

**RESEARCH PAPER**

## Exploring Human History through Material Culture: A comparative Study of Archaeology and Anthropology

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**ABSTRACT**

This study examines the correlation between archaeology and anthropology. Archaeology, as a sub-field of anthropology that works archaeological site techniques to uncover artifacts, structures, of past human way life and their substructure of household, despite the fact that anthropology explores within cultural belief, trend and social frameworks. This study employs a comparative methodology that explores different archaeological sites and their analysis through historical eras. It also evaluates different theoretical methods of anthropology, comprising culture-historical, and their strengths and limitations in understanding human societies. Finding makes known GIS mapping and DNA analysis enhance the accuracy of archaeological interpretations and anthropological theories suggest relating gaps and material culture, which finds across cultures. The findings of this study highlight the worth of an interdisciplinary method, which combines the practices of archaeology with the theoretical frameworks of anthropology and holistic consideration of ancient civilizations, allowing researchers to explore both material remains and the cultural settings in which they existed.

**Keywords:** Archaeology and Anthropology, Material Culture and Excavation Methods, Comparative Analysis, Theoretical Approaches, Cultural Heritage and Social Structures

**Introduction**

Archaeology relates to uncover and interpret past, while anthropology offers a broader consideration of human behavior, cultural performs, and social structures. In this regard, both fields are two closely related disciplines that work together to expose and interpret the society. According to Miller, that archaeologists and anthropologists reconstruct past narratives, technological progresses, and societal changes. In addition to, Archaeologists employ excavation techniques, architecture, and burial sites, surveying, and scientific dating methods to uncover physical evidence and anthropology defines social behavior, informal and formal practice, and social arrangements (Miller, 2017). According to Hallam & Ingold that Anthropologists interpret cultural and historical circumstances through different theoretical contexts, such as culture-historical, and post-processual, while archaeology influences how researchers analyze material culture and human development (Hallam & Ingold, 2016). Archaeologists above all deal with material evidence and fieldwork, excavation and mostly engaged in laboratory analysis to modernize ancient societies. It emphasizes on civilizations that have left behind physical remains (Eisenmann et al., 2018). In contrast, anthropologists cover elsewhere physical remains to study language, kinship structures, and social behavior. It includes branches such as cultural anthropology examines living societies, and biological anthropology examines human evolution through remains and inheritances (Delaney, 2017).

## **Methodologies in Archaeology and Anthropology**

Archaeologists and anthropologists use different methodology because archaeologists practice physical tool and scientifically dig at prehistoric sites so that artifacts, structures, and ecological data can be recovered such as radiocarbon dating, dendrochronology, tree-ring dating which help to conclude the age of archaeological discoveries and Geographic Information Systems tool also can be used for map and examine spatial relations between ancient settlements (Durrani & Fagan, 2020). While anthropologists identify patterns of human societies and culture which relate to past and present and provide insight of diseases or other kind of ancient population by the use of DNA and Bio archaeology (Stewart, 2016). Berger argued that modern anthropologists and archaeologists rely on interdisciplinary research where they integrate geology, ecological science, genetics, and digital technology to gain a new perspective of human history (Berger, 2016).

## **Literature Review**

The study reviewed literatures by different books, articles and academic research material which explored archaeology and anthropology significance of material culture, excavation methods, and theoretical approaches in restructuring human history. Key contribution of this study was field of archaeological understanding of ancient civilizations.

## **Archaeology and Anthropology**

Childe argued that early archaeological studies influenced culture-historical approach which highlighted classification and chronology of artifacts (Childe, 1929). Binford & as Anthropology, criticized cultural sequences and lacking clarifications of collective change. Later, the growth of processual archaeology (Binford & as Anthropology, 1962). On other hand Hodder & Hutson introduced a scientific method for studying human societies, which concentrated on ecological elements and traditional adaptation and challenged by post-processual archaeologists (Hodder & Hutson, 2003). Renfrew & Bahn argued that Boas 1911, made known to cultural relativism, and societies should be considered inside their own historical and ecological contexts. Later, Lévi-Strauss 1963 advanced structuralism that worldwide patterns of human thought impact on cultural expression. Anthropological theories provided frameworks how material culture reveals human behavior, social belief and social structures (Renfrew & Bahn, 1994).

## **Material Culture and Its Role in Societies**

Renfrew and Bahn (2016) emphasized that artifacts necessarily considered in their wider context, together production, sharing, and consumption (Renfrew & Bahn, 1994). Those from the Indus Valley Civilization Kenoyer, 1998 and Ancient Mesopotamia Pollock, 1999, reveal how early societies organized trade, governance, and social hierarchies (Jones, 2001). Comparative research by Hodder 2012, suggests that material culture should not only be analyzed for its practical use but also for its symbolic and ritual significance. For example, burial sites and grave goods in Egyptian tombs Ikram, 2003 or Neolithic Europe Chapman, 2000, demonstrate the role of ideology and religious beliefs in shaping material culture.

## **Methodologies in Archaeology and Anthropology**

Excavation and analysis methods have evolved significantly, moving from traditional digging techniques to high-tech approaches. Collins and Molyneux 2003, highlight the importance of stratigraphy in dating sites, (Renfrew & Bahn, 1994). While Taylor 2014, and discusses advancements in radiocarbon dating, dendrochronology, and thermo luminescence in determining the age of artifact Anthropologists complement

archaeological findings by studying contemporary societies with similar material practices (Gardin, 1980). Ethno archaeology (Schiffer, 1987) examines how modern communities use and discard objects, providing analogies for interpreting ancient remains. For instance, studies of traditional pottery-making in Africa have helped archaeologists understand ceramic production in prehistoric societies (Anthony, 2008). Additionally, the application of GIS (Geographic Information Systems) has transformed archaeological mapping, allowing scholars to analyze spatial relationships between settlements, trade routes, and environmental factors (Schiffer, 2016). Such interdisciplinary approaches bridge the gap between physical remains and human behavior, creating a more holistic understanding of past civilizations. Comparative research between different cultures enhances our understanding of human adaptation and societal development. Studies comparing early civilizations—such as the Indus Valley, Mesopotamia, and Ancient Egypt (Trigger, 2003), show common patterns in urbanization, agriculture, and governance (Abraham, Gullapalli, Raczek, & Rizvi, 2016). Meanwhile, Harris (1995) applies cultural materialism to explain how environmental constraints shape technological and economic systems across different societies (Scupin, 2019). Cross-cultural analyses also highlight variations in burial customs, religious structures, and social hierarchies. Parker Pearson (1999) examines death and burial practices in prehistoric Europe and draws parallels to rituals found in contemporary societies. Similarly, studies on migration patterns, such as those by Anthony (2007) on Indo-European expansions, provide insights into how human populations spread and interacted over millennia (Hallam & Ingold, 2016). Smith and Burke (2007) debate issues related to the dig of indigenous sites and artifacts due to suburbanization, looting, and war, also raising worries about the defense of cultural heritage (Toman, 2017).

## Material and Methods

This study compared archaeological and anthropological in past societies where role of both discipline examine cross-cultural and material culture, human behavior, and industrial growth into the complexities of ancient civilizations. Finding of this study contribute for understanding of both field that both discipline work for identifying heritage conservation, historical reconstruction, environmental studies, and sociocultural analysis. Secondary sources used a wide range of theoretical literature, archaeological and anthropological studies.

**Table 1**  
**Role of Indigenous Knowledge in Pakistani Archaeology**

Indigenous Groups	Archaeological Contribution
Sindhi communities near Mohenjo-Daro	Oral traditions about the "lost city" and ancient floods
Baloch and Brahui in Mehrgarh	Knowledge of prehistoric agriculture, pottery, and herbal medicine
Kalash people in Chitral	Unique preservation of animistic religious traditions linked to ancient Indo-Iranian beliefs
Pashtun tribes	Oral histories linking them to early Afghan and Gandhara Buddhist sites
Gilgit-Baltistan communities	Rock carvings and petroglyphs interpreted through Indigenous storytelling

## Results and Discussion

### A Comparative Analysis through Archaeological and Anthropological Approaches

**Archaeological Evidence:** Excavations reveal variations in burial practices, grave goods, and monumental structures, indicating a hierarchical society. For example, in Mohenjo-Daro, some individuals were buried with valuable items, while others had simple burials, suggesting social inequality. Similarly, the royal tombs of Egypt and Mesopotamia contain elaborate artifacts, reinforcing the idea of centralized power (Rathje, 1981). **Anthropological Interpretation:** However, archaeology alone cannot fully explain social

roles and relationships. Anthropological studies show that social stratification is not only about wealth but also about kinship, religion, and political authority. Ethnographic comparisons suggest that some societies such as certain indigenous groups—have non-material forms of status recognition, challenging the assumption that wealth-based burials always indicate rigid class divisions(Hodder, 2012)

**Table 2**  
**Evaluation: Native Knowledge vs. Western Archaeologist in Pakistan**

Aspect	Indigenous Knowledge Systems	Western Archaeology in Pakistan
Approach	Oral histories, folklore, spiritual interpretations	Excavations, radiocarbon dating, artifact analysis
View of History	Cyclical, mythological, interconnected with nature	Linear, evidence-based history
Cultural Sites	Sacred, spiritually significant	Scientific, historical landmarks
Interpretation	Symbolic, influenced by tradition	Based on physical remains and stratigraphy
Authority	Community elders, local historians	Professional archaeologists and scholars

The Makli Necropolis (Sindh) is interpreted through both Sufi traditions (Indigenous perspective) and architectural analysis (Western archaeological approach), providing a holistic understanding of its significance.

Comparative Argument: Archaeological findings suggest social hierarchy based on material remains, but anthropology demonstrates that status and power can exist beyond material wealth. This highlights the need to integrate both perspectives to avoid misinterpreting ancient social structures.

### Cultural Evolution

Archaeological Evidence: The study of tools, pottery, metallurgy, and architecture reveals the gradual progression of technology in ancient civilizations (Earle, 2008). Excavations at Mohenjo-Daro, Mesopotamia, and Mesoamerican sites show how early societies mastered urban planning, irrigation, and long-distance trade. The Indus Valley Civilization's advanced drainage system indicates engineering skills that surpass even some later societies

Anthropological Interpretation: While archaeology traces material progress, anthropology examines how technology shaped human behavior and cultural practices(Earle, 2008). For example, the shift from hunting-gathering to agriculture led to new social structures, division of labor, and permanent settlements. Anthropologists argue that technological change is not just about innovation but also about adaptation to social and environmental needs.

Comparative Argument: Archaeology provides physical evidence of technological progress, but anthropology explains why and how societies adopted or rejected new technologies. While archaeological records show technological innovation, anthropological research is needed to understand its impact on social organization and cultural evolution.

### Religious and Ritual Practices

Archaeological Evidence: Temples, idols, and inscriptions provide clues about religious practices. The fire altars of the Indus Valley Civilization, Mesopotamian ziggurats, and Egyptian pyramids suggest organized religious systems. Burials with ritualistic objects imply a belief in the afterlife(González-Ruibal, 2012). Anthropological Interpretation: However, religious practices cannot always be inferred from material remains alone. Anthropologists analyze living traditions and historical records to understand how religious

beliefs evolved. For instance, shamanistic practices, ancestor worship, and oral myths may leave little to no physical evidence, yet they are central to many societies (Earle, 2008). **Anthropological Interpretation:** Anthropology goes beyond material evidence by studying oral traditions, linguistic patterns, and living cultural practices. For example, language studies reveal how Indo-European migrations shaped cultural identities, while folklore preserves memories of ancient migrations that archaeology cannot directly record.

**Comparative Argument:** Archaeology provides physical proof of religious sites and objects, but anthropology deciphers their deeper cultural meanings. Without anthropological insights, we risk misinterpreting artifacts as religious when they might have had different purposes. Archaeology proves physical movement of goods and people, but anthropology explains the human experience of migration, assimilation, and cultural change. A purely archaeological perspective might overlook the social and psychological aspects of migration, such as identity shifts and cultural adaptation.

## **Conclusion**

The findings of this study reveal understanding of past societies by archaeological and anthropological perspectives. Both approaches allow a reconstruction of ancient civilizations and limitations of a single-method study. Equally, anthropology depends on ethnographic analogies related to ancient civilizations without material authorization. On the other hand, archaeological evidence enhances anthropological frameworks that change surface-level interpretations and develop a more dynamic consideration of ancient civilizations. Both interdisciplinary approaches enhance historical and valuable lessons for modern problems such as urban sustainability, cultural heritage, and social rigidity. The past is not just about discovering artifacts; it is about modernizing human practices and revolutions. Archaeology and anthropology can achieve a true knowledge of human history both the physical and the intangible of civilization.

## **Recommendations**

The recommendations emphasize an interdisciplinary approach of archaeological and anthropological research should be addressing historical biases and global comparisons. Future studies can reveal deeper empathies of human history.

## Reference

- Abraham, S. A., Gullapalli, P., Raczek, T. P., & Rizvi, U. Z. (2016). Connections and complexity: New approaches to the archaeology of South Asia *Connections and Complexity* (pp. 15-34): Routledge.
- Anthony, D. W. (2008). *The horse, the wheel, and language: how Bronze-Age riders from the Eurasian steppes shaped the modern world*: Princeton University Press.
- Berger, A. A. (2016). *What objects mean: An introduction to material culture*: Routledge.
- Binford, L. R., & as Anthropology, A. (1962). American Antiquity. *Salt Lake City, Society for American Archaeology*, 28(2), 217-225.
- Delaney, C. (2017). *Investigating culture: An experiential introduction to anthropology*: John Wiley & Sons.
- Durrani, N., & Fagan, B. (2020). *In the beginning: an introduction to archaeology*: Routledge.
- Earle, T. (2008). Cultural anthropology and archaeology. *Handbook of archaeological theories*, 187-202.
- Eisenmann, S., Bánffy, E., van Dommelen, P., Hofmann, K. P., Maran, J., Lazaridis, I., . . . Reich, D. (2018). Reconciling material cultures in archaeology with genetic data: The nomenclature of clusters emerging from archaeogenomic analysis. *Scientific reports*, 8(1), 13003.
- Gardin, J. C. (1980). Archaeological constructs: an aspect of theoretical archaeology.
- González-Ruibal, A. (2012). 7 Archeology and the Study of Material Culture: Synergies With Cultural. *The Oxford handbook of culture and psychology*, 132.
- Hallam, E., & Ingold, T. (2016). *Making and growing: Anthropological studies of organisms and artefacts*: Routledge.
- Hodder, I. (2012). *The Present Past: An Introduction to Anthropology for Archeologists*: Pen and Sword.
- Hodder, I., & Hutson, S. (2003). Reading the past: current approaches to interpretation in archaeology.
- Jones, A. (2001). *Archaeological theory and scientific practice* (Vol. 1): Cambridge University Press.
- Miller, H. M.-L. (2017). *Archaeological approaches to technology*: Routledge.
- Rathje, W. L. (1981). Modern material culture studies *Advances in archaeological method and theory* (pp. 647-683): Elsevier.
- Renfrew, C., & Bahn, P. G. (1994). *Archaeology: theories, methods and practice*: Thames and Hudson.
- Schiffer, M. B. (2016). *Behavioral archaeology: Principles and practice*: Routledge.
- Scupin, R. (2019). *Cultural anthropology: A global perspective*: Sage Publications.

Stewart, C. (2016). Historicity and anthropology. *Annual review of anthropology*, 45(1), 79-94.

Toman, J. (2017). *Protection of Cultural Property in the event of Armed Conflict*: Routledge.