Writing Essays in Biological Anthropology

Writing conventions in biological anthropology follow those of formal science writing, and thus may differ from requirements in some of the other social sciences or the humanities. Above all, science writing is objective rather than subjective. By objective, I mean three things:

First, science writing, and the argument that you form in your essay, must be based on objective “facts”. By facts, I don’t mean absolute truths. A fact in science can be thought of as the best current knowledge about a particular aspect of the natural world (facts may be overturned or modified at any time). A fact in the science literature in effect means an opinion, report or observation that has already been published in the primary literature - usually a peer-reviewed journal or scholarly book. When you are constructing your essay, you must support your argument or ideas with reference to objective “facts” in the literature (references will be discussed in more detail below). In this way, science writing differs from critical writing in other disciplines, say English Literature, where your argument is often based on subjective opinions and impressions rather than objective facts.

Second, science writing is concrete and unambiguous. Whereas non-science critical writing often rewards wit, humor, irony and subtlety, science writing is a dry enterprise. Because science writing is objective rather than subjective, the priority is to assemble facts into a coherent argument with as little ambiguity as possible. This means using short, simple, sentences and avoiding sub-texts and vagueness in order to make your argument as plain as possible. In contrast to non-science critical writing, you will be penalized for the use of humor, irony, sarcasm and wit. This is not because science writers have no sense of humor (some may question this) but because humor and emotive criticism usually get in the way of a clear message. Sarcasm is particularly inappropriate in science writing because it is usually used to “dis” opposing perspectives. This is bad for several reasons: 1) opposing perspectives are also based on current knowledge 2) emotive criticism is often personal, and 3) criticism should be used to challenge arguments rather than the people making them.

Lastly, science (and your essay) is not about being right or wrong, either in terms of one perspective being “correct” or from a moral point of view. Science is a contest of ideas. At any one time some ideas may be better supported by “facts” than others, but it is usually possible to build formidable arguments for each and every opposing perspective. What I’m getting at here is that you can argue any perspective you like in your essay, as long as it is supported by facts in the literature. At the same time, you are also required to respect arguments opposed to your own perspective. In terms of grading, you don’t have to try and figure out which perspective I favor and then tell me what I want to hear - my assessment will be based on how good your argument is, not which perspective you are arguing. But you will be penalized if you construct your own wacky argument without supporting references from the literature.

A Good Essay is an Original Essay

As well as being objective, I will also be looking for originality in your essays. By original, I don’t mean that you are expected to make a new scientific breakthrough, but to demonstrate that
you have read and understood the key literature on the essay topic, and then showed some creativity by adding something extra. This might take the form of:

- finding and incorporating additional sources (not specified by me in the readings) that add a new perspective or new information to the issue at hand.
- offering your opinion in the form of an argument supported by references about which side of the issue at hand you think has the most merit.

In contrast, an unoriginal essay may adequately review the literature and/or repeat an existing argument while demonstrating little evidence of creativity or critical reflection on the part of the writer. Note that originality does not mean telling me how you feel about the topic. You will be penalized for padding your essay with irrelevant comments about your emotional reactions to the essay material e.g. I really liked... I felt that... etc.

**Essay Structure**

Your essay will be divided into a title page, introduction, body, conclusion and references.

**Title Page**

The title page will display your chosen essay question. The title page with the essay question is there to remind you what it is all about. A good essay closely addresses the question. The number one error in undergrad essays is not answering the question. Read the essay question again when you are done. Does your essay answer the question, or is it tangential to the question, or worse, doesn't really address the question? If you have finished your essay and get an uneasy, queasy, feeling when you re-read the question, your essay may need more work before handing in (follow your gut instinct on this - it is probably trying to tell you something)!

**Introduction**

The introduction is the most important part of the essay. Your introduction will be one or two paragraphs long and will tell the reader:

- the subject or topic of the essay - in a science essay this will often constitute an unresolved problem (i.e. does the Earth orbit the Sun or vice versa?).
- your perspective on the subject - your angle or argument (I will argue that the Earth orbits the Sun...).
- how you are going to organize your essay to present your argument (I will first review current thinking about..., then I will argue that..., etc.).
- a brief indication of your conclusion (I will conclude that Copernicus is right and that Ptolemy is wrong...).

Once again, science essays are different to non-science critical writing in that your reader should not be kept in suspense about your conclusions. Spell out your conclusions as soon as possible in the interests of clarity and to help your reader evaluate the strength of your argument. It is not always possible to get your conclusion into the introduction but do your best; at the very least you should be able to clearly indicate the perspective that you are supporting.

**Body**

The body of your essay will usually incorporate these elements:
1) a background to the problem at issue - your background will incorporate a (brief) literature
review of each of the existing perspectives addressing the problem.
2) the main points and rationale of your own argument.

Conclusion
The conclusion is the next most important part of your essay after the introduction. Your
conclusion will be a paragraph summarizing the essential points of your argument and stating
your conclusions. The golden rule of conclusion writing is not to include any material that has
not been discussed in the body (i.e. don’t introduce any new information).

The introductory and concluding paragraphs of your essay are usually harder to write than the
body. Most people find it easier to start on the body of their argument first, then write the
conclusion, leaving the introduction for last. You will have to experiment and find out what
works best for you.

References
In science writing, your argument must be supported by previous knowledge. You are expected
to reference all of your ideas, or the published facts leading to, or supporting, your ideas. All
references will come from primary sources in the scientific literature - this means scholarly
books and peer-reviewed journals (we will discuss primary sources in class). Do not, under any
circumstances, reference websites; in practice, useful material is hard to find on the internet and
is rarely appropriate for use in an essay.

The way that your will use and present references is standardized so that anyone reading your
work (me) understands what you are doing. In my classes we will use the referencing style of the
American Journal of Physical Anthropology (AJPA). This means that when you are citing the
sources of ideas in your essay, you will copy the current AJPA citation style. Here are some
examples from AJPA articles of how to cite your sources in the text of your essay:

Examples of reference placement in the text:
A radiological study of humeri noted a temporal disjuncture in the western region as well
(Smith et al., 1992). Sealy and Pfeiffer (2000), studying femora, noted a similar pattern
among skeletons from the southern region.

Geophytes, fruits and nuts, and tortoises were among the most important food resources;
along the coast, fish and shellfish were key items (Deacon and Deacon, 1999; Mitchell,
2002).

Examples of referencing style when quotes are used:
The differences in the state of preservation of osseous remains according to individual
age and sex may bias paleodemographic analyses. As emphasized by Walker (1995, p.
40), “a logical starting point in dealing with this problem is to develop better techniques
for assessing the condition of skeletal collections.”

Wilson and Lundy (1994, p. 7) further noted “some evidence of diachronic change in the
statures of both the female and male samples, with a decrease after 3000 BP and an
increase after 2000 BP.’’

Don’t use long quotes in your essay i.e. longer than a sentence or two. Paragraph-length quotes
are often a form of “padding” where the writer is avoiding the hard work of paraphrasing the
information in the original text. Direct quotes should be short and reserved for pithy insights that
might be lost in paraphrasing.

At the end of your essay you will include a list of the references you have used. The reference
list will also follow the AJPA style. The format of the reference is different depending on
whether it came from a book or a journal. Below are examples of reference style for different
types of publications:

**Journal citation:**
analyses of the hominid ulna from Klasies River Mouth. Journal of Human Evolution
34:653-656.

**Book citation:**
Toronto: Firefly Books, Ltd.

**Book chapter citation:**
In: Cohen MN, Crane-Kramer G, editors. Paleopathology at the origins of agriculture.
Gainesville: University of Florida.

**Essay Style**
Essays are written in prose - this means without headings or lists. This might seem hard if you
are used to writing under headings and bullet points, but your writing will improve dramatically
without them.

**Grading**
Essays will be graded on a straight scale (i.e. “A” grades = 90s range, “B” grades = 80s range,
etc.). For an “A” grade, I will be looking for an original, well-referenced, articulate and well-
written essay. An unoriginal essay will review the literature and/or repeat an existing argument
with little evidence of creativity or critical reflection on the part of the writer. In this sense, a “B”
grade essay may contain all of the elements of a good science essay, but may lack originality. A
“C” grade essay may contain flashes of brilliance, but will probably be missing one of the key
elements of a good essay such as a clear introductory paragraph or sloppy referencing. One
method to guarantee a good essay grade in my class is to write a draft as early as possible and get
me to read it over well before the due date.

**Sudden-death flaws**
1. No introduction, or an introduction missing the key features described above. This sin will
result in a C as the starting point for your grade assessment.

2. Ditto for absent concluding paragraph.

3. Unreferenced work, or sections of work, will earn a C regardless of the quality of the rest of the essay.

4. Paragraph-length quotes.

5. A letter grade will be deducted for using headings or lists.

6. A letter grade will be deducted for every website referenced.

**Final checklist**

Use this checklist to increase your chance of a top grade.

**Do:**
- include a title page displaying your chosen essay question
- ensure that you have answered the essay question
- include a detailed introductory paragraph
- include a detailed concluding paragraph
- review the literature relevant to your essay question
- reference all of your ideas, or the published facts leading to, or supporting, your ideas
- use AJPA referencing style
- strive for clarity in constructing and presenting your argument

**Don’t:**
- use sarcasm or irony
- tell me how you feel about the topic
- use long quotes
- reference websites
- use headings or lists

**Good luck and enjoy your writing!**