

Anglo-American antiquarians and early modern science

A proposal for a Development Grant for a Humanities Research Network Project

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Susan Alcock, Professor and Director, Joukowski Institute for Archaeology and the Ancient World, Brown University;
Hayette Hemassi, University Librarian, Brown University;
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Project outline

Early modern science was, as Steven Shapin put it, “a diverse array of cultural practices aimed at understanding, explaining, and controlling the natural world”. Included in this diversity are archaeological practices of prospection, excavation, field survey, collection and sampling, and associated documentation, annotation, commentary, discussion and publication. This project aims to investigate these practices in the early history of science—unpacking the agendas, networks and socio-cultural context. We will pursue a fully multidisciplinary approach to these key components of scientific practice through an international team of scholars.

We propose that what is often called the antiquarian tradition in early modern Europe (roughly 1500-1820) has been misunderstood because of the difficulty of multidisciplinary research. We wish to investigate the proposition that the antiquarian tradition was not an intellectual backwater to the mainstream development of experimental science. Too often the antiquarian tradition has been treated simply as a precursor to scientific archaeology; we will investigate the tradition in its local and historical context without presuming its disciplinary location. Antiquarians were transdisciplinary figures who bridged the humanities and natural philosophy through topographical fieldwork, chorography, human geography, earth sciences, natural history, ethnology, history, folklore studies, toponymy, numismatics, materials science, philology and epigraphical interpretation. Multidisciplinary research is simply the only way to investigate this hybrid field.

We estimate that there are between 1500 and 2000 key works produced in the antiquarian tradition in England and America before 1820. This project aims to identify, gather and make digitally available for study this relatively small number of sources. We will produce a scholarly apparatus of commentary and annotation for understanding them in context. This will be an on-line database of high resolution scans developed through

the software experience of Stanford and Brown University Libraries. In addition, we will use our expertise in collaborative web-based software (wikis and content management systems, Web 2.0 technologies) to provide an interface to this database and to enable broad international access and address to specific research questions concerning the antiquarian tradition and early modern science. This will be a major output of the project: a research resource of a new format built upon the best possible design principles available in current information science. We intend our findings in the design of such collaborative research environments to be transferable to other cognate research topics.

The antiquarian tradition up to 1820 can be termed microcosmic:

- in the aspiration of antiquarians to collect and categorize wide ranges of human experience of the material world,
- in the myriad of connections through contemporary society forged by antiquarian interests,
- because the study of this relatively small dataset promises to yield wide-ranging insights into the history of science and of the early modern world.

We propose therefore that a coordinated multidisciplinary focus upon the antiquarian tradition promises research results that will be a very significant and efficient return on the effort put into understanding 2000 primary sources.

We will manage the research and writing using conventional workshops and seminars and a conference, as well as through the social software (using synchronous and asynchronous authoring, posting and video links).

A major and complementary research effort aimed at the French antiquarian tradition is already underway, headed by Alain Schnapp (INHA - Institut National d'Histoire de l'Art, Paris) and focused on the collections of the Bibliothèque Nationale de France. Another connected project, focused upon the Scandinavian antiquarian tradition, is also in planning.

Participants

The list of PIs that heads this proposal is the core team that will manage and deliver the project.

The project lies within the primary research interests of Hingley, Schnapp, Shanks, and Witmore; they will manage the main research component. Alcock, Hingley, Hemmassi, Lowood, Schnapp and Shanks will coordinate institutional support, Lowood, Hemmasi and Schnapp will deal with libraries support. Hemmasi, Lowood and Shanks will coordinate technical and IT support.

In addition to this core team the project anticipates considerable further participation. We will be working to recruit interest and involvement throughout the term of the project. The participatory software is designed to enable a range of commitments and contributions, from short comment through to a doctoral dissertation.

Paulla Findlen at Stanford has already indicated interest in the project, though we do not anticipate her joining as a PI. We are talking with Gail Feigenbaum, Associate Director of the Getty Research Institute, about their involvement.

The project aims to conduct much of its work through research assistants: undergraduate, doctoral and post-doctoral. These will come under the supervision of the core team members.

Output and Publication

- A general research resource comprising a database of high resolution scanned books, a scholarly apparatus for understanding these works in context, and a user-friendly front-end presenting open commentary and discussion.
- A conference on antiquarian science (in 2010).
- A collaboratively authored book addressing specific research questions in early modern antiquarian science.

Schematic budget

Our current view is that the project will run till 2010, with publication to follow thereafter.

Between October 2007 and March 2008 we are networking to establish interest and commitment, and seeking a first round of support with funding applications. From March 2008 we will begin a feasibility study and a pilot.

We therefore request support for these activities.

Travel expenses:

Stanford to UK December 2007: \$2200

Stanford to Brown January 2008: \$1200

Paris to Stanford - for a project meeting in February 2008: \$1000

(Some of this cost is already covered by the Getty Institute for Schnapp)

Stanford to Paris and the UK June 2008 - for a two week research trip to Durham Library and to the associated project researching French antiquarians \$5500

Technical/research assistance - server set up and priming - a graduate to help Nicole Coleman \$750

Total December 2007 to July 2008 \$10650

The balance above \$10k will be found from other sources.

These are not the only costs in these first two phases of the project - see appended full outline.

Appendix: Full Working Project Proposal

Anglo-American antiquarians and early modern science.

A research proposal

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Abstract

We aim to investigate the proposition that what is often called the antiquarian tradition in early modern Europe (roughly 1500-1820) was not an intellectual backwater to the mainstream development of experimental science. We will explore the antiquarian tradition in its local and historical context, with a special emphasis on its relationship to the discipline of archaeology.

This project aims to identify, gather and make digitally available for study approximately 2000 key works in the antiquarian tradition from Great Britain and the United States. An international team of scholars will pursue a multidisciplinary approach to the study of early scientific practice (fieldwork, collection and sampling, documentation, and archiving), employing a web-based collaborative framework of commentary and critique connected with high-resolution digitally scanned sources.

As well as this open access research resource, the project will coordinate several research seminars, will organize a conference and produce a collaboratively authored book presenting the results of research into several specific questions of the relationship of the antiquarian tradition to early modern science.

Project aims: a concise focus for understanding early modern science

Early modern science was, as Steven Shapin put it, “a diverse array of cultural practices aimed at understanding, explaining, and controlling the natural world”. Included in this diversity are archaeological

practices of prospection, excavation, field survey, collection and sampling, and associated documentation, annotation, commentary, discussion and publication. This project aims to investigate these practices in the early history of science—unpacking the agendas, networks and socio-cultural context. We will pursue a fully multidisciplinary approach to these key components of scientific practice through an international team of scholars.

We propose that what is often called the antiquarian tradition in early modern Europe (roughly 1500-1820) has been misunderstood because of the difficulty of multidisciplinary research. We wish to investigate the proposition that the antiquarian tradition was not an intellectual backwater to the mainstream development of experimental science. Too often the antiquarian tradition has been treated simply as a precursor to scientific archaeology; we will investigate the tradition in its local and historical context without presuming its disciplinary location. Antiquarians were transdisciplinary figures who bridged the humanities and natural philosophy through topographical fieldwork, chorography, human geography, earth sciences, natural history, ethnology, history, folklore studies, toponymy, numismatics, materials science, philology and epigraphical interpretation. Multidisciplinary research is simply the only way to investigate this hybrid field.

We estimate that there are between 1500 and 2000 key works produced in the antiquarian tradition in England and America before 1820. This project aims to identify, gather and make digitally available for study this relatively small number of sources. We will produce a scholarly apparatus of commentary and annotation for understanding them in context. This will be an on-line database of high resolution scans developed through the software and experience of Stanford and Brown University Libraries. In addition, we will use our experience in collaborative web-based software (wikis and content management systems, Web 2.0 technologies) to provide an interface to this database and to enable broad international access and address to specific research questions concerning the antiquarian tradition and early modern science. This will be a major output of the project: a research resource of a new format built upon the best possible design principles available in current information science. We intend our findings in the design of such collaborative research environments to be transferable to other cognate research topics.

The antiquarian tradition up to 1820 can be termed microcosmic:

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- because the study of this relatively small dataset promises to yield wide-ranging insights into the history of science and of the early modern world.

We propose therefore that a coordinated multidisciplinary focus upon the antiquarian tradition promises research results that will be a very significant and efficient return on the effort put into understanding 2000 primary sources.

As well as a research resource, we aim to publish our address to specific research questions in early modern antiquarian science in the form of a collaboratively authored (rather than edited) book. We will manage the research and writing using conventional workshops and seminars and a conference, as well as through the social software (using synchronous and asynchronous authoring, posting and video links).

A major research effort aimed at the French antiquarian tradition is already underway, headed by Alain Schnapp (INHA - Institut National d'Histoire de l'Art, Paris) and focused on the collections of the Bibliothèque nationale de France. Our complementary project focuses on Anglo-American antiquarians. Another connected project, focused upon the Scandinavian antiquarian tradition, is also in planning.

Research questions in the history of science

There were no archaeologists in early modern times. Antiquarian scholars were pastors, lawyers, physicians and teachers, practicing science non-professionally. This came to be called archaeology, but it was not consistently so termed before the mid nineteenth century.

We propose that it is crucial to avoid a teleological view on the history of archaeology and of science. A basic premise of this project is that contemporary archaeology has not developed in a straightforward genealogy from the practices of pre-scientific antiquarians. Nor were those scholars aiming to develop what later came to be called archaeology. We are archaeologists and historians of science researching early modern scholars practicing archaeology, but we are not their scientific descendants. We therefore aim to approach the scholars of the past in their own time, from their own beliefs and philosophies, which also means to explore and to understand their scientific, political, religious and social contexts. This context includes the standard and sometimes questionable narratives of scientific revolution, when scholars discovered new worlds through microscopes and telescopes and via global seafaring. A key question is how the antiquarians became aware of their own modernity and how this awareness prompted a clearer definition of the past, of Graeco-Roman antiquity and of the Christian Middle Ages, but also of pagan prehistory.

We aim to investigate distinct archaeological practices or methods which yielded more or new information about the past before history, ie prehistory beyond written sources. Prospecting, excavating, collecting, publishing, reading and writing are scientific practices which have produced a variety of written sources for the history of archaeology. As already indicated, there are between 1500 and 2000 works. These will be the main data of this project.

Specific research questions include:

- How are archaeological practices before 1820 related to the development of other scientific practices?
- Why were scholars digging and collecting? What were the social, cultural and political circumstances of their scientific practices?
- How they were conducting these practices? How were these practices conceived?

- How far can archaeological practices be conceived as new scientific methods to gain exceptional sources which might be able to assure the scholars of their own modernity?
- How far were archaeological practices before 1800 a matter of religious, regional or national identities?
- Questions of scholarly identity: the figure of the antiquarian. To what extent is the pursuit of archaeological practices a unified phenomenon throughout early modern Europe and is the term antiquarian an appropriate one? (The term “Antiquarian” (Latin “Antiquarius”) appears not to have been entirely common throughout early modern Europe for somebody digging up and collecting archaeological finds from the soil).
- The relation of books and media to the work of the antiquarian. For example, how did publication affect the dissemination of local antiquarian knowledge? How important were maps and field drawings? Reading, the quill in hand, for example, has left specific traces in books: marginalia, underlinings or annotations. Such annotated books are rare sources for the individual reception of certain printed key texts for the history of archaeology, which are more valuable if the historic owner of the book is known. We aim to document such marginalia.
- The place of scientific instruments in the work of the antiquarian, such as spade and quill, compass and rule. How did such instruments bring about the standardization of antiquarian research?

Method: the construction of a digital scholarly apparatus for international collaborative research

A primary concern of the project is to enable collaborative approaches to these research questions. The research questions require an apparatus for effectively connecting sources to context as well as enabling international scholarly collaboration across many disciplines. We propose therefore to base our project on information technologies:

- digitized sources at high resolution to enable scrutiny of text, illustrations and marginalia and the material character of the book or medium
- a web-based collaborative authoring environment to enable multi-authored commentary and discussion on the digitized sources and to enable hyper-linking of themes.

This project will build a digital archive of books, from the inception of printing to the modern period in the West, at about 1820, that deal with cultures in terms of their material products and remains. There is a wonderful set of such texts: most of them labeled as antiquarian works, but we will also include the works that engaged the cultural encounters of the early modern age of discoveries and exploration.

A key to the project's success will be to make find and make available this source material. For the English world there already exists the ECCO (Eighteenth Century Collection Online) database. ECCO is limited to the 18th-century and England and does not do a particularly user-friendly job, nor includes all of the illustrated books; but it is a start. The project will need to initiate new scanning of many works. Brown University Library has one of the world's finest collections of antiquarian works, certainly the best in the US. Stanford's holdings are very good, but not comprehensive. Durham University has very significant collections too. We are talking to

the Getty Institute about collaboration. With such core team member involvement, we are confident in being able to achieve as complete coverage of the field as is possible.

It will be important to enable effective searching of the source materials. We intend to build on the world-class experience of the libraries of both Stanford and Brown in developing modes of rich access to text and manuscript collections. Of particular note here is Stanford's Parker Library project which provides rich online access to the medieval manuscript collections held in Corpus Christi College, Cambridge—one of the most significant surviving. Michael Keller, Stanford's University Librarian and project PI, has offered cooperation in adapting this software to our needs.

The database of high resolution scans will include contextual research concerning biobibliography, social and cultural history. Interacting with this database will occur through a wiki-like interface that allows more dynamic commentary and critique from any interested party. We aim to use new participatory media to enable and manage the necessarily multidisciplinary research contributions. So the front-end of the project's scholarly apparatus will be an interactive and collaboratively constructed web-site. Any interested scholar will be able to view the archive of works, browse high resolution scans, read contextual information, and then make their own comment on a book using direct annotation, or supplying a related point, developing an argument, providing indirect commentary, making links within or beyond the archive, or simply posting a relevant paper or image. An important technological task is to coordinate the searchable archive with the authoring environment and with the management of the team. We have much experience of such technology and the management tasks. Michael Shanks, in his lab in Stanford Archaeology Center (metamedia.stanford.edu) and in Stanford Humanities Lab (shl.stanford.edu), has pioneered the design and use of Web 2.0 technologies (wiki-based systems of content management and collaborative authoring) in such multidisciplinary collaborative research. These will be integrated with the widely available communication technologies now available in video conferencing, chat rooms and online environments (for example, Shanks and Lowood have made extensive use of the online world Second life in teaching, research and in publishing work: the project anticipates having a facility in Second Life).

This digital component will not, however, substitute for conventional aspects of international collaboration. Seminar and workshop meetings will be essential for building the team of scholars, for managing the research and to prepare for a final project conference and conventional publication. It is important also to stress that the information and communication technologies are designed to enable the application of traditional skills of scholarship, particularly critical commentary and source criticism.

Process and stages of the research project

Phase One - October 2007 - March 2008

Collaboration established and agreed - network building

Project plan agreed

Costs - travel between Stanford, Brown, and the UK

Phase Two - March 2008 - March 2009

Feasibility study

Establishment of a bibliography, establish sources and availability of works to be scanned

Feasibility and functionality testing of the information technology - template building and evaluation

Cost - meeting of team members at Stanford in Spring 2008

Cost - visits to Paris and Durham to view local resources first hand

Cost - research assistance

Cost - server set up

Cost - technical assistance in building database and wiki

Cost - an evaluative workshop/seminar in January 2009

Phase Three - January 2009 - December 2010

Implementation - digitization

Cost - research assistance

Phase Four - March 2009 - December 2010

Implementation - commentary and critique across international team

Costs - research manager, server maintenance

Cost - seminar/workshops, summer 2009 and 2010

Phase Five - December 2010

Publication and discussion, dissemination of findings

Cost - a conference at Stanford

Cost - research and technical assistance in archiving wiki and ensuring database and wiki integrity and longevity

Significance of the project

Research into antiquarian practices is relatively undeveloped; this project will throw considerable light on the history of archaeology and the history science in the context of the early modern western world. We will make publicly available a unique and manageable set of sources for understanding the antiquarian tradition. We will also present a multidisciplinary scholarly apparatus for understanding this aspect of the history of archaeology, of science and of their social and cultural contexts. This apparatus will be open ended in the sense of allowing an unlimited number of contributions, from a simple comment on a text to a doctoral dissertation.

Our project is focused on the history of science, but its methodology, using a customized environment of participatory digital media, is applicable to any multidisciplinary research project. This will be a case study in international research collaboration using the latest of information and communication technologies, while also remaining true to long-standing traditions of collegial scholarship.

Partners and institutions

Stanford University

Michael Shanks is the Omar and Althea Dwyer Hoskins Professor of Classical Archaeology. He is a leading figure in archaeological theory and has specialized in archaeological receptions of the past. His Metamedia Lab in Stanford Archaeology Center, in its affiliation with Stanford Humanities Lab, has pioneered the use of Web 2.0 technologies in facilitating collaborative research, learning and publication.

Giovanna Ceserani, Assistant Professor of Classics, is part of the new wave of critical historiographical scholarship focusing on archaeology. She works on the classical tradition with an emphasis on the intellectual history of classical scholarship, historiography and archaeology from the eighteenth century onwards. She is interested in the role that Hellenism and Classics played in the shaping of modernity and, in turn, in how the questions we ask of the classical past originate in specific modern cultural, social and political contexts.

Henry Lowood is Curator for the History of Science & Technology Collections in Stanford University Libraries. As a PI of several projects connected with his directorial role in Stanford Humanities Lab, his expertise bridges information science, new approaches in the digital humanities as well as the history of science. Henry also offers close liaison with the range of expertise and resources available in Stanford libraries.

Paris

Alain Schnapp is the world's leading expert on the antiquarian tradition. He is also one of France's most senior archaeologists, senior founding faculty in the Institute of Archaeology at Paris Nanterre, the founding director of the French National Institute for the History of Art (INHA). With European funding Alain initiated the AREA project

that is revolutionizing our understanding of the history of archaeology by looking beyond published texts to unpublished documents and other evidence of changing archaeological practices.

Brown

Susan Alcock is Professor of Classics and Director of The Artemis A.W. and Martha Sharp Joukowsky Institute for Archaeology and the Ancient World. She is a major and influential figure in Classical Archaeology, a specialist in the landscape tradition in regional archaeological study, and is leading the Joukowsky Institute with a broad and forward looking multidisciplinary agenda for research and curriculum.

Harriette Hemmasi is the Joukowsky Family University Librarian at Brown. She oversees the five libraries that form the Brown University system and which include one of the world's finest collections of antiquarian literature. She is particularly interested in the possibilities for supporting the digital humanities through projects such as this.

Chris Witmore is a Post-Doctoral Research Fellow in the Joukowsky Institute for Archaeology and the Ancient World. His research covers landscapes in Greece and the Aegean, theories of material culture, and the implication of the Digital Humanities in Classics and Archaeology. Chris has particular expertise in the historical development of the topographic tradition in the antiquarian tradition and Classical Archaeology. He is a senior founding member of the Metamedia Lab at Stanford and helped develop its projects in participatory software.

Durham

Richard Hingley is a Reader in Archaeology and Director of the Durham Centre for Roman Cultural Studies. His research interests cover Roman imperialism and native reaction and the reception of Classical culture since the sixteenth century. Several influential articles, an edited volume and a monograph on the history of Roman archaeology have put him in a leading position in the new history of archaeology. He has recently received major funding for a research project focused on the reception of the classical past: "Tales of the Frontier: Political representations and cultural practices inspired by Hadrian's Wall" begins in 2007.

Funding opportunities

In addition to internal sources of support at both Stanford and Brown, we have already identified a number of external funding sources for our project. A new NEH/JISC initiative aims to provide major support to joint US/UK efforts at digitizing and developing research resources; we will make an application (due November 2007) for the first round of funding. European Union sources of funding are now applicable to US collaboration and we are investigating possibilities: Schnapp has had considerable success with some of these sources.