# **Research Paper Guide**

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This document should serve as a general guide for organizing and formatting your research papers, rather than as a rigid template. In all cases, you need to use your judgment about how to clearly and effectively communicate your argument.

These guidelines will apply to your paper in different ways. The best "guide" for your paper is a research article published in the journal that you found most helpful in your work, e.g., Annals of the Association of American Geographers; Comparative Politics; cultural geographies; Political Geography; Post-Soviet Affairs, Social and Cultural Geography, etc. If you are writing a literature review, you may wish to use a "progress report" published in Progress in Human Geography as a guide.

### A research paper is an argument based on theory, evidence, and interpretation.

Your thesis should be a short statement of your argument, and should include both your research question and your answer to it. It should always be placed within a theoretical framework.

The evidence are the facts, data, or materials that you gathered in the course of your research. In some cases, you will obtain this material yourself directly, *e.g.*, through interviews, surveys, archival research, case studies, or field sampling. In other cases, you will use an existing body of data (government statistics, institutional documents, etc). In the latter case, you should transform or combine the previously gathered information in an original fashion. For literature reviews, scholarly books and articles are your "data."

In your interpretation of the evidence, show how the data does (or does not) support your thesis or expectation, and why this is expected or unexpected based on previously published research.

Specific questions produce better papers. A topic such as "What is the nature of social memory?" is far too broad, and you could not hope to address it adequately in 20 pages. In contrast, a more specific question such as "What political dynamics drove changes in monuments in Moscow during the 1990s?" could produce a very fine manuscript (Style II). A good Style III paper might address a specific question such as "In their analyses of national monuments, how have scholars distinguished between ethnic and civic national identities?"

#### **Contents**

I first discuss basic formatting and citation practices (page 2), and then discuss three common styles of social science research papers (pages 3-6). *Prof. Forest's Short Guide to Good Scholarly Writing* is on pages 7-9, typical grading criteria are summarized on page 10, and a template for the first page of research papers is on page 11.

# **Formatting**

- 1" (2.5 cm) margins.
- page numbers.
- double spaced lines.
- a standard font, *e.g.*, Times 12 or Times New Roman 12. (This page is written in Times New Roman 12.)
- a header with a title, your name, the name of the class, my name, and the date. (See last page for a template.)
- a separate bibliography or works cited section.
- a staple in the upper left corner. Do not use plastic cover sheets or paper clips.

Follow all but the last rule if you submit your paper as a pdf file.

### Citations and bibliographic references

Use the author-date system of citations in your paper, and include a bibliography. You should use the APA style guide prepared by the McGill Library.

## Plagiarism/When to cite

Please carefully review the plagiarism guidelines on the McGill Academic Integrity website:

http://www.mcgill.ca/students/srr/academicrights/integrity

Some very general rules of thumb:

- All work must be your own. Never present or *appear to present* someone else's words or ideas as your own. If in doubt, use quotation marks and/or a citation.
- Use quotation marks and a citation anytime you take three or more words directly from another source.
- Use a citation anytime you use an important idea or observation from another source, even if you are not using the exact words. For example, you need to provide a citation if you paraphrase (summarize) an argument or section in an article.
- Never cut and paste anything you find on the web. Although the web can be a valuable source of primary documents and there are ways to cite web pages properly, it is easy to make mistakes.

If you have questions about plagiarism, and the McGill guide does not answer them, do not hesitate to ask me

### **Three Styles of Research Papers**

The organization of your research paper should follow one of three basic styles - these should look familiar to you after reading journal articles.

- **Style I (Hypothesis Testing)** is appropriate when you test a set of hypotheses with a specific type of data, *e.g.*, for many topics in the physical and the positivistic social sciences. *Style I projects are generally used to demonstrate cause and effect relationships*.
- Style II (Analytic or Interpretative Narrative) is appropriate where you are offering an interpretation, qualitative evaluation, or historical analysis of social or cultural phenomena. Style II projects are generally used to discuss the construction of meaning or historical developments. Some papers -- often, for example, case studies -- are a mix of Style I and II.
- Style III (Review Essay) is used to evaluate a theoretical, philosophical or empirical controversy in the scholarly literature. Style III papers offer an original interpretation or commentary on existing literature but do not analyze original data.

### **Style 1: Hypothesis Testing**

**Introduction.** Clearly state your thesis, and your expected results and/or hypotheses. What is the theoretical or empirical "gap" in the literature that your study fills?

**Literature review and theoretical framework.** Summarize and discuss previously published research relevant to your research project. Show how your research builds on the work of others. Use this section to justify the significance of your question - why is it something that other scholars would find interesting?

**Methodology and data.** Describe the methods, techniques and/or research design that you used. Explain how you collected your data, and/or the type of data you used. Give enough detail so that one of your peers could duplicate the study. Show that your methodology can actually answer the questions you ask. Also, show how your method comes from the scholarly literature by citing and discussing studies that use the same or similar methods.

**Results and Analysis**. What are your data? "Digest" your data. What do they mean? What are the important patterns?

**Discussion**. What is the significance of your results for your hypotheses and research questions? Are these results expected or unexpected? If expected, discuss how your results extends knowledge about your topic. If unexpected, discuss the possible reasons. Do your results suggest flaws in previous studies or theories? What new or alternative theory might explain your results?

**Conclusion**. Return to the "big picture," restate your expectations and results. Discuss shortcomings of your study and directions for future research, etc.

### **Style II: Analytic or Interpretative Narratives**

**Introduction.** State your research questions and their significance in terms of the scholarly literature. Briefly demonstrate the broader importance of your questions; what is the theoretical or empirical "gap" in the literature that your study fills? Outline the themes, categories and theories that you will use analyze your research material. What are your conclusions?

**Literature review and theoretical framework.** Summarize and discuss previously published research relevant to your research project. Show how your research builds on the work of others. Use this section to justify the significance of your question in more detail.

**Methodology and data.** Typically, this section is less formal than in Style I projects, because your "data" is often based on documents, interviews, or artifacts. Nonetheless, you still need to describe your research materials, and explain how you collected them. Give enough detail so that one of your peers could duplicate the study. Show that your methodology can actually answer the questions you ask. Also, show how the approach used in your study comes from the scholarly literature by citing and discussing studies that use similar methods.

Analysis/Results/Discussion. Unlike Style I projects, there is seldom a one-to-one correspondence between your "results" and a "hypothesis" because you are not trying to demonstrate single cause and effect relationships. For example, you might offer several interpretations of the same set of evidence using a number of different themes or theories. Or you might analyze a set of social or cultural relationships through their historical developments or underlying geographic principles.

As with Style I projects, you need to explain the significance of your findings. Are your findings expected or unexpected in light of previously published studies? If expected, discuss how your result extends the knowledge about your topic. If unexpected, discuss the possible reasons. What new or alternative theory does your work suggest?

**Conclusion**. Return to the "big picture," restate your expectations and results, and how these relate to your theoretical framework. Discuss shortcomings of your study and directions for future research, etc.

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### **Style III: Review Essay**

"Review" is a somewhat misleading term because your paper should not be simply a list or catalogue of current work on a particular issue. As in Style I and Style II projects, you need to craft an argument that includes specific claims and conclusions. The journal *Progress in Human Geography* publishes "progress reports" that you can use as models for your paper. In addition, nearly every research article you read will have a "literature review" section, typically right after the introduction. A full-blown review essay is simply an extended version of such reviews.

**Style IIIA.** The most common form of literature reviews identifies, describes and evaluates a current scholarly controversy about a particular question or issue. Such conflicts can be methodological, theoretical or empirical in nature. For example:

- **Methodological:** What is the best way to count the number of undocumented workers in the United States? Do different kinds of workers require different approaches?
- **Theoretical:** What is the best way to define undocumented workers? What is the history of the concept? How do different theoretical perspectives define this group?
- **Empirical:** How many undocumented workers are there in the US? How has this number changed historically?

Typically, you will need to address all three in one way or another, and part of your argument will probably involve separating the different issues and showing the linkages between them.

Another form of "literature review" is an extended critical discussion of a fundamental theory or concept, and is common in political theory and the philosophy of (social) science.

**Style IIIB**. Alternatively, a literature review can identify and describe a conflict between the "conventional wisdom" and the scholarly view of a particular question. This can be tricky because conventional wisdom is wrong about so many things. You should pick a nontrivial case where the popular view is not obviously wrong. Further, you need to find some way to identify the convention wisdom about a particular issue.

For both kinds of literature reviews, the issue you examine needs to be "big" enough so that there is a genuine scholarly controversy, but "small" enough to have a cohesive focus.

**Introduction.** State the basic conflict in the scholarly literature, or the conflict between the scholarly and popular views. Briefly demonstrate the broader importance of your questions. Why does your question have important consequences? Why is this question important to non-specialists? Outline the themes and categories that you will use to analyze the controversy. What are your conclusions?

**Background and Framework.** Situate the specific conflict you are examining in a broader historical, theoretical and/or political framework. Show why the issues you are examining have broader consequences for scholarship and/or policy. Has this always been an important issue? If not, what has changed?

Analysis/Results/Discussion. There are many different ways to organize your discussion. You can organize it historically, showing how the views on a particular issue evolved over time. If you identify two competing viewpoints (Sides A and B), you might first describe and explain the position of Side A on Points 1, 2 and 3; and then offer the same treatment to Side B. Alternatively, you might describe and contrast the position of Sides A and B on Point 1, then on Point 2 and finally on Point 3. In either case, you should finish by discussing the merits and weaknesses of each side on the three points in question. Which side offers more compelling arguments? Why is one more convincing? What is the source of the disagreement? If you are evaluating the conventional wisdom, why are the popular and scholarly viewpoints different?

What new or alternative theory does your work suggest? Are there ways to resolve the scholarly controversy through new (empirical) research, or refinement of existing theories, etc? If you are examining a fundamental concept like representation, discuss the impacts of this concept on policy issues (like voting rights.)

**Conclusion**. Return to the broader consequences, and restate your basic conclusions. Discuss shortcomings of your arguments and directions for future research.

### Prof. Forest's Short Guide to Good Scholarly Writing

#### **GENERAL PRINCIPALS**

Good writing is clear, direct, and simple.

No one is a good writer, but one can become a good *re-writer*. Good writing requires *multiple drafts*, *editing*, *and proofreading*.

Good writing, like any skill, requires practice. Write something every day, and cultivate good writing habits even when writing email and the like.

Use as few words and sentences as necessary to convey your arguments.

Write in the active voice.

Avoid jargon, and learn to recognize the difference between jargon and necessary technical terms.

Organize papers so that each element of your argument follows logically from the previous one.

Provide "sign posts" and explain the organization of your paper in its introduction.

Buy and use a standard manual of style, such as the classic *Elements of Style* by Strunk and White.

#### SPECIFIC TIPS AND EXAMPLES

#### Be concise

Writing multiple drafts is typically the key to eliminating wordy constructions and unnecessary phrases. Consider the sentence below and the three successive revisions. Any of the revised sentences are acceptable, but note that the last version is **one-quarter** the length of the original.

**Wordy:** I seek to show that a demonstration of Smith's theory can be found in the data collected for this study. (20 words.)

**Concise:** This study demonstrates the validity of Smith's theory. (8 words.)

**Concise:** I demonstrate support for Smith's theory. (6 words.)

**Concise:** The data support Smith's theory. (5 words.)

### Active vs. passive voice.

Students often confuse the active voice with use of the first person ("I"), but they are not the same (see next tip).

The passive voice typically uses a form of the verb "to be" combined with an action verb, typically in the past tense. The classic example is:

**Passive**: The dog was kicked by the boy.

**Active**: The boy kicked the dog.

In scholarly writing, the passive voice often obscures cause and effect relationships, and produces excessively wordy prose. Consider the differences below:

**Passive**: Many students have been told not to use the first person in formal writing. **Active**: High school teachers tell students not to use the first person in formal writing.

**Passive**: The increase in erosion was caused by greater runoff due to deforestation.

Active: Deforestation led to increased runoff, which caused more erosion.

**Passive**: As is shown by Table 1...

**Active**: Table 1 shows...

Note that in the first example the passive construction eliminates the active agents – high school teachers – from the cause and effect relationship described by the sentence.

In the second example, the passive sentence includes all of the causal agents, but the relationship between them is much clearer in the active sentence.

In the third example, the active construction takes half as many words as the passive sentence.

#### Science writing and the passive voice

Some journals and some disciplines (particularly in the physical or laboratory sciences) prefer the passive voice because it emphasizes the receiver of action (the object of study) rather than the agent (the researcher). This is a matter of disciplinary convention and should be respected when appropriate. If given a choice, however, write in the active voice.

Consider the following two examples, either of which would probably be acceptable in a scientific journal.

**Passive**: The plants were administered four different levels of nitrogen fertilization, in addition to a control, in a multiple plot experiment.

**Active**: The research design used a multiple plot method with a control and four different levels of nitrogen fertilization.

### Use of the first person.

Some journals forbid the use of the first person ("I"), and that often requires convoluted and/or passive constructions (see above). When you have the choice, the first person allows you to write more clearly and directly. Consider the examples below:

**Third person**: The research involved interviewing 50 students.

**First person**: I interviewed 50 students.

**Third person**: It is argued that...

**First person**: I argue that...

**Third person**: This paper concludes that...

**First person**: I conclude that...

The first person should never be used to give a personal opinion or perspective except in **extremely** rare circumstances. Avoid the use of the first person that merely adds words to your sentences.

**Inappropriate**: I think that the evidence demonstrates...

**Appropriate**: The evidence demonstrates...

**Inappropriate**: I feel that the methodology is appropriate because...

**Appropriate**: The methodology is appropriate because... (followed by citations or

evidence).

# Organization and "sign posts"

In your introduction – typically at the end – you should provide a concise outline of your paper. For example,

I first review the literature on *camellia sinensis* cultivation, and on organic farming techniques. I then explain the use of multiple plot comparison to evaluate agricultural production, followed by the results of my five field trials. Using ANOVA analysis, I show that organic techniques do not increase *c. sinensis* yields compared to non-organic methods, but demonstrate that they may increase crop quality. I conclude that organic techniques may therefore be most appropriate for high-end tea cultivation.

Note how this paragraph summarizes each of the five sections (literature review, methodology, results, analysis, and conclusion) in a single sentence or phrase.

You should have such a paragraph in the introduction to your paper or thesis, and in the introduction to each section or chapter.

### **Grading guidelines**

While there is no magic formula for writing an A paper, these guidelines describe my basic standards. Please note that this list is not exhaustive. *There are only a few ways to write a great paper, but many ways to write a bad one!*<sup>1</sup>

A papers: The paper 1) has a clear, creative and original thesis that is well supported by the articles; 2) analyzes the articles, arguments, and data in a sophisticated manner and does not misinterpret or mischaracterize any of them; 3) devotes appropriate attention to each article, and neither relies too heavily nor gives short-shift to any one; and 4) clearly demonstrates that the student understands the articles and has given the paper considerable thought. The paper is 5) well organized, and 6) the writing is clear, concise and in the active voice. 7) The prose should be polished and free of spelling and grammatical errors. 8) Citations and the bibliography must be correct in both form and content. 9) The paper uses the correct format (title page, font, margins, etc.)

**B papers** may include all of the elements of an A paper, but executed less well. Such papers, for example, may have a clear thesis, but it may be unoriginal or obvious. Conversely, a B paper may do most things well, but may be lacking in one critical element. For example, an otherwise fine paper may focus on just a few articles and merely cite others in passing. (Such a paper would need to do everything else perfectly to receive a B.) Poor organization can sabotage a creative and thoughtful analysis.

C papers may lack two critical elements discussed above, or may have some major flaw, such as using too few articles. C papers may include all of the elements of a good paper, but are poorly executed as a whole. Significant problems with organization, clarity, spelling, etc. can reduce a B paper to C.

**D papers** may lack three or more elements, or may have a highly significant flaw. D papers may include all elements but in very poor form. Missing or clearly improper citations will immediately place a paper in danger of earning a D. Papers displaying obvious lack of thought, attention, or intellectual investment will earn low grades.

**Failing papers.** Papers will receive failing grades if they lack four or more of the important elements, or if they are prepared in an exceptionally poor manner. Papers that obviously pay no attention to the instructions or that fall outside the boundaries of the assignment will receive failing grades.

<sup>&</sup>lt;sup>1</sup> Sound familiar? See the first line of *Anna Karenina* by Leo Tolstoy.

Your Title Here: A Short, Pithy Description of Your Paper

Name

Course number

Prof. Forest

Date

#### Introduction

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