Writing a Research Paper in Archaeology

Curtis Runnels Priscilla Murray Updated: 3 August 2009

Introduction

The ability to write a good research paper is an essential skill and this handout will help you improve your paper writing skills in archaeology. Two helpful publications are W. C. Booth, G. G. Colomb, and J. M. Williams, *The Craft of Research* (2008, Chicago, 3rd edition) and *The Chicago Manual of Style* (2003, Chicago, 15th edition). The former gives practical advice on how to plan your research and write a formal paper. The latter is an essential reference for the preparation of all kinds of research papers.

Getting Started

What subject do you find interesting? What is known, and not known, about the subject? What questions remain to be answered? What would be the significance of the answers for your readers? Use your interest in a particular subject and the unanswered questions about it as a starting point to formulate a specific problem that you wish to analyze. Example: you might be interested in the Greek Bronze Age and the Mycenaeans. That is a *subject*, which is both broad and unspecific. A specific *topic* might be "Why did the Mycenaean Empire collapse?" A good topic can always be posed as a question. A possible answer to this topical question is an *hypothesis or thesis*, e.g. "The Mycenaean Empire collapsed because of a prolonged drought." Once you have formulated this sequence of subject, topic, and hypothesis, you are ready to start.

An *hypothesis* is a thesis or proposition such as "the Maya collapse resulted from an increase in population that surpassed the productive capacity of the available agricultural technology" or "the Neanderthals became extinct as the result of new diseases introduced by contact with anatomically modern humans." The hypothesis posits a cause and effect relationship between events or variables and engages the reader's interest by telling the reader what the research is about. The hypothesis guides your research and requires evaluation, explanation, and testing. A good topic and an interesting hypothesis are the heart and soul of any paper. A strong paper typically states the hypothesis at the beginning of the introduction.

Your paper should convey your interest and engagement in the subject. Do not describe other people's work or reiterate an author's arguments, and do not rely on other writers' interpretations of the sources. Evaluate all arguments and evidence yourself. Be skeptical. Challenge the arguments. Dig deeper. Try to think like a member of a jury in a trial. Think of your sources as the attorneys who are presenting their arguments for and against your hypothesis. You must reach a verdict by deciding in favor of one or the

other. Which one is right? Why? Be explicit when you explain your reasons for your conclusions. Don't be afraid to conclude that the hypothesis you began with is *not* supported by the evidence. Negative results are a productive form of research.

The Abstract

Every paper should have an abstract of 100 to 300 words identifying the subject, topic, and hypothesis. The abstract summarizes the research, the results, and the conclusions. An abstract is not a statement of what you are going to do, but what you have *done* in the paper. Tip: write the abstract twice, once before you begin writing the paper to clarify your thinking about the question or questions you are trying to answer, and again after you are done with the paper and you know how it all came out.

Structure of the Paper

The first paragraph of your paper is important. It must introduce your subject, topic, and hypothesis, discuss the significance of the problem, describe your research, and give an outline of your conclusions. The introduction must get the reader's attention and let the reader know what is in the paper. After the introduction each paragraph should follow in a smooth logical sequence. Your last paragraph is equally important because it summarizes your findings and convinces the reader that your conclusions are supported by the evidence. State your conclusions clearly in the first sentence of the last paragraph.

Other Points to Remember

Write a detailed outline before you begin your research. As you work, consult the outline frequently, adding to it, turning it from a subject outline to a sentence outline, and ultimately expanding it to full paragraphs. Once you start writing, bear in mind that one draft of your paper is inadequate. Experienced writers write many drafts, typically three or more. Include a title page and an abstract; double space everything; paginate the text; use headings and subheadings to divide the text; make sure that every citation in the text is in the bibliography and vice versa; use dates consistently and explain conventions (e.g., are you using calendar dates B.C. and A.D., or uncalibrated or calibrated ¹⁴C?); do not use slang or vague expressions ("cool" or "a lot"), double negatives, or contractions.

Keep your writing simple and use declarative sentences and direct verbs, avoiding the passive voice (e.g., "they found artifacts in the ravine" not "artifacts were found in the ravine"). When you are finished, proofread your paper to check spelling, grammar, and punctuation, paying attention to the agreement of tense (has/had), number (one/they; phenomenon/phenomena), possessives versus plurals (artifact's/artifacts), case (who/whom), and other common errors such as confusing "its" (possessive pronoun) with "it's" (contraction of "it is") or "affect" with "effect."

Cite only the references you use. Do not cite titles that you have not read or consulted. Use primary sources such as published books and articles in peer-reviewed

journals, and limit your use of secondary sources such as textbooks, dictionaries, and encyclopedias. If a source has not been subjected to peer review or editorial control, you should be skeptical of its contents. Remember that web sites, blogs, and similar sources may be unfiltered opinion and not data. Always provide sufficient detail for the reader to know where you obtained your information, and include the author, year of publication, place of publication, and specific page numbers. Specific page numbers for large books must be cited. For web sites include the author (s), date of creation, and the complete URL address.

End notes are generally preferred to footnotes, and are placed at the end of the text and before the bibliography. Citations in the text are placed in parentheses immediately following the information you are referencing. The format is "author's name-date-page numbers" (e.g., Potter 1979: 15-20). The entry in the bibliography corresponding with this citation is Potter, Timothy W., 1979, *The Changing Landscape of South Etruria*. New York: St. Martin's Press.

Figures (maps, plans, photographs, or other images) are grouped at the end of the paper, each with a number and a caption explaining the figure and identifying the source. Figures are not window dressing: each should add something to your paper. A map is useful for putting archaeological sites in context, and other images should convey information that cannot be adequately expressed in words alone. Photographs or drawings may be used to show the details of a building or an artifact being described in the text. Graphs, charts, and tables should be used sparingly. A simple line graph depicting declining rainfall in the Bronze Age may show the severity of a drought affecting the Mycenaeans more clearly than the presentation of quantitative data in a table.

When you are finished, have someone read your abstract, or the whole paper, and comment on it. Are your arguments logical? Are they supported by the evidence? Do you present only positive evidence to support your hypothesis (this weakens a paper), or do you consider negative evidence in an attempt to challenge the hypothesis (always best)?

Plagiarism

Do not commit plagiarism. Plagiarism is a serious offense. Never take credit for other people's ideas or words. Your paper must be your work entirely with your own thoughts, ideas, and words. You are responsible for creating your work from your own imagination and based on original research. It is not acceptable to paraphrase or copy the work of others. Just as you cannot cut and paste from a printed source, it is completely unacceptable, under any circumstances, to cut and paste even a word from the Internet without attribution. When you use any source it is absolutely necessary to provide a full and accurate citation of it. Anything less is a form of theft and will have serious consequences. Do not plagiarize yourself. You may not submit the same paper, or substantial portions of one paper, to more than one instructor. Every paper, in every course, should be completely original. If you have questions about the line between original scholarship and plagiarism, or if you have questions about specific practices, ask

your instructor and consult Boston University's Academic Conduct Code (http://www.bu.edu/cas/students/undergrad-resources/code).