



The content is published under a Creative Commons Attribution Non-Commercial 4.0 License.

Unreviewed Mixed Matters Article:

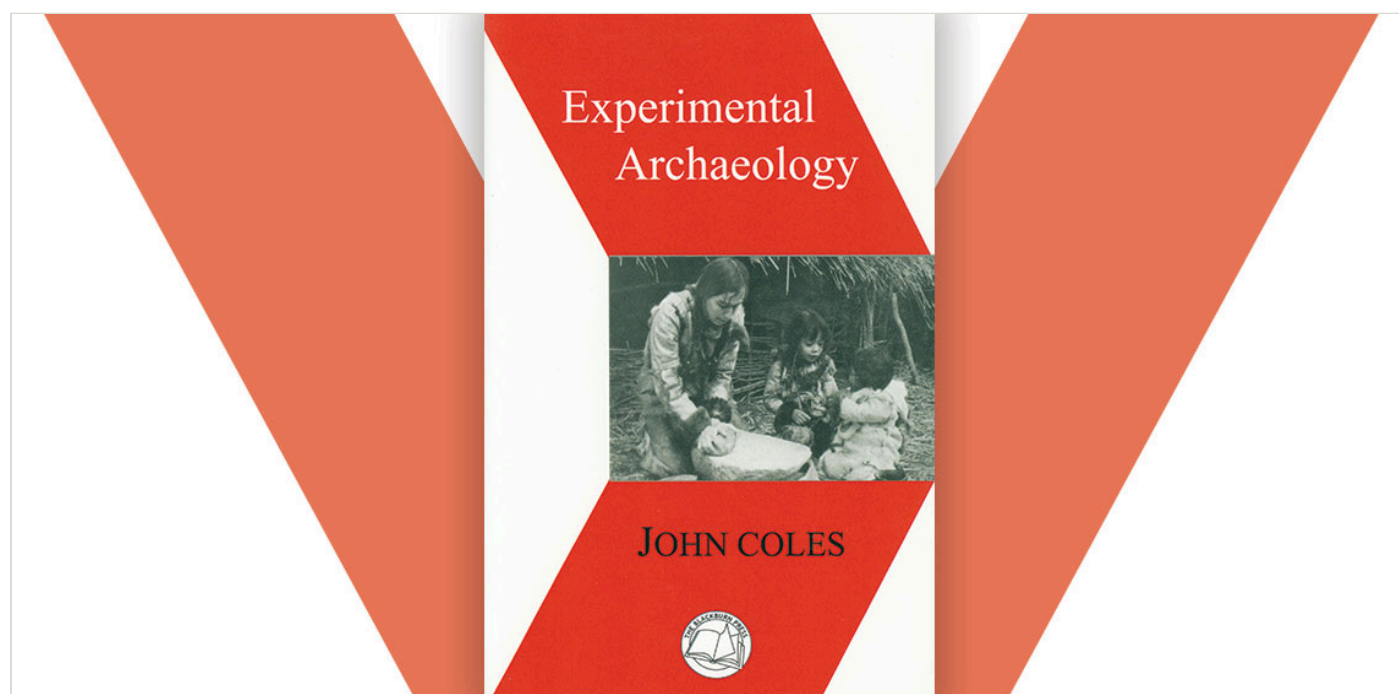
Book Review: Experimental Archaeology by John Coles

Persistent Identifier: <https://exarc.net/ark:/88735/10007>

EXARC Journal Issue 2012/1 | Publication Date: 2012-01-15

Author(s): Heather Hopkins ¹ ✉

¹ School of Engineering, University of Bradford, Bradford, West Yorkshire, BD7 1DP, United Kingdom.



It may appear odd or redundant to reprint a book that was published in 1979. The subject will have moved on, more will have been discovered, new techniques will have been developed. But this is partly the point: *Experimental Archaeology* by John Coles is a foundation text for the subject as a whole.

Reprint 2010 of 1979 edition

Preface 2010 reprint: Roeland Paardekooper



This book offers a snapshot in time, a foundation text at the birth of a subject and a good discussion of contemporary work. It is recommended for those who do not already possess a copy and the preface is recommended for those who do. This reprint is long overdue!

It was written to give an overview of the subject at that point, to place it within its contemporary context and that of archaeology as a whole. It also aimed to give recommendations for the future. It succeeded in doing each of these things and also allows later archaeologists to appreciate where experimental archaeology came from, placing their own experiments within the wider context of the history and methodology of experimental archaeology. It also allows an understanding of how the subject has changed.

Coles examines major trends, gives an overview and brief history of experimental archaeology, without which lesser known parts will be lost in time. He states that it will be incomplete, giving reasons for the inclusions of some works and not others, and includes a bibliography. By necessity any

snapshot in the printed word will be incomplete. As Coles states, experimental archaeology is expanding rapidly as a subject. Paardekooper notes, writing in 2010, the expansion that Coles was seeing was only the beginning. Coles explains the context and paradigm in which he is writing in 1979. Although a number of archaeologists mentioned in the book are still practicing, they would be hard-pressed to specifically remember the exact paradigm of over 30 years ago, without the distraction of hindsight, and to successfully explain it to today's generation. Coles defines experimental archaeology as "any honest effort to understand ancient artefacts by actually working with them". New methods have blurred the edges of this definition. Coles uses the words 'simulation' and 'model'. Now these words can also refer to computer generated replications, causing confusion if they are used without explanation. When reading an original work from 1979 this confusion does not occur as they are used within context.

By its nature this book cannot comment further than 1979. To some this book may therefore seem unnecessary or antiquated. The reviewer could not even acquire a copy of this book while studying. It was felt that there should not be interest in works of this age, books written before she was born. But this missed the point of what this book represents: it is a foundation text of a subject, without which further work is divorced from its origin, its purpose, and without which it is not possible to understand the paradigm in which the subject as a whole evolved. Since 1979 there has been a paradigm shift and experimental archaeology is now viewed increasingly as a mainstream subject. In the 21st century it is deemed perfectly natural to construct replicas to test ideas as part of academic assignments. As Coles states, the theories stand for nothing if they are not tested.

A generation ago the internet did not exist. A theme throughout the book is that there is a need for a comprehensive review of experiments, an overall plan of action, better publication and a laying down of standard rules (a set of which Coles suggests). With the internet this is now possible and can be informed and updated from anywhere in the world. The preface mentions a project that is undertaking just that: <http://experimentalarchaeology.net>. This will revolutionise the way that experimental archaeology is undertaken, but again without a record of what came before, the previous paradigm will be forgotten. Coles' review means that it is not.

Coles' language shows social changes: 'Man' is used to mean 'people' and countries that no longer exist are named (Czechoslovakia). It would be wrong to update these as they are as much of their era as what they discuss. The book is manageable and readable; it is not a hefty tome filled with empty space or impenetrable pros. There is a dry humour throughout the book, with personal observations set within the framework of serious academic experiment. Some of the comments can be better appreciated if the reader has also ever hoped that "the pungent smell will eventually fade" or bemoaned that "the archaeologists could not persuade their wives" in the preparation of a particularly repellent artefact. Such observations may seem unorthodox but actually add to the strength of the book as they demonstrate that there are no empty theories presented: every idea has been tried and tested. A recurrent theme is that only through experiment can the method and outcome of use be understood and any unforeseen problems discovered. That leather shields droop in the rain would affect a battle fought on an overcast day, but may be overlooked by a theoretician. Some attitudes to experimental archaeology appear to be universal and not one replica long-voyage sea craft is mentioned without reference to the pessimism and morbid curiosity of bystanders. 'Universal' concepts can also lock a text in time: Coles states that freshly made hot "maple taffy" has the "ability to remove any fillings". My contemporaries do not have fillings so this reference, and the horror that accompanies it, is completely lost on them.

A recurrent theme is the importance of ethnography, in particular the need for rapid recording before an already diminishing source of information is lost forever. Not only would the use of tools be lost, but the tasks for which the tools were designed would be too, leaving archaeologists to misinterpret artefacts. To watch an expert make and use a tool is the best way to understand it, especially as they can explain as they work. To an extent this is also what Coles' book itself represents: a stage of the evolution of experimental archaeology before a growth in the area and the use of computing. The internet means that it is now possible to watch a technique in a different continent and learn a craft by watching a film, but this is still not as beneficial as the craftsperson teaching. Ethnography also allows a greater understanding of the social and ritual aspects to an event, the parts that leave little or no physical remains. If these are lost then it is not possible to understand the reason for a behaviour. Coles highlights the importance of both ethnography and written historic records

in this area.

Experimental archaeology and archaeological findings have developed in the intervening 30 years. Coles refers to projects involving computer simulation. Since 1979 computer simulation has become an important part of reconstruction, in particular to understand aesthetic and physical properties. There are now reconstructions of the early computers themselves. Geophysics is also mentioned. Coles discusses the use of King Tutankhamen's horn to delight radio audiences in the 1920s. He states that this was played by a trumpeter who brought his own mouthpiece. To an extent this highlights the European/American-centric nature of a lot of the earlier experiments. Coles stated that perhaps it was fortunate that a complete carnyx had not been found as the world would be spared the cacophony. He did not know that within a generation they would be examined, recreated and used. To fully explore every method of playing, one tester was a didgeridoo player and achieved an unforeseen resonance and distance.

As the original book was written in 1979 it is possible to see how the hopes of the time have been realised and the plans come to fruition. It is possible to use these to see where experimental archaeology needs to develop next. West Stow, Butser and Lejre are mentioned throughout and all three are still continuing experiments today. Butser is mentioned as having a twenty-year plan, which would have ended a decade ago. Coles states a need to examine fencing and today West Stow is doing that. But furthermore it is possible to see what Blockley describes as the "infectious enthusiasm that persists for life" that comes with experimental archaeology. Coles mentions a group of Boy Scouts who made and used replicas of Viking sailing vessels. One Boy Scout is now a shipwright and recently constructed the Sea Stallion, the Roskilde ship that sailed to Ireland. A theme that exists throughout the book, told partly through the humour, is that experimental archaeology is fun while simultaneously teaching us about ourselves and the past. We will never recreate the state of mind of ancient people, but we can at least test the concepts that they devised. Coles discusses the problems with underwater excavation and the need to develop techniques quickly. He wrote before the raising of the Mary Rose in 1982. He comments that more should be done with cookery and recommends exploration of dormouse recipes. Dormice are now a protected species in Britain. However two other recipes are presented with encouragement.

The practical difficulties experienced when undertaking experiments is a recurrent theme and a reason that means the book should be compulsory reading to anyone wishing to undertake experimental archaeology, in addition to the guidelines and context that is also given. Problems such as the difficulty in acquiring a replica mammoth, solved by the acquisition of a deceased elephant from a Californian studio, and the need to frequent petshops to reconstruct the last meals of various bog persons, are all touched upon. Theoretical and

financial difficulties are also mentioned. Had the advanced health and safety regulations of today existed, efforts would have been hampered further. Coles notes that initial fumbling in methodology can cause a wider range of factors to become apparent. He states that the experiments described avoided dogmatism in their results and conclusions. Experimental archaeology shows not what happened but what could have happened, what is physically impossible and that there is more than one way of performing a task. It is not possible to compare projects with different aims. As time has progressed experimental archaeology has diversified and this approach is increasingly necessary.


As the need has grown to exhibit experimental archaeology to the public the paradigm has shifted to accommodate this. Public television broadcasts have increased the number of people who can view an experiment but the nature of experiment has changed to ensure that it is sufficiently interesting and understandable. Now it is necessary to explain a practical and theoretical subject to the internet generation. To construct a replica on the site of an original finding would allow the public to understand but would affect what future archaeologists would find. There is a need to bring a balance. When understanding the physical properties of an original artefact, care should be taken to not damage the original, but this was a relatively new idea. Coles cites an archaeologist of the 1920s firing arrows through armour of 17th century date. Today replicas are used to increase the educational experience, to encourage learning through all of the senses.

Coles states that a tested replica shows what has been lost since its original deposition. It also shows the time, resources, skills and people necessary to construct the artefact originally. As the construction process becomes more laborious or complicated it allows an understanding of the social processes involved, the control of a workforce and resources. This may not give an absolutely accurate picture but it does give an indication. Of interest was the origin of experimental archaeologists: flint knappers had begun as archaeologists, but archaeo-metallurgists were originally metallurgists. It is important to reconstruct the social aspects of archaeology, because although it is not possible to enter the specific mindset of prehistoric people, people will still interact as people and this will have an effect on experiments.

This book offers a snapshot in time, a foundation text at the birth of a subject and a good discussion of contemporary work. It is recommended for those who do not already possess a copy and the preface is recommended for those who do. This reprint is long overdue!

Book information:

COLES, John M., 2010, *Experimental Archaeology*, Caldwell NJ: Blackburn Press, ISBN 978-1932846263 (reprint of 1979).

 Keywords [experimental archaeology](#)
[review](#)
[book](#)

 Country [United Kingdom](#)

Bibliography

BLOCKLEY, M., "Archaeological reconstructions and the community in the UK", *The Constructed Past, experimental archaeology, education and the public*, London, New York, Routledge, pp. 15-34, 1999.

 Share This Page

[f](#) [X](#) [in](#)

| Corresponding Author

Heather Hopkins

School of Engineering

University of Bradford

Bradford, West Yorkshire, BD7 1DP

United Kingdom

[E-mail Contact](#)