ARCH 0295: Artifacts in Archaeology: Understanding Material Culture and Ancient Technologies
Course description

The manufacture of artifacts distinguishes us from all other species. Inevitably, the study of these artifacts and other material culture form a significant part of archaeological interpretation. In fact, through the study of material culture we can ask exciting questions such as: how does technology emerge during human evolution? What kind of material culture do archaeologists deal with? How can we interpret such material culture?

Artifacts, material culture and technology form an unbreakable bond with our human existence. However, archaeologists often struggle with interpreting material culture, especially since artifacts such as stone tools are unlike any present day technology. In the meantime, archaeologists have often made the mistake of using present-day comparisons to understand the use of past artifacts. But this is in fact a highly erroneous and problematic way to study ancient material culture.

Therefore, in this course we will go through the basic artifact types that archaeologists most commonly recover: lithics, pottery and metallurgy. We will precede these artifacts by asking ourselves: What is technology? How should we debate it? Then we will look at the technological basics, classification methods and interpretational methods utilized to understand lithics, pottery and metallurgy. To further comprehend these technologies, class will alternate between discussing the distinct material culture types and detailed overviews of important case-studies.

We will also overview other, lesser-found artifact types including glass, wood and bone. Further, the course will discuss scientific means for the characterization of artifacts. Such studies have played large roles in recent archaeological studies since it permits archaeologists to ‘fingerprint’ raw materials and trace their distribution over
space. Our final aim for the course will be to discuss interpretation paradigms used by archaeologists. Therefore, we will discuss interpretational modes such as processualism, post-processualism and current models, such as agency theory, operational sequences etc.

In this class students will be encouraged to consider the importance of archaeological material culture in aiding us to comprehend our human past. The course will also illustrate that a solid comprehension of various technological processes and properties can aide us to grasp a better sense of human choices and adaptation.

**Aims and Objectives**

Envisioned as a higher undergraduate course, this class will seek to introduce students to theoretical concepts and a solid background into archaeological material culture. Therefore, this class will concentrate on the following key questions and issues:

- How does technology emerge during human evolution?
- What kind of material culture do archaeologists deal with?
- How can we interpret such material culture?

The course is divided in the following format:

- **Week 1:** Introduction to Material Culture
- **Week 2:** Technology, *Teknos* and Material Culture
- **Week 3:** Lithic and stone technology
- **Week 4:** Lithics in human evolution
- **Week 5:** Ceramic technology
- **Week 6:** Early ceramics vs Roman mass-production
- **Week 7:** Metallurgy technology
- **Week 8:** The Metal Ages
- **Week 9:** ‘The unusual suspects’: Glass, Wood, Bone
- **Week 10:** Scientific characterization
Week 11: Interpretation methods

Week 12: Presentations (1)

Week 13: Presentations (2)

Assessment

The assessment is broken down in the following manner:

Attendance 20%
Case-study 30% (Presentation: 15%; Paper: 15%)
3 Quizzes 50%

Since the larger scope of this class is meant to supply students with crucial information for their archaeological education, the assessment for this class is meant to ensure the gradual comprehension of the subject-matter. Students are encouraged to select a material culture, artifact type and case-study of their interest and present their interpretations in Week 12 in a 10 minute interpretation. This presentation will be accompanied by a 10 page double-spaced paper discussing these results. Finally, 3 multi-choice quizzes will be set (Weeks 4, 8 and 11) on materials discussed in the previous weeks.

Week 1: Introduction to Artifacts and Material Culture

In this week’s class we will discuss the usefulness of material culture to archaeology. What kind of questions can we answer through material culture? What is the plethora of material culture that archaeologists are often faced with? How do archaeologists study these artifacts?


Week 2: Technology, Teknos and Material Culture

Underpinning the production of artifacts is the connection between humans and their respective technologies. In this class we will try to define technology and find a useful way through which we can look at material culture over time.


Week 3: Lithic and stone technology

Lithic technology is all about angles and force. However, archaeologists can tell quite a lot from their lithic assemblages. In this class we will discuss the technological attributes that archaeologists can identify and their effect on archaeological interpretations.


Week 4: Lithics in human evolution

The first hominids are distinguished due to their proficient tool-making during the Late Paleolithic. In this class we will broadly look at the main lithic technologies over time and across numerous hominids including Homo Erectus, Homo Neanderthalensis and
Homo Sapiens Sapiens. We will also ask ourselves: how does tool-making distinguish us from our primate cousins? What are the cognitive necessities to produce lithic tools?


Week 5: Ceramic technology

In this class we will discuss ceramic as an additive type technology, unlike lithics in the previous week. We will go over the principles and process for ceramic production. We will also look at ceramics and the way in which archaeologists seeks to extrapolate information from this type of material culture.


Week 6: Early ceramics vs Roman mass-production

Ceramics seem to have originated in the Near East after 7,000 BC alongside farming and permanent sedentism. Indeed, ceramics appears to have provided their communities with their ability to store, carry and cook, a facet previously missing in human culture. On the other hand, later ceramic technology produced during the Roman Empire appears to have been mass-produced and meant to cater for a specific market demand. In this class we will cross-compare ceramic technology at two very different time-periods and discuss the usefulness of ceramics for archaeological interpretation.


**Week 7: Metal technology**

The production of metal material culture is a complex process that would have required know-how and significant pre-planning by past communities. In this class we will look at the manner in which metallurgy is produced and the different types of metals used.


**Week 8: The Metal Ages**

The shift from stone-based technology to metal was not an abrupt one but the demand for metal has always been very high. In this class we will look at some impressive weaponry distributed across the Mediterranean during the Bronze Age. We will also discuss whether such artifacts were meant to impress or for actual warfare use.


**Week 9:** *‘The unusual suspects’: Glass, Wood, Bone*

While lithics, ceramics and metals are considered to be the triad of archaeological artifacts, we do have an array of other material culture. However, the raw materials used for glass, wood and bone are more susceptible to preservation issues. Despite their limited survivability these technologies have a lot to tell us archaeologically.


**Week 10:** *Scientific characterization*

How great would it be if you could ‘fingerprint’ the chemical make-up to a raw material source? Well we can! In this class we will go over some of the commonly scientifically utilized techniques in archaeological studies.


**Week 11: Interpretation methods**

Archaeologists tend to agree to disagree quite often. During this week’s class we will discuss several interpretative paradigms that have been used by archaeologists to interpret material culture.


**Week 12-13: Presentations**