier coiling.



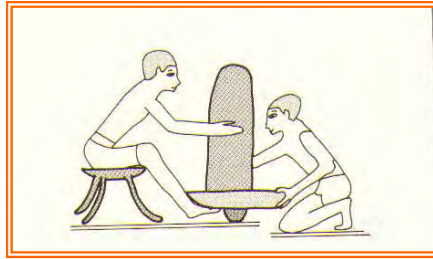
BEARINGS OF SLOW WHEEL
2000-1550 B.C.E.
STONE
6 IN WIDE
JERICHO
© WOOD 1992

The speed of the slow wheel could be increased if one potter turned the table, while another potter shaped the clay. A wall painting in the tomb of Kenamun at Thebes (Egypt) shows two potters working together on a slow wheel.

Kenamun was a mayor of Thebes during the 18th Dynasty (1550-1070 B.C.E.) who was also in charge of the granaries of Karnak temple. The potters are part of a larger painting in his tomb showing of the arrival at Thebes of a fleet of sea-going ships from Syria and the

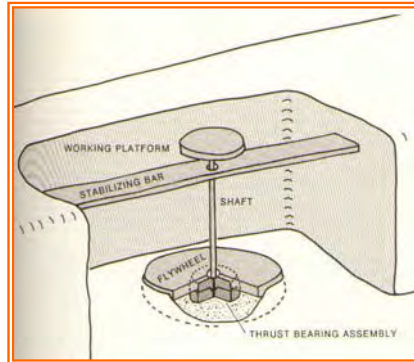
Aegean.

SLOW WHEEL
1550-1070 B.C.E.
WALL PAINTING
TOMB OF KENAMUN, THEBES
© WOOD 1992, v 428



The fast wheel developed
around 2000 B.C.E.

http://www.ceramicstoday.com/articles/potters_wheel2.htm). Two
wheels were connected to a shaft.
Potters turned the lower wheel with
their feet, and shaped their pots on the
top wheel with their hands.



FAST WHEEL
© FRANKEN 1992

Pottery came in many shapes and
sizes: dipping jugs, drinking cups,
round pilgrim flasks, broad open bowls,
cooking pots, and strainers for beer and
wine. Enormous storage jars preserved
grain. Smaller jars stored and shipped wine and olive oil.

EMPTYING THE KILN
WALL PAINTING
© VICTOR BRYANT



Like herding, farming and architecture,
pottery making gave Neolithic people not only
a reliable means of cooking, transporting, and
storing food, but changed the way they
thought about human creation. An example
of how Neolithic artists viewed pottery as a sacred science can be seen in
their creation of a range of ceramics with human features.

Neolithic statues of the Godmother shaped from clay were
common. Most are seated on a birthing chair. The only complete statue
of a Godmother was recovered at Horvat Minha (Israel) where the
Yarmuk River flows into the Jordan River from the east.

The Godmother is seated, although the chair itself is missing. Like similar statues, she is steatopygous or full figured. Her breasts are pendulous, her abdomen is distended, her hips and legs are heavy. She is a child-bearer with her left hand lifting her breast to nurse her children.

NURSING GODMOTHER

ISRAEL MUSEUM

6,000 B.C.E.

CLAY

4 3/8x2 1/2 IN

HORVAT MINHA

© TREASURES OF THE HOLY LAND 1986



The most famous ceramic statue of a Godmother was recovered from Catal Hayuk (Turkey). She is giving birth seated on a birthing chair and using two leopards to support herself in the squatting position. Her hips are wide from child-bearing. Her breasts are full from nursing. She is the *Mother of all Living* (Gen 3:20).

GODMOTHER ON BIRTHING CHAIR

6,000-5500 B.C.E.

CLAY

CATAL HAYUK



Archaeologists sometimes refer to statues of women birthing or nursing as *fertility figurines*. Women especially honor the Godmothers of their cultures for their fertility – the ability to conceive and give birth to humans. The statues not only honor Godmothers for their fertility, but are used by women to petition their Godmother for fertility -- the ability to conceive and bear healthy children for their households.

Catal Hayuk is a Neolithic city built between 6500 and 5700 BCE along the edge of a small river south of the great salt depression in central Turkey and north of the fertile Konya Plain (<http://www.angelfire.com/realm/bodhisattva/catal-hayuk.html>). The plain stretches from Catal Hayuk to the Hasan Dag volcanoes. It lies three thousand feet above sea level. The village was built in two areas, leaving two tells. The largest is thirty two acres. The water in nearby crater lakes is brackish, but springs fed by rain in the hills north of the city provided fresh water. The city traded salt mined from Tuz Golu, a great salt lake; obsidian mined at Hasan Dag and Karaca Dag; and flint.

The earliest painting of a leopard was made in Chauvet Cave in the Ardeche Gorge (France)

(<http://www.culture.gouv.fr/culture/arcnat/chaufvet/en/>). The cave was discovered in 1994, and explored by Jean Clottes, a science adviser to France's Ministry of Culture, in 1998. The leopard is one of four hundred sixteen paintings of predators like rhinos, lions, cave bears and mammoths in a string of three chambers, 1700 feet long, as well as one connecting gallery and three vestibules.

LEOPARD
30,000 B.C.E.
CAVE PAINTING
CHAUVET CAVE, FRANCE



Most cave art depicts hunted animals. These animals, however, are not eaten. They are predatory, dangerous animals, whose strength and power Stone Age artists were trying to capture.

At least one-third of the buildings in Strata VII-VIII at Catal Hayuk are sanctuaries. The walls and floors of these sanctuaries were repeatedly refinished with white plaster. Some sanctuary walls were covered with paintings that were annually painted and repainted. In Stratum VII there is a pair of painted leopards. These leopards have been repeatedly re-plastered and repainted.

The repeated plastering and repainting is an indication that this artwork is not simply record keeping. The repetition is a form of storytelling that re-enacts divine events like the ritual of bull jumping in Minoa or bullfighting in Spain (Roaf 1990: 45).

LEOPARD
CATAL HAYUK
6850-6300 B.C.E.
PAINTED PLASTER
CATAL HAYUK
© ROAF 1990: 45



By re-enacting both the creation of the world and human creation traditional cultures remind themselves of their role as co-creators with their divine patrons (Eliade 1959: 68-113). Creation is never a past event, but an on-going present event in which every generation participates. Humans and their world are annually recreated. Each year they return to that first moment of creation. All the failures of the preceding year are destroyed, and everything starts over in perfect condition. These celebrations of the New Year are acts of hope. Failure exists, but it is not permanent.

Neolithic artists also plastered human skulls, and shaped life-size human bodies from reeds and clay. These works of art are not portraits; they are powerful representations of the incarnation of the divine in human form and linked the living and the dead.

PLASTERED SKULL
ISRAEL MUSEUM
6500-3000 B.C.E.
BONE PLASTER
BEISAMUN



Natufian peoples buried human skulls. Neolithic peoples, however, reconstructed the features on skulls with plaster. Many lower jaws and the teeth have been removed from the skulls. The eye sockets are inlaid with cowrie shells or pellets of clay. Carefully shaped bases angle the skulls in a particular direction. Some of the skulls are painted with red or brown iron oxide. The top and back of the skull were usually left untouched, but occasionally they were painted. Most of the plastered skulls were found below the floors of houses.

The dead of the Neolithic village of Jericho were buried beneath the floors of houses or in the fill of abandoned buildings (<http://ancientneareast.tripod.com/86.html>). The graves frequently contained more than one burial. Some of the skeletons in these multiple burials were articulated – each bone was in its correct anatomical position -- some were not. The skulls had been removed from many of the skeletons.

The practice of separating skulls from skeletons and reburying the disordered skeletal remains in collective graves was widespread during Neolithic period, but only the skulls recovered at Jericho, Tall Ramad (Syria) and Beisamun (Israel) were plastered.

Seven skulls were found buried together under the floor of one room of a house and two more in another room of the same house at Jericho. No other detached skulls were excavated anywhere else at Jericho. The jaws of these skulls had been removed from all but one and the face and base of the skull covered with plaster. The features were reconstructed to give the appearance of a living human being. One other plastered skull was found at the north end of the mound making a total of ten altogether. Five of these skulls were adult males.

In addition to the plastered skulls recovered at Jericho, statues from the Neolithic period were also recovered in 1983 at 'Ain Ghazal (Jordan). The site was initially discovered during the building of a new road in the 1970's on the north-east outskirts of Amman (Jordan) (<http://www.ucl.ac.uk/archaeology/>). 'Ain Ghazal is almost thirty acres, and was occupied from 7250-5000 B.C.E. Radiocarbon tests date charcoal in the pit with the statues to 6000 B.C.E.



FIGURE (CENTER) AND DUMPIES (RIGHT AND LEFT)
6000 B.C.E.
CLAY AND BRANCHES
1-3 FT 'AIN GHAZAL

There are two kinds of statues: *dumpies* and *figures*. Dumpies are about a foot high; figures are three feet high. Dumpies have solid, roughly shaped and unpainted bodies. Figures have well-defined arms and legs. The bodies of the statues were painted with red iron oxide, black carbon and white lime.

The heads of both dumpies and figures have detailed eyes, noses, mouths and ears. Their eyes were painted with black tar and blue copper oxide. They are elliptical and have round irises. Their noses turn up at the ends and the nostrils are simply two narrow cuts. Their mouths are also just narrow cuts. Their ears are small, unshaped knobs.

The statues are shaped from plaster over a core of branches tied with string. Although this organic material has decayed, it left impressions in the plaster. The cores in the dumpies were one bundle of branches. The cores of the figures were several bundles tied together. The heads and necks of the cores were also reinforced with string. The branches in the cores stuck out from the bases of the statues so that they could be mounted into plaster floors. Some figures were arranged in groups: father, mother and child surrounded by dumpies.

The statues were carefully buried in a building inside the village. Below the pit were two plastered floors, but there is no evidence that the statues were used in the building where they were buried, or in any of the surrounding buildings.

HEAD OF FIGURE
6000 B.C.E.
CLAY, TAR
'AIN GHAZAL



The Stories of Adam and Eve (Gen 2:4—4:2) describe the epoch primeval with pottery making, farming and herding metaphors drawn from the Neolithic period when Stone Age humans took two momentous steps toward civilization. They learned to farm and they learned to make pottery. When Neolithic people invented farming and pottery, they created a new world. Consequently, creation stories told during the subsequent Bronze Age (3300-1200 B.C.E.) often describe divine patrons as farmers when they create the world and as potters when they create humans.

The metaphor of the creator as a potter is modified, however, so that the techniques of the divine and human potters are similar, but not identical. For example, all potters work with two ingredients. One ingredient is firm and the other is fluid. Human potters mix clay with water. Divine potters use a variety of thinners. In the Stories of Atrahasis the divine midwife, Nintu-Mami, thins her clay with blood (Atrahasis 1:229–234). In the Stories of Gilgamesh the godmother, Aruru, uses saliva (Gilg 1:30–40). In the Stories of Adam and Eve Yahweh wets the clay with only the condensation created by breathing on it.

A STORY OF THE 'ADAM AS A FARMER
(GEN 2:4–17)

sterility affidavit (Gen 2:4–6)

When Yahweh, Our Creator,
Began to create the heavens and the earth,
There were no orchards,
There were no fields of grain.
There were no planting rains,
There were no harvesting rains.
There was no one to work the soil,
There was no soil to work.
There was only water pouring through dikes of clay,
There was only water flooding the earth.

cosmogony (Gen 2:7–14)

Then Yahweh sculpted an 'adam from clay,

Made it live by breathing moisture onto the clay.
Yahweh, Our Creator, built a plantation,
Yahweh installed the 'adam in Eden.
There were trees delightful to see,
Fruit good to eat
The Tree of Life was in the middle of Eden,
And The Tree of the Knowledge of Good and Evil.
There were rivers,
Abundant water for the garden.
The Pishon flowing through the desert of Havilah in Arabia,
The Gihon running through the land of Cush in Ethiopia.
The Tigris rolling east of Asshur in Iraq,
The Euphrates.
There was gold,
Twenty-four carat gold.
There was the gemstone, bdellium,
There was lapis lazuli.

covenant (Gen 2:15–17)

Finally Yahweh, Our Creator, gave Eden to the 'adam to cultivate,
The 'adam was to care for the plantation of Yahweh.
Yahweh decreed: *You shall eat from any tree in Eden,
Except the Tree of Knowledge of Good and Evil.
Anyone who eats from this tree shall die.*

In the Bible the living are moist. Blood, sperm, tears, and saliva distinguish the living from the dead; the moist from the dry. In the Stories of Adam and Eve Yahweh is a divine potter who shapes the 'adam from clay and then gently moistens and polishes the 'adam with the saliva that condenses on the surface of the 'adam when Yahweh breathes on it.

Pottery making revolutionized human life. Comparing the body to clay did not degrade it, but elevated it. Comparing the soul to the silva carries in human breath did not shame it, but to honored it. Christian theologies of the body and soul today were influenced by Greek philosophers more than by the Bible.

Greek philosophers and subsequently Christian teachers thought of the soul as completely independent of the body. For example, once the body died, the soul went on living. In world of the Bible the soul and body are completely integrated. One cannot live without the other. Even in death body and soul remain joined together.

Greek philosophers also considered the soul to be good and noble, but the body to be bad and ignoble. Consequently, Christian teachers stressed that it was important to subdue the body by punishing it with forms of physical torture like wearing uncomfortable clothes, and

whipping the body until it bled. In the world of the Bible the body and soul are equally good and noble. They are best friends, not rivals.

Finally, Greek philosophers considered the body to be material and the soul to be spiritual. Consequently Christian teachers used only the unseen wind or human breath as metaphors for the soul, and avoided any metaphors connected with matter or the human body.

There are two important words for *soul* in Hebrew: the *ruah* soul and the *nephesh* soul. Both are connected with the throat (Schroer and Staubli 2001: 56-67). The soul is not only something that can be seen – the human throat; it can also be heard when human trill (Ps 103-104). Of all the things that pass through the throat the most important is breath and the *silva* it carries. Life comes into the body on the air humans breathe and in the *silva* it contains. Life leaves with the last breath and the last drop of moisture in the body (Ps 69:1; 1 Kgs 17:21-22; Gen 35:18). Where there is no breath and where there is no *silva* or blood or tears or sperm, there is no life.

The Hebrew word *nephesh* occurs more than 750 times in the Bible with a rainbow of very concrete and observable meanings (Reid 1996). For example, the *nephesh* soul reacts emotionally to each human experience, and its reaction is observable in the way breathing patterns change (Exod 6:9; Prov 14:29; Judg 8:3; Mic 2:7).

The *nephesh* soul is also a synonym for the human personality. Some *nephesh* souls are unfaithful (Hos 4:12); some are faithful (Isa 28:6); some are arrogant (Dan 5:20); some are jealous (Num 5:14); some are despairing (Job 7:11).

The very limited understanding of the soul as the immaterial and personal part of a human being emerges in the world of the Bible only after it was conquered by Persia and then by Greece. When the Bible was translated from Hebrew into Greek, for example, *nephesh* was translated by the one Greek word: *psyche* -- -- over 600 times virtually erasing all the rich and diverse understandings of soul in the world of the Bible.

Some of the most fascinating insights into understanding the richness of soul theology in the world of the Bible come from Egypt. In the birth story of Pharaoh Hatshepsut (1473-1458 BCE) written on the walls of her funeral chapel at Deir el Bahri (Egypt), for example, Hatshepsut's Godfather, Amen, orders the divine potter, Khnum, to shape both the human body and the *ka* soul of his daughter.



CREATION OF HATSHEPSUT

Amen-Re summoned Khnum, the divine potter, who shaped human bodies.
Fashion for me the body of my daughter and a ka soul... worthy of her dignity and glory.

O Amen-Re, answered Khnum, it shall be done as you have said. The beauty of your daughter shall surpass that of the members of the divine assembly and shall be worthy of her dignity and glory.

So Khnum fashioned the body of Hatshepsut and her *ka* soul. They were identical twins, and more beautiful than any other woman on the face of the earth. Khnum fashioned them from clay on his potter's wheel. Heqet, the divine midwife, knelt by his side holding the *ankh* sign of life towards the clay to bring Hatshepsut to life.

The main constituents of a human being in Egypt were the body (Egyptian: *khat*), its *ka* soul and its *rn* name which remained always in close proximity to each other even in the tomb, and the *shut*, the *ba* soul, the *sahu* and the *akh* which were more mobile and independent. The connotations of *ba* soul, *ka* soul, *sahu* and *akh* overlap and evolve. There are no exact English equivalents for these Egyptian terms.



Khnum was the divine patron of Elephantine Island (Egyptian: *Abu*), the divine patron of the cataract rapids in the Nile River and the divine patron of the annual Nile floods. The Egyptians thought that the floods began in a cavern at the first cataract rapids on the Nile River at Elephantine Island.

Khnum and Satis were the parents of Anukis. The three made up the divine assembly of Elephantine Island.

BODY (EGYPTIAN: *KHAT*)

Khnum is the divine potter with the head of a ram (http://nefertiti.iwebland.com/religion/body_and_soul.htm). The Egyptian word *khnum* means *to create* or *to create all things that are and all things that shall be*. Khnum, the divine potter, represented the divine assembly of Egypt (Egyptian: *ennead*) when shaping humans on his potter's wheel.

The Hymn to the Atum tells the story of the birth of first nine members of Egypt's divine assembly (Matthews and Benjamin 2006: 7-9). In the story the Sun (Egyptian: *Re Atum*) creates Father Wind (Egyptian:

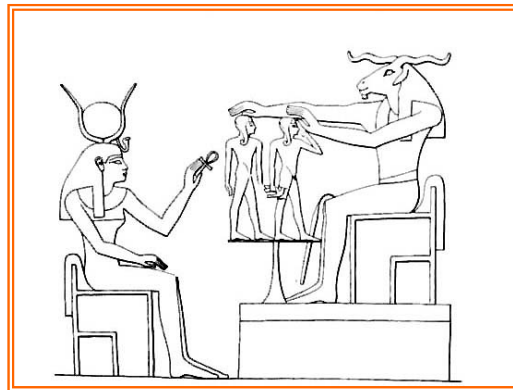
Shu) by sneezing and Mother Rain (Egyptian: *Tefnut*) by spitting. They give birth to Father Earth (Egyptian: *Geb*) and Mother Sky (Egyptian: *Nut*). Father Earth and Mother Sky are the parents of four: Father Osiris, Mother Isis, Father Seth and Mother Nephthys. Horus is the son of Father Osiris and Mother Isis who are both brother and sister and husband and wife. The story ends: *...these nine (Greek: ennead) gave birth to all the multitude of the land.*

As the representative of the divine assembly Khnum shaped the *khat* body and its *ka* soul on a potter's wheel and then used the sperm to insert them into the mother's womb. The Egyptian view of the body was, from its conception to its death, spiritual, not physical. The biological aspects of the body's functions were of little interest. Instead Egyptians studied the helpful and threatening invisible spirits that lived in the human body.

The preservation of the body as a mummy (Egyptian: *saH*) in order to enable the dead to enjoy a life after death was at first only performed on the corpse of the pharaoh, but eventually became common for anyone who could afford it.

KHNUM CREATING HATSHEPSUT
1473-1458 B.C.E.
WALL PAINTING
DEIR EL-BAHRI

The afterlife was a continuation of life on the human plane. Tombs were decorated with scenes of daily life. Things used by the dead during their life on earth were left in their graves for them to use in the afterlife. The wealthy were buried with statues of slaves (Egyptian: *ushabtis*) who would come to life when their tomb was sealed. These *ushabtis* slaves would work the fields of the divine assembly in place of the dead to give them the leisure to enjoy the afterlife.



After its transformation into a mummy the body had to undergo the Opening of the Mouth ritual to have its senses restored so that it could testify before various members of the divine assembly during the twelve hour journey from the human plane into the divine plane.

The most important part of the body was the heart (Egyptian: *jb*) Intelligence and conscience resided in the heart. The heart gave human life direction. *Following one's heart* meant *living a full life*. When the

heart got tired the body died. When a dead person began the journey into the underworld, the *jb*, as a record of a person's moral past, was weighed by Anubis against a feather representing Maat. If the heart was too heavy Anubis feeds the soul to Ammit which prevented the dead from ever entering the afterlife.

Ammit was portrayed with the head of crocodile, the torso of a leopard and the hindquarters of a hippopotamus. Ammit sat beside the Scales of Justice in front of the throne of Osiris while Anubis weighed the souls of the dead.



AMMIT (CENTER) WITH ANUBIS (LEFT) AND THOTH (RIGHT) AT
THE SCALES OF JUSTICE IN THE BOOK OF THE DEAD FOR
HUNEFER
THEBES
1275 B.C.E.
BRITISH MUSEUM (EA 9901)

During the embalming the heart was not removed together with the other interior organs. A scarab was inserted into the mummy's bindings right above the heart in an attempt to prevent it from speaking out against its owner.

STATUS (EGYPTIAN: *REN*)

The *name* (Egyptian: *ren*) gave humans their social status. Only when humans had *ren* names could they have relations with others. Without a name humans were not alive. Every status required a separate name. Osiris, the divine patron of the afterlife, for example, had one hundred different names.

Names had divine power. Knowing people's names gave others power over them.

True names were bestowed on humans by their divine patrons and were often kept secret even from their human mothers. An important part of assuring life after death was saying the *names* of the dead. Only those whose *names* continued to be spoken by their household after death continued to live.

Carving *names* into stone gave them permanence. Erasing the *names* of the dead from their tombs avenged the suffering they caused during their lives. By erasing the *names* of Hatshepsut and Akhenaten on their monuments throughout Egypt, for example, they were exiled from the afterlife, and were dead for all eternity.

PERSONALITY (EGYPTIAN: *BA*)

The *ba* soul was associated with divinity and power. This *ba* personality was the immortal force inherent in human beings which made up human personalities. Like the human body, each *ba* soul was unique. It entered a person's body with the breath of life and it left at the time of death.

The *ba* soul was generally represented in the form of a bird with a human head perched on trees planted by the tomb, but it could assume any shape it wished. It had the ability to take on different forms.



Like human imagination and human dreams the *ba* soul could go virtually anywhere. The *ba* soul of the deceased was able to move freely between the underworld and the physical world, but always returned to its body to share the stories of its experiences.

The members of the divine assembly had many *ba* personalities. Originally, members of Egypt's divine assembly who manifested themselves anonymously to humans were called *ba revelations*. Later the visible forms that these divines assumed were called the *ba of Re*.

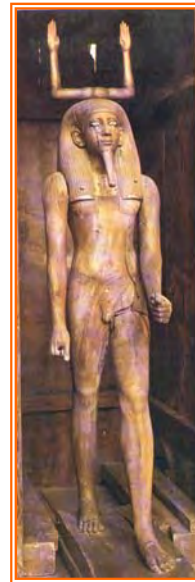
SOUL (EGYPTIAN: *KA*)

The *ka* is usually translated as *soul* or *double* -- an invisible friend. *Ka* is pronounced like the Egyptian word for *bull*, a symbol of fertility. Therefore, the *ka* soul was a powerful life-creating force.

Khnum crafted both the physical body and the *ka* on a potter's wheel at the time of birth. A *ka* would live on after the physical body had died. When people died they *met their ka*.

During the life of the body the *House of the Ka* was the body's tomb. The *ka* soul had the same needs as the *khat* body. It ate and drank. Egyptians left offerings of food, drink, and worldly possessions in tombs for the *ka* to use.

KA STATUE OF HARAWIBRA
WOOD
1783-1640 B.C.E.



The *ka* soul was a constant companion of the body in

life and death depicted. Painting of pharaohs and Horus always show their *ka* soul written behind their names.

SHADOW (EGYPTIAN: *SHUT*)

In the light of the life-giving sun the body and its shadow soul were inseparable. The pitch-black shadow (Egyptian: *shut*) in Egyptian psychology was not an ordinary shadow. This *shut* shadow is depicted leaving the body's grave accompanied by the *ba* soul.

Shut shadows were a blessing for those who could rest in them in a hot country like Egypt. Metaphorically, the members of the divine assembly cast shadows that protected humans from harm. The pharaohs were the shadows of their divine patron, Horus. The holy sites at Amarna were called the *Shadow of Re*.

SHADOW SOUL AND BA-BIRDS
TOMB OF IRINUFER
THEBES

STAR (EGYPTIAN: *AKH*)

The *akh* star belongs to the afterlife; the *khat* body belongs to this life. The *khat* body is buried while the *akh* star, the *Shining One*, ascends into the night sky. It is the part of the body least bound to the others, but just as important as the others for assuring the immortality of the deceased.



The members of the divine assembly are *akh* stars. Pharaohs, having a divine nature, became *akh* stars and joined the stars after the demise of their mortal bodies, but later ordinary mortals too attained this status when they became transfigured dead.

PSYCHE (EGYPTIAN: *SAHU*)

The *sahu* psyche is similar in form to the *khat* body and is immortal. It is a personification of the human mind or consciousness. The *sahu* psyche motivates humans to act. It is an animating principle.

CONCLUSION

Like farming and herding, pottery making was a process that developed slowly, and changed little in contrast to the rapidly changing short term events, and the crossroads processes. And, like farming and

herding, pottery making was not simply a technical skill; it was a genuine reflection of how peoples in the world of the Bible looked at their lives and understood their relationship to their divine patrons. Pottery not only made their lives more humane; pottery enriched their ways of thinking about themselves and about their divine patrons. Pottery making was at once a simple and yet profound lesson about both creatures and their creator.



WHAT YOU HAVE LEARNED

- Wheels allowed potters to work more quickly and to throw pots with thinner walls.
- Slips and glazes not only added decoration to the outside walls of pots, they also water-proofed them.
- Statues of Godmothers portrayed them with large breasts, distended abdomens, heavy hips and legs to emphasize that they are the mothers of all humans.
- Neolithic potters shaped images of their households from sticks and clay to re-enact their creation.
- The stories of Adam and Eve describe Yahweh as a potter who creates humans from clay and saliva. Human potters use clay and water.
- Unlike Greek philosophy which considers the soul to be exclusively spiritual, the Bible gives the soul a whole range of meanings most of which are very physical.
- Like human imagination and dreams *ba* souls in Egyptian psychology are birds who can fly anywhere, but always return to their bodies with their stories. *Ka* souls are the best friends to their human bodies and remain with them throughout life and death.

CHAPTER 14

ARCHITECTURE



Chapter 14 describes a third example of a long lasting institution reconstructed by Annales Archaeologists. The chapter explains how humans in the Neolithic, Bronze and Iron Ages each had unique styles of domestic architecture, and how the pillared house common in the villages of ancient Israel, and throughout Syria-Palestine during the Iron is not only a practical and efficient dwelling, but also a reflection of the social structure of marriage and daily life in the household.

NATUFIAN ARCHITECTURE

During the Neolithic period (8,000-3800 B.C.E.) the Natufians and other Neolithic peoples colonized the Negev at Gebel Maghara and Har Harif in the Sinai; at Nahal Oren and Megiddo in the Carmel Mountains; Kefar Giladi and Banias in the Galilee; Beisamun near Lake Hula; Yiftahel and Horvat Minha on the Jordan River; Sha'ar ha-Golan on the Yarmuk River; Jericho and Gilgal in the Jordan Valley; Abu Ghosh near Jerusalem; Nahal Hemar on the Dead Sea.

Natufian villages and camps have been excavated at Tell Abu Hureira, Mureybat and Yabrud III in Syria; Hayonim Terrace, Ain Mallaha, Beidha, Ein Gev, Hayonim Nahal Oren, Mugharet el Wad, Shuqba and Salibiya I in Israel; Jericho on the West Bank; Jiita III, Borj el-Barajné, Saaidé and Aamiq II in Lebanon. From this homeland in Syria-Palestine the Natufians traded abroad for obsidian from Turkey, shellfish from the Nile River Valley, and for malachite beads.

GREEN MALACHITE BEADS

Smaller camps were used for hunting and foraging. For example, the Valley Cave (Arabic: *Mugharet el Wad*) is the largest of the Mount Carmel caves. Natufian



households used both the Valley Cave and the broad terrace in front of it as a camp.

The first excavations at Nahal Oren, six miles south of Haifa, in 1941 identified remains of Natufian culture. Nahal Oren was repeatedly occupied, and then abandoned. Curiously, most humans who occupied the site lived outside, rather than inside, the cave. There were few natural resources at Nahal Oren. Not only was there little to support permanent settlements of farmers and herders, but there was also little to support hunters and gathers. Little grain was recovered at the site, and there is little soil around the cave suitable for growing grain. Consequently it is hard to explain where the wheat recovered at the site was grown.

Natufians dug their houses into the ground on a stone foundation with a roof made of branches. No trace of the mud brick characteristic of the later Neolithic period has been found. These round houses were nine to eighteen feet in diameter with a round or rectangular fire pit in the center.

Natufian villages covered about two-tenths acres or an area of thirty by thirty yards. These villages housed some one hundred to one hundred fifty people.

Above the ground Natufian houses may have looked like crannogs - dwellings built along lakesides in Scotland, Ireland and Wales after 3000 B.C.E. Crannogs were roundhouses of wood and branches supported on stilts driven into the lake bed. Sometimes, in place of stilts, tons of rocks were piled onto the lake bed to make an island foundation for the crannog. Several hundred crannog sites have been identified but only a few have been excavated.

CRANNOG
THE SCOTTISH CRANNOG CENTRE
[HTTP://WWW.CRANNOG.CO.UK](http://www.crannog.co.uk)



NEOLITHIC ARCHITECTURE

Neolithic peoples settled Beisamun (Israel) on the west shore of Lake Hula around 7000 B.C.E. The village covers some thirty acres. Nonetheless there is less than two and one-half feet of human settlement debris.

There are rectangular stone-walled houses with plaster floors

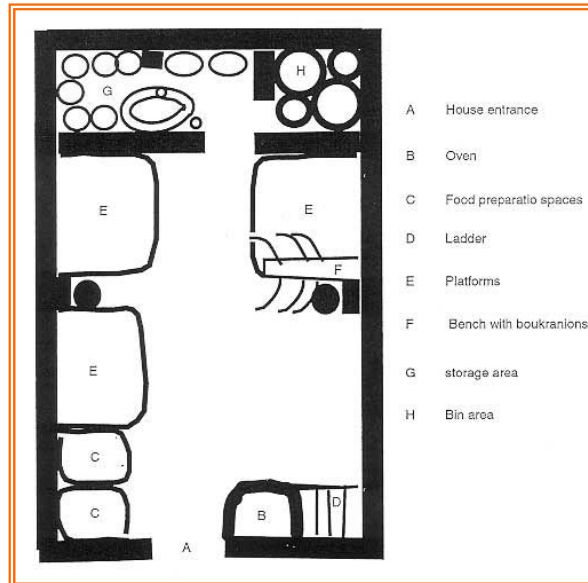
which were widely spaced along the lakeside. One of these had two rooms with a hearth and the remains of two plastered skulls and several secondary burials beneath its floor. One of the skulls belonged to an adult female.

Yiftahel (Israel) was settled on the northern coast after 6500 B.C.E. The site was abandoned about 6000 B.C.E. shortly before the invention of pottery. Large rectangular houses found at the site show that these Neolithic people knew how to make and use lime-based plaster..

TOP PLAN OF A NEOLITHIC HOUSE
6500 B.C.E.
CATAL HAYUK

At Catal Hayuk Neolithic peoples built single-story, rectangular houses with roofs supported by wooden beams. Most were built with a flat roof that provided working space for food preparation.

Houses did not have a door but were entered through openings in the roofs that were reached using ladders. After entering their houses, villagers pulled the ladder down into their houses to keep them safe.

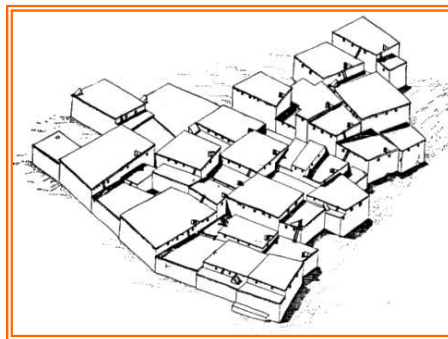


Inside the houses were benches of firmly packed soil running along the walls for sleeping. Villagers were buried in the benches where they slept.

NEOLITHIC VILLAGE AT CATAL HAYUK

BRONZE AGE ARCHITECTURE

During the Bronze Age houses were built using the Arad House blueprint. The outside walls formed a rectangle. The door was in one of the long sides. A rectangular building with a door in its long side is called a *broad room* floor plan.



There were low benches running along the inside walls of Arad

Houses. During the night benches were used for sleeping. During the day they were used for storage. None of the benches at Arad were used for burials.

Floors of Arad Houses were some two feet below ground level. People had to step down from the street into their houses. The floors were not paved, but covered with packed soil.

The flat roofs of Arad Houses were supported by a single wooden pillar that was set on a single stone base. The base kept the pillar from drilling into the soil and allowing the roof to sag or collapse.



MODEL OF ARAD HOUSE
CLAY
ARAD

Doors in an Arad House were carved from either a single shaped stone or built with wood. The top post fit into a socket in the lintel (Hebrew: *masqop*) above the door and the bottom post into a socket in the threshold (Hebrew: *sap, miptan*). The lintel was supported by two doorposts (Hebrew: *mezuzot*).

Walled courtyards surrounded the doors of Arad Houses. There were stone work tables in the courtyards which archaeologists found littered with flint, bone and copper tools. Women used stone mortars and pestles for grinding grains; spindle whorls for spinning thread; shuttles for weaving; and needles for sewing. Men used sickles with toothed flint blades for harvesting grain; flint scrapers for cleaning hides; drills for making jewelry from shells and beads; awls for leatherwork. Two jars of jewelry were also recovered from the site.

IRON AGE ARCHITECTURE

Landscape Archaeologists walked the surface of the some 1600 square miles in the hills north of Jerusalem and west of the Jordan River recording the number of village sites and the size of these sites. Using these calculations they discovered that, at the beginning of the Iron Age, the population there was growing about two percent a year.



An isotope is a variation of a standard element. For example, oxygen (O^2) is the standard element; ozone (O^3) is an isotope. Over time some elements convert into isotopes. The rate of conversion is standard. For example the conversion of the standard element of Carbon (C^{12}) into the isotope Carbon 14 (C^{14}) is used to date once living material such as leather or wood.

Some 20 twelve-acre, Late Bronze villages cramped into less than 30 square miles were replaced by more than 100 one-acre, Iron Age villages sprawling over 76 square miles. The population expanded from some 40,000 people in 1200 B.C.E. to some 80,000 people by 1000 B.C.E.



Landscape Archaeologists study the development of the land itself, including the impact that humans have on its development. They study the way humans who live on the land describe their land and the way humans modify and idealize their land.

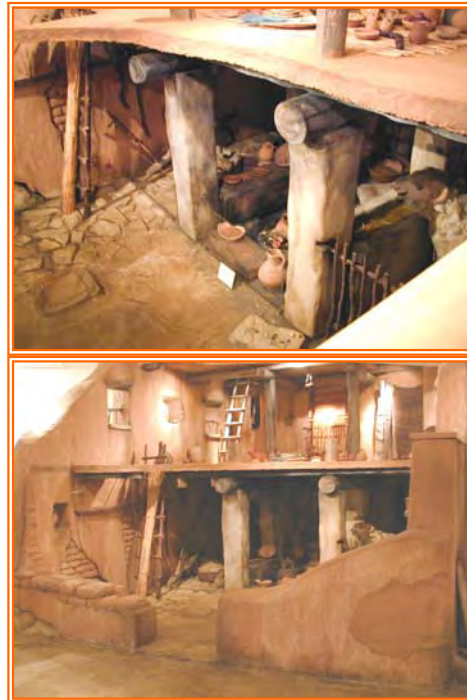
Landscape Archaeologists reconstruct the dynamic relationship between the land as a whole and the humans who use it (Wilkinson, T.J. 2003). They use climate, vegetation, isotopes recovered from lakes, caves and the sea bottom, pollen from lakes and coastline movement to chart landscape changes. They also use aerial photography and satellite imagery to reconstruct the development of the land.

Once the changes in a particular environment have been reconstructed, Landscape Archaeologists look for causes. Some causes are natural; some are human. Natural disasters are events like earthquakes, floods or drought. Human impact on the land includes terracing the hillsides for farms, cutting down trees to plant crops, diverting rivers for irrigation, mining and the development of sanctuaries.

HOUSES

Pillared or four-room houses were the signature domestic architecture during the Iron Age. They were also a model of the world view of the villagers who built them. The pillared house is a prime example of a long lasting institution studied by Annales Archaeologists. For example, the Romans (37 B.C.E. – 324) installed the same style stone door in their fortress at Araq (Jordan) as was used in pillared houses during the Iron Age (1200-539 B.C.E.). Similarly, villagers around Antioch (Turkey) today still roof their houses with brush and adobe and reseal these roofs with stone rollers just as Iron Age villagers did.

REPLICA OF A PILLARED HOUSE
HARVARD SEMITIC MUSEUM

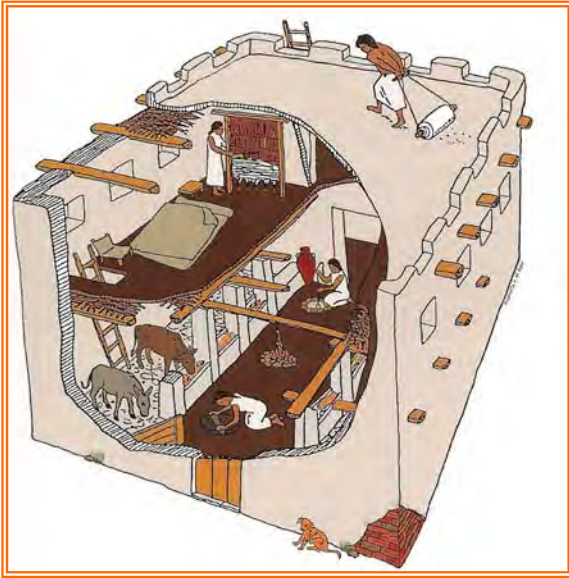


Pillared houses were rectangular with 500-800 hundred square feet of living space (King and Stager 2001: 21-84). There was enough room for two adults and two children (Hebrew: *yeled*). Each would have about 90-100 square feet of living space.

Several houses grouped together around a shared courtyard formed a household (Hebrew: *bet 'ab*, *bayit*; Arabic: *za'ila*). There were as many as thirty people from four generations in a household (Judg 17-18).

Villages (Hebrew: *mispahot*) were made up of as many of households as the natural resources (Hebrew: *nahalah*) at the site could support (1 Kgs 21). The seven villages in the tribe of Manasseh, for example, each had some 40 square miles of resources.

Iron Age villagers insured themselves by forming tribes (Hebrew: *sebet*, *matteh*) to spread work and to distribute risk (Josh 7:14-18; Jer 32:6-15). Villagers helped one another clear land and build terraces. They helped one another breed and herd livestock. They sent warriors to rescue one another when they were attacked. They sent legal guardians (Hebrew: *go'el*) to restore households at risk from the untimely death of their fathers. They sent deputies (Hebrew: *go'el haddam*) to arrest and execute murderers.



PILLARED HOUSE
© KING AND STAGER 2001: 29

Iron Age villagers built their pillared houses on foundations of two or three courses of field stones. The outside walls were about three feet thick. They were framed with large limestone blocks stacked into piers or pillars. The windows (1 Kgs 6:4; Ezek 41:26) or spaces between the pillars were filled with rubble (Isa 33:15; Prov 17:28). Alternating solid pillars with loose stone fill allowed the walls to bend earthquakes.



STONE DOOR
300-1300
BASALT
QASR AZRAQ (JORDAN)

The main door (Hebrew: *daleth, petah*) in a pillared house was built into the narrow end of the outside wall. Like doors in Arad Houses doors in pillared houses were carved from either a single shaped stone or built with wood. Pivot posts extended from the top and bottom on one side of the door.

The door opened into a rectangular work room in the center of the house. Work rooms were ten to twelve feet wide. Here villagers pressed olives and grapes and ground grain. Material remains from work rooms include silos dug into the floor and stone hand mills for grinding grain into flour. There were also ovens for baking bread, and fireplaces for cooking vegetables, olives, grain, figs, beans, lentils, lamb and goat.

There were two kinds of ovens – the *tabun* oven and the *tannur* oven. Both were made from *terra cotta* – like clay hardened to make bricks today. Each oven was shaped like a hay stack. Both had a chimney hole at the top.

Both *tabun* ovens and *tannur* ovens were used for baking bread. In the *tabun* loaves were placed on pebbles scattered inside the oven. The opening at the base of the oven and the chimney were sealed. The oven was heated from the outside by stacking wood, charcoal or manure chips against the oven. In contrast the fire was kindled inside the *tannur*. Dough was slapped against the walls of the oven to bake just as the people of South Asia do today to bake Naan bread.

Some work room floors were packed earth (French: *terre pise*) layers of ash and clay; some were plastered. Ceilings were five to six feet above the floors and supported by beams of stone or wood running from the outside walls and supported by pillars on either side of the work room. These two rows of pillars created side rooms some five to ten feet wide. At least one side room was a stable.

Most animals grazed outside during the day and were brought inside at night. The fatted calf (Ps 50:9; Amos 6:4, Jer 46:21; Mal 4:2) was an exception. The veal from this calf was a delicacy. The calf never left the stable, so that its diet and weight could be monitored. When guests came to the house, villagers slaughtered their stable-fed calf (1 Sam 28:24).

Villagers dug a shallow cesspit into the floor of the stable which was then paved with flagstones. Urine from the livestock that was not absorbed by the straw bedding trickled through the cracks between the flagstones, and drained into the cesspit.

Mangers for fodder or cribs for grain were cut into large blocks of stone and installed on the floor between the pillars. In the New Testament there is no room for Mary and Joseph to sleep on the second floor with the members of the household, so they sleep in the stable with the animals. When Mary gives birth to Jesus, she places him in one of the stone mangers between the pillars (Luke 2:7).



WOMAN AT A WINDOW IN A PILLARED HOUSE
MEGIDDO

No windows have been recovered from pillared houses, but windows do appear in the pillared houses carved on ivory inlays for furniture. These skylights (Hebrew: *hallonim*) through the outside walls of the side rooms admitted light and ventilated the smoke from the ovens and hearths inside.

Across the back of the house was a broad storeroom (Hebrew: *yarka*, Amos 6:10; *yarketayim*, Ps 128:3) for food and supplies. Some of these storerooms could only be entered through the roof. Provisions were kept in large storage jars and stone lined silos.

Early in the Iron Age (1200-1000 B.C.E.) pillared houses were built with only one floor. Later (1000-586 B.C.E.) they were built with two floors. Villagers used inside ladders or outside stairs to reach the second floor (Hebrew: *'aliyyah*). In some houses wooden steps were attached to a stone pillar.



The second floor (Hebrew: *'aliy-yah*) of a pillared house became a metaphor for the divine plane. The Hebrews called their creator *El* – a second floor resident (Ps 104: 3, 13).

The second floor was a large loft used for eating meals and for sleeping (1 Kgs 17; 2 Kgs 4:10; 2 Kgs 17:1-6). Women wove cloth on the second floor, and created shrines there for the divine patrons of the household (Hebrew: *teraphim*).

Open beamed ceilings (Hebrew: *meqareh*, Judg 3:24; 2 Kgs 6:2-5; Eccl 10:18) supported the second floor and the roof (Hebrew: *gag*). The beams (Hebrew: *qorot*, *rahitim*) on both floors were fourteen to sixteen feet long. Villagers laid branches across the beams above the second story to create flat roofs. They sealed their roofs with an adobe of clay, straw, sand, charcoal and ash (Ps 129:7). The finished roof was about fifteen inches thick (Herr and Clark 2001). After rains these flat roofs needed to be patched and flattened with a stone roller to remain water-tight (King

and Stager 2001: 23-24).

During the dry season villagers like Saul and Samuel slept on their roofs (1 Sam 9:25-26). Elijah carries his host's son to the roof where he sleeps (1 Kgs 17:19). David first saw Bathsheba bathing on the roof of her house while he was walking on the roof of the palace (2 Sam. 11:2).

WOMAN BATHING
ISRAEL MUSEUM
900-700 B.C.E.
TERRACOTTA
ACHZIB
©ART RESOURCE



Villagers also went to the roof to pray (Jer 19:13; 32:29; 2 Kgs 23:12). Because it was sacred space Bathsheba bathes on the roof of her house at the end of her menstrual period (2 Sam 11:2). Jeremiah indicts the people of Jerusalem for praying to the *hosts of heaven* and to *other gods* on their roofs (Jer. 19:13; 32:29; 2 Kgs 23:12).

ROLLER ON FLAT ROOF FARM HOUSE
STONE
ANTAKA (ANTIOCH), TURKEY

HOUSEHOLDS



Households were the base communities in the world of the Bible. The pillared house common throughout Syria-Palestine during the Iron Age (1200-586 B.C.E.) is an artifact whose architecture reflects the way a household is organized, and how a household works (Meyers 2003:34-36). Pillared houses are the material remains of households.

In "The Archaeology of the Family" (1985) and in Life in Biblical Israel (2001) with Philip J. King, Lawrence E. Stager demonstrated how Annales Archaeology can be used to reconstruct the social world of ancient Israel reflected in the pillared house floor plan. The result is a seminal study of long lasting trends among the people of ancient Israel.

Households are social institutions with four generations. Some members of households are blood kin, some are not. Households are communities of covenant or choice. Even members of households that are blood relatives must ratify their kinship by covenant.

Households exercise political, economic, diplomatic, legal and educational authority in ancient Israel. Stable households not only exercise this authority for their own members, but also exercise it for the common good of the other households in their village and tribe as well.

On the average Iron Age men lived to the age of forty; women to the age of thirty-five. Women married when they were twelve to fourteen years old. Men married when they were twenty to thirty years old.

There was romance in the world of the Bible, just as there is romance in every other world, but not every sexual relationship in the world of the Bible was an affair of the heart. Marriage was a carefully negotiated covenant sealing a significant political or economic relationship between households. It was designed to bring together two households willing to exchange substantial goods and services with each other over a significant period of time (Matthews and Benjamin 1993: 13-17).

Codes of sexuality determined whether or not a man or a woman was eligible for marriage. There were different criteria for men and women. *Virginity* (Hebrew: *betulim*; Arabic: *ird*) was the technical term for the legal eligibility for a woman to enter a marriage. *Chastity* was the technical term for the legal compliance of a woman with the terms of her marriage covenant.

To propose marriage, the father of the household of the groom sent an expensive gift to the father of the household of the bride (Gen 34:12; Exod 22:16; Deut 22:9; 1 Sam 18:25; Mal 2:14). When the marriage covenant was ratified households exchanged a bride price (Hebrew: *mohar*) or a dowry (Hebrew: *zebed*). The bride price was the investment of the household of the groom in the household of the bride. The dowry was the investment of the household of the bride in the household of the groom.

Marriages were polygamous. One man had two or more wives. The marriage was ratified when a groom spread his cloak over a bride and conferred on her either the title *primary wife* (Hebrew: *issah*) or *secondary wife* (Hebrew: *pileges*). In English translations of the Bible words like *prostitute*, *mistress* or *concubine* are not always the titles of shamed women who are promiscuous or are sexual partners for hire. They are often titles of honor identifying secondary wives, and distinguishing them from the primary wife who is the mother of the household (1 Kgs 11:1-8).

Most marriages were endogamous. Marriage covenants were negotiated between households in the same village. Endogamous

marriages were financially conservative. They strengthened already existing and proven relationships between households. The financial risks were small and so were the financial rewards. Endogamous marriages were designed to keep the resources of a village intact. They are common in subsistence cultures, like early Israel, whose material resources were scarce.

The most common endogamous marriage is a cross-cousin marriage between the households of two brothers. The bride and groom are *cousins*, but not necessarily blood relatives. The words *uncle* or *father's brother* in many kinship systems refers to a covenant or business partner, not necessarily a sibling. In the world of the Bible the relationship between a man and his uncles is as important as the relationship between a man and his father.

Marriages were also patrilocal. Newly married couples were members of the household of the father of the groom and lived with him.

Finally, marriages were patrilineal. Eligibility for inheriting the resources of a household was determined by relationships between men and the fathers of their households. Although kinship and birth order contributed to a man's eligibility, covenant was more important than kinship in identifying what men would inherit, and how much a man would inherit (Hebrew: *bekora*).

Members of a household described their relationship to one another as a line of descent or lineage. A lineage (Hebrew: *perazot*) is an organizational flow chart beginning with a single couple and their children. Lineages vary in size or generational depth. Some are shallow lineages made up of the descendants of only one set of grandparents or great-grandparents. Some are deep lineages with several dozen generations subdivided or segmented into smaller households.

A segmented lineage is a deep lineage sub-divided into two or more households. The households are each linked to a son or daughter in the parent lineage. Some parent lineages in the world of the Bible are sub-divided into as many as twenty households or generations (<http://umanitoba.ca/faculties/arts/anthropology/tutor/descent/unilineal/segments.html>).

The father of a household protected and provided for its land and children. He adopted or exiled sons and daughters. He recruited workers and warriors. He negotiated marriages and other covenants. He hosted strangers, and designated heirs.

The mother of a household also protected and provided for its land and children. She bore children and arranged for the other wives in the household to bear children. Despite regular pregnancies women carried only four children to term, and only two of those four would survive to become adults (Gruber 1989).

The mother of a household also supervised the processing and storing of grain, beer and vegetables. She rationed and prepared food (Hebrew: *lehem*). She taught clan traditions to the children and to the women. She mediated domestic disputes. She was the primary advocate in choosing which young warrior (Hebrew: *na'ar*) would become the heir (Hebrew: *bekor*) or *first born* (Gen 27:29; Deut 21:15-17) of the household (Matthews and Benjamin 1993: 22-36).

Competition among the young men to become the next father of the household was intense. They competed in one of three areas of public life: as warriors, as priests or as tribal officials.

Young men who became tribal officials served as stewards or business managers – literally *slaves* -- for households with deep lineages. Their names often appear on scarab seals with which they notarized covenants for their households.

Young men who became warriors (Hebrew: *geberim*) fought as Special Forces. Here they had the opportunity to distinguish themselves. Their acts of heroism would recommend them to the elders of their households when the time came to appoint an heir.

Young men who became priests served at tribal sanctuaries dedicated to Yahweh. Micah, for example, hired a young man to serve at the sanctuary on Mt Ephraim for his household (Judg 17). Samuel was a young man who served Eli at Yahweh's sanctuary at Shiloh.

Members of a household were buried together so they could ...*sleep with their ancestors*. The most important responsibility that members of a household had to one another was ...*to honor* (Hebrew: *kabbed*) *their father and mother* (Exod 20:12) -- to see that they were properly buried. Households dug their tombs from caves outside, but adjacent to, their villages. A proper burial included not only the interment of a body in a household tomb, but also remembering the dead at thanksgiving meals (Hebrew: *marzeah*, Amos 6:7; Jer 16:5).

CONCLUSION

Stager's work has been widely recognized for what it said about ancient Israel. His work has had equal impact in demonstrating how

important theory is to good fieldwork, and how important it is for biblical archaeologists to apply a range of disciplines to their work. Using an enriched relationship between stones and stories, Stager demonstrates how much the use of written artifacts like the Bible can bring to the material remains of the pillared house. He also demonstrates that by the integration of archaeology with anthropology and sociology the stories in the stones can be enriched and bring to life not simply a building technique, but an entire social structure that first appeared in the Iron Age and continues to be reflected in the daily life of traditional peoples in the world of the Bible today.



WHAT YOU HAVE LEARNED

- Neolithic humans (10,000-4,000 B.C.E.) invented free standing houses to replace caves.
- Architectural styles included partially subterranean round houses with thatched roofs and rectangular houses with flat roofs, door either in the roof or the long wall, and sleeping benches along the inside walls.
- Iron Age houses (1200-586 B.C.E.) in Israelite villages and throughout Syria-Palestine were not only practical dwellings, but blueprints for marriage and daily life in ancient Israel.

Part Four

Processual Archaeology



- Part Four is an introduction to the School of Processual Archaeology.
- Chapter 15 describes how Processual Archaeologists reconstruct the way in which cultures at a site adapted to changes in their natural and human environment.
- Chapter 16 describes a specific kind of Processual Archaeology called *Ethnoarchaeology*. Ethnoarchaeologists live with and observe still existing cultures to better understand extinct cultures. For example, what ethnoarchaeologists have learned about childbirth in traditional cultures today contributes to the understanding of childbirth and its use as a metaphor in the Bible.
- Chapters 17-18 look at Gezer and Tel Migne, two important sites excavated by Processual Archaeologists, and what those sites contributed to the understanding of the stories of Solomon and Samson in the Bible.

CHAPTER 15

PROCESSUAL ARCHAEOLOGY



Chapter 15 describes how Processual Archaeologists reconstruct the way in which cultures at a site adapted to changes in their natural and human environment. It also explains basic differences between Cultural History and Processual Archaeology such as Cultural History is an adaptation of history to archaeology, and Processual Archaeology is an adaptation of anthropology to archaeology.

Phillip Phillips (1900-1994) crafted a sentence that became the motto of the School of Processual or *New Archaeology*: *New World archaeology is anthropology or it is nothing* (Phillips_1955: 246-247). With Gordon R. Willey (1913-2002) Phillips pioneered the Processual Archaeology still widely used today (Willey and Phillips 1958). Processual Archeologists emphasize the dynamic relationship between cultures and their environments. Change occurs when cultures adapt to shifts in their environment (Wilkinson 2003: 226).

Like most of the disciplines studied and taught at universities today Cultural History and Processual Archaeology are both developments of the Enlightenment. The Enlightenment is a world view that first appeared in the Renaissance cultures of Europe at the end of the medieval period. It continues as the dominant world view today.

In ordinary speech *modern* often means *scientific*; *medieval* means *superstitious*. Technically, however, *modern* and *medieval* simply identify two different ways of looking at the world. One is not truer or more accurate than the other.

The medieval worldview considered human experience, and

especially human religious experience, to be mysterious. Medieval people had little confidence in their ability to understand the world where they lived or to understand the divine world. The world was a mystery that defied human understanding. They respected the world where they lived. They did not try to understand it.

Like people in the world of the Bible, medieval people viewed their world as a home to the divine. Trees, rocks and water, for example, were all manifestations of the divine (Eliade 1959: 116-159). Therefore medieval cultures taught humans to continually acknowledge the divine in their daily lives. Every action was carefully and reverently undertaken. Medieval people not only prayed before they ate; they prayed before they did anything.

Medieval cultures relied on the Bible and tradition to interpret their experience. As the guardians and interpreters of the Bible and tradition Jewish, Christian and Muslim religious authorities dominated medieval cultures.

As difficult as it is for the peoples of Europe, North America and Japan today to understand, medieval people did not trust the human mind. For them the human mind was not a very reliable guide to life. More often than not the human mind tricked, rather than tutored human beings.

The weakness of the human mind for medieval cultures was how it collected information. The mind used the five senses – hearing, seeing, feeling, smelling, and tasting – to collect the data it needed to make decisions. These senses are easily deceived. Therefore, decisions based on such faulty sensual data could not be trusted. Medieval cultures are commonly called the *Dark Ages* because of their distrust of the human mind – the *light*.

The Renaissance (1300-1700) began in Italy and spread throughout Europe. It had wide-ranging consequences in all intellectual pursuits, but is perhaps best known for its impact on art reflected in the work of Leonardo da Vinci and Michelangelo (1475-1564). The Renaissance introduced critical thinking and the scientific method into European education. Students read and discussed Greek and Roman classics and researched the world where they lived with physical sciences.

An important legacy of the Renaissance is Modernism, a world view that assumes human experience, even human religious experience, makes sense. Modernism has an almost absolute confidence in the

human mind and its ability to understand human experience. Today Enlightenment cultures rely on the human mind to solve problems. These cultures have confidence that humans can use their minds to face challenges and resolve those challenges. If the senses could be trained to accurately collect data, then the interpretations of this data by the human mind would be trustworthy.

Cultural History and Processual Archaeology both study the human past. Both consider the human mind a reliable tool for understanding the past and both use the Wheeler-Kenyon method to collect material remains from the past. They are two different schools or theories of archaeology. The difference between Cultural History and Processual Archaeology is not that one is objective, and the other is subjective. Each has its own strategy for reconstructing the story in the stones.

Cultural Historians reconstruct the past by describing the past -- dating and cataloging artifacts (Trigger 2006). They ask: *Who made these artifacts? When were these artifacts made?* (Renfrew and Bahn 1996: 36-39) For Cultural Historians the most important partner for interpreting the material remains are written artifacts from the site or from elsewhere. They use stories to interpret the stones, hence the name *Cultural History*. Processual Archaeologists use artifact samples from the site to reconstruct anthropological *processes* or ways of adapting to change which they they use to interpret the stones -- hence the name *Processual Archaeology*.

Processual Archaeologists focus on explaining the past. Like anthropologists Processual Archaeologists use material remains to reconstruct not only the physical, but also the cultural processes that brought these material remains into existence and governed their use. Using sample artifacts to reconstruct a process is a technique developed by General Systems Theory which assumes that all life is controlled by systems or processes. Some processes are simple; some are complex. A simple process is how to make pottery – where to find the clay, how to prepare it, shape it, harden it, fire it and decorate it. A complex process is politics – how to feed the people in a community, and how to protect their land.

By using General Systems Theory Processual Archaeologists assume that every artifact they recover has a clear and essential purpose in the daily life of the human community at the site. There is a purpose in the stones. Nothing recovered at a site is meaningless or even whimsical. There are no unexplainable or chaotic artifacts.

General Systems Theory also assumes not only that the process reflected in any given artifact can be reconstructed, but also that this reconstruction can be used to reconstruct all the other processes operating in a culture. The part is a model of the whole.

Finally, General Systems Theory assumes that the process of adaptation in a culture is predictable. Once a process has been reconstructed from an artifact for any given point in its evolution, then Processual Archaeologists can use the reconstruction to chart how the process will evolve as it faces new changes.

For Cultural Historians cultures are basically stable. Consequently, they interpret any radical change at a site as evidence that new people have conquered the site or immigrated to the site. New people arrive; the old people do not evolve.

For Processual Archaeologists cultures are basically dynamic. They evolve. The same population at a site can be responsible for even dramatic changes in the material remains there. Dramatic changes in material remains are not evidence for the arrival of new populations at the site, but rather of significant adaptations by the established population at the site to changes in the environment like the build up of salts in the soil of a site or a shortage cooking fuel or drought. The material remains of past cultures tell how cultures survived. Artifacts are not actions, they are reactions. Change is adaptation. It is part of the human evolutionary process.

During the Late Bronze period, for example, the Mycenaean, Egyptian and Hittite trade empires delivered tin and copper which the peoples of Syria-Palestine used to make bronze tools and weapons. Then the trade empires collapsed. Tin and copper were no longer available. Sources of fuel – wood and charcoal – were also being exhausted. Material remains at sites reflected creative adaptation to these changes. Iron tools and weapons began to replace bronze tools and weapons. Iron ore did not have to be imported like tin and copper. Much less wood and charcoal were needed to refine iron. Therefore, iron working was a creative adaptation to changes in the environment of cultures in the world of the Bible.

Cultural Historians let the stones tell their own stories. They are not looking for something, they are listening to something. They want to know what happened at a site, when it happened, and why it happened. They reconstruct a material history of the site by letting the story in the stones unfold on its own. They dig and listen.

Processual Archaeologists question the stones. They have a story when they begin to excavate and want to determine whether that story is true. They want to know if there is artifact evidence for what they think happened at the site. They want to know if there are stones to support their stories.

Processual Archaeologists are positivists. Nothing about the world of the Bible can be taken for granted. Everything must be supported by evidence and experiment. They develop concrete theories or questions about a site, and then go into the field to test their theories. They talk and then dig.

Theories are not only developed before an excavation begins. As the excavation progresses Processual Archaeologists create new theories and ask new questions. Then they modify their dig strategies from season to season in order to test those theories.

For example, during excavations under the direction of Chang-Ho Ji at *Khirbat 'Ataruz* (Jordan), workers recovered a plaque with two male figures standing side by side. One holds a lion, the other holds a bull. There is no inscription. Both figures could be humans like Gilgamesh and Enkidu in the Stories of Gilgamesh from Mesopotamia (Matthews and Benjamin 2006: 21-32). One figure could be human, one divine. The male holding the lion could be a ruler of Israel like Ahab; the male holding the bull could be his divine patron, Yahweh. Lions are a symbol of royal authority; bulls are a symbol of divine authority. Both images could be divine. Other material remains at the sanctuary are also twinned. Therefore, the plaque from one season created new questions and new theories for upcoming seasons. So the team decided to clear a courtyard outside an entrance to the sanctuary flanked by twin towers to test the theory: *Is Khirbat 'Ataruz a sanctuary dedicated to two divine patrons?*

Cultural Historians assume that, eventually, the stones will tell only one, coherent story – a *metahistory*. They assume that when the excavation has been completed all the stones will become part of a single story. Therefore, Cultural Historians need to recover every stone to tell the story of a site.

Processual Archaeologists, in contrast, assume that they will never recover a complete archaeological record, even if they excavate the entire site. Therefore, they reconstruct the systems which their artifacts reflect, and then using those reconstructions to hypothetically fill in the gaps in the artifact record. Processual Archaeologists can tell a lot about human life at a site by doing just a little.

CONCLUSION

For Processual Archaeologists human life is a dynamic process. Human life is process. By looking carefully at any part of the process it is possible to understand the entire process. More than one world view drives the process. It is pluralistic, not monolithic. There is only one set of stones, but they reflect a variety of stories. The School of Processual Archaeology is committed to using stones to reconstruct the dynamic of human life at a site, and the diversity of stories that those stones represent.



WHAT YOU HAVE LEARNED

- Processual Archaeologists reconstruct the way in which cultures at a site adapt to changes in their natural and human environment.
- Cultural Historians describe artifacts; Processual Archaeologists explain them.
- Processual Archaeologists assume every artifact is a meaningful part of a social process, and that they can reconstruct the entire process from the artifacts.
- Cultural Historians assume a culture at a site is stable; it cannot change. For Cultural Historians change at a site is always a sign of conquest by outsiders or the arrival of new peoples. Processual Archaeologists assume cultures at a site are dynamic; they continue to change and adapt.
- Cultural Historians assume that a single metahistory of a site can eventually be reconstructed from the artifacts recovered there. Processual Archaeologists assume that the story of a site will always be incomplete, and they reconstruct the systems which their artifacts reflect, and then using those reconstructions to hypothetically fill in the gaps in the artifact record.

CHAPTER 16 ETHNOARCHAEOLOGY



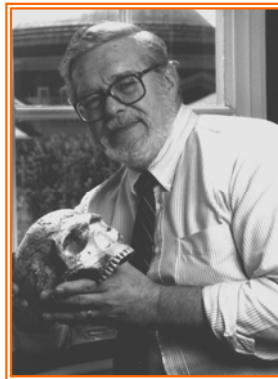
Chapter 16 describes a specific kind of Processual Archaeology called *Ethnoarchaeology*. Ethnoarchaeologists live with and observe still existing cultures to better understand extinct cultures. For example, what ethnoarchaeologists have learned about childbirth in traditional cultures today contributes to the understanding of childbirth and its use as a metaphor in the Bible.

In “Archaeology as Anthropology” (1962) Lewis R. Binford outlined one method for doing Processual Archaeology called *Ethnoarchaeology* (Binford 1962; Binford and Binford 1968). Ethnoarchaeologists study living cultures to better understand extinct cultures. They observe not only how the peoples in these cultures create material things, but why they create them. They want to learn not only how they use material things, but also why they use them. These observations or ethnographies become the basis for interpreting the artifacts and the world views of cultures of extinct peoples recovered in excavations.

For example, Binford wanted to prove that the Mousterian artifacts from Ice Age France were adapted to their environment. Therefore, he spent time with the Nunamiut people of Alaska, who lived in an Ice Age climate. He observed how and why artifacts were created in his host cultures.

LEWIS R. BINFORD

In 1949 Robert K Merton used the work of Emile Durkheim and Max Weber (1864-1920) to develop *Middle Range Theory* (Merton 1949). This sociology was a balanced application of theory and method to the study of human behavior and social organization. Merton criticized sociologists for collecting data without any effort to reconstruct a



theory for understanding the data. He also criticized sociologists for constructing grand theories of human behavior and social organization without doing any fieldwork. Merton did not want to explain the whole world, but concentrated on data that was transparent enough to provide a limited understanding of human behavior and social organization. Universal theories were unreliable. Only Middle Range Theories were reliable tools for understanding human behavior and social organization.

Binford refined Middle Range Theory for use in archaeology. As in sociology Middle Range Theory in archaeology is an artful blend of theory and practice. Here Middle Range Theory identifies and measures a few specific properties of extinct cultures by both collecting artifacts carefully and reconstructing a theory for understanding the function of these artifacts, why they survived, and what they can contribute to understanding the world view of the maker culture.

Binford's work earned him the title: *The Father of Modern Archaeology*. He published his legacy as: Constructing Frames of Reference: an analytical method for archaeological theory building using hunter-gatherer and environmental data sets (2001).

ETHNOARCHAEOLOGY OF JEWISH, BEDOUIN AND ARAB PEOPLES

Ethnoarchaeology in the world of the Bible has focused on both Arab and Bedouin peoples. Raphael Patai (1910-1996) was an anthropologist who studied Jewish life in Hungary and, then went on to use Ethnoarchaeology to study Bedouin culture as a way of understanding the culture of the biblical Hebrews. He taught at the Technion (Haifa) and the Hebrew University (Jerusalem), and founded the Palestine Institute of Folklore and Ethnology. In 1952 he was asked by the United Nations to direct a research project on Syria, Lebanon and Jordan for the Human Relations Area Files (<http://www.yale.edu/hraf/>).

Patai's work was wide-ranging but focused primarily on the anthropology of traditional cultures surviving in the Middle East today as a tool for understanding the culture of ancient Israel. Among his works on the Ethnoarchaeology of the world of the Bible are The Arab Mind (1973) and Sex and Family in the Bible and the Middle East (1959).

The Ethnoarchaeology of Bedouin peoples focuses on cultures that live geographically in same part of the world today where the Hebrews lived yesterday. Thus they are separated in time, but not in place. The most important criterion for Ethnoarchaeology, however, is not geography, but rather similar environmental challenges (Eilberg-Schwartz 1990: 87-102).

ETHNOARCHAEOLOGY OF CHILDBIRTH

Ethnoarchaeologists have lived for longer or shorter periods of time in traditional cultures around the world to observe how midwives work with parents and children. Their patient observations have created an invaluable archive of materials for better understanding and appreciating the role of midwives in the world of the Bible.

The ethnoarchaeology of childbearing focuses not on cultures related to the Hebrews geographically, but to the common experience of

LAMENT
(Ps 139:1-24, author's translation)

Yahweh, you know when I sit down
You know when I stand up;
You know my thoughts from far away.
You track my path and find my den,
You know all my ways....
Where can I go from your spirit?
Where can I flee from your presence?
If I ascend to heaven, you are there;
If I am buried in Sheol, you are there.
If I take the wings of the morning;
If I settle at the farthest limits of the sea,
Even there your hand shall lead me;
Your right hand shall hold me fast.
If I say, "Surely the darkness shall cover me;
Surely, the light around me will become night,"
Even the darkness is not dark to you;
The night is as bright as the day,
Darkness is as light to you.
For it was you who formed my inward parts;
You *massaged* me in my mother's womb.
I praise you, for I am fearfully and wonderfully made.
I know well how wonderful are your works.
My frame was not hidden from you,
When I was being made in secret,
When I was incubating deep in the earth....

childbirth among women in traditional cultures in general. Studies of midwives in most traditional cultures show that they provide both clinical and legal services to households. Clinically, midwives see that women who are going to give birth are physically prepared (Delaney 1988:264). Legally, they were responsible for seeing that these women were officially designated and financially compensated.

Menstruation
(Latin: *menses*)
played a key role in

the preparation of child bearers. Intercourse during menstruation was strictly prohibited (Lev 15:19-24; Delaney 1988:89; Buckley and Gottlieb 1988:19-20). By observing when a woman had finished her menstrual period midwives determined the appropriate time for the couple to have sexual intercourse (Jensen, Benson and Bobak 1977: 733).

Before couples had intercourse, midwives monitored women's nutrition and prescribed special foods or aphrodisiacs considered to increase fertility. For example, the mandrake, which is a Mediterranean herb with egg-shaped leaves, white or purple flowers, and a large forked

root (Latin: *mandragora officinarum*), was used by midwives as an aphrodisiac in ancient Israel (Song 7:13; Gen 30:14-20). Aphrodisiacs are often shaped like or smelled like the reproductive organs they were expected to stimulate. Midwives certified that mothers were pregnant by palpating or massaging their uterus (Ps 139:1-24). Another definitive sign of a healthy pregnancy was the movement or kick of the fetus in the uterus (Gen 16:4). This physical contact between midwives and their unborn children created an enduring bond between them and the children. The fetus not only grew accustomed to the touch of its midwife, but also responded to her gentle hands.

BIRTH ROCK
HAR KARKOM

In some cultures midwives construct birthing huts. They use music to exorcise any members of the divine assembly who were not welcome at birth, and prevent their return by caulking any openings in the walls of the birth hut and carefully sweeping the dirt floor or scattering flour on it so that any invisible member of the divine assembly who tried to enter and harm the mother or her child could easily be detected. Pioneer mothers in the American West used similar tactics to protect their families from rattlesnakes. They removed all the shrubs and grass from around their houses which were built off the ground on pilings of brick or stones. Every day, they swept the dirt smooth so that any snake which crawled up into the cool shade under the house would leave a clear trail to its hiding place.

LA VIRGEN DE GUADALUPE EN CINTA

In traditional cultures mothers deliver kneeling, squatting, sitting, or standing. Their midwives used birthing stools, music, and massage to control



pain (Donegan 1978:141-63; Jordan 1983). Paleolithic (9000 BCE) rock drawings from Europe and a Neolithic (6000-4000 BCE) clay figurine of the godmother of Catal Hayuk portrays a steatopygous or large hipped woman giving birth sitting (Towler and Bramall 1986:1-5; Anati 1987: 125).

Birthing stools were used to support the mother's weight and position her hips for delivery. The Cuna in Panama use hammocks during labor (Severin 1973:124). The mother sits over a hole in the hammock through which the midwife delivers her baby.

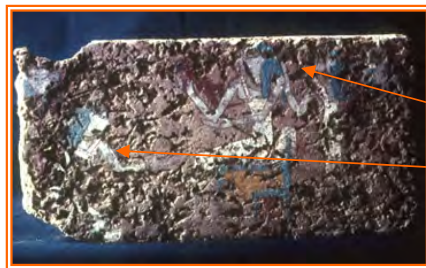
Azteca mothers in Mexico announced their pregnancy by wrapping a long black sash (Spanish: *cinta*) around their waists. During pregnancy it helped support their uterus. During labor, midwives tied the sash over a beam in the hut to create a sling to support the mother's hips.

On the American frontier, midwives used milking stools as birthing stools (Wertz and Wertz 1977:13-14). Birthing chairs have reappeared in delivery rooms in the United States in response to the increasing demand of healthy mothers who intended to deliver their babies without drugs and in an upright position (Roberts and Van Lier 1984:33-41).

In the world of the Bible the birthing stool was simply two rocks or bricks pushed close enough together to support the mother's hips (Thompson 1986: 267).

At Abydos archaeologists recovered a birth brick decorated with a mother giving birth with the help of her midwife (Wegner 2002; McGeough 2006). Mothers may have knelt on these bricks while giving

birth, or midwives may have laid the newborn on a cushion framed by the bricks during its adoption.



MOTHER AND
MIDWIFE ON BIRTH BRICK AT ABYDOS



MOTHER AND MIDWIVES
DEIR EL MEDINA

At Abydos archaeologists recovered a birth brick decorated with a mother giving birth with the help of her midwife (Wegner 2002; McGeough 2006). Mothers may have knelt on these bricks while giving birth, or midwives may have laid the newborn on a cushion framed by the bricks during its adoption.

Just as the midwives used music to prepare the rooms where intercourse would take place, they also used music during labor and delivery. The rhythm or melody was as important as the words. Midwives, however, were not simply entertainers. Music was a sympathetic ritual (Meyers 1991: 24-25). The rhythm of the voice or the drum set a healthy pace for respiration and heartbeat, and tuned newborns to the rhythm of their culture with which they were joined during these creative moments.

To clear the newborn's airway in some traditional cultures, midwives set newborns down firmly on the ground. The Cuna splashed the newborn in a stream or a water-filled canoe (Severin 1973:124). Clinically, these techniques closed a valve so that the newborns can begin to breathe. It also jolted them out of primary apnea, which sometimes arrests their respiration.

Legally earthing the newborn affirmed the bond between them and their Mother Earth. By placing newborns on the ground and then removing them, midwives reenacted with Mother Earth the parturition they had just completed with their human mothers.

Earthing also affirmed the widespread belief that before entering the womb of its human mother, newborns gestated in the soil, rocks, trees, plants, flowers, rivers, and springs (Ps 139:15; Wis 7:1-6; McKenzie 1907). For traditional cultures in Germany, Australia (van Gennep 1974), Africa (Burton 1961: 115), and Japan (Batchelor 1892: 225), the soil is the primary mother of all humans (van Gennep 1960:52).

After delivery midwives held up the newborns inviting their adoption. The first cry of newborns as they inflate their lungs and begin to breathe is considered a legal petition to join their households and become members of the village community.

To legally adopt their children parents would answer the primal scream of the newborn with a hymn inviting the household to praise their divine patron and accept this child (Job 3:7). Formulas like *a ... child is conceived* (Job 3:3) introduced newborns to their households (Gen 21:6-7). Eve celebrates the successful birth of Cain and Abel

with the hymn: *I have gotten a son with the help of the Lord* (Gen 4:1).

If no one adopted a newborn, the midwife left it, just as it came from the womb -- unwashed and unclothed -- in an open field where it could be adopted by another household (Stager and Wolff 1984: 50). In the world of the Bible, life began, not with the physical process of birth, but rather with the legal process of adoption.

Once parents spoke for their newborns, midwives rinsed off the placenta with saltwater in order to clean and sterilize them. Then they gently massaged their bodies with oil to protect their skin from drying and cracking. Washing conferred legal standing on newborns.

Midwives further defined the social status of their newborns by clothing them. Receiving blankets were not simply a practical necessity, but uniforms which identified newborns as members entitled to all the rights and privileges of their households. The Mbuti of Australia strengthen the bond between their newborn and Mother Earth by swaddling them in a carefully prepared bark blanket (Severin 1973: 85-87).

Finally, midwives placed newborns in the nursing position on the laps of their mothers. Again the Mbuti further strengthen the bond between newborns and their earth mother by nursing them with catch water from the pulp of trees before offering them human breast milk.

Midwives carefully dispose of the umbilical cords of the newborn (Jensen, Benson, Bobak 1977). They treat umbilical cords the way they wished the newborn to be treated in later life. For example, they do not allow animals who are the totems of any member of the divine assembly who could harm the newborn to eat the cord. Among the Swahili the cord is placed around the child's neck and then later buried where the child was born so that the child will always be welcome in the house of its parents.

With the child safely born and legally adopted, midwives continue to serve as pediatricians, teaching child bearers how to care for themselves and child-rearers how to care for their children (Gruber 1989; Habicht 1985). Mothers sought their advice on ordinary matters like birth control.

Breast-feeding was common and also provided a natural spacing of the children since women who are breast-feeding several times a day are less likely to ovulate or conceive. Female infants

would be weaned in eighteen months; male infants in thirty, in order for the mother to resume ovulating (1 Sam 1:21-24; Granqvist 1947:108; Gruber 1989: 68).

Mothers also looked to their midwives for support in extraordinary crises like stillbirth or crib death. Birth and death mirror each other in traditional societies. Midwives and mourners assist at each threshold. High infant mortality rates and the need to provide an adequate labor supply would have required couples to have more than one child. Even with an average of four births per couple, the only two children generally survived to adulthood (Hopkins 1985:156; Angel 1972: 94-95).

For the Hebrews Yahweh was neither male nor female, but both male and female (Mollenkott 1983:1-35). Humans were gendered; Yahweh was integral. Among its rich archive of metaphors for Yahweh, the Bible regularly portrays Yahweh as a mother (Latin: *dea mater*), as a midwife (Latin: *dea obstetrix*), and as a nurse (Latin: *dea nutrix*). As a mother Yahweh carries a child in her womb, labors to give birth (Deut 32:18; Job 38:28-29; Isa 42:14), teaches her child to walk (Hos 11:3-4), and wipes tears from its eyes (Isa 66:13-14). As a midwife Yahweh delivers a newborn (Job 38:8; Isa 66:9), clothes it (Gen 3:21; Job 10:10-12; 38:8-9), and places it in its mother's arms (Ps 22:9-10). As a nurse, Yahweh cradles her child (Hos 11:3-4; Isa 46:3-4), nurses it (Ps 34:9; Isa 49:15; Hos 11:4; 2 Esd 1:28), and weans it (Ps 131:1-2; Wis 16:20-21).

The book of Isaiah identifies Yahweh as a true midwife who is Judah's companion in labor (Isa 26:16-18). The book of Psalms also describes Yahweh as the midwife who aspirates newborns and protects them from crib death (Ps 8:1-10). Some of the same imagery appears in the book of Wisdom (Wis 7:1-6), where Yahweh delivers the Wise Woman and then sets her down firmly on the ground until she begins to breathe (Wis 7:3).

PARABLE OF A GOOD PARENT
(Ezek 16:4-5)

As for your birth,
 On the day of your birth
Your umbilical cord was not cut,
 You were not washed with fresh water...,
You were not rinsed with salt water,
 You were not wrapped in swaddling clothes.
No one pitied you,
 No one loved you enough to do these things for you...
You were abandoned in an open field,
 You were abhorred on the day you were born.

The Parable of the Good Parent in the book of Ezekiel (Ezek 16:2-5) preserves the most complete list of a midwife's postpartum services in the Bible. It expects midwives to cut and tie off the umbilical cord, to rinse the placenta off newborns, to sterilize newborns with saltwater, and then wrap them in a receiving blanket.

Because no one in the Parable of the Good Parent adopts the child, the midwife takes the newborn from the birthing room and leaves it covered with afterbirth in an open field. Here human jurisdiction ends. In this field, the midwife transfers the newborn from human jurisdiction to the jurisdiction of the divine assembly over which Yahweh presides. By placing it here in the same condition in which it left the womb, the household waives its own right to adopt the child, and declares that it is eligible for another to claim.

CONCLUSION

Ethnoarchaeologists living with still existing traditional cultures today have observed and reconstructed the clinical and legal services of midwives (Jordan 1983) . Their reconstructions allow biblical scholars to better understand why midwives are so highly regarded in ancient Israel. Using these reconstructions to better understand and appreciate biblical traditions, it becomes clear that midwives in the world of the Bible were important not only to the parents they helped conceive, birth, and rear children, but also to the whole community which learned from their work how to understand their divine patrons. The Hebrews' gratitude to these women remains enshrined in the powerful metaphors of birth and birthing with which they described their Creator and creation in the Bible.



WHAT YOU HAVE LEARNED

- Ethnoarchaeology is a specific kind of Processual Archaeology.
- Ethnoarchaeologists live with and observe still existing cultures to better understand extinct cultures and to test their reconstructions of social institutions in the field.
- Theories about how social institutions in early Israel worked are often tested by studying Bedouin peoples.
- Ethnoarchaeologists use the research of anthropologists on midwives and childbearing in traditional cultures to interpret material artifacts from the world of the Bible.
- The Parable of the Good Parent in the book of Ezekiel (Ezek 16:2-5) preserves the most complete list of a midwife's postpartum services in the Bible. It expects midwives to cut and tie off the umbilical cord, to rinse the placenta off newborns, to sterilize newborns with saltwater, and then wrap them in a receiving blanket.

CHAPTER 17

GEZER



Chapter 17 describes the excavations at Gezer, an important site excavated by Processual Archaeologists, and what those excavations contributed to the understanding of the stories of Solomon in the Bible.

Tel Rehov (Israel), Megiddo (Israel), Ashkelon (Israel), Tall Al-'Umayri (Jordan), Gezer (Israel) and Ekron (Israel) and the underwater excavations at Uluburun (Turkey) and Cape Gelidonya (Turkey) were all excavated by Processual Archaeologists. They were committed to using the scientific method and went into the field with clearly defined goals for their excavations. They were especially conscious of how the material remains demonstrated the flexibility of the maker cultures to changes in their environment, whether these changes occurred in nature or as the result of human activity. If the Bible and other written artifacts were relevant for their excavation, they made use of them, but only after a full model of interpretation for the sites had been reconstructed on the basis of the material remains alone.

Tel Gezer is about half way between Jerusalem and Tel Aviv today - five miles south-southeast of Ramleh. It guards the western entrance to Jerusalem from the Coast Highway. The 33 acre site was occupied from the Bronze Age (3400-1200 B.C.E.) to the Hellenistic Period (323-37 B.C.E.). Boundary markers from the Hellenistic period (Stratum I) reading *The Boundary of Gezer* definitively identify the site.

R.A.S. Macalister directed the first major excavations at Gezer (1902-1905, 1907-1909). Following techniques common at the time, Macalister dug thirty trenches, and then refilled them. He identified 8 of the 26 settlement layers.

The second major excavations at Gezer (1964-1974+1984, 1990) were directed by G. Ernest Wright, Nelson Glueck, William G. Dever and Joe D. Seger for Hebrew Union College and the Harvard Semitic

Museum. Dever wanted the Gezer excavations to be a field school for applying Processual Archaeology and General Systems Theory to excavations in Syria-Palestine (Dever 1993).

To some extent Dever focused the excavations at Gezer on specific historical questions. For example: *Was the restoration of Gezer part of a state resettlement program during the reign of Solomon? Were villagers*



forcibly moved from the hills into cities like Gezer to more rapidly convert the decentralized and subsistence culture of early Israel into a centralized and surplus culture of Israel as a state? (Faust 2003) But as a Processual Archaeologist he also concentrated on more general questions of human evolution and social change in Syria-Palestine. He excavated to test various theories about how cultures adapt to change. He described not only evolutionary patterns of development at Gezer, but also the impact of inventions like metalworking on development as well. He took an interdisciplinary approach to excavating Gezer analyzing the contribution of seeds, bones and geology to understanding human settlement at the site.

Changes in theory at Gezer led to changes in practice. In contrast to the trenching techniques used by McAlister, Kenyon had rigorously focused her excavations at Jericho and Jerusalem on opening very small squares. Influenced by Israeli archaeologists like

Yohanan Aharoni, however, Dever widened the Wheeler-Kenyon method to include excavations of entire architectural structures like the main gate and its wall. As the work progressed at Gezer, field supervisors faithfully kept diaries, drew top plans every day and recorded each find on locus sheets.

Many of the most accomplished archaeologists in the United States and Canada today learned their craft together at Gezer. Among them are Dever; Seger; Lawrence Stager; Gitin; Jack Holladay, Eric Meyers, Carol Meyers; Dan Cole; Oded Borowski; Darrell Lance; Anita Walker; Robert Wright.

A consortium of institutions under the direction of Steven M. Ortiz and Sam Wolff resumed work at Tel Gezer in 2006 (<http://www.gezerproject.org/>). The project is re-investigating the Iron Age levels of occupation (Strata V-XIII).

GEZER (1650-1468 B.C.E.)

Humans pioneered Gezer during the Chalcolithic Age (Stratum XXVI) inaugurating some 26 periods of occupation at the site. Three human communities used the site during the Early Bronze period (Strata XXIII-XXV); five during the Middle Bronze period (Strata XVIII-XXII); four during the Late Bronze period (Strata XIV-XVII); nine during the Iron Age (Strata V-XIII); one during the Persian period (Stratum IV); and three during the Hellenistic period (Strata I-III).

A sanctuary constructed by the Middle Bronze community that lived at Gezer between 1650-1468 B.C.E. (Strata XVIII-XIX) and the main gate constructed by the Iron Age community that lived at Gezer between 1000-920 B.C.E. have made particular contributions to understanding the world of the Bible.



GEZER SANCTUARY
1650-1468 B.C.E.

The Middle Bronze period (2000-1500 B.C.E.) was a remarkable time in the world of the Bible. Refugees from the Early Bronze period (3400-2000 B.C.E.) returned from the hills and deserts to rebuild their cities. Early Bronze culture in Syria-Palestine had collapsed abruptly between 2300-2000 B.C.E. Natural disasters like drought and

epidemics set off food wars between cities that had crops and those that did not. Egypt delivered the final blow to Early Bronze culture as its armies campaigned throughout Syria-Palestine creating a wasteland to defend Egypt against peoples from the borders of Mesopotamia who were moving south (Mazar 1992: 141-143).

Middle Bronze cities were magnificent. Throughout the Bronze Age (3400-1200 B.C.E.) there were none larger, none more heavily fortified. Walls 25 feet thick and a mile long were built with stones weighing over 2000 pounds.

City people in the Middle Bronze were merchants. Villagers were herders and farmers. Some were rich and some were poor. The wealthy were served by warriors, bureaucrats, artists, trades people, and slaves. They were masters of the planning, organization, production, distribution, and enforcement that the construction and operation of great cities demands.

Middle Bronze cultures in Syria-Palestine invented the alphabet. Hundreds of word-pictures in Mesopotamian cuneiform and Egyptian hieroglyphics were reduced to thirty hieroglyphics in Ugaritic and twenty-two letters in Hebrew. Ordinary people, not just an elite corps of scribes, could now read and write (Daniels and Bright, eds. 1996: 21-32).

Middle Bronze cultures manufactured bronze tools and weapons with tin imported from Afghanistan. They crafted jewelry with alabaster and faience from Egypt. They turned exquisite pottery on new high-speed wheels. They carved fine wooden furniture inlaid with ivory from Syria. They exported grain, olive oil, wine, cattle, timber, and slaves.

During the Middle Bronze period colonists and warriors from Syria-Palestine, whom native Egyptians despised as *Hyksos* or *northerners*, occupied the delta where the Nile River flows into the Mediterranean Sea. From there the Hyksos ruled Egypt (1630-1539 B.C.E.) three hundred miles south to Thebes.

Middle Bronze culture thrived in Egypt until 1540 B.C.E. when Kamose (1555-1550 B.C.E.) declared Egypt's independence from the Hyksos. For the next 150 years, pharaohs systematically razed Hyksos' cities and exterminated their culture from Avaris in the delta of Egypt north to Megiddo in the valley of Jezreel in Syria-Palestine.

To create the Middle Bronze sanctuary at Gezer 10 large stones were erected (Hebrew: *massebot*) in the soil along a straight line running north-south. Some of the stones are 10 feet high. The sacred space

around the stones is plastered and edged with a low stone curb. In front of the line of standing stones there is a large stone into which a basin or socket has been carved (Dever 1993; Dever 1997).

The earliest standing stones in the world of the Bible were erected during the Neolithic period around 5,000 B.C.E. Although the sanctuary at Gezer was built in the Middle Bronze period (1650-1500 B.C.E.), it continued to be used by communities at Gezer until the end of the Late Bronze period (1500-1200 B.C.E.).

Sometimes communities erected (Hebrew: *massebot*) simply a single stone, but generally there are two, three, five, seven, nine or twelve stones. Sometimes the stones are arranged in a straight line as they were at Gezer; sometimes the arrangement is curved as it is at Gilgal.

Standing stones were not images of members of the divine assembly, but rather dwellings for them. Therefore the Covenant between Yahweh and Israel did not outlaw them (Exod 20:4-5; Deut 5:8-9). Likewise, the Bible does not consider the standing stones of other cultures in Syria-Palestine to be idols. The Bible orders the Hebrews to smash the standing stones of strangers because as long as those stones stand, the divine patrons of the strangers have places to stay (Exod 23:24; 34:13; Deut 7:5; Deut 12:5). If the Hebrews destroy these standing stones, then the divine patrons of their enemies are homeless. Because they have no place to stay, they cannot defend their peoples against the Hebrews.

At Bethel Jacob erects the stone from which Yahweh appeared to him in a dream (Gen 28:10-22; Isa 19:19). The tradition never explicitly says that the stone is an image of Yahweh. Jacob anoints the stone to acknowledge the presence of Yahweh in the stone.

Similarly, the standing stones that the Hebrews erected at Arad, the Bull Site in Samaria, Lachish, Dan, Tirzah and Hazor were not images of Yahweh, but were places for Yahweh to stay with them. They are on-going reminders that the Covenant between Yahweh and Israel is still in effect (Zevit 2001: 256-266).

Most standing stones have been shaped. The dwellings for godfathers are represented by tall and thin stones; the dwellings for godmothers by short and squat stones. The two standing stones in the Hebrew sanctuary at Arad roughly conform to these canons of style. The theology of the divine patron of ancient Israel as a couple, rather than as simply a single, divine male also appears in the prayers of Hebrew pilgrims who visited the sanctuaries at Kuntillet 'Ajrud and Khirbet el-

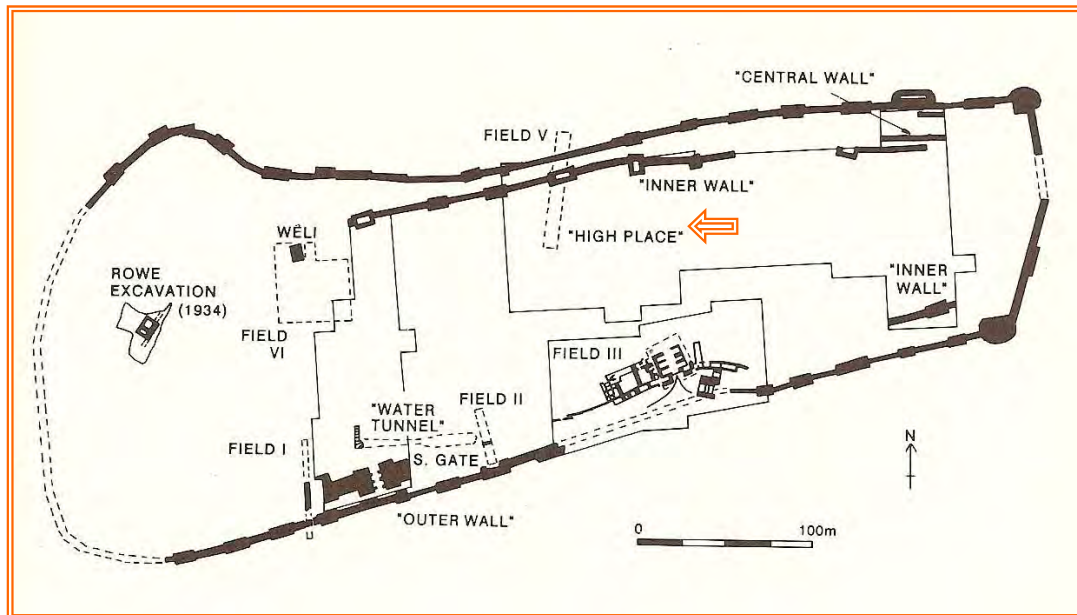
Qom. They wrote their prayers on broken pieces of pottery to both Yahweh -- their godfather -- and Asherah -- their godmother (Zevit 2001: 350-438).

The List of Witnesses in the Covenant between Yahweh and Israel at Sinai in the book of Exodus (Exod 24:1-18) describes the stones as tablets on which the covenant is inscribed. The List of Witnesses for the Covenant between Yahweh and Israel at Gilgal in the book of Joshua (Josh 3:1—5:12) describes the stones as representations of the twelve tribes of Israel. Yet in most sanctuaries, including those erected by the Hebrews, standing stones house the divine patrons of the community that erected them. This architecture created a visual image of the divine plane from where the divine assembly watched over the people for whom the sanctuary was a sacred center.

Stones were also erected to commemorate human events. Shoshenq I erected a standing stone at Megiddo as a memorial of his conquest of the city. Jacob erects a stone as a memorial to the Covenant between Jacob and Laban at Gilead on the border between their lands (Gen 31:43-54).

Standing stones were also erected over graves. These tomb stones reflect the expectation of the living that where the dead are buried, divine intercourse will take place, and the community will be recreated. For example, a stone was erected on the grave of Rachel (Gen 35:16-20).

GEZER TOP PLAN
ABD 2:999



Biblical traditions connect the erection of stones with the cutting of a covenant between the Hebrews and Yahweh. Jacob, for example, erects the stone and then anoints it with oil. The tradition then describes the stipulations and the blessings of the covenant. As long as the stone stood, the covenant remained in effect. If the stones were broken, as Moses does, the covenant is abrogated (Exod 23:24; 34:13; Deut 7:5; 12:3).

The magnificent Middle Bronze city at Gezer and its impressive sanctuary of standing stones were destroyed in 1468 B.C.E. The Annals of Tuthmosis III (1479-1425 B.C.E.) report that he waged sixteen campaigns in Syria-Palestine. Gezer was one of his victories.

GEZER (1000-920 B.C.E.)

The Hebrews most important natural resource was their geographical location. Two trade routes passed through their land: the Coast Highway (Latin: *Via Maris*) and the Royal Highway. The Coast Highway was a north-south trade lane that ran along the Mediterranean Sea from Egypt to the Carmel Mountains. The Royal Highway ran along the eastern ridge of the Dead Sea Valley between the Red Sea and Damascus. Income from transit trade and outright piracy from these two routes was significant (1 Kgs 10:14-15).

The two most important social institutions in the world of the Bible were the village and the state (Matthews and Benjamin 1993: 155-158). Villages are decentralized and subsistence economies; states are centralized and surplus economies. One of Dever's questions was: *Is Gezer (Stratum VIII) evidence that the decentralized and subsistence villages of early Israel had developed into a centralized and surplus state ruled by David and Solomon?* Hebrew villages appeared in the hills or highlands of Judah, west of the Jordan River and north of Jerusalem around 1200 B.C.E. Just when these villages develop into a centralized, surplus, state economy is not so clear.

State economies in the world of the Bible are composed of a *mother* city and its villages or *daughters*. Architecturally a city is a complex of domestic and public buildings surrounded by a wall. This walled community maintained a successful trade network with smaller, unfortified surrounding villages.

Cities were governed by a monarch and a city assembly. Monarchs (Akkadian: *hazannu*) leased the land to households (Akkadian: *hupsu*). Cities controlled more land and produced more goods than they needed simply for survival. The surplus was traded to outsiders for luxury goods.

The Hebrews founded villages in the hills as a strategy for protecting themselves from the wars raging along the Coast Highway. In time, however, they exhausted the scant natural resources in these hills and began migrating back to the foothills and the plains along the coast.

In some areas the Hebrews negotiated with their new neighbors in the foothills and on the plains. They negotiated covenants for goods and services that were mutually beneficial. In other areas, however, the Hebrews and their new neighbors became bitter enemies. The Hebrews raided their neighbors' herds and farms, and their Philistine, Midianite, Ammonite, Moabite and Amalekite neighbors raided the Hebrews' herds and farms.

The need to protect land and people is a common stimulus for the formation of a state. Villages are defended by militias of part-time warriors who are farmers and herders commanded by charismatic leaders. States have standing armies of full-time professional soldiers commanded by trained military officers. On-going military crises generally prompt villagers to forego their self determination in exchange for strong-man rule in a state. In order to protect their land and children, village households were willing to relinquish a portion of their authority.

The Hebrews finally broke out of their villages and began to occupy, purchase, or conquer new land (Edelman 1988). David is generally considered the last chief – a temporary war lord elected to lead the tribe of warriors into battle. Solomon is the first monarch – a permanent ruler and commander of a full-time and professional army of soldiers. From the reign of Solomon on, the monarchs of ancient Israel all constructed monumental public works and fortifications like the gates and casemate walls at Gezer, Hazor, and Megiddo. By the end of Solomon's reign around 930 B.C.E. the evolution of Israel as villages into Israel as a state was generally considered to be complete.

A closer look at the material remains along the Coast Highway, however, reveals that neither David (1000-970 B.C.E.) nor Solomon (970-930 B.C.E.) had much political or economic control over the Philistines. The Philistines were clearly dominant (Bierling 2002). As their threat to Egyptian trade along the Coast Highway increased Pharaoh Siamun (978-959 B.C.E.) attacked Gaza, Gath, Ekron (Stratum IV), Ashdod (Stratum X) and Tel Qasile (Stratum X). Siamun published the annals of his campaign in Syria-Palestine on the sanctuary walls at Tanis.

In his annals Siamun is pictured attacking a Philistine warrior armed with a double blade axe characteristic of the Sea People. The warrior is holding the axe by the blade, not the handle, reflecting his

incompetence as a fighter. The blade itself is drawn at an angle indicating that the handle has cracked just at the point where it slides into the blade so it is useless as a weapon. Neither the warrior, nor his weapon is a threat to Siamun (Kitchen 2003:108-110).

Midway up the Coast Highway, an east-west cut-off connected that highway to Jerusalem. Gezer guarded the intersection. During his campaign against the Philistines in 967 B.C.E. Siamun also attacked the Canaanite city of Gezer to keep the Philistines from expanding farther inland (Stratum IX). He ceded the city to the Hebrews to clearly identify the border of Philistia and to guard the Coast Highway for Egypt.



SIAMUN
978-959 B.C.E.
TANIS
KITCHEN 2003: 618

Following Siamun's campaign palaces, sanctuaries and fortifications were constructed at Gezer, Beth-Shemesh, Megiddo, Taanach, Beth-Shean, Yokneam and Hazor to secure trade routes against Philistine interference. These building programs transformed the landscape along the Coast Highway.

The Coast Highway was important to both Israel and Tyre. Fortifying Gezer gave Israel a secure border. The actual reconstruction of Gezer may have been done by Hiram of Tyre (1 Kgs 5:1). Both David and Solomon took advantage of Tyre's skill in business and building (1 Kgs 9:10-25). Solomon may have paid Hiram by ceding land north of the Carmel Mountains to Tyre (Miller and Hayes 2006: 208-209; Kitchen 2001: 112-115).

The main gate at Gezer is one example of the monumental architecture identifying the strategic importance of the city (Stratum VIII). It is also a test case for determining whether or not Gezer is evidence for state formation in Israel.

MAIN GATE, GEZER
1000-925 B.C.E.
© KING AND STAGER 2001: 235

The gate at Gezer followed the same pattern as



the gates of Hazor and Megiddo (Yadin 1958). The main gate of Gezer is the best preserved of the three. The space on either side of the main gate of Gezer was subdivided into three smaller rooms or bays. Low stone benches ran along the base of the walls.

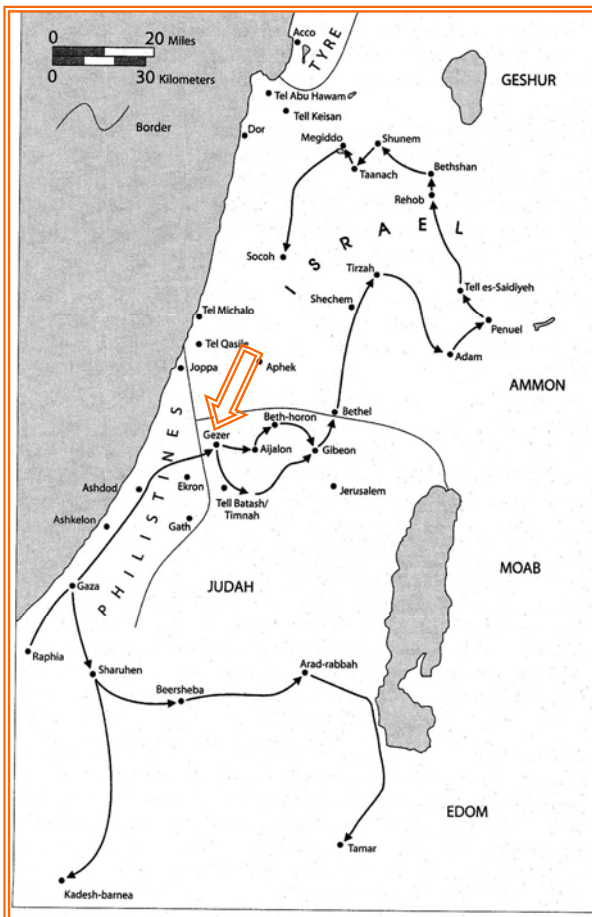
The gate was repeatedly redesigned and repaired until it was destroyed by Shoshenq I (Stratum VIII). This destruction layer was dated by red-slipped pottery polished by hand and manufactured prior to Shoshenq's campaign (Dever 2001: 131-138; Holladay 1990 BASOR 277-278: 23-70).



RED-SLIPPED POTTERY
1000-900 B.C.E.
TEL REHOV
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In 925 B.C.E. Shoshenq I invaded Syria-Palestine. His annals describe his march and the cities he conquered. These annals are a geography for Syria-Palestine at the end of the Iron I period (1200-900 B.C.E.) and the beginning of the Iron II period (900-586 B.C.E.). The conquest of Gezer (Stratum VIII) in 925 B.C.E. was one of his victories (1 Kgs 11:40; 2 Chr 12:2-4) along with Tirzah, Rehob, Bethshan and Megiddo.

SHOSHENQ'S CAMPAIGN
925 B.C.E.
DEVER 2001: 136



Writing is also a signature of state formation. Education or wisdom was an important skill for good government. As villages evolved into states teaching traditions developed by mothers of households to integrate women and children into

the community evolved into schools taught by male scribes (Jamieson-Drake 1991). These wise men like Ptah-hotep and Amen-em-ope taught the men who would be rulers of these states in Mesopotamia, Syria-Palestine and Egypt as scribes. The recovery of several clay inkwells (Stratum VII) and the Gezer Almanac (Stratum VIII) suggest that Gezer may have been home to a school for scribes.

Sometime between 950-925 B.C.E. a student at Gezer practiced writing Hebrew on a limestone tablet four inches long and four inches wide (Abright 1942). Macalister recovered the artifact during his excavation at Gezer in 1908. The student copied an almanac identifying the specific chores for each season of the farmer's year.

In Syria-Palestine the agricultural year begins in the fall, when olives were harvested and the October rains soften the sun dried soil enough so that planting can start (Matthews and Benjamin 2006: 135-136).

GEZER ALMANAC
(Matthews and Benjamin 2006: 155-156)

August and September to pick olives;
October to sow barley
December and January to weed;
February to cut flax
March to harvest barley;
April to harvest wheat and pay tithes.
May and June to prune vines;
July to pick the fruit of summer.



GEZER ALMANAC
950-925 B.C.E.
LIMESTONE
4X4 INCHES
© KING AND STAGER 2001: 88

Stratum VIII (967-925 B.C.E.) at Gezer became a battlefield not just for invading pharaohs, but for twentieth century scholars. Archaeologists who identified the material remains at Gezer as evidence for a powerful, centralized state ruled by Solomon are called *maximalists*. Dever and Kitchen, for example, are maximalists, who argue that Stratum VIII clearly shows that Gezer was a provincial capital in the state of Israel ruled by Solomon (Dever 2001, 2005; Kitchen 2003).

Biblical scholars who find no evidence in Stratum VIII that Solomon built the gates, walls and other buildings at Gezer are called *minimalists*. Niels Peter Lemche, Thomas L. Thompson and Keith W. Whitelam, for example, are minimalists who strongly disagree with Dever and Kitchen (Lemche 1997; Thompson 1996; Whitelam 1996). They argue that no archaeological evidence from Gezer supports the historical reliability of the biblical tradition that Israel was a state ruled by

Solomon between 1000-900 B.C.E. The Israel of the period was still no more than a scattered federation of villages in the hills north of Jerusalem.

CONCLUSION

The debate between the archaeologists and the biblical scholars frequently lacked civility, but has, nonetheless, contributed to a more nuanced understanding of what was happening in Syria-Palestine between 1000-900 B.C.E. If Tyre built the walls and gates and other buildings of Gezer for the Egyptians who then gave the city to Solomon to create a border that the Philistines were not to cross, then the evidence for a centralized state of Israel ruled by Solomon still remains to be found. If the renewed excavations at Gezer by a consortium of institutions under the direction of Steven M. Ortiz and Sam Wolff cannot connect the construction of the city with Solomon then what Solomon may have brought to Israel was not so much political power, and economic wealth, but the genius of knowing how to successfully negotiate the survival of the Hebrews in a world dominated by powerful and often hostile neighbors.

The power-brokers in the world of Solomon were the Philistines, the Egyptians and the people of Tyre. They were the wagers of wars, the barons of trade, the builders and the bankers. The Hebrews had emerged from their asylum in the hills north of Jerusalem onto the military, political and economic playing field of Syria-Palestine. Ancestor stories in the Bible (Gen 11:27—25:18) do not celebrate Abraham and Sarah for building great cities, but for negotiating good covenants. Abraham and Sarah were the patrons of the household of David and Solomon who is probably responsible for the tellings of those stories preserved today in the Bible. David and Solomon remembered Abraham and Sarah for their skill in negotiating with their divine patron (Gen 11:27—12:8), with their enemies (Gen 12:9—13:1) and with their friends (Gen 13:5—14:24). Perhaps Solomon remembered Abraham they way he himself wanted to be remembered at Gezer – not so much as a builder but as a covenant maker. Whether they were dealing with Yahweh, their divine patron; the Egyptians and the Philistines, their ancient enemies; or the people of Tyre, their friends, covenants were the Hebrews' strategy of choice for establishing the life supporting conditions for land and children. The Hebrews may have survived their entry into the Iron Age not because they were rich and powerful, but because they knew how to negotiate covenants with the rich and powerful. And the material remains at Gezer, not built by Solomon, but rather given to him by Shoshenq I, may be a prime example of what such successful covenant making can accomplish.



WHAT YOU HAVE LEARNED

- Gezer is an important site excavated by Processual Archaeologists.
- Processual archaeologists wanted to know if material artifacts at Gezer would demonstrate that Israel was a central, surplus state by 1000 B.C.E. The evidence is still inconclusive.
- Masseboth standing stones like those at Gezer are dwellings for members of a culture's divine assembly, not images of their divine patrons.
- The Gezer Almanac identifying specific chores for each season of the farmer's year recovered at Gezer may indicate there was a royal school for scribes there.
- The gates, walls and public buildings at Gezer may have been built by Tyre for Egypt, which then turned the city over to Israel to prevent the Philistines from blocking the Coast Highway.

CHAPTER 18
TEL MIQNE
(1175-603 B.C.E.)



Chapter 18 describes the excavations at Tel Miqne, an important site excavated by Processual Archaeologists. Three significant questions were used to interpret the artifacts producing the following results. Excavators demonstrated that the transition from the Bronze Age to the Iron Age in Syria-Palestine was complex, not uniform, and gradual, not spontaneous. They also reconstructed the shifting political conditions between Philistines, Israelites, Phoenicians, Assyrians and Egyptians; the interaction of these diverse cultures; and their economic development. Finally, they clearly described the development and then decline of Philistine culture in Syria-Palestine, providing an important corrective for generally barbaric and hostile portrayal of the Philistines in the Bible.

Tel Miqne is some twenty miles southwest of Jerusalem on the western edge of the foothills (Hebrew: *sephelah*) in the Sorek Valley. The site is some three hundred fifty feet above sea level.

Processual archaeologists begin with a question. Trude Dothan and Seymour Gitin wanted to know if the transition from the Late Bronze period (1500-1200 B.C.E.) to the early Iron period (1200-1000 B.C.E.) in Syria-Palestine was uniform and simultaneous (Dothan 1990). Fourteen seasons of excavating at Tel Miqne (1981-1996) clearly show that the transition was complex, not uniform, and gradual, not spontaneous. Egyptian, Sea People and native cultures in Syria-Palestine began to show Iron Age characteristics and to develop Iron Age technologies in different ways and at different times (<http://www.aiar.org/miqneekron.html>).

Tel Miqne is on the biblical border between Judah and Philistia. Political and economic conditions change more quickly in border cities, than in cities in the heartland. Therefore Dothan and Gitin also wanted to clarify the relationship between Philistines, Israelites, Phoenicians, Assyrians and Egyptians from 1200-586 B.C.E. The excavations at Tel Miqne are important for understanding the culture of the Sea Peoples in

Syria-Palestine, particularly the culture of the Philistines. Therefore, Tel Migne was a prime site for reconstructing the shifting political conditions, the interaction of diverse cultures, and economic development between 1200-586 B.C.E.

Artifacts from Tel Migne also provide a fresh context for reconstructing a calendar for both Philistia in particular and Syria-Palestine in general. The Philistines who conquered Tel Migne in 1175 B.C.E. imposed their western Mediterranean culture on the native peoples who survived the war. As a Philistine city Tel Migne rose and fell. The culture of the Philistines was influenced by contact with the cultures of Canaan, Egypt, Israel, Judah and Assyria, but was never completely assimilated by any of them. After Judah ceded Tel Migne to Assyria in 701 B.C.E. the city flourished until Babylon destroyed it in 603 B.C.E. and relocated the survivors.

TEL MIQNE
©RAINEY AND NOTLEY 2006: 36

TEL MIQNE 1550-1175 B.C.E.

Artifacts indicate that there were human settlements at Tel Migne from 4000-3000 B.C.E. and from 1700-603 B.C.E. Less enduring settlements were built on the site between 64 B.C.E. and 640.

From 4,000-1550 B.C.E. Tel Migne was used by various peoples. They left pottery and bricks at the site, but their settlements were completely destroyed by the inhabitants who came after them.

The people who lived at Tel Migne between 1550-1175 B.C.E. left a clear record of their presence (Strata VIII-X). They were Canaanites – peoples native to Syria-Palestine -- but they traded with people from all over the world of the Bible. They left behind imports from Egypt, Cyprus, Troy (Turkey) and Mycenae (Greece).



The pottery imported from Mycenae -- called *Monochrome Mycenaean III C: 1b* -- was decorated with only one color. Potters used dark brown or red paints to create spirals and lines on their wares.



MINYAN GREY WARE
BRITISH MUSEUM
2000-1550 B.C.E.
CERAMIC
7.5 INCHES TALL
MYCENAE

The pottery imported from Troy -- called *Minyan or Trojan Grey Ware* -- was grey or tan (Allen 1994). Potters decorated their wares with alternating straight and wavy horizontal lines.



SCARAB SEAL OF AMENOPHIS III
UNIVERSITY COLLEGE LONDON
1391-1353 B.C.E.

[HTTP://WWW.DIGITALEGYPT.UCL.AC.UK/SEALS/COMM.HTML](http://www.digitalegypt.ucl.ac.uk/seals/comm.html)

There was also a seal shaped like a beetle imported from Egypt during the reign of Amenophis III (1391-1353 B.C.E.). The inscription on the seal commemorates the dedication of a sanctuary to his divine patron, Hathor -- called *The Lady of the Sycamore Tree*.

TEL MIQNE 1175-975 B.C.E.

Between 1300-1175 Tel Mique was protected by a mud brick wall some 10 feet thick (Stratum VIII). Shortly after 1200 B.C.E. Tel Mique was invaded by Philistines from Crete. The last Canaanite city was totally destroyed by a fire that left its storerooms full of jars containing carbonized grains, lentils and figs.

The Philistines were a Sea People. Gaston Maspero (1846-1916), founder of the Institut Français d'Archéologie Orientale and director of the Egyptian Museum (Cairo), coined the name *Sea Peoples* (French: *Les Peuples de la Mer*) which first appears in the Annals of Merneptah (1224-1214 B.C.E.). The Egyptians and the Hittites identified at least nine groups of Sea Peoples: Karkisa, Labu, Lukka, Meshwesh, Shardana,

Shekelesh, Tjakkar and Philistines

(http://www.courses.psu.edu/cams/cams400w_aek11/www/index.htm)

The Sea Peoples had been uprooted from their homelands by the collapse of the great empires of Egypt, Hatti (Turkey) and Mycenae (Greece). They migrated from Mycenae, Troy (Turkey) and Crete through Cyprus and then on to Syria-Palestine and Egypt. After a fierce battle on Egypt's Mediterranean coast, Ramesses III (1194-1163 B.C.E.) ceded control of much of the southern coast of Syria-Palestine, including Tel Migne, to the Sea Peoples.

The Philistines developed Tel Migne into a large city called *Ekron* with a rich material culture. As a member of an urban league with Ashdod, Ashkelon, Gath and Gaza, Ekron had significant economic and political influence in the region. From 1175-1000 B.C.E. the residential neighborhoods of Ekron covered about 40 acres; the administrative district covered 10 acres (Dothan and Gitin 1992).



MONOCHROME MYCENAEAN III C:1B
EKRON
1175-1125 B.C.E.



Archaeologists use Neutron Activation Analysis to identify chemical compounds in pottery. There are some fifty compounds occurring in nature whose stable isotopes can be converted into radioactive isotopes with one extra neutron. To convert these isotopes from stable to radioactive, archaeologists place a pottery sample in a nuclear reactor and bombard it with neutrons. During the process the compounds capture an extra neutron and become radioactive. These radioactive isotopes are like bar codes -- a unique signature for a particular chemical compound. The particles not only identify the compounds in the pottery, but also how much of the compound is found in the clay formula. <http://www.lbl.gov/nsd/education/ABC/wallchart/chapters/13/5.html>

Between 1175-1125 B.C.E. the Philistines imported less pottery from Mycenae, and began to manufacture their own Mycenaean pottery at Ekron (Stratum VII). Neutron Activation Analysis identified the chemical compounds in the clay used to make the pottery. These compounds are found only in soils around Ekron, and not in Mycenae.

Philistine potters made large mixing bowls with horizontal handles -- called *kraters* -- and pitchers with strainer-spouts for decanting wine into cups.

Like the imported pottery, potters at Ekron decorated their Mycenaean ware with only one color paint.

Between 1125-1050 B.C.E. the Philistines at Ekron began to manufacture a new style of pottery – called *Philistine Bi-chrome Ware* (Strata V-VI). The ware was also made from local clay, but, unlike the locally made Mycenaean pottery, it was decorated with two colors of paint instead of one. Potters used red and black paint to draw fish and birds on their ware.

Philistine culture closely integrated work and worship. In the northeast section of Ekron they built their kilns – ovens for firing pottery. Along with industrial artifacts around the kilns, archaeologists recovered liturgical artifacts that have nothing directly to do with firing pottery.

PHILISTINE BI-CHROME WARE
1125-1050 B.C.E.
CERAMIC
EKRON



Among the liturgical artifacts around the kilns were small painted statues of animals and a small statue of the godmother of the Sea Peoples. She is wearing a feather headdress and a bird mask. Her body and the throne where she is sitting meld into one another.

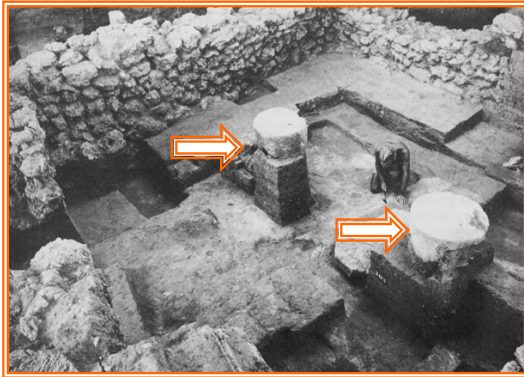


GODMOTHER OF SEA PEOPLES
ISRAEL MUSEUM, JERUSALEM
1200-1000 B.C.E.
CLAY
ASHDOD
©ART RESOURCE

The close association of work and worship reflects a belief that crafts like pottery making are not human inventions; they are divine gifts. Potters believed that they were taught their craft by their divine patrons so that they could not only make a living, but also so that they could make a difference in their cultures. Their divine patrons gave them not only their skill, but their raw materials. The godmother of the Sea Peoples not only taught them how to throw pots, but also where to find the water and the clay. To acknowledge their debt to their divine patrons the Philistines arranged their work space to reflect sacred space, and

they punctuated their work days with worship.

In addition to the work-place sanctuaries, the Philistines built a huge hearth sanctuary – called a *megaron* -- at Ekron between 1125-1100 B.C.E. (Stratum VI). This public building was some sixty-five feet long and forty-five feet wide. The brick walls were four feet wide; they were plastered and painted blue.



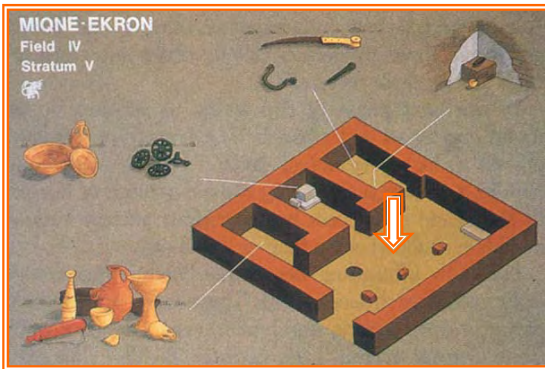
TWIN PILLAR BASES
 SANCTUARY
 TEL QASILE
 ©EAEHL 1978, 4:973

The floor in the great room of the sanctuary was compacted soil (French: *terre pise*). The roof over the great room was supported by two pillars some seven and one-half feet apart. This construction style is parallel to the great room of the sanctuary at Tel Qasile whose roof is also supported by twin pillars.

The first Philistine city at Tel Miqne continued to thrive until its destruction after 975 B.C.E. (Stratum IV). Pharaoh Siamun (978-959 B.C.E.) may have destroyed Ekron, Ashdod (Stratum X) and Tel Qasile (Stratum X) during his campaign against Gezer (1 Kgs 3:1; 9:16).

TEL MIQNE 975-701 B.C.E.

The Philistines who survived the destruction of their first city in 975 B.C.E. did not rebuild their neighborhoods. Instead they moved into the 10 acre administrative district at Ekron's city center (Stratum III). Ekron was no longer a city. It was simply a fortress.

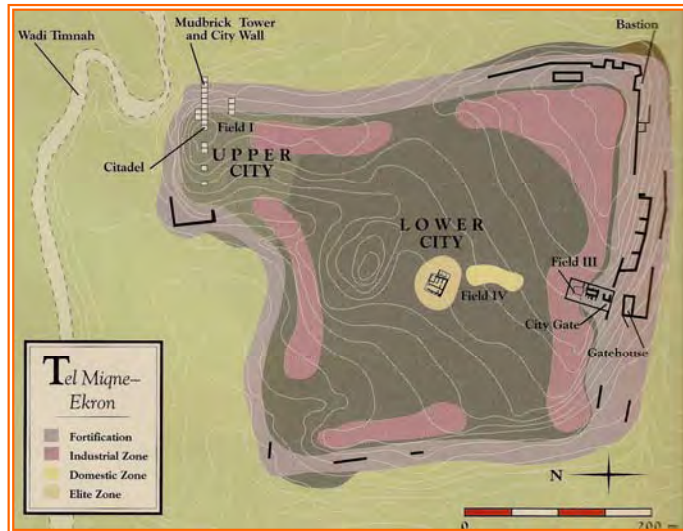


TWIN/TRIPLET PILLAR BASES
 SANCTUARY BLDG 350
 EKRON
 ©ILAN SZTULMAN

The survivors built a new brick wall to protect their fortress. This wall was further fortified by a brick tower covered by large, smooth blocks of limestone – called *ashlars*. One block was laid with the narrow end facing out; the adjoining block was laid with the wide side facing out. This alternating *header* or narrow and *stretcher* or wide construction technique created a building flexible enough to ride out the shocks of an earthquake.

TOP PLAN
TEL MIQNE-EKRON
©BAR 16, 2: 34

Sometime between 750-700 B.C.E. Judah gained control over the fortress at Ekron (Stratum IIA). As part of his preparation for an invasion by Assyria, Hezekiah of Judah (715-687 B.C.E.) imposed a war tax on Ekron. The Philistines were to send grain, wine and olive oil to the governor of Hebron. Archaeologists recovered some of the *l'melek* seals which were attached to storage jars that ...*belonged to the king* (<http://www.lmlk.com/research/index.html>). More than 1000 *l'melek* seals have been found at 43 different sites, mostly in Judah.



TEL MIQNE 701-603 B.C.E.

In 701 B.C.E. Sennacharib, Great King of Assyria (704-681 B.C.E.), attacked Judah (2 Kgs 18:13-15). He destroyed Lachish and attacked Jerusalem. Ekron was not destroyed, but was part of the ransom that Hezekiah paid for Jerusalem. Under Assyrian rule, Ekron, once again, became a thriving independent state (Stratum IC). Assyria established a 70 year period of peace in Syria-Palestine which allowed its covenant partners like Padi, and then Ikausu, at Ekron to flourish.

THIRD YEAR OF THE REIGN OF SENNACHARIB

(Matthews and Benjamin 2006: 190-192)

The official and ranking citizens of Ekron deposed Padi, their king, and put this loyal covenant partner of Assyria in chains. They placed him in the custody of Hezekiah, the king of Judah. Once they realized what they had done, they called on the pharaohs of Egypt for assistance.

Although the Egyptians marshaled a large army against me, I inflicted a great defeat upon them in the Plains of Eltekeh with the help of Ashur, my divine patron (2 Kgs 19:9). I personally captured the Egyptian and Ethiopian chariots and their commanders, and then laid siege, conquered and looted the cities of Eltekeh and Timnah.

Advancing to Ekron, I slew its rebellious officials and ranking citizens and impaled their bodies on the towers of the city (1 Sam 31:10). All the rest of the people who had raised a hand against me were taken captive. The innocent were spared. King Padi was released from prison in Jerusalem and once again placed on his throne and his tribute payments were reinstated.

Because Hezekiah of Judah did not submit to my yoke, I laid siege to forty-six of his fortified cities, walled forts, and to the countless villages in their vicinity. I conquered them using earthen ramps and battering rams. These siege engines were supported by infantry who tunneled under the walls. I took 200,150 prisoners of war, young and old, male and female, from these places. I also plundered more horses, mules, donkeys, camels, large and small cattle than we could count. I imprisoned Hezekiah in Jerusalem like a bird in a cage. I erected siege works to prevent anyone escaping through the city gates. The cities in Judah which I captured I gave to Mitinti, king of Ashdod, and to Padi, king of Ekron, and to Sillibel, king of Gaza. Thus I reduced the land of Hezekiah in this campaign, and I also increased Hezekiah's annual tribute payments.

Hezekiah, who was overwhelmed by my terror-inspiring splendor, was deserted by his elite troops, which he had brought into Jerusalem. He was forced to send me four-hundred twenty pounds (Akkadian: thirty talents) of gold, eleven-thousand two-hundred pounds (Akkadian: eight-hundred talents) of silver, precious stones, couches and chairs inlaid with ivory, elephant hides, ebony wood, box wood, and all kinds of valuable treasures, his daughters, wives, and male and female musicians. He sent his personal messenger to deliver this tribute and bow down to me (2 Kgs 18:14-16).

Fortifications, the industrial districts, residential neighborhoods and the administrative district of the new Ekron were well planned. Buildings were constructed on a system of terraces that sloped from the outer walls to the city center.

The Philistines rebuilt the walls around Ekron and added a new battle tower at the southeast corner of the city. The main gate on the south side of Ekron had a tower and three piers that created two bays. This pattern is parallel to that used to construct the gates of Ashdod, Gezer and Lachish.

The old residential neighborhoods inside the walls were rebuilt, and a new ten acre suburb northwest of the walls was constructed. The limestone needed for all this urban development was imported from Judah, as were the stone masons needed to shape and install it. In contrast to the hostility between the Hebrews and the Philistines reflected in the Bible, Hebrews and Philistines were trade partners during 701-603 B.C.E.

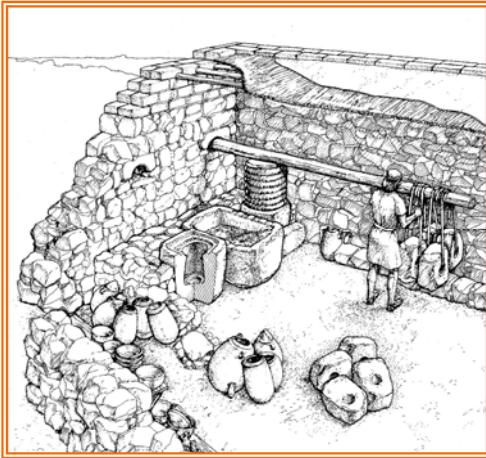
More than 100 olive oil presses were installed along the inside of the walls near the gate along a street complete with drains and curbs; and in an industrial district in the northeastern section of the city. The workshops were rectangular buildings with three rooms: one room for production, one for storage, and an outer room that opened to the street.

The room that opened to the street was used for both devotion and for dining. Incense altars for worship and pottery for preparing and serving food were found in these rooms.

Incense altars with raised corners or *horns* are common in the northern Hebrew state of Israel, but not in Philistia or Judah. The presence of these ten altars in Ekron may indicate that after Assyria conquered Israel (721 B.C.E.), some Israelite workers were deported to Ekron.

Farmers produced at least 290 gallons of olive oil during a good harvest year. This made Ekron the largest olive oil producer in the world of the Bible. The city was near the foothills where the soil and climate for growing olives was excellent. Ekron was also close to the coast highway running from Egypt to Damascus, and to ports like Ashkelon from which the olive oil could be shipped to the western Mediterranean.

Pressing or milling olives was a four or five step process. First, olives were washed and then crushed in a rectangular vat with a heavy stone roller to create a paste.



OLIVE OIL PRESS
EKRON
701-603 B.C.E.
©E. COHEN, ABD 2: 421

Second, the paste was loaded into loosely woven baskets. The baskets were stacked on top of one another over a vat. Each mill had two pressing vats, one on each side of the crushing vat.

Third, pressure was applied to the baskets using a lever. One end of the lever was set into a socket in the wall; the other end was weighted with stones. Each stone had been drilled and threaded with a rope which was then looped over the end of the lever. Four stones were used to weight each lever. The baskets trapped the skins and pits, and the oil flowed through the weave of the baskets into collection vats.

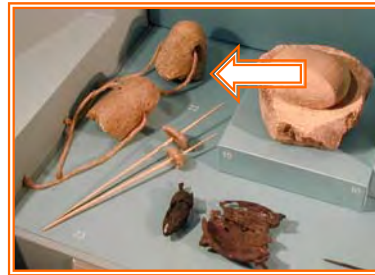
LOOM WEIGHTS

Fourth the oil was ladled from the vat into larger ceramic separation jars to separate the water from the oil pressed from the olives. These separation jars had two holes halfway down their side walls. These holes were sealed with bungs or plugs until the water and oil had settled. The oil rose to the top of the krater; the water settled to the bottom.

Fifth, by unplugging the holes, the water could be drained off, leaving the olive oil. The oil was collected and stored.

Olives were harvested and milled during four months of the year at Ekron. During the rest of the year the Philistines at Ekron used the workshops to weave cloth. Loom weights were recovered from many of the workshops.

REPLICA OF A LOOM



The warp-weighted loom holds the warp threads parallel under tension by tying them in small bunches to stone or pottery weights. Loom weights, like those found at Ekron, have been also been found in 7000 B.C.E. Catalhoyuk (Turkey).

Looms have two uprights, a horizontal warp beam, a shed rod, a heddle rod, and weights. The warp threads are tied to the horizontal beam at the top and hang down vertically towards the ground. Weights are tied to the warp threads, which are then grouped together and tied so that the spun threads cannot unwind.

About 630 B.C.E. Babylon destroyed the Assyrian empire, and Egypt seized Ekron (Stratum IB). Ekron lost its access to the world markets for its olive oil that Assyria had guaranteed, and Egypt could no longer provide. Its economy softened. By 603 B.C.E. Nebuchadnezzar, Great King of Babylon had conquered Ekron.

Archaeologists found a sad souvenir from those last days at Ekron. Buried in the store room of one of Ekron's workshops was a stash of iron farm tools: plows, a knife and sickle blades. The farmers who hid them never returned to resume their peacetime lives at Ekron. Six hundred years of Philistine presence at Ekron had come to an end.

SAGA OF SAMSON
(Judg 13:1—16:31)

In both the traditions of Egypt and ancient Israel the Sea Peoples, and especially the Philistines, are barbarians. The demonization of the Philistines is particularly brutal in the Saga of Samson (Judg 13:1—16:31) where they burn Samson's wife and her household to death; blind and torture Samson. The same caricatures of the Philistines appear in the Ark of the Covenant Stories (1 Sam 4:1—7:1) where they desecrate the Ark of the Covenant; in the Stories of David's Rise to Power (1 Sam 8:4—2 Sam 8:13) where Goliath taunts the Hebrews and David for not having a man among them; and in the Stories of Saul (1 Sam 8:4—15:35) whose dead body they behead and hang on the walls of Beth-Shan.

In archaeology the Philistines are survivors, artists, merchants -- political and economic powerbrokers, something the Bible also seems to recognize. In the Stories of David's Rise to Power, Achish the Philistine ruler of Gath, grants David asylum when Saul wants to assassinate him; and in the Stories of David's Successor (2 Sam 9:1—20:26+1 Kgs 1:1—11:43) when Absalom revolts against David, only Cherethites and Pelethites -- Sea Peoples like the Philistines -- come to his support.

ANNUNCIATION TO THE WIFE OF MANOAH (Judg 13:1—25)

Tellers set the Saga of Samson in the land of Ekron and its sister city Timnah. Timnah (Hebrew: *Tel Batash*) is located in the Sorek Valley between Beth Shemesh and Ekron (Josh 15:10-11). Although the population of Ekron was Philistine, quarry workers and stone masons from Judah came and went to work on building projects. The population of Timnah was more culturally diverse than Ekron. Philistines, Canaanites and Israelites lived side by side at Timnah (Panitz-Cohen and Maser, ed. 2006). Only thirty or forty percent of the pottery artifacts from the period in Timnah were manufactured in the traditions of the Sea Peoples. Both the geographical and social setting in the Saga of Samson is consistent with the geographical and social setting reconstructed by archaeology for Ekron and Timnah. These hero stories are a fascinating profile of daily life on the border between Ekron and Judah.



In an Annunciation to the Wife of Manoah (Judg 13:1-25), Samson's parents have no children. Yahweh intervenes and they have a son.

Samson grows up to become a fearless hunter. Undaunted by animals, however, he is defeated by women. Delilah, a Philistine woman, outwits Samson. The death of Samson is avenged by his divine patrons.

The wife of Manoah is wise. Because the message involves childbirth, and

because women have a greater role in childbirth than men, the messenger deals with the wife of Manoah, rather than with Manoah. The wife of Manoah respects the messenger, pays close attention to the directions, and conscientiously tells Manoah what the messenger told her to do for their son.

In contrast, Manoah is a fool who not only knows little or nothing about childbearing, but also does not listen to his wife, who does. Manoah also violates the protocol of a host by asking the messenger for his name. The foolishness of fathers in annunciation stories emphasizes

the powerlessness of human beings in contrast to the power of Yahweh to give birth to children even from infertile couples. The wife of Manoah is infertile, yet Yahweh allows her to give birth to the hero Samson who will free the Hebrews from Ekron, and their other Philistine enemies. Birth is a divine gift, not a human accomplishment. Infertile women are liminal women, who, like Israel itself, are without status, but infertile women, like Israel itself, are chosen by Yahweh to free the slaves. Samson will deliver the people of Judah living along the border with Ekron from Philistine domination.

SAMSON COURTS THE WOMAN OF TIMNAH (Judg 14:1–10)

The Saga of Samson characterizes him as a womanizer, who seduces the woman of Timnah and the woman of Gaza, and is seduced by Delilah. Samson's mother, the wife of Manoah, is a Hebrew. She is the mother of a household in Israel. The other three women in the Saga of Samson are Philistines. They are strangers. The wife of Manoah is the insider whom Yahweh protects. The woman of Timnah, the woman of Gaza, and Delilah are the outsiders from whom Yahweh protects the Hebrews.

Samson goes down to Timnah, a daughter city of Ekron. He crosses back and forth over the frontier separating Judah and Philistia. Samson is a fool for seeking to have intercourse with strange women.

Samson's weapons in these stories are his bare hands. The Hebrews considered Philistine weapons to be state of the art. The Philistines had the best available arsenal of military hardware, yet the best iron weapons – like the tools hidden by the farmers at Ekron -- that the Philistines could forge were no match for the hands of Samson, or the jawbone of an ass, when these unorthodox weapons are wielded by heroes lifted up by Yahweh to deliver the Hebrews from slavery. Samson would deliver the Hebrews living along the border with Ekron from Philistine oppression just as Moses had delivered the Hebrews from slavery in Egypt.

SAMSON KILLS THE WARRIORS OF ASHKELON (Judg 14:11–20)

During the first six days of the wedding, the household of the groom displayed the bride-price that it was investing in the household of the bride. Likewise, the household of the bride displayed the dowry that it was investing in the household of the groom. The guests looked over the bride-price and the dowry to be sure that they met the stipulations of the covenant that the two households had negotiated. On the seventh day of the wedding feast the bride and groom were expected to consummate their marriage.

Riddles were part of wedding rituals. Riddles are word games that men used at weddings to determine their new status in the household created by the wedding. Samson Kills the Warriors of Ashkelon (Judg 14:11–20) begins when Samson loses a riddle contest, which renders him impotent and, therefore, unable to consummate his marriage.

To redeem the honor of his household, Samson kills and strips thirty Philistine warriors to shame them. Exposing the genitals of a warrior was comparable to castration. Only children played naked. Clothing was the uniform of a sexually active adult. To remove the clothing of sexually active adults returns them to the status of children.

In the world of the Bible, marriage was almost always patrilocal. Women left the households of their fathers and moved to the households of their husbands. In this story there is no marriage. Samson leaves the wedding feast unable to consummate his marriage, so the woman of Timnah returns to the household of her father unmarried.

SAMSON MASSACRES THE GARRISON OF LEHI (Judg 15:9–17)

The stories of how Samson Massacres the Garrison of Lehi (Judg 15:9–17) and How Samson Raids the Spring at Hakkore (Judg 15:18–20) use mnemonics to help their audiences remember the cry that Samson lets out, where he cries out, and the unorthodox weapon with which he massacres the Philistines.

The name Lehi or *Jawbone Springs* reminds the Hebrews where Yahweh began their deliverance from the Philistines. Here Samson cried out for independence. Both the Hebrew words *spring of water* and *cry out* have one letter in common: 'ayin. The 'ayin is shaped like a fork with two tines. As a word picture these prongs represent the crack in the face of a rock through which the water, here portrayed as the handle of the fork, trickles like tears from a human eye. By drinking water from the spring shaped like the sound of a cry for help, Samson cries out. The shape gives birth to a sound.

The letter 'ayin and the jawbone of an ass also have the same shape. Again, the association between the shape of the spring leads Samson to the shape of his unorthodox weapon. Traditional people strongly believe in the desire of creation to harmonize. Nothing likes to stand out or create discord. Therefore, Samson chooses a weapon that harmonizes with the place where he will deliver Israel.

SAMSON TERRORIZES THE WADI SOREK (Judg 16:4–22)

In the story of how Samson Terrorizes the Wadi Sorek (Judg 16:4–22), Samson delivers Israel from Philistia three times, before Delilah delivers Philistia from Israel by shaving his head. A man's hair and his beard were comparable to his pubic hair because both appear during puberty. By shaving Samson's head, Delilah castrates him, and leaves him as weak as a child.

When Delilah lets Samson fall asleep on her lap she also transforms him from powerful to powerless. Samson tries to fall between the legs of Delilah and have intercourse with her as an adult, but instead falls asleep on her lap like a child.

When the Philistines take Samson prisoner, they gouge out his eyes. The tactic renders warriors powerless. Blinding was equivalent to castration because the eyes of warriors were equivalent to their testicles. To be blind was to be impotent. Mutilating prisoners of war also disabled them from bearing arms. They are powerless to protect their land and their children. Mutilated warriors could work, but they could not fight. Mutilation also clearly identified convicts and served as a warning to others. The Philistines sentence Samson to grind at a mill. The great warrior is forced to do the work of a woman.

SAMSON DESTROYS THE HOUSE OF DAGON (Judg 16:23–31)

Prisoners of war were brought back from the battlefield as evidence to the people at home that the warriors had fulfilled their obligation to protect them from their enemies. Some prisoners were sold as slaves. Others, like Samson, are publicly tortured and executed in mock battles. The Philistines torture Samson during the festival of Dagon, their divine patron.

Samson retaliates and puts out the *eyes* or twin pillars, of the Philistine sanctuary in retaliation for the loss of his eyes. The pillars mark the place where the divine patrons of the community enter and leave the human plane. The Philistine sanctuaries at both Ekron and Tel Qasile likewise rest on two pillars. Through these eyes of the Philistine temple Dagon enters Philistia. Blindness closes the vent, cutting Philistia off from its divine patron. The Philistines have left Israel powerless by blinding Samson. Samson has left Philistia powerless by blinding Dagon.

CONCLUSION

The Saga of Samson does not celebrate Samson. In all his glory Samson is a fool. Only blind and powerless does he become a hero. The Saga of Samson teaches its audiences that Yahweh does not need great warriors to deliver Israel from its enemies, but can use a blind man like

Samson. It is Yahweh, and Yahweh alone, who feeds and protects the land and its people – even from the great Philistines of Ekron, Gath, Gaza, Ashkelon and Ashdod. The stones from the excavations at Ekron are the scenery against which the stories in the Saga of Samson were told.



WHAT YOU HAVE LEARNED

- Tel Miqne, an important site excavated by Processual Archaeologists.
- Processual Archaeologists demonstrated that the transition from the Bronze Age to the Iron Age in Syria-Palestine was complex, not uniform, and gradual, not spontaneous.
- They also reconstructed the shifting political conditions between Philistines, Israelites, Phoenicians, Assyrians and Egyptians; the interaction of these diverse cultures; and their economic development.
- Finally, they clearly described the development and then decline of Philistine culture in Syria-Palestine, providing an important corrective for generally barbaric and hostile portrayal of the Philistines in the Bible.

CHAPTER 19

CAPE GELIDONYA AND ULUBURUN



Nautical Archaeologists study the design and construction of ships and harbors.

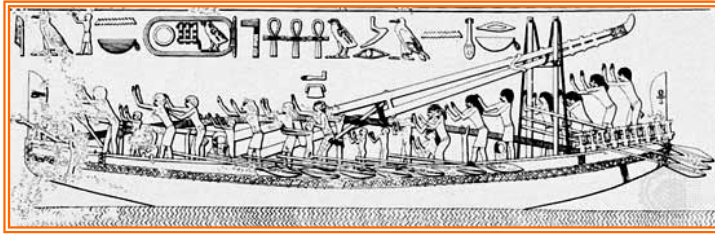
Artifacts from the shipwrecks at Cape Gelidonya and Uluburun off the coast of Turkey have reconstructed the history for metal working and seafaring during the Late Bronze period (1500-1200 B.C.E.).

The impact of the Sea Peoples on seafaring and metalworking in the world of the Bible is reflected in both the Annals of Ramesses III and the hero story David Delivers Israel from Goliath in the books of Samuel-Kings

The Annals of Ramesses III and the story of how David Delivered Israel from Goliath both admit that the Sea Peoples are dominant. The superiority of the Sea Peoples, however, in technology cannot overcome the will of the Egyptians and the Hebrews to survive.

Seafaring was a Stone Age technology in the world of the Bible. The peoples of Mesopotamia, Syria-Palestine and Egypt developed boats for use on lakes and rivers, and ships for sea-going. Neolithic sailors and merchants carried obsidian, turquoise, cowrie shells and bitumen to the Neolithic communities in the Near East. During the Bronze Age (3400-

2000 B.C.E.) ships sailed from Mesopotamia to ports like Magan (Oman) and Dilmun (Bahrain) for products like gold, copper, lapis lazuli, ivory, wool, leather, pearls and timber (Bass 1995). Similarly ships sailed from Egypt to Byblos (Lebanon), Ugarit (Syria) and Punt (Somalia) for products like timber, ivory, copper, tin, turquoise, resin, ostrich shells, murex shells, hides, ointments and fruit.



From the beginning sailors and shipbuilders from Syria-Palestine were masters of the sea. Egyptians recruited them to

man their ships and deliver goods. In 2900 B.C.E. a majority of the dockyard workers at Saqqara had Semitic names. In 1300 B.C.E. Ugarit negotiated a contract to build a fleet of 150 ships. In 1200 B.C.E. Ugarit negotiated a contract to build a freighter to carry 450 tons of grain. In the Story of Wen-Amun (1196-1070 B.C.E.) the economy of Egypt is completely dependent on sailors and ships from Syria-Palestine (Matthews and Benjamin 2006: 347-354).

EGYPTIAN SHIPⁱ 2458-2446 B.C.E.

On the walls of the tomb of Pharaoh Sahure (2458-2446 B.C.E.) there are paintings of an Egyptian fleet and its crew from Syria-Palestine. The main mast is an inverted “V” with a tall, narrow sail. When the mast was not in use, it was laid back on a support near the stern. There were three steering oars. Ships with crews from Syria-Palestine also appear in a relief carved during the reign of Pharaoh Wenis (2356-2323 B.C.E.). The main mast is an inverted “W”. Nebamun was a wealthy Egyptian. Around 1400 B.C.E. he built his tomb near Thebes with a painting of a ship with a crew from Syria-Palestine arriving in Egypt. The yard arm on the main mast curves down toward the deck. Above the rail of the ship there is a wicker fence to protect the deck from waves.



FREIGHTER FROM SYRIA-PALESTINE
TOMB OF KENAMUN
THEBES
1391-1353 B.C.E.ⁱⁱ

Kenamun was a mayor of Thebes during the reign of Amenophis III (1391-1353 B.C.E.) There is a painting in the tomb of Kenamun showing a fleet of ships from Syria-Palestine unloading cargo at an Egyptian port. Each sailor wears a pectoral or medallion around his neck. The freighters have quarter rudders with tillers for steering, and sails attached to both upper and lower yards. There are

also wicker fences along their rails of the ships to protect the deck from waves, and each ship had a crow's nest.

Stevedores are carrying amphoras, pilgrim canteens and spindle bottles down the gangplank. On the deck are storage jars almost six feet tall. All three of these styles of pottery were found in the wreck at Uluburun wreck which also probably sailed from Syria-Palestine shortly before 1300 B.C.E.

NAUTICAL ARCHAEOLOGY

Nautical Archaeologists study the design and construction of ships – freighters, war ships, fishing ships – and harbors. They also study settlements once on land, but now beneath the water. The archaeological wealth on the floor of the Mediterranean is difficult to estimate. Thousands of ship wreck time capsules preserve artifacts of sea faring (1975: 62).

Artifacts from shipwrecks are consistently better preserved and there are more examples of any given artifact in a shipment than artifacts from land excavations (Bass OEANE v: 283-284). Most clay, glass and metal artifacts recovered by land archaeologists are manufactured, damaged or recycled and, unlike ships' cargoes, little raw material is recovered from land sites. Land sites are a puzzle of many times and cultures. Shipwrecks are a moment frozen in time. Therefore, shipwrecks are easier to date than land sites, and once dated can provide a reliable chronology for the cargo.

Nautical archaeologists adapt the Wheeler-Kenyon Method followed

by land archaeologists to recover artifacts from the seabed (Bass 1970; Muckelroy 1978). One important adaptation is time. Storms which uncover shipwrecks can return quickly to bury them again. Likewise nautical archaeologists working deep underwater may be limited to as little as an hour's work on a single dive to avoid decompression sickness.

Since the Neolithic period (600-3800 B.C.E.) divers, simply holding their breath, have collected food, raw materials and lost artifacts from in more than 100 ft of water. In 2007 Herbert Nitsch dove to a record 702 ft simply holding his breath.



Decompression sickness (DCS) is a dangerous and occasionally deadly condition caused by nitrogen bubbles that form in the blood and other tissues of divers who surface too quickly. Nonetheless, according to the Divers Alert Network (DAN), less than 1% of divers fall victim to decompression sickness -- one case in every 7,400 dives and one death in every 76,900 dives.

Land Archaeologists typically excavate squares fifteen feet on a side. Nautical Archaeologists excavate squares six feet on a side. The underwater square is a moveable metal grid anchored over the site, and used to map the location of artifacts.

UNDERWATER GRID ⁱⁱⁱ

Underwater sites are generally recorded using a submersible with a camera that passes back and forth over site. The resulting images are then linked to create a composite picture of the entire site.

Metal detectors are an important part of the work of Nautical Archaeologists. Metal nails and fittings from ships are generally scattered across the seabed. Metal detectors also locate cargoes of raw metal.

Metal objects like knives and ingots of copper, bronze and tin that are exposed to salt water are rapidly



coated with a crust that soon erodes the metal object completely. The process is called “concretion.” The crust, however, preserves a perfect mold of the now lost object. Nautical Archaeologists use an x-ray to study these clumps and to decide whether or not to rescue and open them.

NAUTICAL ARCHAEOLOGIST USING AIRLIFT TO REMOVE SAND FROM ARTIFACTS

Underwater soil is removed with a large air lift or siphon. The airlift is like a giant vacuum cleaner. The mouth of the siphon is covered with a mesh to catch any small artifacts. The remaining water and soil are carried up the hose which is anchored on the surface to a raft. When the soil and water reach the surface, both are sprayed into the air and drop back into the water. Although the siphon quickly and effectively removes the soil covering artifacts from the seabed, the soil and water the siphon sprays back into the water at the surface pollutes the water and is toxic to sea life.

Once artifacts have been recorded they are collected into plastic crates attached to balloons. Once crates are full the balloons gently float them to the surface.

CAPE GELIDONYA

Cape Gelidonya is the “Chelidonian Promontory” of Pliny (*Natural History* 5.27.97) in Lycia (Turkey). The cape marks the western end of the Bay of Antalya. Running south from the cape is a string of five small islands, the Chelidoniae or Besadalar Islands. Strabo (14.2.1 and 14.3.8) noted only three of them and Pliny (*Natural History* 5.35.1 31) only four.

In 1954 Kemal Aras, a ship’s captain and sponge diver from Bodrum, saw the cargo of a Late Bronze period shipwreck in over 85 feet of water. Four years later, he described it to Peter Throckmorton, an American journalist and amateur archaeologist, who was cataloguing ancient wrecks along the southwest Turkish coast. Throckmorton located the site in 1959 and asked the University Museum at the University of Pennsylvania if it would organize an excavation.

In 1960 Rodney Young (1907-1974) convinced his graduate student, George Fletcher Bass, to direct the underwater excavation of Cape Gelidonya underwater. The Cape Gelidonya shipwreck became the first underwater excavation carried out on the seabed; the first underwater excavation directed by an archaeologist, who was also a diver; and the first underwater excavation conducted following the standards of excavations on land. Bass pioneered underwater

archaeology at Cape Gelidonya and in 1973 founded the Institute of Nautical Archaeology at Texas A&M University -- the world's first school for the archaeological study of humans and the sea (<http://ina.tamu.edu/>).

Visits to the site in the late 1980s reconstructed how the ship had sunk between 1250-1150 B.C.E. The freighter had ripped its hull open on a rock near the surface just off the northeast side of Devecitasi Abasi, the largest of the five islands. Spilling its cargo as it sank, the ship settled with its stern facing north and resting on a large boulder almost 165 feet below the surface. The bow of the ship landed on a flat rock seabed. At some point during the hull's disintegration, the stern slipped off the boulder into a gully formed by the boulder and the base of the island (Bass 1975: 1-10). Because of a lack of protective sediment, most of the ship's hull -- held together with pegged mortise-and-tenon joints -- was eaten by *teredos* sea snails.

The shape of the pottery on board like two nearly intact Mycenaean IIIB stirrup jars date the wreck to the Late Bronze period (1500-1200 B.C.E.). Radiocarbon tests on brushwood packing from the wreck date the wreck to 1250-1150 B.C.E. plus or minus 50 years.

The brushwood packing around the ship's cargo explains why Homer describes Odysseus carpeting the inside hull of his ship with brush (*Odyssey* 5.257). The distribution of cargo on the seabed suggests that the ship was 25-35 feet long. The cargo and the size of the shipwreck at Gelidonya indicate that it was a privately owned freighter, and not a royal freighter like the wreck at Uluburun which was also excavated by a team from the Institute of Nautical Archaeology.

The metal cargo on the shipwreck came from Cyprus. The pottery was from Mycenae, Cyprus, and Syria-Palestine. The ship's cargo was from Cyprus; the ship, however, was from Syria-Palestine. Even its anchor was manufactured in a style used primarily in Syria-Palestine, not Mycenae.

Most of the cargo was for bronze working. There were broken bronze tools from Cyprus to be recycled. This scrap -- plowshares, axes, adzes, chisels, pruning hooks, a spade, knives, and casting waste -- was packed in wicker baskets. There were also ingots of both copper and tin to be alloyed to create new bronze.



FOUR HANDLED INGOTS^{iv}
INSTITUTE OF NAUTICAL ARCHAEOLOGY

Some copper ingots were bun-shaped or disc-shaped. Each averaged about 6 pounds each. The tin ingots were too badly corroded to determine their original shapes, but seabed evidence suggests that at least one was a rectangular bar. In addition, there were 18 much smaller, flat, oval-shaped ingots, at least one of them bronze, that seem to have been cast in multiples of one pound.

Most of the copper was cast in 34 flat, four-handled ingots. These four-handled ingots were once thought to imitate tanned ox hides, and worth the value of an ox. Now, however, it is clear that the shape of these ingots simply makes them easier to carry (Buchholz and Karageorghis 1973).

The rough edges and surface of the four-handled ingots does not imitate tanned ox-hides, but are simply the result of open casting. The ingot shape was cut into soil or sand and filled with molten copper. The exposed surfaces of the ingots dried rough.

The weight of the ingots from Cape Gelidonya varies. Some weigh 35 pounds, some weigh 57 pounds. Therefore, they are not a form of currency.

Primary marks pressed into the copper before it cooled may be letters from the dialect of Greek spoken on Cyprus during the Late Bronze period, which still cannot be translated. This alphabet may have developed from another dialect of Greek on Cyprus -- Linear A Greek, which also has not been translated. Linear A Greek, similar to Semitic languages like Hebrew, is written from right to left, instead of from left to right like most Indo-European languages, and does not leave spaces between words (Latin: *lecto continua*).

Secondary marks were scratched onto some ingots after the metal cooled. The meanings of these marks, like the primary marks, are still unknown.

The four-handled ingots are familiar from Egyptian tombs painted between 1400-1200 B.C.E., where such ingots are said to be tribute from Syria-Palestine. Archaeologists have recovered four-handled ingots from land excavations in Sardinia, Greece, Cyprus, and from shipwrecks off the coasts of Israel, Greece and Bulgaria. Ships like the wrecks at Cape Gelidonya and Uluburun sailed a counterclockwise route from Syria-Palestine to Egypt and back.

The only foreign ships depicted in Late Bronze period art in Egypt are from Syria-Palestine. Some 16 Egyptian paintings – some made more

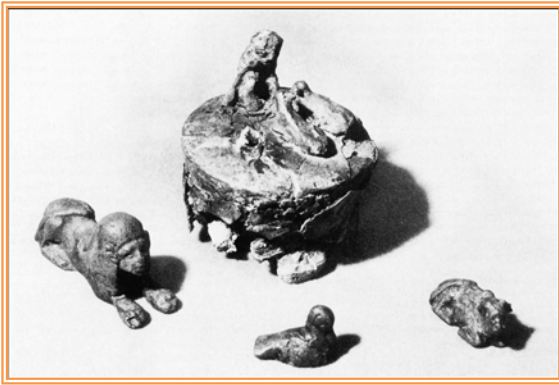
than 200 years before the Cape Gelidonya shipwreck – show four-handled copper ingots, and tin ingots, with sailors from Syria-Palestine, not from Mycenae (Bass 1975: 56). The only known mold for casting four-handled copper ingots was found after the Cape Gelidonya excavation in a palace at Ras-ibn-Hani, the port of Ugarit (Arabic: *Ras Shamra*) and the greatest Late Bronze period port in Syria-Palestine.

The recovery of stone hammerheads, stone polishers, a whetstone, and a large, flat stone anvil, suggest that there may have been a smith on board the ship. Two lens shaped seals and two swords from Mycenae (Greece) may have belonged to passengers who boarded the ship in Cyprus.

The captain's cylinder seal was found in his cabin at the stern of the ship. The seal is from Syria-Palestine, not from the western Mediterranean. Not only his cylinder seal, but also scarab seals, a grinding stone, a lamp and the weights from the Cape Gelidonya wreck suggest that home port of the ship was in Syria-Palestine, not Mycenae.

About sixty pan-balance weights manufactured from hematite stone and either domed or shaped like sling stones. There were *qedets* from Egypt weighing .32 ounces; *nesefts* and *shekels* from Syria-Palestine weighing .36 ounces and .40 ounces respectively. Merchants typically

use the standards of the places where they do business.



PAN BALANCE WEIGHTS^v
CAPE GELIDONYA SHIPWRECK

The Cape Gelidonya wreck has reconstructed the history for metal working and metal trade during the Late Bronze period. Before the excavation at Cape Gelidonya scholars assumed that

Mycenaean sailors had a monopoly on maritime commerce in the eastern Mediterranean during the Late Bronze Age (1500-1200 B.C.E.), and that sailors from Syria-Palestine did not begin seafaring until the Iron Age (1250-586 B.C.E.). The excavations at Cape Gelidonya made it clear that cultures from Syria-Palestine – from the Near East itself – were the primary metal workers and metal traders during the Late Bronze period.

ULUBURUN

From 1984-1994 the Institute of Nautical Archaeology excavated a shipwreck at Uluburun near Kas (Turkey). The shipwreck lay on a steep rocky slope 140-170 feet below sea level.



STONE ANCHOR^{vi}
ULUBURUN (TURKEY) SHIPWRECK
1306 B.C.E.

Tree ring analysis of a small piece of a piece of firewood or dunnage packing dates the sinking of the ship to 1306 B.C.E. The hull was constructed from fir. Its planks were fitted together with mortise and tenon joints and oak pegs. The anchors were rectangular blocks of stone. They were drilled with a single hole for the rope. This style of anchor was used only in Syria-Palestine, not the Western Mediterranean.

The quantity and quality of the ship's cargo of raw materials and manufactured goods indicates that it was a royal vessel. It carried the largest known collection of Late Bronze period artifacts found to date in the Mediterranean Sea.

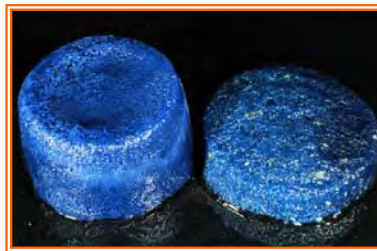
MANIFEST FOR SHIPWRECK AT ULUBURUN

- Ten tons of copper from Cyprus
 - 354 ox hide shaped [ingots](#)
 - 120 bun shaped ingots

Manifests from royal freighters delivering copper from Alashiya (Cyprus) for Akhenaton were recovered during excavations at his capital city at Tel el Amarna. None of these manifests listed more than ten tons of copper. Therefore, the shipwreck at Uluburun was undoubtedly a royal freighter.

- One ton of bun shaped and ox hide shaped tin ingots
- One ton of terebinth resin in 150 jars made in Syria-Palestine
- 175 disc shaped ingots of glass like those mentioned in tablets from Ugarit (Syria) and Amarna (Egypt)
 - cobalt blue
 - turquoise
 - a unique lavender ingot

COBALT BLUE GLASS INGOTS^{vii}
ULUBURUN (TURKEY) SHIPWRECK
1306 B.C.E.



- Logs of Egyptian ebony wood (Latin: *Dalbergia melanoxylon*)
- Ostrich eggs for manufacturing containers
- Elephant tusks
- Twelve hippopotamus teeth
- Murex shells
- Tortoise carapace shells for manufacturing the sound-boxes of stringed instruments
- Pottery made in Cyprus
 - Nine storage jars of pomegranates and olive oil.
 - Rhyton drinking cups finished in faience
 - Three shaped like the head of a ram
 - One shaped like the head of a woman
- Bronze and copper cooking pots and bowls
- Jewelry from Syria-Palestine
 - Bracelets
 - Gold pendants
- Scrap gold and silver
- Jewelry from Egypt
 - Gold jewelry
 - Electrum jewelry
 - Silver jewelry
 - Stone jewelry
- A unique [scarab](#) seal with the cartouche of Queen Nefertiti
- Thousands of [beads](#)
 - Glass beads
 - Agate beads
 - Carnelian beads
 - Quartz beads
 - Faience beads
 - Ostrich shell beads
 - Amber beads
- Two duck-shaped [ivory](#) cosmetics containers
- Trumpet carved from a hippopotamus incisor into the shape of a ram's horn
- Bronze [tools](#)
 - Awls
 - Drills
 - Chisels
 - Axes
 - Adzes
 - Saw
- Bronze weapons
 - Spearheads

- Arrowheads
 - Daggers
 - Swords
- Fishing equipment – evidence the crew fished from the ship
- Lead net and line sinkers
 - Netting needles for repairing nets
 - Fishhooks
 - A harpoon
 - A bronze three pronged fishing spear
- Two wooden writing boards with two leaves joined with an ivory hinge, and slightly recessed to receive wax writing surfaces.



ONE LEAF OF A WRITING BOARD^{viii}
ULUBURUN (TURKEY) SHIPWRECK
1306 B.C.E.

One writing board was found in a large storage jar originally filled with pomegranates. This board is 500 years older than a board recovered by archaeologists at Nimrud (Iraq), which had been the oldest recovered to date. To stiffen the wax enough to the shape of the symbols and letters pressed into it with a stylus scribes mixed the wax with resin. If the one ton of resin in 150 jars made in Syria-Palestine recovered from the shipwreck at Uluburun were intended for use by scribes it would suggest that writing was widespread during the Late Bronze period in the world of the Bible.

- A small [bronze and gold plated statue](#) of a godmother from Syria-Palestine may represent the ship's divine patron
- Personal property of two passengers from Mycenae (Greece)
 - Two lens shaped seals
 - Two swords
- Two pectorals with glass relief beads

The sailors from Syria-Palestine painted on the walls of the tomb of Kenamun are wearing round gold medallions around their necks like these pectoral recovered from the shipwreck at Uluburun.

MEDALLION WORN BY SAILORS FROM SYRIA-PALESTINE^{ix}
ULUBURUN (TURKEY)
GOLD
1306 B.C.E.



The shipwrecks at Uluburun and Cape Gelidonya are windows into the craft of metalworking and seafaring during the Late Bronze period (1500-1200 B.C.E.). Until these excavations metalworking and seafaring were thought to be monopolies of Mycenae in the western Mediterranean during the Late Bronze period. Now, however, it is clear that Cyprus and Syria-Palestine in the eastern Mediterranean dominated metalworking and seafaring during that period in the world of the Bible.

THE SEA PEOPLES

Shortly after the shipwrecks at Cape Gelidonya and Uluburun, the mastery of the sea by ships and sailors from Syria-Palestine came to an end with the arrival of the Sea Peoples. The Egyptians identified as many as ten different groups of Sea Peoples: Philistines (Egyptian: *Peleset*), Tjakkar (Egyptian: *Sikila*), Shardana, Shekelesh (Egyptian: *Skls*), Danuna, Karkisa, Labu, Lukka and Meshwesh. They emigrated from Crete and looted the coast of Syria-Palestine and Egypt at the end of the Late Bronze period (1400–1200 B.C.E.) when the empires of Mycenae, Hatti, and Egypt collapsed.

The impact of the Sea Peoples on seafaring and metalworking in the world of the Bible is reflected in both the Annals of Ramesses III and the hero story David Delivers Israel from Goliath in the books of Samuel-Kings (1 Sam 17:1–58). The annals focus on the dominance of the Sea Peoples in seafaring; the hero story on their dominance in metalworking.

Neither the Annals of Ramesses III nor the story of how David Delivered Israel from Goliath are battle reports. They are assessments of how the shift of power in Egypt and Syria-Palestine will impact indigenous peoples there. Both admit that the newcomers are dominant. The question is: Will the Egyptians and the Hebrews survive? Both the annals and the hero story are optimistic. The superiority of the Sea Peoples in technology cannot overcome the will of the Egyptians and the Hebrews to survive.

The Late Bronze period dates for the shipwrecks at Cape Gelidonya and Uluburun and for the Annals of Ramesses III on the walls of Medinet Habu are scientifically fixed. The dates for the Annals of Solomon and the stories of how David Delivers Israel from Goliath are not.

Unlike artifacts from land sites which are continuously disturbed, reused and mixed together, artifacts from shipwrecks seal a fixed moment in time. The constructions style of the ship and its anchors, the style of the pottery in its cargo, and the Carbon 14 testing of the brush used as packing for the cargo all fix its date in the Late Bronze period.

Pharaohs like Ramesses III built their funeral chapels and tombs during their reigns. Once a pharaoh died there is little or no major construction at the site. The standard chronology for Egypt dates the death of Ramesses III to 1163 B.C.E. and fixes his annals at Medinet Habu to the Iron I period.

Dates for the stories of how David Delivers Israel from Goliath and the Annals of Solomon are far less certain. Although the armor of Goliath was assumed to be identical to the armor worn by the Sea Peoples in the Annals of Ramesses III at Medinet Habu, careful reconstructions by archaeologists makes it clear that his armor is not like the Sea Peoples in the Iron I period. In fact, the armor of Goliath is more similar to the armor of Greek mercenaries in the Egyptian army in the Iron II period (900-586 B.C.E.).

The standard dates for the reign of David and Solomon are 1000-930 B.C.E. On-going excavations especially at sites like Megiddo, Gezer and Jerusalem now show that there is little or no evidence of major building during that period.

Likewise, biblical traditions about the Philistines reflect little, if any, geography, culture and history from the Iron I period (1200-1000 B.C.E.). The Stories of the Ark of the Covenant may be an exception. *Seranim* rulers, five city urban leagues, armor like Goliath's in the Bible reflect the geography, culture and history from the 26th Dynasty (664-525 B.C.E.) when *hoplites* -- infantry armed with spears who fought in phalanx formations -- from Caria, Ionia, Lydia and Crete were stationed by pharaohs in Philistia (Finkelstein 2002). If the story of how David Delivers Israel from Goliath developed early in the Iron I period, it is strange that the Books of Samuel-Kings and the books of Chronicles do not refer back to it, and only the apocryphal hymn known as Psalm 151 (11QPs^a) -- a tradition which may have developed as late as 200 B.C.E. -- recalls the duel. Consequently, biblical traditions connected with David and Solomon may have developed much later in the Iron II period than originally thought (Rofe 1987; Finkelstein 1996).

Greeks were not only present on the coast of Syria-Palestine before the time of Alexander of Macedonia (356-323 B.C.E.), Greek culture and tradition had begun a renaissance throughout the Mediterranean as early as 800 B.C.E. (Yadin 2004). The Iliad of Homer inspired individual warriors to fight hand to hand on behalf of their armies, and storytellers sang of their heroism at their tombs. Such is a more likely context for the stories of how David Delivers Israel from Goliath than the era of the Sea Peoples.

Despite the time disparity between the stones and stories, the annals of Ramesses III and the story of how David Delivers Israel from Goliath both struggle with a common challenge: east meets west. The Sea Peoples set in motion a process that would continue throughout the Iron Age.

ANNALS OF RAMESES III

YEAR 8 OF THE REIGN OF RAMESSES III

. . . strangers from the Islands formed a federation with one another. Suddenly, their warriors were invading and destroying every land. No land could defend itself against them. In one campaign, they cut down Hatti, Kode and Arzawa in Turkey, Carchemish in Syria, and Alashiya in Cyprus. They pitched their battle camp at Amor, and began slaying the peoples of Syria-Palestine and devastating their lands as no one had ever done before. Then they turned toward Egypt, whose fire was preparing to devour them. In this federation were the Peleset, the Tjekker, the Shekelesh, the Dannuna and the Weshesh. They attacked every land on the face of the earth, confidently boasting: "We will be victorious!"

Now my divine heart was plotting how I was going to snare them like birds....

I, ruler of the divine assembly, ordered my governors and commanders in Syria-Palestine to deploy their soldiers and *maryanu* chariots at Djahi on the coast. I ordered them to outfit every warship, freighter and transport from stern to stern with heavily-armed, hand-picked troops, and to blockade the mouth of every river along the coast. These ships were the pride of Egypt, and they roared like lions in the mountains. Runners led the chariots manned by the best, hand-picked soldiers. The bodies of the horses quivered as they waited to crush these strangers under their hoofs. As Montu, the divine warrior, I led them into battle, so that they could see my outstretched hand. . . .

Strangers who reached the border of Egypt by land were annihilated. Their hearts and souls will never rise again. Those who attacked by sea were devoured at the mouths of the rivers, while the spears of the soldiers on shore tightened like the wall of a stockade around them. They were netted, beached, surrounded, put to death and stacked, head to foot, in piles. Their ships and cargo drifted aimlessly on the water.

I decreed that no one in the lands of these strangers was to even say the word: "Egypt." Whoever pronounced the word was to be burned alive. Since the day I ascended to the throne of Re-Harakhti, the divine patron of pharaohs, since the first day the divine power of the uraeus serpent rode like Re upon my brow, I have not let a single stranger see the border of Egypt, or any of the Nine Bows even boast of having fought against it. I have seized their lands, and crossed their borders. Their rulers and their people all sing my praises, for I have walked in the ways of Re, ruler of all the earth, my incomparable godfather, who rules the divine assembly.

Rameses III built his funeral chapel (Arabic: *Medinet Habu*) in the Valley of the Pharaohs at the site where Amennophis I (1525-1504 B.C.E.) and Hatshepsut (1473-1458 B.C.E.) had built a sanctuary celebrating Atum who stood on the first hill which emerged from the waters of chaos and created the cosmos of Egypt.

A high pylon gate opens into a broad courtyard with another pylon gate 90 feet high leading to the holy of holies. Emphatically carved on both sides of the entrance pylon, more than eight inches deep into the walls, are the annals of a pharaoh conquering his enemies. In 1829 Jean François Champollion identified the pharaoh of Medinet Habu as Ramesses III and translated his annals describing the defense of Egypt under attack by the Sea Peoples (Matthews and Benjamin 2006: 151-154).

Like Atum who stood on a mound of soil in the Valley of the Pharaohs and drove chaos from Egypt, Ramesses stands on the shores of Egypt and drives the Sea Peoples from Egypt. Ramesses' battle against the Sea Peoples was the first day of creation.

HYMN TO ATUM
(MATTHEWS AND BENJAMIN 2006: 7-9)

At the moment of creation, Atum spoke:
I alone am the creator.
When I came into being, all life began to develop.
When the almighty speaks, all else comes to life.
There were no heavens and no earth,
There was no dry land and there were no reptiles in the land....

When I first began to create,
When I alone was planning and designing many creatures,
I had not sneezed Shu the wind,
I had not spat Tefnut the rain,
There was not a single living creature.
I planned many living creatures,
All were in my heart, and their children and their grandchildren.

THE ANNALS OF SOLOMON (1 KGS 9:26-28 + 10:11+22)

The artifacts from the shipwrecks at Gelidonya and Uluburun identify the people of Syria-Palestine as masters of both seafaring and metal working in the Late Bronze period. The Bible, however, says little about the Hebrews as seafarers during the Iron Age.

Solomon (970-930 B.C.E.) and Jehosophat, a ruler of Judah (877-853 B.C.E.) both built ships at Ezion Geber, which is near Elath on the shore of the Red Sea. Both were joint ventures. Solomon's partner was Hiram of Tyre. Jehosophat's partner was Ahaziah, a ruler of Israel (853-852 B.C.E.).

The ships of Solomon and Hiram were incredibly successfully (1 Kgs 9:26-28 + 10:11+22). They sailed between Ezion Geber and Ophir (Somalia) and brought back gold, silver, ivory and exotic animals.

The Annals of Hatshepsut (1473-1458 B.C.E.) on the walls of her funeral chapel at Deir el Bahri (Egypt) made similar claims for her treasure fleets sailing to Punt (Somalia). The freighters built by Hatshepsut were over 72 feet long and over 16 feet wide. They did not have a keel. The hulls were stabilized by thick rope fastened to the bow and the stern and then twisted to tighten the boards of the hull together. There were fifteen oars on the port and the starboard sides of the freighters. Two oars, one on either side of the hull were fastened to one another and used as a rudder to steer the ship. There was only one mast



topped with a crow's nest and a single sail some 50 feet wide. The figurehead on the stern of the freighters was a lotus blossom.

MODEL OF AN EGYPTIAN FREIGHTER
DEIR EL BAHRI.^x
1473-1458 B.C.E.

THE ANNALS OF JEHOSEPHAT (1 KGS 48-49; 2 CHR 20:35-37)

The ships built by Jehosephat and Ahaziah were destroyed before they ever reached the high seas (1 Kgs 48-49; 2 Chr 20:35-37). The shipbuilders were from Israel; the crews from Judah. The sailors from Judah seemed to have been unfamiliar with ships of Tarshish (Hebrew: *'oni tarshish*) and wrecked them (Rainey and Notley 2006: 203)

STORIES OF SAUL (1 SAM 13: 15-22)

Just as the Bible says little about the Hebrews as seafarers, it also says little about their skill as metalworkers. The Stories of Saul (1 Sam 13:15-22), for example, observe that Hebrew farmers went to Philistine smiths to have their metal tools sharpened and repaired.

STORIES OF SAUL
(1 SAM 13: 15-22)

Samuel and about 600 warriors left Gilgal, and went toward Gibeah of Benjamin. Saul, his son Jonathan, and the warriors who were with them camped in Geba of Benjamin; but the Philistines camped at Michmash.

The Philistines sent out three detachments to forage for food and supplies. One raided from Ophrah to Shual; another Beth-horon; and another the mountain above the Valley of Zeboim.

Now there were no smiths anywhere in Israel because the Philistines ordered: "The Hebrews are not to make swords or spears for themselves." Therefore, they went to the Philistine smiths to sharpen their plows, mattocks, axes and sickles. The charge was .25 ounces of silver for plow points and mattocks; .10 ounces of silver for axes and goad points. So on the day of the battle not one of Saul or Jonathan's warriors had a sword or a spear except Saul and his son Jonathan.

DAVID DELIVERS ISRAEL FROM GOLIATH (1 SAM 17:1-58)

The stories of how David Delivers Israel from Goliath (1 Sam 17:1-58) characterize David like Ramesses III destroying the chaos of the Sea Peoples and creating the cosmos of Israel. Both traditions emphasize the courage of Ramesses and David in standing their ground against overwhelming odds. Nonetheless the stories reflect the awe which the Hebrews have for the metalworking skills of the Philistines.

David appears on the battlefield with gifts for his brothers' commander (1 Sam 17:17-18). In one tradition Saul meets David before his duel; in another he meets David only after watching him kill Goliath. Both traditions want to show that David did not revolt against Saul, his patron, but that Saul accepted David, his client, as his heir (Benjamin 2004: 1914-195).

Saul adopts David by dressing him in his own armor. Attempting to dress David in the same armor as Goliath portrays Saul as trusting in the armor of his military policies for protection. David trusts only in Yahweh. Saul goes into battle fully armored, which demonstrates that he depends on metal for victory. David goes into battle armed only with a slingshot, five smooth stones and a shepherd's staff, which demonstrates that he depends on Yahweh for victory.

The story punctuates the fierceness of Goliath by describing his state-of-the-art, metal armor in detail. The Philistines are masters not only of the old metal – bronze, but the new metal – iron.

Curiously there is little archaeological evidence that Philistine

settlements produced more bronze or more iron than Hebrew settlements (Stager 1985). Characterizing a culture as having a monopoly in metalwork, particularly in iron work, identifies as politically dominant, rather than technologically superior. Like iron, cultures with monopolies in iron work, were virtually invincible (McNutt 1990).

The armor of Goliath is not characteristic of the Sea Peoples (Yadin 2004). Goliath's helmet is solid bronze; the helmets of the Sea Peoples at Medinet Habu are topped with feathers. Goliath wears greaves or shin guards; the Sea Peoples at Medinet Habu do not. Goliath wears chain link or mail armor like warriors from Babylon or Assyria; the Sea Peoples do not. Goliath has a shield bearer and a great shield like warriors from Babylon or Assyria; Sea Peoples carry small round shields.

Goliath is armed with a javelin, a weapon that is thrown. A spear is simply used for thrusting. Both this Philistine killed by David, and the Goliath of Gath killed by Elhanan in a parallel tradition are armed with javelins "like a weaver's beam" (2 Sam 21:19).



MYCENAEAN WARRIORS ARMED WITH JAVELINS
SHOWING THE THROWING LOOPS^{xi}
NATIONAL MUSEUM, ATHENS

Goliath's javelin is called a "weaver's beam" not because of its size and weight, but because, like the leash rod of a loom, it is a shaft with loops. The leash rod of a loom is a block of wood which separates the threads of the warp to offer passage for the threads of the weft or woof. The characteristic feature

of this rod was the loops or leashes of cord tied to it (Yadin 1955; 1963: 352-355).

Standard Mycenaean javelins have loops and cords wound round their shafts so that they will spin when warriors throw them. The Hebrews did not use javelins, and there is no word in Hebrew for the weapon. The spinning allows the javelin to travel farther, and more accurately. Rifling inside the barrels of firearms today also causes bullets to spin, stabilizing them so they will travel farther and more accurately. The Greeks and Romans called their javelins "loops."

Dueling champions (Greek: *monomachia*) like Menelaus and Paris in the Illiad of Homer is common in Greek tradition. The dueling of Sinuhe and the strong man (Matthews and Benjamin 2006: 137-141) and of

David and Goliath are extraordinary in Near Eastern tradition. Champions who step out from their armies into the no man's land (Greek: *metaixmion*) between the two battle lines to duel and decide the fate of their fellow warriors is almost unknown in the world of the Bible (Rofe 1987).

Now Goliath taunts David: *Am I a dog that you come to me with a stick?* (1 Sam 17:43). Goliath asks David if he thinks the Philistines are dogs ready to play fetch. Although there is a long-standing tradition that David kills Goliath with a slingshot, he may have used an atlatl or throwing stick. Yahweh protects the Hebrews from weapons of bronze and iron with weapons of wood.

Taunts (2 Kgs 2:23–25) are a common strategy in making war in the world of the Bible. Tiamat taunts Marduk (Enuma 4:63–74). Gilgamesh taunts Ishtar (Gilg 6:31–78). Aqhat and Anat taunt each other, taunt Yamm, or taunt Baal (Aqhat 6:35–49).

David is fearless. He has no question that Yahweh will deliver him from Goliath. David shames Goliath by calling him *uncircumcised* (1 Sam 17:26). Western Mediterranean cultures, like the Philistines, did not circumcise their sons; Semitic and African cultures, like Egypt and Israel did. Circumcision was originally a sign that males had reached puberty, and that they were now sexually active adults. They were men. David calls Goliath an impotent child, and shames the warriors of Israel for being afraid of a *little boy*.

Although there is a long standing tradition that David's stone strikes Goliath in the forehead, the archaeology of armor suggests otherwise. The style of helmet Goliath wears would have fully covered his forehead. The words in Hebrew for shin guards (Hebrew: *mishat*) and for forehead (Hebrew: *mesah*) are homonyms. They sound alike. David's stone may have struck Goliath in the exposed part of his knee just above the shin guards crippling him and causing him to fall (Deem 1978). A better reading might be: "David put his hand into his bag, took out a stone, shot it, and struck the Philistine just above his greave (Hebrew: *el-misho*). The stone sank into his greave (Hebrew: *bemisho*) and he fell face down on the ground (1 Sam 17:49)."

CONCLUSIONS

Nautical Archaeology provides a unique and important tool for the study of shipbuilding, technology and trade. Ships brought the Sea Peoples into the world of the Bible and changed that world forever. The Philistines were the single greatest threat to the Hebrews' survival. The Hebrews were no match for their ships, their metals and the trade.

Nonetheless, the Hebrews survived, and the Philistines did not. The silent record of that irony between Ramesses and the Sea People and David and Goliath is in the stones under the sea and on land.



WHAT YOU HAVE LEARNED

- Nautical Archaeologists study shipwrecks, harbors and sunken settlements.
- The shipwrecks at Cape Gelidonya and Uluburun made it clear that cultures from Syria-Palestine dominated metal working and seafaring during the Late Bronze period until the appearance of the Sea Peoples.
- The impact of the Sea Peoples on seafaring and metalworking in the world of the Bible is reflected in both the Annals of Ramesses III and the hero story David Delivers Israel from Goliath. Both argue that the superiority of the Sea Peoples in technology cannot overcome the will of the Egyptian and the Hebrew peoples to survive.

Part Five

Post-Processual Archaeology



Part Five is an introduction to Post-Processual Archaeology. Chapter 20 describes Post-Processual Archaeology as a critique or revision of Processual Archaeology. Chapter 21 is a sample of Post-Processual Archaeology applied to a remarkable hero story in the book of Judges. A Woman Delivers Thebez from Abimelech (Judg 9:50-57) celebrates an unnamed woman for delivering her city from its enemy with an extraordinary weapon. The mill she uses to feed her household becomes the weapon she uses to defend it.

Chapter 20

Post-Processual Archaeology



Chapter 20 describes Post-Processual Archaeology which critiques Processual Archaeology for interpreting any change in the artifact record as an adaptation to a change in the natural or human environment. For Post-Processual Archaeologists interpret change in artifacts as a reflection of a change in the world view of a culture at a site. Post-Processual Archaeologists also stress the importance of identifying assumptions of the archaeologists and other stakeholders influenced by the site to avoid having them prejudice their interpretation of artifacts from a site. Finally, Post-Processual Archaeologists are committed to working with Cultural Resource Managers, and other educational and tourist industries to publicize their sites.

The close relationship that had existed between archaeology and biblical studies in the United States since the time of William F. Albright (Albright 1942) was repeatedly challenged by William G. Dever (Dever 1973; 1985; 1992). Dever argued that Biblical Archaeologists in the Albright School were so committed to proving that the Bible was a historically accurate record of events that they completely ignored the developments which Processual Archaeology brought to the discipline.

Dever also alleged that Biblical Archaeologists ignored Processual Archaeology because they assumed that ancient Israel did not evolve like other cultures in Syria-Palestine. For Biblical Archaeologists ancient Israel was unique and could not be studied using the scientific method.

By the 1980's Dever had prevailed, and archaeology in Syria-Palestine came of age (Dever 2005: 80). It was no longer an amateur enterprise of biblical scholars, but a separate and professional and processual discipline.

Curiously, however, archaeologists working in Syria-Palestine began using Processual Archaeology just as Processual Archaeologists working in other parts of the world were beginning to question and re-

evaluate their method. Ian R. Hodder described this on-going critique since 1975 as *Post-Processual Archaeology*.

The critique embraces a variety of revisions. What they all have in common is their objection to the assumption of Processual Archaeology that cultural changes are always adaptations to changes in the human or natural environment. Post-Processual Archaeologists assume that the artifacts recovered at a site demonstrate not only how a culture adapted to changes in its environment, but also to the evolution of its world view.

Israeli archaeologists at the Tel Aviv Institute of Archaeology provided an important catalyst for the use of Post-Processual Archaeology in Syria-Palestine. The surface surveys they conducted throughout Israel during the 1970s and 1980s profoundly changed the focus of Israeli archaeology. This environmentally oriented fieldwork created a new interest in the people without history (Bunimovitz 2007).

The emphasis on the rural backbone of Syria-Palestine countered the urban bias of Processual Archaeology and its reliance on elitist political history. The archaeology of the silent majority that emerged served as a healthy antidote to the preoccupation of Processual Archaeologists with great men and great deeds. In contrast, Post-Processual Archaeologists were interested in what artifacts revealed about the dynamics of households in antiquity and the relationship of men and women in the household especially by identifying women's space in a household, men's space in a household and shared space.

ARTIFACTS ARE MORE THAN ADAPTATIONS

Post-Processual Archaeologists use artifacts to reconstruct the word views of the maker cultures. Material remains are not only tools for survival. They reveal how people looked at their world, and how they lived in that world. Changes in the material remains at a site reflect changes in a culture's world view. When people begin to think differently about their experience, that change can be seen in their material remains.

Artifacts reflect how maker cultures think and learn and communicate. They focus not only on how humans used their hands, but also on how they used their minds. They are interested not only in what people did, but also in what it meant to them.

Post-Processual Archaeologists assume a more dynamic balance between determinism and free-will than Processual Archaeologists. They use artifacts not only to reconstruct how people in a particular culture interpreted their experiences, but also how they shaped those

experiences. Material remains reflect how people developed, maintained and changed systems in their cultures. Post-Processual Archaeologists are interested not just in what people do, but in what people know, and what they want to do. People creatively interpret their experiences, and intentionally design experiences. For example, they not only experience starvation during times of famine, they fast during times of plenty. People cannot make their experience conform to their expectations, but their actions can transcend natural systems and human change. People are intelligent agents of social change (Bourdieu 1984; Giddens 1986).

For example, the sanctuaries of the original Early Bronze age community at Megiddo were round. The sanctuaries of their successors, however, were rectangular. Post-Processual Archaeologists reconstruct not just the techniques necessary to build a round or a rectangular sanctuary, but also reconstruct what was going on in the culture at Megiddo that is reflected in the change in shape of its sanctuaries.

Likewise, sanctuaries dedicated to Yahweh at Beersheba and Arad were both decommissioned. At Beersheba the altar stones were recycled to repair a warehouse wall. At Arad the *masseboth* standing stones were laid carefully on their sides. They were not smashed or broken. Then the entire sanctuary was filled in with soil. It was buried, not vandalized, and not recycled. Post-Processual Archaeologists consider these changes in material remains to reflect a change in the way the people of Judah thought about Yahweh. When the sanctuaries at Beersheba and Arad were built, the people of Judah worshipped Yahweh throughout their land. When the sanctuaries were decommissioned, the people of Judah had decided to worship Yahweh only in Jerusalem, the sacred center of their land. Their world view had changed, and the material remains preserved the transition.

EMPHASIS ON WHAT HAPPENS OVER TIME, NOT AS SPECIFIC MOMENT IN THE PAST

Processual Archaeology is synchronic; it reconstructs a specific moment in the past. Synchronic methods give a snapshot of a particular system at a particular moment in time. Synchronic methods focus on how something is at a given moment and how each part fits into the system.

Post-Processual archaeology is diachronic; it emphasizes what happens over time. Diachronic methods examine the origins, development, history and changes that take place, over time, like a motion picture documentary.

INTERPRETATION OF A SITE IS NOT NECESSARILY AN INTERPRETATION OF A CULTURE

Processual Archaeologists use their interpretations of artifacts from any given site to develop generalizations or a metahistory about the development of agriculture, of states, of the rise and fall of civilizations in a region or in an archaeological period.

Post-Processual Archaeologists are much more site-specific. They limit their interpretations of artifacts from a particular site to that site, and generalize much less about what that site says about the culture in the region or in a particular archaeological period. They consider generalizations about cultures in a particular region or in a particular archaeological period to be unreliable. Instead Post-Processual Archaeologists focus upon a single site and its surroundings, and assume that cultures in the same region or in the same period are more likely to be different than similar.

NOT ONE STORY, BUT MANY STORIES

Processual Archaeologists develop a single interpretation of their artifacts. Post-Processual Archaeologists consider diverse interpretations of a site to be more helpful in understanding ancient cultures than a single interpretation.

Like other Post-Modernists, Post-Processual Archaeologists emphasize the importance of diversity in explaining change; and the need to realize that all explanations of change are relative, not absolute. No one interpretation definitively explains the culture at a site. The goal of Modernism is to develop a single world view or metahistory that explains how humans process their experience. Modernism is looking for *the* answer. Post-modernism is only looking for *an* answer. For Modernism there is a single world view based on universally accepted values. For Post-modernism there are diverse world views based on valid, but not universally accepted, values.

For Post-Processual Archaeologists the interpretation of artifacts is a discourse or conversation. Artifacts are dynamic. They are not symbols with a single, fixed meaning, but symbols with a subtle range of meanings in both their cultures of origin, and in the hands of the archeologists who recover and interpret them. Artifacts are icons manufactured to communicate a specific message. Archaeologists work to reconstruct the grammar of both the worldview of the artifacts' culture of origin and a dictionary of symbols appearing in artifacts. Graves, houses and pottery, for example, are not only conversations between their makers and the people of their time, but also conversations with the archaeologists who interpret them.



REPLICA OF A CIST BURIAL
BRITISH MUSEUM
3400 B.C.E
NAGADA (EGYPT)

Consequently, no site can be adequately interpreted without a staff that is interdisciplinary. There are not only academic professionals like archaeologists, ceramicists and paleobotanists on a staff, but also religious leaders, government officials, and local people on the staff. For example, any excavation team that uncovers human remains in Israel will immediately add religious representatives to the staff. Imams and rabbis are not archaeologists, but they guarantee that the remains are dealt with appropriately.

PERSONAL VALUES INFLUENCE INTERPRETATIONS

Post-Processual Archaeologists assume there is no such thing as an objective interpretation of the material remains of a culture. Since 1993, for example, Hodder has continued to survey the interpretations of all the shareholders involved in his excavation of a 9,000 year-old Neolithic site at Catal Hayuk (<http://www.catalhayuk.com/>). He surveys his own interpretation as the dig director; the interpretations of his professional staff; the interpretation of the student volunteers; the interpretation of the local Turkish villagers; the interpretation of the Turkish Departments of Antiquities and of Tourism; the interpretation of women's groups and other visitors to the site. Each group brings its own assumptions and experiences to the excavation. Allowing each group to speak makes it less likely that any one group can dominate or distort the interpretation of the material remains from a site.

A dig director like Hodder interprets artifacts from Catal Hayuk from a university perspective. He uses the artifacts to reconstruct both the lives of the rich and famous at Catal Hayuk during the Neolithic period, and the lives of the poor and anonymous at the site.

Ceramics specialists on the team at Catal Hayuk interpret artifacts from the perspective of potters. They are interested in where the people of Catal Hayuk got their clay, how they prepared it and how they shaped it.

Paleobotanists on the team interpret material remains from the perspective of farmers. They want to identify the kinds of crops grown and to determine just how successful the people of Catal Hayuk were at herding.

Student volunteers on the team at Catal Hayuk interpret artifacts from the perspective of their educational goals. Graduate students are looking for ways to use their field work at Catal Hayuk in their dissertations. They are also thinking about how their field work experience will contribute to their careers in archaeology.

Turkish villagers interpret artifacts from the perspective of descendants of this long extinct people. They wonder how the people of Catal Hayuk are like the people of Turkey today, and also how they are different.

Feminists who visit Catal Hayuk interpret its material remains from the perspective of women. They feel a strong sisterhood with this ancient people whose divine patron was a godmother, rather than a godfather. They want to know if cultures having a godmother as a divine patron create a more equitable environment for ordinary women.

Socialists who study Catal Hayuk interpret its material remains using the sociology of Karl Marx (1818-1883) in his Communist Manifesto (1848). They are sensitive to artifacts which reflect a primitive democracy among these Neolithic peoples. They are looking for ancient prototypes of classless societies today.

POLITICAL EVENTS INFLUENCE INTERPRETATIONS

Post-Processual Archaeologists are interested in defining the relationship of politics and archaeology. Interpretations are unavoidably influenced by what is happening in the world while archaeologists are excavating. For example, how do the attacks on the World Trade Center on September 11, 2001 impact the interpretation of a massive destruction layer at a site in Syria-Palestine? Therefore archaeologists are expected to clearly identify their assumptions and experiences in order to limit the distortions that these assumptions and experiences might create in their interpretations.

Post-Processual Archaeologists also study the impact of cultural developments today -- like Post-Modernism and feminism -- on the interpretation of the material remains of past cultures. Their goal is to understand how such issues and interests influence the way people today think about the past and, consequently, how these issues and interests influence their interpretation of artifacts from past cultures.

Post-Processual Archaeologists catalogue the values of those recovering and interpreting artifacts and the influence of contemporary movements on the interpretation of material remains of past cultures to

reduce the possibility that they will distort the interpretations of the artifacts, or that they will use artifacts to promote destructive values systems like sexism, Nazism, colonialism, imperialism and racism.

IDENTIFYING OWNERS AND INTERPRETERS OF ARTIFACTS

Post-Processual Archaeologists are concerned with the ethics of archaeology. They do not, for example, assume that professors are better interpreters of the material remains of past cultures than politicians or local religious leaders.

Before they go into the field Post-Processual Archaeologists ask probing questions about how best to distribute responsibilities for an excavation (Silberman 2003: 10). They carefully negotiate the legal status of the material remains from the excavation. International law provides that artifacts are the property of the states where they are recovered. Nonetheless, humanity in general and ethnic communities with strong emotional ties to ancient sites are also entitled to have their rights respected by archaeologists.

Post-Processual archaeologists also negotiate a power sharing process to develop the excavation strategy. They do not assume that the director of the excavation alone should decide what portions of a site should be excavated and what portions of the site should be left buried. They also do not take for granted that well funded teams from universities abroad who view antiquities as educational resources for their students should have more control of these decisions than local departments of antiquities who view ancient sites as a economic resource for attracting tourists.

IDENTIFYING PUBLICISTS FOR ARTIFACTS

Post-Processual Archaeologists also negotiate how to publicize the findings and the interpretations of the artifacts from a site. They do not assume that articles in professional journals are a more appropriate medium than school textbooks and television programming. They work collaboratively with the industry of Cultural Resource Management, tourism and the entertainment industry that continue to package the past for pleasure and profit.

In the United States *Cultural Resource Management* refers to the legally mandated protection of archaeological sites situated on public lands that are threatened with destruction through development. Extensive laws have been enacted to protect sites on federal lands, but states and some cities have similar legislation.

Cultural Resource Management is the largest employer in the field of archaeology, yet there is often little dialogue between Cultural Resource managers and archaeologists about what should be preserved and how it should be preserved. Cultural Resource Management is still largely a service sector for the development of public parks and monuments.

Cultural heritage is articulated in different ways by universities, the media and the entertainment industry. Until the emergence of Post-Processual Archaeology Cultural Resource Management did not involve academic archaeology to any degree. Many Processual Archaeologists would make quite a radical separation between research and interpretation for a wider non-professional and popular audience, between the production of knowledge of the past and its subsequent use. But these distinctions have been blurred by Post-Processual Archaeology with its notion of archaeology as the mediation of that past in the present. This gives tremendous credence to projects which aim not only to set archaeology in a cultural context, but which aim to develop ways of intelligently commenting upon these global issues.

Though clearly there would be no future for archaeology without policies that ensure the protection of the remains of the past, the worlds of academic research and Cultural Resource Management remain distant. Post-Processual Archaeologists take a serious interest in contributing to the conversation about how cultural heritage should be preserved and interpreted in a world that is post colonial and intensely global.

ON-GOING EVALUATION OF INTERPRETATIONS

Post-Processual Archaeologists follow the principles of Critical Theory which assigns a shelf life to the assumptions of all disciplines. Interpreting a site is an on-going, open-ended conversation between the archaeologists and their artifacts, between the culture of the artifacts and the culture of the archeologists.

The assumptions of any discipline like archaeology should, according to Critical Theory, be regularly reviewed and evaluated to certify that the way a discipline goes about the business of learning, or of speaking and of making use of its findings, are still valid.

Critical Theory is particularly suspicious of any discipline that exercises a monopoly in its field. Critical Theory is also suspicious of any discipline whose methods of learning, ways of speaking or applications are too simple. Human life is seldom simple, and the cultures that people create reflect that complexity.

CONCLUSION

Post-Processual Archaeology emphasizes that archaeologists do not discover the past; they tell stories about the past (Shanks 1996). The interpretation of a site reflects the questions that its archaeologists and other stakeholders who are affected by the interpretation of an archaeological site ask about artifacts from the site. The values and interests of the excavators and these stakeholders are embedded in their work; these values and interests determine what they keep and what they study.

Post-Processual archaeologists are also advocates of a rainbow of stories about the stones. They assume that there is at least as much diversity at the site they are studying as there is among those who are interested in and working at the site. To the extent possible that diversity needs to given expression in their interpretations of the artifacts.

Like Annales Archaeologists the stories that Post-Processual Archaeologists tell is about ordinary men and women (Ackerman 2003; Meyers 2003). They are students of the little people in the world of the Bible. They focus on the less dramatic, but no less significant, roles of ordinary men and women – mothers, fathers, midwives, widows, elders, teachers, slaves, herders and farmers who live in households and villages.



WHAT YOU HAVE LEARNED

- Post-Processual Archaeology is a critique of Processual Archaeology.
- Change in the artifact record is not only an adaptation to a change in the natural or human environment, but also a reflection of a change in the world view of a culture at a site.
- Post-Processual Archaeologists also stress the importance of identifying assumptions of the archaeologists and other stakeholders influenced by the site to avoid having them prejudice their interpretation of artifacts from a site.
- Post-Processual Archaeologists are committed to working with Cultural Resource Managers, and other educational and tourist industries to publicize their sites.

CHAPTER 21 HOUSEHOLD ARCHAEOLOGY



Chapter 21 describes two specific kinds of Post-Processual Archaeology called *Gender Archaeology* and *Household Archaeology* to interpret a hero story in the book of Judges. Gender Archaeology is interested, for example, in how the work of men and the work of women in the world of the Bible are valued. Women who bake bread for their men and their children are not seen as powerless, but their authority to feed gives them remarkable control over those whom they feed. Household Archaeology is interested, for example, in how some space in a house is shared by men and women, while some space is women's space, and some space is men's space. The woman who saves Thebez from Abimelech uses the flour mill with which she feeds her household to defend it. Likewise she defends her household not by trespassing on men's space, but by remaining within women's space on the roof of the house.

In 1963 Betty Friedan (1921-2006) published The Feminine Mystique which launched the second wave of the Women's Movement and became the charter for a national debate about the roles of women in the workplace. Friedan began her five years of research at her fifteenth



First wave feminism addresses how politics defines women. Second wave feminism addresses how work defines women. Third wave feminism addresses how race defines women.

college reunion. She asked two-hundred alumnae from Smith College (<http://www.smith.edu/>) to fill out a questionnaire. The results confirmed what she had already suspected—many American women were unhappy and did not know why.



BETTY FRIEDAN
1921-2006

Friedan concluded that women in her generation were victims of a *feminine mystique* – unrealistic expectations that men have of women. Women felt

worthless because they were defined by this feminine mystique as financially, intellectually and emotionally dependent upon the men and the children in their lives. The mystique programmed them to believe that they would only be happy if they were married and had children.

For Friedan the feminine mystique developed in the middle class suburban communities built for veterans of World War II and their families. It was a response, in part, to the need that veterans had for women to mother them – to help them recover from the trauma of war.

Similarly, technology – dishwashers, toasters, washing machines, dryers, electric irons – was moving into the home. These new appliances were marketed as simplifying homemaking. In fact, many made women's work less meaningful and less valuable.

LITERARY AND HISTORICAL STUDY OF GENDER

The impact of the women's movement was, initially, most evident in departments of literature and in the literary and historical critical study of the Bible. Phyllis Tribble and Phyllis A. Bird pioneered the study of gender in biblical studies during the 1970s (Tribble 1973; Bird 1974).



PHYLLIS TRIBBLE

Bird used historical criticism to reconstruct the lives of Hebrew women. Historical criticism reconstructs the community of origin where a biblical tradition develops in order to better understand how the tradition was understood there.

Tribble used literary criticism to learn from female characters in the Bible about men's attitudes toward women in ancient Israel. Literary criticism focuses on how a biblical tradition casts characters, develops its plots and uses motifs and techniques in order to recover the world view of the narrators.

Literary and historical criticism of the Bible, however, revealed little about the lives of ordinary men and women, because the Bible is interested primarily in how women affect the lives of elite males (Fuchs 1985; Exum 1983). Therefore, historical and literary criticism of the Bible could not provide an accurate, systematic, or complete record of the daily lives of ordinary people. For example, the ancestor story: Two Shrewd Midwives (Exod 1:12-21) celebrates women, but the story celebrates them for using their power and authority to the advantage of Hebrew males (Bal 1988).

GENDER ARCHAEOLOGY

In 1984 Margert W. Conkey and Janet D. Spector argued that archaeology had its own feminine mystique (Conkey and Spector 1984). They found their fellow archaeologists were seldom objective or inclusive in reconstructing the role of gender at their excavations. Too many simply assumed that the roles of men and women were the same in ancient cultures as in their own. In response to Conkey and Spector archaeologists working in the prehistoric periods of Europe and the Americas began to develop an Archaeology of Gender based on the artifacts themselves (Conkey and Gero, eds. 1991).

Carol Meyers expanded the study of gender from literary and historical criticism of the Bible to the social scientific study of gender based on Household Archaeology (Meyers 2003). Meyers challenged archaeologists not just to pay more attention to what artifacts reveal about the lives of women in ancient Israel, but also to rethink the goals of archaeology in the world of the Bible altogether. She encouraged archaeologists to use a more creative mix of disciplines and reliable social scientific models to understand both the biblical traditions and the material remains of ancient Israel. Consequently, archaeologists today working in the world of the Bible study not only the lives of the powerful, but the lives of the powerless – not only cities, but also villages; not only palaces but also households; not only men, but also women.

CAROL MEYERS



During most of the twentieth century archaeologists working in the world of the Bible preferred to excavate cities – the domain of men, rather than to excavate households – the domain of women. Urban excavations focused on male palaces, forts and sanctuaries. Even archaeologists who do excavate households often interpret their artifacts only in light of what they could reveal about the development of patriarchal culture in ancient Israel. For example: *Were Hebrews insiders or outsiders? How did settlement take place — by conquest, by immigration or by revolution?*

Excavations reconstructed the great events in the lives of rich and famous of ancient Israel, Egypt and Mesopotamia. Archaeologists looked for artifacts connected with the lives of great men and their conquests, expeditions, cities, palaces, temples, walls, water systems, libraries, correspondence, famines, earthquakes, and, ultimately, their deaths and burials. Finding Abraham, Moses, Joshua, David and Solomon was

important. Reconstructing the plagues, the exodus, the conquest, the Temple, the destruction of Jerusalem was important.

Egypt and Mesopotamia were more careful to tell the stories of their great men in stone than ancient Israel. Therefore, much has been learned about Sargon, Tiglath-Pileser III, Hammurabi, Sennacharib, Nebuchadnezzar, Akhenaton, Tutmosis III, Amenhotep, Ramses II, Merneptah, Ramses III and Amen-em-o-pe. Few of the great men of ancient Israel celebrated in stories, have comparable stones to speak for them.

Archaeology in the twenty-first century may still find material remains to document the presence of Hebrew slaves in Egypt during the New Kingdom; to explain the origins of early Israelite villages in Syria-Palestine; and to unlock the secrets of the Israel of David and Solomon. On-going excavations at Tel Rehov (<http://www.rehov.org/>), Hazor (<http://unixware.mscc.huji.ac.il/~hatsor/hazor.html>) and Megiddo (<http://megiddo.tau.ac.il/>) may yet tell the stories of the of Israel's great men.

Post-Processual Archaeologists realized that although during the twentieth century Cultural Historians and Biblical Archaeologists had focused on the rich and the powerful, they actually recovered a remarkable amount of material about the poor and the powerless. Consequently, gender and household archaeologists have turned their attention to this archive of material remains from completed excavations, and now pay more attention to what material remains reveal about daily life of ordinary men, women, mothers, fathers, herders, farmers, midwives, slaves, teachers, elders, bakers, brewers, priests, prophets and elders (Nakhai RelSRev 31 : 147-153). Household Archaeology reveals much about how women, who bake bread for their men and their children, have a remarkable authority over them.

MEN'S SPACE AND WOMEN'S SPACE

Household Archaeology shows that throughout Syria-Palestine during the Iron Age, 1200-586 B.C.E. material remains were socially and economically similar, and that material development was consistent (Meyers Nashim 5 (2002) 14-44). Even when Israel developed from a decentralized, subsistent and village culture to a centralized, surplus and city culture around 1000 B.C.E., the economics of households were not significantly changed; and the volatile politics of Israel and Judah between 925-586 B.C.E. did not seriously interrupt the need for households to farm and herd.

Gender is an important factor in the distribution of power in the

households of Syria-Palestine. The authority of women and men in households were comparable, but not identical.

One task of Household Archaeology is to observe and record what artifacts reveal of about the gender of the spaces in a house. Usually men, women and children worked separately. Sometimes they worked together. Women map their space in a house differently than men, and archaeologists can use artifacts to identify the common and gender specific in a house.

Men and women of households eat together and sleep together. Therefore eating and sleeping space in a house is common space. Women, however, are the only ones in the households of ancient Israel who weave and bake. Therefore weaving and baking space in a house is women's space.

Space defined by women's work (Gen 24:28; Ruth 1:8; Song 3:4; 8:2) is called the *household of the mother* (Hebrew: *bet 'em*). Space defined by men's work is called the *household of the father* (Hebrew: *bet 'ab*). When Naomi says to her daughters-in-law -- Ruth and Orpah — *Go back to your mother's house* (Ruth 1:8), she is telling them to rejoin the women who weave and bake in the households where they were born.



EGYPTIAN MALE MAKING BREAD
NELSON-ATKINS MUSEUM OF ART, KANSAS CITY

Gender specific work is also group work. Group work not only gets the work done, but also creates important social relationships between the men or the women doing it. While grinding flour older women teach younger women not just how to bake bread, but also how to deal with the men and the children they feed. A Woman Delivers Thebez from Abimelech (Judg 9:50-56) may have been a group work tradition told by either men or women.

Abimelech attacks Thebez (Hebrew: *Tirzah*) and breaches the wall into the lower city (Halpern 1992 ABD I, 21-22; HAR 2:79-100). The people of Thebez take refuge in the upper city. Abimelech fights his way to the wall of the upper city and tries to set fire to its wooden gates. While Abimelech is close to the wall, a woman throws a grinding stone at him, breaking his neck.

A WOMAN DELIVERS THEBEZ FROM ABIMELECH
(JUDG 9:50-57)

Abimelech attacked Thebez, north east of Shechem, and captured the lower city.

All the men and women of Thebez fled with their leaders behind the walls of the upper city. They locked the gate, and prepared to defend the city.

Abimelech attacked the upper city, and was preparing to set fire to its gate.

Then a woman threw her grinding stone at Abimelech, and crushed his skull.

Immediately Abimelech gave his shield bearer this order: *Draw your sword and kill me, so people will not say: 'A woman killed him.*

So the shield bearer thrust his sword into Abimelech's chest.

When the Israelites fighting with Abimelech saw that he was dead, they all fled from Thebez to their villages. Thus Elohim, Israel's divine patron, punished Abimelech for murdering his seventy covenant partners.

The signature of a hero in the Bible is an unorthodox weapon. During the Iron I period the Philistines set the standards for military weapons forged from iron. Yet these state-of-the-art weapons wielded by warriors like Abimelech were no match for the unorthodox weapons wielded by the heroes lifted up by Yahweh to deliver the Hebrews from slavery to their enemies. Ehud uses a two-edged knife (Judg 3:16). Jael uses a mallet and a tent peg (Judg 4: 21). Shamgar uses an ox-goad (Judg 4:31). Samson uses the jawbone of an ass (Judg 15:15) and a woman of Thebez uses her grinding stone (Judg 9:53). Hebrew heroes use the tools with which they feed their households to protect them.

MODEL OF AN EGYPTIAN BAKERY
WOOD
ROYAL ONTARIO MUSEUM



Like the weapons of Jael the weapon of the woman of Thebez is unorthodox, but familiar. The same skills and strength that she uses to grind flour every day for her household, she uses to defend it. She crushes the head of Abimelech like she crush the heads of grain. The man who crushed the gate of her city is crushed by the woman he threatened.

Mortally wounded, Abimelech orders the warrior who carries his shield to kill him so that people cannot say that a woman killed him. Instead, Abimelech's shame-filled death became a taunt: *Who killed Abimelech son of Jerubbaal? Did not a woman throw a grinding stone at him from the wall of Thebez and killed him?* (2 Sam 11:21)

The tools of peace become the weapons of war. Ordinary people ...*beat their plowshares into swords* (Joel 3:10). The same things that women use to make their homes, they also use to defend them. They were not professional warriors; they were citizen soldiers. They fought in support of Yahweh the divine warrior. Their powerlessness made it clear to audiences that it was Yahweh, and not the woman from Thebez or Jael, who delivered the people from their enemies. Yahweh did not lift up professional soldiers to lead the Hebrews from slavery to freedom. The heroes in the books of Joshua, Judges, Samuel and Kings were ordinary men and women who use the tools of their trade to deliver the Hebrews from their enemies.

Men would have told the story of how A Woman Delivers Thebez from Abimelech to shame Abimelech, and any other man who would be king, for the heresy of forgetting that in ancient Israel only *Yahweh is Lord!* (Smith 1990: 46).

Jews who became Christians continued this faith tradition by professing that: *Jesus is Lord!* And later Muslims would pray: *Allahu Akbar!* or *Allah is Great!* The profession of faith affirms that no human may wield divine power. Abimelech had ignored Israel's profession of faith: *Yahweh is Lord!* (Ps 29; 47:2; Deut 10:17; 1 Chr 12:6) Therefore, Abimelech was sentenced to the shameful death of being killed by a woman.

Women would have told the story to teach one another that when men fail to feed and protect their households, women can and must fill the void. Older women would teach younger women that Yahweh can use even a woman to protect and provide for their households.

Household Archaeology enriches the understanding of A Woman Delivers Thebez from Abimelech by reconstructing how bread was made, by identifying where bread was made, the authority that bread making gave to the women of a household, and what it would mean for a woman to destroy her mill, even to defend her household from its enemies.

BREAD AND BEER MAKING

Bread and beer were staples for households in the world of the

Bible. Egypt's poor ate bread and drank beer. Egypt's rich drank beer and wine, and ate pigeon, duck, oxen and some forty kinds of bread and pastry. Egypt's dead prayed that the living members of their households would bring bread and beer to their tombs. The Egyptians had fifteen different words for bread.

Cereals are still more widely used as food in African countries today, than anywhere in the developed world. They make up more than seventy-five percent of the calories in the average diet in Africa. Most of these cereals are naturally fermented. Fermentation is one of the oldest methods for preparing and preserving foods. Different methods of fermentation are used to make alcoholic beverages, lactic acid, leavened breads and protein substitutes (Lee 2003.

<http://seafood.ucdavis.edu/iufost/lee.htm>).

EGYPTIAN TUBE FOR BAKING BREAD
TERRA COTTA
MICHAEL C. CARLOS MUSEUM
EMORY UNIVERSITY, ATLANTA



Archaeology and Ethnoarchaeology both play important roles in reconstructing how people in the world of the Bible brewed beer and baked bread. Archaeologists have recovered models placed in tombs illustrate how ancient Egyptians ground the grain, kneaded the dough and strained the mash for beer and bread. Ethnoarchaeology demonstrates that the people of Sudan today still brew *bouza* beer the way it was brewed in ancient Egypt (<http://www.fao.org/docrep/x2184e/x2184e07.htm>).



ISRAELITE BEER MUG (L) AND STRAINER (R)
JERUSALEM
1000 B.C.E.
9.5 CM
HAIFA UNIVERSITY, ISRAEL
©ERICH LESSING/ART RESOURCE

Baking bread and brewing beer used substantially the same ingredients and, to the point of fermentation, the same procedure. Grain was the main ingredient of both bread and beer (Quirke and Spencer, eds. 1992: 17-18). The most common type of beer was brewed by straining the mash from fermented bread into a vat. Dates

were used as to feed the yeast sugar

Bouza beer is a thick, pasty yellow brew (Journal of Food Technology in Africa 2002: 59-64). Brewers begin by coarsely grinding wheat, placing some of it in a wooden basin and kneading it with water into dough. The dough is cut into thick loaves which are very lightly baked. Meanwhile, the remaining wheat is moistened with water, germinated for three-five days, sun-dried, ground and mixed with the loaves of bread which are soaked in water in a wooden barrel. *Bouza* beer from a previous brewing is added to serve as a starter. The mixture is allowed to ferment at room temperature for twenty-four hours, following which the wort is sieved to remove large particles and diluted with water to a desired consistency.

Bouza beer has a very short shelf-life and is expected to be drunk within a day. Its pH increases to between 3.9 and 4.0 and its alcoholic content to between 3.8-4.2% within a twenty-four hour period (Ishida 2002: 81-88).

A Hymn to Ninkasi describes how Sumerians brewed beer (Matthews and Benjamin 2006: 256-257). They baked a bread (Akkadian: *bappir*) from barley or emmer wheat and sweetened with date honey. The dried bread was crumbled, and cooked with water and sprouted barley. This mash was spread on a large mat to cool. The mash was seasoned with date honey and fermented. Finally, it was filtered through a strainer into a storage jar. This beer was then drunk from a common bowl through long reeds or metal straws.

HYMN TO NINKASI
(Matthews and Benjamin 2006: 256-257)

You, Ninkasi, were born at the source of the rivers,
You were nursed by Ninhursag. . . .
She laid the foundations of your great city on the sacred lake,
She finished its walls for you. . . .
Your father was Enki-Nudimmud,
Your mother was Ninti, Queen of the Underworld. . . .

You, who soothe the mouth, knead the dough with a great paddle,
You sweeten the bread bowl with dates.
You bake the bread in a great oven;
You stack the barley in piles to sprout. . . .

You, who slake thirst, dampen the piles of barley malt,
While your great dogs guard them from thieves. . . .
You ferment the bread and malt in a jar,
Waves of foam rise and fall. . . .

You, divine patron of brewers, spread the mash on great reed mats,

You cool the wort. . . .
You press the mash with both hands,
You filter the honey sweet brew. . . .

Your strainer, Ninkasi, makes sweet music,
As you skillfully drain the wort into a storage jar. . . .
When you serve the filtered beer from the jar;
It gushes out like the Tigris and Euphrates. . . .

Beer is mentioned frequently in the Bible (Deut 29:6, 1 Sam 1:15; Isa 29:9; 28:7; 24:9). It was offered to Yahweh as a sacrifice (Num 28:7; Deut 14:26). Wise rulers (Prov 31:4), Nazirites (Num 6:3; Judg 13:4-14) and priests did not drink beer on days they were scheduled to enter the sanctuary (Lev 10:9). The poor drank beer to forget their suffering (Prov 31:6). Fools, who drank too much beer, became drunks (Ps 69:12; Isa 5:11+22; 56:12), started fights (Prov 20:1) and became false prophets (Micah 2:11).

PHILISTINE BEER JUG
TEL EITUN
TERRACOTTA
H: 22 CM
HAIFA UNIVERSITY, ISRAEL
©ERICH LESSING/ART RESOURCE
1000 B.C.E.



The taste of the bread baked by the Egyptians would have depended on the grain used to make the bread. Archaeobotanists like Mary Anne Murray excavating the workers' village at the pyramids on the Giza Plain in Egypt recover seeds using a flotation tank (Davies and Friedman 1998: 83). The flotation tank is a vat full of flowing water. The seeds of barley and emmer wheat float to the top of the water. Dirt and stones sink to the bottom. These ancient seeds contained little of the gluten that makes bread light and crispy today.



FLOTATION TANK
GIZA PLAIN

The large cake-like loaves baked by the Egyptians were high in calories and starch. They were baked over open fires in large bell-shaped pots. Each loaf fed several people at one meal more economically than

baking flat bread. By baking bread in pots the Egyptians could feed several hundred or even several thousand people quickly and efficiently.

EGYPTIAN BREAD POT
HARVARD SEMITIC MUSEUM
2775-2134 B.C.E.
TERRA COTTA
GIZA PLAIN
©[HTTP://WWW.FAS.HARVARD.EDU/~SEMITIC/HSM/GIZAUILTEGYPT.HTM](http://www.fas.harvard.edu/~semitic/hsm/GizaBuiltEgypt.htm)



Bread pots (Egyptian: *bedja*) were made upside down over a cone, leaving a smooth and regular interior that was lined with finer clay so the loaf would not stick to the sides (<http://www.fas.harvard.edu/~semitic/hsm/GizaBuiltEgypt.htm>). The thick walls were formed of coarse Nile mud mixed with chopped grass and sand. The grass chaff burned out when the pot was fired; leaving a highly porous wall that retained and regulated heat so that the outer crust would not burn before the interior of the loaf was baked. Bread pots came in all sizes for baking conical loaves that ranged in size from small buns to large cakes.



BREAD POT TODAY

In 1991 a back hoe gouged a huge trench to the east of the building on the Giza Plain where priests embalmed the body of Menkaure, the pharaoh who built the third pyramid. Out of that trench came thousands of pieces of broken pottery. When Mark Lehner examined the trench, he found two intact bakeries. The large bell-shaped pots in which the bread was baked littered the floor. Ancient tomb scenes show offering bearers carrying large conical loaves of exactly the same shape as these pots would have produced.

The woman of Thebez killed Abimelech with a grinding stone. This stone was the upper half of her grain mill. The physical strength of the woman of Thebez is remarkable. Everyday women during the Iron I period hauled water, toted fuel, milked goats, spun wool, weaved cloth, grinded grain and baked bread for themselves and their households (Herr and Boyd *BAR* 2002: 34-37, 62). The average weight of a grinding stone at *Tall Al-'Umayri* (Jordan), for example, is six pounds, thirteen ounces. In the 1998 excavation season alone some eighteen saddle stones and some forty-five grinding stones were recovered. The woman of Thebez undoubtedly would have been strong enough to throw a grinding stone. Her strength won the battle for Thebez and for Israel. She was an ordinary woman who used the ordinary resources at hand to achieve heroic results.

GRINDING STONES
TALL AL-'UMAYRI (JORDAN)

In the world of the Bible women used mills (Hebrew: *pelah tahtit*) to make flour. These mills had two parts. The lower part was the saddle -- a concave stone that was about one and one-half feet long and one-half to one and one-half feet wide. The upper part was the grinding stone -- a loaf-shaped stone (Hebrew: *pelah rekeb*; Spanish: *mano*). The grinding stone could be grasped easily with one hand. It was about as long as the saddle stone was wide.



Typically, grain mills were made of black basalt because the hard yet porous stone provides a rough surface and many cutting edges. Both parts of these mills, whole or broken, are found in Bronze and Iron Age sites throughout Syria-Palestine.



WOMEN FROM SYRIA-PALESTINE MAKING BREAD
ISRAEL MUSEUM
900-800 BCE
CLAY
©ART RESOURCE

Throwing her grinding stone was not only an act of strength, but also an act of desperation for Thebez. Once the grinding stone was gone, she could not longer make bake bread for her household which women did every day.

Basalt stone was a luxury in Thebez' region of Syria-Palestine. There were no local quarries, making it difficult for her to replace the grinding stone. Mills were so critical to the survival of a household that they could not be used as collateral for a loan. *No one shall take a mill or even the grinding stone as collateral, for that would be holding every member of the household hostage.* (Deut 24:6)

A Woman Delivers Thebez from Abimelech is not just celebrating the physical strength of Iron I period women. This is not just a human accomplishment; it is a divine action. These traditions are



Official spellings of all sites in Jordan now correspond to the Arabic spellings of the written words, not the Arabic pronunciations of the spoken words; thus, the word for an ancient mound, *tell* has become *tall*; it is, however, pronounced exactly the same as *tell*. 'Umayri's spelling as also changed from 'Umeiri.

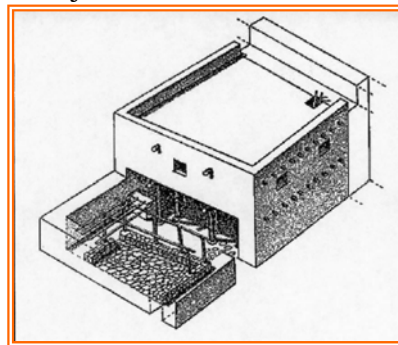
celebrating Yahweh who uses the powerless -- like a woman grinding grain -- to shame the powerful --like a man attacking a city.

The punishments of the powerful are proportionate (Latin: *talis*) to their crimes. Abimelech wanted to rule Shechem single-handedly as its head (Judg 9: 37), therefore he executed his seventy covenant partners upon a single stone (Hebrew: 'al). Therefore, he is executed by a single woman (Hebrew: *ishah achat*) who drops a single stone upon (Hebrew: 'al) his head (Janzen JSOT 1987: 35).

Most grain was ground in the first floor courtyard of pillared houses. But there is some evidence for grinding grain on the second floor of a house. In 1994 a three-hundred pound mill was recovered at Tall Al-'Umayri (Jordan) on top of mud brick rubble that once had been the upper story of a pillared house. Although it would have been difficult to carry such a heavy mill to the roof of the house, once it was there, women could grind grain more comfortably in the breeze under the shade of reed canopies.

Therefore the *strong tower* (Judg 9:51, NRSV) in A Woman Delivers Thebez from Abimelech may have simply been the roof of one of the pillared houses whose outer walls ringed the village like the house of Rahab in the Story of Rahab as a Host (Josh 2:15). Because of the labor involved in building pillared houses, they often served more than one purpose. From here, defenders could easily throw rocks, sling stones, shoot arrows and throw spears at invaders.

The traditions also celebrate the woman from Thebez for being wise, and shame Abimelech for being a fool. Only fools come close enough to the wall of a city and put themselves at risk of being killed by stones thrown at them by defenders. The strategy of the wise was to force the defenders of a city to waste their ammunition by firing it at the attackers who remained at a distance and safely out of harm's way.



PILLARED HOUSE AT WALL
TALL AL-'UMAYRI (JORDAN)
©RHONDA ROOT (ANDREWS UNIVERSITY)

Household Archeology reveals much about how women who bake bread for their men and their children have a remarkable authority over them. They also reveal that the woman of Thebez is not Joan of Arc. She is not a woman in a man's world. She is not on the ramparts of the inner

city with men, but on the roof of her own house adjoining the wall of the inner city. She is in women's space. On the roof of her house she grinds her grain with the other women of the household. By throwing her mill at Abimelech she is an unlikely hero with an unorthodox weapon who identifies this struggle as the end time duel between cosmos and chaos. The old world where she used the mill to grind flour for her household has come to an end. She will no longer be able without the mill to provide for her household. The food of the new world will be divine, not human. In the new world the godmother, not the mother of the household will provide for the people.



WHAT YOU HAVE LEARNED

- Two specific kinds of Post-Processual Archaeology are *Gender Archaeology* and *Household Archaeology* can be used to interpret a hero story in the book of Judges.
- Gender Archaeology is interested in how the work of men and the work of women in the world of the Bible are valued. Women who bake bread for their men and their children are not seen as powerless, but their authority to feed gives them remarkable control over those whom they feed.
- Household Archaeology is interested, for example, in some space in a house is shared by men and women, while some space is women's space, and some space is men's space.
- The Woman who delivers Thebez from Abimelech (Judg 9:50-57) uses the flour mill with which she feeds her household to defend it. Likewise she defends her household not by trespassing on men's space, but by remaining within women's space on the roof of the house.

Part Six

The Future of Biblical Archaeology



Part Six looks at two ways that archaeology will continue to contribute to the understanding of the Bible. Chapter 22 surveys universities in the United States and Canada with outstanding programs in archaeology in the world of the Bible. Chapter 23 identifies developing trends that will characterize archaeology in the world of the Bible.

CHAPTER 22 THE NEXT GENERATION



Chapter 22 surveys universities in the United States and Canada with outstanding programs in archaeology in the world of the Bible.

Outstanding universities in the United States and Canada still train students in the archaeology of the Near East. Among their promising graduates is a significant number who will focus their careers on the world of the Bible.

DEPARTMENT OF NEAR EASTERN LANGUAGES AND CIVILIZATIONS AT THE UNIVERSITY OF CHICAGO

The languages and civilizations of the Near East have always been a major part of the graduate degree programs in the Department of Near Eastern Languages and Civilizations at the University of Chicago (<http://humanities.uchicago.edu/depts/nelc/>).

William R. Harper, the University's founder and first president, was a specialist in Semitic languages and author of a Hebrew grammar widely used at universities and seminaries for more than seventy-five years.

Faculty at the University of Chicago pioneered the disciplines of Assyriology, Egyptology and ancient Near Eastern archaeology in the United States. The first program in Islamic civilization was also developed at the University Chicago.

An interdisciplinary approach to learning is a characteristic of the Chicago intellectual tradition. The Department of Near Eastern Languages and Civilizations collaborates with the Departments of Anthropology, Art History, Classics, Comparative Literature, History, Law, Linguistics, Political Science, and Religious Studies. Many of the

students and faculty also work at the Oriental Institute and Center for Middle Eastern Studies.

The department also publishes the Journal of Near Eastern Studies, which is one of the leading journals in Near Eastern and Islamic studies.

THE DEPARTMENT OF ART HISTORY AND ARCHAEOLOGY AT COLUMBIA UNIVERSITY

Graduate degrees in the Department of Art History and Archaeology at Columbia University are offered in a wide range of fields including Near Eastern art and archaeology (<http://www.columbia.edu/cu/arthistory/>). Students and faculty study urbanism, architectural space, and the context of visual images. Archaeology students here have access not only to programs in the department itself, but also to the Program in Archaeology that is a coalition of six departments at Columbia University, as well as the network of archaeologists, archaeological sites, and museum collections in New York City as a whole.

Students intern at the Lamont-Doherty Earth Observatory, New York University, the City University of New York, the New York Botanical Garden, the American Museum of Natural History, the Metropolitan Museum of Art, the Brooklyn Museum of Art, the National Museum of the American Indian, the South Street Seaport Museum and the Museum of the City of New York.

At Columbia University, archaeology is a multidisciplinary field practiced by faculty and students in the social sciences, natural sciences, and humanities. Faculty in the Departments of Anthropology, Art History and Archaeology, Classics, Historic Preservation, History, Middle Eastern Languages and Cultures, and the Center for Environmental Research and Conservation conduct research on prehistory, ancient society, or historical archaeology. There are also researchers at Lamont-Doherty in fields such as dendro-chronology, paleo-climatology, and remote sensing.

Some faculty in the Department of Art History and Archaeology participate in the interdepartmental program in the archaeology of pre-Columbian, medieval, and Mediterranean cultures. Others work at the Center for the Ancient Mediterranean focusing on Bronze Age cultures, Greek and Roman cultures, Byzantine cultures and Near Eastern art and Archaeology (<http://www.columbia.edu/cu/cam/>).

The Center for the Ancient Mediterranean at Columbia University links together faculty and students from various departments with an

interest in the ancient Mediterranean cultures. The Center coordinates courses, organizes conferences, and accesses resources such as the Columbia's Art Properties Collections, the Wallach Art Gallery and the artifacts from the excavations at Phlamoudhi (Cyprus). On-going fieldwork by faculty in New York City, upstate New York, the Southwest United States, Mexico, Belize, Honduras, Peru, Argentina, Italy, Egypt, Greece, Syria, Yemen, Sicily, France, Cyprus, Egypt and the Andes offer students opportunities to learn the craft of field archaeology

THE DEPARTMENT OF NEAR EASTERN LANGUAGES AND CIVILIZATIONS AT HARVARD UNIVERSITY

The Department of Near Eastern Languages and Civilizations at Harvard University offers eleven graduate programs in different fields of study, all of which are concerned in some way with the cultures of the Near East (<http://www.fas.harvard.edu/~nelc/>).

Widener Library has extensive holdings in Arabic, Armenian, Hebrew, Persian, Turkish and Yiddish literature (<http://hcl.harvard.edu/libraries/widener/history.html>). Faculty and students also have access to the Andover-Harvard Theological Library of the Harvard Divinity School and the Center for Jewish Studies.

The Harvard Semitic Museum has a unique collection of ancient and medieval artifacts representing many of the cultures of the Near East. For students interested in Biblical or other ancient Near Eastern studies, or in the archaeology of the Near East, a variety of opportunities for archaeological field work in the world of the Bible are available.

THE DEPARTMENT OF NEAR EASTERN STUDIES AT JOHNS HOPKINS UNIVERSITY

Founded in 1883, the Department of Near Eastern Studies of the Johns Hopkins University was the first in the United States to offer a doctorate in Near Eastern studies (<http://www.jhu.edu/neareast/>). The department now offers programs in Northwest Semitic Languages and Literatures including Biblical Studies, Egyptology, Assyriology, Ancient Law, and Near Eastern Archaeology.

Students study the literary traditions and material artifacts of Near Eastern civilizations using literary criticism, legal studies, anthropology and archaeology. The study of language and literature forms a major part of the program, with an emphasis on accessing traditions in their original languages. Consequently, even the archaeology program has a substantial language requirement.

DEPARTMENT OF NEAR EASTERN STUDIES AT THE UNIVERSITY OF MICHIGAN

The Department of Near Eastern Studies at the University of Michigan (<http://www.umich.edu/~neareast/>) offers programs in Near Eastern languages, literatures, civilizations, linguistics, history, ancient studies, Biblical studies, Egyptology, Mesopotamian and Ancient Near Eastern Studies, Ancient Israel, the Hebrew Bible, Judaism and Christianity in the Graeco-Roman World.

The Department of Near Eastern Studies partners with the departments of Anthropology, Classical Art and Archaeology, Classical Studies, Economics, History, History of Art, Judaic Studies, Linguistics, Political Science, and Sociology.

DEPARTMENT OF ANCIENT NEAR EASTERN, MIDDLE EASTERN AND ISLAMIC STUDIES AT THE UNIVERSITY OF TORONTO

The Department of Near Eastern, Middle Eastern and Islamic Studies at the University of Toronto studies the languages and literature, history and material culture of the cultures of the Near and Middle East, from prehistoric times until the present (<http://www.gradschool.utoronto.ca/programs/masters/Ancient-Near-Eastern-Studies-and-Middle-Eastern-and-Islamic-Studies.htm>). The department has faculty with specialties in the art, archaeology, languages, and literatures of Egypt, Syria-Palestine and Western Asia.

Department programs are rooted within the broad tradition of the humanities, and facilitate the study of the complex non-western cultures and societies that comprise the cultural legacy of the ancient Near East, and to provide greater understanding of their contribution to the historical development of western civilization and the contemporary cultures and societies of the Middle East today.

The Department partners with the departments of Classical Studies and History of Art to offer an interdisciplinary program in Ancient Studies.

DEPARTMENT OF NEAR EASTERN LANGUAGES AND CIVILIZATIONS AT THE UNIVERSITY OF PENNSYLVANIA

The Department of Near Eastern Languages and Civilization at the University of Pennsylvania (<http://www.sas.upenn.edu/nelc/>) and the Graduate Group in the Art and Archaeology of the Mediterranean World (<http://www.arthistory.upenn.edu/aamw/>) trains students in the art and archaeology of Classical and Near Eastern Civilizations. Drawing on the resources of the University of Pennsylvania Museum of Archaeology and Anthropology, the program incorporates fieldwork, museum internships, and university instruction.

The faculty of the Art and Archaeology of the Mediterranean World Graduate Group are from Classical Studies, History of Art, Anthropology and Near Eastern Languages and Civilizations, the Graduate School of Design, the University Museum's Applied Science Center for Archaeology and the Center for Ancient Studies and the Center for Advanced Judaic Studies. Students also have the opportunity to take courses at Bryn Mawr, Princeton, and Temple University, which form part of a regional academic consortium with the University of Pennsylvania.

The program engages in the interdisciplinary humanistic study and teaching of the cultures of the Near East as they express themselves in languages and traditions, as well as art, architecture, archaeology, and material culture. These cultures encompass the geographic region that includes Mesopotamia, Egypt, Israel, Syria, Arabia, Anatolia and Persia. Faculty teach Sumerian, Akkadian, Hittite, Egyptian, Hebrew, Aramaic, Arabic, Persian, and Turkish, and other languages of the region.

The deepest understanding of any Near Eastern culture and its impact on the cultures of the world in areas as diverse as writing, literature, religion, science and politics requires a profound knowledge of its languages. The department's approach to languages and traditions is interdisciplinary. It places primary sources in their historical, cultural and intellectual contexts and studies them using philology; literary criticism; history; archaeology; history of art and architecture; comparative law; religion; philosophy and ethics; psychology; gender studies; anthropology; theater, cinema, and other performance studies. For example, the program studies the Hebrew Bible in the light of the Near East; the origins of monumental architecture in Egypt in comparison with that of Mesopotamia; the origins of writing in Egypt, Mesopotamia, and Syria-Palestine.

Important assets for Near Eastern studies at University of Pennsylvania are the University of Pennsylvania Museum which provides hands-on contact with many of the texts and artifacts that are the primary sources of study. The Museum's Babylonian Section houses the second largest collection of cuneiform tablets in the United States and the most important collection of Sumerian literature in the world. The museum also houses the files of the Pennsylvania Sumerian Dictionary project. Faculty and graduate students are involved in translation and publication of the tablets and the preparation of the dictionary. In the Tablet Room, students can study original copies of the Sumerian Flood Story and part of the Gilgamesh Epic. The Egyptian Section houses approximately 40,000 Egyptian artifacts, by far the largest university collection in the United States and among the largest in the world. The

section continues more than a century of ongoing field work in Egypt. The Near East Section also has the largest collection of artifacts from Syria-Palestine outside of Israel.

CONSORTIUM FOR CLASSICAL AND MEDITERRANEAN ARCHAEOLOGY AT THE UNIVERSITY OF NORTH CAROLINA IN CHAPEL HILL AND DUKE UNIVERSITY

Duke University and the University of North Carolina at Chapel Hill employ one of the largest concentrations of archaeologists in the United States, distributed in departments of classics or classical studies, art history, religious studies, and anthropology. The Consortium for Classical and Mediterranean Archaeology brings these faculties together to enhance the archaeology programs in the respective departments. The Consortium fosters an interdisciplinary dialogue on methods, theory, and practice in classical archaeology and material culture, provide students access to seminars, excavations, and other research opportunities, academic advising, and develop avenues for curricular and extra-curricular interaction.

Graduate students at the University of North Carolina in Chapel Hill and at Duke University follow separate degree tracks in their respective departments, but as members of the consortium graduate group, students may take any number of courses and seminars outside of their department and institution. They may choose thesis and dissertation in another department or at another university. Students are encouraged to develop their program of study and research to integrate appropriate fields of study and areas of specialization not represented in their home department.

COTSEN INSTITUTE OF ARCHAEOLOGY AT THE UNIVERSITY OF CALIFORNIA IN LOS ANGELES

The Cotsen Institute of Archaeology at the University of California in Los Angeles offers interdisciplinary research programs, bringing together faculty from eleven departments. The Cotsen Institute houses 15 research laboratories, a computer laboratory, a reading room, a seminar room, and teaching facilities. Visiting scholars also contribute to seminars.

The Institute partners with other institutions like the J. Paul Getty Museum where students can acquire more advanced training in specialized components of archaeological method and theory. For example, there are programs in archaeological and ethnographic conservation with the Getty Museum.

Graduate programs train students in the best interdisciplinary practices and techniques of archaeological investigation. They provide

students with a strong background in archaeological interpretation and theory to enable them to undertake independent research, explanation, and preservation of archaeological heritage worldwide. Graduate programs are designed to provide broad training in theoretical perspective combined with in depth study of specific areas. These programs are interdisciplinary and draw on faculty from Anthropology, Art History, Classics, East Asian Languages and Cultures, Germanic Languages, History and Near Eastern Languages and Cultures.

The Institute provides a series of core courses for first-year students that provides training in archaeological theory and enables the formation of a yearly cohort of students. There is also training in a diverse range of laboratory methods, enabling students to select the methods and techniques best suited to their interest, geographic region and time period of study. Students work alongside their faculty to develop new technologies for demonstrating, analyzing and communicating the past to a variety of professional and public audiences.

LEVANTINE ARCHAEOLOGY LABORATORY AT THE UNIVERSITY OF CALIFORNIA IN SAN DIEGO

The Levantine Archaeology Laboratory at the University of California in San Diego promotes archaeological field and laboratory research conducted by archaeologists and related specialists. Archaeology at the UCSD is an interdisciplinary and collaborative endeavor practiced by scholars who hold faculty or research positions in a variety of departments, ranging from Anthropology to the Scripps Institute of Oceanography.

The mission of the Laboratory is to disseminate Levantine research by making use of resources, including laboratory facilities and study collections, to students and affiliated researchers; to develop resources that benefit archaeologists, academics and students, while being able to expand the support - laboratory, equipment, funding - for Levantine archaeological research.

Artifacts and samples recovered by the Edom Lowland Project (http://www.anthro.ucsd.edu/~tlevy/index_files/Edom.htm) in Jordan are analyzed and prepared for long-term storage at the Laboratory. There is also a Levantine Zoo-archaeology Laboratory.

CLASSICS AND ANCIENT MEDITERRANEAN STUDIES AT PENNSYLVANIA STATE UNIVERSITY

At Pennsylvania State University faculty in the Department of History and the Department of Classics and Ancient Mediterranean Studies hold joint appointments. Consequently, programs cover not only

ancient Greece and Rome, but also the Near East -- Egypt, Israel, Mesopotamia, and North Africa. The faculty also directs on-going excavations in Egypt, Israel, and Greece.

THE DEPARTMENT OF NEAR EASTERN LANGUAGES & CIVILIZATIONS AT YALE UNIVERSITY

Yale University offered the first formal program of study in Near Eastern Languages & Civilizations Near Eastern languages in the United States. Faculty here pioneered in the language and literature of biblical Hebrew and the history of Judaism. Arabic and Islamic studies, cuneiform studies, Semitic epigraphy, philology, linguistics, and Sanskrit studies.

Yale publishes the Journal of the American Oriental Society, the first professional journal devoted to Oriental Studies in the United States.

Charles C. Torrey, professor of Arabic and Semitic languages, directed the first American excavation in Syria-Palestine in 1900 and founded the American School of Archaeology at Jerusalem – today the Albright Institute -- in 1901. The Department sponsors archaeological field projects in Syria and Egypt.

Throughout its long history, the Department's mission has expanded to include Assyriology, Egyptology, the archaeology of Western Asia, Northwest Semitic and Ugaritic studies, Hittitology, and the contemporary Near East. The Department of Near Eastern Languages & Civilizations today maintains its strong sense of traditional humanist values, as well as leadership in developing and evaluating new techniques, perspectives, and resources for study of the Near East.

The graduate program of the Department of Near Eastern Languages & Civilizations partners with the departments of Anthropology, History, Medieval Studies, and Religious Studies to emphasize reflective scholarship based on sound knowledge of the languages, civilizations, and material cultures of the Near East.

The Department founded the Yale Egyptological Institute in Egypt. The Institute provides instruction in the philology and cultures of ancient Egypt and Nubia. Egyptology courses at Yale present the history and archaeology of ancient Egypt and neighboring regions from the earliest pre-dynastic through the Coptic period.

THE INSTITUTE OF NAUTICAL ARCHAEOLOGY AT TEXAS A&M UNIVERSITY

The Institute of Nautical Archaeology at Texas A&M University studies of the remains of boats and ships and the cultures that created and used them. The program therefore focuses on the history of wooden ship construction; seafaring through the ages; maritime commerce, cargoes, and ports; and the techniques used to record, to analyze and to conserve the remains of these activities.

The Nautical Archaeology Program is a part of the Department of Anthropology. Students and faculty conduct underwater archaeological research in various parts of the world, delving into time periods from prehistory to the recent past, and working with a plethora of societies and cultures.

THE CENTER FOR OLD WORLD ARCHAEOLOGY AND ART AT BROWN UNIVERSITY

The Artemis and Martha Sharp Joukowsky Institute for Archaeology and the Ancient World studies complex societies of the pre-modern era. Its programs promote the investigation, understanding, and enjoyment of the archaeology and art of the ancient Mediterranean, Egypt, and Western Asia. The Institute's faculty and facilities provide a campus hub for research and teaching in this complex and compelling part of the world, including active fieldwork projects, diverse graduate and undergraduate curricula, and public outreach activities. The Artemis A. W. and Martha Sharp Joukowsky Institute for Archaeology and the Ancient World is dedicated to the academic study and public promotion of the archaeology and art of the ancient Mediterranean, Egypt, and Western Asia -- extending from Anatolia and the Levant to the Caucasus, and including the territories of the ancient Near East.

The Program in Ancient Studies at Brown University is a collaboration, critical exploration, and truly interdisciplinary scholarship that seeks to bring together all those at Brown (faculty, graduate students, undergraduates, and staff) who are interested in the cultures, religions, and histories of ancient civilizations. Geographically, the ancient world represented at Brown comprises early China and India, West Asia (Mesopotamia, Iran, Anatolia, and Israel), Egypt, the Mediterranean (especially Greece and Italy), the early Islamic and Byzantine worlds as well as the Pre-Columbian Mesoamerican civilizations. Near Eastern civilizations have had a profound impact on the cultures of the world in areas as diverse as writing, literature, religion, science and politics. Therefore, while believing that the deepest understanding of any culture requires a profound knowledge of its languages.

CONCLUSION

The students who graduate from the rich variety of schools teaching archaeology will find there is still exciting work to be done in the area of Archaeology and the Bible. Nonetheless biblical archaeology will continue to be a craft of quiet perseverance rather than of high profile discoveries. There are still languages to be learned, more and more books and journal articles to be read and long physical seasons in the field. The material heritage of any culture does not reveal itself easily. Progress is made by the patient, the hardworking and by the gifted insights that such determination stimulates.



WHAT YOU HAVE LEARNED

- Programs of archaeology in the world of the Bible at various universities each have particular emphasis.
- Before entering a particular program for graduate study it is important to spend time identifying the particular program that best suits your interests and abilities as a student.

CHAPTER 23 BIBLICAL ARCHAEOLOGY TODAY



Chapter 23 describes developing trends that will characterize archaeology in the world of the Bible in the near future. War and political instability in Mesopotamia will move more projects into Turkey, Saudi Arabia, Syria or Kuwait. Assyriologists, Egyptologists and Biblical Archaeologists will work more together than in isolation on projects. Archaeologists from faith based universities will work alongside colleagues from religiously unaffiliated schools without being suspected of excavating to prove the Bible. Archaeologists will continue to develop working relationships with Cultural Resource Managers, the industry of Tourism and even good antiquities dealers to educate the public about their work and its interpretation.

Promising and on-going work by archaeologists like James K. Hoffmeier along the Coast Highway between Egypt and Syria-Palestine (Hoffmeier 1997, 2005, 2006); by Amihai Mazar at Tel Rehov in the Jordan Valley; by Israel Finkelstein, David Ussishkin and Eric H. Cline at Megiddo (<http://megiddo.tau.ac.il/>); and by Amon Ben-Tor at Hazor are almost certain to produce finds that will completely change the paradigms currently in place for understanding the culture of ancient Israel. The next generation will inherit much from the painstaking and professional work of these and other excavators.

The Gulf Wars in Kuwait, Iraq and Afghanistan destroyed much of the material heritage of these venerable cultures. The instability that these wars created also brought the work of foreign archaeologists there to a halt. Because of these tragedies archaeological resources were shifted away from Kuwait, Iraq and Afghanistan to Syria and to Turkey with the result that new and important finds in these countries will occupy the next generation of archaeologists for decades.

Technology continues to improve the ability of archaeologists to assemble material and to do research. Computers provide more access to more artifacts more quickly. They also allow sophisticated models for

comparison to be developed and applied. Projects like the Chicago Assyrian Dictionary are coming to completion and technology will allow the meticulous work of a century to be accessed and applied to a better understanding of the world of the Bible.

Archaeology in the world of the Bible during the twentieth century repeatedly divided and separated. Assyriologists specialized in the study of Mesopotamian cultures and many had little or no interest in the relationship of those cultures with ancient Israel. Egyptologists specialized in the study of Egypt and its neighbors in Africa and many likewise ignored the implications of their work for understanding the Bible. Even Biblical Archaeologists began referring to their field as *Levantine Studies*, *Middle Eastern Archaeology*, *Syro-Palestinian Archaeology* or *Archaeology of Palestine in the Iron Age*. Now, however, there is a growing realization that the problem was not with the term *Biblical Archaeology*, but with the way in which archaeologists working in Syria-Palestine were designing their excavations and using their material remains. Consequently, *Biblical Archaeology* is being reinstated as the title for the field (Zevit 2002).

The isolation of Assyriology, Egyptology and even Biblical Archaeology from Biblical Studies may have been necessary for each discipline to better define its own identity, and to achieve adequate confidence in its own area. The competition and the hostility are not gone, but there is likely to be less fragmentation in the community of learning where new graduates will be pursuing their careers. Biblical Studies now increasingly recognizes that it needs the resources and the enrichment which Assyriology, Egyptology and Archaeology bring to it. Fortunately, the number of scholars who actively participate in multiple specialties is increasing and will continue to increase during the twenty-first century.

Albright used all the traditions and artifacts that archaeologists had recovered in his day to understand the world of the Bible. Today, that archaeological archive has multiplied again and again. There are more artifacts and better tools to sort, analyze, compare, and interpret them. The work of Rainer Albertz (1994), Ziony Zevit (2001) and Mark S. Smith (2001, 2002) are only a few examples of how productive the results of this new detente will be (Wright 2002: 67). They will certainly inspire the next generation of archaeologists to be more inclusive in their own work.

In the Golden Age of Biblical Archaeology fieldwork was both inspired and funded by people of faith. As Biblical Archaeology came under more and more scrutiny a consensus began to develop that faith

contaminates learning. Archaeologists and biblical scholars did not become atheists, but they often assumed that secular, or at least non-sectarian, archaeology and biblical studies was to be preferred. Nonetheless some schools like the Seventh Day Adventist universities continued to field a distinguished group of archaeologists whose work during the twentieth century has been academically sound (Younker 2004). Their on-going work in the world of the Bible, in the academic community and in professional organizations now stands out as an example of how faith-based schools and how denominations as a whole, can successfully engage in scientifically based field archaeology, and yet remain active in biblical and religious studies. The next generation of archaeologists will certainly benefit from their example. Faith, even in archaeology and biblical studies, is not only compatible with learning; faith can inspire and motivate learning.

Material remains from the world of the Bible have always had a profound impact on both the archaeologists who recover them, and the public who view them. Today technology distributes images and interpretations of the artifacts on a scale almost unimaginable for most of the twentieth century. Artifacts become an immediate stimulus for community identities and social and political claims of all kinds. Biblical archaeology will play a new social role as a partner, not a patron in the study of the world of the Bible (Silberman 2003: 7-9).

The archaeology of emperors projected the world views of Western Europe onto the material remains recovered by archaeologists to validate their own cultures. The world view of one nation challenged the world view of another. It was a dangerous game, but there were few players. Then biblical archaeology brought the world view of Christians from the Reformation tradition in the United States into play. The material remains of the past were used to demonstrate that Judaism, Christianity and Islam were world views rooted in history, not in myth celebrating the recurring cycles of nature.

Today Britain, France, Germany or the United States are not the only nations who define themselves with the material remains of the past. More and more states and ethnic communities in the world of the Bible are demanding not only political recognition, but also cultural endorsement for their world views from the material remains of the past (King 1987; Silberman 2003: 9-10).

Archaeologists can no longer enjoy the private pleasure and undisturbed isolation to recover and interpret the material remains of the past. They now must interact immediately with all those institutions and organizations, who now manage, maintain, interpret, present and

negotiate the social significance of the cultural heritage in the world of the Bible.

Today's archaeologists are dialogue partners with governments, departments of antiquities, museums, ethnic groups, local residents, land owners, academic colleagues, religious leaders, financial backers, educators in local schools and the media. Archaeologists no longer control the interpretation of the artifacts they recover, but must negotiate with a wide variety of stake holders to understand what they have unearthed. Archaeologists are no longer just recovering, restoring and interpreting the material remains of the past. They are partners with those who use computer modeling to visualize what the site looks like today, and what it looked like yesterday. They work with museums to develop techniques to display and interpret their artifacts. They work with print, radio, television and internet media to responsibly popularize both the material remains and the stories that media demands to go with the artifacts.

The Gospel of Judas developed in Egypt among Coptic Christians. The papyrus fragments on which the Gospel of Judas was written had changed hands a number of times following its discovery in 1983. The Maecenas Foundation for Ancient Art in Switzerland approached National Geographic to authenticate and conserve the codex.

In 2000 the National Geographic Society assembled a small group of scholars to work on the project (<http://www.nationalgeographic.com/lostgospel/?fs=www9.nationalgeographic.com>). When the project and the exhibitions are complete, the codex will be returned to Egypt, where it will be housed in Cairo's Coptic Museum (<http://www.copticmuseum.gov.eg/english/default.htm>). The project is a model for the demands that will be placed on archaeologists in the future.

Marvin W. Meyer, who worked on the translation of the Gospel of Judas, reported informally at the 2007 Society of Biblical Literature Pacific Coast Region annual meeting at the Pacific School of Religion that his experience with the National Geographic project was generally positive, even if unorthodox by academic standards (<http://www.nationalgeographic.com/lostgospel/?fs=www9.nationalgeographic.com>).

The Geographic, for example, required Meyer to sign an order of suppression restricting him from making public any information about the project before even talking with him about the project. Nonetheless, the academic grapevine was already alive with rumors that the Gospel of

Judas project was in progress, so Meyer was not surprised after signing the order to hear what the Geographic had to propose.

The physical resources that the Geographic made available to project members were all state of the art. Nonetheless, security screeners searched Meyer coming and going from his work space as if he were working for the Los Alamos National Laboratory.

Academic translation projects like the New Revised Standard Translation are collaborative. The work is done by committee. Drafts are made, then discussed, then revised. Only when the entire committee votes to accept a translation does it go to press. The Geographic project segregated Meyer from the other translators. Their work became collaborative only after it was completed.

The Geographic model was not without precedent for an Egyptian text. According to the Letter of Aristeas arrangements not unlike those provided to Meyer and his colleagues by the Geographic were provided to the seventy-two Jewish scholars who translated the Bible from Hebrew into Greek by Ptolemy II Philadelphus (285-246 B.C.E.)

LETTER OF ARISTEAS

[HTTP://WWW.CCEL.ORG/C/CHARLES/OTPSEUDEPIG/ARISTEAS.HTM](http://www.ccel.org/c/charles/otpseudepig/aristeas.htm)

...Demetrius took the men and passing along the sea-wall, seven stadia long, to the island, crossed the bridge and made for the northern districts of Pharos. There he assembled them in a house, which had been built upon the sea-shore, of great beauty and in a secluded situation, and invited them to carry out the work of translation, since everything that they needed for the purpose was placed at their disposal. So they set to work comparing their several results and making them agree, and whatever they agreed upon was suitably copied out under the direction of Demetrius. And the session lasted until the ninth hour; after this they were set free to minister to their physical needs. Everything they wanted was furnished for them on a lavish scale. In addition to this Dorotheus made the same preparations for them daily as were made for the king himself - for thus he had been commanded by the king. In the early morning they appeared daily at the Court, and after saluting the king went back to their own place.... ...they met together daily in the place which was delightful for its quiet and its brightness and applied themselves to their task. And it so chanced that the work of translation was completed in seventy-two days, just as if this had been arranged of set purpose.

When the Gospel of Judas project was complete, the National Geographic orchestrated a grand debut for the project in Washington D.C. On the same day the Geographic opened the exhibition of the codex itself; released the Gospel of Judas (2006) edited in part by Meyer; and launched a website with a scholarly quality copy of the Coptic text and its English translation.

The next generation of archaeologists will be much more comfortable working with the corporations like the National Geographic Society. Academics will no longer segregate themselves from the media or from Cultural Resource managers. They will become active participants in the work of the preservation and publication of the material heritage of the past. As Cline – another National Geographic Society collaborator – enthusiastically proclaims: *It is high time that professional archaeologists, ancient historians, and mainstream biblical scholars take back their fields from the amateur enthusiasts, pseudoscientists, uninformed documentary filmmakers, and overzealous biblical maximalists and minimalists who have had, for the most part, free rein to do what they wish, without any regard to scientific method or an unbiased investigation for the truth. ...we as academics owe it to the general public....* (Cline 2007: xi)

Albright defined Biblical Archaeology. His work as an excavator, a ceramicist, a linguist and a cultural historian continues to be a lightening rod for the best of times and the worst of times for the discipline or, as Dever would label it, the *dialogue* between archaeologists working in the Near East and biblical scholars (Dever 1982: 103). At the time of his death colleagues hailed Albright as a 20th century genius (Running and Freedman 1975). Today he is honored more modestly as a 20th century, *American, Protestant* genius. Albright was not the scholar of all time, but a scholar of his time (Wright 2002:68).

As the director of the American School of Oriental Research at Johns Hopkins University (1929-1959), Albright pioneered the Biblical Archaeology Movement. Anticipating the canons of Processual Archaeology Albright brought remarkable scientific skills to the discipline. He knew the pottery chronology; he knew ancient languages, and he knew the cultures of Israel's neighbors. Albright professionalized Biblical Archaeology. In the details of excavation and interpretation he was a master. The genius of Albright was admirable, but isolating. The academic virtue of the next generation is not isolated genius but collegial collaboration. Genius today is assembling a good team, not enjoying uncontested control of all the evidence.

CONCLUSION

The beginning of the twenty-first century is a significant moment for archaeology and for the Bible. For perhaps for the first time since the traditions which the Bible preserves were written, but no longer told; perhaps for the first time since the world where those traditions developed came to an end; perhaps there is now a possibility to hear those traditions again, and to return to that ancient and fascinating world. The extraordinary achievements of archaeologists and biblical

scholars working together continues to reveal the world of the Bible, and the Bible itself in ways that are not only intriguing, but also inspiring. They have created a way back that will define a new way forward in understanding what these ancient and remarkable people had to say, and why they said it.



WHAT YOU HAVE LEARNED

- For the near future war and political instability in Iraq and Afghanistan will move more projects into Jordan, Cyprus, Turkey, Saudi Arabia, Syria or Kuwait.
- Assyriologists, Egyptologists and Biblical Archaeologists will work more together than in isolation on projects.
- Biblical Archaeologists from faith based universities will work alongside colleagues from religiously unaffiliated schools without being suspected of excavating to prove the Bible.
- Archaeologists will continue to develop working relationships with Cultural Resource Managers, the industry of Tourism and even good antiquities dealers to educate the public about their work and its interpretation.

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Massachusetts Institute of Technology
<http://archnet.org>

ArchNet is a project being developed at the MIT School of Architecture and Planning in close cooperation with, and with the full support of The Aga Khan Trust for Culture, an agency of the Aga Khan Development Network. The Aga Khan Trust for Culture is a private, non-denominational, international development agency with programs dedicated to the improvement of built environments in societies where Muslims have a significant presence.

Arnold, Philip P.

1991 "Eating Landscape: human sacrifice and sustenance in Aztec Mexico". In To Change Place: Aztec ceremonial landscapes : 219-232. Edited by David Carrasco. Niwot: University of Colorado.

Arnold translated "Atl Caualo" – a ritual for ending drought – from Nahuatl as the basis for his study. Bernardino de Sahagun, Florentine Codex: general history of the things of New Spain: Book 2, Chapter 20:42-46. Translated and edited by A.J.O Anderson and C. Dibble. 13 bks. Santa Fe: School of American Research and the University of Utah.

Art Resources

<http://www.artres.com/c/htm/Home.aspx>

Art Resource is an art stock photo archive licensing images to all media.

Ascalone, Enrico

2007 Mesopotamia: Assyrians, Sumerians, Babylonians.

Translated by R. Giammanco Frongia. Berkeley: University of California.

Brief overview of Mesopotamian civilization.

Asher-Greve, Julia M.

2004 "Gertrude L Bell, 1868-1926." In Breaking Ground: pioneering women archaeologists: 142-197. Edited by Getzel M. Cohen and Martha Sharp Joukowsky. Ann Arbor: University of Michigan.

With the publication of The Thousand and One Churches (1909) and a chapter in Amida (1910), Bell gained considerable recognition as an archaeologist. No other women worked in field archaeology before World War I in such remote areas and under such hazardous conditions. Bell conducted all her excavations alone, accompanied only by her cook, Fatuh, and other servants. Male archaeologists worked with teams of specialists. In spite of her experience, Bell was never invited to participate in an excavation. Excavation teams in the Near East were all male and not prepared to accept women.

Ashmolean Museum of Art and Archaeology
<http://www.ashmolean.org>

The Ashmolean Museum of Art and Archaeology at Oxford University is one of a few research collections of ancient Near Eastern artifacts at university and national museums around the world. Together with library resources, teaching and research in ancient Near Eastern Archaeology and languages its historic collection has laid so many of the foundations of the knowledge of the world of the Bible.

Atkinson, Kenneth

2008 Review of Qumran, The Site of the Dead Sea Scrolls: archaeological interpretations and debates (proceedings of a conference held at Brown University, November 17-19, 2002). Edited by Katharina Galor, Jean-Baptiste Humber and Jurgen Zangenberg. RBL 3.
<http://www.bookreviews.org>

Atkinson provides an update of relevant publications and their relationship to interpretation of Qumran.

Averbeck, Richard E., Mark W. Chavalas and David B. Weisberg
2003 Life and Culture in the Ancient Near East. Bethesda: CDL.

Avi-Yonah, Michael

2002 The Holy Land: a historical geography from the Persian to the Arab conquest, 536 B.C. -- A.D. 640. Carta: Jerusalem.

Avigad, N

1976 Bullae and Seals from a Post-Exilic Archive. Qedem iv; Jerusalem: Hebrew University.

Avni, Gideon

2007 "From Standing Stones to Open Mosques in the Negev Desert: the archaeology of religious transformation on the fringes." Near Eastern Archaeology 70: 124-138.

BBBB

Badone, Ellen and Sharon R Roseman

2004 Intersecting journeys: the anthropology of pilgrimage and tourism. Chicago: University of Illinois.

Bailly, Antoine, Robert Ferras and Denise Pumain, eds.

1995 Encyclopedie de Geographie. Paris: Economica.

Baines, John and Jaromir Malek

1980 Atlas of Ancient Egypt. New York: Facts on File.

Bakir, A.M.

1978 Notes on Middle Egyptian Grammar. Oxford: Aris & Phillips.

Bal, Mieke

1988 Death and Dissymmetry: The Politics of Coherence in the Book of Judges. Chicago: University of Chicago.

Balter, Michael

2005 The Goddess and the Bull: Catalhoyuk, An Archaeological Journey to the Dawn of Civilization. New York: Free.

Balter, Michael

2005 The Goddess and the Bull: Catalhoyuk, An Archaeological Journey to the Dawn of Civilization. New York: Free.

Bar-Yosef, Ofer

1998 "The Natufian Culture in the Levant: threshold to the origins of agriculture." Evolutionary Anthropology 6: 159-177.

Bar-Yosef describes the archeological evidence for the origins of agriculture in the ancient Near East. He addresses the question of why the emergence of farming communities there was an inevitable outcome of a series of social and economic circumstances that caused the Natufian culture to be considered the threshold for this major evolutionary change. Currently, archaeology points to two other centers of early cultivation, central Mexico and the middle Yangtze River in China that led to the emergence of complex civilizations. However, the

best-recorded sequence from foraging to farming is found in the world of the Bible. Its presence warns against the approach of viewing all three evolutionary sequences as identical in terms of primary conditions, economic and social motivations and activities, and the resulting cultural, social, and ideological changes.

Bar-Yosef, Ofer and F. R. Valla, eds.

1991 The Natufian Culture in the Levant. Ann Arbor: International Monographs in Prehistory.

Barth, F., ed.

1969 Ethnic Groups and Boundaries. Boston: Little, Brown.

Basola, Moses

1999 In Zion and Jerusalem: the itinerary of Rabbi Moses Basola (1521-1523). Edited with Notes and an introduction by Abraham David. Translated by Dena Ordan. Jerusalem: Bar-Ilan University.

The Ottoman sultan Salem I (1516-20) defeated the Persians (Iran) and then invaded Greater Syria. Salem destroyed Mamluk resistance in 1516 at Marj Dabaq, north of Aleppo taking control of present-day Lebanon, Syria, Jordan, and Israel. In the wake of the Ottoman conquest, Jews began to visit the world of the Bible. Moses Basola, an Italian, made a pilgrimage from 1521-1523. His journal describes details of his sea and land journey and of his visits to sites connected with the Bible and Jewish life, especially in Safed and Jerusalem.

Bass, George F.

1997 "Cape Gelidonya." *OEANE* i: 414-416

1996 "Cape Gelidonya." In Shipwrecks in the Bodrum Museum of Underwater Archaeology: 25-35. Edited by George F. Bass. Bodrum: Bodrum Museum of Underwater Archaeology.

1995 "Sea and River Craft in the Ancient Near East." In Civilizations of the Ancient Near East iii:1421-1431. Edited by Jack M. Sasson. New York: Charles Scribner's Sons.

1991 "Evidence of Trade from Bronze Age Shipwrecks." In Bronze Age Trade in the Mediterranean, edited by N.H. Gale, pp. 69-82. *Studies in Mediterranean Archaeology*, 90; Jonsered. Paul Astroms Forlag.

1988 "Return to Cape Gelidonya." Institute of Nautical Archaeology Newsletter 15, 2 (June): 2-5.

Bass interprets the wreck at Gelidonya in light of discoveries made at the wreck at Uluburun.

1975 Archaeology Beneath the Sea. New York: Walker.
Bass writes a popular account of the excavation.

1973 "Cape Gelidonya and Bronze Age Maritime Trade." In Orient and Occident, Festschrift Cyprus Gordon: 29-38. Edited by Harry A. Hoffner. Neukirchner-Vluyn: Verlag Neukirchner, Butzon and Bercker Kevelaer.

Bass refines the original excavation report.

1970 Archaeology Under Water. Second edition; place: Harmondsworth.

Bass summarizes the history and techniques of underwater archaeology.

1966 Archaeology Under Water. New York: Frederick A. Praeger.

Bass, George F., ed.

1967 "Cape Gelidonya: A Bronze Age Shipwreck." Transactions of the American Philosophical Society 57, 8:1-177).

This full excavation report describes a ship that sunk in the Bay of Antalya (Turkey) around 1200 B.C.E. The personal possessions of the crew and its stone anchor link the ship to Late Bronze Age Syria-Palestine or Cyprus. Egyptian art associated the ship's cargo of four-handled copper ingots and tin ingots only with merchants from Syria-Palestine. Therefore, "Phoenicians" in the Illiad of Homer were merchants from Syria-Palestine like those on the shipwreck at Cape Gelidonya.

Batchelor, J.

1892 "Specimens of Ainu Folklore." Transactions of the Asiatic Society of Japan 20: 216-227.

Batto, Bernard F.

1992 Slaying the Dragon: mythmaking in the biblical tradition.
Westminster/John Knox: Louisville.

Batto argues that the "Sea of Reeds" is – as the Septuagint translates it – the Red Sea, a geographical metaphor for the "Sea at the

End of the Earth” or Chaos. At the Red Sea Yahweh – the Creator – confronts the Red Sea – Chaos – to bring the new world of Israel to birth.

Battuta, Ibn

1986 Travels in Asia and Africa, 1325-1354. Translated by H.A.R. Gibb.
New Delhi: Manshram Manoharlal.

Beitzel, Barry, ed.

2006 Biblica The Bible Atlas: A Social and Historical Journey through the Lands of the Bible. Lane Cove: Global.

Biblica is an atlas written for general readers rather than for students, which brings the world of the Bible to life and enabling its reader to better visualize and appreciate the incidents and narratives in the Bible.

Bell, Gertrude

1909 A Thousand and One Churches. London: Hodder and Stoughton.

2001 The Desert and the Sown: the Syrian adventures of the female Lawrence of Arabia. Lanham: Cooper Square.

2005 Persian Pictures. New York: Anthem.

Gertrude Bell Archive

<http://www.gerty.ncl.ac.uk/>

The Gertrude Bell papers consist of about 1,600 detailed and lively letters to her parents, of her 16 diaries, which she kept while she was traveling, and of some 40 packets of miscellaneous items. There are also about 7000 photographs, taken by her from 1900-1918. Those of Middle Eastern archaeological sites are of great value because they record structures which have since been eroded or, in some cases, have disappeared altogether, while those of the desert tribes are of considerable anthropological and ethnographical interest.

Belzoni, Giovanni Battista

1821 Narrative of the Operations and Recent Discoveries Within the Pyramids, Temples, Tombs and Excavations in Egypt and Nubia. London: John Murray.

Ben-Ezer, Ehud

1997 Courage. The Story of Moshe Dayan. Tel Aviv: Ministry of Defence.

Ben-Ezer describes Dayan as a shrewd and intuitive explorer of ancient sites, who collected antiquities that were ignored or abandoned

by archaeologists or state agencies – antiquities that would have otherwise been destroyed.

Benjamin, Don C.

2004 The Old Testament Story, an introduction. Minneapolis: Fortress.

1983 “Legal Instruction concerning Charges of Premarital Promiscuity against a Daughter from an Urban Family.” In Deuteronomy and City Life: a form criticism of texts with the word *city* (‘ir) in Deuteronomy 4:41-26:19: 222-236+300-301. Lanham: University Press of America.

The city played an important role in Israel’s understanding of itself and of its divine patron. The urban traditions in Deuteronomy are key to Israel’s theology of the city. They were developed by Israelites who encountered Yahweh in the city, and fulfilled their obligations to Yahweh through urban institutions like the gate court. Here Yahweh freed the oppressed -- defendants charged with unwitnessed murders; victims in unsolved crimes; parents of incorrigible children; wives accused of promiscuity; women victims of sexual assault, and widows without heirs.

2004 The Old Testament Story : an introduction. Minneapolis : Fortress.

Bentley, R. Alexander and Herbert D.G. Maschner

2008 “Introduction: On Archaeological Theories.” In Handbook of Archaeological Theories: 1-10. Edited by R. Alexander Bentley, Herbert D.G. Maschner and Christopher Chippindale. Lanham: Rowman & Littlefield.

Bentley, R. Alexander, Herbert D.G. Maschner and Christopher Chippindale, eds.

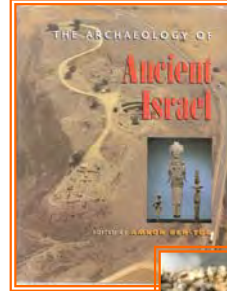
2008 Handbook of Archaeological Theories. Lanham: Rowman & Littlefield.

Bentley, Maschner and Chippindale gather original, authoritative articles on the theories of archaeology. These archaeologists provide a comprehensive picture of the theoretical foundations by which archaeologists contextualize and analyze artifacts. This anthology demonstrates the immense power that theory has for building interpretations of the past, while recognizing the wonderful archaeological traditions that created it. An extensive bibliography is included.

Ben-Tor, Amnon, ed.

1992 The Archaeology of Ancient Israel. Translated by R. Greenberg. New Haven: Yale University.

The Archaeology of Ancient Israel (1992) edited by Amnon Ben-Tor also uses the archaeological calendar as an overall outline for the book which covers the Neolithic period to Iron Age III. Some chapters also follow the archaeological calendar. For example, Gabriel Barkay subdivides *The Iron Age II-III* into chronological periods: *The Iron Age IIa – the Tenth-Ninth centuries B.C.E.*, *The Iron Age IIb – the Eighth Century B.C.E.*, *The Iron Age IIIa – the Seventh Century B.C.E.*, *Archaeology of Jerusalem in the Iron Age II-III*, and *The Iron Age IIIb – the Sixth Century B.C.E.* Other chapters, however, are outlined thematically. For example, Mazar subdivides *The Iron Age I* into themes: *The Decline of Egyptian Domination in Canaan*, *The settlement of the Philistines and Other Sea Peoples in Canaan*, *Material Culture of the Israelite Tribes During the Period of the Judges*, *Canaanite Culture and the Rise of Phoenician Culture*, *Transjordan*, *The Development of Metallurgy, Art, Writing and Literacy*, *Trade Relations*, and *Transition to the Monarchy*.



Ben-Tor, Amnon and M.T. Rubiato
1999 "Excavating Hazor – Did the Israelites Destroy the Canaanite City?"
BAR 25, 3: 22-39.

Ben Yehuda, Eliezer
1948 A Complete Dictionary of Ancient and Modern Hebrew. Tel Aviv:
La'am.

Bertalanffy, Ludwig von
1968 General Systems Theory: foundations, development, applications.
New York: G. Braziller.

Bertman, Stephen
2005 Handbook to Life in Ancient Mesopotamia. New York: Oxford
University.

Betro, Maria Carmela
1996 Hieroglyphics: the writings of ancient Egypt. New York: Abbeville.

Betz, Hans Dieter, Don S. Browning, Vernd Janowski and Eberhard
Jungel, eds.
2007 Religion Past and Present: encyclopedia of theology and religion.
Leiden: Brill.

Religion in Geschichte und Gegenwart is the most comprehensive
and authoritative existing guide to the study of religion. The RGG has

been the gold standard of European encyclopedias of religion and the standard of excellence in reference works in religion for almost a century. Religion Past and Present is an extension within this tradition of German excellence. Entries on Archaeology and the Bible are edited by Hermann Michael Niemann and Guntram Koch.

Bible and Interpretation

<http://www.bibleinterp.com/>

Bible and Interpretation, edited by Mark W. Elliott, is dedicated to delivering the latest news, features, editorials, commentary, archaeological interpretation and excavations relevant to the study of the Bible for the public and biblical scholars.

Bible and Women Pilgrims

<http://www.umilta.net/egeria.html>

Bierling, Neal

2002 Philistines: giving Goliath his due. Marco Polo Monographs 7; Warren Center: Shangri-La.

Bierling uses archaeology, the Bible and written artifacts from Egypt, Syria-Palestine and Mesopotamia to reconstruct Philistine culture.

Phoenix Data Systems

<http://www.phoenixdatasystems.com/>

An picture resource for Syria-Palestine, and especially Petra, containing individual images, and series that can be manipulated.

Binford, Lewis R.

2001 Constructing frames of reference: an analytical method for archaeological theory building using hunter-gatherer and environmental data sets. Berkeley: University of California.

Binford's masterpiece on hunting and gathering cultures with charts, graphs, developing eleven "problems," eighty-six "propositions" and one hundred twenty-six "generalizations."

1962 "Archaeology as Anthropology." American Antiquity 28, 2: 217-225.

Binford defines the goals of Processual Archaeology.

Binford, Lewis R. and Sally Binford

1968 New Perspectives in Archaeology

New or Processual Archaeologists explain that archaeological data has great potential for learning about past social and economic systems. Outlines the general principles of Processual Archaeology.

Bintliff, John

1991 "The contribution of an *Annaliste*/structural History Approach to Archaeology." In The Annales School and Archaeology: 1-33. Edited by John Bintliff. London: Leicester University.

Bird, Phyllis

1974 "Images of Women in the Old Testament". In Religion and Sexism: images of women in the Jewish and Christian Traditions: 41-88. Edited by Rosemary Radford Ruether.

Bird describes her hermeneutics for gendered archaeology.

Blaiklock, E.M. and R.K. Harrison, eds.

1983 The New International Dictionary of Biblical Archaeology. Grand Rapids: Zondervan.

Blenkinsopp, Joseph

2002 "The Bible, Archaeology and Politics or The Empty Land Revisited." JSOT 27: 169-187.

Since its inception with Napoleon's invasion of Egypt in 1798, archaeology in the Middle East has always been involved in politics reflected, for example, in the mapping Syria-Palestine and renaming settlements and physical features taken over from the local Arabs. The myth of the empty land is a common assumption in the politics of archaeology. Blenkinsopp examines publications on the archaeology of the Neo-Babylonian period in Syria-Palestine to demonstrate that the myth of the empty land still influences scholarship.

Bloch-Smith, Elizabeth

2003 "Bronze and Iron Age Burials and Funerary Customs in the Southern Levant" Near Eastern Archaeology (2003): 105-115.

2003 "Israelite Ethnicity in Iron I: archaeology preserves what is remembered and what is forgotten in Israel's history. JBL 122: 401-425.

2002 "Life in Judah from the Perspective of the Dead." Near Eastern Archaeology 65: 120-130.

2002 "Death in the Life of Ancient Israel." In Sacred Time, Sacred Space: 139-143. Winona Lake: Eisenbrauns.

1992 Judahite Burial Practices and Beliefs about the Dead. Sheffield: JSOT.

Bloch-Smith, Elizabeth and Beth Alpert Nakhai

1999 "A Landscape Comes to Life: The Iron Age I". Near Eastern Archaeology 62: 62-92+100-127.

Bogdanos, Matthew

2005 Thieves of Baghdad: one Marine's passion for ancient civilizations and the journey to recover the world's greatest stolen treasures. New York: Bloomsbury.

Bolen, Todd

Survey of Western Palestine: The Maps.

<http://www.bibleplaces.com/surveywesternpalestinemaps.htm>

Bolen has produced an electronic edition of Kitchner and Condor's maps. The surveyors distinguished between vineyards, orchards, gardens, woods, scrubs, palms, and fir trees. Locations were designated for winepresses, milestones, tombs, wells, cisterns, and caves. The survey covered all of the territory west of the Jordan River between Tyre in the north and Beersheba in the south.

Boling, Robert G. and G. Ernest Wright

1982 Joshua: a new translation with notes and commentary. Garden City: Doubleday.

Borghouts, J.F.

1994 "Magical Practices Among the Villagers." In Pharaoh's Workers: the villagers of Deir el Medina: 119-130, 182-185. Edited by Leonard H. Lesko. Ithaca: Cornell University.

Borowski, Oded

2006 "Ecological Principles in the Bible: surviving in the hill country." In "I Will Speak The Riddles of Ancient Times": archaeological and historical studies in honor of Amihai Mazar on the occasion of his sixtieth birthday, vol 1: 401-406. Edited by Aren M. Maeir and Pierre de Miroschedji. Winona Lake: Eisenbrauns.

2003 Daily Life in Biblical Times. Atlanta: Scholars.

Borowski uses archaeology and the Bible to describe Syria-Palestine, the peoples who lived there, their households, the economies of their cities and villages, farming, herding, trade, government, military, worship, art, music and writing.

1988 "Ceramic Dating." In Benchmarks in Time and Culture: an introduction to the Palestinian archaeology: 223-233. Edited by Joel F. Drinkard, Jr., Gerald L. Mattingly and J. Maxwell Miller. Atlanta: Scholars.

1982 "Sherds, Sherds, Sherds." BAR 8/4: 67-68.

Borowski briefly describes how to excavate, record and interpret pottery.

Bourdieu, Pierre

1984 Distinction: A social critique of the judgement of taste
Translated by R. Nice. Cambridge: Harvard University.

Bow, Beverly

2003 "Sisterhood? stories of eligibility and encounter in ancient Israel." In Life and Culture in the Ancient Near East: 205-216. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.

Bradley, Richard

2000 An Archaeology of Natural Places. London: Routledge.

Braudel, Fernand

1980 "The Situation of History in 1950." In On History : 6-22. Translated by Sarah Matthews. Chicago: University of Chicago.

1992 The Mediterranean and the Mediterranean World in the Age of Philip II. Translated by Sian Reynolds. San Francisco: HarperCollins.

Bremmer, J.N.

2007 The Strange World of Human Sacrifice. Studies in the History and Anthropology of Religion, 1; Leuven: Peeters.

Bremmer edits studies on human sacrifice among the Aztecs and the literary motif of human sacrifice in medieval Irish literature. Three cases of human sacrifice in Greece are analyzed: a ritual example, a mythical case, and one in which myth and ritual are interrelated. Early Christians were accused of practicing human sacrifice, and Christians themselves accused Christian heretics of practicing human sacrifice, just as the Hebrews of ancient Israel accused their neighbors of practicing human sacrifice. At the beginning of the Old Kingdom the Egyptians buried the pharaoh's slaves to serve the pharaoh into the afterlife. In India the godmother Kali was worshipped with human sacrifice. In Japan

human sacrifice took the form of self-sacrifice, and there may well be a line from these early sacrifices to the ritual of the «kamikaze».

Brewer, Douglas J. and Emily Teeter
2007 Egypt and the Egyptians. 2nd edition; New York: Cambridge University.

Brichto, Hebert C.
1973 "Kin, Cult, Land and Afterlife – a biblical complex." HUCA 44:27-33.

Members of a household were expected to honor the father and mother of the household by seeing that they were properly buried in the tomb of the household and to celebrate thanksgiving meals at which the dead were remembered.

Bright, John
2000 A History of Israel. Philadelphia: Westminster.
1976 Covenant and Promise: the prophetic understanding of the future in pre-exilic Israel. Philadelphia: Westminster.
1953 The Kingdom of God: the biblical concept and its meaning for the Church. Nashville: Abingdon-Cokesbury.

Brody, Aaron J.
2008 "The Specialized Religions of Ancient Mediterranean Seafarers." Religion Compass 2, 4: 444 – 454.

Ancient sailors developed unique stories and rituals to help them face the dangers of sailing. They honored divine patrons who could bless or curse their voyages. They worshipped their divine patrons in sanctuaries built at harbors and on promontories.

Bronner, Leila Leah
1993 "Valorized or Vilified? The Women of Judges in Midrashic Sources." In Feminist Companion to Judges: 91-???. Edited by Athalya Brenner. Sheffield: Sheffield University.

Bronze Age Shipwreck Excavation at Cape Gelidonya, 1960
<http://ina.tamu.edu/capegelidonya.htm>

Bronze Age Shipwreck Excavation at Uluburun, 1984-1994
http://ina.tamu.edu/ub_main.htm

Brooklyn Museum of Art
1997 Brooklyn: Brooklyn Museum of Art.

Broshi, Magen

1986 "Religion, Ideology and Politics and their Impact on Palestinian Archaeology" Israel Museum Journal 6:17-32.

Broshi, Magen and Hana Eshel

2004 "Three Seasons of Excavations at Qumran." Journal of Roman Archaeology 17: 321-332

In 2001-2002 Eshel (Bar-Ilan University) and Broshi (Israel Museum) led excavations focused on finding where the members of the Qumran community lived. They concluded there were heavily traveled paths between Qumran and the surrounding caves. They found three artificial caves used as dwellings, and a circle of stones used as a tent site. The trails between these caves and Qumran were littered with first century Common Era coins and sandal nails.

2003 "Whose Bones? New Qumran Excavation, New Debates." BAR 29/1: 26-33, 71.

2003 "Excavations at Qumran, summer of 2001." IEJ 53, 1: 61-73.

2000 "Daily Life at Qumran." Near Eastern Archaeology 63: 136-137.

During their 1996-1997 excavations, Broshi and Eshel concluded that Qumran housed an ascetic community of some 150-200 people who lived in caves, huts or tents around Qumran.

Brown, William P.

2000 "Introduction to John Bright's A History of Israel." In A History of Israel: 1-22. By John Bright. Louisville: Westminster John Knox.

2000 "Appendix: An Update in the Search of Israel's History." In A History of Israel: 465-485. By John Bright. Louisville: Westminster John Knox.

Bryant, Victor

"The Origins of the Potter's Wheel."

http://www.ceramicstoday.com/articles/potters_wheel2.htm

Bryce, Trevor

2004 Life and Society in the Hittite World. New York: Oxford University

Buckley, Thomas and Alma Gottlieb, eds.

1988 From Blood Magic: the anthropology of menstruation, Berkeley: University of California.

Budge, E. A. Wallis

1978 Egyptian Language: easy lesson in Egyptian hieroglyphics with sign list. London: Routledge.

Buchholz, Hans-Gunter and Vassos Karageorghis
1973 Prehistoric Greece and Cyprus. New York: Phaidon.

This standard work on pre-historic Greece and Cyprus begins with the Stone Age and ends with the Mycenaen Period with an emphasis on architecture and other technologies including wall painting, sarcophagi and stelai, metal vessels, sculpture, ivories, jewelry, pottery, seals and tools.

Bullis, Douglas

2000 "The Longest Hajj: the journeys of Ibn Battuta, part 1 – from pilgrim to traveler, Tangier to Makkah." Saudi Aramco World 51,4 (July/August): pp-pp

2000 "The Longest Hajj: the journeys of Ibn Battuta, part 2 – from riches to rags, Makkah to India." Saudi Aramco World 51,4 (July/August): pp-pp.

2000 "The Longest Hajj: he journeys of Ibn Battua, part 3 – from travler to memorist, China, Mali and home." Saudi Aramco World 51,4 (July/August): pp-pp.

Bunimovitz, Shlomo

2007 "Children of Three Paradigms: my generation in Israeli archaeology." BAR 33 (Sept/Oct): 30+80

Three schools of archaeology continue to influence Israeli excavators: Cultural History, Processual Archaeology and Post Processual Archaeology. All three of these disciplinary revolutions influence the research agendas of archaeologists like Shlomo Bunimovitz and Zvi Lederman working at sites like Tel Beth-Shemesh.

Bunimovitz, S. and A. Faust

2003 "Building Identity: the four-room house and the Israelite Mind." In Sybiosis, Symbolism, and the Power of the Past: Canaan, Ancient Israel, and their neighbors from the Late Bronze Age through Roman Palaestina: 411-423. Edited by W.G. Dever and S. Gittin. Winona Lake: Eisenbrauns.

Bunyan, John

1998 The Pilgrim's Progress. New York: Oxford University

Burgh, Theodore W.

2006 Listening to the Artifacts: Music Culture in Ancient Palestine. New York: T&T Clark.

Iconography, figurines and other artifacts recovered by archaeologists and musical traditions in the Bible underline the importance of music in ancient Israel as well as identify the musical instruments that the Hebrews played, indicate what instruments were gender specific and in what settings music was performed.

Burkert, Walter

1972 Homo Necans: the anthropology of ancient Greek sacrificial ritual and myth, Berlin: De Gruyter.

Building on the work of Konrad Lorenz -- On Aggression (1963) -- Burkert studies human sacrifice in Hellenistic or western Mediterranean cultures. He argues that it is connected with the evolution of humans as hunters. Sacrifice processes the guilt which humans experience in killing fellow animals. It allows humans to deify their victims as an act of reconciliation for killing them, and to reaffirm their common bond as fellow animals.

Burleigh, Nina

2007 Mirage: Napoleon's Scientists and the Unveiling of Egypt. San Francisco: HarperCollins.

Burleigh profiles the ten most prominent members of the scholars Napoleon drafted to introduce Europe to the culture of ancient Egypt -- like the artist Dominique-Vivant Denon, the mathematician Gaspard Monge, the inventor Nicolas-Jacques Conte.

Burton, Richard F.

1964 Personal Narrative of a Pilgrimage to Al-Madinah & Meccah. Edited by Isabel Burton. New York: Dover.

1961 The Lake Regions of Central Africa, a Picture of Exploration. 2 vols. New York: Horizon.

Byzantine Studies Page

<http://www.fordham.edu/halsall/byzantium/>

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Cahill, Jane M. and James A. Passamano

2007 "Full Disclosure Matters." Near Eastern Archaeology 70, 4 (December): 194-196.

Cahill and Passamano discuss copyright and fair use, the need to provide incentives for archaeologists to share their data, the best methods for achieving uniforming in data archiving.

Canaan and Ancient Israel, University of Pennsylvania Museum
<http://www.museum.upenn.edu/Canaan/Bibliography.html>

While many are familiar with the ancient Canaanites and Israelite peoples through stories from the Bible, this exhibit explores the identities of these peoples in pre-historical times through the material remains that they have left behind

Callaway, Joseph A.

1979 "Dame Kathleen Kenyon 1906-1978." Biblical Archaeologist 42: 122-125.

Campana, D.V. and P. J. Crabtree

1990 "Communal Hunting in the Natufian of the Southern Levant: The social and economic implications." Journal of Mediterranean Archaeology 3: 233-243.

Cargill, Robert R.

"Virtual Qumran"

<http://virtualqumran.blogspot.com/>

"Ancient Qumran: A Virtual Reality Tour (the movie)" is based upon the UCLA Qumran Visualization Project's digital model of Qumran, and takes the viewer on a tour of the reconstructed settlement of Khirbet Qumran. It offers a history of the archaeological excavation of the site and the surrounding caves, and discusses the different theories concerning the nature and expansion of Qumran. This film is an updated and expanded version of the live-narration movie playing at the San Diego Natural History Museum as a part of their exhibition of the Dead Sea Scrolls.

Carrasco, David

1991 "The Sacrifice of Tezcatipoca: to change place". In To Change Place: Aztec ceremonial landscapes: 31-57. Boulder: University of Colorado.

Carrasco applies Jonathan Z. Smith, To Take Place: toward theory in ritual (1987) and Claude Levi-Strauss, The Savage Mind (1966) to Aztec culture.

Carter, Howard

1954 The Tomb of Tutankhamen. New York: E.P. Dutton.

Carter narrates and illustrates the discovery and interpretation of the tomb of Tutankhamen.

Casson, Lionel

1974 "The World's First Museums." In Gaster Festschrift: 53-57. New York: Ancient Near Eastern Society.

2001 Libraries in the Ancient World. New Haven: Yale University.

Champollion, Jean Francois

1814 Egypt under the Pharaohs.

Chaney, Marvin L.

1983 "Ancient Palestinian Peasant Movements and the Formation of Premonarchic Israel." In Palestine in Transition: the emergence of ancient Israel: page-page. Edited by David Noel Freedman and David Frank Graf. Sheffield: Almond.

Chapman, Rupert L.

1990 "Pioneers of Biblical Archaeology." In Archaeology and the Bible: 9-36. Edited by Rupert L. Chapman, Peter G. Dorrell and Jonathan N. Tubb. London: British Museum.

Chapman, Rupert L., Peter G. Dorrell and Jonathan N. Tubb, eds.

1990 Archaeology and the Bible. London: British Museum.

Chapman, Dorrell and Tubb survey the contribution of the Palestine Exploration Fund to the development of biblical archaeology.

Charlesworth, James H. and Walter P. Weaver, eds.

1992 What Has Archaeology to Do with Faith? Philadelphia: Trinity Press International.

Chavalas, Mark W.

2003 "Pusurum, a Homeowner from Khana-Period Terqa." In Life and Culture in the Ancient Near East: 153-170. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.

Chavalas, Mark W. and K. Lawson Younger, eds.

2002 Mesopotamia and the Bible. Grand Rapids: Baker.

Cheng, Jack and Marian Feldman, eds

2007 Ancient Near Eastern Art in Context: studies in honor of Irene J.

Winter by her students. Culture and History of the Ancient Near East, 26; Leiden: Brill.

Chicago Assyrian Dictionary Project
<http://oi.uchicago.edu/research/projects/cad/>

The Chicago Assyrian Dictionary (CAD), initiated in 1921 by James H. Breasted, is compiling a comprehensive dictionary of the various dialects of Akkadian, the earliest known Semitic language that was recorded on cuneiform texts that date from 2400 B.C.E -100 which were recovered from excavations at ancient Near Eastern sites. The Assyrian Dictionary is a joint undertaking of resident and non-resident scholars from around the world who have contributed their time and labor over a period of seventy years to the collection of the source materials and to the publication of the Dictionary.

Chiera, Edward
1938 They Wrote on Clay: the Babylonia tablets speak today. Edited by George Cameron. Chicago: University of Chicago.

Chilton, Bruce
2008 Abraham's Cure: the roots of violence in Judaism, Christianity, and Islam. New York: Doubleday.

Chilton investigates child sacrifice in the Bible, particularly the sacrifice of Isaac. He studies the ritual of human sacrifice in the world of the Bible and in the Bible itself; the sacrifice of Jesus and of the early martyrs; and Ibrahim's sacrificial vision in Islam. He concludes with a study of the violence of the Crusaders against Muslims, the theology of jihad, and the sobering question: "When is martyrdom heroic?"

Clark, Douglas R. and Victor H. Matthews, eds.
2003 One Years of American Archaeology in the Middle East: proceedings of the American Schools of Oriental Research Centennial Celebration, Washington DC, April 2000. Boston: ASOR

Clark and Matthews edit an anthology of papers by leading archaeologies working in the ancient Near East organized by the major historical archaeological periods, covering geographical areas and larger arenas of concern, including technology, religion, and economic and political realities. Papers not only review results from a century of North American archaeological endeavor in the Middle East, but are also concerned with a prospective view, seeking to address how archaeologists should proceed with their work at the beginning of the twenty-first century.

Clayton, Peter A.

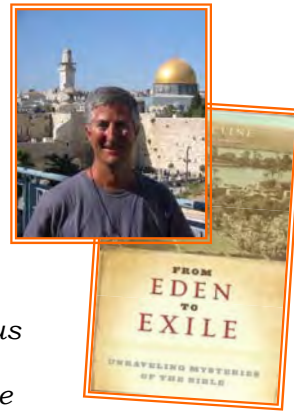
1994 Chronicle of the Pharaohs: the reign-by-reign record of the rulers and dynasties of ancient Egypt. London: Thames and Hudson.

Clayton reconstructs a history of ancient Egypt from the biographies of each pharaoh creating a history of ancient Egypt. From Narmer to Cleopatra their cartouches are drawn, their names are translated and their contributions of each pharaoh to the culture of Egypt is outlined.

Cline, Eric H.

2007 From Eden to Exile: unraveling mysteries of the Bible. Washington D.C.: National Geographic.

From Eden to Exile: unraveling mysteries of the Bible (2007) by Eric H. Cline is a print companion to the National Geographic television series *Science of the Bible*. Jesus is the focus of *Science of the Bible*; the focus of From Eden to Exile is ancient Israel. Hot topics create the book's outline: the Garden of Eden, Noah's Ark, Sodom and Gomorrah, Moses and the Exodus, Joshua and the Battle of Jericho, the Ark of the Covenant and the Ten Lost Tribes of Israel.



Each chapter is also outlined by the hot topics. *Moses and the Exodus*, for example, asks: *Did the exodus take place? When did the exodus take place? Was the exodus a single event or a gradual process? Who was the pharaoh of the exodus? How many Hebrews made the exodus? What kinds of disasters were the plagues? What caused the plagues? How was the Red Sea divided? What were the Ten Commandments?*

The book is Cline's effort to insert archaeologists and biblical scholars into the media market. Ignoring notorious claims made by a growing number of unqualified individuals, Cline argues, gives these pundits unchallenged influence over the public understanding of the relationship of archaeology and the Bible.

Clines, David, Cheryl Exum, Keith Whitelam, eds

2006 Orientalism, Assyriology and the Bible. Sheffield: Sheffield Phoenix.

Orientalism refers both to the academic study of the Orient and to Western scholarship that clings to caricatures of the East. This is a four part-collection by art historians, Assyriologists and biblical scholars. (1)

“Intellectual and Disciplinary Histories” deals with the rise of Assyriology in the United States, shifting images of Assyria, Smithsonian Institution exhibits of *biblical antiquities* at the 1893, 1895 world’s fairs, the rise of Egyptology in the nineteenth century, the impact of the Mari excavations on biblical studies, and the genre of ancient Near Eastern anthologies by Foster, Frahm, Holloway Reid and Younger. (2) “Visual Perspectives” is a corrective to images of the ancient Near East reconstructed only from texts using the Assyrianizing engravings in the Dalziels’ Bible Gallery, the reception of ancient Assyria in nineteenth-century England versus France, and artwork for twentieth-century American histories of Israel by Bohrer, Esposito and Long. (3) “Of Harems and Heroines” studies gender issues focusing on Semiramis and the harem in the Bible and Assyriology by Asher-Greve and Solvang. (4) “Assyriology and the Bible” studies figures (Josiah), texts -- Gen 28.10–22 and the Uruk Prophecy, periods -- Persian period by Grabbe, Handy, Hurowitz and Scurlock.

Cobb, Charles

1991 “Social Reproduction and the *Longue Durée* in the Prehistory of the Midcontinental United States.” In Processual and Post-Processual Archaeologies: Multiple Ways of Knowing the Past: 168-182. Edited by R. Preucel. Carbondale: Southern Illinois University.

Cohen, Getzel M. and Martha Sharp Joukowsky, eds.

2004 Breaking Ground: pioneering women archaeologists. Ann Arbor: University of Michigan.

Cohen and Joukowsky edited biographies of twelve pioneering women archaeologies: Jane Dieulafoy (1851-1916), Esther B. Van Deman (1862-1937), Margaret Alice Murray (1863-1963), Gertrude L. Bell (1868-1926), Harriet Boyd Hawes (1871-1945), Edith Hayward Hall Dohan (1879-1943), Hetty Goldman (1881-1972), Gertrude Caton-Thompson (1888-1985), Dorothy Annie Elizabeth Garrod (1892-1968), Winifred Lamb (1894-1963), Theresa B. Goell (1901-1985) and Kathleen Kenyon (1906-1978).

Cole, Juan

2007 Napoleon’s Egypt: invading the Middle East. New York: Palgrave Macmillan.

Cole describes Napoleon’s invasion of Egypt as a brutal disaster -- comparable to the invasion of Iraq by the US-led coalition forces in 2003 -- using quotations from contemporary Egyptian memoirs and diaries.

Coleman, Simon

2006 "Pilgrimage." In Blackwell Companion to the Study of Religion, 385-396. Oxford: Blackwell.

Coleman, Simon and John Elsner

1994 Pilgrimage: Past and Present in the World Religions. Cambridge: Harvard University.

Anthropological theories of pilgrimage often neglect the cultural significance of images and architecture. Coleman and Elsner study the material culture of St. Catherine Monastery at Mt. Sinai from 600-500 in order to restore archaeological evidence to the anthropology of pilgrimage. The arts, architecture and inscriptions at the monastery perform initiate pilgrims from around the world into a biblical spirituality.

1994 "The Pilgrim's Progress: art, architecture and ritual movement at Sinai." World Archaeology 26, 1: 73-89.

Anthropological theories of pilgrimage often neglect the cultural significance of material images and architecture. Coleman and Elsner study the material culture of St. Catherine Monastery at Mt. Sinai between 600-500 to restore archaeological evidence to the anthropology of pilgrimage. The arts, architecture and inscription at the monastery lead pilgrims from all over the world through a ritual of initiation.

Collingwood, R.G.

1946 The Idea of History. New York: Oxford University.

The Idea of History was not actually published by Collingwood but was put together after his death from lecture notes, short published articles, and parts of an unpublished manuscript: The Principles of History. That manuscript then vanished, was only discovered in 1995, and was subsequently published (Michael Stack. A Review of The Principles of History and Other Writings in Philosophy of History. Edited by W.H. Dray and W.J. van der Dussen. University of Toronto Quarterly 71 (2002).

Collins, Billie Jean

2007 The Hittites and their World. Atlanta: SBL.

Collins reviews how archaeology and language studies have reconstructed the Hittite culture which began in 1900 B.C.E. with trade colonies and ended in 800 B.C.E. with the destruction of their great cities. She places special emphasis on how Hittite culture contributes to the understanding of the world of the Bible.

Collins, Billie Jean, ed.

2001 A History of the Animal World in the Ancient Near East. Handbook of Oriental Studies, vol I, 64; New York: Brill.

Collins' zoology of the Near East concentrates on the depiction and use of animals in the art, literature and cultures in Anatolia, Egypt, Iran Mesopotamia and Syria-Palestine. The seventeen chapters focus on native fauna, animals in art, animals in literature, animals in religion, and the cultural use of animals.

Comaroff, J and J. Comaroff

1992 Ethnography and Historical Imagination. Bouldr: Westview.

Conder, Claude R. and Horatio H. Kitchner

1881 The Survey of Western Palesine, 6 vols. London: PEF.

Conkey, Margaret W. and Janet D. Spector

1984 "Archaeology and the Study of Gender." In Archaeological Method and Theory 7:1-38. New York: Academic.

Archaeologists often reconstruct past cultures to justify their own cultures especially in describing the roles of women. They assume the meaning of masculine and feminine, the capabilities of men and women, about their power relations, and about their appropriate roles in society were the same in ancient cultures as in their own culture. Archaeologists are neither objective nor inclusive on the subject of gender. Because archaeologists never developed a method for determining how gender operated in a culture, they simply applied the way gender operated in their own culture to the cultures they were reconstructing. Conkey especially has continued to work on the archaeological study of gender.

Conkey, Margaret W. and Joan M. Gero, eds.

1991 Engendering Archaeology: Women and Prehistory. Cambridge: Blackwell.

Conkey and Gero edit fourteen essays on women in ancient cultures and gender in archeology. Conkey is professor of anthropology and director of the Archaeological Research Facility at the University of California, Berkeley.

Coogan, Michael D., J. Cheryl Exum and Lawrence E. Stager, eds.

1994 Scripture and Other Artifacts: essays on the Bible and archaeology in honor of Philip J. King. Louisville: Westminster John Knox.

Cook, Stephen L. and S.C Winter

1999 "Introduction: Contemporary Methods and the Place of Philology and Archaeology in Biblical Studies Today." In On the Way to Nineveh: studies in honor of George M. Landes: 7-17. Atlanta: Scholars

Cook, Stephen L. and S.C Winter, eds.

1999 On the Way to Nineveh: studies in honor of George M. Landes. Atlanta: Scholars

Coptic Museum, Cairo

<http://www.copticmuseum.gov.eg/english/default.htm>

Morcos Smeika Pasha, the Ottoman governor of Egypt, founded the Coptic Museum in 1910. The Museum was built on land at the Fort of Babylon donated by Coptic popes Kerolos V and Abba Yuanis XIX. It houses some 16,000 artifacts reflecting the history of Christianity in Egypt

Cornfeld, Gaalyah and David Noel Freedman

1976 Archaeology of the Bible: book by book. San Francisco: Harper & Row.

Council for British Research in the Levant

<http://www.cbri.org.uk/>

The Council for British Research in the Levant (CBRL) -- formerly the British School of Archaeology in Jerusalem and the British Institute at Amman for Archaeology and History -- is the British Academy sponsored institute for research into the humanities and social sciences with research centers in Amman and Jerusalem and field bases in Homs and Wadi Faynan. The CBRL promotes research in the modern countries of Cyprus, Israel, Jordan, Lebanon, the Palestinian Territories and Syria, closely related to the former Bilad el-Sham.

Craiger, Stephen L.

1935 Bible and Spade: an introduction to Bible archaeology. New York: Oxford University.

Crook, Zeba A.

2005 "Reflections on Culture and Social-Scientific Models." JBL 124,3: 515-532.

Cross, Frank Moore

1973 "W.F. Albright's View of Biblical Archaeology and its Methodology." The Biblical Archaeologist. 36:2-5.

For Albright Syro-Palestinian Archaeology was a sub-discipline of biblical archaeology which studied "...all biblical lands from India to Spain and from and from southern Russia to south Arabia, and the whole history of those lands from about 10,000 B.C., or even earlier, to the present time (Albright 1966:13)." Only by using historical studies of both the Bible and other ancient Near Eastern cultures was it possible to understand a site. Although he referred to himself as an Orientalist or historian of religion, he brought virtually all the humanities to bear on his work as a biblical archaeologist. Consequently, many of his colleagues and students considered him a genius. He studied religion the way he studied pottery – by using typology. Every type of pottery has ancestors; every type inspires successors. So do religious traditions. The goal of biblical archaeology is to reconstruct the typology or evolution of religion from the Stone Age to the Byzantine period of Christianity.

Currid, John D.

1999 Doing Archaeology in the Land of the Bible: a basic guide. Grand Rapids: Baker.

Currid writes a handbook for student volunteers explaining the dynamics of the Wheeler-Kenyon Method.

Curtis, J.E.

1995 "Assyrian Civilization." In Art and Empire: treasures from Assyria in the British Museum: 32-37. Edited by J. E. Curtis and J. E. Reade. New York: Metropolitan Museum of Art.

1995 "The Discovery of Assyria." In Art and Empire: treasures from Assyria in the British Museum: 9-16. Edited by J. E. Curtis and J. E. Reade. New York: Metropolitan Museum of Art.

Curtis, J. E. and J. E. Reade, eds.

1995 Art and Empire: treasures from Assyria in the British Museum. New York: Metropolitan Museum of Art.

Cyberpursuits: Archaeology

<http://www.cyberpursuits.com/archo>

Cyberpursuits: Archaeology is an archive of links to archaeological sites and projects of specific geographic regions and specific disciplines such as underwater and marine archaeology. There are pages which lead to reference material, academic departments, libraries, museums, publications and organizations

DDDD

Dahari, Uzi

2000 Monastic Settlements in South Sinai in the Byzantine Period: the archaeological remains. IAA Reports, 9; Jerusalem: Israel Antiquities Authority.

Dahood, Mitchell J.

1986 "The Moabite Stone and Northwest Semitic Philology." In Archaeology of Jordan and Other Studies Presented to S.H. Horn: 429-441. Edited by L.T. Geraty and L.G. Herr. Berrien Spring: Andres University.

Daniels, Peter T.

1996 "Methods of Decipherment." In The World's Writing Systems: 141-159. Edited by Peter T. Daniels and William Bright. New York: Oxford University.

1996 "The Study of Writing Systems." In The World's Writing Systems: 3-17. Edited by Peter T. Daniels and William Bright. New York: Oxford University

Daniels, Peter T. and William Bright, eds.

1996 The World's Writing Systems. Oxford: Oxford University.

"Humankind is defined by language; but civilization is defined by writing. (1)" Linguistics studies the structure of spoken languages. Grammatology (Gelb 1952) studies writing systems -- the signs that record languages.

Darvill, Timothy

2002 The Concise Oxford Dictionary of Archaeology. Oxford: Oxford University.

Darvill writes over 4000 entries covering the essential vocabulary for everyday archaeology. He focuses especially on Europe, the Old World, and the Americas, and covers legislation relations to the United Kingdom and the USA.

David, Nicholas and Carol Kramer

2001 Ethnoarchaeology in Action. New York: Cambridge University.

David and Kramer study the ethnographic material culture from archaeological perspectives embracing both the Processual archeology and the Post-Processual archaeology during the 1980s and 90s. Three introductory chapters introduce the subject and its history, survey the broad range of theory required, and discuss field methods and ethics. It concludes with an appreciation of

ethnoarchaeology's contributions, actual and potential, and of its place within anthropology.

Daviau, M.P. Michele

2001 "Assyrian influence and changing technologies at Tall Jawa, Jordan." In The Land That I Will Show You. The Land That I Will Show You: Essays in History and Archaeology of the Ancient Near East in Honor of J. Maxwell Miller: 214-238. JSOT Supplement Series, 343; Sheffield: Sheffield University.

Daviau describes the impact of Assyria on the site of Tell Jawa in rural Ammon.

1993 Houses and their furnishings in Bronze Age Palestine: domestic activity areas and artefact distribution in the middle and late Bronze Ages. Sheffield: JSOT.

Daviau, P.M. Michele and Paul-Eugene Dion

2002 "Economy-Related Finds from Khirbat al-Mudayna (Wadi ath-Thamad, Jordan).'BASOR 328: 31-48.

Steiner (2002) suggests that Iron Age Moab had both a state economy and a village economy. The village economy served fortified villages, unfortified villages and herders living on the land. Agriculture was the backbone of this village economy, but crafts, pottery, metalworking, and textiles were also produced for local markets. Steiner's description of a small state's economic organization can now be tested against the archaeological record. Finds from a pillared industrial building in the fortified village of Khirbat al-Mudayna on the Wadi ath-Thamad include two inscribed scale weights and one un-inscribed weight, and seven Iron Age seals and three seal impressions (Latin: bullae). This small corpus is directly related to the village economy and includes the first occurrence of inscribed weights in Moab. This paper presents those weights, seals, and seal impressions in their archaeological context and studies their implications.

Davies, Dave (Philadelphia Daily News)

"Interview with Neil Asher Silberman" NPR Fresh Air.

<http://www.npr.org/templates/story/story.php?storyId=5401536>

Davies, Nina M.

1958 Picture Writing in Ancient Egypt. New York: Oxford University.

Davies, Norman de Garis

1930 The Tomb of Ken-Amun at Thebes. New York: Metropolitan Museum of Art.

Davies, Philip R.

Date "Minimalism, "Ancient Israel," and Anti-Semitism."
<http://www.bibleinterp.com/articles/Minimalism.htm>.

2005 "Crypto-Minimalism," Journal of Semitic Studies 50/1: 117-136.

1992 In Search of 'Ancient Israel'. Edinburgh: T. & T. Clark.

Davies, Philip R. and John Rogerson.

2005 The Old Testament World. Louisville: Westminster John Knox.

Part one describes geography, the social organization and cultures in the world of the Bible. Part two reconstructs the history of Israel. Part three catalogues the genres in the Bible emphasizing the importance of creation stories in the world of the Bible. Part four describes the development of the canon.

Davis, Thomas W.

2004 Shifting Sands: the rise and fall of biblical archaeology. New York: Oxford University.

Davis published his 1987 dissertation directed by William G. Dever tracing the interaction of biblical studies and archaeology in Syria-Palestine describing the theories and methods of William Foxwell Albright and other biblical archaeologists.

Dearman, J. Andrew, ed.

1989 Studies in the Mesha Inscription and Moab. Archaeology and Biblical Studies, series no. 2; Atlanta: Scholars.

Dearman edits an anthology of eight essays on the Annals of Mesha including an introduction to the study of the annals by J. Maxwell Miller; a description of the political and social history of the period by M. Patrick Graham; and a reconstruction of the text by Kent P. Jackson.

2001 The Land That I Will Show You: Essays in History and Archaeology of the Ancient Near East in Honor of J. Maxwell Miller. Journal for the Study of the Old Testament Supplement Series, 343; Sheffield: Sheffield University.

Colleagues and students of J. Maxwell Miller (Candler School of Theology at Emory University) offer him their articles dealing with the history, chronology, geography, archaeology and epigraphy in the world of the Bible. They range from broad methodological discussions of

historiography to focused analyses of individual texts or historical issues. A review of Miller's career and a select bibliography of his publications are included.

Dearman, J. Andrew and Gerald L. Mattingly.

1992 "Mesha Stela." Anchor Bible Dictionary 4: 708-709. Edited by D. N. Freedman. New York: Doubleday.

Dearman, J. Andrew, ed.

1989 Studies in the Mesha Inscription and Moab. Archaeology and Biblical Studies, series no. 2; Atlanta:

De Capoa, Chiara

2003 Old Testament Figures in Art. Translated by Thomas Michael Hartmann. Edited by Stefano Zuffi. Los Angeles: J. Paul Getty Museum

Deem, Ariella

1978 "And the stone sank into his forehead": a note on 1 Samuel XVII 49." Vetus Testamentum 28:349-351.

Deesel, J.P.

2003 "In Search of the Good Book: a critical survey of handbooks on biblical archaeology." In Between Text and Artifact: integrating archaeology in biblical studies teaching: 67-98. Edited by Milton C. Moreland. Atlanta: SBL.

Delaney, Carol

1988 The Seed and the Soil: Gender and Cosmology in Turkish Village Society. Comparative Studies on Muslim Societies, No. 11; Berkeley: University of California.

Delitzsch, Friedrich

1902 Babel and Bible: a lecture on the significance of Assyriological research for Religion. Translated by Thomas J. McCormack. Chicago: Open Court.

Demsky, Aaron

1997 "The Name of the Goddess of Ekron: a new reading." JANES 25: 1-5.

Dersin, Denise, ed.

1996 What Life Was Like on the of the Nile: Egypt 3050-30 B.C. Alexandria: Time-Life Books.

Dersin tells the history of Egypt through the daily lives of ordinary Egyptians: a tomb foreman, an independent woman, a scolding wife.
Glossary.

De Vaux, Roland

1973 Archaeology and the Dead Sea Scrolls. Revised Edition; New York: Oxford University.

The first excavations at Qumran (1951-1958) were directed by De Vaux (1903-1971). He published his preliminary reports in the Revue Biblique (1951-1958). Archaeology and the Dead Sea Scrolls is his only synthesis, although only half of the book deals with Qumran. The English translation, published after De Vaux's death, expands the French original (1961). Two important conclusions guided his interpretation of the site. First, he concluded that the Dead Sea Scrolls recovered from eleven caves around the ruins were stored there by the Qumran community. Second, he concluded that the Qumran community was a Jewish monastic order much like the Essenes described by Philo, Pliny and Josephus.

Dever, William G.

2005 Did God Have a Wife? archaeology and folk religion in ancient Israel. Grand Rapids: William B. Eerdmans.

Dever reconstructs the folk religion of ordinary people in ancient Israel and their everyday religious lives reflected in excavations reveal numerous local and household shrines where sacrifices and other rituals were carried out. He reconsiders the presence and influence of women's cults in early Israel and their implications for understanding of official religion in the Bible. Dever also pays particular attention to the goddess Asherah, reviled in official religion, but popular in the folk religion of the women of ancient Israel as Yahweh's wife.

2004 "Kathleen Kenyon, 1905-1978." In Breaking Ground: pioneering women archaeologists: 525-553. Edited by Getzel M. Cohen and Martha Sharp Joukowsky. Ann Arbor: University of Michigan.

To place an archaeologist of Kenyon's stature in critical perspective is somewhat presumptuous. Yet Dever notes that Kenyon's Arab sympathies almost prevented her from directing the British School of Archaeology in Jerusalem after the 1967 war. Colleagues considered her strategy of digging deep, narrow, unconnected trenches, which only she could draw or interpret, failed to provide an accurate overview of a site. Once she had read pottery she discarded it, so no one could check her

work. As a scholar she was isolated; she did not read enough, and she did not publish enough. The teamwork concept that came to characterize American excavations in Jordan and Israel that adopted Kenyon's methods was inconceivable to her. She worked alone.

- 2001 "Excavating the Hebrew Bible or burying it again?" BASOR 322 (2001), 67-77.
2001 What Did the Biblical Writers Know and When Did They Know It?: what archaeology can tell us about the reality of ancient Israel. Grand Rapids: William B. Eerdmans.

Dever surveys the history of archaeology and the Bible and the contributions which he has made to the field during his thirty-five years of work. He also examines the minimalist, postmodern philosophical worldview, the logic of their argument and interpretation of the Bible, and the coalition supporting their case. Chapter titles. 1) The Bible as history, literature, and theology. 2) Revisionists and their non-histories. 3) What archaeology is and what it can contribute to biblical studies. 4) Getting at the 'history behind the history': convergences between texts and artifacts - Israelite origins and the rise of the state. 5) Daily life in Israel in the time of the divided monarchy. 6) What is left of the history of ancient Israel and why should it matter to anyone?

- 2000 "Nelson Glueck and the other half of the Holy Land," In Archaeology of Jordan and Beyond: 114-121. Winona Lake: Eisenbrauns
1999 "Can 'Biblical Archaeology' be an Academic and Professional Discipline," In Archaeology, history and culture in Palestine and the Near East: 11-22. Atlanta: Scholars.
1997 "Gezer." OEANE 2: 396-400.
1993 "Gezer." NEAEHL 2: 496-506.
1992 "Gezer." ABD 2: 998-1003.
1992 "Archaeology, Syro-Palestinian and Biblical." Anchor Bible Dictionary I, 354-367. New York: Doubleday.

Dever divides the history of archaeology into four phases: 1) the exploratory phase (1838-1914); 2) the beginning of large-scale fieldwork and the evolution of a basic chronological cultural framework (1918-1940); 3) the introduction of modern stratigraphic methods (1948-1970); 4) an incipient revolution caused by the rise of the "new archaeology" (1970-).

- 1990 "Biblical Archaeology: death and rebirth?" In Biblical Archaeology Today, 1990: Proceedings of the Second International Congress on Biblical Archaeology, Jerusalem: 706-722. Edited by Avraham Biran and Joseph Aviram. Jerusalem.

Dever describes the external factors that led to the demise of "biblical archaeology.

- 1989 Recent Archaeological Discoveries and Biblical Research. Seattle: University of Washington.
- 1988 "Impact of the 'New Archaeology'." In Benchmarks in Time and Culture: an introduction to Palestinian archaeology: 337-352. Edited by Joel F. Drinkard, Jr., Gerald L. Mattingly, and J. Maxwell Miller. Atlanta: Scholars.

Dever discusses the shifting of the paradigms of archaeological research. Before 1970 archaeologists emphasized technique; after 1970 their emphasis is on cultural evolution using a multidisciplinary and holistic approach.

- 1985 "Syro-Palestinian and Biblical Archaeology." In The Hebrew Bible and its Modern Interpreters: 31-74. Philadelphia: Fortress.
- 1982 "Retrospects and Prospects in Biblical and Syro-Palestinian Archeology." Biblical Archaeologist 45: 103-107.

Dever calls for archaeologists working in Syria-Palestine to develop

- 1) a theory clearly defining *Syro-Palestinian archeology* as a professional academic discipline in contrast with *biblical archeology* -- the part-time and amateur dialogue between biblical scholars, archaeologists and archaeology lovers;
- 2) a common method for conducting excavations;
- 3) a curriculum for training graduate students;
- 4) solid moral and monetary support from established academic foundations;
- 5) strong centers for research overseas;
- 6) a reputation for the prompt publication of its excavations and textbooks for the discipline.

- 1973 Archaeology and Biblical Studies: retrospects and prospects. Evanston: Seabury-Western Theological Seminary.

Dever, William G. and Seymour Gitin, eds.

- 1984 Symbiosis, Symbolism, and the Power of the Past: Canaan, ancient Israel and their Neighbors from the Late Bronze Age through Roman Palaestina: proceedings of the centennial symposium, W.F. Albright Institute of Archaeological Research and the American Schools of Oriental Research,

Jerusalem, May 29-May 31, 2000. Winona Lake:
Eisenbrauns.

Dietz, Maribel

2005 Wandering Monks, Virgins, and Pilgrims: ascetic travel in the Mediterranean world, A.D. 300-800. University Park: Pennsylvania State University.

The Digital Archaeological Atlas of the Holy Land. Edited by Stephen H. Savage. Arizona State University.

<http://daahl.ucsd.edu/DAAHL/>

DAAHL is an international project of information technology experts and archaeologists working in Israel, Palestine, Jordan, Lebanon, Syria and Egypt. Using spatial information systems such as Google Maps, Google Earth and the Geographic Information Systems, site maps, photographs and artifacts are entered into a comprehensive database. The historical and archaeological content for the project are developed by a team of over 30 international scholars. The website serves as a prototype knowledge node for a more comprehensive Digital Archaeological Atlas Network for Mediterranean cultures.

Digmaster (Cobb Institute, Mississippi State University)

<http://www.cobb.msstate.edu/dig/>

A database of artifacts from the Near East (Lahav, Maresha, Peirides).

Dinur Center Archaeology Project (Hebrew University of Jerusalem)

<http://www.hum.huji.ac.il/dinur/links/Archaeology.htm>

Links to home pages of archaeological excavations.

Donceel, Robert

1997 "Qumran." OEANE 4: 392-396

Donceel, Robert and Pauline Donceel-Voute

1994 "The Archaeology of Khirbet Qumran." In Methods of Investigation of the Dead Sea Scrolls: 1-38. Edited by Michael O. Wise. Annals of the New York Academy of Sciences, 722; New York.

Donceel and Donceel -Voute describe their interpretation of the material remains from Qumran and the plans of the Ecole Biblique and the Catholic University of Louvain for publishing De Vaux's final report.

They focused their research on small finds from Qumran -- glassware, metal wares, and coins, and concluded that Qumran was not a monastery but a plantation (Latin: *villa rustica*) built by a wealthy household from Jerusalem during the reign of Herod the Great (73-4 B.C.E.)

Donegan, J.B.

1978 Women and Men Midwives: medicine, morality and misogyny in Early America. Westport: Greenwood.

Dothan, Trude

1990 "Ekron of the Philistines, Part I: Where They Came From, How They Settled Down and the Place They Worshiped In." BAR 16, 1:20-36.

Dothan describes Ekron during the early Iron Age (1200-1000 B.C.E.) when it was a large city with a rich material culture founded by the Sea Peoples and developed into an important member of the Philistine urban league. Ekron has industrial areas, unique cultic installations and a distinctive material culture, all reflecting strong Aegean ties. The city reached its peak of development between 1100 - 1000 B.C.E. However, this progress went hand in hand with a loss of distinctiveness of the Philistines' material culture. The quality of the Philistine bichrome pottery degenerated as Egyptian and Phoenician influences had their effects on Philistine material culture. Pharaoh Siamun (978-959 B.C.E.) may have destroyed Ekron during his campaign against Gezer (1 Kgs 3:1; 1 Kgs 9:16).

1982 The Philistines and their Material Culture. New Haven: Yale University

Dothan, Trude and Moshe Dotan

1992 People of the Sea: the search for the Philistines. New York: Macmillan.

Dothan, Trude and Seymour Gitin

1997 "Miqne, Tel." OEANE 4:30-35.

1992 "Ekron." ABD 2: 416-422

Doughty, Charles M.

1888-

1979 Travels in Arabia Deserta. New York: Dover.

Douglas, Mary

1966-

2001 Purity and Danger. London: Routledge and Kegan Paul.

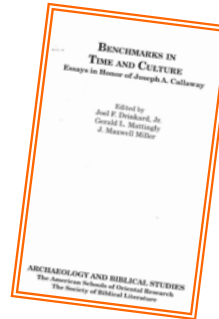
Downing, Frederick L.

2006 "The Biblical Archaeology Movement: building and re-building the Albright house." Perspectives in Religious Studies 33, 4: 495-506.

Drinkard, Joel F. Jr., Gerald L. Mattingly and J. Maxwell Miller, eds.

1988 Benchmarks in Time and Culture: an introduction to the Palestinian archaeology. Edited by Joel F. Drinkard, Jr., Gerald L. Mattingly, and J. Maxwell Miller. Atlanta: Scholars.

Benchmarks in Time and Culture: An Introduction to Palestinian Archaeology (1988) edited by Joel F. Drinkard, Jr., Gerald L. Mattingly, and Miller is an anthology of 23 essays dedicated to Joseph A. Callaway. Part One presents histories of the major national schools of archaeology in Syria-Palestine. Part Two outlines the methods and techniques used in archaeology today. Part Three discusses selected areas where archaeology has been integrated in order to bring about historical-cultural syntheses.



Duke, Philip

1996 Braudel and North American Archaeology: An Example from the Northern Plains. In Archaeology, Annales and Ethnohistory: 99-111. Edited by Alan Knapp. Cambridge: Cambridge University.

Drukheim, Emile

1895 Rules of the Sociological Method. Translated by W. D. Halls. New York: The Free Press.

EEEE

Eakins, J. Kenneth

1988 "Future of 'Biblical Archaeology.'" In Benchmarks in Time and Culture: an introduction to Palestinian archaeology: 441-454. Edited by Joel F. Drinkard, Jr., Gerald L. Mattingly, and J. Maxwell Miller. Atlanta: Scholars.

Earle, Timothy K. and Robert W Preucel

1987 "Processual Archaeology and the Radical Critique." Current Anthropology 28: 501-38.

Ebeling, Jennie R.

2000 "Recent Archaeological Discoveries at Hazor."
http://www.bibleinter.com/articles/Hazor_Ebeling.htm

Edelman, Diana

1992 "Who or What was Israel? BAR 18:72-73.

1988 "Tel Masos, Geshur, and David." JNES 47:253-258.

Edwards, Douglas R. and C. Thomas McCollough, eds.

2007 The Archaeology of Difference: gender, ethnicity, class and the "other" in antiquity. ASOR Annual Volume 60-61; Oakville: David Brown.

Edwards and McCollough edit an anthology of studies of the archaeology of difference based on gender, ethnicity and social status that is reflected in both traditions and material remains. Clothing, hair style and housing are only a few of the signals that distinguish insiders from outsiders.

Ehrman, Bart D., Rodolphe Kasser, Marvin Meyer, Gregor Wurst, eds.

2006 The Gospel of Judas. Washington D.C.: National Geographic Society.

Eickelman, Dale F. and Piscatori, James, eds.

1990 Muslim Travelers: pilgrimage, migration, and the religious imagination. Berkeley: University of California.

Eilberg-Schwartz, Howard

1990 The Savage in Judaism: an anthropology of Israelite religion and ancient Judaism. Bloomington: Indiana University.

Eliade, Mircea

1959 The Sacred and the Profane: the nature of religion. New York: Harcourt.

Elitzur, Yoel

2004 Ancient Place Names in the Holy Land: Preservation and History. Winona Lake: Eisenbrauns.

Elliott, M.

2002 Biblical Interpretation Using Archeological Evidence 1900-1930. Lewiston: Mellen.

Elm, Susanna

1989 "Perceptions of Jerusalem pilgrimage as reflected in two early sources on female pilgrimage (3rd and 4th centuries AD)." Studia

Patristica 20: 219-23.

Emberling, G.

1997 "Ethnicity in Complex Society: archaeological perspectives."
Journal of Archaeological Research 5,4: 294-344.

Engelstad, Ericka

1991 "Images of power and contradiction: feminist theory and post-processual archaeology." Antiquity 65: 502-14.

Engelstad argues that archaeology, like many of the sciences, uses only masculine metaphors. The male archaeologist as hero explore and tames the mysteries of his female subject. Feminist theory has made important criticism of positivist science on these grounds, drawing on much the same postmodern theory as Post Processual Archaeology.

Eusebius of Caesarea

2003 The Onomasticon by Eusebius of Caesarea Palestine in the Fourth Century A.D. Translated by G. S. P. Freeman-Grenville. Edited by Rupert L. Chapman and Joan E. Taylor. Jerusalem: Carta.

1999 Life of Constantine. Introduction, translation and commentary by A. Cameron and S.G. Hall. Oxford: Clarendon.

Elitzur, Yoel

2004 Ancient Place Names in the Holy Land: Preservation and History. Winona Lake: Eisenbrauns.

ETANA

<http://www.etana.org/>

ETANA is a digital library for archaeology developed through the collaboration of library scientists, computer scientists, and Near Eastern archaeologists. ETANA makes both the primary data and secondary studies of participating projects immediately available online and accessible world-wide.

FFFF

Falk, A.

1985 Moshe Dayan, the Man and the Myth: a psychoanalytic biography.

Jerusalem: Cana.

Falk understood that Dayan's claim of saving antiquities is paradoxical, and that "the fact that Israeli society was not able to limit the narcissistic greatness complex of Moshe Dayan, and put an end to the attitude that he can do whatever he wants, is sad evidence to its lack of maturity at that time".

Fagan, Brian

1975 The Rape of the Nile: tomb robbers, tourists and archaeologists in Egypt. New York: Charles Scribner's Sons.

Falconer, Steven F.

1995 "Rural Responses to Early Urbanism: Bronze Age household and village economy at Tell el-Hayyat, Jordan." Journal of Field Archaeology 22: 399-419.

Temporal and spatial patterns of faunal, floral, and ceramic artifacts reveal several aspects of household and village economy at Tell el-Hayyat ("Ruin of Snakes"). This modest village of some fifty acres and 100-150 inhabitants had six major settlement layers between 2100-1500 B.C.E. – the Middle Bronze period of intense urban development in southern Syria-Palestine. Existing ethnographic and historical data argue that village farmland during the period was owned by urban states, temples or households. Artifacts from levels 3, 4, 5 (MB IIA-IIB) at Tell el-Hayyat (Jordan), however, suggest that farmland was owned by village households, and that independent villages like Tell el-Hayyat continued to thrive even during MB.

Fazzini, Richard A., James F. Romano and Madeleine E. Cody
1999 Art for Eternity: masterworks from ancient Egypt. Brooklyn: Brooklyn Museum of Art.

Faust, Avraham

2006 Israel's Ethnogenesis: settlement, interaction, expansion and resistance. London: Equinox.

2003 "Abandonment, Urbanization, Resettlement and the Formations of the Israelite State." NEA 66:147-161.

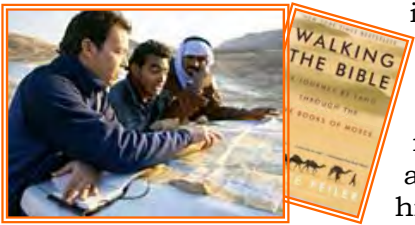
For Faust none of the Iron I sites excavated to date continue to exist in the Iron II period. He proposed that the state established by David resettled villagers to larger villages or cities. The purpose of the program according to Faust is to socialize villagers to state life.

Faust, Avraham and Shlomo Bunimovitz
2003 "The Four Room House: embodying Iron Age Israelite Society." Near Eastern Archaeology 66,1-2: 22-31

Feder, Kenneth L.
1990 Frauds, Myths, and Mysteries: science and pseudoscience in archaeology. Mountain View: Mayfield.

Feiler, Bruce
2001 Walking the Bible: a journey by land through the five books of Moses. New York: HarperCollins

Journalist Bruce Feiler used a geographical outline to chart his reverse pilgrimage through the world of the Bible. Walking the Bible, a journey by land through the five Books of Moses (2001) was not inspired by his faith, but rather a search for his faith. With archaeologist Avner Goren, Feiler traveled Israel, Jordan, Turkey, Egypt and the Palestinian territories retracing the steps of Abraham, Moses, Aaron and Jacob in the Torah. Goren was a reliable guide not only across the land, but also through the biblical scholarship that he shares with Feiler. Feiler's interviews with archaeologists and ordinary people are fascinating.



His trek through the land clearly matures his understanding of how the land and its traditions develop. Near the end of his journal Feiler writes: *...this trip, this route, this dirt ...animates me. If that spirit is God, then I found God in the course of my journey. If that spirit is life, then I found life. If that spirit is awe, then I found awe.*

...I had gone to the land, I had encountered a spirit, and in so doing I had become more human. That equation drew me back to one of the defining moments of the Pentateuch, Jacob's wrestling with the messenger of God in the valley of Jabbok.... At first Jacob doesn't know who the messenger is. They wrestle, they struggle, one seems to be winning, then the other, until finally Jacob is scarred. The scar, significantly, does not end up on Jacob's hand, nor on his head, his heart, or his eyes. Humans experience God ...not by touching him, imagining him, feeling him, or seeing him. Jacob is scarred on his leg, for the essential way humans experience God ...is by walking with him (Feiler 2001: 422).

Feinman, Peter Douglas

2004 William Foxwell Albright and the Origins of Biblical Archaeology.
Berrien Springs: Andrews University.

A dissertation and very detailed biography that mined published and unpublished papers, official records, stories, and anecdotes about W. Albright's childhood influences, from his birth in 1891 to his journey to Johns Hopkins in 1913. Begins by introducing Albright in the context of Biblical Archaeology, then critically engages Albright's anecdotes about his childhood, studying the three that Albright claims put him on his life path: a book on archaeology he purchased in Chile as a young boy, a collection of archaeology books he purchased in Iowa, and his decision to apply to Johns Hopkins University.

Fellman, Jack

"Eliezer Ben-Yehuda and the Revival of Hebrew (1858-1922)"

http://www.jewishvirtuallibrary.org/jsource/biography/ben_yehuda.html
1

Feulner, Mark A. and J. Barton Arnold III

2005 "Maritime Archaeology." In Handbook of Archaeological Methods,
vol. 1: 270-305. Lanham: AltaMira.

Finkelstein, Israel

2002 "The Philistines in the Bible: a late-monarchic perspective." JSOT
27,2: 131-167.

Biblical traditions about the Philistines reflect little, if any, geography, culture and history from the Iron I period (1200-1000 B.C.E.). The Stories of the Ark of the Covenant may be an exception. The *seranim* leaders, five city urban league, Goliath's armor and the Cherethites and Pelethites in the Bible reflect the geography, culture and history from the 26th Dynasty (664-525 B.C.E.) when pharaohs stationed Greek and Syrian hoplites or infantry armed with spears who fought in phalanx formations from Caria, Ionia, Lydia and Crete in Philistia.

1998 "Bible Archaeology or Archaeology of Palestine in the Iron Age? A Rejoinder." Levant 30:167-174.

1996 "The Archaeology of the United Monarch: an alternate view."
Levant 28: 177-187.

Finkelstein, Israel and Neil Asher Silberman

2001 The Bible Unearthed: archaeology's new vision of ancient Israel and the origin of its sacred texts. New York: Free.

The Bible is an important artifact for understanding the world of the Bible, but not the decisive criterion by which other artifacts must be interpreted. Evidence for Abraham and Sarah, Isaac and Rebecca, Jacob, Leah and Rachel; for the exodus from Egypt; for the conquest of Syria-Palestine, and for a state ruled by the household of David and Solomon is biblical, but not archaeological. In fact, the archaeology, sociology and history of the world of the Bible date these traditions to the days of Hezekiah (715-687 B.C.E.) and Josiah (640-609 B.C.E.), not to 1000-925 B.C.E.

2006 David and Solomon: In Search of the Bible's Sacred Kings and the Roots of the Western Tradition. New York: Free.

In the Bible David is a shepherd, a warrior, and a divinely protected ruler. Solomon is a great builder, a wise judge, and a serene ruler of a vast empire. In archaeology, however, the world of David and Solomon is a modest hilltop village of farmers and herders. Finkelstein and Silberman describe how the stories of David and Solomon developed from such humble beginnings into the great traditions that shaped Western cultures in important ways

Finkelstein, Israel and Amihai Mazar

2007 The Quest for the Historical Israel: Debating Archaeology and the History of Early Israel. Edited by Brian B. Schmidt. SBLABS 17; Atlanta: Society of Biblical Literature.

Finegan, Jack

1959 Light from the Ancient Past: the archeological background of Judaism and Christianity. Princeton: Princeton University

"First farmers discovered"

http://news.bbc.co.uk/1/hi/english/sci/tech/newsid_489000/489449.stm

Firth, Susan

2003 "Spreading Word". Pennsylvania Gazette (January 5).

Firth interviews Steve Tinney profiling the Pennsylvania Sumerian Dictionary Project and the University of Pennsylvania Museum of Archaeology and Anthropology.

Firmage, Edwin

1992 "Zoology (Animal Profiles): Gazelle". Anchor Bible Dictionary, vi: 1141-1142.

Flam, Faye

“Sumerian Dictionary to Decipher Ancient Texts.”

http://news.nationalgeographic.com/news/2002/07/0723_020724_cuneiform.html

Fowler, Don D., Edward A. Jolie and Marion W. Salter

2008 “Archaeological Ethics in Context and Practice.” In Handbook of Archaeological Theories: 409-422. Edited by R. Alexander Bentley, Herbert D.G. Maschner and Christopher Chippindale. Lanham: Rowman & Littlefield.

Frahm, Eckart

2006 “Images of Assyria in Nineteenth- and Twentieth-Century Western Scholarship.” In Orientalism, Assyriology and the Bible: 74-94. Edited by Steven W. Holloway. Sheffield: Sheffield Phoenix.

Frahm describes Assyria as a port of trade during the Old Assyrian period (2000-1500 B.C.E.), a warrior state in the Late Bronze period (1500-1200 B.C.E.), and an empire during the Iron Age (1000-600 B.C.E.). Assyria was a culture that successfully reinvented itself again and again. Assyrian art is impressive and aesthetic. Assyrian politics created stability and prosperity. Nonetheless, to achieve the beauty of its art and the sophistication of political administration Assyria was obsessed with unparalleled violence in deeds, words, and images.

Franciscan Cyperspot: Christian Pilgrimage to the Holy Land

<http://www.christusrex.org/www1/ofm/pilgr/00PilgrHome.html>

Thousands of pilgrims visited the Holy Land in the first centuries of Christianity to follow in the “footsteps of Christ, of the Prophets and of the Apostles” (Origen). Some wrote journals that were famous; others were left neglected for centuries in archives and libraries. All of them are of some interest, not only to scholars, but to all those who love the Holy Places. The “Christian Pilgrimage to the Holy Land” project commits the best of these early pilgrims' accounts in a simple, interactive interface on the internet.

Franken, Hendricus Jacobus

1992 “Pottery”. Anchor Bible Dictionary, v 428-433.

1988 The Art and Architecture of the Ancient Orient. New York: Penguin.

1956 The Birth of Civilization in the Near East. Bloomington: Indiana University.

Fraser, Michael

“Egeria and The Fourth Century Liturgy of Jerusalem: a select

bibliography.” <http://users.ox.ac.uk/~mikef/durham/egeria.html>

Frazer, James George

1922 The Golden Bough: a study in magic and religion. New York: MacMillan. <http://www.bartleby.com/196/>

Frazer produced this monumental study in comparative folklore, magic and religion to draw parallels between the rituals and myths of early cultures and those of Christianity. His work had a great impact on psychology and literature and remains an early classic in anthropology.

1906 Adonis, Attis, Osiris: studies in the history of Oriental religion. London: MacMillan.

Freedman, David Noel, ed.

1992 The Anchor Bible Dictionary. New York: Doubleday.

The Anchor Bible Commentary Series launched in 1956 by Albright and David N. Freedman (1922-2008) uses the canon as an outline. Albright and Freedman promised to make available all the significant advances in languages, literatures and archaeology which bear on the interpretation of the Bible. Their goal was to create a common body of knowledge for understanding the Bible to be shared by scholars and the general public. In their commentary on the book of Joshua, for example, Robert G. Boling (1930-1994) and G. Ernest Wright (1909-1974) carefully weigh the archaeological work done at Tell es-Sultan and its contribution to the understanding of the Inauguration of Joshua at Jericho (Josh 5:13—6:27). They conclude that: *Given the incommensurability of the military achievement and its theological import, it is not surprising that the bulk of the action in the chapter appears to be liturgical.... The story of the river crossing suggests that this was a period of ...seismic tremors. All of this would ...be interpreted in such a way as to establish The Circle [of Jericho] as an especially holy place, developing its own liturgy but without much permanent settlement* (Boling and Wright 1982: 205, 215).



Freedman, David Noel and Jonas C. Greenfield

1969 New Directions in Biblical Archaeology. Garden City: Doubleday.

Freedman, David Noel, Robert B. MacDonald and Daniel L. Mattson.

1975 The Published Works of William Foxwell Albright: a comprehensive bibliography. Cambridge: American Schools of Oriental Research.

French, Elizabeth

2005 "Archaeologists's Wives as Travel Writers." In Women Travellers in the Near East: 103-109. Oxford: Oxbow.

Friedan, Betty

1963 The Feminine Mystique. New York: W.W. Norton.

Frick, Frank S.

1992 "Palestine, Climate of." Anchor Bible Dictionary v: 119-126.

Fritz, Volkmar

2006 "The Complex of Traditions in Judges 4 and 5 and the Religion of Pre-state Israel." In "I Will Speak The Riddles of Ancient Times": archaeological and historical studies in honor of Amihai Mazar on the occasion of his sixtieth birthday, vol 1: 689-698. Edited by Aren M. Maeir and Pierre de Miroschedji. Winona Lake: Eisenbrauns.

Fritz, Volkmar and Philip R. Davies, eds.

1996 The Origins of the Ancient Israelite States. OTSup 228; Sheffield: Sheffield University.

Fritz and Davies offer an anthology of minimalist studies arguing that there is no hard evidence for a united monarchy ruled by David and Solomon in Israel between 1000-900 B.C.E.

GGGG

Gadd, C.J. and L. Legrain et al.

1928 Ur Excavations, Texts: I Royal Inscriptions [UET] 5:256.

Gallagher, Jan

2003 "An Extraordinary Everyday for Emar's Diviner." In Life and Culture in the Ancient Near East: 171-184. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.

Galor, Katharina, Jean-Baptiste Humbert and Jürgen Zangenberg, eds.

2006 Qumran, The Site of the Dead Sea Scrolls: Archaeological Interpretations and Debates (Proceedings of a Conference held at Brown University, November 17-19, 2002). Studies on the Text of the Desert of Judah, 57; Leiden: Brill.

Fifteen papers presented in 2002 at Brown University provide the necessary data to break new ground in the recent debate about the character of Qumran. Section I discusses material from old and new excavations that help assess the validity of the traditional Qumran-Essene hypothesis. Part II discusses various aspects of the main settlement such as division of space, the character of period III, the date of the cave scroll deposits and the use of food. Part III deals with the Qumran cemetery and a similar graveyard at Khirbet Qazone. Part IV places Qumran into a wider regional context, concentrating on local agriculture and ceramic production. The articles strongly call for a new awareness for archaeological detail and, in their various ways, instigate a renewed debate about how to bring texts and material culture into a meaningful dialogue.

Gambino, Megan

“Underwater World: new evidence reveals a city beneath ancient Alexandria.” <http://www.smithsonianmag.com/history-archaeology/rhakotis.html>

Historians have generally agreed that Rhakotis – a fishing village or a walled city -- existed at Alexandria before Alexander. Daniel Stanley of the Smithsonian Institution's National Museum of Natural History now has found artifacts of that forgotten city that existed 700 years before Alexander the Great founded Alexandria as part of his efforts to conquer the known world.

Gardiner, Alan H.

1957 Egyptian Grammar: being an introduction to the study of hieroglyphs. London: Oxford University.

Garr, W. Randall

1985 Dialect Geography of Syria-Palestine, 1000-586 B.C.E. Philadelphia: University of Pennsylvania.

Garr discussing the unusual ways in which the letters in the Annals of Mesha are written, and argues that the Moabite language and the Hebrew language are closely related.

Garrod, Dorothy Anne

1957 The Natufian Culture: the life and economy of a Mesolithic people in the Near East. London: British Academy.

Gelb, Ignace J.

1952 A Study of Writing. Chicago: University of Chicago

Although writing systems have been studied for centuries by linguists, Gelb is widely regarded as the first scientific practitioner of the study of scripts, and coined the term “grammatology” to refer to the study of writing systems. In A Study of Writing he suggested that scripts evolve in a single direction, from words to syllables to letters. This historical typology has been criticized as overly simplistic, forcing the data to fit the model and ignoring exceptional cases. Yet, despite the refinements of Daniels 1996 and others, Gelb's rigorous study of the properties of different kinds of writing system was pioneering and innovative.

Gennep, Arnold van

1974 “Arnold Van Gennep On the Rites of Passage.” In Frontiers of Anthropology: 315-319. Edited by A. Monatu. New York: G.P. Putnam's Sons.

1964 Rites of Passage. Chicago: University of Chicago.

Germond, Philippe

2005 The Symbolic World of Egyptian Amulets from the Jacques-Edouard Berger Collection. Milan: 5 Continents.

Geus, C.H.J. De

1975 “The Importance of Archaeological Research into the Palestinian Agricultural Terraces, with an Excursus on the Hebrew Word *gbi*.” Palestinian Exploration Quarterly 107: 65-74.

Giddens, Anthony

1986 The Constitution of Society : outline of the theory of structuration. University of California Press, Berkeley.

Gilchrist, R.

1999 Gender and Archaeology: contesting the past. New York: Routledge.

Gillispie, Charle Coulston and Michel Dewachter, eds.

1987 Monuments of Egypt, the Napoleonic edition: the complete archaeological plates from la Description de l'Egypte. Princeton: J. Paul Getty.

Girard, Rene

1972 Violence and the Sacred. Baltimore: Johns Hopkins University.

Girard studies human sacrifice in western Mediterranean cultures, and argues that sacrifice is a strategy for controlling aggression or competition which consistently threatens to destroy human

communities. Human sacrifice focuses this aggression on a single member of the community. By sacrificing one human being the community vents its hostility, thereby protecting other members. Once the victims are dead, they are often deified, as an act of restitution. The portion served to each household during the meal following the sacrifice reestablishes the social structure that was threatened by the violence neutralized by the sacrifice.

Gitin, Seymour

2004 "The Philistines: Neighbors of the Canaanites, Phoenicians and Israelites." Pp. 57-85 in *100 Years of American Archaeology in the Middle East: 57-85*. Edited by D.R. Clark and V.H. Matthews. Boston: American Schools of Oriental Research.

1990 "Ekron of the Philistines: Part II: Olive-Oil Suppliers to the World." *BAR* 16, 2: 32-42+59.

For Gitin Tel Miqne was settled before the founding of Philistine Ekron at the beginning of the Iron Age. The urban center of Ekron evolved through a four-stage process of growth, contraction, regeneration and partial abandonment, reflecting its changing role as a border city on the frontier separating Philistia and Judah. The material culture of the Philistine coastal tradition was maintained throughout Ekron's 600-year tradition.

Gittlen, Barry M., ed.

2002 Sacred Time, Sacred Place: archaeology and the religion of Israel. Winona Lake: Eisenbrauns.

Glassner, Jean-Jacques

2003 The Invention of Cuneiform: writing in Sumer. Baltimore: Johns Hopkins University.

For Glassner cuneiform writing was not invented as a recording device, nor to link symbols with the objects they represent, but as a tool for recording spoken Sumerian.

Glock, Albert E.

1999 "Archaeology as Cultural Survival: the future of the Palestinian past." In Archaeology, History and Culture in Palestine and the Near East: essays in memory of Albert E. Glock: 302-323. Edited by Tomis Kapitan. Atlanta: Scholars.

1999 "Cultural Bias in Archaeology." In Archaeology, History and Culture in Palestine and the Near East: essays in memory of Albert E. Glock: 324-342. Edited by Tomis Kapitan. Atlanta: Scholars.

Glossarist: archaeology glossaries and archaeology dictionaries
<http://www.glossarist.com>

Godlewska, Anne

1999 Geography Unbound: French Geographic Science from Cassini to Humboldt. Chicago: University of Chicago.

At the end of the eighteenth century, French geographers faced a crisis. Though they had previously been ranked among the most highly regarded scientists in Europe, they suddenly found themselves directionless and disrespected because they were unable to adapt their descriptive focus easily to the new emphasis on theory and explanation sweeping through other disciplines. Godlewska examines this crisis, the often conservative reactions of geographers to it, and the work of researchers at the margins of the field who helped chart its future course. She tells her story partly through the lives and careers of individuals, from the deposed cabinet geographer Cassini IV to Volney, von Humboldt, and Letronne who were innovators in human, physical, and historical geography, and partly through the institutions with which they were associated such as the Encyclopédie de Géographie (1995) and the Jesuit and military colleges. She presents an insightful portrait of a crucial period in the development of modern geography, whose unstable disciplinary status is still very much an issue today.

Golb, Norman

1995 Who Wrote the Dead Sea Scrolls: the search for the secret of Qumran? New York: Scribners.

1985 "Who Hid the Dead Sea Scrolls?" BA 48/2: 68-82.

1980 "The Problem of Origin and Identification of the Dead Sea Scrolls." Proceedings of the American Philosophical Society. 124/1 (Feb 29): 1-24.

Golb proposes an alternative to the Qumran-Essene hypothesis of De Vaux who concluded that the Dead Sea Scrolls were copied and stored by the Essene community that lived at Khirbet Qumran. Golb argues that the scrolls are from the libraries of various communities in Jerusalem, who hid them in the caves around Qumran when war between Judah and Rome was immanent, but that the Qumran community had nothing directly to do with the Dead Sea Scrolls.

Gong, Y. and J. Hodgson, M.G. Lambert and I.L. Gordon
1996 "Short-term ingestive behaviour of sheep and goats grazing grasses and legumes." New Zealand Journal of Agricultural Research 39:63-73.

Goodman, Susan
1985 Gertrude Bell. Gordonsville: Berg.

Gottwald, Norman K.
1979 The Tribes of Yahweh: a sociology of the religion of liberated Israel 1250-1050 B.C.E. Maryknoll: Orbis.

Gould, Richard A.
2000 Archaeology and the Social History of Ships. Cambridge: Cambridge University.

Gould writes a comprehensive treatment of underwater archaeology that examines the impact of new undersea technologies and the destructive effects of treasure hunting. Maritime archaeology deals with shipwrecks and is carried out by divers rather than diggers. Marine archaeologists study maritime history, changes in ship-building, navigation, the infrastructure of waterborne commerce, and offers fresh perspectives on the cultures and societies that produced the ships and sailors.

Grabbe, Lester L.
2007 Ancient Israel: What do we know and How do we know it? London: T&T Clark.

Grabbe surveys methods of reconstructing the history of Israel and reviews the archaeological and written artifacts sources from, provides an analysis of the issues in, and outlines a synthesis for Middle-Late Bronze periods (2000–1300 B.C.E.); Late Bronze II-Iron IIA periods (1300–900 B.C.E.); Iron IIB period (900–720 B.C.E.); and the Iron IIC period (720–539 B.C.E.). He also offers syntheses and analyses on the place of the social sciences, the use of archaeology, the *longue durée*, ethnicity, ideology and neo-fundamentalism, maximalists-minimalists and the *ad hominem* argument, and describes the six principles of his own historical method.

2001 "Sup-urbs or Only Hup-urbs? Prophets and populations in ancient Israel and socio-historical method." In "Every City Shall Be Forsaken:" urbanism and prophecy in ancient Israel and the Near

East: 93-121. Edited by Lester L. Grabbe and R.D. Haak. JSOT supplement 330; Sheffield: Sheffield University.

Grabbe, Lester L., ed.

2003 "Like a Bird in a Cage: the invasion of Sennacherib in 701 B.C.E."
Journal for the Study of the Old Testament Supplement 363;
London: Sheffield Academic.

The European Seminar on Methodology in Israel's history has spent a number of years debating historical method. "Like a Bird in a Cage" is a case study on the history of Sennacherib's invasion of Judah in 701 B.C.E. Using archaeology, biblical studies, Assyriology and Egyptology the contributors describe various methods for reconstructing an accurate history of ancient Israel.

Granqvist, H.

1947 Birth and Childhood Among the Arabs. Helsinki: Soderstrom.

Green, Thomas J.

2008 "Cultural Resource Management." In Handbook of Archaeological Theories: 375-394. Edited by R. Alexander Bentley, Herbert D.G. Maschner and Christopher Chippindale. Lanham: Rowman & Littlefield.

Greenberg, Raphael

2006 "What's Cooking in Early Bronze Age II?" In "I Will Speak The Riddles of Ancient Times": archaeological and historical studies in honor of Amihai Mazar on the occasion of his sixtieth birthday, vol 1: 39-48. Edited by Aren M. Maeir and Pierre de Miroschedji. Winona Lake: Eisenbrauns.

Gruber, Mayer I.

1989 "Breast-Feeding Practices in Biblical Israel and in Old Babylonian Mesopotamia." JANES 19: 61-83.

Gruber explains how breast-feeding may delay the return of ovulation after birth. If Hebrew women nursed for three years, they would have carried only four children to term. Of these four only two lived to become adults.

HHHH

Haarlem, Willem M. van

1992 "A Functional Analysis of Ancient Egyptian Amulets." Sesto

Congresso Internazionale di egittologia 1: 237-240.

Habricht, J.P, J. Davanzo, W.P. Butz and L. Meyers
1985 "The Contraceptive Role of Breast Feeding." Population Studies
39: 213-232.

Hallo, William W.

1964 "The Slandered Bride." In Studies from the Workshop of the Chicago Assyrian dictionary presented to A Leo Oppenheim, June 7, 1964: 95-105. Chicago: Oriental Institute of the University of Chicago.

A study of a cuneiform tablet that preserves the transcript of the trial of The Slandered Bride (UET 5:256) (Babylonian Expedition of the University of Pennsylvania, Series A: Cuneiform Texts [BE] edited by H.V. Hilprecht 1893-1914: 6/2:58; C.J. Gadd, L. Legrain et al., Ur Excavations, Texts: I Royal Inscriptions [UET] 1928: 5:256; Hallo and Younger 2003: 3.199). This trial is significant for the understanding of both ancient Near Eastern legal systems in general, and legal systems in ancient Israel in particular.

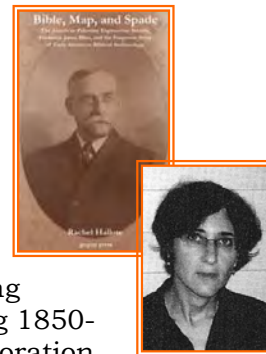
Hallo, William W. and K. Lawson Younger, eds.
2003 The Context of Scripture, 3 vols. Leiden: Brill.

Hallo and Younger edit three volumes of canonical, monumental and archival traditions from the world of the Bible set in their original geographical, historical, religious, political, and literary contexts with introductions and bibliographies.

Hallote, Rachel

2006 Bible, Map and Spade: the American Palestine Exploration Society, Frederick Jones Bliss and the forgotten story of early American Biblical Archaeology. Piscataway: Gorgias.

Rachel Hallote combines both politics and biography to outline Bible, Map and Spade: the American Palestine Exploration Society, Frederick Jones Bliss and the forgotten story of early American Biblical Archaeology (2006). Hallote studies the American Palestine Exploration Society sponsored by Syrian Protestant College, now the American University of Beirut, and the work of Frederick J. Bliss (1859-1937) and other pioneering American archaeologists and their political agendas during 1850-1900. Because Bliss worked for the British Palestine Exploration



Fund for a decade, many scholars downplayed his American nationality and sensibilities, as well as his achievements as an archaeologist.

Halpern, Baruch

1978 "The Rise of Abimelek ben-Jerubaal." Hebrew Annual Review 2:79-100.

K.C. Hanson's HomePage

<http://www.kchanson.com>

Hardin, James W.

2004 "Understanding Domestic Space: an example from Iron Age Tel Halif." Near Eastern Archaeology 67, 2: 71-83.

Harmanioah, Omor

2007 "Upright Stones and Building narratives: formation of a shared architectural practice in the Ancient Near East." In Ancient Near Eastern Art in Context: studies in honor of Irene J. Winter by her students: 67-98. Edited by Jack Cheng and Marian Feldman. Culture and History of the Ancient Near East, 26; Leiden: Brill.

Hasel, Michael G.

2003 "Merenptah's Inscription and Reliefs and the Origin of Israel." In The Near East in the Southwest: essays in honor of William G. Dever: 19-44. Annual of the American Schools of Oriental Research, 58; Boston: ASOR.

Hasel argues against the interpretation of the Merenptah Inscription by Rainey 2001. Rainey says the word "seed" refers to the "people" of Israel; Hasel says it refers to their "crops". Rainey considers Israel to be a city; Hasel considers Israel to be villages of farmers and herders.

1994 "Israel in the Merneptah Stela." BASOR 296: 45-61.

Hasel is an Egyptologist who completed his dissertation Domination and Resistance: Egyptian Military Activity in the Southern Levant, 1300-1185 BC (1996) at the University of Arizona with William G. Dever and Richard H. Wilkinson. He studies Late Bronze Age Syria-Palestine and Egyptian interaction with the Eastern Mediterranean and has excavated at Idalion (Cyprus); Ashkelon, Dor, Gezer, Masada, Hazor (Israel); and at Jalul (Jordan). He is currently Director of the Institute of Archaeology, Curator of the Lynn H. Wood Archaeological Museum, and

Professor of Near Eastern Studies and Archaeology at Southern Adventist University.

Hays-Gilpin, Kelley

2008 "Gender." In Handbook of Archaeological Theories: 335-350. Edited by R. Alexander Bentley, Herbert D.G. Maschner and Christopher Chippindale. Lanham: Rowman & Littlefield.

2000 "Feminist Scholarship in Archaeology." Annals of the American Academy of Political and Social Science 571: 89-106.

Hays-Gilpin explores the history of women and feminism in archaeology, examines a few of the central issues addressed by feminist and gender-oriented archaeologists, briefly addresses equity issues for women archaeologists, and identifies some future directions.

Hays-Gilpin, Kelley and David S. Whitley, eds.

1998 Reader in Gender Archaeology. New York: Routledge.

Hazor Excavations in Memory of Yigael Yadin

<http://unixware.mscc.huji.ac.il/~hatsor/hazor.html>

Heider, George C.

1985 The Cult of Molek: a reassessment. Sheffield: JSOT.

Heider does a comparative study on child sacrifice.

Helms, Svend W. and A. Betts

1987 "The Desert 'Kites' of the Badiyat esh-Sham and Northern Arabia." Paleorient 13, 1:41-67.

Helms and Betts analyze the relationship between kite corrals and hunting on the vast treeless plains of the basalt rich region of Badiyat esh-Sham (Jordan) during the Neolithic and later periods. Before this study these extensive stone structures were reported only in the journals of travelers.

Henige, David

2006 "A War of Pots and Kettles: the dubious discourse of W.G. Dever." SJOT 20,1:77-95.

Hernandez, Miguel

"Stature estimation in extinct Aonikenk and the Myth of Patagonian Gigantism."

<http://www3.interscience.wiley.com/cgi-bin/abstract/28170/>

Herodotus

1987 History. Chicago : University of Chicago.

Herr, Larry G. and Douglas R. Clark

2001 "Excavating the Tribe of Reuben." BAR 27, 2: 36-47+64+66.

Herscher, Ellen

1999 "International Control Efforts: are there any good solutions?" In The Ethics of Collecting Cultural Property: Whose Culture? Whose Property?: 117-128. Edited by Phyllis Mauch Messenger. Albuquerque: University of New Mexico.

Hess, Richard S.

2007 Israelite Religions: an archaeological and biblical survey. Grand Rapids: Baker.

Hess reviews archaeological evidence from Syria-Palestine and Egypt to argue that archaeology has no universal principles for understanding the meaning of religion and the way it functions in cultures. Consequently, contemporary worldviews unduely influence how archaeologists understand the religion of ancient Israel.

Hilprecht, H.V.

1893 Babylonian Expedition of the University of Pennsylvania, Series A: Cunieform Texts [BE] 1893-1914: 6/2:58.

Hirschfeld, Yizhak

2004 Qumran in Context: reassessing the archaeological evidence. Peabody: Hendrickson.

Hirschfeld challenges the Qumran-Essene hypothesis of De Vaux and Magness, and interprets Khirbet Qumran as a country house of a wealthy Herodian household. For him the Dead Sea Scrolls were not copied and stored by a Jewish monastic community, but removed from Jerusalem to the caves around Qumran for safekeeping during the first war between Judah and Rome.

History of the Ancient Near East Electronic Compendium: Ancient Israel, Iraq, Egypt, Turkey, Iran Syria, Lebanon, Jordan, Arabia, Cyprus and Bahrain. <http://ancientneareast.com/index.html>

Initially promises to be a significant resource to information and images on the web. The site, however, is top heavy with marketing pop-ups, and usable information is very limited.

Hobson, Christine

1987 The World of the Pharaohs: a complete guide to ancient Egypt.
London: Thames and Hudson.

Hobson introduces the men and women connected with origins of archaeology in Egypt. Anecdotes about these pioneers appear throughout the book. The most famous -- Belzoni, Lepsius, and Petrie -- are profiled, but also the less famous -- Hans Sloan, James Bruce, Lady Lucie Duff-Gordon, and Amice Calverly. There is no description of the contributions of North American scholars like James H. Breasted and his successors at the Oriental Institute (University of Chicago).

Hodder, Ian

1991 "Postprocessual Archaeology and the Current Debate." In Processual and Postprocessual Archaeologies: Multiple Ways of Knowing the Past: 30-41. Edited by Robert Preucel. Carbondale: Center for Archaeological Investigations.

1985 Symbols in Action: ethnoarchaeological studies of material culture.
New York: Cambridge University.

Hodder, Ian, ed.

2001 Archaeological Theory Today. Oxford: Polity.

1995 Interpreting Archaeology: finding meaning in the past. New York: Routledge

Hodder, Ian and Scott Hutson

2003 Reading the Past: current approaches to interpretation in archaeology. 3rd edition; Cambridge: Cambridge University.

In their classic introduction to archaeological theory and method Hodder and Hutson argue that archaeologists must bring to bear a variety of perspectives in the complex and uncertain task of constructing meaning from the past. While remaining centered on the importance of hermeneutics, agency and history, they explore cutting-edge developments in areas such as post-structuralism, neo-evolutionary theory and new branches of theory such as phenomenology, feminist archaeology, cultural history, and theories of discourse and signs.

Hodges, Henry

1970 Technology in the Ancient World. New York: Barnes and Noble.

Hodgson, William Brown

“Biographical Sketch of Mohammed Ali, Pasha of Egypt, Syria, and Arabia. <http://www.sunnah.org/history/mhdalip.htm>

Hoffmeier, James K.

2008 The Archaeology of the Bible. Oxford: Lion Hudson.

Beginning with Genesis and the origins of the world Hoffmeier follows the Bible narrative through to the early churches of the book of Revelation. His book is divided into three sections – two of which cover the Old Testament and one covers the New Testament – and is interspersed with stories from his own experience as an archeologist.

2007 “Rameses of the Exodus Narratives is the 13th Century B.C. Royal Ramesside Residence.” TRNJ 28NS: 281-289.

2007 “What is the Biblical Date for the Exodus? a response to Bryant Wood.” JETS 50, 2: 225-247.

2006 “Out of Egypt: the archaeological context of the Exodus”. BAR (Jan-Feb): 30-41+77.

Hoffmeier argues for the identification of the El Ballah Lakes as the *Sea of Reeds*, and proposes a route for the exodus south from Avaris (Tell el-Daba) to Succoth (Tell el-Maskhuta), then north along east coast of El Ballah Lakes crossing just south of Way of Horus and the forts at Tell el Borg, Tel Hebua and Migdol.

2005 Ancient Israel in Sinai: the evidence for the authenticity of the Wilderness Tradition. New York: Oxford University.

2004 “The North Sinai Archaeological Project’s Excavations at Tell el-Borg (Sinai): an example of the ‘New’ Biblical Archaeology? In The Future of Biblical Archaeology: reassessing methodologies and assumptions: 53-66. Edited by James K. Hoffmeier and Alan Millard, eds. Grand Rapids: William B. Eerdmans.

2003 “Everyday Life in Ancient Egypt.” In Life and Culture in the Ancient Near East: 327-354. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.

1997 Israel in Egypt: the evidence for the authenticity of the Exodus tradition. New York: Oxford University.

The full argument for the summary article in BAR 2006:10-41+77. Dedicated to Kenneth A. Kitchen (On the Reliability of the Old Testament 2003) and with cover praise from Anson Rainey, H shares Kitchen and Rainey’s conviction that biblical traditions are historically reliable.

Hoerth, Alfred J.

2009 Archaeology and the Old Testament. Grand Rapids: Baker.

Hoffmeier, James K. and Alan Millard, eds.

2004 The Future of Biblical Archaeology: reassessing methodologies and assumptions, the proceedings of a symposium, August 12-14, 2001 at Trinity International University. Grand Rapids: William B. Eerdmans.

Hoffmeier and Millard edit an anthology of papers by archaeologists from the North Sinai Archaeological Project who want to redefine biblical archaeology in the aftermath of the minimalist-maximalist debate and the schism between Assyriology and biblical studies.

Hoffner, H. A.

2003 "Daily Life Among the Hittites." In Life and Culture in the Ancient Near East: 95-120. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.

Hole, Frank Arnold

1995 "Assessing the Past Through Anthropological Archaeology." In Civilizations of the Ancient Near East, vol. 4: 2715-2727. New York: Charles Scribner's Sons.

Holladay, John S.

1998 "The Kingdoms of Israel and Judah: political and economic centralization in the Iron IIA-B." In The Archaeology of Society in the Holy Land: 369-398. London: Leicester University

Holladay offers a maximalist analysis of archaeological data for the state of Israel between 1000-900 B.C.E.

1990 "Red Slip, Burnish, and the Solomonic Gateway at Gezer." BASOR 277-278 (Feb-May): 23-70.

For Holladay polishing or burnishing red slips on pottery is a signature of a cultural change during the Iron Age in Syria-Palestine. Just when this technological change took place and what kind of cultural evolution it represents is a matter of dispute. The excavation of the gate at Gezer, however, clearly suggests that burnished red slip pottery is the signature of state culture in Iron II Syria-Palestine.

Holloway, Steven W.

2002 Assur is King! Assur is King! Religion in the Exercise of Power in the Neo-Assyrian Empire. CHANE 10; Leiden: E.J.Brill.

Holum, Kenneth G.

- 1990 "Hadrian and St. Helena: Imperial travel and the origins of Christian Holy Land pilgrimage." In The Blessings of Pilgrimage: pp-pp. Edited by R. Ousterhout. Urbana: University of Illinois.
- 2004 "Caesarea's Temple Hill: the archaeology of sacred space in an ancient Mediterranean city." Near Eastern Archaeology 67: 184-199.

Archaeological history of the Temple Platform at Caesarea Maritima: 1) Temple to Augustus and Roma (22 B.C.E – 350 C.E.); 2) vacant (400-470); 3) intermediate commercial or residential building (470-490); 4) octagonal martyr church dedicated to St. Cornelius the Centurion (470-640); 5) mosque (640-1101); 6) Church of St. Peter and great vaulted Crusader Halls (1101-1264); 7) villas of wealthy Bosnian refugees (1884-1948)

Homan, Michael M.

- 2004 "Beer, Barley, and *sekar* in the Hebrew Bible." In Le-David Maskil: a birthday tribute for David Noel Freedman: 25-38. Biblical and Judaic Studies from the University of California, San Diego, 9; Winona Lake: Eisenbrauns.

Hoover, Marleen

- "Art History Survey I."
www.accd.edu/.../arts1303/Neolith1.htm

Hoppe, Leslie J.

- 2007 "Taking a Second Look: New Excavations at Hazor." TBT November/December: 378-383.

Hopkins, David C.

- 1985 The Highlands of Canaan: agricultural life in the early Iron Age. Sheffield: Almond.

Horn, Siegfried H.

- 1986 "Why the Moabite Stone Was Blown to Pieces: Ninth-century B.C. inscription adds new dimension to Biblical account of Mesha's rebellion." BAR (May-June): 50-61.

Hornung, Erik and Betsy M. Bryan, eds.

- 2002 The Quest for Immortality: Treasures of Ancient Egypt. Washington: National Gallery of Art.

Horowitz, W

2000 "Two Late Bronze Age Tablets from Hazor." IEJ 50:16-28.

Horowitz, W. and T. Oshima

2000 "Two More Cuneiform Finds from Hazor." IEJ 52:179-186.

Howard, Calvin D.

1999 "Amorphous Silica, Soil Solutions, and Archaeological Flint Gloss." North American Archaeologist 20: 209-215.

Natural chemical processes in soils produce glossy conditions on artifacts of flint and chert that mimic, modify, or destroy ancient use-wear traces, thus making affected artifacts difficult or unacceptable for microwear studies. These glosses include general gloss patina or soil sheen, and intensely brilliant specular spots. The information presented suggests that this enigmatic "bright spot" phenomenon is the result of deposition and solidification of silica gel precipitated from soil colloids in the artifact s *in situ* environment and should not be confused with ancient use-wear evidence.

Howard, Kathleen, ed.

1986 Treasures of the Holy Land: ancient art from the Israel Museum.
Edited by Kathleen Howard. New York: Metropolitan Museum

Howell, Georgina

2006 Daughter of the Desert. New York: Macmillan

Human Relations Area Files

<http://www.yale.edu/hraf/>

The Human Relations Area Files, Inc. (HRAF) is an internationally recognized organization in the field of cultural anthropology. The mission of HRAF is to encourage and facilitate worldwide comparative studies of human behavior, society, and culture. Founded in 1949 at Yale University, HRAF is a financially autonomous research agency of Yale. HRAF produces two major collections (the HRAF Collection of Ethnography and the HRAF Collection of Archaeology), encyclopedias, and other resources for teaching and research. Click on one of the areas above for more information.

Hunt, Alice Wells

2005 "Bringing Dialogue from Cacophony: can Bakhtin speak to biblical historiography?" Perspectives in Religious Studies 32, 3: 325-337.

Hunt, E. D.

1982 Holy Land Pilgrimage in the Later Roman Empire A.D. 312-460.
Oxford: Clarendon

IIII

Isbouts, Jean-Pierre

2007 The Biblical World: an illustrated atlas. Washington D.C.: National Geographic.

Isbouts creates a popular, illustrated reconstruction of the world of the Bible including maps and timelines. Chapters summarize the Bible, place the tradition in a particular historical period and include finds from geography, archaeology and literary criticism. Sidebars highlight daily life, such as marriage, childbirth, food supply, dress, trade, language, art, and burial practices.

Ishida, Hideto

2002 "Insight Into Ancient Egyptian Beer Brewing Using Current Folkloristic Methods." Master Brews Association of the Americas TechQuarterly 39,2: 81-88.

Isserlin, B.S.J.

2001 The Israelites. Minneapolis: Fortress.

JJJJ

Jackson, Kent P.

1989 "The Language of the Mesha Inscription." In Studies in the Mesha Inscription and Moab: 96-130. Edited by Andrew Dearman. Archaeology and Biblical Studies, series no. 2; Atlanta: Scholars.

Jackson argues that Moabite and Hebrew are more closely related to Hebrew than Garr (1985) proposed. He also offers a basic grammar of Moabite, and a brief survey of other Moabite inscriptions.

Jacobs, Paul and Christopher Holland

2007 "Sharing Archaeological Data: the distributed archive method." Near Eastern Archaeology 70, 4 (December): 197-201.

Jacobs and Holland discuss copyright and fair use, the need to provide incentives for archaeologists to share their data, the best methods for achieving uniforming in data archiving.

Jakobson, Roman and Morris Halle

1980 Fundamentals of Language. New York : Mouton.

Jamieson-Drake, David W.

1997 "Historical Archaeology." OEANE 3: 28-30.

Historical Archaeology is a partnership between archaeology and history, rather than history and anthropology, and places a priority on the role of writings in the interpretation of material remains.

1991 Scribes and Schools in Monarchic Judah: a socio-archeological approach. JSOT supplement 109; Almond: Sheffield University.

Janzen, J. Gerald

1987 "A Certain Women in the Rhetoric of Judges 9." JSOT 38: 35.

Jensen, M.D., R.C. Benson and I.M. Bobak

1977 Maternity Care, the Nurse and the Family. St Louis. C.V. Mosby.

Joffe, Alexander H.

2006 "The Rise of Secondary States in the Iron Age Levant: aracheological and historical considerations." In Excavating Asian History: interdisciplinary studies in archaeology and history: 67-112. Edited by Norman Yoffee and Bradley L. Crowell. Tucson: University of Arizona.

Johnson, Amber L., ed.

2004 Processual Archaeology: exploring analytical strategies, frames of reference and culture process. Wesport: Praeger.

Johnson, Matthew

1999 Archaeological Theory: an introduction. Oxford: Blackwell.

Johnson introduces each of the contemporary theories of archaeology, and describes the historical context where each developed.

Johnston, R.H.

1974 "The Biblical Potter." BA 37,4:86-106.

Building on the work of Matson 1965, Johnston uses ethnoarchaeology -- studying the techniques used by the potters of Cyprus and other sites in the Middle East today -- to better understand the mechanics of pottery making in the world of the Bible. He worked for four seasons with Wright at Idalion, Bab-edh-Dhra and Shechem.

Jordan, Brigitte

1983 Birth in Four Cultures: a cross-cultural investigation of childbirth in Yucatan, Holland, Sweden, and the United States. Montreal: Eden.

Josephus, Flavius

2000 Flavius Josephus, translation and commentary. Edited by Steve Mason and Louis H. Feldman. Leiden: Brill.
<http://members.aol.com/FLJOSEPHUS/home.htm>

KKKK

Kadesh Barnea (tell el Qudeirat)

<http://www.deltasinai.com/sinai-01.htm>

Kahane, P.P.

1965 The Bible in Archaeology. Jerusalem: Israel Museum.

Kansa, Sarah Whitcher, Eric C. Kansa and Jason M. Schultz

2007 "Open Context, Data Sharing, and Archaeology." Near Eastern Archaeology 70, 4 (December): 188-194.

Kansa, Kansa and Schultz discuss the benefits and challenges of data sharing in archaeology. Open Context is a free, open access resource for the electronic publication of primary field research from archaeology and related disciplines.

Kapitan, Tomis, ed.

1999 Archaeology, History and Culture in Palestine and the Near East: essays in memory of Albert E. Glock. Atlanta: Scholars.

Karmon, Y.

1960 "An Analysis of Jacotin's Map of Palestine." IEJ 10:155-173; 244-253.

Keefe, Alice A.

2001 Woman's Body and the Social Body of Hosea. JSOT Supplement Series, 338; Gender, Culture, History, 10; New York: Sheffield.

Keller, Werner

1955 The Bible as History: a confirmation of the Book of Books. Translated by William Neil. New York: William Morrow & Co.

Kemp, B.J.

1989 Ancient Egypt: anatomy of a civilization. London: Publisher.

Kemp includes a discussion of the administration of baking and bread as rations.

Kenyon, Kathleen M.

1971 Royal Cities of the Old Testament. New York: Shocken.

1960 Archaeology in the Holy Land. Nashville: Thomas Nelson.

1957 Samaria Sebaste III: the objects. London: Palestine Exploration Fund.

1952 Beginning in Archaeology. New York: Frederick A. Praeger.

Kenyon, Kathleen M. and P.R.S. Moorey

1987 The Bible and Recent Archaeology. Atlanta: John Knox.

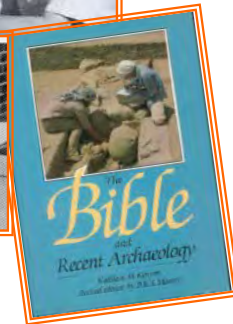
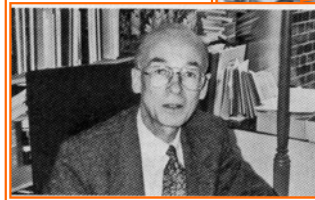


Kathleen M. Kenyon (1906-1978) published The Bible and Recent Archaeology (1978) shortly before her death. P. Roger Moorey (1937-2004) issued a revised edition of these short essays in 1987. The book follows the archeological calendar for the Bronze Age to Roman period. Moore accepts the arguments of Frank Yurco (Field Museum of Natural History, Chicago) that a battle scene on the walls of a Karnak temple depicts the campaign described in the Annals of Merneptah, rather than the Annals of Ramses II (Journal of the American Research Center in Egypt 23[1986]:189-215). Therefore Yurco considers the figures on the bottom of this drawing to be the first pictures found in Egypt of the biblical Hebrews.

PEOPLE OF ISRAEL CONQUERED BY MERNEPTAH?

Killebrew, Ann E.

2006 "The Emergence of Ancient Israel: the social boundaries of a 'mixed multitude' in Canaan." In "I Will Speak The Riddles of Ancient Times": archaeological and historical studies in honor of Amihai Mazar on the occasion of his sixtieth birthday, vol 1: 555-572. Edited by Aren M. Maeir and Pierre de



Miroschedji. Winona Lake: Eisenbrauns.

2005 Biblical Peoples and Ethnicity: an archaeological study of Egyptians, Canaanites, Philistines, and Early Israel, 1300-1100 B.C.E. Atlanta: SBL.

Killebrew, Ann E. and Daniel Mack

2001 Sea Peoples and the Philistines on the Web

http://www.courses.psu.edu/cams/cams400w_aek11/www/index.htm

A project of CAMS 400W (Fall Semester 2001), under the direction of Ann Killebrew, Professor of Classics and Ancient Mediterranean Studies, in collaboration with Daniel Mack, humanities librarian at University Libraries.

King, Jaime Litvak

1987 "Cultural Property and National Sovereignty." In The Ethics of Collecting Cultural Property: Whose Culture? Whose Property?: 199-208. Edited by Phyllis Mauch Messenger. Albuquerque: University of New Mexico.

King, Noel Quinton

1986 "Egeria, Fa Hsien and Ibn Battuta: search for identity through pilgrimage?" In Identity Issues and World Religions, 42-46. Bedford Park: Australian Association for Study of Religions.

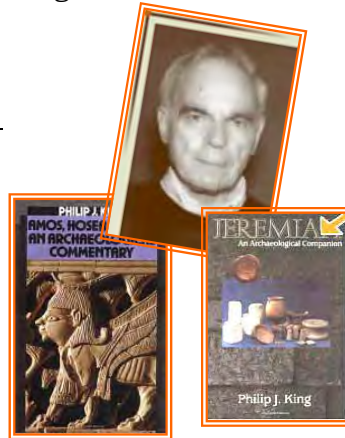
King, Philip J.

1993 Jeremiah – an archaeological companion. Louisville: Westminster/John Knox.

1988 Amos, Hosea, Micah – an archaeological commentary. Philadelphia: Westminster.

Philip J. King also published two volumes using a canonical outline: Amos, Hosea, Micah, an archaeological commentary (1988) and Jeremiah, an archaeological companion (1993). The chapters of both volumes, however, are arranged thematically.

After an introductory essay on the relationship of archaeology and biblical studies, for example, King provides a biography of Jeremiah and an outline of the contents of the book of Jeremiah. Then there are chapters demonstrating what archaeologists have learned about the history and the geography of the period, the political relationship of Edom and Judah, writing, worship, burials, farming and crafts. Both works use archaeology to better understand the



social world of the Bible. For example, a trial in the book of Jeremiah (Jer 47:1-7) sentences not only the Philistine cities of Ashkelon and Gaza, but also the Phoenician cities of Tyre and Sidon to be destroyed by Babylon. The relationship between the Philistines and the Phoenicians was unclear until Phoenician artifacts were recovered from the 604 B.C.E. destruction layers during the 1992 season at Ashkelon indicating the Philistines and the Phoenicians were covenant partners. Similarly, another trial of Jerusalem indicts its people for burning incense on ...*all the houses upon whose roofs offerings have been made* (Jer 19:13). The use of roofs as sacred space was unknown until incense stands that had been on the roofs of houses were recovered at Ashkelon (King 1993: xxv).

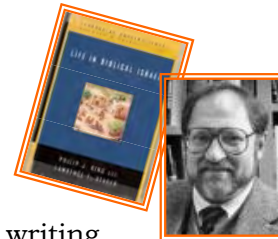
1983 American Archaeology in the Mideast: a history of the American Schools of Oriental Research. Winona Lake: ASOR.

In American Archaeology in the Mideast: a history of the American Schools of Oriental Research (1983) King anchors his story of the American Schools of Oriental Research on the biographies of Edward Robinson (1794-1863), Charles Clermont-Ganneau (1846-1923), Albright, James H. Breasted (1865-1935), Nelson Glueck (1900-1971), Wright, Millar Burrows (1889-1980), G. Lancaster Harding, Roland De Vaux (1903-1971), Carl H. Kraeling (1897-1966), Kenyon, Yigael Yadin (1917-1984), A. Henry Detweiler (1906-1970), James B. Pritchard (1909-1997), Callaway, Paul W. Lapp (1930-1970), William G. Dever, H. Dunscombe Colt, Frank M. Cross and other notable excavators who worked in the world of the Bible before 1980.



King, Philip J. and Lawrence E. Stager
2001 Life in Biblical Israel. Louisville: Westminster John Knox.

In Life in Biblical Israel King and Lawrence E. Stager use the kind of thematic outline of the social world of ancient Israel that King used in his archaeological commentaries. After introducing the archaeology of daily life, they discuss the household, farming, herding, the state, clothing, music, writing and worship. The book is a careful description of daily life based on the Post-Processual archaeology of the family done by Stager (Stager BASOR 260 [1985]: 1-35).



Kitchen, K.A.

- 2003 On the Reliability of the Old Testament. Grand Rapids: William B. Eerdmans.
- 2000 Ramesseide Inscriptions: Historical and Biographical. Oxford: B. H. Blackwell
- 1999 Poetry of Ancient Egypt. Gothenburg: Astrom.
- 1996 The Third Intermediate Period in Egypt 1100-650 B.C.E. Warminster: Aris & Phillips.
- 1995 Third Intermediate Period in Egypt, 1100-650 B.C. 2nd (1986) ed. With Supplement. Warminster: Aris & Phillips.

Kletter, Raz

- 2006 Just Past? The Making of Israeli Archaeology. London: Equinox

- 2006 "Can a Proto-Israelite Please Stand Up?" In "I Will Speak The Riddles of Ancient Times": archaeological and historical studies in honor of Amihai Mazar on the occasion of his sixtieth birthday, vol 1: 573-586. Edited by Aren M. Maeir and Pierre de Miroschedji. Winona Lake: Eisenbrauns.
- 2002 "A Very General Archaeologist: Moshe Dayan and Israeli archaeology." Journal of Hebrew Scriptures vol 4, article 5 http://www.arts.ualberta.ca/JHS/Articles/article_27.pdf

Kletter (Israel Antiquities Authority) studies written sources whose authors bore no known grudge against Dayan, to explain how Dayan could have collected antiquities illegally for some thirty years from more than thirty-five sites.

- 2005 Just Past? the making of Israeli archaeology. London: Equinox.

History of Israeli Archaeology in the 1950s and early 1960s: intrigues, budgets, dreams and failures. Documentary material in English and Hebrew as well as original documents never before published.

Knapp, A. Bernard, ed.

- 1992 Archaeology, Annales, and Ethnohistory. Cambridge: Cambridge University.

Koczka, Charles S.

- 1987 "The Need for Enforcing Regulations on the International Art Trade." In The Ethics of Collecting Cultural Property: Whose Culture? Whose Property?: 185-198. Edited by Phyllis Mauch Messenger. Albuquerque: University of New Mexico.

Kohler, Ludwig

1953 Hebrew Man. Translated by Peter R. Ackroyd. New York: Abingdon.

Kollek, T. and M. Pearlman

1970 Pilgrims to the Holy Land: the story of pilgrimages through the ages. London: Weidenfel and Nicholson.

Kramer, Samuel Noah

1978 Cradle of Civilization. Alexandria: Time-Life.

1978 "The Literate Man." In Cradle of Civilization: 118-137. Alexandria: Time-Life.

1956 History Begins at Sumer: thirty-nine firsts in recorded history. Philadelphia: University of Pennsylvania.

For Kramer the Sumerians created civilization in the world of the Bible. This ingenious and amazing people in Iraq were the first to develop written language, law codes, schools, philosophy, ethics, farms, healthcare, taxes and love songs.

Kuhn, Thomas S.

1970 The Structure of Scientific Revolutions. Chicago: University of Chicago.

Kuhn argues that academic disciplines are paradigms based on research which both solves problems and raises new problems and proposes new theories. Paradigms are not theories, but a consensus about what works among those in any discipline. When paradigms no longer evaluate evidence accurately, nor produce effective solutions, they shift.

LLLL

Lampl, Paul

1968 Cities and Planning in the Ancient Near East. New York: George Braziller.

Lance, H. Darrell

1981 The Old Testament and the Archaeologist. Philadelphia: Fortress.

Language of Ancient Egypt

<http://www.ancient-egypt.org/index.html>

Lane, Edward William

2000 Description of Egypt; notes and views in Egypt and Nubia made during the years 1825-1828. Cairo: American University in Cairo.

1863 Arabic-English Lexicon.
<http://www.studyquran.co.uk/LLhome.htm>

1836 An Account of the Manners and Customs of the Modern Egyptians. New York: Cosimo.

Lapp, Paul W.

1975 The Tale of the Tell: archaeological studies by Paul W. Lapp. Edited by Nancy L. Lapp. Pittsburgh Theological Monograph Series, 5; Pittsburgh: Pickwick.

1961 Palestinian Ceramic Chronology 200 B.C.-A.D. 70. Boston: ASOR.

Lapp published this still widely used study as his dissertation under G. Ernest Wright at Harvard University.

Larson, Mogens Trolle

1997 "Hincks versus Rawlinson: the decipherment of the cuneiform system of writing." In Ultra Terminum Vagari: scritti in onore di Carl Nylander: 339-356. Edited by Borje Magnusson. Rome: Quasar.

Laughlin, John C. H.

2000 Archaeology and the Bible. New York: Routledge.

Laughlin describes the development of archaeology in the Near East including the rise and fall of Biblical Archaeology and how recent discoveries and theories challenge established interpretations of the Exodus and Conquest traditions. He also explains fieldwork methods, and the broad cultural horizon of the Bible.

Lawler, Andrew

2007 "Raising Alexandria." Smithsonian April.
<http://www.smithsonianmag.com/science-nature/alexandria.html>

More than 2,000 years after Alexander the Great founded the city, archaeologists are discovering the remains of the Pharaoh's lighthouse that was one of the seven wonders of the ancient world, and the remains of Cleopatra's palace.

Lehner, Mark

1997 The Complete Pyramids. London: Thames and Hudson.

Lekson, Stephen

2001 "The Legacy of Lewis Binford." American Scientist (Nov-Dec).
<http://www.americanscientist.org/template/BookReviewTypeDetail/assetid/14411>

Lemche, Niels Peter

"Conservative Scholarship –Critical Scholarship of How Did We Get Caught By This Bogus Discussion?"
http://www.bibleinterp.com/articles/Conservative_Scholarship.htm).

2003 "On the Problems of Reconstructing Pre-Hellenistic Israelite (Palestinian) History." In "Like a Bird in a Cage:" 150-167. Edited by Lester L. Grabbe. Sheffield: Sheffield University.

1997 "On Doing Sociology with 'Solomon'." In The Age of Solomon: scholarship at the turn of the millennium: 321-325. Leiden: Brill.

Lemche offers a minimalist response to the maximalist analysis of archaeological data for the state of Israel between 1000-900 B.C.E. by John S. Holladay, "The Kingdoms of Israel and Judah: political and economic centralization in the Iron IIA-B." In The Archaeology of Society in the Holy Land: 369-398. He concludes that Holladay's work is an example of biblical archaeology's "contaminated method."

1985 Early Israel: anthropological and historical studies on the Israelite society before the monarchy. Leiden: E J Brill.

Lemelek Research Website

<http://www.lmlk.com/research/index.html>

Information about, and images of the *lmlk* -- *belonging to the king* -- seal impressions found in and around Jerusalem on fragmented jar handles interpreted as royal stamps referring to rulers of Judah.

Le Roy Ladurie, Emmanuel

1974 The Peasants of Languedoc. Translated by John Day. Edited by George Huppert. Urbana: University of Illinois.

The Letter and the Scroll: what modern archaeology tells us about the Bible.

2009 Washington DC: National Geographic.

Letter of Aristeas

<http://www.earlyjewishwritings.com/letteraristead.html>

The Letter of Aristeas describes how Pharaoh Ptolemy Philadelphus (285-247 B.C.E.) commission a translation of the Bible into Greek for the Library of Alexandria. The high priest Eleazar in Jerusalem chose seventy-two translators who worked on the Island of Pharos (Egypt), and completed the translation in seventy-two days

Levant

<http://www.art.man.ac.uk/ARTHIST/levant.htm>

Levant is the annual of the Council for British Research in the Levant (formerly the British School of Archaeology in Jerusalem and the British Institute at Amman for Archaeology and History). It is a fully refereed journal, devoted primarily to the archaeology of Palestine, Transjordan, Syria and Lebanon but the range of cognate disciplines and the geographical coverage is interpreted more widely.

Levenson, Jon D.

1993 The Death and Resurrection of the Beloved Son. New Haven: Yale University.

Levenson studies human sacrifice in ancient Israel and early Christianity. He argues that the firstborn belongs to Yahweh. "You shall give me the first-born among your sons (Exod 22:28)." Yahweh can ask for the firstborn to be sacrificed, or for an animal to be substituted, or for a vow of celibacy to be substituted. The fathers of most households did not have to sacrifice their firstborn, but some – Abraham, Jephthah and Moab – did.

Levi-Strauss, Claude

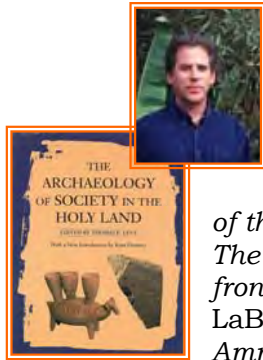
1966 The Savage Mind. Chicago: University of Chicago.

Levy, Thomas E., ed.

2009 The New Biblical Archaeology: from text to turf. London: Equinox.

Levy edits essays reflecting recent major changes in the historical archaeology of Syria-Palestine. They represent a fundamental paradigm shift brought about by the application of objective science based dating methods, Geographic Information Systems, anthropological models, and an array of computer-based and digital technology tools to the study of ancient texts and the archaeological record. Examples include: the Vedas, the Illiad and the Odyssey of Homer, Icelandic sagas, and Umayyad, Abbasid, Ayyubid Islamic traditions.

1998 The Archaeology of Society in the Holy Land. London:
Leicester University.



The Archaeology of Society in the Holy Land
(1995-1998) edited by Thomas E. Levy combines
themes with the archaeological calendar as an outline
for this anthology from thirty contributors all of whom
follow some form of the Annales School of
Archaeology. For example Stager describes *The Impact
of the Sea Peoples (1185-1050 B.C.E.)*; Israel Finkelstein,
*The Great Transformation: the 'conquest' of the highlands
frontiers and the rise of the territorial states*; Ostein S.
LaBianca and Randall W. Younker, *The Kingdoms of
Ammon, Moab and Edom: the archaeology of society in Late
Bronze/Iron Age Transjordan (ca 1400-500 B.C.E.)*.

Levy, Thomas E. and Augustin F.C.Hall

1998 "Social Change and the Archaeology of the Holy Land." In The
Archaeology of Society in the Holy Land: 2-8. Edited by Thomas E.
Levy. London: Leicester University.

Levy, Thomas E., Russell B. Adams and Adolfo Muniz

2004 "Archaeology and the Shasu Nomads: recent excavations in
the Jabal Hamarat Fidan, Jordan." In Le-David Maskil: a
birthday tribute for David Noel Freedman: 63-90. Biblical
and Judaic Studies from the University of California, San
Diego, 9; Winona Lake: Eisenbrauns.

The Library of the Palestine Pilgrims' Text Society

1971 New York: AMS Publishing.

Between 1887-1897 the Society collected, translated and edited the
journals of early pilgrims in the world of the Bible.

Lloyd, S

1984 The Archaeology of Mesopotamia: from the old Stone Age to the
Persian conquest. London: Thames & Hudson.

Systematic survey of the archaeology of Mesopotamia.

Lorenz, Konrad

1966 On Aggression. Translated by Marjorie Kerr Wilson. New York :
Harcourt, Brace & World.

The Louvre: seven faces of a museum

1989 Paris: Editions de la Reunion des musees nationaux.

Catalog for the Louvre.

MMMM

McCarter, Susan Foster

2007 Neolithic. New York: Routledge.

McCarter explains the evolution of the domestication of plants and animals, and the impact of farming and herding on population, social organization, nutrition, disease, architecture, exchange systems, technology and religion.

McGeough, Kevin M.

2006 "Birth Bricks, Potter's Wheels, and Exodus 1,16." Biblica 87, 3: 305-318.

Machinist, Peter

1996 "William Foxwell Albright: the man and his work." In The Study of the Ancient Near East in the Twenty-first Century: the William Foxwell Albright Centennial Conference: 385-403. Edited by J.S. Cooper and G. M. Schwartz. Winona Lake: Eisenbrauns.

For Machinist Albright brought his formidable understanding of the traditions, languages, world views, archaeology, chronology and history of virtually every culture in the ancient Near East to bear on his interpretation of ancient Israel and the Bible. Albright's work was interdisciplinary, but individual; today work continues to be interdisciplinary, but collaborative. Peter Machinist (Harvard University) evaluates the role of the Bible, Orientalism, archaeology and science in Albright's work. The *Bible* was always the point of departure and ultimate point of return in his work across many different fields. *Orientalism* or Ancient Near Eastern Studies placed the Bible within the larger context of the languages and cultures in the world of the Bible. *Archaeology* also grounded his understanding of the Bible in a context outside of itself. And, finally, Albright used a scientific, rather than a theological, approach to the Bible. He rationally and empirically collected data that would ground his interpretations on a tangible body of verifiable facts. As an *archaeologist* Albright collected and interpreted specific material remains; as a *linguist* he clarified vocabulary and usage. And as an *historian* he described the evolution of Western civilization from the

culture in ancient Israel and the Bible.

Albright used diagnostic details – the investigation of words and other concrete objects reflecting daily life -- to establish his chronologies or typologies – patterns of evolution or development for pottery, language, and world views like monotheism.

McIntosh, Roderick, Susan Keech McIntosh and Tereba Togola
1995 “The Good Collector and the Premise of Mutual Respect Among Nations.” African Arts. 28: 60-69 +110-112.

Alpha Oumar Konare, president of Mali (1992-2002), said that Mali (Africa) regards good collectors and public trust museums as natural partners in its goal of sharing Mali’s antiquities with the world. Here three archaeologists describe good collectors and the role they can play in eliminating illegal collecting and trafficking in antiquities.

McIntosh, Susan Keech
2000 “The ‘Good Collector’: fabulous beast or endangered species?” Public Archaeology. 1: 73-76.

Good collectors use their artifacts to open the eyes of others to the nobility of the maker cultures; their pride comes not from possessing artifacts, but using them for education; aesthetics are important to collectors, but not at the expense of the archaeological context of their artifacts.

McKenzie, D.
1907 “Children and Wells.” Folklore 18: 253-282.

McNutt, Paula
1990 The Forging of Israel: iron technology, symbolism and tradition in ancient society. Social World of Biblical Antiquity Series, 8; Sheffield: Almond.

Madaba Map
<http://www.christusrex.org/www1/ofm/mad/index.html>

Magen, Yizhak and Yuval Peleg
2007 The Qumran Excavations 1993–2004: Preliminary Report. Jerusalem: Israel Antiquities Authority.

Magen and Peleg propose that Qumran was originally a military post responsible for the security of the Dead Sea shore. From the Roman

conquest of Judah (63 B.C.E.) to the earthquake of 31 B.C.E., the site became a pottery factory, and date and date honey plantation. It retained its same function during the Herodian period, when more kilns were constructed and production increased. Its occupants even added a synagogue to serve its workers. They suggest that the scrolls are unconnected with the site but were brought there from Judean synagogues and hidden there at the time of the First Revolt.

2006 "Back to Qumran: Ten Years of Excavation and Research, 1993–2004." In Qumran, The Site of the Dead Sea Scrolls: archaeological interpretations and debates -- proceedings of a conference held at Brown University, November 17-19, 2002: 55–113. Edited by Katharina Galor, Jean-Baptiste Humbert and Jurgen Zangenberg. Leiden: Brill.

Magness, Jodi

"Review of Yizhar Hirschfeld, Qumran in Context: reassessing the archaeological evidence."

Greater Atlanta Biblical Archaeology Association.

http://www.gabaa.net/newsfeed/br_hirsch.htm

2002 The Archaeology of Qumran and the Dead Sea Scrolls. Grand Rapids: William B. Eerdmans.

"I find myself – an American Jewish woman – in the curious position of defending the interpretation proposed by de De Vaux who was a French Dominican priest! But this book is not about my personal beliefs and background or about De Vaux's. It is about the archaeological evidence. Obviously, De Vaux's interpretation of Qumran was influenced by his background (who isn't?). De Vaux's bias is evident in his use of monastic terms to describe some of the rooms and installations at Qumran (such as "refectory" and "scriptorium"). But the objections that have been raised by De Vaux's critics have obscured the fact that his interpretation of the site is basically correct (15-16)."

1995 "The Chronology of the Settlement at Qumran in the Herodian Period." Dead Sea Discoveries 2:58-65.

Magness makes her argument for redating Qumran. She argues that the Qumran community developed the site no earlier than 100-50 B.C.E. and stayed until 9 B.C.E. when Qumran was abandoned until 4 B.C.E.

Maeir, Aren M.

2006 I Will Speak the Riddles of Ancient Times: archaeological and historical studies in honor of Amihai Mazar on the occasion of his sixtieth birthday. Winona Lake: Eisenbrauns.

Marx, Karl

1848 Communist Manifesto. New York: New York Labor News.

Marzahn, Joachim

nd The Ishtar Gate: the processional way, the New Year festival of Babylon. Berlin: Vorderasiatisches Museum.

Maschner, Herbert D.G. and Christopher Chippindale, eds.

2005 Handbook of Archaeological Methods. Walnut Creek: Altamira.

Matson, Frederick R.

1965 Ceramics of Man.

Matson shows how to use pottery to better understand the cultural context where pottery was produced. The ecology of pottery is one aspect of the Ceramic ecology may be considered as one facet of cultural ecology, that which attempts to relate the raw materials and technologies that the local potter has available to the function in his culture of the products he fashions.

Magen, Itzhak and Yuval Peleg

2006 "Back to Qumran: ten years of excavation and research, 1993-2004." In Qumran, the site of the Dead Sea Scrolls: 55-113. Leiden: Brill.

In 1993-2004 Magen and Peleg directed excavations at Qumran and concluded that the water system at Qumran was part of a pottery factory. The cisterns were used to wash the clay before using it to make pots.

Matthews, Charles D.

1932 "Palestine, Holy Land of Islam". Journal of Biblical Literature 51: 171-178

Matthews, Victor H.

2007 "Historical Geography." In Studying the Ancient Israelites: a guide to sources and methods: 19-58. Grand Rapids: Baker Academic.

2007 "Archaeology." In Studying the Ancient Israelites: a guide to sources and methods: 59-90. Grand Rapids: Baker Academic.

Matthews, Victor H. and Don C. Benjamin
1991-

2006 Old Testament Parallels: laws and stories from the ancient Near East. Mahwah: Paulist.

1993 Social World of Ancient Israel 1250-587 B.C.E. Peabody: Hendrickson.

Mattingly, Gerald L.

1992 "Mesha." Anchor Bible Dictionary: 4, 707. Edited by D.N. Freedman. New York: Doubleday.

Mayes, Stanley

1959-

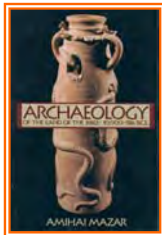
2003 The Great Belzoni: the circus strongman who discovered Egypt's ancient treasures. New York: L.B. Tauris.

Mazar, Amihai

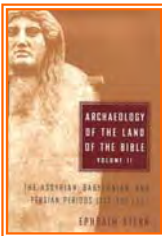
2006 "Jerusalem in the 10th Century B.C.E.: the glass half full." In Essays on Ancient Israel in its Near Eastern Context: 255-272. Winona Lake: Eisenbrauns.

1992 Archaeology of the Land of the Bible 10,000-586 B.C.E. New York: Doubleday.

Archaeology of the Land of the Bible, 10,000-586 B.C.E. (1990) by



Amihai Mazar and Archaeology of the Land of the Bible: the Assyrian, Babylonian, and Persian Periods, 732-332 B.C.E. (2001) by Ephraim Stern use the archaeological calendar as an outline. As part of the Anchor Bible Reference Library Mazar chooses one or more sites to describe the cultures of each archaeological period. The Carmel caves and the city of Jericho, for example, are exhibits for the Neolithic period (10,000-4,000 B.C.E.). Chapter outlines, however, are thematic. Mazar summarizes what material remains reveal about settlement planning, domestic and monumental architecture, farming and herding, trade, pottery, tools and weapons, liturgical art, and burials. Anthropology plays little role in his reconstruction of the world of the Bible (Shanks BAR 27 (2001):2-35). Use of artifacts to better understand the Bible appear only as asides. The index of citations from the Bible for this book of 576 pages is only one and one-half pages.



1990 "The First Agricultural Cities: the Neolithic Period (ca. 8500-4300 B.C.E.)" In Archaeology of the Land of the Bible, 10,000-586 B.C.E.: 35-58. New York: Doubleday.

Mazar, Amihai, ed.

2001 Studies in the Archaeology of the Iron Age in Israel and Jordan.
Sheffield: Sheffield Academic.

Megiddo Expedition

<http://megiddo.tau.ac.il/>

Mellaart, James

1965 Earliest Civilizations of the Near East. New York: McGraw Hill.

Merton, Robert K.

1949 Social Theory and Social Structure. New York: Free Press.

Social Theory and Social Structure continues to be a work of central importance in the social sciences because it provides the most systematic outline of the theoretical foundations of functional sociology. Among the enduring concepts that Merton proposed is *middle range theory* which is a balanced application of both theory and method in conducting studies.

Meskill, Lynn

2002 Private Life in New Kingdom Egypt. Princeton: Princeton University.

Messinger, Phyllis Mauch, ed.

1989 The Ethics of Collecting Cultural Property: Whose culture? Whose property? Albuquerque: University of New Mexico.

Meyers, Carol L.

2005 Households and Holiness: the religious culture of Israelite women. Minneapolis: Fortress.

2003 "Engendering Syro-Palestinian Archaeology: reasons and resources." Near Eastern Archeology 66: 185-197.

2003 "Where the Girls Are: archaeology and women's lives in ancient Israel." In Between Text and Artifact: integrating archaeology in biblical studies teaching: 31-51. Edited by Milton C. Moreland. Atlanta: SBL.

2003 "Material Remains and Social Relations: Women's Culture in Agrarian Households of the Iron Age." In Symbiosis, Symbolism, and the Power of the Past: Canaan, Ancient Israel, and their neighbors from the Late Bronze Age through Roman Palaestina: 425-444. Winona Lake: Eisenbrauns.

- 2003 "Everyday Life in Biblical Israel." In Life and Culture in the Ancient Near East: 185-204. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.
- 2002 "Having their Space and Eating There Too: bread production and female power in ancient Israelite households." Nashim: a journal of Jewish women's studies and gender issues 5: 14-44
- 1997 "The Family in Ancient Israel." In Families in Ancient Israel: 1-47. Edited by L.G. Perdue, J. Blenkinsopp, J.J. Collins and C. Meyers. Louisville: Westminster John Knox.
- 1991 "Of Drums and Damsels: women's performance in ancient Israel." BA 54: 16-27.
- 1988 Discovering Eve: ancient Israelite women in context. New York : Oxford University.

Meyers, Carol L. and Eric M. Meyers

- 1987 Haggai, Zechariah 1-8: a new translation with introduction and commentary. Anchor Bible, 25b; Garden City: Doubleday.

Meyers, Eric M.

- 1994 "Second Temple Studies in the Light of Recent Archaeology: part I, the Persian and Hellenistic periods." In Currents in Research: Biblical Studies: 25-42. Edited by Alan J. Hauser and Philip Sellev. Sheffield: Sheffield Academic

Through the lens of his own interpretation of the Second Temple period Meyers summarizes the archaeological highlights of the Persian (Iron III) and Hellenistic periods in Judah.

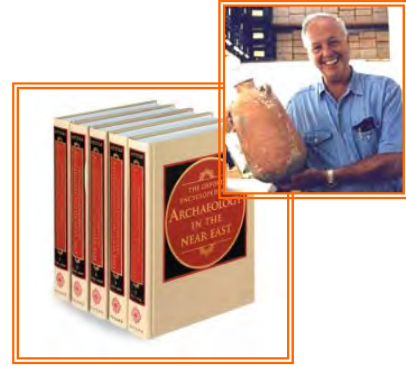
- 1985 "The Shelomith Seal and the Judean Restoration: some additional considerations." Eretz Israel 18:33-38.

Meyers, Eric M., ed.

- 1997 The Oxford Encyclopedia of Archaeology in the Near East. New York: Oxford University.

Originally, the five-volume Oxford Encyclopedia of Archaeology in the Near East (1997), edited by Eric M. Meyers with 560 contributors, was to be a one-volume introduction to archaeology and the Bible modeled on the Biblisches Reallexikon (1937-1977) by Kurt Galling. Four-hundred fifty of the 1125 entries are site reports from Syria-Palestine to Iran, Anatolia to Arabia, including Egypt, Ethiopia, Cyprus, North Africa, Morocco, Malta and Sardinia. These reports are the basis for an additional 650 articles on geography – Ethiopia, Nubia, North Africa, and everyday life – farming, herding, household, medicine, clothing and diet. There are also entries on the environment, the

economies of the peoples of the world of the Bible -- glass-making, shipbuilding, and metal working. Finally, there are entries on archaeological theory, methods, and practice, -- New Archaeology, Underwater Archaeology, Survey Archaeology, Salvage Archaeology, Development and Archaeology, Museums, Ethics and Archaeology, Ideology and Archaeology, Nationalism and Archaeology, Tourism and Archaeology. Biblical Archaeology is described within the larger context of archaeology in the Near East.



Microliths

<http://www.hf.uio.no/iakh/forskning/sarc/iakh/lithic/microliths.html>

Miller, J. Maxwell

1989 "Moab and the Moabites." In Studies in the Mesha Inscription and Moab: 1-40. Edited by Andrew Dearman. Archaeology and Biblical Studies, series no. 2; Atlanta: Scholars.

Miller provides a survey of the primary and secondary sources for the Annals of Mesha, especially the history of exploration of Moab and the identification of sites mentioned in the Bible.

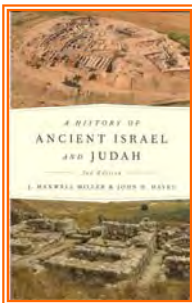
1988 "Antecedents to Modern Archaeology." In Benchmarks in Time and Culture: essays in honor of Josep A. Callaway: 3-14. Edited by Joel F. Drinkard, Jr. Gerald L. Mattingly and J. Maxwell Miller. Atlanta: ASOR.

1982 Introducing the Holy Land: a guidebook for first-time visitors. Macon: Mercer University.

1974 "The Moabite Stone as a Memorial Stele." Palestinian Exploration Quarterly. 106: 9-18.

Miller, J. Maxwell and John H. Hayes

2006 A History of Ancient Israel and Judah. Second edition; Louisville: Westminster John Knox.



A History of Ancient Israel and Judah (2006) by J. Maxwell Miller and John H. Hayes also uses the archaeological calendar. Hayes and Miller make careful use of archaeology to assess and revise the history that William F. Albright (1891-1971) proposed and which is reflected in works like A History of Israel (1959-2000) by John Bright (1908-1995). Albright's and Bright's histories of Israel used archaeology to demonstrate the historical reliability of the Bible. Hayes and Miller, in

contrast, use archaeology to evaluate and to interpret the biblical traditions.

Miller, Patrick D.

1969 "A Note on the Mesha Inscription." Orientalia 38: 461-464.

Miller, Robert D.

2005 Chieftains of the Highland Clans: a history of Israel in the twelfth and eleventh centuries B.C. Grand Rapids: William B. Eerdmans.

Mitchell, Stephen

2004 Gilgamesh: a new English version. New York: Free Press.

Mitchell, T.C.

1988 The Bible in the British Museum: interpreting the evidence. London: British Museum.

Mitchell translates sixty Near Eastern and western Mediterranean traditions from 2000 B.C.E.-100 and discusses the contribution they make to the understanding of the world of the Bible.

Mithen, Steven J

1989 "Evolutionary Theory and Post-Processual Archaeology." Antiquity 63: 483-94.

Mollenkort, V. R.

1983 The Divine Feminine: biblical imagery of God as female. New York: Crossroad.

Molnár, Zs.

Neutron Activation Analysis

http://www.reak.bme.hu/nti/Education/Wigner_Course/WignerManuals/Budapest/NEUTRON_ACTIVATION_ANALYSIS.htm

Archaeologists use Neutron Activation Analysis (NAA) is a quantitative and qualitative method of high efficiency for the precise determination of a number of main-components and trace elements in pottery. NAA, based on the nuclear reaction between neutrons and target nuclei, is a useful method for the simultaneous determination of about 25-30 major, minor and trace elements of geological, environmental, biological samples.

Moorey, Roger

1994 Ancient Mesopotamian Materials and Industries: the archaeological evidence. Oxford: Clarendon.

- 1991 A Century of Biblical Archaeology. Louisville: Westminster/John Knox.
1981 Excavation in Palestine. Grand Rapids: William B. Eerdmans.
1969 Archaeology, Artefacts and the Bible. Oxford : Ashmolean Museum.

Moorey, Roger and Peter Parr, eds.

- 1978 Archaeology in the Levant: essays for Kathleen Kenyon.
Warminster: Aris & Phillips.

Moreland, Milton C., ed.

- 2003 Between Text and Artifact: integrating archaeology in Biblical Studies Teaching. Atlanta: SBL.

Moreland edits thirteen essays from archaeologists and biblical scholars who teach in undergraduate, graduate, and seminary settings integrate archaeology and the Bible into the classroom. The essays give practical advice about the best available literature and audio-visual material in the field of archaeology related to the Bible, the New Testament, early Judaism, women in the ancient world, and the Dead Sea Scrolls. The essays illustrate how archaeological data can visualize the items, environments, and landscapes from the world of the Bible.

Morton, William H.

- 1985 "The 1954, 55 and 65 Excavation at Dhiban in Jordan." In Studies in the Mesha Inscription and Moab: 239-246. Edited by Andrew Dearman. Atlanta: Scholars.

Morton reports on three brief seasons of digging at Dhibon mentioned in the Annals of Mesha and identifies some of the building projects described by Mesha like the large building on the top of the tell.

Mosca, Paul

- 1975 "Child Sacrifice in Canaanite and Israelite Religion: a study in *Mulk* and *Mlk*." PhD Dissertation, Harvard University.

Muckelroy, Keith

- 1978 Martime Archaeology. New York: Cambridge University.

The first attempt to develop a theory of underwater archaeology for the specialist.

Muckelroy, Keith, ed.

- 1980 Archaeology Under Water: an atlas of the World's submerged sites. New York: publisher.

Muckelroy edits a solid introduction to the field of underwater archaeology.

Muhly, James D.

1977 "The Cape Gelidonya Shipwreck and the Bronze Age Metals Trade in the Eastern Mediterranean." Journal of Field Archaeology 4, 3: 353-362

Murphy-O'Connor, Jerome

1986 The Holy Land: an archaeological guide from earliest times to 1700. New York: Oxford University.

In The Holy Land: an archaeological guide from earliest times to 1700 (1980-1992) Jerome Murphy-O'Connor also follows a geographical outline. He begins with a description of sites related to the Bible in Jerusalem and then alphabetically does the same for sites throughout Israel. In his discussion of Megiddo, for example, Murphy-O'Connor indexes the appearance of the city in the Annals of Tutmosis III (Matthews and Benjamin 2006:142-145); in the El-Amarna Letters (Matthews and Benjamin 2006: 146-150); in the inventory of cities that the Hebrews did not conquer in the book of Judges (Judg 1:27); in the Annals of Sheshonq (945-924 B.C.E.); and in the Annals of Omri and Ahab in the books of Samuel-Kings.



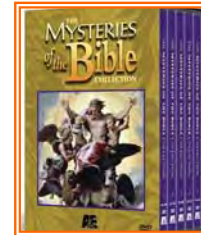
Murray, Mary Anne

2008 "Feeding the Town: new evidence from the complex of the Giza Pyramid Builders." General Anthropology 12, 1-2: 1-9.

"Mysteries of the Bible" History Channel

<http://www.history.com>

The on-going *Mysteries of Bible* series on the History Channel uses a hot topics outline. This ...*what you always wanted to know about archaeology and the Bible but were afraid to ask* approach starts with the inquiring minds of the television watching public, and uses archaeology to both answer and intrigue. The producers promises to reveal to its audience the secrets that the guardians of religious traditions do not want their followers to know.



NNNN

Nadel, Dani, Ehud Weiss, Orit Simchoni , Alexander Tsatskin, Avinoam

Danin , and Mordechai Kislev

- 2004 "Stone Age hut in Israel yields world's oldest evidence of bedding"
PNAS 101 (April 27, 2004): 6821-6826.
<http://www.pnas.org/cgi/content/full/101/17/6821>

Paleolithic houses built by humans have been excavated in Europe. None have designated zones for work, for food preparation and for sleeping. Now, however, archaeologists have recovered houses in a Paleolithic (25,000-10,000 B.C.E.) year-old fishing, hunting, gathering camp of Ohalo II on the shore of the Sea of Galilee. The grass bedding consists of bunches of partially charred *Puccinellia* confer *convoluta* stems and leaves, covered by a thin compact layer of clay. The bedding is arranged on the floor around a central hearth clearly identifying the three zones -- a hearth for food preparation, workspace and beds along the walls.

Nakhai, Beth Alpert

- 2003 The Near East in the Southwest: essays in honor of William G. Dever. Annual of the American Schools of Oriental Research, 58: Boston: ASOR.
2001 Archaeology and the Religions of Canaan and Israel. ASOR Books, 7; Boston: ASOR.

Near East and Middle East Archaeology

<http://www.cyberpursuits.com/arceo/ne-arch.asp>

Near East and Middle East Archaeology is a gateway site for archaeological sites in the Ancient Near East. Beverly Freed, a private internet contractor, has assembled web pages to sites and projects of specific geographic regions and specific disciplines such as underwater and marine archaeology. There are pages which can lead you to reference material, academic departments, libraries, museums, publications, organizations, and other endeavors. Archaeology grows as a science and continues to add new disciplines to its roster, such as urban archaeology and geo-archaeology.

Negev, Avraham, ed.

- 1986 The New Archaeological Encyclopedia of the Holy Land. Revised Edition; Nashville: Thomas Nelson.

Nelson Robert S.

- 2006 "Where God Walked and Monks Pray." In Holy Image + Hallowed Ground: icons from Sinai: 1-37 Los Angeles: J. Paul Getty.

Nelson, S. M.

1997 Gender in Archaeology: analyzing power and prestige. Walnut Creek: AltaMira.

Nelson, S.M. and M. Rosen-Ayalon, eds.

2001 In pursuit of Gender: worldwide archaeological approaches. Walnut Creek: AltaMira.

Nemet-Nejat, Karen Rhea

2002 Daily Life in Ancient Mesopotamia. Peabody: Hendrickson.

Netzer, Ehud

2008 The Architecture of Herod the Great Builder. Grand Rapids: Baker.

Neusner, Jacob

1994 Purity in Rabbinic Judaism, a systematic account: the sources, media, effects, and removal of uncleanness. South Florida Studies in the History of Judaism, 95; Atlanta: Scholars.

1973 The Idea of Purity in Ancient Judaism. Leiden: E.J. Brill.

Newman, John Philip

1875 Thrones and Palaces of Babylon and Nineveh: from sea to sea – a thousand miles on horseback. New York: Harper & Brothers.

Noort, Ed

2007 "Child Sacrifice in Ancient Israel: the status quaestionis." In The Strange World of Human Sacrifice: 103-125. Edited by J.N. Bremmer. Studies in the History and Anthropology of Religion, 1; Leuven: Peeters.

For Noort prophetic indictments of the rulers of Israel and Judah for human sacrifice suggest that at certain times and under certain circumstances the Hebrews did offer human sacrifices to Yahweh. He argues that if human sacrifices were ever offered to Yahweh by the Hebrews, they most likely offered these sacrifices in Judah after 700 B.C.E. when traditions like Yahweh giving Israel "...statutes that were not good and ordinances by which they could not live" (Ezek 20.25) – referring to human sacrifice – developed. The household of David in Jerusalem associated Yahweh with the stars which were worshiped with human sacrifice in other Mediterranean cultures.

Noth, Martin

1983 A History of Israel. Norwich: SCM.

1972 A History of the Pentateuchal Traditions. Translated by Bernhard

W. Anderson. Englewood Cliffs: Prentice-Hall.

Anderson translates Überlieferungsgeschichtliche Studien which is arguably the most influential work of Martin Noth.

Noy, Tamar.

1986 "The Natufian Culture." In Treasures of the Holy Land: ancient art from the Israel Museum: 31-40. New York: Metropolitan Museum of Art.

1986 "Neolithic Period: ca. 8500-ca. 4500 B.C." In Treasures of the Holy Land: ancient art from the Israel Museum: 41-56. New York: Metropolitan Museum of Art.

Nur, Amos

1994 "The Walls Came Tumbling Down: Earthquakes in the Holy Land." Stanford: ESI Productions.
<http://srb.stanford.edu/nur/>

Amos Nur (Stanford University) is Loel Professor of Geophysics, director of the Rock Physics and Borehole Geophysics Project. A native of Israel, Nur earned his BS in geology at Hebrew University, Jerusalem, and his Ph.D. in geophysics at MIT in 1969. He was a research associate at MIT until 1970, when he joined Stanford's geophysics faculty. He was chair of the Geophysics Department 1986-1991 and from 1997-2000. Nur was the SEG Distinguished Lecturer in 1997, and the AAPG Distinguished Lecturer in 1998. Nur's research interests are in wave propagation, fluid flow, permeability, fractures and electrostatic properties of sedimentary rocks and how these apply to geophysical exploration, reservoir evaluation, and geothermal resources. In the area of tectonophysics, Nur is pursuing research on the mechanics of faults and accretion tectonics

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O'Brien, Michael J.

2005 Archaeology as a Process: Processualism and Its Progeny. Salt Lake City: University of Utah.

Traces the intellectual history of American archaeology in terms of the research groups that were at the forefront of these various approaches, concentrating as much on the archaeologists as on method and theory. Contains rare photographs of well-known archaeologists. Documents the swirl and excitement of archaeological controversy for the past forty years. Examines how archaeology is conducted --the ins and outs of how various groups

work to promote themselves -- and how personal ambition and animosities can function to further rather than to retard the development of the discipline.

O'Brien, Michael J. and R. Lee Lyman

2004 "History and Explanation in Archaeology." Anthropological Theory. 4:173-97.

Historical Processualism (Pauketat 2001: 73-98) explains culture change without human behavior or universal laws. The method uses Darwin's principles of evolution to identify causes of cultural change that are scientifically verifiable to argue that humans continually develop new ways of doing things..

Ohio 5 Foreign Language Technology Project

<http://go.owu.edu/%7Eo5medww/egeria/>

O'Keefe, Patrick J.

2000 "Archaeology and Human Rights." Public Archaeology 1: 181-194.

1998 "Codes of Ethics: form and function in cultural heritage management." International Journal of Cultural Property 7: 32-51.

2000 "Archaeology and Human Rights." Public Archaeology 1/3: 181-194.

Omniplot: writing systems & languages of the world

http://www.omniplot.com/writing/egyptian_demotic.htm

Ornit, Sebbane and Ruth Amiran

2006 "Arad." In *The Oxford Encyclopedia of Archaeology in the Near East*, i: 169-74. Edited by Eric M. Meyers. New York: Oxford University.

Oppenheim, A. Leo

1977 Ancient Mesopotamia: portrait of a dead civilization. Revised by Erica Reiner. Second edition; Chicago: University of Chicago.

Origen

1857 "In Joannem." In *Patrologiae Cursus Completus, Series Graeca*, vol 14. Paris: J.P. Migne.

Ortiz, Steven M

2004 "Deconstructing and Reconstructing the United Monarchy: House of David or Tent of David (Current Trends in Iron Age Chronology).

Deleted: x

In The Future of Biblical Archaeology: reassessing methodologies and assumptions: 121-147. Grand Rapids: William B. Eerdmans.

PPPP

Panitz-Cohen, Nava and Amihai Mazar, eds.

2006 Timnah (Tel Batash) III: The Finds from the Second Millennium B.C.E. Qodem 45; Jerusalem: Hebrew University of Jerusalem.

Pardee, Dennis

1979 "Literary Sources for the History of Palestine and Syria II: Hebrew, Moabite, Ammonite and Edomite Inscriptions." Andrews University Seminary Studies 17: 47-70.

Parsons, Marie

"Giovanni Belzoni: Circus Giant and Collector of Egyptian Antiquities."
<http://www.touregypt.net/featurestories/belzoni.htm>

Past: the newsletter of the prehistoric society.

www.ucl.ac.uk/prehistoric/past/past30.html

Patai, Raphael

1976 The Arab Mind. New York: Charles Scribner's Sons.

1959 Sex and the Family in the Bible and the Middle East. Garden City: Doubleday & Company.

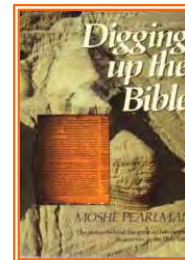
Patterson, Thomas C.

1990 "Some Theoretical Tensions Within and Between the Processual and Postprocessual Archaeologies." Journal of Anthropological Archaeology vol: 189-200.

Pearlman, Moshe

1980 Digging up the Bible: the stories behind the great archaeological discoveries in the Holy Land. New York: William Morrow.

Digging Up the Bible: the stories behind the great archaeological discoveries in the Holy Land (1986) by Moshe Pearlman also uses the hot topics outline. Its strategy is kiss-and-tell. Sometimes, in almost tabloid fashion, Pearlman tells his readers the story behind the story of De Vaux, Robinson, Flinders Petrie, Jean F. Champollion, Henry Creswicke Rawlinson, Paul E. Botta, Austen H. Layard -- ending eventually with Kathleen Kenyon in Jerusalem and Yigael Yadin at Masada.



Perdue, Leo G. Lawrence E. Toombs and Gary L. Johnson, eds.
1987 Archaeology and Biblical Interpretation: essays in memory of D. Glenn Rose. Atlanta: John Knox.

Perdue, L. G., J. Blenkinsopp, J.J. Collins, C. Meyers, eds.
1997 Families in Ancient Israel : the family, religion and culture.
Louisville: Westminster John Knox.

Petit Larousse illustre
1959 Paris: Librairie Larousse,

Petrie Museum
Institute of Archaeology, University College London.
<http://www.petrie.ucl.ac.uk/museum/petrie.html>

The Petrie Museum houses artifacts from Petrie's excavations in Egypt and Sudan. The museum is attached to the

Phillips, Philip
1955 "American Archaeology and General Anthropological Theory"
Southwestern Journal of Anthropology 11: 246-250.

Phillips pioneered Processual Archaeology with the argument that: "New World archaeology is anthropology or it is nothing."

Philo
1941 Every Good Man is Free. On the Contemplative Life. On the Eternity of the World. Against Flaccus. Apology for the Jews. On Providence. Translated by F. H. Colson. Loeb Classical Library; Cambridge: Harvard University.

Phipps, William E.
1992 Assertive Biblical Women. Contributions in Women's Studies 128; Westport: Greenwood.

Pigafetta, Antonio
1969 The Voyage of Magellan. Translated by Paula Spurlin Paige. Englewood Cliffs: Prentice-Hall.

Pilch, John J.
1999 The Cultural Dictionary of the Bible. Collegeville: Liturgical Press.

Pliny the Elder (*Gaius Plinius Secundus*)
1938 Natural History. Translated by D.E. Eichholz, W.H.S. Jones and H. Rackham. Loeb Classical Library; Cambridge: Harvard University.

Pluciennik, Mark and Marek Zvelebil

2008 "The Origins and Spread of Agriculture." In Handbook of Archaeological Theories: 467-486. Edited by R. Alexander Bentley, Herbert D.G. Maschner and Christopher Chippindale. Lanham: Rowman & Littlefield.

Pollock, Susan M.

1999 Ancient Mesopotamia: the Eden that never was. Cambridge: Cambridge University.

1991 "Women in a Men's World: images of Sumerian women." In Engendering Archaeology: women and prehistory: 366-387. Oxford: Basil Blackwell.

Pollock, Susan M. and Reinhard Bernbeck, eds.

2003 Archaeologies of the Middle East. Oxford: Blackwell.

2000 "And they said, Let us make gods in our image': gendered ideologies in ancient Mesopotamia." In Reading the Body: representations and remains in the archaeological record: 150-164. Philadelphia: University of Philadelphia.

Preucel, Robert W.

1995 "The Postprocessual Condition." Journal of Archaeological Research (2):147-175.

Price, Megan

2005 "Three Travelers in Nineteenth Century Egypt: Sarah Belzoni, Amelia Edwards and Margaret Benson." In Women Travellers in the Near East: 40-51. Edited by Sara Searight. Oxford: Oxbow.

QQQQ

Quirke, Stephen and Jeffrey Spencer, eds.

1992 British Museum Book of Ancient Egypt. London: Thames and Hudson.

RRRR

| Rainey, Anson [F.](#)

2006 "Sinuhe's World." In "I Will Speak The Riddles of Ancient Times": archaeological and historical studies in honor of Amihai Mazar on the occasion of his sixtieth birthday, vol 1: 277-302. Edited by Aren M. Maeir and Pierre de Miroschedji. Winona Lake: Eisenbrauns.

2001 "Israel in Merenptah's Inscription and Reliefs." IEP 51:57-75.

Rainey studies the Merenptah Stela and the newly identified Merenptah reliefs at Karnak using work of Van der Steen 1999. He concludes that *Israel* in the Merenptah Stela is part of the migration of the *Shashu* farmers and herders from east of the Jordan River into the hills west of the river, and that "seed" refers to the people of Israel, and not to their crops.

1988 "Historical Geography." In Benchmarks in Time and Culture: an introduction to Palestinian archaeology: 355-368. Edited by Joel F. Drinkard, Jr., Gerald L. Mattingly, and J. Maxwell Miller. Atlanta: Scholars.

Rainey, Anson and R. Steven Notley

2006 The Sacred Bridge: Carta's atlas of the biblical world. Jerusalem: Carta.

An historical geography based on archaeology and ancient traditions.

2001 "Israel in Merenptah's Inscription and Reliefs." IEJ 51: 57-75.

Rainey argues that the word *seed* refers to the people of Israel, and that Israel is an urban, not a village culture.

Ramsay, W.M. and Gertrude L. Bell

1910 "The Thousand and One Churches". Journal of Hellenic Studies 30: 173-174.

Rast, Walter

2003 "Bible and Archaeology." In Near Eastern Archaeology: 48-53. Edited by Suzanne Richard. Winona Lake: Eisenbrauns.

1992 Through the Ages in Palestinian archaeology: an introductory handbook. Philadelphia: Trinity Press International.

Rawlinson, Henry C.

1852 Outlines of Assyrian History from the Inscriptions of Nineveh: the twenty-ninth annual report of the Royal Asiatic Society of Great Britain. London: John W. Parker & Son.

Reade, Julian

1983 Assyrian Sculpture. London: British Museum.

Regev, Eyal

2007 "The Archaeology of Sectarianism: a socio-anthropological analysis of Kh.Quran." Annual Meeting of Schools of Oriental Research. San Diego.

Argues that the archaeology of space at Qumran reflects a cloister which segregates outsiders from insiders, and classes of insiders from one another.

Reed, Stephanie

2007 "Blurring the Edges: a reconsideration of the treatment of enemies in Ashurbanipal's reliefs." In Ancient Near Eastern Art in Context: studies in honor of Irene J. Winter by her students: 99-128. Edited by Jack Cheng and Marian Feldman. Culture and History of the Ancient Near East, 26; Leiden: Brill.

Reid, Donald Malcolm

2002 Whose Pharaohs? Archaeology, museums, and Egyptian National Identity from Napoleon to World War I. Berkeley: University of California.

Examines how Egyptian nationalists and European imperialists used archaeology between 1798 (the French Expedition) and 1914 (WW I). Imperialism and nationalism were both partners with archaeology.

Renfrew, Colin

2000 "The Fallacy of the 'Good Collector' of Looted Antiquities." Public Archaeology 1:76-78.

The only *good collector* (pace McIntosh, R 1995; McIntosh, S.K. 2000) of illegally stolen artifacts from ancient cultures is an ex-collector. The end of using stolen artifacts for appreciation and education does not justify the means of stealing and trafficking in illegal antiquities.

Renfrew, Colin and Paul G. Bahn

2007 Archaeology Essentials: Theories, Methods, and Practice. London: Thames & Hudson.

An abridged version of their textbook -- Archaeology: theories, methods and practice (1996) -- on what archaeologists do and how they do it

1996 Archaeology: theories, methods and practice. London: Thames &

Hudson.

<http://www.thamesandhudsonusa.com/web/archaeology/>

The Research Archives of the Oriental Institute, University of Chicago

http://oilib.uchicago.edu/cgi-bin/opac/o_search.html

The computer catalogue of the Oriental Institute Research Archives contains entries for materials catalogued in the library since 1987, and complete analytics (essays, articles and book reviews) for materials catalogued since 1990. The catalogue also includes earlier materials, and retrospective cataloguing of the entire collection will ultimately make all Research Archives materials accessible. At present, the Research Archives on-line catalogue contains well over two hundred thousand entries, searchable through a library database program.

Rhodes, Matthew

2006 "History of the Diocese of Egypt and North Africa."

<http://www.geocities.com/diocesefegypt/history1.html>

Richard, Suzanne, ed.

2003 Near Eastern Archaeology: a reader. Winona Lake: Eisenbrauns.

Ringgren, Helmer, David N. Freedman, Michael P. O'Connor

1986 "YHWH." In Theological Dictionary of the Old Testament, v, 500-521.

Ritner, Robert K.

1984 "A Uterine Amulet in the Oriental Institute Collection." JNES 43, 3: 209-221.

Roaf, Michael

1990 Cultural Atlas of Mesopotamia and the Ancient Near East. New York: Facts on File.

Well illustrated and detailed atlas-like work on ancient Mesopotamia.

Roberts, David

1849 The Holy Land, Syria, Idumea, Arabia, Egypt, and Nubia. London: E. G. Moon.

Roberts, J. and D. Van Lier

1984 "Which Positions for the Second Stage?" Childbirth Educator 3:33-41.

Robinson, Edward

1841 Biblical Researches in Palestine. London: John Murray

Robinson kept a three-volume, detailed journal describing the flora and fauna; the social customs and the geography of the world of the Bible.

Rofe, Alexander

1987 "The Battle of David and Goliath: folklore, theology, eschatology."
In Judaic Perspectives on Ancient Israel: 117-151. Edited by Jacob Neusner, Baruch A. Levine, and Ernest S. Frerichs. Philadelphia: Fortress.

Rogers, Robert William

1915 A History of Babylonia and Assyria. Sixth Edition; New York: Abingdon.

Rouse, Irving

1953 "The Strategy of Culture History." In Anthropology Today: 84-103.
Edited by Sol Tax. Chicago: University of Chicago.

Irving reviews the research planning of cultural historians excavating between 1900-1960.

Routledge, Bruce

2004 Moab in the Iron Age: Hegemony, Polity, Archaeology. Philadelphia: University of Pennsylvania.

Routledge (University of Liverpool) studies Bronze and Iron Age cultures of Syria-Palestine, especially on Iron Age cultures in south-central Jordan – the land of Moab. In Jordan he directs on-going research projects at the sites of Khirbat al-Mudayna al-'Aliya and Dhiban. Routledge follows the cultural theories of state-formation of Antonio Gramsci, and the theories of political economy of settlement in arid and semi-arid regions, material culture studies, and exchange theory of Marcel Mauss.

Roux, Georges

1992 Ancient Iraq. Harmondsworth: Penguin.

General and systematic survey of the history of Mesopotamia.

Running, Leona Glidden and David Noel Freedman

1975 William Foxwell Albright: a twentieth century genius. New York: Morgan.

A flattering intellectual biography of William Foxwell Albright based on his own correspondence. Freedman was Albright's last student and later his editorial assistant. He describes this biography as "...a labor of love undertaken in grateful homage by a devoted disciple toward a revered teacher – yet at the same time a genuine attempt to present objectively the man as he really was, letting him speak for himself (ix)."

Reeves, Nicholas

2000 Ancient Egypt: The Great Discoveries. London: Thames & Hudson.

Reid, Barbara E.

1996 "Soul: Spirit of God/Holy Spirit." In The Collegeville Patroal Dictionary of the Biblical Theology: 945-947. Collegeville: Liturgical Press.

Reid, Donald

2002 Whose Pharaohs?: archaeology, museums, and Egyptian national identity from Napoleon to World War I. Berkeley: University of California.

Renfrew, Colin and Paul Bahn

1996 Archaeology: Theories, Methods, Methods and Practice.
Thames and Hudson: New York.

Ricoeur, Paul

1980 The contribution of French Historiography to the Theory of History. The Zaharoff Lecture for 1978-1979. Oxford: Clarendon.

In the spirit of the Annales School, Ricoeur cautions historians not to succumb to the methodological illusion whereby the historical fact is held to exist in a latent state in documents and the historian to be the parasite of the historical equation. To counter this methodological illusion, one must assert that in history the initiative does not belong to the document but to the question posed by the historian. The latter has logical precedence in the historical inquiry." (17)

Roaf, Michael

1990 "Toward Civilization." In Cultural Atlas of Mesopotamia and the Ancient Near East: 42-56. New York: Facts on File.

Rogers, Everett M. Rogers

1962-

2003 Diffusion of Innovations. Fifth edition; New York: Free.

For Rogers diffusion is the process in which an innovation is communicated through certain channels over time among the members of a social system. It is a special type of communication, in that the messages are concerned with new ideas.

Rohl, David M.

1995 Pharaohs and Kings: a biblical quest. New York: Crown.

Proposes a radically revised chronology for relating biblical events to the history of Egypt. For example, Shishak (1 Kgs 14:25-28; 2 Chr 12:1-12) is not Shoshenq I (945-924 B.C.E) but Sysa, a nick name or hypocoristicon of Ramses II (1290-1225 B.C.E.), the only pharaoh to have recorded a defeat of (Jeru-) Shalem.

SSSS

Saggs, H.W. F.

1965 Everyday Life in Babylonia and Assyria. New York: Dorset.

Said, Edward W.

1978-

2003 Orientalism: western conceptions of the Orient. London: Routledge & Paul Kegan.

Saleh, Mohamed and Hourig Sourouzian

1987 Official Catalogue The Egyptian Museum Cairo. Munich: Prestel.

Sales, R.H.

1957 "Human Sacrifice in Biblical Thought" JAAR 25 (1957): 112-117.

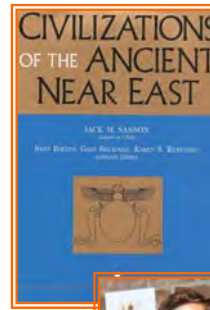
Sales identifies the most commonly discussed biblical traditions dealing with human sacrifice (Gen 22:1-19; Exod 22:29, 13:2, 34:20; Lev 18:21, 20:1-5; Num 18:15-16, 3:11-13; Judg 11; 1 Kgs 3, 18:40; 2 Kgs 10:25-27, 16:2-4, 21:5-16; 2 Chr 28:3-4, 33:6; Isa 40-55).

Samuel, Delwen

2001 "Bread." The Oxford Encyclopedia of Ancient Egypt. Edited by Donald Redford. Vol. 1, 196-198.

Preferred grain for Egyptian bread was bread wheat (Latin: *triticum aestivum*); most common was emmer wheat (Latin: *tricum diocum*). From the Neolithic period to the Old Kingdom period saddle querns or mills were placed on the floor making grinding flour a laborious process.

During the Middle and New Kingdoms mills were placed on platforms, called “querns emplacements” which made the grinding flour easier, more comfortable and quicker. No grit was used to grind flour in Egypt; flour textures could be precisely controlled by the miller. Bakeries appear in tomb of (fifth dynasty) at Saqqara; OK models, MK modeld fro Meketra’s tomb; wall paintings of bakeries at Beni Hasan; NK Nebamun tomb at Thebes.



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Samuel, Delwen

1996 “Investigation of Ancient Egyptian Baking and Brewing Methods by Correlative Microscopy.”
Science 273: 488-490.



Presents the microscopy analysis of loaves and their interpretation; discusses the relationship of bread and beer.

Saoud, Rabah

2002 “Muslim Architecture under the Abbassid Patronage (750-892AD).”
<http://www.muslimheritage.com/includes/viewResource.cfm?resourceID=183>

Sasson, Jack M., ed.

1995 Civilizations of the Ancient Near East. New York: Charles Scribner’s Sons.

The four volumes of Civilizations of the Ancient Near East (1995) edited by Jack M. Sasson also follows a thematic outline using anthropology. The first volume begins with essay on the discipline of Near Eastern Studies as well as essays on the environment and population in the world of the Bible. Sasson groups the essays around ten themes. There are sections, for example, reconstructing social institutions such as the economy, trade, technology, art, science and writing. Among the concluding essays is “Assessing the Past through Anthropological Archaeology” by Frank Hole

Schloen, J. David ed.

2009 Exploring the *Langue Duree*: essays in honor of Lawrence E. Stager. Winona Lake: Eisenbrauns.

1. Lawrence Stager and Biblical Archaeology, J. David Schloen; 2. Solomon’s Patrimonial Kingdom: A View from the Land of Gilead, Tristan J. Barako; 3. The Dolphin Jug: A Typological and Chronological

Assessment, Manfred Bietak and Karin Kopetzky; 4. Assyrians Abet Israelite Cultic Reforms: Sennacherib and the Centralization of the Israelite Cult, Elizabeth Bloch-Smith; 5. "Those Who Add House to House": Household Archaeology and the Use of Domestic Space in an Iron II Residential Compound at Tell en-Nasbeh, Aaron J. Brody; 6. More Light on Old Reliefs: New Kingdom Egyptian Siege Tactics and Asiatic Resistance, Aaron A. Burke; 7. Cores, Peripheries, and Ports of Power: Theories of Canaanite Development in the Early Second Millennium B.C.E., Susan L. Cohen; 8. The Social Worlds of the Book of Job, Michael D. Coogan; 9. 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, Frank Moore Cross; 10. Merenptah's "Israel," the Bible's, and Ours, William G. Dever; 11. Linchpins Revisited, Trude Dothan and Alexandra S. Drenka; 12. Cities, Villages, and Farmsteads: The Landscape of Leviticus 25:29-31, Avraham Faust; 13. Destructions: Megiddo As a Case Study, Israel Finkelstein; 14. The Late Iron Age II Incense Altars from Ashkelon, Seymour Gitin; 15. Palmachim-Giv'at Ha'esev: A Navigational Landmark for Ancient Mariners? Ram Gophna and Shmuel Liphshitz; 16. Wine for the Elite, Oil for the Masses: Some Aspects of Early Agricultural Technology in Cyprus, Sophocles Hadjisavvas; 17. The Dawn of an Age: Megiddo in the Iron Age I, Baruch Halpern; 18. Compositional Techniques in the Book of Haggai, Paul D. Hanson; 19. Lifting the Veil on a "Dark Age": Tayinat and the North Orontes Valley during the Early Iron Age, Timothy P. Harrison; 20. Other Edens, Ronald Hendel; 21. The House of the Father at Iron I Tall al-'Umayri, Jordan, Larry G. Herr; 22. Israel's Ancestors Were Not Nomads, Theodore Hiebert; 23. How Much Is That in . . . ? Monetization, Money, Royal States, and Empires, John S. Holladay; 24. The Levitical Diaspora (I): A Sociological Comparison with Morocco's Ahansal, Jeremy M. Hutton; 25. A Cypriot Workshop of Middle Bronze Age Askoi, Vassos Karageorghis; 26. Slavery in Antiquity, Philip J. King; 27. Ethnic Identity in Biblical Edom, Israel, and Midian: Some Insights from Mortuary Contexts in the Lowlands of Edom, Thomas E. Levy; 28. A Reconstruction of Achaemenid-Period Ashkelon Based on the Faunal Evidence, David Lipovitch; 29. Hazael, Birhadad, and the .r., Aren M. Maeir; 30. Divination at Ebla during the Old Syrian Period: The Archaeological Evidence, Nicol Marchetti; 31. Egyptian Fingerprints at Late Bronze Age Ashkelon: Egyptian-Style Beer Jars, Mario A. S. Martin; 32. From the Buqê'ah to Ashkelon, Daniel M. Master; 33. The Iron Age Dwellings at Tell Qasile, Amihai Mazar; 34. The Armor of Goliath, Alan Millard; 35. Facts or Factoids? Some Historical Observations on the Trophy Inscription from Kition (KAI 288), Paul G. Mosca; 36. Ashkelon under the Assyrian Empire, Nadav Na'aman; 37. The Built Tombs on the Spring Hill and the Palace of the Lords of Jericho ('dmr r.') in the Middle Bronze Age, Lorenzo Nigro; 38. A New Join of Fragments of the Baal

Cycle, Dennis Pardee; 39. L'inscription phénicienne du pithos d'Amathonte et son contexte, Émile Puech; 40. A Fragmentary Tablet from Tel Aphek with Unknown Script, Itamar Singer; 41. Camels in Ur III Babylonia?, Piotr Steinkeller; 42. A Persian-period Hoard of Bullae from Samaria, Ephraim Stern; 43. Trade and Power in Late Bronze Age Canaan, Michael Sugerman; 44. East of Ashkelon: The Setting and Settling of the Judean Lowlands in the Iron Age IIA, Ron E. Tappy; 45. The Books of the Hebrew Bible As Material Artifacts, Karel van der Toorn; 46. The Temple Mount in Jerusalem during the First Temple Period: An Archaeologist's View, David Ussishkin; 47. The Israelite mi.p..â, the Priestly Writings, and Changing Valences in Israel's Kinship Terminology, David S. Vanderhooft; 48. Two New Hellenistic Lead Weights of the Tanit Series, Samuel R. Wolff and Gerald Finkielsztein; 49. Behavioral Patterns in Transition: Eleventh-Century B.C.E. Innovation in Domestic Textile Production, Assaf Yasur-Landau; 50. Bedhat esh-Sha`ab: An Iron Age I Enclosure in the Jordan Valley, Adam Zertal and Dror Ben-Yosef

Schmidt, Peter R. and Roderick J. McIntosh
1996 Plundering Africa's Past. Bloomington: Indiana University

Schroer, Silvia and Thomas Staubli
2001 Body Symbolism in the Bible. Collegeville: Liturgical.

Schwappach-Shirrif, Lisa
2004 Treasures of the Rosicrucian Egyptian Museum: a catalogue.
San Jose: Grand Lodge of the English Language Jurisdiction,
AMORC.

Schwimmer, Brian
1995 "Segmentary Lineages."
[http://umanitoba.ca/faculties/arts/anthropology/tutor/descent/
unilineal/segments.html](http://umanitoba.ca/faculties/arts/anthropology/tutor/descent/unilineal/segments.html)

Scolnic, Benjamin Edidin
2004 "A New Working Hypothesis for the Identification of Migdol." In The Future of Biblical Archaeology: reassessing methodologies and assumptions: 91-120. Grand Rapids: William B. Eerdmans.

Scrolls from the Dead Sea: the ancient library of Qumran and modern scholarship.
<http://www.ibiblio.org/expo/deadsea.scrolls.exhibit/intro.html>

Illustrated cyber-exhibit posted by the Library of Congress.

Searight, Sarah, ed.

2005 Women Travelers in the Near East. Oxford: Oxbow.

Women travelers in world of the Bible during the 19th century were educated, enlightened and sometimes romantic. Some traveled alone, a few with companions. Some had private incomes that facilitated their travels. They were not much concerned with public opinion back home that was critical of their independence. They were physically and mentally resilient. Above all they were inquisitive. Some wrote fascinating journals and letters of their exotic travels.

Sertillanges, A.C.

1923 The Intellectual Life: Its Spirit, Conditions, and Methods.
Washington, D.C.: The Catholic University of America.

Severin, T.

1973 Vanishing Primitive Man. New York: Oxford University

Shai, Itzhaq

2006 "The Political Organization of the Philistines." In "I Will Speak The Riddles of Ancient Times": archaeological and historical studies in honor of Amihai Mazar on the occasion of his sixtieth birthday, vol 1: 347-360. Edited by Aren M. Maeir and Pierre de Miroschedji. Winona Lake: Eisenbrauns.

Shanks, Hershel

2007 The Copper Scroll and the Search for the Temple Treasure.
Washington D.C.: Biblical Archaeology Society.

Shanks tells the story of the discovery, unfolding, translation and the interpretation of the Copper Scroll found near Khirbet Qumran. The Scroll itself is an enigma. It is the only Dead Sea Scroll hammered in copper and the only one of four or five scrolls that has survived complete.

2005 "Should the Israel Museum take the Dayan Collection off display?" BAR 31: 53-57

2001 "The Age of BAR: scholars talk about how the field has changed." BAR 27:21-35.

Shanks discusses with leading archaeologists how biblical archaeology has changed since 1976 when the first issue of BAR was published.

- 2000 "Sacrilegious Neglect." BAR 26: 411999 "Bringing Collectors and Their Collections Out of Hiding." BAR 25: 40.
1999 "Don't Buy Forgeries (In Other Words, Don't Collect)." BAR 25:6.
1997 "Leading Archaeologist Chastised for Publishing Artifacts in Private Collections: debate over antiquities market continues." BAR 23: 33.
1996 "Magnificent Obsession: the private world of the antiquities collector." BAR 22:22-35.
1983 "The Sad Case of Tel Gezer." BAR 9, 4 (July-August): 30-42.

Shanks, Hershel, ed.

- 1988 Ancient Israel: a short history from Abraham to the Roman destruction of the Temple. Englewood Cliffs: Prentice-Hall.

Shanks, Michael

- 2008 "Post Processual Archaeology and After." In Handbook of Archaeological Theories: 133-146. Edited by R. Alexander Bentley, Herbert D.G. Maschner and Christopher Chippindale. Lanham: Rowman & Littlefield.

Shaw, Ian and Paul Nicholson

- 2003 The British Museum Dictionary of Ancient Egypt. London: The British Museum.

Shestack, Alan

- 1987 "The Museum and Cultural Property: the transformation of institutional ethics." In The Ethics of Collecting Cultural Property: Whose Culture? Whose Property?: 93-101. Edited by Phyllis Mauch Messenger. Albuquerque: University of New Mexico.

Siebert, I

- 1974 Women in the Ancient Near East. New York: Abner Schram.

Silberman, Neil Asher

- 2003 "A Century of American Archaeology in the Middle East: looking back and looking ahead." In One Years of American Archaeology in the Middle East: 7-17. Edited by Douglas R. Clark and Victor H. Matthews. Atlanta: ASOR.

- 2001 Archaeology and Society in the 21st Century: the Dead Sea Scrolls and other case studies. Edited by Neil Asher Silberman and Ernest S. Frerichs. Jerusalem: Israel Exploration Society.

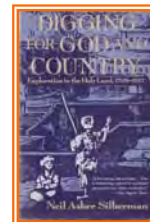
Anniversary volume celebrating the fiftieth anniversary (1948-1998) of the discovery of the Dead Sea Scrolls' discovery. Eighteen chapters in five sections; an (E. S. Frerichs and N. A. Silberman) and a conclusion -- "Many Battles of the Scrolls" (L. Schiffman). In each section has a chapter on the Scrolls and comparative case studies: 1) politics and the past (N. A. Silberman, I. Silverblatt, and M. Hall); 2) presenting the past to the public (A. Roitman, G. Bisheh, and C. Doumas); 3) deciphering ancient writing (B. Fagan, E. Tov, D. Redford, and G. E. Stuart); 4) antiquities looting and law (Gerstenblith, H. Shanks, E. Herscher, and H. A. Davis); 5) the power of the past in the twenty-first century (L. Schiffman, P. E. Hyman, and D. Lowenthal),

- 1989 Between Past and Present: archaeology, ideology and Nationalism in the Modern Middle East. New York: H. Holt.

Time and again, states and individuals have called on archeology to define borders, legitimize ideologies, investigate issues of contemporary concern and establish genealogies for a leader or a whole people. Silberman explores the interaction between archeological research and political and social trends.

- 1982 Digging for God and Country: exploration, archeology, and the secret struggle for the Holy Land -- 1799-1917. New York: Doubleday.

Neil A. Silberman uses a political outline in Digging for God and Country (1982). He reports, for example, on how archaeology became a tool for empire building. Napoleon used archaeology in Egypt to define his empire as the direct descendant of the Empire of Alexander and the empires of the pharaohs (Silberman 1982: 10-17). Similarly, Wilhelm II (1888-1918) challenged British supremacy in the Middle East by offering the Ottoman Empire of Abdul Hamid (1842-1918) technical and financial support to build a railway from Constantinople to Palestine, to build a German Lutheran Church of the Redeemer adjacent to Holy Sepulchre, and a German Catholic Monastery and Church of the Dormition of Mary. In return the Deutscher Palastina Verein was given permission to conduct inaugural excavations at the coveted sites of Megiddo, Jericho, Jerusalem, the Roman Baalbek in Lebanon, Galilee synagogues from the



first century of the Common Era and to finish mapping the land east of the Jordan River. Consequently, archaeological, and therefore political, supremacy in the world of the Bible passed from Britain to Germany (Silberman 1982: 161-170).

Simmons, Alan H.

2007 The Neolithic Revolution in the Near East: transforming the human landscape. Tucson: University of Arizona.

Simmons traces the evolution of Neolithic technologies – like sea trade with Cyprus -- and their impact on the sensitive relationship between humans and their environment, and how quickly events like climate change can alter the landscape.

Singer, Itamar

2006 "The Hittites and the Bible Revisited." In "I Will Speak The Riddles of Ancient Times": archaeological and historical studies in honor of Amihai Mazar on the occasion of his sixtieth birthday, vol 1: 723-756. Edited by Aren M. Maeir and Pierre de Miroschedji. Winona Lake: Eisenbrauns.

Sivan, Hagith

1988 "Holy Land pilgrimage and western audiences: some reflections on Egeria and her circle." Classical Quarterly 38: 528-535.

1988. "Who was Egeria? piety and pilgrimage in the age of Gratian." Harvard Theological Review 81: 59-72.

Skeen, Judy Lynn

1993 "A comparative study of the wandering people of Hebrews and the pilgrimage of Egeria." PhD, dissertation. Southern Baptist Theological Seminary.

Slater, Robert

1992 Warrior Statesman: The Life of Moshe Dayan. London: Robson.

Smelik, Klass A. D.

2003 "The Inscription of King Mesha." In The Context of Scripture ii: 137-138. Edited by William W. Hallo and K. Lawson Younger, Jr. Leiden: Brill.

1992 "King Mesha's Inscription." In Converting the Past: studies in ancient Israelite and Moabite Historiography: 59-92. OTS 28; Leiden: Brill.

Smelik provides an historical reconstruction for the Annals of Mesha and the Annals of Jehoram.

1990 "The Literary Structure of King Mesha's Inscription." Journal for the Study of the Old Testament 46: 21-30.

Smith, George

1872 "The Chaldean History of the Deluge." The London Times (December 4, 1872): 27551.

1872 "The Chaldean Story of the Deluge." The London Times (December 5, 1872): 27552.

Smith, Jonathan Z.

1987 To Take Place: toward theory in ritual. Chicago: University of Chicago.

Smith, Laurajane

1994 "Heritage Management as Postprocessual Archaeology?" Antiquity 68: 300-309.

Explores the relationship between explicitly political Postmodern or Post Processual Archaeology and Heritage Management where archaeology most directly engages politics. Investigates 1) political and cultural role played by archaeologists as intellectuals; 2) the degree to which archaeological knowledge and ideology has been both institutionalized and constrained within state institutions and discourses; 3) the role heritage plays in the politically fraught process of the construction of cultural identity.

Smith, Mahlon H.

"The Dead Sea Scrolls."

Virtual Religion Network: resources for research and reflection

<http://virtualreligion.net/iho/qumran.html>

Smith reconstructs a helpful, and remarkably detailed, timetable for the discovery and debate of the Dead Sea Scrolls.

Smith, Mark S.

2001 The Origins of Biblical Monotheism: Israel's polytheistic background and the Ugaritic texts. Oxford: Oxford University.

1990 The Early History of God: Yahweh and the other deities in ancient Israel. San Francisco: Harper & Row.

Snell, Daniel C.

1997 Life in the Ancient Near East 3100-332 B.C.E. New Haven: Yale University.

Sorensen, M.L.S.

2000 Gender Archaeology. Cambridge: Polity.

"Sphinx and the Pyramids: 100 years of American Archaeology at Giza".
<http://www.fas.harvard.edu/~semitic/hsm/GizaBuiltEgypt.htm>

Stack, Michael

2002 "A Review of The Principles of History and Other Writings in Philosophy of History. Edited by W.H. Dray and W.J. van der Dussen." University of Toronto Quarterly 71: pp-pp.

Stager, Lawrence E.

1985 "The Archaeology of the Family in Ancient Israel." Bulletin of the Schools of Oriental Research 260: 1-35.

Stager conducts a study of long term trends (French: *langue duree*) among people of ancient Israel, who, after 1200 B.C.E., built villages on the hilltops north of Jerusalem and who built terraces on the slopes of the valleys below for their crops. A pivotal institution in this culture was the household, whose political and economic structure can be reconstructed using the remains of their pillared houses. He uses archaeological, textual and ethnographic data to recreate the social structure of early Israel.

Stager, Lawrence E. and Samuel R. Wolff

1984 "Child Sacrifice at Cathage: religious rite or population control – archaeological evidence provides basis for a new analysis." BAR 10, 1 (Jan-Feb): 31-51.

Stanford Encyclopedia of Philosophy "Critical Theory."
<http://plato.stanford.edu/>

Steinberg, Naomi

1999 "The Problem of Human Sacrifice in War: an analysis of Judges 11." In On the Way to Nineveh: studies in honor of George M. Landes:114-135. Atlanta: Scholars.

Steiner, Margarete Laura

2002 "Mesha versus Solomon: two models of economic organization in Iron Age II." Svensk Exegetisk Arsbok 67: 37-45.

Stern, Ephraim

2001 Archaeology of the Land of the Bible: the Assyrian, Babylonia, and Persian Periods 732-332 B.C.E. New York: Doubleday.

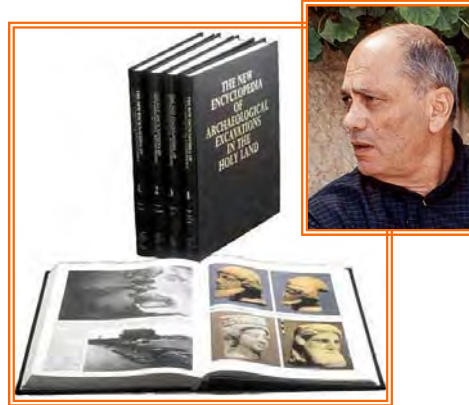
1982 Material Culture of the Land of the Bible in the Persian Period, 538-332 B.C.E. Arminster: Ariz & Phillips.

Stern, Ephraim, ed.

1993 The New Encyclopedia of Archaeological Excavations in the Holy Land. New York: Simon and Schuster.

Encyclopedias like The New Encyclopedia of Archaeological Excavations in the Holy Land (1993) edited by Stern are site specific. They describe a single site, stratum by stratum, using material remains to reconstruct the cultures of each archaeological period. The profile of *Bab edh-Dhra* by R. Thomas Schaub, for example, identifies the site geographically on the eastern shore of the Dead Sea in Jordan today

(<http://www.nd.edu/~edsp/personnel.html>) and a brief history of excavations there. He then describes the material remains from the Paleolithic Period, the Neolithic Period, the Chalcolithic Period, the Early Bronze Age IA, Early Bronze Age IB, Early Bronze Age IC, Early Bronze Age II, Early Bronze Age III and Late Early Bronze Age II or Early Bronze Age IV (NEAEHL: I, 130-136). Schaub introduces the exclusively archaeological survey by indexing the work which he and Walter E. Rast and subsequently Willem C. Van Hattum published elsewhere (Rast 1974; Van Hattum 1981). Both articles suggest that the ruins of magnificent Bronze Age cities like Bab edh Dhra may have inspired the Stories of Lot and his Daughters in the book of Genesis (Gen 19:1-38).



Stiebing, William H. Jr.

1989 Out of the Desert? archaeology and the exodus/conquest narratives. Prometheus: Buffalo.

Stiebing argues that the plagues were a literary description of economic disasters caused by natural disasters in Egypt.

Stierlin, Henri

1995 The Pharaohs: master builders. Paris: Pierre Terrail.

From 3,000 B.C.E. to the C.E. pharaohs built: pyramids at Giza, sanctuaries at Luxor, Karnak and Philae; tombs in the Valley of the Pharaohs. Each building was not only an architectural masterpiece, but a sacrament reflecting the world view of this ancient people.

Strathern, Paul

2007 Napoleon in Egypt: a clash of cultures. New York: Random House.

Napoleon is an historical figure whose character is so complex, and whose exploits are spread across such a broad canvas, that it is almost impossible to do them justice. Strathern has written a narrative of the Egyptian adventure, which simultaneously demonstrates how Napoleon's invasion of Egypt foreshadowed many aspects of his later rule in France. Here in embryo are many of the later preoccupations of Napoleon's peculiar brand of megalomania.

Strawn, Brett A.

2005 What is Stronger than a Lion? leonine image and metaphor in the Hebrew Bible and the ancient Near East. Orbis Biblicus et Orientalis, 212; Fribourg: Academic.

Strawn classifies more than two hundred biblical uses of lions as metaphors for the righteous, for the wicked, for rulers and for divine patrons. Seals and onomastica from Israel (1,500-332 BCE) represent rulers and divine patrons acting in their official capacity as lions. Lions are also metaphors for Yahweh especially in the book of Psalms. These develop from female divine patrons like Sekhmet or Ishtar rather than from male patrons like Baal or Seth. Lions in other ancient Near East parallels are also metaphors for power, both protecting and threatening. One appendix discusses the Hebrew words for "lion;" another provides 483 line drawings of lions.

Stuart, George E.

1987 "Working Together to Preserve Our Past." In The Ethics of Collecting Cultural Property: Whose Culture? Whose Property?: 243-252. Albuquerque: University of New Mexico.

Sullivan, Thelma D.

1972 "Tlaloc: a new etymological interpretation of the god's name and what it reveals of his essence and nature." Proceedings of the 40th International Congress of Americanists, 2: 103. Genoa.

The Aztecs sacrificed their children at significant places in nature – water sources, fertile fields -- where Tlaloc sacrificed her children for the Aztecs. Wherever there were openings or *mouths* in the body of Tlaloc,

the Aztecs offered sacrifice. The creation stories of the Aztecs explain that for Tlaloc to be able to release life-giving power, she had to be dismembered. In order to give birth, she had to be split in two. A parallel tradition appears in the Enuma Elish Stories where Marduk kills Tiamat, and then cuts her body in two to create the heavens and the earth.

Sumption, Jonathan
1976 Pilgrimage: An Image of Medieval Religion

Sweeney, Marvin A.
2000 The Twelve Prophets. Berit Olam Studies in Hebrew
Narrative and Poetry; Collegeville: Liturgical Press.

TTTT

Tell Arad: Early Bronze Canaanite City and Iron Age Israelite Fortress
<http://ebibletools.com/israel/arad/index.html>

Tel El Borg Excavations
<http://tellelborg.org/>

Tel Gezer Excavation and Publication Project
<http://www.gezerproject.org/>

Texas Beyond History: the virtual museum of Texas cultural heritage.
The University of Texas at Austin. College of Liberal Arts.
[www.texasbeyondhistory.net/.../ gallery.html](http://www.texasbeyondhistory.net/.../gallery.html)

Thomas, Nancy
1995 The American Discovery of Ancient Egypt. Los Angeles: Los
Angeles County Museum of Art.

Thomas edits an exhibition catalog that describes the contributions of American Egyptologists to the understanding of Egypt and Nubia. In contrast to the well-known efforts of European Egyptologists like Jean-Francois Champollion and Howard Carter American achievements have often gone unnoticed. For example, George A. Reisner (1867-1942) reconstructed the culture of the Nile Valley culture, of the 4th Dynasty pharaohs who built the pyramids, of the rulers of Nubia and Kush; and he revolutionized archeological field techniques. The essays clarify various perceptions of ancient Egypt in the writings of American travelers, of collectors and of archaeologists between 1899-1960. A list of

excavations directed by Americans appears in the appendix.

Thompson, Henry O.

1992 "Yahweh." In Anchor Bible Dictionary vi, 1001-1012.

1987 Biblical Archaeology: the world, the Mediterranean, the Bible. New York: Paragon House.

Thompson uses historical and thematic outlines in his introduction to archaeology and the Bible: Archaeology Itself (3-42); the History of Archaeology (43-158); Archaeology and Science (159-212); Daily Life in Biblical Times (213-280); Archaeology Illuminates the Bible (281-418); and Archaeology and Religion (419-450).

Thompson, J. A.

1986 Handbook of Life in Bible Times. Downers Grove: InterVarsity.

1962 The Bible and Archaeology. Grand Rapids: Eerdmans.

Thompson, Jason

2008 Edward William Lane: a biography.

2008 "An Account of the Journeys and Writings of the Indefatigable Mr. Lane." Saudi Aramco World March/April: 30-39.

Lane became Britain's more renowned scholar of the culture of Egypt. He wrote a fascinating study of Egyptian society – An Account of the Manners and Customs of the Modern Egyptians (1836) – a classic study that is still in print. His Arabic-English dictionary is still a basic, irreplaceable reference work.

1992 Sir Gardner Wilkinson and His Circle. Austin: University of Texas.

Thompson, Thomas L.

2006 "Archaeology and the Bible Revisited." SJOT 20, 2: 286-313.

1996 "Historiography of Ancient Palestine and Early Jewish Historiography: W.G. Dever and the Not So New Biblical Archaeology." In The Origins of the Ancient Israelite States: 26-43. Edited by Volkmar Fritz and Philip R. Davies. OTSup 228; Sheffield: Sheffield University.

Thompson offers a minimalist assessment of how biblical archaeology continues to fail to answer its own research questions and archaeological standards in general.

Throckmorton, Peter

1964 The Lost Ships: An Adventure in Underwater Archaeology. Boston and Toronto, 1964.

1962 "Oldest Known Shipwreck Yields Bronze Age Cargo." National Geographic 121.5 (May 1962): 696-711.

Throckmorton provides a popular account of the excavation.

1960 "Thirty-three Centuries Under the Sea." National Geographic. 117: 682-703,

Throckmorton, Peter, ed.

1987 The Sea Remembers: shipwrecks and archaeology from Homer's Greece to the Rediscovery of the Titanic. New York: publisher.

Throckmorton edits the most comprehensive overview of underwater archaeology from its beginnings.

Toivari-Vitala, J.

2001 Women at Deir el-Medina: a study of the status and roles of the female inhabitants in the workmen's community during the Ramesside Period. Leiden: Nederlands Instituut voor het Nabije Oosten.

Toorn, Karel van der

2007 Scribal Culture and the Making of the Hebrew Bible. Cambridge: Harvard University.

Towler, J and J. Bramall

1986 Midwives in History and Society. London: Croom Helm.

Tribble, Phyllis

1973 "Depatriarchalizing in Biblical Interpretation" JAAR 41: 30-38.

Seminal study.

Travelers in Egypt

▼ "Entering Inside the Second Pyramid".

http://www.travellersinegypt.org/archives/2006/01/entering_inside_the_second_pyr.html

Deleted: 2006 .

Trigger, Bruce

2006 A History of Archaeological Thought. 2nd edition; New York: Cambridge University.

Trigger examines the history of archaeology from medieval times to the present in world-wide perspective. He places the development of archaeological thought and theory within a broad social and intellectual framework, and seeks to determine the extent to which these trends were a reflection of the personal and collective interests of archaeologists as these relate to the fluctuating middle class fortunes. Subjective influences have been powerful; nonetheless the accumulation of archaeological data has exercised a growing constraint on interpretation. Consequently, objectivity of archaeological research has steadily increased, and enhanced its value for understanding human history.

Trope, Betsy Teasley, Stephen Quirke and Peter Lacovara
2005 Excavating Egypt: great discoveries from the Petrie Museum of Egyptian Archaeology. Atlanta: Emory University.

Tubb, Jonathan N., and Rupert L. Chapman.
1990 Archaeology and the Bible. London: British Museum

Tutankhamen's Tomb
<http://www.crystalinks.com/tutstomb.html>

Tyldesley, Joyce
2005 Egypt: how a lost civilization was rediscovered. Berkeley: University of California.

UUUU

Ullmann-Margalit, Edna
2008 "Dissecting the Qumran-Essene Hypothesis." BAR 34, 2: 63-67+86.

Ullmann-Margalit evaluates the competing interpretations for Qumran and the Dead Sea Scrolls as a philosopher of science. She concludes that: "All in all the Qumran-Essene theory has found ingenious ways to co-opt some of its challengers. Subtly adapted and re-described, it endures as the reigning consensus in Qumran studies. Barring dramatic new evidence that might yet come to light and cause a sea-change, this status of the Qumran-Essene theory, as far as I can judge, is just about right (Ullmann-Margalit BAR 34,2:67)."

Underwater Archaeology Glossary
<http://www.abc.se/~pa/uwa/glossary.htm>

University of Texas, Department of Anthropology
<http://www.utexas.edu/courses/wilson/ant304/projects/projects97/gebhardp/gebhardp.html>

Notes on Colin Renfrew and Paul Bahn. Archaeology: Theories, Methods, Methods and Practice. Thames and Hudson: New York, 1996: 36-39.

VVVV

Van Beek, Gus W.

1988 "Excavation of Tells." In Benchmarks in Time and Culture: an introduction to Palestinian Archaeology: 131-167. Edited by Joel F. Drinkard, Jr., Gerald L. Mattingly, and J. Maxwell Miller. Atlanta: Scholars.

Van Beek describes the excavation process step by step: the nature of a tell, site selection, selection of areas to be excavated, staff selection, funding, tell stratification, contour plans, test pits and trenches, excavating layers, excavating walls, balk removal, recording the information and the task of interpretation.

Van Beek, Gus W., ed.

1989 The Scholarship of William Foxwell Albright: an appraisal. Harvard Semitic Studies 33; Atlanta: Scholars.

Van Beek appraises the legacy of William Foxwell Albright at a symposium by Albright's students on the 350th anniversary of the founding of Maryland for Albright – a son of the state for most of his professional career at Johns Hopkins University.

Van der Steen, Evelyn

1999 "Survival and Adaptation: life east of the Jordan in the transition from the Late Bronze Age to the Early Iron Age." PEQ 131: 176-192.

Van Hatten, Willem C.

1981 "Once Again: Sodom and Gomorrah." BA 44: 87-92

Vaughn, Andrew G.

2003 "Is Biblical Archaeology Theologically Useful Today? Yes, a Programmatic Proposal." In Jerusalem in Bible and Archaeology: 407-430. Edited by Andrew Vaughn and Ann E. Killebrew. Atlanta: SBL.

Vaughn, Andrew G. and Ann E. Killebrew, eds.
2003 Jerusalem in Bible and Archaeology. Atlanta: SBL.

Vieweger, Dieter and Jutta Haser
2007 "Tall Zira'a: five thousand years of Palestinian history on a single-
settlement mound." Near Eastern Archaeology 70: 147-167.

WWW

Wachsmann, Shelley
1994 Seagoing Ships and Seamanship in the Late Bronze Age. College
Station: Texas A&M University.

Wallach, Janet
1999 Desert Queen: the extraordinary life of Gertrude Bell, adventurer,
adviser to kings, ally of Lawrence of Arabia. New York: Doubleday.

In the wake of the first Gulf War (1990-1991) Wallach writes a
biography of Gertrude Bell, the English woman who almost single
handedly created the state of Iraq.

Walton, John H.
2006 Ancient Near Eastern Thought and the Old Testament: Introducing
the Conceptual World of the Hebrew Bible. Grand Rapids: Baker
Academic.

Walton writes a comprehensive and comparative study of the
cultural worlds of ancient Israel and its neighbors in the world of the
Bible. The introduction explains the importance and the methods of
comparative study. Its comparisons explain how these ancient
peoples thought about religion, the cosmos, and themselves.

Warren, Karen J.
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Cultural Properties Issues." In The Ethics of Collecting Cultural
Property: Whose Culture? Whose Property?: 1-25. Albuquerque:
University of New Mexico.

Warzeski, Jeanne-Marie
2005 "Women's Work for Women': American Presbyterian missionary
women in Egypt 1854-1914." In Women Travellers in the Near
East: 79-91. Oxford: Oxbow.

Watson, Patty Jo

2008 "Processualism and After." In Handbook of Archaeological Theories: 29-38. Edited by R. Alexander Bentley, Herbert D.G. Maschner and Christopher Chippindale. Lanham: Rowman & Littlefield.

1999 "Ethnographic Analogy and Ethnoarchaeology." In Archaeology, History and Culture in Palestine and the Near East: essays in memory of Albert E. Glock: 47-65. Edited by Tomis Kapitan. Atlanta: Scholars.

Watson, Patty Jo, Steven LaBlanc and Charles Redman
1984 Archaeological Explanation: the scientific method in archaeology. New York: Columbia University.

Promoted the use of Processual archaeology. Called for archaeologists to use the same scientific method as other scientists. Any archaeological hypothesis should be rigorously tested in the field before it is used to interpret a culture or to reconstruct its structure.

Watson, Wilfred G.E.
2003 "Daily Life in Ancient Ugarit (Syria)." In Life and Culture in the Ancient Near East: 121-152. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.

Waxman, Sharon
2008 Loot: the battle over the stolen treasures of the ancient world. New York: Times. <http://sharonwaxman.typepad.com/loot/>

Waxman, a former New York Times correspondent, interviews smugglers, government officials, dealers and curators about whether artifacts be moved to countries where they are safe, well cared for and accessible to the most visitors, or should remain in their countries of origin. Her suggestion is a collaborative middle way.

Webster, Gary S.
2008 "Culture History: a culture-historical approach." In Handbook of Archaeological Theories: 11-28. Edited by R. Alexander Bentley, Herbert D.G. Maschner and Christopher Chippindale. Lanham: Rowman & Littlefield.

Wegner, J.
2002 "A Decorated Birth-Brick from South Abydos." Egyptian Archaeology 20 (Spring): 3-4

Weisberg, David B.

2003 "Everyday Life in the Neo-Babylonia Period: the integration of material and non-material culture." In Life and Culture in the Ancient Near East: 83-94. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.

Wells, Bruce

2005 "Sex, Lies, and Virginal Rape: the slandered bride and false accusation in Deuteronomy." JBL 124:41-72.

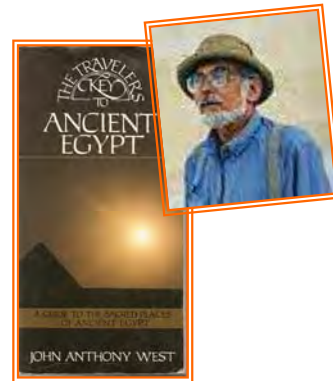
Wertz, R.W. and D.C. Wertz

1977 Lying-In: a history of childbirth in America. New York: Free Press

West, John Anthony

1989 The Traveler's Key to Ancient Egypt: a guide to the sacred places of ancient Egypt.

Geography is the outline for introductions to archaeology and the Bible like the Traveler's Key to Ancient Egypt, revised: a guide to the sacred places of ancient Egypt (1995) by John West. West begins with a discussion of the history of ancient Egypt and the history of archaeology in Egypt, and then moves from north to south along the Nile River describing, for example, the antiquities on the Giza Plain, at Saqqara, Memphis, Beni Hassan, Luxor, Abydos, Dendera, Edfu, Aswan and Abu Simbel. The final chapter is about Alexandria on the Mediterranean Coast, presumably because it was, until recently, thought to have been an exclusively Hellenistic site (<http://www.smithsonianmagazine.com/issues/2007/april/alexandria.php>). West does not reference the Book of Judges in his discussion of the Amarna Letters, but he does note the similarity of the Hymn to the Aten and Psalm 104.



Westbrook, Raymond

1985 "Biblical and Cuneiform Law Codes." RB 92: 247-264.

Westbrook demonstrates that the legal systems of ancient Israel and Judah, as reflected in the Bible, were similar to those of other Near Eastern cultures. One legal system was not directly dependent on the other, but that the similarity across systems in the world of the Bible strongly favors the conclusion that most Near Eastern cultures,

including ancient Israel, appear to have operated by many of the same legal rules and customs. Understanding how law worked in one society can then aid in understanding how law may have worked in another.

1988 Studies in Biblical and Cuneiform Law. Paris: Gabalda.

1994 "What Is the Covenant Code?" In Theory and Method in Biblical and Cuneiform Law: Revision, Interpolation, and Development: 15-36. Edited by Bernard M. Levinson. JSOTSup 181; Sheffield: Sheffield.

Wevers, J.W. and D.B. Redford, eds.

1972 Studies on the Ancient Palestinian World: presented to Professor F.V Winnett on the occasion of his retirement, 1 July 1971. Toronto: University of Toronto.

Wheeler, Mortimer

1966 Civilizations of the Indus Valley and Beyond. London: Thames & Hudson.

1966 Alms for Oblivion: An Antiquarian's Scrapbook. London: Wiedenfeld and Nicolson.

1959 Early India and Pakistan to Ashoka. New York: Frederick A Praeger.

1955 Still Digging. London: Michael Joseph.

1954 Archaeology from the Earth. Harmondsworth: Penguin.

Whitelam, Keith W.

1996 The Invention of Ancient Israel: the silencing of Palestinian history. New York: Routledge.

Wildung, Dietrich

1998 Egyptian Art in Berlin: masterpieces in the Bodemuseum and in Charlottenburg. Berlin: Ägyptisches Museum und Papyrussammlung.

Wilkenson, John

1977 Jerusalem Pilgrims before the Crusades. Warminster: Aris & Phillips.

1999 Egeria's Travels to the Holy Land: newly translated, with supporting documents and notes. Warminster: Aris & Phillips.

2002 Jerusalem Pilgrims before the Crusades. Warminster: Aris & Phillips.

Wilkinson, John Gardiner

1837 Manners and Customs of the Ancient Egyptians. London: John Murray.

Wilkinson, Tony J.

2003 Archaeological Landscapes of the Near East. Tucson: University of Arizona

Using the principles that underlie the preservation and recovery of landscape features, as well as how the cultural landscape was managed through time, Wilkinson provides an overview of Asia Minor to the Arabian Peninsula and from the east coast of the Mediterranean Sea to Persia beginning in the Neolithic period to describe the dynamic character of the Near Eastern landscape. Landscape archaeology is a framework for other studies requiring an understanding of the economic and physical infrastructure of the world of the Bible.

Wiley, Gordon R. and Phillip Phillips

1958 Method and Theory in American Archaeology. Chicago: University of Chicago.

Wilson, Charles William, ed.

1971 Itinerary from Bordeaux to Jerusalem (333). Translated by Aubrey Stewart. New York: AMS.

Wilson, Edmund

1969 The Dead Sea Scrolls 1947-1969. London: Collins Fontana.

Wilson publishes a revised and expanded edition of W.A. Allen, The Scrolls from the Dead Sea (1955). The influence of his series of articles in the The New Yorker magazine on which the book is based captured public attention for Qumran and the Dead Sea Scrolls.

Wilson, Kevin A.

2005 The Campaign of Pharaoh Shoshenq I in Palestine. Forschungen zum Alten Testament, 2. Reihe 9. Tübingen: Mohr Siebeck.

Wilson argues that Shoshenq's campaign was not as widespread as previously thought. Instead, it focused only on Jerusalem, and Jerusalem itself was not destroyed.

Winstone, H.V.F.

2004 Gertrude Bell: a biography. New York: Quartet.

Wood, Bryant G.

1992 "Potter's Wheel". Anchor Bible Dictionary: v 427-428.

Wright, G. Ernest

1969 "Biblical Archaeology Today." In New Directions in Biblical Archaeology: 149-165 Garden City: Doubleday & Company.

Biblical archaeology is a sub-discipline of both anthropology, which studies cultures, and of history, which studies events. Biblical archaeologists give the Bible the benefit of the doubt unless there is contrary evidence in the material remains. Their goal is to read the Bible in the setting of its time, its people and its land. Archaeology has had a profound impact on the understanding of Northwest Semitic languages and their genres. Archaeology has also had a profound impact on the understanding of the theology and anthropology of ancient Israel. The Hebrews did not describe their divine patron with timeless philosophical terms; they told stories about what Yahweh had done. This event-centered thinking cannot be systematized; it includes the confessional recital of past events together with the deductions drawn from them by a worshiping community as a means of renewal in various historical situations. Likewise, the Hebrews described humans by describing their relationships and commitments. In the Bible humans are historical creatures. Human nature changes, and has repeatedly changed. It is impossible for the Bible to understand what it means to be human apart from the actions of those humans in a particular point in time.

1969 The Old Testament and Theology. New York: Harper & Row.

1963 Shechem: biography of a biblical city. New York: McGraw Hill.

1962 The Pottery of Palestine from the Earliest Times to the End of the Early Bronze Age. New Haven: ASOR.

1957 Biblical Archaeology. Philadelphia: Westminster.

1955 "Israelite Daily life." BA 18: 50-79.

1952 God Who Acts: biblical theology as recital. Norwich: SCM.

Wright, G. Ernest, ed.

1965 The Bible and the Ancient Near East: essays in honor of William Foxwell Albright. New York: Doubleday.

Wright, J. Edward

2002 "W.F. Albright's Vision of Israelite Religion." Near Eastern Archaeology 65:63-68.

Albright was not so much a 20th century genius (Running and Freedman 1975), as a 20th century, *American, Protestant* genius; not the scholar of all time, but a scholar of his time. He was an accomplished excavator, pottery expert, language specialist and historian of the

cultures in the world of the Bible. His technical studies in any of these areas are classics. He was also, however, a devout Christian from the Reformation tradition in the United States. Therefore, when Albright used his archaeological work to illuminate the Bible, he allowed his theology to guide his archaeology. His goal was to demonstrate that the way in which American Protestant pastors preached the Bible was historically reliable, and that the Reformation tradition of Christianity in the United States – in contrast to the faith traditions of Catholics and Jews -- was biblically faithful. Therefore, Abraham, Isaac and Jacob were real people whose stories in the book of Genesis accurately reflected daily life in the Middle Bronze Period. The faith of Abraham and, later, of Moses, was uniquely monotheistic and moral in contrast to the polytheistic and explicitly sexual rituals of the indigenous peoples of Syria-Palestine. Joshua led a military crusade that conquered these militarily superior, but culturally inferior, Canaanites.

YYYY

Yadin, Azzan

2004 “Goliath’s Armor and Israelite Collective Memory.” Vetus Testamentum 14,3: 374-395.

Yadin argues that the style of Goliath’s armor and the institution of one on one combat in the story of how David Delivers Israel from Goliath identify it as a biblical parallel to the Illiad of Homer where Menelaus and Paris duel in fine armor. The biblical hero story is a response to burgeoning Greek national identity in Syria-Palestine, and maintains a literary dialogue with the Greek epic tradition.

Yadin, Yigael

1993 “Hazor.” In New Encyclopedia of Archaeological Excavations in the Holy Land 2:594-603. Edited by Ephraim Stern, et al. Jerusalem: Israel Exploration Society.

1963 The Art of Warfare in Biblical Land in Light of Archaeological Study. New York: McGraw Hill.

1958 “Solomon’s City Wall and Gate at Gezer.” IEJ 8 (1958): 80-86.

For Yadin the excavation of nearly identical 10th century city walls and gates at three of the four sites listed in the books of Samuel-Kings (1 Kgs 9:15-17) implied that the defenses could only have been constructed by a highly centralized state of Israel.

1955 "Goliath's Javelin and the *menor 'origin*." Palestinian Exploration Quarterly 8, 1: 58-69.

Yamauchi, Edwin M.

2003 "Athletics in the Ancient Near East." In Life and Culture in the Ancient Near East: 491-500. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.

1983 "Magic in the Biblical World." Tyndale Bulletin 34: 169-200.

Yardeni, Ada

2007 "A Note on a Qumran Scribe." In New Seals and Inscriptions, Hebrew, Idumean and Cuneiform: 287-298. Edited by Meir Lubetski. Sheffield: Sheffield Phoenix.

Yardeni argues that, between 100 B.C.E. – 70, a scribe with a unique way of writing the letter *lamed*, copied more than 50 biblical and non-biblical scrolls recovered from Caves 1,2,3,4,6 , 11 at Qumran and also scrolls at Masada.

Yoffee, Norman and Bradley L. Crowell

2006 "Historical Archaeology in Asia: an introduction." In Excavating Asian History: interdisciplinary studies in archaeology and history: 3-14. Edited by Norman Yoffee and Bradley L. Crowell. Tucson: University of Arizona.

Yon, Marguerite

2006 The City of Ugarit at Tell Ras Shamra. Winona Lake: Eisenbrauns.

An updated translation from a 1994 French introduction to the excavations at the port of Ugarit on the northern Mediterranean coast of Syria today, as well as the nearby port of Mahadu (Arabic: Minet el-Beida) and the village at Ras Ibn Hani. Concentrates on the thirteenth and twelfth century Strata before Ugarit's destruction by the Sea Peoples. Architectural plans demonstrate the use of space at Ugarit. Tablets, seals, stelae, ceramics and handiwork in gold, ivory and faience reflect the city's cosmopolitan character.

Younger, K. Lawson, Jr.

2003 "'Give Us Our Daily Bread' everyday life for the Israelite deportees." In Life and Culture in the Ancient Near East: 269-288. Edited by Richard E. Averbeck, Mark W. Chavalas and David B. Weisberg. Bethesda: CDL.

1990 Ancient Conquest Accounts: a study of ancient Near Eastern and biblical history writing. JSOT supplement 19; Sheffield: University of Sheffield.

Yunker, Randall W.

2004 "Integrating Faith, the Bible, and Archaeology: a review of the 'Andrews University Way' of doing archaeology." In The Future of Biblical Archaeology: reassessing methodologies and assumptions: 43-52. Edited by James K. Hoffmeier and Alan Millard. Grand Rapids: William B. Eerdmans.

Yurco, Frank J.

1986 "Merenptah's Canaanite Campaign." Journal of the American Research Center in Egypt 23:189-215.

For Yurco a battle scene on the walls of a Karnak temple depicts the campaign described in the Annals of Merenptah, rather than the Annals of Ramesses II. Therefore Yurco considers the figures on the bottom of this drawing to be the first pictures found in Egypt of the biblical Hebrews.

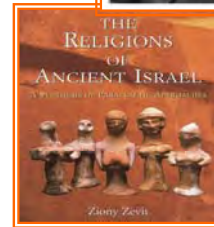
ZZZZ

Zevit, Ziony

2002 "Three Debates about Bible and Archaeology." Bib 83:1-27.

2001 The Religions of Ancient Israel: a synthesis of parallactic approaches. London: Continuum.

The Religions of Ancient Israel: a synthesis of parallactic approaches (2001) by Ziony Zevit is an anthology of essays using archaeology to reconstruct Hebrew faith practice. The outline of the book is thematic. Essays reconstruct places of worship and liturgical furniture. They also describe the significance of inscriptions at sanctuaries, how the Hebrews describe their own worship, how outsiders describe Hebrew worship, and the names used by Hebrews for their divine patron.



Ziffer, Irit

2007 "A Note on the Nahal Mishmar 'Crowns'". In Ancient Near Eastern Art in Context: studies in honor of Irene J. Winter by her students: 45-66. Edited by Jack Cheng and Marian Feldman. Culture and History of the Ancient Near East, 26; Leiden: Brill.

Zohary, M.
1982 Plants of the Bible. Cambridge: Cambridge University.

Zuckerman, S
2006 "Where is the Hazor Archive Buried?" BAR 32:28-37.

CHAPTER 25
INDEX OF PERSONAL NAMES

AAAA

William F. Albright (1891–1971)
Yohanan Aharoni (1919–1976)
Michael Avi-Yonah (1904–1974)
Amenhotep III (1391–1353 B.C.E.)
Gosta W. Ahlstrom (1918–1992)
Akhenaton (1352–1335 B.C.E.)
Alexander of Macedonia (356–323 B.C.E.)
Edmund H. Allenby (1861–1936)
Caliph Al-Mansur (712–775)
Moqtada al-Sadr
Ashurnasirpal II (883–859 B.C.E.)
Muhammed Ali (1769–1849)
Ruth Amiran
Aya (1323–1319 B.C.E.)
Albrecht Alt (1883–1956)
Amenophis II (1427–1401 B.C.E.)
Antiochus Epiphanes IV (175–164 B.C.E.)
Amen-em-ope

BBBB

Amnon Ben-Tor
Gabriel Barkay
John Bright (1908–1995)
Robert G. Boling (1930–1994)
Frederick J. Bliss (1859–1937)
Charles Clermont-Ganneau (1846–1923)
James H. Breasted (1865–1935)
Millar Burrows (1889–1980)
Fernand Braudel (1902–1985)
Lewis R. Binford
Giovanni B. Belzoni (1778–1823)
Marc Bloch (1886–1944)

Moses Basola (1480-1560)
David Ben Gurion (1886-1973)
Napoleon Bonaparte (1769-1821)
John Bunyan (1628-1688)
Pierre-Francois Bouchard
James H. Breasted (1865-1935)
Isaac Lowthian Bell
Gertrude Bell (1868-1926)
Paul-Emile Botta
William F. Bade (1871-1936)
Johann Ludwig Burckhardt (1784-1817)
Menachem Begin (1913-1992)
Avraham Biran
John Bright (1908-1995)
Magen Broshi
Aaron Brody
Oded Borowski
Phyllis A. Bird

CCCC

Joseph A. Callaway
H. Dunscombe Colt
Frank M. Cross
Eric H. Cline
Constantine (272-337)
Jean F. Champollion (1790-1832)
Cambyes (530-521 B.C.E.)
Edward Chiera (1885-1933)
Chista Clamer
Howard Carter (1874-1939)
Charles Clermont-Ganneau
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Dan Cole
Margert W. Conkey

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William G. Dever
Joel F. Drinkard, Jr.
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Friedrich Delitzsch (1850-1922)
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Yehudah Dagan
Philip Davies
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Emile Durkheim (1858-1917)

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Eusebius (275-339)
Dianna Edelman
Hana Eshel

FFFF

Israel Finkelstein
David N. Freedman (1922-2008)
Bruce Feiler
Lucien Febvre (1878-1956)
Betty Friedan (1921-2006)

GGGG

Seymour Gitin
Kurt Galling
Nelson Glueck (1900-1971)
Gian-Francesco Gamurrini (1835-1923)
George Friedrich Grotefend (1775-1853)
Nelson Glueck
Albrecht Goetze
Norman Gottwald
Cyrus Gordon (1908-2001)
Norman Golb
Dorothy Garrod (1892-1968)

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John H. Hayes

Frank Hole
Rachel Hallote
G. Lancaster Harding
Ian R. Hodder
Scott Hutson
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Michael G. Hasel
Kenneth G. Holum
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Edward Hincks (1792-1866)
William R. Harper (1856-1906)
Louis Haghe (1829-1898)
Faisal ibn Hussein (1883-1935)
Saddam Hussein (1937-2006)
Ze'ev Herzog
William Brown Hodgson
G. Lancaster Harding
Paul Haupt (1858-1926)
Yizhar Hirschfeld
Gordon Hillman
Jack Holladay
James K. Hoffmeier

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Justinian (483-565)
Michael Jursa
Abdul Jabbar
Thorkild Jacobsen
Morris Jastrow, Jr. (1866-1921)

KKKK

Kathleen M. Kenyon (1906-1978)
Philip J. King
Carl H. Kraeling (1897-1966)
Samuel Noah Kramer
Alpha Oumar Konare

Ya'qub Karavaca Khufu (2551-2528 B.C.E.)
Kenneth A. Kitchen

LLLL

Niels P. Lemche
Thomas E. Levy
Ostein S. LaBianca
Paul W. Lapp (1930-1970)
Martin Luther (1483-1546)
Erle Leichty
Amina Lawal
Edward W. Lane (1801-1876)
T.E. Lawrence (1888-1935)
Austen H. Layard (1817-1894)
Lucien Febvre (1878-1956)
Emmanuel Le Roy Ladurie
Darrell Lance
Mark Lehner

MMMM

Carol Meyers
Victor H. Matthews
Amihai Mazar
J. Maxwell Miller
P. Roger Moorey (1937-2004)
Eric M. Meyers
Jerome Murphy-O'Connor
Gerald L. Mattingly
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Max Mallowan (1904-1978)
Muzahim Mahmu
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George Mendenhall
Itzak Magen
Jodi Magness
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R.A.S. Macalister
Mary Anne Murray

Marvin W. Meyer

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Martin Noth (1902-1960)
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Jules Oppert
Steven M. Ortiz

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James B. Pritchard (1909-1997)
Moshe Pearlman
William F. Petrie (1853-1942)
Ptolemy V Epiphanes (204-181 B.C.E.)
Ptolemy I Soter
Augustus H. Pitt-Rivers (1827-1900)
Antonio Pigafetta (1491-1534)
Pompey (106-48 B.C.E.)
J. Heinrich Petermann
Yuval Peleg
Phillip Phillips (1900-1994)
Raphael Patai (1910-1996)
Ptah-hotep

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Saba Qa'war

RRRR

Walter E. Rast
Edward Robinson (1794-1863)
Anson F. Rainey
Ippolito Rosellini (1800-1843)
Henry Rawlinson
John D. Rockefeller

David Roberts (1796-1864)
George A. Reisner (1867-1942)
Hormuzd Rassam (1826-1910)

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Lawrence E. Stager
Ephraim Stern
Jack M. Sasson
R. Thomas Shaub
Neil Asher Silberman
Eli Smith (1801-1857)
Åke Sjöberg
Suriya
E. A. Speiser
Sennacherib
Joe D. Seger
Mohammed Sadiq Sadr
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George E. Smith (1840-1876)
William Shakespeare 1564-1616)
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Seti I (1306-1290 B.C.E.)
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Hershel Shanks
Konstantin Schlottmann (1819-1897)
James L. Starkey (1895-1938)
George E. Smith (1840-1876)
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Tiye (1398-1338 B.C.E.)
Theodosius I (347-395)
Tiglath-Pileser I (1114-1076 B.C.E.)
Steve Tinney
Tammuz
R. Taylor
Olga Tufnell (1905-1985)
Thomas Thompson
Phyllis Tribble
Charles C. Torrey

UUUU

Edna Ullmann-Margalit
David Ussishkin

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Willem C. Van Hattem
Louis-Hugues Vincent

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G. Ernest Wright (1909-1974)
John West
Sam Wolff
Mortimer Wheeler (1890-1976)
John G. Wilkinson (1797-1875)
Charles Warren (1840-1927)
John Woodhead
Henry Wellcome (1853-1936)
Keith Whitelam
Leonard Woolley
Gordon R. Willey (1913-2002)
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Anita Walker
Robert Wright

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Randall W. Younker
Frank Yurco
Yigael Yadin (1917-1984)

ZZZZ

Ziony Zevit
Orna Ziumhoni

GLOSSARY

The Glossary defines common technical terms used in Stones & Stories. Each term is also defined when it is first used in the book itself. The Concise Oxford Dictionary of Archaeology by Timothy Darvill is a good general reference for terms not covered in the glossary here. There are on-line glossaries at: <http://www.archaeolink.com/index.htm> and <http://www.glossarist.com>

AMPHICTYONY

An amphictyony is a league of twelve tribes whose lands surrounded a central sanctuary like Shechem or Hebron. One tribe protected and provided for the sanctuary for one month each year.

APOLOGETICS

The root of the word apologetics is the Greek word apologia. In a trial the prosecuting attorney delivered an kategoria or list of indictments; the defense attorney replied with an apologia. Apologetics is the study of how to reply and rebut charges of antisocial behavior.

ARCHAEOLOGICAL CALENDAR

Archaeologists working in the world of the Bible created a calendar using the raw materials used for tools and weapons, for example, Stone Age, Chalcolithic (Greek: chalco = copper; lithic = stone) Age, Bronze Age, Iron Age. The dates for these periods reflect the consensus of early archaeologists on when these materials first came into use. Subsequent research has made modifications in the dates, but the calendar dates have not been changed. Dates for the Archaeological Calendar in Stones & Stories follow The Anchor Bible Dictionary (1992) edited by David N. Freedman.

ARCHAEOLOGY

Archaeology is the recovery, interpretation and reconstruction of the cultural property of now extinct cultures.

ASHLAR

An ashlar is a large, smooth block of limestone.

BIBLICAL ARCHAEOLOGY

Biblical Archaeology is a sub-discipline of Cultural History. Albright launched the Biblical Archaeology Movement to demonstrate that the Bible was historically accurate. For example, in 1922 Leonard Woolley was directing an excavation of the royal tombs at Ur (Arabic: Tell al Muqayyar) north of Basra (Iraq), when he uncovered an eight foot thick layer of clean clay. He considered this layer unmistakable evidence that the Flood Stories in the Book of Genesis (Gen 6:1—11:26) were historically accurate.

BODY SHERD

A body sherd is a broken piece of pottery valuable for identifying the composition of the clay and the technique used to make a pot.

BULLA

A bulla is a seal impression created when papyrus scrolls were rolled up, tied with a string, and secured with a seal pressed into a bit of wet clay.

BURNISH

A burnish is a polish applied to seal and to shine the surface of a pot.

CERAMIC CALENDAR

Calendars built around political and economic events in written artifacts were replaced by ceramic calendars built around the raw material, the shape and the decoration used in pottery. Repeated, careful excavations developed sequences for the development of pottery types from its first appearance in the Neolithic period (6000-3800 B.C.E.) to the pottery used in Syria-Palestine during the Crusades (1096-1291). Pottery not only provided a chronology for a particular site, but the chronologies from more than one site could be used to recreate the chronology of an entire region.

CRANNOG

A crannog is a dwelling built along lakesides in Scotland, Ireland, and Wales after 3000 B.C.E. Cranogs are round houses of wood and branches supported on stilts driven into the lake bed. Sometimes, in

place of stilts, tons of rocks were piled onto the lake bed to make an island foundation for the crannog. Several hundred crannogs have been identified, but only a few have been excavated.

CUNEIFORM

The earliest cuneiform inscriptions were pictographs or icons. These pictographs evolved into signs or patterns created by wedges. Originally, each cuneiform sign stood for one or more related words whose correct meaning was determined by their context. For example, a cuneiform star stood for both a star in the night sky and a member of the divine assembly. Cuneiform developed some six hundred signs that could represent either words or syllables. A few signs could also indicate that the sign following it referred to a particular category like a city or a people. The remarkable thing about the cuneiform system is that, for all its complexity, it had sufficient flexibility to permit its adaptation to a large number of extremely different languages.

DEMOTIC EGYPTIAN

Demotic Egyptian is a cursive or longhand writing. It appeared about 650 B.C.E. and was used for business, legal, scientific, literary and religious documents written on papyrus paper.

DIACHRONIC

Diachronic identifies schools of interpretation that, like a motion picture documentary, examine the origins, development, history, and change that takes place over time.

DIAGNOSTIC SHERD

A diagnostic sherd is a broken piece of pottery like a rim, handle or base from which the shape and decoration of the original pot can be reconstructed.

DIMORPHIC ECONOMY

Village economy in the world of the Bible was dimorphic -- a combination of farming and herding. Some villagers farmed, some herded.

DRUZE

The Druze are a minority faith tradition in Syria, Lebanon and Israel.

Historically they are the disciples of al-Hakim bi-Amrih Alla an Egyptian Muslim who in 1009 proclaimed himself to be divine -- challenging both the Muslim belief in the uniqueness of Allah and the position of Muhammad as the last prophet of Allah. Although the Druze evolved from Shi'a Islam, Druze tradition today includes beliefs influenced by Persian Gnosticism and Hellenistic philosophy.

DUMPIE

In 1983 two kinds of statues from the Neolithic period were recovered at 'Ain Ghazal (Jordan): *dumpies* and *figures*. Dumpies are about a foot high; figures are three feet high. Dumpies have solid, roughly shaped, unpainted bodies. Figures have well-defined arms and legs. The bodies of the statues were painted with red iron oxide, black carbon, and white lime. The heads of both dumpies and figures have detailed eyes, noses, mouths, and ears. The eyes, elliptical with round irises, were painted with black tar and blue copper oxide. Noses turn up at the ends, and the nostrils are simply two narrow cuts. Mouths are also just narrow cuts. Ears are small, unshaped knobs. The statues are shaped from plaster over a core of branches tied with string. The cores in the dumpies were one bundle of branches, while the cores of the figures were several bundles tied together. The heads and necks of the cores were also reinforced with string. The branches in the cores stuck out from the bases of the statues so that they could be mounted into plaster floors. Some figures were arranged in groups: father, mother, and child surrounded by dumpies.

EPIGRAPHY

Epigraphy is the science of copying and interpreting inscriptions and associated pictures.

ETHNOGRAPHY

Ethnographies are the detailed descriptions by anthropologists of human behavior in a particular culture. These ethnographies are based on both the observations of the anthropologists as outsiders and interviews with members of the cultures they are studying as insiders.

FAST WHEEL

The fast wheel developed around 2000 B.C.E. Two wheels were connected to a shaft. Potters turned the lower wheel with their feet and shaped their pots on the top wheel with their hands.

FIGURES

See: **DUMPIES**

GLACIS

A glacis is a slopping, layered, packed earth ramp with a plastered surface. The glacis sheeted water off the wall and away from its foundations to prevent erosion.

HEBREWS

During the Late Bronze period (1500-1200 B.C.E.) *Hebrews* were displaced households (Akkadian: *'apiru*) whose common bond was not ethnic, but social. War and famine were common causes of their social dislocation. These Hebrews often fought as mercenaries or supported their household by raiding.

The *Hebrews* who founded the villages in the hills west of the Jordan River Valley and north of Jerusalem at the beginning of the Iron Age (1200-1100 B.C.E.) were refugees from cities along the coast, not nomads from the desert. What these villagers had in common was that they were social survivors who fled the famine, plague, and war which brought the Bronze Age to an end. They were not warriors, they were farmers and herders. They left centralized, surplus states and created decentralized, subsistence village federation called *Israel*. Politically these villagers were *Israelites*; culturally they were *Hebrews*.

HIEROGLYPHICS

Hieroglyphics is a writing system developed for a single language: Egyptian. There are as many as 2,000 hieroglyphic characters. Each hieroglyph or stylized picture of a common object – a duck, a house, water, for example – represented the sound of the object or an idea associated with the object.

HISTORICAL OR LINEAR RELIGIONS

During the middle of the twentieth century religions were divided into two categories. Those whose significant events, like the exodus of the Hebrews from Egypt and the resurrection of Jesus, were unique past events were called historical or linear religions. Those whose significant events, like planting times and harvest times, repeated year after year were called mythical or cyclical religions. Today it is recognized that nearly all religions are based on a combination of both unique historical

events and repeated natural events.

KILN

A kiln is a brick-lined oven used to bake or fire pottery.

KRATER

A krater is a wide mouthed, two-handled bowl used for mixing wine and water. In the world of the Bible wine was not stored ready to drink, but in a concentrated form. Hosts mixed the concentrated wine with an appropriate amount of water in a krater to make it drinkable.

LEVIGATION

Levigation is soaking or slaking clay in water before mixing in order to remove contaminants.

LIMINAL WOMEN

Liminal women in the world of the Bible do not have a defining male to give them status. They are women temporarily without a household. Women of a household enjoy the status of daughter, wife or widow. The defining male for a daughter is a father; the defining male for a wife is a husband; the defining male for a widow is her son. Liminal women without status are the orphan without a father, the prostitute without a husband, and the widow without a son. Female characters like Naomi, Ruth (Ruth 1:1—4:22) or Tamar (Gen 38:1-30) portrayed in the Bible as liminal women often exploit their lack of status for the good of others.

MAXIMALISTS-MINIMALISTS

Maximalist scholars -- such as William G. Dever --regard the Bible as the heritage of a Hebrew culture that first appeared in the hills north of Jerusalem after 1200 B.C.E. Minimalist scholars --such as Niels P. Lemche -- regard the Bible as the ingenious strategy of an elite community of Jews who were trying to prevent the assimilation of Judaism into the dominant Greco-Roman culture after 333 B.C.E.

MEGARON

A megaron is a Mycenaean or Greek style of architecture imported to the world of the Bible by the Philistines. The megaron is the main hall or

central room of a palace or house with a pillared porch built around a central hearth.

MINIMALISTS

See: **MAXIMALISTS**

MYTHICAL OR CYCLICAL RELIGIONS

See: **HISTORICAL OR LINEAR RELIGIONS**

NATUFIAN CULTURE

The Natufian (10,300-8500 B.C.E.) and Neolithic (8500-4300 B.C.E.) periods in the world of the Bible were characterized by discovery and creativity. Slowly developing, but long lasting, ways to farm, to herd, to build houses, to make tools, to make pottery and to bury the dead appear for the first time in the settlements of these remarkable cultures. The practical inventions of Natufian and Neolithic peoples not only produced radical changes in their daily life; they also inspired dramatic changes in the way that they understood life.

ORIENTALISM

Orientalism has two meanings. First, Orientalism or Assyriology refers to the academic discipline which studies the Near Eastern cultures of Mesopotamia and its neighbors. Second, Orientalism refers to a racial prejudice which developed after 1900 against cultures in the Middle East. This Orientalism considers western European cultures to be intellectual, dynamic and inclusive. In contrast, it considers cultures in the Middle East to be impulsive, stagnant and intolerant. As a prejudice Orientalism influences not only public opinion, but also scholarship and art.

OSTRACON (PL. OSTRACA)

An ostrakon is a broken piece of pottery used as a writing surface.

PAPYRUS

The raw material of papyrus paper comes from *Cyperus papyrus* plant which grows along the banks of the Nile River. The green skin of the stalk is peeled away and the white center is cut into strips. The strips are pounded and then soaked in water for 3 days. One layer of strips is laid on a cotton sheet; another layer is laid in a criss-cross pattern on top of

it. Another cotton sheet is placed on top, and the sheet is put in a press and squeezed until all the moisture is removed, and the strips form a single sheet of papyrus paper.

PARADIGM

Academic disciplines like archaeology are paradigms – methods or theories based on research which both solves problems and raises new problems and proposes new theories. Paradigms are not only theories, but also a consensus about what works among those in any discipline. When paradigms no longer evaluate evidence accurately, nor produce effective solutions, they shift.

PATRILOCAL MARRIAGE

In a patrilocal marriage the woman leaves the household of her father and moves to the household of her husband.

POTSHERD OR SHERD

A potsherd or sherd is a broken piece of pottery.

POST-PROCESSUAL ARCHAEOLOGY

Post-processual archaeology is an umbrella term applied to a range of archaeological theories. What these schools have in common is their objection to the assumption of processual archaeology that cultural changes are always adaptations to changes in the human or natural environment.

ROSETTA STONE

While they were repairing the fortifications at Fort Julien near the Egyptian port city of Rosetta (Arabic: Rashid), French military engineers under the command of Capt. Pierre-Francois Bouchard discovered the stone on July 15, 1799. It is dark grey and pink grano diorite. It weighs sixteen-hundred pounds and is forty-five inches high, twenty-eight inches wide and ten inches thick. The Rosetta Stone was originally erected to call on Egyptians to worship their thirteen year-old pharaoh, Ptolemy V Epiphanes (204-181 B.C.E.) on the first anniversary of his coronation in 196 B.C.E. The

SARCOPHAGUS

A sarcophagus is a coffin carved from stone.

SHAMAN

Shaman (Tungus: *šaman*) cultures first appear in South Asia and then migrate east through Siberia and into the Americas. Shaman cultures assume that there are both a divine plane populated by invisible spirits and a human plane populated by visible humans. Shamans are men and women who channel back and forth between these planes. They use drumming, dancing, chanting and drugs to induce a state of ecstasy or trance in order to make the voyage. On their inaugural voyages unique spirits or totems appear to them as animals and serve as their guides. These guides teach shamans how to synchronize the human and divine planes so that life may thrive. For example, shaman cultures consider sickness to be the result of a collision between spirits and humans, which traps spirits inside humans. Guides teach shamans a variety of healing techniques for drawing out or freeing trapped spirits.

SLIP

A slip is a thin, finish coat of clay without additives.

SLOW WHEEL

The potter's wheel developed gradually. Neolithic potters graduated from coiling their pots on a mat to using a shallow bowl to build a coiled pot. The slow wheel was a simple turntable. Potters attached a wooden platform where potters shaped the clay to a stone bearing that fit into a stone socket. These wheels did not turn easily and were only used for easier coiling. The speed of the slow wheel could be increased if one potter turned the table while another potter shaped the clay.

STEATOPYGOUS

In the world of the Bible Godmothers are often portrayed as steatopygous or full-figured. Their breasts are pendulous, their abdomens are distended, their hips and legs are heavy. The characterization emphasizes that they are the mothers of all humans.

SUBSISTENCE CULTURE

Subsistence cultures produce only enough goods and services to survive.

There is no surplus left to trade for luxuries.

SURPLUS CULTURE

Surplus cultures produce more goods and services than they need to survive. This excess or surplus is used to trade for luxuries – goods and services that are not needed for survival, but enrich the quality of life.

SYNCHRONIC

Synchronic schools of interpretation give a snapshot of a particular system at a particular moment in time. Synchronic methods focus on how something is at a given moment and how each part fits into the system.

TABUN OVEN

The tabun oven was made from terra cotta, was shaped like a haystack and had a chimney hole in the top. Loaves of bread dough were placed on pebbles scattered inside the oven. The opening at the base of the oven and the chimney were sealed. The oven was heated from the outside by stacking wood, charcoal, or manure chips against the oven.

TANNUR OVEN

The tannur oven was made from terra cotta, was shaped like a haystack and had a chimney hole at the top. The fire was kindled inside the tannur. Dough was slapped against the walls of the oven to bake, just as the people of South Asia do today to bake Naan bread.

TELL

A tell (Hebrew: *tel*; Arabic: *tell*, *tall*) is an artificial hill or mound formed by the eroded debris from ancient settlements.

TEMPER

To temper clay potters add straw, dung, sand, salt or beer to harden the clay and keep it from cracking and shrinking.

TERRA SIGILLATA POTTERY

Terra sigillata is bright-red, polished pottery impressed with designs (Latin: *sigillata*) used throughout the Roman Empire from the

100 B.C.E. until 300. The body of the ware was cast in a mold. Relief designs taken from a wide repertory of patterns were then applied to the ware. The style changes in these patterns and the potters' marks stamped on the vessels made terra sigillata pottery an important tool for dating other artifacts found with them. The quality of the pottery was high, considering that it was mass-produced.

TERRACES

Terraces (Hebrew: *merome sadeh*, Judg 5:18; *sede terumot*, 2 Sam 1:21) in ancient Israel were benches built on the slopes of hills. Walls were constructed parallel to the contours of the slopes. Infill or slope wash created deep, fertile soil beds behind the walls, and villagers used these for farming.

TOTEM ANIMAL

In shaman cultures a totem animal is a godparent who teaches its people a signature skill that they will need to survive. For example, the raven is clever. In nature ravens are attracted by anything shiny, and can cleverly steal coins or jewels from humans. The raven became the totem of the Tlingit people in the Pacific Northwest who tell the story about how raven stole a shiny piece of the sun and gave it to them so that they could have fire. The Tlingit considered themselves clever because the raven taught them how to kindle a fire.

TUMULUS

A tumulus is a convex dome of soil over a grave.

WASH

A wash is a thin, almost transparent, coat of paint applied to pottery.

WARE

Ware are pots made from clay combined with mineral and fossil additives.

CHAPTER 27

STUDY GUIDE

INTRODUCTION

1. Archaeologists *recover* material remains from now extinct cultures. What are the other two responsibilities of archaeologists?
2. Archaeologists do not *plunder* material remains of now extinct cultures. Explain two other inappropriate uses of archaeology.
3. Archaeology offers new ways of defining the Bible in relationship with its own world, and using it more effectively in the world today. Explain.
4. "...writing without artifacts is like flesh without a skeleton, and artifacts without writing are a skeleton without flesh (Albright 1969)." Explain.
5. The chapters in some introductions to archaeology and the Bible are arranged according to the archaeological calendar. What is the archaeological calendar?
6. Most scholars like William G. Dever (University of Arizona) hold a *maximalist* view of the development of the Bible. They consider the Bible to have developed from oral traditions some of which originated as early as the Late Bronze period (1500-1200 B.C.E.) or Early Iron period (1200-1100 B.C.E.). Explain the view of *minimalist* scholars like Niels P. Lénche (University of Copenhagen).
7. The chapters in some introductions to archaeology and the Bible follow a canonical outline. What is the canon?
8. The Oxford Encyclopedia of Archaeology in the Near East, edited by Eric M. Meyers (1997) is an important resource for the study of archaeology and the Bible. Besides over 1000 site reports what other kind of entries does OEANE contain?
9. For a long time Biblical Archaeologists were more committed to the practice of fieldwork, than to the theory of archaeology. Explain.
10. A significant accomplishment of Biblical Archaeologists during the 20th century was the development of a ceramic calendar. Explain another significant contribution.

11. The answers that archaeologists get from the material remains they recover are shaped by the questions they ask. Explain.
12. Two important theories of archaeology that developed during the first half of the 20th century are Cultural History and Annales Archaeology. Explain a significant difference in the approaches that Cultural Historians and Annales Archaeologists take to their work.
13. Two important theories of archaeology that developed during the second half of the 20th century are Processual Archaeology and Post-Processual Archaeology. Explain a significant difference in the approaches that Processual Archaeologists and Post-Processual Archaeologists take to their work.
14. Describe different ways to organize introductions to archaeology and the Bible.
15. What is the task of introductions to archaeology and the Bible?
16. How is Stones & Stories organized?

FAVORITES

-- ON THE INTERNET

Michael Shanks (Stanford University)

Archaeolog – all things archaeological

<http://humanitieslab.stanford.edu/Archaeolog/Homeaeolog/>

“I research and teach archaeology at Stanford University in California. A lot of my work has focused on theory - how archaeologists work to reconstruct the past. I have also delved deeply into the early Greek cities in the Mediterranean, into early farming societies and their monuments, into the Roman and medieval north of England. My perspective is a broad one. For me, archaeologists do not *discover* the past; they work on what remains. Archaeology is about our *relationships* with what is left of the past. And more - archaeology is THE discipline of things - the history of design, how people get on with the material world, materiality itself.”

-- IN PRINT

Victor H. Matthews (Missouri State University at Springfield)

2007 “Archaeology.” In Studying the Ancient Israelites: a guide to

sources and methods: 59-90. Grand Rapids: Baker.

Matthews provides a guide to the tools, methods, and goals of studying ancient Israel using geography, archaeology, literary study, sociology and history. He identifies both the assets and the liabilities of each discipline.

PART ONE
Popular Archaeology

CHAPTER 2

ARCHAEOLOGY OF PILGRIMS

1. Pilgrimage is an ancient ritual for refreshing the connection between a household and the sacred center of its culture. Explain.
2. Pilgrims demonstrated the importance of geography in understanding the Bible. What other important contribution did their journals make to archaeology?
3. Moses Basola made a pilgrimage to the graves of 24 people mentioned in the Bible. What other reason did he have for leaving Italy and going to the Holy Land?
4. Abu Ibn Battuta made a pilgrimage to Mecca to fulfill one of the five essential rituals of Muslim. What is significant about Mecca in Muslim tradition?
5. In 313 Constantine issued the Edict of Milan establishing Christianity as the official religion of the Roman Empire. What role did pilgrimage play in the implementation of the edict?
6. Pilgrimage became a popular sacrament of Christian renewal. Explain.
7. Pilgrims used guides or lists of place names called *onomastica*. Describe the *Onomasticon* of Eusebius.
8. Describe how Edward Robinson (1794-1863) used Arabic place names in the world of the Bible to identify ancient sites.
9. Explain the three parts of the archaeology of pilgrims describe by Egeria in her journal -- the *Travels of Egeria* (381-384).
10. Today biblical geographers like Yohanan Aharoni, Michael Avi-Yonah and Anson F. Rainey want to know: *Where did the events described in the Bible happen?* They use the land to interpret the Bible. Contrast their question with the question asked by pilgrims, ancient and modern.
11. In his Annals Pharaoh Merneptah (1224-1214 B.C.E.) celebrated his military campaign in Syria-Palestine. How are these Annals important for the study of the Bible?
12. The Books of Joshua and Judges portray the Hebrews as a warrior people who invaded Syria-Palestine. Contrast this description with the stories in the material remains recovered by archaeologists.

13. Letters recovered by archaeologists at Amarna (Egypt) which were written to pharaohs Amenhotep III (1398-1361 B.C.E.) and Akhenaton (1352-1335 B.C.E.) by their governors in Syria-Palestine complain about '*apiru* who are raiding their farms, herds and caravans. How have these descriptions been used to understand the social structure of the Hebrews in the books of Joshua-Judges?
14. The '*apiru* were people out of place. They had abandoned their assigned social status as farmers and herders and supported their households by raiding. Name three significant biblical figures portrayed as '*apiru*.
15. Pilgrims and biblical geographers both bring the Bible down to earth. Explain.

FAVORITES

-- ON THE INTERNET

Todd Bolen

The Pictorial Library of Bible Lands

<http://www.bibleplaces.com/details.htm>

Bolen's picture archive includes some 6,000 pictures of the land of the Bible. All images are included in jpg format. The pictures can be easily edited, printed or inserted into a PowerPoint presentation. The produce is for sale, but includes free material on-line.

-- IN PRINT

Rainey, Anson and R. Steven Notley

2006 The Sacred Bridge: Carta's atlas of the biblical world. Jerusalem: Carta.

Rainey and Notley have created an historical geography based on archaeology, the Bible and other ancient traditions that is now the standard reference work for using the land to interpret the Bible.

CHAPTER 3

ARCHAEOLOGY OF EMPERORS

1. Imperial archaeologists found illustrations of their national character in the artifacts they recovered, and used those artifacts to justify the unique position of their culture in the world. Explain.
2. Competition, intrigue and conspiracy characterized the archaeology of emperors. Nonetheless, what are two important legacies of their work?
3. Nabuchadnezzar II (604-562 B.C.E.) built an archaeological museum in Babylon to justify his authority. Describe the Hanging Gardens he also built there.
4. Nebuchadnezzar used prisoners of war like the people of Judah to restore national monuments like the Esagila and the Etemenanki. Describe these two great Babylonian sanctuaries.
5. Napoleon invaded Egypt in 1798 to weaken England's authority in the eastern Mediterranean. Why did he bring a Scientific and Artistic Commission of scholars with him?
6. Museums like the Louvre, the British Museum, the Pergamon and the Vatican Museum are now irreplaceable archives of the life and times of the world of the Bible. Explain the impact of their Near Eastern collections on the general public, students, teachers, tourists and philanthropists.
7. The most important artifact recovered by Napoleon's Scientific and Artistic commission was the Rosetta Stone. Explain its significance.
8. Jean Francois Champollion (1790-1832) was a language prodigy who was an expert in more than a dozen ancient languages. What theory about the Coptic language helped him decipher Egyptian hieroglyphics?
9. Both hieroglyphic and cuneiform writing systems began by using pictographs or icons that stood for one or more related words. How did the use of these symbols develop?
10. George Friedrich Grotefend (1775-1853) unsuccessfully used the Annals of Darius carved on Mt Behistun in Iraq to decipher cuneiform. Where did archaeologists unexpectedly find a copy of these annals?
11. Two important on-going translation projects in the United

States are the CAD and the PSD. Describe these projects.

12. James H. Breasted (1865-1935) founded the Oriental Institute at the University of Chicago in 1919. Explain the mission statement of this world-class center for the study of Near Eastern cultures.
13. The Sumerians settled between the Tigris and Euphrates Rivers in Iraq as early as 3200 B.C.E. Their cuneiform language system is *isolate*. What does that mean?
14. Painstaking language study continues to make important contributions to the understanding of the world of the Bible. Where does mention of Nebu-shazdan, a diplomat in the book of Jeremiah (Jer 39:3), turn up outside the Bible and what is its significance?
15. The archaeology of language is demanding. The results, however, could ultimately separate religion from violence. How does work on cuneiform texts like the Nebu-sharrusu-ukin tablet contribute to the understanding of sentencing in Islam's *Shari'a* and legal traditions in the book of Deuteronomy?

FAVORITES

-- ON THE INTERNET

Al-Azhar Mosque and University, Cairo

<http://www.sacred-destinations.com/egypt/cairo-al-azhar-university.htm>

Al-Azhar Mosque and University are named in honor of Fatima Az-Zahraa, the daughter of Muhammad. The mosque was built in 971. The *madrassa* school connected with it was founded in 988. It is the oldest Islamic university in the world. Its students study the Qur'an and Islamic law, logic, grammar, rhetoric, and how to calculate the lunar phases of the moon. Most of this learning is done by listening in a circle (*halqa*) at the feet of a sheikh.

■ IN PRINT

Kramer, Samuel Noah

1956 History Begins at Sumer: thirty-nine firsts in recorded history. Philadelphia: University of Pennsylvania.

For Kramer the Sumerians created civilization in the world of the Bible. This ingenious and amazing people in Iraq were the first to develop written language, law codes, schools, philosophy, ethics, farms, healthcare, taxes and love songs.

CHAPTER 4

ARCHAEOLOGY OF TRAVELERS

1. The positive meaning of *Orientalism* is the study of the cultures of Mesopotamia and their neighbors. What is the negative meaning?
2. Travelers were often inspired to try and preserve the world of the Bible for future generations. What were the contributions of Edward William Lane (1801-1876), David Roberts (1796-1926) and Gertrude Bell (1868-1926)?
- 3.

-more-

ⁱ Drawing of an Egyptian 2600 B.C.E. based on vessels in a relief in the pyramid of Sahure at Abū Sir, Cairo. Courtesy of the Science Museum, London
<http://www.britannica.com/EBchecked/topic-art/1350805/3674/Drawing-of-an-Egyptian-seagoing-ship-2600-BC-based-on#tab=active~checked%2Citems~checked>

ⁱⁱ <http://www.davidgibbins.com/Bronze%20Age%20Wreck.htm>

ⁱⁱⁱ http://www.waterencyclopedia.com/images/wsci_01_img0031.jpg

^{iv} <http://ina.tamu.edu/images/Cape%20Gelidonya/metal%20ingots/Cg576.jpg>

^v Cemal, Pulak, "The Bronze Age Shipwreck at Ulu Burun, Turkey: 1985 Campaign." *American Journal of Archaeology* 92, No. 1 (Jan., 1988): 1-37, Fig. 37. Balance-pan weights (left to right: KW 468, KW 350 and KW 335, with KW 582 above). Approx. 1:

^{vi} <http://ina.tamu.edu/images/Uluburun/anchors/KW9735.JPG>

^{vii} <http://ina.tamu.edu/images/Uluburun/exotic%20raw%20materials/KW11348.1.JPG>

^{viii} A wooden leaf from a writing tablet or diptych (KW4863). A now-detached three-part ivory hinge would have affixed its two leaves. Max. length: 12.4 cm. (Photo: INA) <http://ina.tamu.edu/>

^{ix} <http://ina.tamu.edu/images/Uluburun/jewelry/Kw6842.jpg>

^x <http://nefertiti.iwebland.com/timelines/topics/seagoingvessels.htm>

^{xi} The Warriors Vase, National Museum, Athens.
http://bama.ua.edu/~ksummers/cl222/mycenae/mycenae_gateway.htm

