



ANTHRO 100

Archaeological Enquiry: Past and Present

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Office Hours MW 1-3
Rm 5402 Soc. Sci.

**Major topics
and themes**

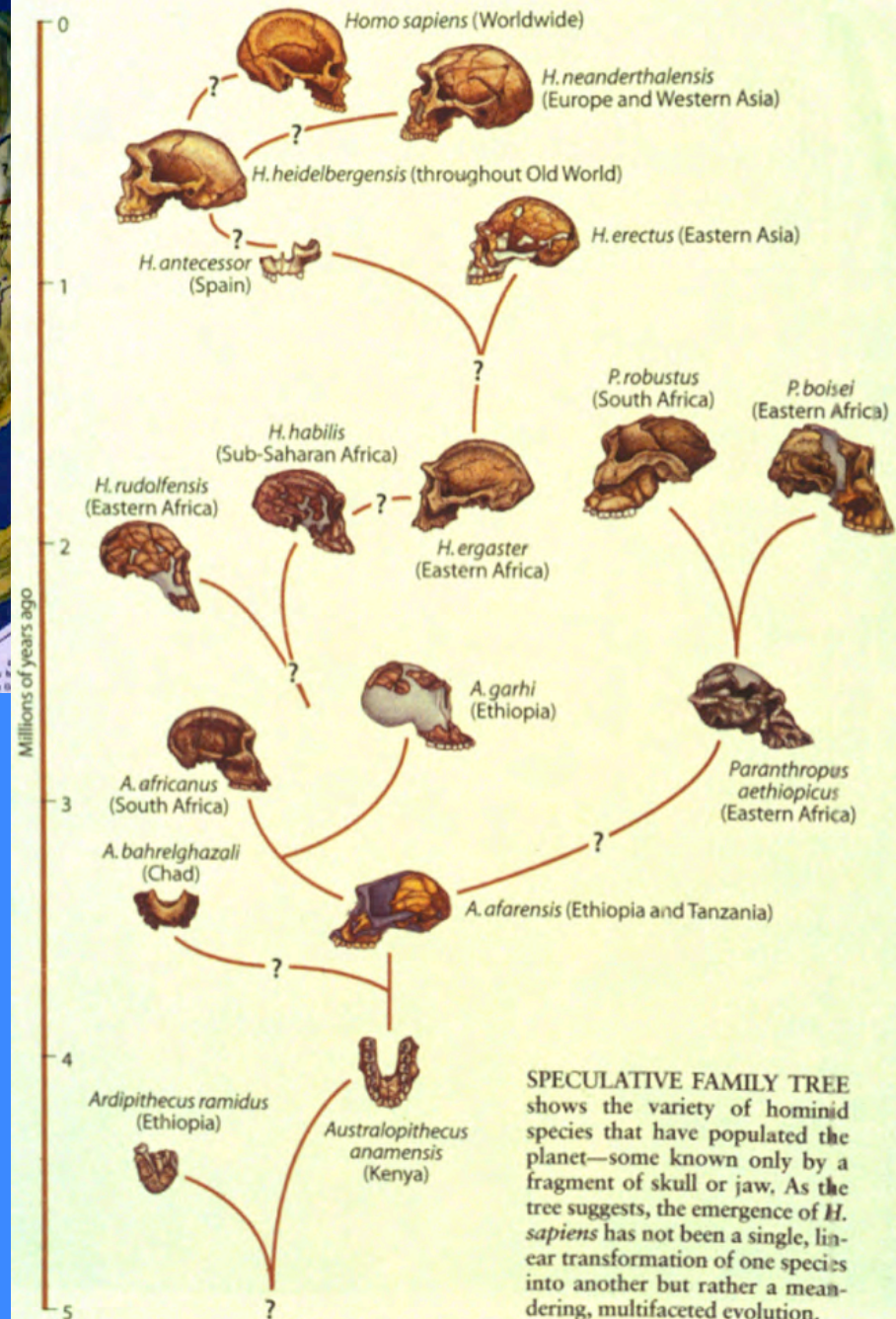


History of Archaeological Methods and Theory

**Origin and earliest development of human culture -
beginning with early hominins and continuing through the
emergence of the first state level societies in both the Old
World and the New World**



Earliest **hominins** and models
 of **evolution**
 What makes us human?
 How human communities
 have spread and **diversified**
 across the world



transition from hunting-gathering to more permanent settlements and the **domestication of animals and plants**



**emergence of craft
specialization**



**models for stratified
socioeconomic and
political
organization**

major regions of the world where regional cultures emerged and were eventually integrated into highly stratified urban society and **state level** political organization



Other Events of Interest During Fall Semester

**Archaeology Brown Bag- Friday Noon
5230 Social Science Bldg**

**Charles E. Brown Archaeology Society
State Historical Society**

**Anthro Circle events and talks
Anthro Colloquia - each month**

Archaeological Institute of America talks

Archaeology Certificate

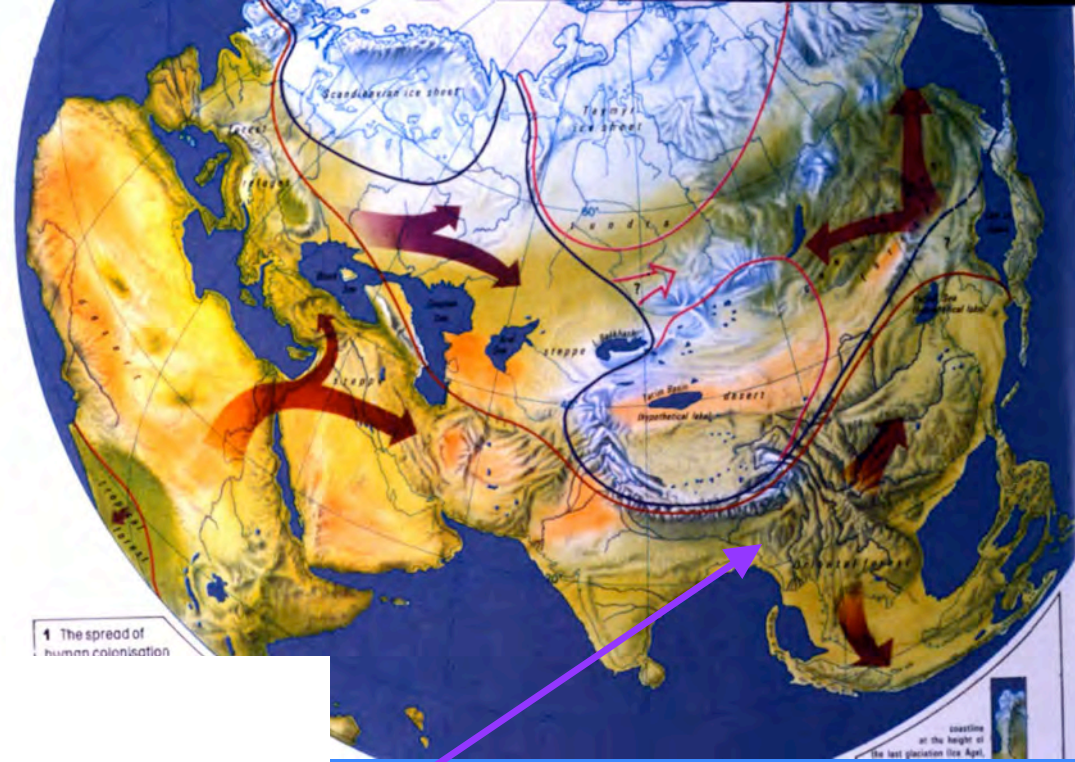
- designed for students with broad interests in archaeology
- do not have to be an Anthro Major
- take 21 credits in at least three different departments
- includes a field course and a capstone seminar



**Anthro 352-
Ancient Technology
And Invention**
(also a Com B course)

My background and interests

View from my home
In Assam, India
- Bhubon Hills



Naga tribal dancers

Early Archaeology Experiences

Balakot excavations 1974, Pakistan,
craft technologies and experimental
archaeology - pottery, shell bangles
and stone beads



Harappa Excavations: 1986 to 2007-08, 2010



Lifting large burial jar, 1987



J. M. Kenoyer and R. H. Meadow
with Kot Diji pot, 2001



Excavation of Ravi level agate
bead workshop with US and
Pakistani students 2001

WWW.HARAPPA.COM

fortified monasteries



Mes Aynak, Afghanistan
– 3rd c. BC to historical period.
Ancient copper mining and
smelting area,, workshops
and other remains.



Buddhist stupa
and rare
Wooden Buddha



Copper ore



<https://www.facebook.com/buddhasofaynak>

Bhamala Stupa Excavations, Taxlia, Pakistan – 5th century CE



Birch bark Manuscript – Sangarwala Tibba – Punjab, Pakistan 5th Century CE

How is archaeology relevant today?

Why study archaeology ?

To better understand our past

To help build a better future

Because that is what makes us human - different from animals who live to eat - reproduce - die, and only leave a genetic legacy

Humans leave a cultural legacy



Stratfordshire Anglo-Saxon gold hoard



***Homo naledi, South Africa
– 335,000-236,000 YA***

Humans have always been intrigued with their past.

Chinese medical text on the preparation of dragons teeth (fossil animal and hominids).



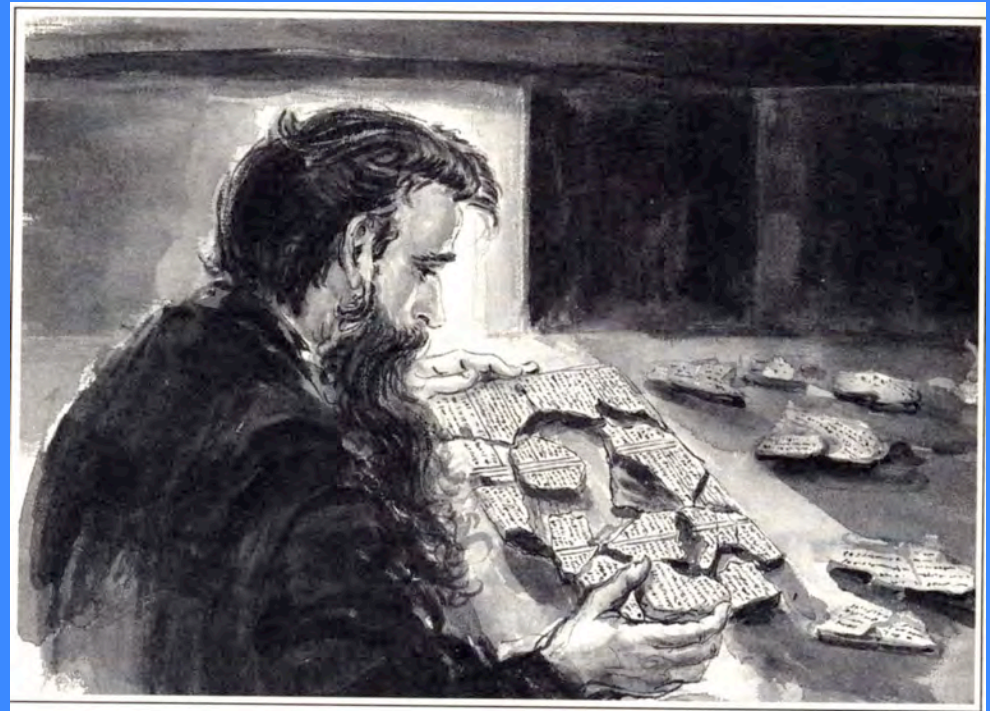
Royal library at Ebla, with ancient cuneiform texts.



Austen Henry Layard's excavations at **Biblical Ninevah**, looking for museum treasures and Lady Layard with a necklace of cylinder seals.



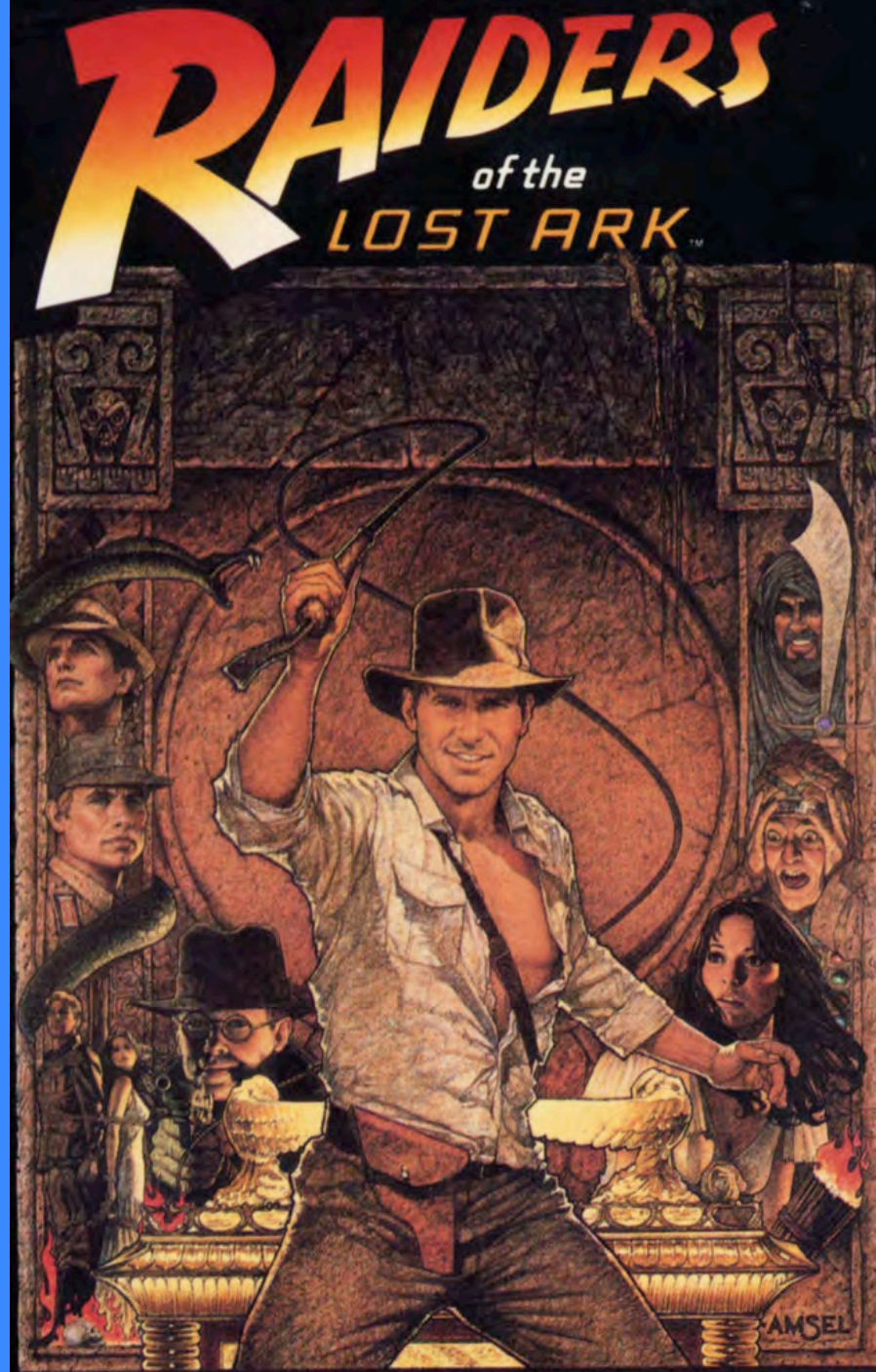
**Ahmed Kamal with
Egyptian mummy for
sale to collectors.**



*George Smith pieces together fragments of a tablet containing
the story of the great flood*

**George Smith at the British
Museum, searching for clues to
Noah's Flood.**

Gertrude Bell, demands more professional and scientific archaeology in Iraq, 1909.



Goals of Archaeological Research



1) describe and reconstruct **culture history**

Types of Material Evidence Preserved Archaeologically

faunal and botanical remains, raw materials, finished objects, tools and weapons, utensils, ornaments, mortuary remains, architecture, settlement patterns, graphic symbols, ritual objects and symbols

Inform us about

subsistence systems, technology, population growth, centralization and control of social, ritual, economic and political aspects of a society, e.g. urbanism, social stratification, status, access to resources, etc.

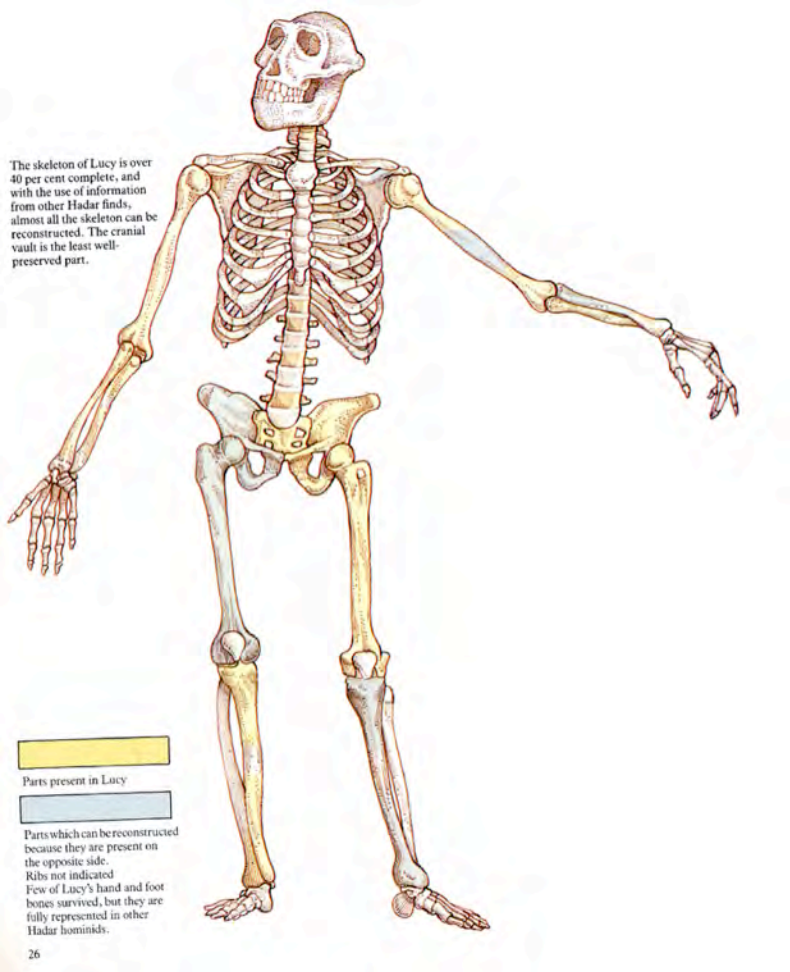


Tel – mounded ruins of Jericho, resulting from repeated occupation

- **Archaeological Sites**- any physical location in which humans have interacted with the environment or lived. The longer humans are in the same locality the more evidence they leave for potential preservation in the archaeological record.



Downtown Chicago is creating a mound today



2) describe and reconstruct **past life ways**

- **Culture traits** - all aspects of human adaptation - tools, houses, subsistence activities, social organization, belief systems, etc.



3) identify and explain **culture process** – how and why people do what they do



- to better understand the **Archaeological Context**- the context that artifacts enter after they leave the systemic context or are discarded or buried.

Systemic Context- the context in which artifacts are made and used by humans.



ARTIFACTS - any object or environment with evidence of human intervention

- **artifacts** generally refer to the range of movable objects
- **ecofacts** generally refer to seeds, pollen, bone, etc.
- **structures** generally refer to architectural features
- **features** generally refer to any discernable change in the soil or natural environment that results from human activity, e.g. a hearth, depression for sleeping, etc.



4) describe and understand the archaeological record

The **Archaeological record** is a **finite** (limited) and incomplete record of human activity.



- **Diffusion** - the spread of organisms or ideas over space - **more gradual process**
- **Migration** - the physical movement of organisms into new regions - **generally more rapid process**

It is difficult to differentiate the two processes in archaeology - need to have detailed chronological and materials analysis, DNA studies, bone chemistry, etc.



Archaeological Research on Early cities.

Originally the focus was on Temples, Palaces and Tombs.

- the main goal was to identify the names of the ancient cities and correlate them to historical texts

Ziggurat and palaces at Ur, Iraq



Napoleon's officers visit an Egyptian temple



Early focus was on
art objects and
written record with
specific biblical links

Merneptah stele
(1211-1202 BC
naming the people
of Israel who were
conquered but we
can't be sure it is
the same as the
Hebrew people

Israel stela of Merneptah
(1211–1202 BC) from
Thebes; 1208 BC. Granite;
ht 318cm. Cairo Museum
34025



The name Israel:
Line 27, reading
from right to left



isrir = isril = Isra'el

Another site was Ninevah – modern Mosul – recently liberated from ISIL – Daesh.



Layard in 1840s recovered the decorated panels of Assyrian King, Sennacharib's Palace at Kouyunjik, depicting a battle of circa 700 BC. He also attacked Jerusalem but was unsuccessful (2 Kings 19:25)



New inscription dating to 627 BC in a palace being looted by ISIL after they destroyed the tomb of Jonah



Sumerian seal interpreted as the temptation of Eve

Judeo-Christian models of the origin of civilization and of social complexity



Abraham's journey from Ur

Tower of Babel at Babylon

Garden of Eden ? - models of diffusion from one point of origin

Since the development of archaeology as an academic discipline originated in Europe it has been heavily influenced by **Western Colonial and Eurocentric models**

- including the idea that one civilization (i.e. Western Civilization) is better than others

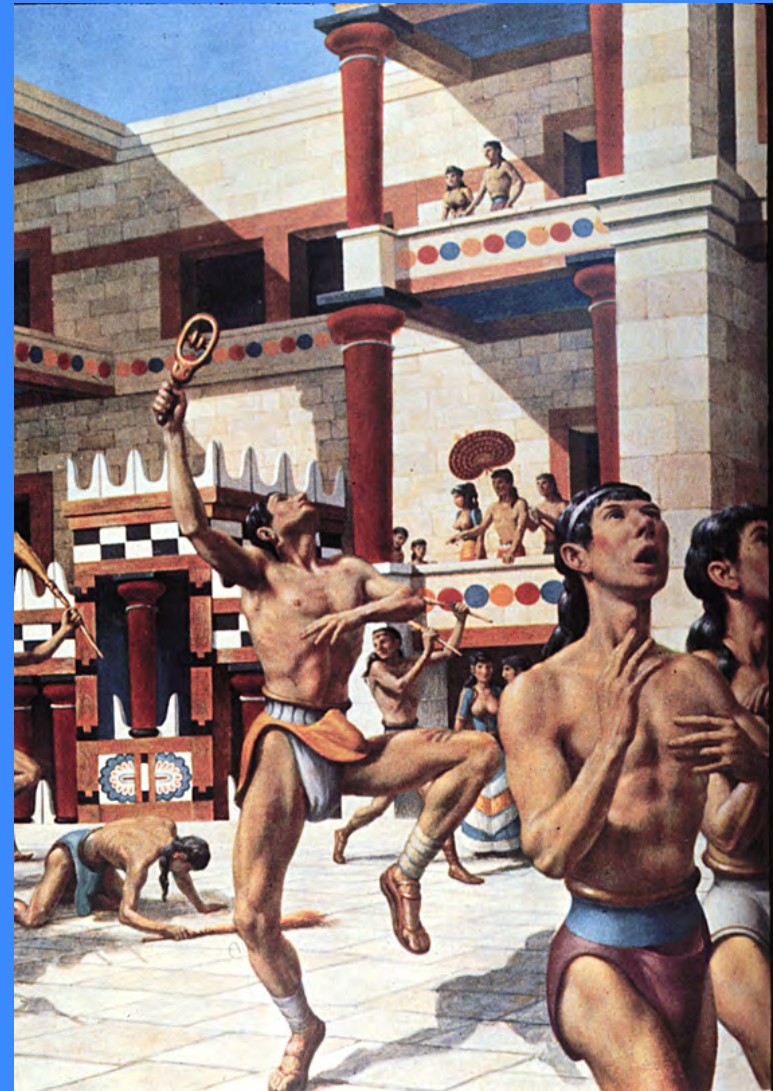
- European isolationism and misperceptions of limited interaction between different geographical regions in the ancient world led to the idea of isolated early civilizations

- much of which was a reaction to the plague which decimated Europe between 1340-1400, and previous invasions of the Mongols.

Old World urban civilizations and their relationships



What is Culture ?



What is Culture - learned behavior

- our primary means of adaptation to the environment
- use of tools and technology
- social organization
- use of symbols
- versatility of the manipulation of symbols
- non-genetic transfer of meaning of symbols

Culture is shared, it is accumulative
and it is constantly changing

Archaeological culture is generally correlated to a human society.

Ways to study the past – Scientific vs Imaginative approaches

Scientific Process of Hypothesis formulation and testing:

- 1) one or more hypotheses are formulated based on **inductive** research
- 2) then you **deduce** the logical consequences from the hypothesis
- 3) then you proceed to test the deduced observational predictions with the empirical data from the archaeological record to see if in fact they are true
- 4) if they are true, then the hypothesis is **confirmed** to some extent



- **Analogy** - a form of inference in which it is reasoned that if two or more things agree with one another in one or more respects, they will probably agree in yet other respects.

Ethnographic Analogy uses such similarities to interpret the function or meaning of past artifacts on the basis of modern function or meaning.

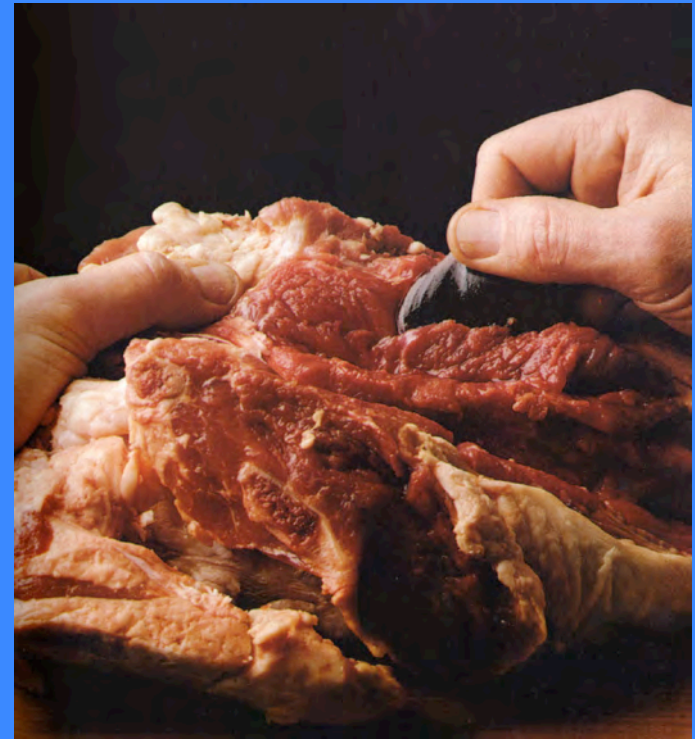
There is no such thing as a "perfect analogy" since if all properties were the same then the objects would be identical





Experimental Archaeology

- the replication of tools or adaptive processes to better understand the archaeological record and site formation processes



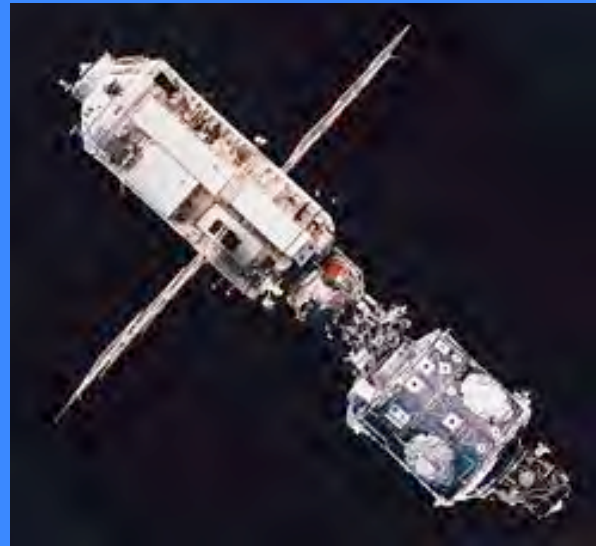
Hard hammer percussion and meat butchery using an obsidian flake.



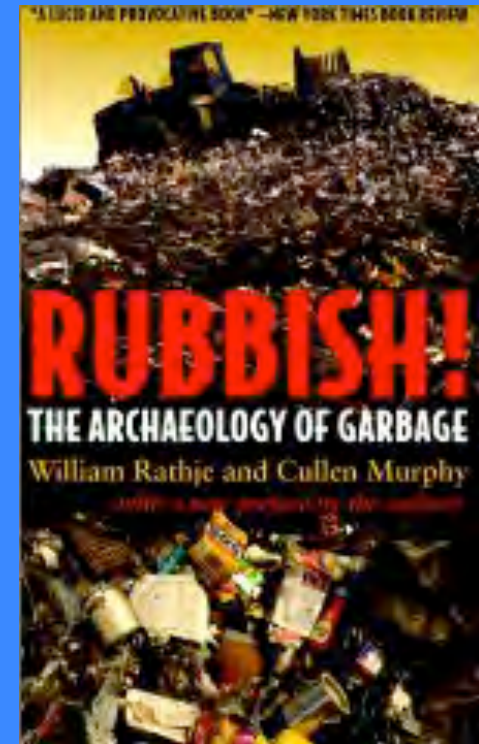
Ethnoarchaeology – studying modern cultures and patterns of archaeological accumulation to understand how to better interpret the past and archaeological sites

Living archaeology - the study of living cultures,

including our own urban and space garbage



Mir satellite



IMPORTANT GEOLOGICAL TERMS and DATES

PERIOD	EPOCH	Approximate Dates
	Holocene	Present to 10,000/12,000 BP
Quaternary	Pleistocene	10,000 to about 2 MYA
	- Upper/Late	10,000 to 100,000 (127,000) BP
	- Middle	100,000 to about 1 (.7) MYA
		anatomically modern <i>Homo sapiens sapiens</i> fossils .19 MYA archaic <i>Homo sapiens</i> fossils .3 to .16 MYA
-----	- Lower/Early	1 MYA to about 2 (1.9, 1.7)
		earliest <i>Homo</i> fossils 2 - 2.4 MYA
	Pliocene	2 MYA to about 5 (5.26) MYA
		earliest Hominin fossils 5.5 MYA
Tertiary	Miocene	5 MYA to about 25 (23) MYA
	Oligocene	25 MYA to about 36 MYA etc.

ARCHAEOLOGICAL PERIODS

Lower Palaeolithic (Hunting-Gathering)

+ 2 MYA to 100 or 70,000 BP

Middle Palaeolithic (Hunting-Gathering)

100 or 70,000 to about 30,000 BP

Upper Palaeolithic (Hunting-Gathering)

30,000 to about 10,000 BP

Mesolithic (Transitional period) 10,000 to 9000 B.P.

Neolithic (Food Production) 9000 to 8000 B.P. and later