

Dr. Jonathan Greer, Archaeology and the Old Testament, Session 2, Archaeological Methods Resources from NotebookLM

1) Abstract, 2) Audio podcast, 3) Study Guide, 4) Briefing Document, and 5) FAQs

1. Abstract of Greer, Archaeology and the Old Testament, Session 2, Archaeological Methods, Biblicalelearning.org, BeL

Dr. Jonathan Greer's lecture on archaeological methods in the Old Testament focuses on investigating ancient Near Eastern sites. **The lecture covers geographical context**, emphasizing the "land between" the major river civilizations and its impact on historical events. **Archaeological techniques**, including surface surveys, site identification, and tell excavation, are explained. **Dating methods**, encompassing relative and absolute dating using pottery styles and radiocarbon dating, are detailed. Finally, the importance of **record-keeping and publication** for disseminating archaeological findings is stressed, along with the integration of textual evidence from the ancient Near East.

**2. 19 - minute Audio Podcast Created on the basis of
Dr. Greer, Archaeology and the Old Testament, Session 2 –
Double click icon to play in Windows media player or go to the
Biblicalelearning.org [BeL] Site and click the audio podcast link
there (Introduction & Languages → Introductory Series →
Archaeology).**



**Greer_Archaeology_
Session02.mp3**

3. Briefing Document

Okay, here is a briefing document summarizing the key themes and ideas from the provided source, "Greer_Arch_EN_Session 02.pdf":

Briefing Document: Archaeological Methods in the Old Testament

Overview: This document summarizes a lecture by Dr. Jonathan Greer focusing on the methodologies employed in archaeology, particularly as applied to the study of the Old Testament. It covers geographical context, survey techniques, excavation processes, dating methods, and the importance of publication and the use of ancient Near Eastern texts and images.

Main Themes and Ideas:

1. Geographical Context is Key:

- **The "Land Between":** The Southern Levant (ancient Israel, Palestine, Jordan, parts of Lebanon, and Egypt) is described as "the land between" – between the major river cultures of Egypt and Mesopotamia, and between the desert and the sea. This geographical position dictates much of the region's history, experiencing an "ebb and flow of traffic" and conflict as superpowers seek to control trade routes.
- **Longitudinal Zones:** The region has distinct zones: the coastal plain, central hill country, the Shephelah (a buffer zone), the Great Rift Valley (Jordan Valley), and the Transjordanian Plateau. These zones also have variations in climate, impacting settlement patterns.
- **Impact on Conflict:** The geographical location of the Levant leads to conflict, as empires are interested in the land for power, influence, and control of trade routes.
- **Quote:** "the history that plays out in the Bible, the big picture is dictated... we see this ebb and flow of traffic that runs through this land between."

1. Archaeological Methods:

- **Regional Surveys:** The initial step is often to conduct regional surveys, walking the land and collecting surface pottery shards. This method provides a general idea of the occupation of a site over time. Pottery is crucial for relative dating because it changes in style over time.

- **Site Identification:** This involves using biblical texts, ancient records, and lists of sites (like Eusebius' *Onomasticon*) to try and identify archaeological sites and also to connect landmarks with biblical locations. Inscriptions can sometimes confirm the identity of a site.
- **Quote:** "Through this process and also identifying landmarks that are listed in these and the very best, once in a while, such as at Tel Dan, you can get an inscription that actually mentions the name of the site..."
- **Tel Excavation:** A "tel" (or tell) is an artificial mound created by the accumulation of ruined cities built on top of each other. These layered ruins are due to the repeated occupation and rebuilding of the same location, often due to its geographical advantages (proximity to water and roads).
- **Quote:** "This is what we call a tell, an artificial mound that is representative of ruined city upon ruined city."
- **Excavation Techniques:** Excavations involve meticulously removing material in controlled 5x5 meter or 10x10 meter squares, using tools like trowels, brushes, and sieves. The goal is to remove material layer by layer to record the stratigraphy. Soil is also analyzed for organic material, like seeds.
- **Recording is Essential:** Archaeology is a destructive science, so recording each step using high-resolution digital photography, GPS data, and potentially drones and videos is important.

1. Dating Methods:

- **Relative Dating:** Determining the age of layers relative to each other (older vs. younger). The principle of *superposition* – deeper layers are generally older – is used, but acknowledged to be more complex in practice.
- **Absolute Dating:** Methods to establish specific dates or time ranges, such as:
- **Radiocarbon Dating:** Analyzing the half-life of carbon-14 in organic material. While precise, it has a range of error (sometimes 50-75+ years), which can be significant.
- **Epigraphic Remains:** Using coins, Egyptian scarabs, and other inscribed objects with dates or mentions of rulers/pharaohs, but this method also needs consideration given items can be retained or moved.

1. Analysis and Interpretation:

- **Material Culture Analysis:** Examining artifacts (stones, bones, pots) using methods from the hard sciences, such as botanical, zooarchaeological, DNA, and isotope studies.
- **Ethnographic Analogy:** Using comparisons with traditional societies today to understand the meaning and use of ancient artifacts, but this method can be fallible (like the fork example). This is also called ethnoarchaeology. This method sometimes involves experimental archaeology, for instance, comparing butchering methods to marks found on animal bones or iconography.

1. **Publication is Critical:**

- Making the collected data available for the interpretive community is the essential final phase. Open-source digital publications are increasingly important.
- **Quote:** "...publication becomes an essential end part of the process."

1. **Incorporating Ancient Texts and Images:**

- **Importance of Ancient Near Eastern Texts:** Acknowledges that understanding ancient cultures also requires insights from texts from the ancient world (Mesopotamian, Egyptian, and others), which have become available as they were deciphered in modern times. The decipherment of hieroglyphics (Rosetta Stone, 1822) and cuneiform (Behistun Inscription) are highlights. These provide vital context and understanding for the biblical world.
- **Linguistic Diversity:** Highlights the diversity of languages (Akkadian, Hittite, Ugaritic, Phoenician, Moabite, Hebrew, Aramaic) and the importance of studying them to fully understand ancient contexts.
- **Quote:** "When we seek to engage the history, culture, and social structures of the ancient world, we have archaeology, but it's framed by discoveries in archaeological investigations, such as these inscriptions."

Conclusion:

This lecture emphasizes that archaeological study of the Old Testament is a complex and multi-faceted endeavor that utilizes a combination of geographical awareness, meticulous excavation techniques, scientific dating methods, careful analysis, and publication, while integrating ancient texts and images. The study of archaeology helps in the reconstruction of the historical, cultural, and social worlds of the biblical text, and the lecture also hints at the complex interplay of archaeology and biblical studies, which is to be covered in future sessions.

4. Greer, Archaeology and the Old Testament, Session 2, Archaeological Methods

Archaeology and the Old Testament: Session 2 Study Guide

Quiz

1. What are the two primary river cultures that influenced the Southern Levant, and why were river cultures significant in the ancient world? *Egypt and Mesopotamia were the two primary river cultures. These cultures were significant because their surplus of food led to the development of specialized economies, trade, and the potential for military power.
2. Why is the Southern Levant called "the land between"? *The Southern Levant is called "the land between" because it is situated between the Eastern Desert and the Mediterranean Sea, and it lies between the major power centers of Egypt and Mesopotamia.
3. Describe the longitudinal zones within the land of biblical Israel. *The longitudinal zones include the coastal plain, the central hill country, the Shephelah (a buffer zone of low rolling hills), the Great Rift Valley (Jordan Valley), and the Transjordanian Plateau.
4. What are regional surveys, and what do they primarily gather? *Regional surveys involve walking through the land and gathering pottery shards from the surface. These surveys help to identify the time periods when a site was occupied based on the pottery styles found.
5. What is a "tel," and how does it form? *A tel is an artificial mound formed by the accumulation of ruined cities built on top of each other over time. This occurs because people repeatedly rebuild in the same location, often due to the presence of a water source and road access.
6. Explain the concept of relative dating in archaeology. *Relative dating determines the order of events or layers based on their position in relation to one another. In a tel, the deeper layers are generally older than the layers closer to the surface, although this is not always a simple rule.
7. What is absolute dating, and what methods are used in the Southern Levant? *Absolute dating is an attempt to put specific dates on particular layers.

Radiocarbon dating is a key method used in the Southern Levant to determine the age of materials, often calibrated against tree ring data.

8. Why is recording during excavation so important? *Recording during excavation is crucial because archaeology is a destructive science. Once material is removed, it cannot be put back exactly as it was found. Detailed documentation allows future analysis and the reconstruction of the site's history.
9. What is the principle of analogy, and how does it apply to archaeological analysis? *The principle of analogy uses ethnographic data from traditional societies, often those with similar technologies, to interpret the function and meaning of ancient artifacts. This can help archaeologists understand how objects were used.
10. Why is the publication of archaeological data so essential? *Publication of archaeological data is essential because it makes the gathered information accessible to the broader academic community and the world, thus allowing for further research, analysis, and understanding of the past.

Quiz Answer Key

1. Egypt and Mesopotamia were the two primary river cultures. These cultures were significant because their surplus of food led to the development of specialized economies, trade, and the potential for military power.
2. The Southern Levant is called "the land between" because it is situated between the Eastern Desert and the Mediterranean Sea, and it lies between the major power centers of Egypt and Mesopotamia.
3. The longitudinal zones include the coastal plain, the central hill country, the Shephelah (a buffer zone of low rolling hills), the Great Rift Valley (Jordan Valley), and the Transjordanian Plateau.
4. Regional surveys involve walking through the land and gathering pottery shards from the surface. These surveys help to identify the time periods when a site was occupied based on the pottery styles found.
5. A tel is an artificial mound formed by the accumulation of ruined cities built on top of each other over time. This occurs because people repeatedly rebuild in the same location, often due to the presence of a water source and road access.
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Essay Questions

1. Discuss the significance of geography in shaping the history and conflicts in the Southern Levant.
2. Compare and contrast relative dating and absolute dating methods in archaeology, providing examples of how each is applied in the Southern Levant.
3. Explain the formation of a "tel" and describe how archaeologists use the material remains found within to reconstruct the history of ancient settlements.
4. Evaluate the importance of recording techniques in archaeology, and how they have evolved over time to maximize data preservation and analysis.
5. Analyze the ways in which archaeological discoveries and ancient texts from the Near East can inform and enhance our understanding of the Old Testament.

Glossary of Key Terms

- **Absolute Dating:** Methods used to determine specific dates or date ranges for archaeological materials, often through scientific means such as radiocarbon dating.

- **Analogy (Principle of):** An approach in archaeological analysis that uses ethnographic data from similar, often modern, societies to interpret the function and meaning of ancient artifacts.
- **Cistern:** A hewed-out or built underground storage chamber, usually for water, often used in areas where natural water sources are limited.
- **Epigraphic Remains:** Inscriptions or writings found on objects or surfaces, such as on stones, pottery, or coins, that can provide historical information.
- **Ethnoarchaeology:** A form of archaeological research that uses direct observation of present-day behavior to infer about past practices, in particular those of traditional societies.
- **Levant:** A historical geographical term referring to the Eastern Mediterranean region, including modern-day Israel, Palestine, Lebanon, Syria, and Jordan.
- **Longitudinal Zones:** The geographical regions, running parallel with the coast, in the land of biblical Israel, from the coastal plain to the Transjordanian Plateau.
- **Philology:** The study of language in written historical sources; it is a combination of literary study, history, and linguistics.
- **Radiocarbon Dating:** A method of absolute dating that measures the decay of carbon-14 isotopes in organic materials to estimate their age.
- **Relative Dating:** Methods used to determine the order of archaeological layers or events, placing them in sequence without assigning a specific date (e.g., older than, younger than).
- **Regional Survey:** Archaeological field reconnaissance that involves systematically walking across an area to locate and record sites and artifacts, often collecting surface pottery.
- **Shephelah:** A region of low, rolling hills between the central hill country and the coastal plain in the Southern Levant.
- **Stratum (pl. Strata):** An individual layer of soil or archaeological deposit representing a specific time period, often visible in the cross-section of an excavation.
- **Tel:** An artificial mound formed by the accumulation of multiple layers of ruined settlements, often found in the Near East.

5. FAQs on Greer, Archaeology and the Old Testament, Session 2, Archaeological Methods, Biblicalelearning.org (BeL)

FAQ on Archaeological Methods in the Ancient Near East

- **Why is the geographical location of ancient Israel, "the land between," so important?** The region of ancient Israel is geographically significant because it lies between two major river civilizations: Egypt and Mesopotamia. This location placed it at a crossroads for trade and military routes, making it a point of conflict as these superpowers sought to control access and resources. It's also described as "between the desert and the sea." The land's longitudinal zones (coastal plain, central hill country, Shephelah, Great Rift Valley, and Transjordanian Plateau) also impact climate, settlement, and how people lived.
- **What are regional surveys and how are they used in archaeology?** Regional surveys involve systematically walking through areas and gathering pottery shards and other artifacts from the surface. These surveys help identify locations of ancient sites and determine when those sites were occupied. The styles of pottery found on the surface can indicate the general periods of settlement (e.g., Late Bronze Age, Iron Age) for a large area. This data informs where archaeologists might choose to excavate, and helps establish relative population trends over time.
- **What is a tel and why are they common in the ancient Near East?** A tel is an artificial mound formed by the accumulation of successive layers of human settlement. When an ancient settlement was destroyed or abandoned, the people often rebuilt on top of the ruins, utilizing the existing materials. This process repeated over time created a mound composed of the ruins of many layers of ancient cities. Tells are common in the ancient Near East because of the strategic value of the locations, especially near water sources and trade routes.
- **How do archaeologists use pottery to date sites and layers within a tel?** Pottery is crucial for dating archaeological sites because pottery styles change over time. By observing the variations in vessel design within different layers, archaeologists can establish a relative chronology. This allows them to say one layer is older or newer than another. The style of pottery serves as a marker of cultural periods, similar to how changes in a container like a Coke bottle can indicate a time period.

- **What is the difference between relative dating and absolute dating in archaeology?** Relative dating establishes the chronological order of layers and artifacts in relation to each other. This is often done using the principle of superposition - that is, deeper layers tend to be older. Absolute dating attempts to fix a specific time period or year to an archaeological find. Methods like radiocarbon dating, analyzing inscriptions on coins and scarabs, and cross-referencing to historical records are used to establish absolute dates, but are not always exact.
- **What are some of the most important aspects of archaeological excavation and recording?** Archaeological excavation involves carefully digging layer by layer, often within defined grids (e.g., 5x5 meter squares). Meticulous recording is essential to document every detail of the excavation since it is a destructive science. This includes photographing and sketching the strata, cataloging finds, and using techniques like photogrammetry and GPS to create detailed maps. The meticulous recording of data through photography and even video is necessary to analyze the information.
- **How is analysis of archaeological data performed and what are some different scientific approaches?** Analysis involves studying the stones, bones, pottery, and organic remains collected from a site. This can include the use of hard sciences to identify plant and animal species, conduct DNA studies, and examine isotope compositions of finds. The meaning of particular artifacts can be understood by observing traditional societies that use similar items, known as ethnoarchaeology. Experimentation, such as using butchering practices on animal remains, to compare the results to that from the archaeological record can also shed light on use practices.
- **Why is the publication of archaeological findings so vital and why is there an increasing push for digital open-source resources?** Publication is vital because it makes the archaeological data accessible to the wider scientific community and interested public. Until data is published and made widely available, the knowledge gained remains limited to a few individuals. A growing movement supports digital open-source publication to provide universal access and allow other researchers to evaluate and interpret findings. Making such data available allows others to interpret and engage with the finds which can in turn create more questions for future digs.