

Experimental Archaeology, Experiential Archaeology and Living History

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EXPERIMENTAL ARCHAEOLOGY

Experimental Archeology may be defined as "that branch of archeology which seeks to interpret material culture, technology, or lifeways of the past by means of structured, scientific experimentation" in order to test hypotheses against archaeological evidence. *It bridges theory and practice.*

The Problem - Definition and Reality From *Primitive Technology Newsletter #1, 1995*

According to Brian Fagan, **anthropology** is the study of humankind's interacting social life, culture and natural environment. **Archaeology** is the study of human cultures and technologies, and is a sub-discipline of anthropology. Errett Callahan's definition of **experimental archaeology** - "that branch of archeology which seeks to interpret material culture, technology, or lifeways of the past by means of replication, reconstruction or theoretical modeling" - does not stop at the artifacts, but strives to also understand the intangible elements behind the artifacts. In most of the world, the projects and theories of experimental archaeology have a long and respected tradition as being a complementary component of archaeological fieldwork and research. It provides a solid experiential and scientific foundation for the assumptions and conclusions created from evidence unearthed through survey and excavation. These "two distinctly different means of data collecting", when merged at the level of interpretation, cross the sacred boundary between social and physical science, creating anthropological archaeology (read *Lightning Bird* by Lyall Watson for a better understanding of this relationship). archaeologist - interprets evidence from sites, artifacts and features technologist - interprets evidence from reproductions, testing and experience. DW

Experimental Archaeology is: "that branch of archeology which seeks to interpret material culture, technology, or lifeways of the past by means of replication, reconstruction or theoretical modeling. Callahan (1987)

Experimental Archaeology is: "Any honest effort to understand ancient artefacts by actually working with them. Experimental Archaeology means learning about the past by recreating and testing ancient technologies and activities in practice."

John Coles, *Experimental Archaeology*, 1979

Coles explains that experimental archaeology involves:

- Reconstructing ancient objects, structures, or technologies
- Using materials and techniques similar to those used in the past
- Testing how these objects were made, used, and functioned
- Observing results to better interpret archaeological evidence

Experimental Archaeology requires the use of the Scientific Process:

- 1-Observation
- 2-Research

- 3-Form a Hypothesis
- 4-Design and conduct an experiment
- 5-Collact and Analyze Data
- 6-Draw Conclusions – Make Inferences – ie. “The possible answer may be”
- 7-Publish Results
- 8-Replcate and Test Conclusions

Experimental archaeology is a field of archaeology that recreates past technologies, activities, or structures to better understand how ancient people lived. [experiential]
By replicating tools, crafts, and techniques using traditional materials and methods, researchers test hypotheses about historical practices. [experimental]
*This hands-on approach helps interpret archaeological findings and fills gaps in the historical record. Examples include building replicas of ancient dwellings, making stone tools, or testing old farming methods. **It bridges theory and practice**, offering insights into the skills, labor, and knowledge of past societies. EXARC*

Dr. Theresa Emmerich-Kamper – EA is a way to answer questions about archaeological evidence using the scientific method.

- Define the question
- Design the experiment
- Collect the data
- Compare the results to the original archaeological example.

Errett Callahan - Experimental Archaeology

- Objective is to produce a precise (Level II and III) replication/reconstruction of the original artifact/evidence. Level II and III imply a broader understanding of the field. "Controlled creativity" can be applied "only in the absence of archeological fact".
- Levels I-III based on a specific "artifact", features or evidence from the prehistoric/ethnographic record.

Level I: NON-AUTHENTIC AND NONSCIENTIFIC ("Play" level). Reproductions that are unsuccessful or nonfunctional units, whether undertaken with the correct period tools, materials, and procedures or not. Such reproductions may vary between honest, failed attempts at authentic units or blatantly non-authentic simulations of authentic originals. • Level I weakness of is in poor research or interpretation of the record.

Level II: AUTHENTIC BUT NON-SCIENTIFIC (Experiential level). Reproductions that are successful, functional units undertaken with the correct period tools, materials, and procedures. • Level II uses appropriate materials and procedures, may use modern tools during learning stages.

Level III: AUTHENTIC AND SCIENTIFIC (Experimental level). Reconstructions that are successful, functional units undertaken with the correct period tools, materials, and procedures and which are scientifically monitored. That is, objects are not just made, they are tested.

- Level III is limited to accurately researched material, tools, and procedures.
- Level III requires the application of the scientific method, as well as documentation and monitoring/reporting of the process, and relates directly to the field of anthropology.

Some Suggested Definitions - Callahan

simulation - honest, failed attempts to blatant forgeries.

experiential - focus on training and insight more than experimentation.

scientific - meets Kertlerborn's 7 criteria. Don't just make things, test things.

intangible - never a physical object...understanding of mankind.

tangible - actual evidence is present; measurable. Replicas can be made.

non-tangible - formerly tangible, but disintegrated. Reconstructions can be made.

template - mental image created by tangible, nontangible and intangible information.

model - design generalized or created from a template, artifact, or feature/evidence.

evidence - tangible information.

artifact - complete is tangible, incomplete is non-tangible.

feature - non-artifactual material evidence - post molds, hearths, etc.

reconstruction - dictionary- from given or available information.; falls within what is the inferred range of variation of the original, based on non-tangible materials; does not imply complete accuracy .. one of many ways it could have been done.

replication/replica - dictionary- close to or exact copy or reproduction; falls within what is the range of variation of the original, based on tangible materials.

simulation - only approximates attributes of the original; does not fall within the range of variation of the original.

reproduction - dictionary - to make a copy duplicate, or representation; through reconstruction, replication or simulation.

recreate - cannot be done; anything beyond actual/tangible or non-tangible evidence is speculation.

NOTE: Jay Anderson published *Time Machines: The World of Living History* in 1984. In the book, he combined a wide variety of re-enactment genres and schemes along with the inclusion of Experimental Archaeology. It might be concluded that from this publication many re-enactors found legitimacy in their efforts by calling themselves Experimental Archaeologists. That might be true of those individuals truly looking at their research with scientific rigor. The problem comes about when hobbyists adopt its use, not knowing what it really means. It can still be found being misused throughout the re-enacting world. DW

EXPERIENTIAL ARCHAEOLOGY

Experiential Archeology, closely akin to experimental archeology, involves "interpretation of material culture and technology by means of physical reconstruction, experiential means or reenactments." It may or may not lack the scientific rigor of experimentation.

Experiential Archaeology refers to conducting activities such as experiments, reconstructions, or reenactments in order to gain personal experience and understanding of the past by recreating and performing past activities to gain personal experience and a

deeper understanding of how people lived in the past, often through reconstructions, crafts, or reenactments. EXARC

- **Experimental archaeology:** tests specific hypotheses using controlled experiments.
- **Experiential archaeology:** focuses on learning about the past through hands-on experience and participation.
- **Living History:** a method used mainly in museums and heritage sites where people recreate historical lifestyles and environments for public interpretation.

Although an archaeological experiment must always answer a specific research question, the experiences gained during non-repeatable activities can be of great value and should always precede controlled experimentation. When results are related back to the archaeological record, the value of Experiential Archeology is evident, as the information gained would be impossible to obtain from solely examining original artifacts. Experiential Archeology is different from reenactment and the reproduction of artifacts. Distinguish between full experiments, pilot experiments, pre-experiments, experiential activities, public demonstrations and hobby projects. EXARC

NOTE: A good deal of early Experiential Archeology was tied directly to structured “projects” by “living back” - The Polder Project, The Old Rag, Kootenai River Project and others.

LIVING HISTORY

- **Defining Living History** –The art and science of bringing history to life through first-person interpretations or demonstrations.

Experiential or experimental research, also called experimental archaeology, with a nod of gratitude to Jay Anderson, author of *Time Machines: The World of Living History* (1984) and *Living History Sourcebook* (1985); this is actually using the tools and accouterments.... Anderson’s works also define the terms and explain how to learn from what you do. **Cathy Johnson**

Cathy Johnson - The living historian literally tries to bring the past to life [through] dress, speech and action...**It’s a kind of performance history**...the more you know, the more you want to know. Having a persona in mind helps direct your research in concrete ways...location, economic status, ethnic background, occupation, gender...creating a three dimensional character...zeroing in on this specific area allows me to burrow much deeper into the past – and to feel at home there. Proper investigation can broaden interpretation in interesting and historically accurate ways...it lets you focus.... Having a persona is like having a guide to the past, one who is both intriguing and intimate...[it] offers a doorway into the period on a different, more individual level...it’s like a treasure hunt...personas change with time as you learn more...

Persona – Jay Anderson - I’ve found the process is circular. I began with a persona in mind, which led to research. The research helped me modify my persona and my camp. The more they’re modified, the more enthusiastic I am about further research to lead to more modification, which...well, you get the point.

Consider your present age. Then look at the period you are interpreting – say 1812 – and subtract to find the year you were born. Perhaps that puts you back to 1763: you would have remembered the Revolutionary War, perhaps lost a father or older brother. At least you would have heard stories from the old veterans. ...What would have affected your life? What medical and scientific advances would you have

seen? What new technologies? What new advantages and disadvantages did aftermath of independence cause your family? Who is now President of this new Republic – and who would like to be? Going a bit deeper, ask yourself what you would have known or remembered at age 10, or 20, or 30? This is most fun to do in a group of like-minded people who can share their ‘experiences’ and introduce topics you might not have thought of. Many people can act as mentors in a situation like this, and it’s a wonderful way to break the ice.”

RE-ENACTING

• **Living History** is a form of historical interpretation where people demonstrate everyday life from the past as accurately as possible, usually in museums or historic sites. Strong emphasis on education and historical accuracy.

• **Reenacting** usually focuses on recreating specific historical events, especially battles or important moments.

INTERPRETATION

Tilden’s Principles of Interpretation

- 1- Any interpretation that does not somehow relate what is being displayed or being described to something within the personality or experience of the visitor will be sterile.
- 2- Information, as such, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.
- 3- Interpretation is an art which combines many arts whether the materials presented are scientific, historical or architectural. Any art is some degree teachable.
- 4- The chief aim of interpretation is not instruction, but provocation.
- 5- Interpretation should aim to present a whole rather than a part and must address itself to the whole man rather than any phase.
- 6- Interpretation addressed to children should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best it will require a separate program.

CREATING A PERSONA

Persona – Who Are You?: What's my story? Think about the history of the person you would like to portray. It could be a historical figure (not easy to do), someone from your family tree (very interesting to research) or a somewhat generic local midwife, war chief, mother, farmer, blacksmith, hunter or whatever. Think about a simple life history, including age and background. Don't get too hung up in details here, but think about what you would have to know and what material goods you would need to live a day in that person's shoes in the situations you expect to be reenacting. Make a list to help focus your thoughts.

- WHERE –
- WHEN –
- GOALS -

Once you have pretty good ideas about these questions, it's time to do some in-depth research. Head to the local library and read what they have on hand about the history of the time and place you are going to portray. Check the bibliography and links on various web sites. Join one of the many mailing lists, electronic or otherwise out there, and take a little time to read their archives and ask questions, both about specific items or material goods in general. It’s a good idea to keep notes as you research. Write down the author,

title, and page number where you saw that quote about tall pointy bearskin hats; it will be important some day. **Wynne Eden**

Use your existing skills...backdate to the period of you choose. (4) *Often a persona develops out of a specific skill...*When you stay in the context of your resource and think about what you're doing and why you're doing it, interpreting becomes much simpler and more natural.

- Primary Research – photos, journals, reports
 - Secondary Research - written accounts of someone not there – news, stories
 - Tertiary Research – books, mags, vidoes, interpret facts
 - Experiential research
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- Refer to *A Guide for Creating a Persona or Character* by Cathy Johnson
<http://www.living-history.net/Fort/FTPERSOAGUIDE.HTM>