

Dr Sullivan's Graduate Essay Guide

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 *critical* and *objective*. What do I mean by these terms?

Critical writing

Rather than merely review the various perspectives about a given topic, critical writing entails forming a specific opinion, choosing sides if you like, and building an argument supporting your opinion. In science writing, your argument must be supported by previous knowledge. This is achieved by referencing your ideas to publications in the science literature (the use of references will be discussed in more detail later).

Objective writing

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, observation etc. that has already been published in a peer-reviewed publication - usually a journal. When you are constructing your essay, you must support your argument with reference to objective "facts" in the literature. 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, 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 support from the literature.

Essay Structure

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

Title

The title of a science essay is direct and informative. If possible, include your conclusions in the title. For example use "Earth Orbits the Sun", rather than "About Celestial Orbits".

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

You all have some familiarity with references and referencing. 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. Use any referencing style that you like, but your referencing must be consistent (i.e. don't mix referencing styles). You will lose marks for sloppy referencing.

Do not use long quotes (i.e. more than a sentence). Paragraph length quotes are not appropriate – instead paraphrase what you interpret the author's meaning to be.

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 argument. In terms of a good essay, originality is all important. 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 put your own critical and creative spin on it. An unoriginal essay will review the literature and 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. A letter grade will be deducted for using headings or lists.
5. A letter grade will be deducted for every website referenced.

Final checklist

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

Do:

- use a descriptive rather than passive title
- 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 a consistent referencing style
- strive for clarity in constructing and presenting your argument

Don't:

- use sarcasm or irony
- use long quotes
- reference websites
- use headings or lists

Good luck and enjoy your writing!