

Guidelines For Writing a History & Philosophy of Science (HPS) Essay

I. Style. An HPS essay is direct and to the point. It uses simple language and does not engage in literary flourishes. Its goal is to articulate a claim and provide reasons in support of that claim in as clear and direct a way as possible.

II. Presentation

1. Begin with a title page containing the following information.

The title of your paper.

Your name.

The paper's due date.

The name of the course.

Your instructor's name.

2. Choose a title that refers explicitly to the topic of your paper (and not "Paper #1").
3. Format: 12-point font, double-space, 1 inch margins, numbered pages.

III. Content

1. **Organization.** The most important aspect of a paper is its *structure*. This is *extremely important*: A paper can make good points, but if it is not well-organized, these points will be obscured and overlooked. Divide your paper into sections, beginning with an introduction. Number each section and provide it with an appropriate section heading.

Ex:

1. Introduction
2. Why Quantum Mechanics Needs an Interpretation
3. Bohm's Theory
4. Problems with Bohm's Theory
5. Conclusion

2. **Introduction.** *Always begin your paper with an introduction.* An introduction is short and accomplishes two things. First, it tells the reader what the author's claims are; this should take only a sentence or two. Second, it tells the reader briefly and explicitly what will be said in each section of the paper to follow.

Ex:

1. Introduction

This essay is about Bohm's theory as an interpretation of quantum mechanics. I will claim that Bohm's theory provides an adequate way of describing what quantum mechanics is about. This will require addressing standard problems associated with Bohm's theory. In Section 2, I indicate why quantum mechanics needs an interpretation. In Section 3, I explain the details of Bohm's theory. Finally, in Section 4, I discuss the problems associated with Bohm's theory and possible responses.

It may happen that you are not sure what your claims are going to be, or the best way to organize and present them, until *after* you've written the paper. It thus makes sense to write the introduction last.

Warning: *Never* begin an essay with an account of the history of human thought: "Since the beginning of time, people have wondered about the nature of the infinite. For centuries, philosophers have pondered long and hard on..., etc." This wastes valuable space. Get to the point with no side diversions: State your claim, and indicate how you are going to support it in the sections to come.

3. **Body.** The remaining sections of your paper (except the conclusion) should each make one clear point; it should be obvious, from the structure of your paper, how that point supports the thesis of your paper. Details belong in these sections, not in the introduction.

4. **Conclusion.** Use a conclusion only to provide a brief summary of what you have accomplished in your paper. It should be a reminder of what you have claimed and how you have supported it.

IV. Plagiarism and the Use of Sources

Plagiarism is the act of presenting another author's written work as your own. It is the most serious offense a writer can commit. It is tantamount to cheating on a final, or faking data in an experiment. *If you engage in this act, you will receive an F for your essay.* Beware of copying online essays or text. It is *extremely* easy to catch this. It is TCS policy to submit all papers to Turnitin. This is an online service that checks an essay against a database consisting of thousands of websites and student essays on an extremely wide range of topics. To avoid plagiarizing, simply follow the steps below:

1. Your essay *must* contain a **bibliography** that lists all sources (books, journal articles, websites, *etc.*) you make use of. *You cannot write an HPS essay without reference to any sources.*
2. All **quotes from sources** must be referenced to those sources. (Think of this as providing evidence to the reader that the quotes you're providing really are attributable to the author in question.)
3. All **claims you attribute to authors** must be referenced to their sources. In describing an author's claims, cite the passage of the source where they make those claims. (Think of this as providing evidence to the reader that these really are the claims made by the author.)
4. **Do not list lecture notes in your bibliography. Do not cite lecture notes in the body of your essay.** Lecture notes should only be used as an aid in identifying the claims of an author. You should then identify the passages in the relevant text where the author makes these claims, and cite these passages.
5. **Beware of using online sources.** The internet is unregulated and lacks a universal means of professional review. Any website that has not been explicitly approved by the instructor should not be used as a source. In particular, *do not use Wikipedia as a source.* Wikipedia should be used only as a guide to legitimate (professionally reviewed) sources.
6. To cite a source, you can use the citation method you are most comfortable with. Here are examples of the method of parenthetical reference:

To cite a quote: Immediately after the quote, enclose in parentheses the author's name, the copyright date of the source, and the page number(s) of the passage where the quote appears.

Ex: Your essay reads:

For Hobbes, "war" means more than just physical conflict: "For War consisteth not in battle only, or the act of fighting, but in a tract of time wherein the will to contend in battle is sufficiently known" (Hobbes 1651, pg. 2).

Your bibliography should include the following reference:

Hobbes, T. (1651) "Of the Naturall Condition of Mankind, As Concerning Their Felicity, and Misery", in T. Horowitz (1996) *Social Philosophy*, pp. 1-3.

To cite a claim you are attributing to an author: Immediately after the author's name, enclose in parentheses the copyright date of the source, and the page number(s) of the passage you are citing.

Ex: Your essay reads:

Rynasiewicz (1996, pg. 305) contends that the hole argument is a version of Quine- and Putnam-style inscrutability of reference arguments.

Your bibliography would include the following reference:

Rynasiewicz, R. (1996) 'Absolute versus Relational Space-Time: An Outmoded Debate?', *Journal of Philosophy* 93, 279-306.

Note on online texts. To cite a passage from an (approved) online text, in general you will not be able to refer to a page number. You will have to identify the passage by other means. For instance, you may refer to it by means of a chapter, a section, and a paragraph number. (This may require you to sit down and count the paragraphs in a particular section of a chapter.) The important point is that you provide a means for the reader to identify the passage in the text you are citing.