Writing a Successful Research Paper
A Simple Approach

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Preface

This pamphlet summarizes the approach to teaching writing of the Making of the Modern World (MMW) program of Eleanor Roosevelt College, one of the six undergraduate colleges of the University of California, San Diego. MMW is a six-quarter (two-year) core sequence that covers world history and civilizations from the evolution of human beings to the present. It is a multi-disciplinary course taught by faculty members and graduate students from nearly all the departments in the humanities and social sciences. In its second and third terms, the sequence incorporates an intensive two-term writing program. The first term of the writing program (incorporated into MMW 2) aims to teach students to write expository essays. The second term of the writing program (incorporated into MMW 3) aims to teach them how to write research papers. They write ten-page research papers in MMW 3 through 6. This pamphlet presents the way we teach our students to write the research papers.

I played a role in founding the college and MMW in the late 1980s, and I have been teaching in the program for many years. Since its early days, the directors and faculty of the program have developed and refined the writing program, especially the segment that teaches students to write research papers. When I was Dean of Arts and Humanities and Associate Vice Chancellor at UCSD, from 1983 to 1994, I was responsible for overseeing the writing programs of all the undergraduate colleges – then five in number – and I often represented UCSD in university-wide meetings on the writing programs. I came to view the program in Eleanor Roosevelt College as the best one in the university. Its superiority consists both in its emphasis on writing research papers, which is the kind of assignment students will get in upper-division courses, and in its hands-on, step-by-step approach to teaching. Students in MMW 3 do not just receive an assignment and some advice about how to carry it out. They must work with their discussion leaders and faculty to formulate a research question, which the discussion leader must approve, and then submit research logs, a prospectus for the paper, and a rough draft before handing in the final version. They receive a substantial response to and a grade for each of these products of the process, so the grade for the research paper is a composite grade.

I could not have written this guide without the support and contributions of Jackie Giordano, who has for many years been the coordinator of the intensive writing program in MMW 2 and 3. During the seven years we worked in the program together, Jackie gave me an understanding of its structure and goals. When I fully understood the program's approach and methods, I came to believe that the program should be made available to students in other colleges of UCSD and beyond. Jackie and I started working on the guide together, but her many commitments made it impossible for her to take responsibility for co-writing it. Nonetheless, I have consulted her often, and she has made numerous contributions, including providing me with the Prospectus Worksheet. The idea of the levels of arguability of questions, an important element in determining what kinds of questions are suitable for research papers, came from her. The pamphlet could not have been written without her help, and I am deeply grateful to her.

In the later stages of writing, I have relied on Matthew Herbst, the Director of MMW, and Heidi Keller-Lapp, who is responsible for managing the second-year of the sequence. Matthew and Heidi have broad experience in MMW, and their suggestions for improving the pamphlet have

been very helpful.

My son Adam, a professor of law who has heard my opinion of his writings too long and too often, read a draft of the pamphlet and made valuable suggestions; as they say, turnabout is fair play. Finally, my wife Peggy read a draft of the pamphlet, and, as she did when she read my dissertation decades ago, brought her outsider's sensibility to bear on the academic curlicues of my prose and on the organization of my presentation. She knows how to deliver a strong critique and encouragement at the same time; it's magic. I couldn't do much without her.

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Introduction

Students often regard the assignment to write a research paper as a daunting task. This pamphlet aims to show you that, if you break down the process of finding a topic, doing research on it, and writing the paper, you will be able to do the assignment well. Writing a research paper is actually pretty straightforward and simple. And, it involves intellectual skills that nearly everyone has been using since they were children. Those skills include making an argument based on evidence to persuade someone –a parent, teacher, coach or other authority figure – that your answer to a question is good and sufficient. "Why is your brother or sister crying?" "Why don't you have your homework?" "What were you thinking when you threw the ball to first base instead of home?" are questions that require fast thinking and slick talk. You have to come up with an argument supported by evidence to persuade the one putting you on the spot that you are guiltless or what you did was excusable. "He took my ball, and I took it back. So he cried." "We had to take my sister to emergency room, so I couldn't get my homework done." "I thought there were two out, so getting the guy at first would end the inning."

You do something similar in a research paper. You answer a question and support it with an argument based on evidence that you have found through research. You want your reader to accept your answer as right or at least plausible and interesting, resulting, if not in exoneration, then in a good grade. So, this pamphlet will help you translate the skills you already have into the ones needed to complete an assignment to write a research paper.

These skills will serve you in any course you take in the university. In all fields of knowledge, you do research to answer a question. Scientists do experiments or make observations to answer questions. Humanists and social scientists do research in libraries or through surveys and interviews to answer questions. The techniques and settings for the research may differ from one academic discipline to another and one project to another, but the basic intellectual process is the same. So, an approach to writing a research paper that rests on the notion that research aims at answering questions is an approach suitable to nearly all intellectual disciplines.

One of the myths about research papers is that to write a good one you have to get an inspiration or an epiphany. The myth seems to suggest that when the light suddenly goes on the whole paper will be laid out before you; you will be able to write it as if you were on automatic pilot. Any experienced student, like your teachers, will tell you that "sudden understanding" comes only after you've done a lot of work. You are answering a research question; you do research to gather evidence to answer the question; little by little, as you gather evidence, your mind organizes it into categories; then you sit back and survey what you've found; at that point you might see a clear path to an answer to your question that you can support with an argument about the evidence you've collected and organized. When the pieces fall into place, you may feel that a light has gone on. In fact, the understanding you now have rests on all the work you've done collecting evidence and thinking about the question and its possible answers.

So, writing a research paper is just another job. You have an assignment with a due date; you have a task to complete. Like any job this one requires work to get it done. The work is not difficult, and it can be great fun. Doing the work requires a plan of action and the discipline to carry it out. This pamphlet gives you a plan; you supply the discipline.

When you receive a paper assignment, you know the scope of the job you have to do. You have to write a paper of a certain length, and you have a fixed amount to time in which to do the research and to write it. The plan in this pamphlet breaks down this job into a number of steps that can be fitted to a timeline leading from the day you get the assignment to the day you have to turn in the paper.

In introductory courses, teachers often give you the topic of your paper, but they rarely tell you what question to ask and answer about that topic. (When teachers give you the question, they are in effect giving you an exam, not a paper assignment; you just have a lot of time to complete your answer.) Above the introductory level, assignments usually require you to find your own topic, specifying only that it be suitable or relevant to the subject of the course. This guide assumes that you have to define a topic yourself. It guides you through the process of doing that and then shows you how to formulate a research question. It also gives you advice about taking notes on what you read, on organizing what you discover through research, and on constructing an argument. You'll see that the work of writing a research paper can be done well by anyone with the skills needed to succeed in a college preparatory or a college program.

What are the characteristics of a good research paper? The quality of a paper depends on many characteristics—the quality of the question addressed, the quality of the argument made to support a thesis (the answer to the question), the quality and amount of research done to find evidence that will support the argument, the persuasive use of the evidence, the quality of the writing, and the care taken in making the text presentable (spelling, punctuation etc.). An excellent paper has a sound thesis and demonstrates that you have done a substantial amount of work. You cannot do the work in a few days; you need to start early and to follow a schedule.

The work plan for writing a research paper starts with a broadly defined research area or topic from which you will select a specific subject that interests you and that meets the requirements of the assignment. You narrow the focus of your topic to the appropriate scope by looking for a specific topic in a general one. After choosing a general research topic, you begin reading relevant scholarly works. In a process described in Chapter 1, you look for a topic suitable to the length of the paper you have to write and to the amount of time you have to do it. Reading critically is crucial to defining a topic. Chapter 2 gives you some guidance in that set of skills. The process leads to the formulation of a research question, covered in Chapter 3. Once you've reached this stage, your research becomes focused on finding the evidence needed to answer the question and on scholarly works in which the authors tried to answer the question or part of the question. As you proceed with this work, you will usually revise your question in response to what you discover. Chapter 4 deals with this process of refinement. Then, you sit back and try to put things together for an answer to your question. To do this, you write a tentative answer to your question (a working thesis) and start to construct an argument and line up the evidence

behind it. Chapter 5 guides you through this stage of the work. Chapter 6 deals with the questions, "What's the best way to use evidence?" and "When do you have enough evidence?" When you have constructed your argument, you are ready to write a first draft of the paper. Chapter 7 gives you a rough draft worksheet and advice about this first stage of writing. Chapters 8 and 9 take you through the processes of revising the rough draft and then polishing the paper for submission.

Read through this short guide before you start your work on your assignment. A perusal of the whole guide will give you an overview of what you have to do. Then, you can refer to individual chapters as you proceed both to remind you of your tasks and to keep you aware of where you are in the process. You write term papers under time pressure; we hope that this guide helps you keep on time and do each task in as orderly a way as possible in the usually messy and chaotic environment of an academic term.

Synopsis of the Program and Timetable

As soon as you receive the writing assignment

1. **Find a research topic.** Start with a broad topic within which you will expect to find the narrow topic for your paper. (Chapter 1)

2. **Start reading** books and articles on this topic. As you read, note (in writing) the topics that particularly intrigue you and all questions that occur to you about those topics. **Take notes as you read**. When you find texts relevant to your topic, photocopy them or print them out. **Record the complete citation information for each text**. (Chapter 2)

Six weeks before the paper is due

3. **Formulate an open-ended question**. Stop and consider what you have found. Look over all of the texts and notes that you have accumulated. You will see several possible topics; choose one or two to read on further. When you have settled on a topic, formulate a question that you would like to answer in your research paper. This question will focus your work, which now aims to answer the question. (Chapter 3)

4. **Return to reading**. This time, focus on texts that provide information directly relevant to your research question. As before, photocopy (or save electronically) all relevant texts, with complete citation information. Annotate the relevant parts of each text. **Stop and Reflect**: When you have learned enough about your topic that you start to feel burdened by the weight of information, stop and reflect on what you have found out. Write some pages of notes and commentary on your ideas. Make sure to note all potential answers to your research question. Revise your question if you find that your research does not lead to an answer to your original question. This process of reading, reflecting, and sharpening your question is a cycle that is repeated for as long as you have to do it. You continue to read, reflect, and sharpen your question until you need to move on to the writing of a rough draft. (Chapter 4)

Three weeks before the paper is due

5. **Write down a tentative answer to your research question**. Your tentative answer is your working thesis. Sort all of your notes, commentaries, photocopies, and so forth by sub-topic or category of evidence. Arrange the categories in the order that will be most effective for arguing your thesis. When you have put your evidence in order, you have the skeleton of your argument. Assess whether you have enough evidence to support your argument. (Chapters 5-6)

6. **Write a complete rough draft**, including a works cited page (or pages), that answers your research question by integrating all the results of your research, including your summaries,

notes, and reflections. (Note: if you have not already studied the style sheet that many programs provide as part of the paper assignment, do so before you start writing your first draft. The style sheet specifies how you should cite references, present your bibliography, set your margins etc. You could lose grade points if you do not follow the specified style.) (Chapter 7)

Two weeks before the paper is due

7. **Revise your rough draft**. Print out your rough draft and put it away for a while (or turn it in, if you are required to do so). After several days, thoroughly revise the draft for organization, clarity, and explanation of evidence. Delete unnecessary sections. Note where you need to add more evidence or explanation. Where necessary, do more research and provide more support for the weaker parts of your argument. If your instructor or peers have commented on your rough draft, make sure to incorporate or at least deal with their suggestions as you revise the draft. Make sure that you have cited all of your sources and that your "works cited" page is complete. (Chapter 8)

One to two days before the paper is due

8. **Copyediting and final revision**: Revise your paper for spelling, punctuation, grammar, and other sentence-level concerns. (It often helps to read the paper aloud, which makes you aware of awkward sentences and misused words. Note also that spell-checkers in computer programs will not highlight words that are in the dictionary but are the wrong words in context.) Print out the paper. Give it one last reading to make sure that everything is correct. (Chapter 9)

Congratulations: you have just successfully written a research paper.

Chapter 1
Finding a Research Topic

Getting started – Choosing a general topic

Many students see the choice of a topic as a big obstacle. They have to write a paper in a field that is not their major interest and don't know how to start. When the teacher has left it to you to find a topic, you have the opportunity to write on a fairly wide range of subjects. If you are taking a course on ancient Greece, you can't write on modern France, but you might be able to persuade the faculty member that a paper on modern French studies on some aspect of ancient Greek culture would be acceptable.

So, start to look for a topic by thinking about your own interests. Are you interested in economics? There are often paper topics that deal with the economics of a period, a region, even in the way a literary author portrays or uses economics in a story. Are you interested in biology? The history of diseases or the state of knowledge of biology and disease might provide a good topic. In history, literature, sociology, and anthropology courses, and in many other fields, the opportunity to pursue your particular disciplinary interests is there. So, start looking for a topic by considering the subjects that interest you.

If you are using a textbook in the course, you could use it to start your search for a topic. Peruse the chapter and sub-chapter headings. When you find something that interests you, read it and see if the author's bibliography gives you leads to other works that would get you deeper into the subject. When you have a general idea of what might interest you, look in the library's subject catalog for titles that seem relevant and interesting. I have more to say on using the library later in this chapter.

The topic should be pretty broad so that you can read a variety of interesting materials. If the topic is too narrow, you might not find much written about it. Students often pick a topic that interests them but on which very little scholarship has been done or on which the existing scholarship is in a language they do not know. By choosing a broad topic, you maximize your chance of finding something interesting, possible, and substantial to work on.

Examples of general topics:

Women in 18th-century China

Social class and race in American (or European) cities

Adult literacy

Church communities and social class

Music in Classical India

The short stories of Joyce Carol Oates

Short stories published in *The Atlantic Monthly* during the 1930s

Food customs in Amazonian culture

Voting patterns in cities and their suburbs

Economic expansion in T'ang Dynasty China

Remember: You are looking for a topic that interests you and meets the criteria that the faculty member set in the assignment. Start from your disciplinary or subject-area interests – science, engineering, literature, visual art, law etc. – and consider what general topics relating to your interests fit the course you are taking. The civilizations of ancient Mesoamerica had technology, and there are many good questions to investigate relating to it. There were artists in nineteenth-century Japan and many questions about what influenced their style and techniques or about the tastes of their patrons and audiences. You will do your best work when you work on topics that reflect your interests.

Finding your paper topic within the general topic

When you have an idea about what general topic you wish to work on, you should begin gathering information on it. Today, many people start looking for information on the Web. However, the Web has drawbacks as a source. First, most of the information on the Web is in short articles, which will not give you the kind of broad overview you need. For example, Wikipedia articles tend to be brief and focused on specific subjects. (Moreover, you don't know the identity of the author, and the articles often contain wrong or partial information.) Thus, starting on the Web might get you some very basic information about some aspects of your topic, but just using the Web will often give you a fragmented body of information of uncertain accuracy or value.

Finding a recent general book on the topic is the best strategy for getting started. The book will give you an overview and a slew of facts about your subject – when things happened, in what order, who did them etc. The author will have organized the material into a coherent narrative or analysis from which you can get a grasp of the subject as a whole, and the author will have done a lot of scholarly work for you. First, his or her bibliography will be a trove of resources for your project. Just reading the titles of the works the author used will provide you with leads to where to look next. Second, the author's footnotes will be full of references to books, scholarly articles, and, perhaps, web sites tied to the particular points he or she makes that you may want to do some more work on. The footnotes add a great deal to what the bibliography will have taught you.

Your job at this stage is to find a specific topic within the general one that interests you. A big topic is composed of many small topics, and as you read you should be looking for a few subtopics that catch your eye. The thing most likely to snag your attention is a question about a subject. The author will write something that does not satisfy you; you want to know more; or something the author writes does not quite make sense. When a question occurs to you or you get an urge to know more, you have an opening to a potential topic for your paper. You will find that questions occur to you at critical points in a scholar's work – points where the author explicitly disagrees with another scholar (which indicates that the point is controversial), places where the author changes direction (usually by using words like "however," "but," and "although"), and places where you think the evidence cited to support a point doesn't really do so.

You are looking for a question about your topic, not just a topic. You may be interested in a topic and want to read about it, but you do not have the basis for a research paper until you have a question you want to answer. You do research not just to collect information but to advance a position or thesis, which is the answer to a question. Chapter 3 will introduce you to different types of questions, but the basic point is that you are looking for a question that you can't answer by simply looking in a reference book or Wikipedia. A question such as, "When was Abraham Lincoln elected to the Illinois Legislature?" is of no use; you can answer it by looking in an encyclopedia. So, you are looking for a question that cannot be answered so simply, such as "What did Lincoln hope to accomplish in the Gettysburg Address?" That question will take you to the text of the Address itself, to what we know about how and when Lincoln wrote it, to why he thought it important for him to go to Gettysburg to deliver the speech, to questions about why he made it so short when his contemporaries were in the habit of giving speeches that lasted more than an hour, and so forth. On this topic, and its subtopics, you'll find a great deal of scholarly work and many different opinions. This kind of open-ended question is perfect for a research paper.

Finding sources

You probably know how to search the Web. You type a search term into a search engine and then sift the hundreds or thousands of responses you get. Some will be relevant, but most will not. If the search term was reasonably specific, the items that come up at the top of the list are likely to be the most relevant to your interests. By defining your search terms, you impose order on what is actually a chaotic environment and increase the likelihood that you will find relevant information quickly. The Web's content is vast, but, in many fields of knowledge, it is not even close to comprehensive and useful.

In contrast, libraries contain materials chosen to represent the best information on a wide range of subjects, including nearly all of the kinds of subjects one deals with in research papers. Libraries purchase only a small percentage of what is published each year, but they typically acquire the works that matter to the academic disciplines. Librarians vet what they purchase. They go for materials from publishers or sources that have established and respected processes

for screening what they put out. Today, librarians also add web sites to the library collection by creating links between their library web pages and the sites of organizations – such as scholarly associations or government agencies – that screen the content of their sites in a way similar to the way good publishers screen manuscripts.

Library collections also have a formal organization created by librarians and represented in the catalog, which is now an electronic catalog in almost every large library. Librarians catalog books by author, title, and subject. They have developed the list of subjects over more than a century of cataloging. In the electronic catalog, you can look up books by author and title, but those search modes only work if you already know what you are looking for. When you start the research for a paper, you do not know that yet.

When you look at a catalog entry, you see a list of the subject areas that the cataloger thought the book fit under. If you had searched by one of those subjects, the book would have come up as one of your search results. Here is an example (from the UCSD library):

Author	Woodward, C. Vann (Comer Vann), 1908-
Title	**Origins of the new South, 1877-1913**
Published	[Baton Rouge] Louisiana State University Press, 1951

LOCATION	CALL NUMBER	STATUS
SSH Stacks	F215 .W85	AVAILABLE
SSH Stacks	F215 .W85 c.2	AVAILABLE

Loc	SSH
Description	xi, 542 p. illus. 24 cm
Series	A History of the South ; v. 9
Note	"Critical essay on authorities": p. 482-515
Subject	Southern States -- History -- 1865-
	Southern States -- Social conditions

The cataloger has put this book under the subjects "Southern States – History 1865-" and "Southern States – Social Conditions." Had you searched the subject catalog under "Southern States," this book would have appeared among your results. The catalog entry of every book in the library contains these kinds of subject identifiers.

Typically, you do not have to put the exact subject title into the library's search engine. It can accept approximations, such as "U.S. South" for "Southern States," but the closer you are to the "official" subject titles, the more certain you will be that you'll find all the resources the library has on that subject. You may have to enter several variant names for the subject you have in mind to be sure that you've found everything there is to find.

In addition to the traditional subject title search, the electronic catalog allows you to do a **keyword search**. In that kind of search, the computer lists all works that contain the keyword in their titles or subject categories. If the library has a digitized copy of a work, then the search engine will actually search the entire text for the keyword. This kind of search gives you a mixed blessing, because a general search term can turn up thousands of items. Yet, a well-

defined term could produce a very complete and good list of everything relevant to you in your library. A keyword search has the advantage of freeing you from the established list of subjects in the cataloging system.

As with the search engines used to find things on the Web, library catalog search engines list the search results in order of relevancy, as judged by the built-in rules that govern the engine's operation. In most cases, the books or articles that contain your search phrase in the title or those listed in a category from the subject catalog will be listed first, followed by works in which the phrase occurs many times in the text and then by those in which it occurs only a few times etc. Before you start running around the stacks to find items your local library has, you should look over the whole list. But, you should expect to find the most relevant and important materials for your subject at the top of the list.

Primary and secondary sources

In many fields, scholars distinguish between primary and secondary sources. Primary sources are writings, documents, or artifacts (paintings, household utensils, machines etc.) produced in the time and place that you are studying. So, if you are reading about foot-binding in China, primary sources would include writings from the period when it was done (ninth or tenth century through the early twentieth century), contemporary medical texts dealing with the consequences of binding, examples of shoes used in binding, and so forth. Secondary sources are scholarly works on your topic. A history of foot-binding is a secondary source.

You will find a great deal of primary material in secondary sources. Historians, literary scholars, and others cite primary sources to support their arguments. On some topics, you will find most of the primary sources you need only in secondary sources. For example, if you are working on the experience of slaves in the African slave trade, you might have to rely for primary sources on historians who have gathered and translated those sources in their works.

The distinction between primary and secondary sources may not be useful in some social science disciplines. Many works of anthropology or sociology rely on observations, surveys, and interviews. The notes on the observations, the survey instruments, the raw data representing the answers of respondents, and the transcripts of the interviews could be called primary sources, while the interpretation offered by the observer, surveyor, or interviewer could be considered secondary sources. But in these disciplines the writer of the secondary source is often a participant in the creation of the "primary" sources. When you are working in a field that relies on participant-observer techniques, you have to focus on the data presented, and on the way it was collected, assembled, and used by the author.

Evaluating the credibility of sources

When you walk into a campus library, you make certain assumptions about what you will find there. You assume that the collection was selected by people who know how to judge the credibility of sources, who know good scholarship from bad, and who choose the good and reject the bad. You can use the materials you find in the library of a good academic institution with a lot of confidence that your instructor and others will regard the sources as serious works of scholarship. However, remember that serious works of scholarship can be seriously flawed. Later studies may undermine or overturn early ones. Scholars sometimes have axes to grind and use their sources to prove the point they want to make. It is always wise to read reviews of scholarly books or to find articles that respond to or build on earlier works and, therefore, at least implicitly review the quality of the earlier studies. Scholarly reviews, usually published in scholarly journals such as the *American Historical Review* or the *American Journal of Sociology*, provide critical appraisals of books. The reviewers give you an idea about what the book covers and then tell you how the book relates to earlier scholarship on the subject and finally appraise the quality of the author's argument and the use of evidence.

Of course, selective and reliable as it is, the campus library is no longer the only or even the principal source of information for a research project. Many of you do most of your research on the Internet, where the credibility of sources is very uncertain. If you must be cautious when assessing books in the library, you have to be vastly more cautious when dealing with Web resources.

The Internet is a great city with millions of sites in it, and more sites are being added every day. Every site has an address, but when you arrive at most sites you cannot assume that you will find credible information there. However, the addresses of some sites give you a clue to their credibility. Sites sponsored by universities or their libraries (which are in the *.edu* domain), by government institutes or agencies (*.gov*), and by well-known scientific societies (such as the American Psychological Association or the American Political Science Association, which are usually in the *.org* domain) can be taken to be credible with the same confidence – and the same caveats – as the works found in an academic library. You are reasonably safe if you stick with such sites, though the *.org* domain contains a lot of sites to be wary of. If you want to use other sites but do not know whether they are reliable, ask some basic questions.

- Does the site tell you who created it and who sponsors it? What can you find out about these people or institutions? When was the site last updated?

- Does the site tell you how the information on it was collected? For example, The Constitution Society has a web site that contains documents and writings pertinent to the history of constitutions, especially the U.S. constitution. The site gives you the provenance of each document, so you know how they got it and what it represents. Because of copyright restrictions, such sites will often digitize an old translation of a work. Knowing that will allow you to get an idea of what an author was saying and then, if you wish to cite the work, to search for a more recent translation in the library.

- How is the information on the site managed? Is it kept up to date? If it offers a database that continually changes, how can you cite it so that the reader of your paper can find the particular data you used?

As you read works on your topic, you will develop a different kind of judgment of scholarship. By reading critically, you will sift the information and opinions on your topic and begin to form your own opinion about which primary sources are most credible and which secondary authors most persuasive. So, judgment of the credibility of sources proceeds from the question, "Should I read this?" to "Do I think this source is reliable or relevant?" to "Do I agree with this author's selection and interpretation of the primary sources or evidence?" The characteristics of critical reading are the topic of Chapter 2.

Chapter 2
Reading and Taking Notes

Once you have collected sources for your research project, you will have to read through all of them, looking for material that you might be able to use in writing your paper. To do so effectively, you will have to read those sources critically.

Reading critically

To read critically is to engage the text actively. You start with questions already in mind. What is the author trying to prove or argue? What kind of sources did the author use? What is the author's point of view? How does the author make his or her argument? Is it persuasive? As you read the works you have collected, you will also want to look for differences of opinion about the topic. Do the authors you read agree about what question needs to be answered about the topic? Do they use the same kind of evidence? When you compare them, do the authors differ in the emphasis they place on one part of the body of evidence or another? If they come to different conclusions – that is, propose different theses – why? What arguments lead the various authors to different conclusions?

The main tasks of critical reading are:

- **Identify main ideas:** For each new text, ask yourself: "What are the author's main points?" "What is the author's point of view?" Try to find out something about the author and publisher of the work. Do they have political or other biases that you should look out for as you read? Pay attention to the date of publication. Every field of scholarship has a history; if you understand that history, you have an advantage in understanding what you are reading. Every scholar has a point of view. He or she may adhere to a particular tradition in the field, such as a way of reading texts or a preconception about what certain words and phrases mean. You'll find that many authors who write about religious subjects – even historians – come to their subject with beliefs that determine how they interpret the sources. You'll also find that the treatment an author gives a subject is often subtly influenced by his or her political views. An author who believes that people ought to be able to rise above their circumstances to achieve success in society – a view usually associated with conservative politics in the United States – may interpret evidence about the bureaucracy's examination system in eleventh-century China as showing that the sons of poor farmers could rise to the top of society and that Chinese society in that period was open to talent. An author who believes that most people are trapped by circumstances and need help to break out of those circumstances – a view usually associated with liberal politics in the U.S. – might interpret the same evidence from China as showing that poor boys only rarely broke the

bounds of their poverty to rise into the ranks of the elite. The same evidence interpreted in opposite ways because of the different points of view of the authors.

Here's another example. In the nineteenth century and the early part of the twentieth century, scholars tended to see the emperor Augustus as a restorer of order in Rome after 14 years of civil war and his reign as the foundation for the success of the imperial regime that followed. In the late 1930s, Ronald Syme reconsidered the sources and painted a much darker picture of Augustus' reign, emphasizing his suppression of political opposition, his restrictive and puritanical social program, and his effective use of propaganda to create the rosy picture that previous historians had accepted as true. Syme's approach was influenced by his observation of contemporary Germany, where the Nazis were doing many of things Augustus had done. A critical reading of Syme's book would note his disagreement with his predecessors and the different way he read the sources, and it would raise the question, "If Syme was influenced by his observations of contemporary Germany, what influences affected the way earlier historians had treated Augustus?" Earlier historians did not have the example of Nazi Germany (and they regarded Germany as paragon of civilization), and they interpreted Augustus as a reformer trying to restore Roman society while they recognized that he subverted Rome's republican traditions. Before Syme, historians might have had Bismarck in mind when they considered Augustus.

- **Take note of patterns:** In historical, sociological, and anthropological research, look for: recurring phenomena (such as the boom/bust cycle in market economies or the way people answer questions about their families); characteristics common to peoples of different times, classes, or cultures (such as the treatment of minority or immigrant groups or the representation of certain themes in art); themes that are repeated by a variety of scholars (such as the interpretations of Augustus noted above). In literary research, look both for themes – such as the desire for power, the ways love affects relationships over time, and hypocrisy – and for the language authors use to express or represent those themes. Authors use language to represent as well as to tell a story. Metaphors, similes, metonymy (the use of the name of a characteristic part of a thing to represent the thing itself, such as "crown" for "the king and his council"), and other figures of speech convey the way the author wants you to understand the story. (J.H. Hexter provided a great example of the importance of language when he showed that in *The Prince*, Machiavelli almost always put "the state" in the position of an object of a verb. For Machiavelli, the state was a thing to be seized, protected, built-up, lost etc. Hexter's observation gave readers a new understanding of what the sixteenth-century author meant to say in his classic work of political theory.)

  In addition, you can look for meaningful connections between events and developments in the period in which an author wrote and the content of that author's work. For example, Thomas Hobbes wrote a "scientific" treatise on the origins and nature of political communities, while his contemporaries were founding the Royal Society in London. Was there a connection? Did the new movement in what was then called

"natural philosophy" have an effect on Hobbes? In research on psychology or economics, look for: the nature of the data used and the theories or models on which the author's interpretation rests. In disciplines like these, scholars often start with models or theoretical frameworks that affect both the way they select evidence and the conclusions they draw. In psychology, scholars do experiments on animals and people to test hypotheses about personality types and how people learn or make judgments. Pavlov's famous experiments with conditioning dogs by rewarding certain behaviors led to hypotheses about the environmental factors that affect human behavior. Do people respond to questions differently in a messy space as opposed to an orderly one? Experiments show that they do. Economies are vast, complicated machines, and economists collect and analyze data to test models about how it works. To what stimuli do people respond when they spend or save or invest their money? The economist starts with a theory or model of stimuli and response and looks at data about how people behave in various conditions to test it. A critical reader looks for those underlying schemes, because they will help him or her understand and take an independent view of the scholarship.

- **Look for problems or contradictions:** Scholarly works will provide you with much of the information on which you will base your own argument, so it's important to assess the quality of information that each source provides. When reading a scholarly work, look for the ways in which the author constructs his or her arguments. Does he provide sufficient evidence to convince you of his thesis? Do her assertions follow logically from the evidence she provides? What is the author's disciplinary perspective, and how does it affect his or her argument? Does the author consider, and then rebut, arguments arising from other points of view? Any problems or contradictions that you find can alert you to potential problems with the author's research and lead you to topics or directions for your own research.

- **Pay attention to the treatment of a work by other scholars:** When you first read it, you may take a work seriously, because it was written by an apparently credible author, published by a good academic press, and chosen for inclusion in a good research library. Later, you may find that most scholars writing on the topic regard the work as seriously flawed. Be alert to the judgments that scholars make about each other's works and the reasons they give for their opinions.

- **Record areas for further research:** If the topic of a work is one that interests you, and you want to follow up on it, note those areas that the author does not cover or has covered inadequately, either because she has not persuaded you or because she has not addressed other arguments that might lead to conclusions different from hers.

- **Follow the trail of scholarship:** No search of the library catalog will identify everything you need or should read for your project. As noted in Chapter 1, the scholars you read have done a great deal of work for you and recorded it in their footnotes and

bibliographies. Take advantage of what they've done. Pay close attention to the works that the authors cite in their footnotes (or endnotes) and bibliographies. You can follow a trail of scholarship from a recent work to earlier works and from works that are central to the topic you are currently reading about to works that touch on that subject tangentially but that may become important for you as you define your topic and shift your focus. You start your research by working with the subject catalog of your library or the search engine of an online library, but you pursue your research by following the trail blazed by earlier scholars.

The mechanics of reading critically

Note-taking

By taking notes as you read you will keep up with what you are reading. When you take notes, you have to think about what the authors are saying and about your response to their work. Making notes is a vehicle for your engagement with the texts. Here's some advice about doing it:

- **Avoid merely summarizing the content of the text. Instead, summarize the text's main ideas.** For an article, record the author's key argument and the main points of that argument. For a book, summarize the main idea of each chapter (it's useful to note the chapter titles) and how each of the chapters relates to the overall argument of the book. If you find that a source contains so many useful pieces of information or so many tantalizing ideas that you want to copy large parts of it into your notes, then it's better to photocopy and to annotate key pages. (More on annotation later.)

- **Note key people, events, terms, dates, and phenomena.** These will provide the factual or evidentiary basis for your research paper. As noted earlier, you will find many primary sources cited in secondary studies, because the authors will cite those primary sources as evidence. When you use primary sources that have been incorporated into scholarly works, make sure to cite both the original document (the primary source) and the secondary source from which you took it. (More on citing your sources later.)

- **Record your responses to the text. When you do, consider the following questions:**

  Questions about the author:
  - What is the author's research question?
  - What is the author's answer to the question? (The answer is the author's thesis.)
  - How does the author argue that the thesis is right?
  - What evidence does the author provide to support the argument?
  - Who is the author's intended audience?

For what purpose was the text written?
How does the author shape the argument to persuade his or her audience and achieve his or her purpose?
How might the author's purpose have affected how he or she selected and used evidence?
Which alternative arguments does the author address and how does he or she rebut them?
How persuasive is the author's argument?

Questions about the text:
What questions does the text raise and which ones does it answer?
Why is the text important to your research?
How does the material connect with what you already know or have already read? Does it support or contradict what you have learned so far? Does it raise new issues?
Which ideas do you find interesting—and *why* do they interest you?

Annotating

As noted, there are times when it is useful to annotate a photocopied text instead of, or in addition to, taking notes on it. To annotate is to make notes on the text in the margins. Annotate in pencil or in light-colored ink that doesn't obscure the printed text. (Note: Generally, as noted below, highlighting is a bad practice, but here is a place where you might use a highlighter.) Mark the sentence that a marginal note relates to.

Useful annotation techniques include:

- **Underlining, bracketing, or highlighting main claims** (and noting, for example, "th" for "theme" or "arg" for "argument" in the margin)

- **Circling or highlighting "pivotal words"**: Words such as "however," "but," "nevertheless," and so forth indicate that the argument has changed direction (and then add a marginal note to the passage indicating, for example, "Δ" for "delta," the scientific symbol for "change"). **Important note**: what an author believes almost always comes *after* a pivotal word (e.g.: "Other scholars assert *x*, **but** I argue *z*" or "Horton's case for *x* is quite elaborate. **However**, the evidence shows…").

- **Circling or highlighting key terms** and bracketing the definition, if it's provided in the text. (If the definition is provided, you might note "df," for "definition," in the margin.) If the author has not provided the definition, write in the definition in the margin. (When you can't pin down what an author means by a term, you may be at a doorway to your own topic.)

- **Marking where key people, events or phenomena are first described**. Circle or highlight a few key words in the text (the name of the person, the name and date of the event, and so forth), so that you can easily find the information again, and write a short note in the margin explaining what the marked item is.

- **Periodically noting the main idea of a passage**. For longer texts, it is useful to write a short (ten words or fewer) marginal note every page or two that summarizes the content of the page(s) and keeps track of the argument.

The Problem with Highlighting

Highlighters are handy, especially when annotating, but use of them tends to get out of hand. They make you think you are reading critically when you are not. You are just marking up the text. Using highlighters

- reduces the likelihood that you will interact critically with the text. Highlighting doesn't allow you to distinguish between a main idea and a detail. If all you do is highlight, then it will be difficult for you to identify the key ideas, evidence, and arguments of the text when you are reviewing what you have discovered through research.

- defers critical reading. When you highlight, what you are really doing is saying to yourself "I don't know what this means, but it *look*s important" or "I'll read this over again more carefully later on," whereas to read critically is to engage the text as you read it.

- makes the process of review inefficient. If all you've done is highlight blocks of text, then when you review what you've read you won't know what those blocks were about or why you thought they were important unless you read them over again. In essence, highlighting forces you to read everything at least twice: once when you highlight it and again when you have to go back and find particular pieces of information or ideas. At some point, you have to make notes about what you regard as significant about each text you read.

- increases the possibility that you will use too many quotations in your paper. A paper composed of a string of quotations is a very bad paper. When you highlight passages throughout the works you read, you may end up writing a paper that is just a collection of readings. **You've presented the findings and ideas of others but not your own thinking**. Doing research is a sustained act of criticism, of finding and assessing information and arguments as you develop your own ideas. To the extent that highlighting interferes with that intellectual process, it undermines your entire effort. To overcome what highlighting produces, you might have to do your reading all over again.

Recording necessary bibliographic information

One of the biggest problems in doing research is keeping track of what you have read. Research requires a great deal of clerical work. Take the time to record the complete bibliographical information on every work you read.

There is nothing quite as frustrating as remembering that you read the perfect quotation to clinch your argument but forgetting where you read it. When that happens, and every scholar can give you a list of his or her own experience with incomplete notes, you have to spend hours going through what you've already done in hopes of finding the source or you have to give up the quotation. In many cases, you will spend the hours, fail to find the source, and then have to forego use of the material. In the worst cases, you'll have to revise your argument, and perhaps your conclusion, because the piece you sort of remember is crucial to making the argument work.

Keeping accurate records of what you read and attaching the bibliographic information to your notes and to pages copied from sources will not only save you time and perhaps save your argument but also prevent you from committing plagiarism. When they are caught using others' words without quotation marks or citation, or when they paraphrase another's words or use others' ideas without citation, students often say that they must have just copied text from their notes into their paper. No plagiarism intended. Unfortunately, that's also no excuse. Plagiarism consists in using someone else's work without acknowledging it. It can be intentional or unintentional. The latter may be less culpable than the former, but both intentional and unintentional plagiarism will lead to charges being filed and to a penalty that might be severe. If you do not know the source of your notes, you can't use them.

Here is the sort of information you need to record for everything you read:

- For books, the information includes the author(s), complete title, place of publication, name of publisher, and date of publication.

- For articles in journals or magazines, it includes author(s), complete title, name of the journal or magazine, volume number, issue number, date of the volume or issue, and page numbers. Specific volumes of journals and magazines are usually numbered by year – so, for example, the *American Political Science Review* for 2008 is volume number 102 (vol. 1 was published in 1906). The common practice is to refer to journals by volume, year, and page number.

- For Web resources, the URL, the author or authority that produced the site, whatever pathways a reader would need to find the material you are using. Remember that many web sites are dynamic, constantly in flux, so you might need to note who or what organization maintains the site, how often it is updated etc. If you are worried

that the information you are taking from a site will have been altered, moved, or removed by the time your reader goes looking for it, then print it out, noting the date and the exact location at the time you used it. For a paper written for a course, being able to provide your teacher with a printout that has full information might save you from a lot of trouble.

In general, err on the side of completeness. Everyone who has done research can recount the costs of sloppiness in recording bibliographic information. Those costs include spending hours searching for the information while a footnote waits to be completed or having to rewrite an argument because you cannot find the source of information or of a quotation crucial to solidifying a part of the argument. For some, the cost has included accusations of plagiarism, when, desperate to complete the work – as students facing a deadline often are – the writer just includes the material without proper citation. When you are doing research, you must keep the best records you have ever managed to keep.

Working towards a research question

During the early stages of working on a research paper, your main activities will be: to read widely; to take notes on and respond to what you are reading; and to ask questions about what you are reading. For the first few weeks, don't worry if your topic changes several times. The best research always seems to be "accidental": you're in the library or online looking for something, and you just happen to find a book or a topic that fascinates you. Getting to the library early and reading widely will help you find a topic that really engages you. For the first weeks of your research, expect to read through a great deal of stuff, to take a lot of notes, to make many photocopies and annotate copiously, and to write a large number of exploratory paragraphs that lay out ideas for the paper. These paragraphs are unlikely to make it into your paper, but they will help you find and develop a topic suitable to the length of the paper you have to write. It is only *after* you have accumulated a great deal of information that you can start to organize your work into a coherent topic that will produce a good paper. A coherent topic is a good research question; answering the question is the objective of the research you will do once you have it. So, the question determines what kind of and how much research you have to do. Formulating a research question is the subject of Chapter 3.

Chapter 3
Formulating an Open-ended Research Question

You reach a crucial stage six weeks before the paper is due. At that point, you have to bring some order to what you have been reading and thinking. If you have been reading critically, you will have a list of questions in your notes. Now, you select, from all of the potential research questions you have accumulated, one narrow, open-ended question. That question will provide the basis for your research paper. **The thesis of your paper will be your answer to the question; your argument will make a persuasive case that your answer is right or at least better than other possible answers.**

You will need to choose a research question that will lead you to do research that will produce a good argument. What sort of question is that?

Good questions

You want a question that can be answered but not definitively. That is the definition of an open-ended question. You will propose an answer to such a question and make a case for it. A great deal of professional scholarship, the sort done by your faculty, does the same thing, answer questions that have been or might be answered in more than one way.

A research paper is not a report. You want to avoid writing a report. In a report, you set out the information you've found and perhaps make some comments on the way scholars have gathered or treated that information. In a report, you show that you've read and understood a body of material. In a research paper, you set out to answer a question of your own devising. You will report on what scholars have said about aspects of the question, but you will be using their work and the work you do with primary sources to make a case for a thesis. Good research papers go beyond merely reporting information about which scholars already agree; they advance claims that are still open to debate, supporting those claims with evidence and argument.

The answer to an open-ended question can be strong or weak, supported by a strong or a weak argument. A good thesis is one supported by a good argument. A good argument persuades because the evidence supports it.

Here are some examples of open-ended questions, and the academic fields in which they would be posed:

- What benefit do male birds of paradise derive from having such elaborate and colorful plumage? (Evolutionary Biology)

- Why do people continue to smoke even though they've been warned about the dangers cigarettes pose to their health? (Neurophysiology, Psychology, Sociology)

- What was the primary cause of the American Civil War? (History)

- How can James Joyce's short story "The Dead" be interpreted? (Literature)

None of these questions can be answered definitively, but each of them has several plausible answers that can be supported with evidence and argument. In other words, advancing and supporting an answer to any of the questions—to any open-ended question—necessarily means making an argument, which is your principal work when writing a research paper.

Basing your research project on an open-ended question thus provides two benefits. First, it gives you something interesting to figure out, so that your research becomes a process of discovery and persuasion that has some suspense to it. Can you find evidence to support the answer to the question you would like to give? Can you convince your readers to accept your answer? Second, it enables you to write a strong research paper that advances a compelling argument.

Research questions come in all sizes. Some good research questions need a book-length answer based on years of research in out-of-the-way archives or months of work in a laboratory. Others can be dealt with in short papers or articles. You have eight to twelve weeks to produce a ten-to-fifteen-page paper. You will need a question suitable to that task.

Why a narrow question?

Ten to fifteen pages, although it might seem endless to you, is really not very much space in which to make a compelling argument. You will need to narrow the scope of your topic and question in order to ensure that you can adequately explain your answer in the permissible number of pages. For example, you might be interested in how the rulers of the Roman Empire succeeded in establishing hegemony over conquered states. What, then, would be a sufficiently narrow research question for you to pursue in a ten- to fifteen-page research paper?

Much too broad: How did Rome maintain control over its empire?
Still too broad: How did Rome maintain control over Egypt?
Still too broad: How did Rome maintain control over Egypt in the first century B.C.E.?
Better: How did Julius Caesar and Marc Antony affect Cleopatra's governance of Egypt?
Even better: How did Marc Antony affect Cleopatra's governance of Egypt?

Formulating your question

Part of the process of reading critically is to record all of the questions that occur to you during your research. Some of those questions will lead to good research projects; others will be less productive. Using the following criteria will help you decide which questions are most likely to be productive.

Levels of arguability

You can rank types of questions in order of increasing arguability—that is, the degree to which you can make arguments supporting answers to them—as follows:

Level 1:	Questions that can be answered with knowledge you have right now
Level 2:	Questions that can be definitively answered with scholarly research
Level 3:	Questions to which an answer can be proposed based on scholarly research but that cannot be answered definitively
Level 4:	Questions that cannot be addressed with scholarly research either because of a lack of evidence or because they ask something that cannot be answered by citing evidence

You want to find a level-3 question—an open-ended question—on which to base your research.

The level at which you frame your question will determine the success of your research project. Answering a level-1 or a level-2 question (such as "What types of weapons did Julius Caesar's troops use?") will only produce a report, since scholars no longer disagree about the answer to that question. Answering a level-4 question (such as "Did the majority of Roman citizens really believe that the emperor Augustus was a god?") will only produce speculation, because suitable evidence (such as diaries or other records of citizens' opinions) does not exist. Other level-4 questions (such as "Was the emperor Augustus a god?") cannot be answered with research, because the answers to such questions rest not on observable, testable evidence but on beliefs. If you want to produce a strong, interesting research paper, you must start with a level-3 question.

Question types

Apart from question level, there are a number of ways to categorize questions. One useful scheme distinguishes among five main types of questions: of fact, value, policy, definition, and causation. The general characteristics of these question types are:

TYPE	GENERAL FORMAT	EXAMPLE
Fact	Did it happen? Is it true?	Did Archimedes show the people of Syracuse how to burn the Athenian fleet by focusing the rays of the sun with mirrors?

Value	Is it good or bad? Which criteria do we use to decide?	Was Athenian democracy more "fair" or egalitarian than other systems of government operating during the fifth century B.C.E.?
Policy	What should we do about it? What should be our future course of action? (Historical version: What should have been done about it? How should they have acted?)	How can we reduce the number of single parents in American society? (Was the execution of Socrates justified?)
Definition	What is it? How shall we interpret it?	What was the political significance of Sophocles's *Antigone*? What is the meaning of "separation of powers" in the U.S. Constitution?
Causation	What caused it? Or, what are its effects?	What events led to the way Madison phrased the First Amendment to the Constitution?

Note that you could argue for an answer to any of the above questions; they are all arguable. Even a claim of fact isn't necessarily "true"; rather, it may be a claim that must be supported with evidence and argument. (For example, the simple question, "When was Socrates born?" cannot be answered by reading his birth certificate. A historian must argue for a date based on the available evidence, which is far from conclusive.) Thus, any of the above question types could be framed as an open-ended, level-3 question.

Categorizing questions according to type has several benefits. First, if you are finding it difficult to formulate a clear question, you might find it helpful to format your query in terms of a general type. More important, after you have formulated a question you can focus your research by considering the kinds of evidence that most effectively support an answer to the type of question you are asking. The following chart summarizes what you will need to learn in order to give a plausible or persuasive answer to each type of question.

TYPE	GENERAL FORMAT	NECESSARY EVIDENCE
Fact	Did it happen? Is it true?	If you are asking "Did X happen?" you will need to know: • What evidence do we have that X happened? Because the evidence is likely to be unclear, what other things do we know about the period, about the actors, about the institutions and so forth that might help us interpret the evidence for the event itself? • How have scholars used the evidence in arguing that X happened or did not happen and why do they differ on the issue?
Value	Is it good or bad? Which criteria do we use to decide?	• If you are asking "Is X good?" you will need to know: • Factual information about X • An understanding of the criteria scholars use to judge the value of things like X • The way scholars use the criteria to judge whether a thing like X is good or bad • Existing scholarly opinions about the value of X

Policy	What should we do about it? What should be our future course of action? (Historical version: What should have been done about it? How should they have acted?)	If you are asking "what should have been done about X"? you will need to know: • Factual information about X • Other scenarios for what could plausibly have been done about X • The criteria scholars use to judge the efficacy of policies like those proposed to solve the problem of X • What positions scholars and others (such as policy makers) have taken on X
Definition	What is it? How shall we interpret it?	If you are asking "How shall we interpret X?" you will need to know: • Factual information about X • Relevant scholarly criteria for interpreting phenomena such as X • Existing scholarly opinions about the meaning of X
Causation	What caused it? Or, what are its effects?	If you are asking "How did X affect Y?" you will need to know: • Factual information about both X and Y • What Y was like before X occurred • What Y was like after X occurred • What factors other than X might have affected Y • Existing scholarly opinions about whether or not, and how, X affected Y

Note that every topic has many different aspects. For example, if you are asking, "Why did Europeans become dominant in the world in the early nineteenth century?" you might frame an answer by comparing economic, technological, or cultural development in Europe and other major civilizations of the period. Each of these approaches to the question will require different kinds of theoretical models, different kinds of evidence, and different bodies of scholarship. Likewise, if your topic is European technological achievements in the eighteenth century, you might ask, "What effect did technological development have on the European family?" or on the success of colonization or on economic development or on the growth of science or on cultural attitudes (think of Marx's claim that the growth of manufacturing deprived the people of their personal relationship to the production of goods).

Working with a research question: keeping track of evidence

One good way to get to a research question that will serve your needs is to start early trying to identify questions. Write down each research question that occurs to you as you get into the research process. Keep a separate file for each one, and record or photocopy all of the evidence you find that might help you to answer the question, along with your annotations, notes, and comments. By the time you get to the stage where you have to make a choice, you'll have a lot of possibilities to choose from.

Chapter 4
The Cycle of Reading: Gathering the information you need to answer your question

Once you have a good question, you will be able to focus your further reading. You now will read primary and secondary sources that you think will help you answer your question. You will also be able to review what you read earlier with the question in mind. You will find it amazing what you see in previously read texts once you've got the focus that a research question provides.

As you go back to reading, you will probably have some idea about how you want to answer the question – that is, what your thesis will be – and that will help you choose what to read. However, keep an open mind. You may discover that your first impressions about how the project will turn out are wrong and that you arrive at a different conclusion after doing your research.

Your goals in doing research

The answer to a research question rests on an argument that is, in effect, a series of demonstrations. You demonstrate that something is true, which leads you to a demonstration that another thing is true, leading eventually to the answer to the question. Each demonstration involves making a claim and then arguing that it is true or at least likely. The argument you make to support each claim consists of citations of evidence and reasoning.

Here is an example. If your question is, "What was the original purpose of the Parliament in England?" you will start with a claim about when the institution was created, citing evidence that shows when that happened and referring to the work of scholars who have written about it. Then, you must make a claim about what the evidence produced by and about the early Parliaments shows about its purposes or function. One claim could be that the kings created Parliament as a political body to help them govern. Another claim could be that communities in England – counties and towns – had acquired such economic power that they forced the kings to call Parliaments to hear their views on national issues. Yet another claim might be that whatever the kings had in mind, the principal business of the early Parliaments was the hearing of petitions and law cases that members brought to the meetings. So, the Parliaments were not so much political bodies as courts, the highest in the land because the king headed them. As you work towards an answer to your question, you need to argue for or against these claims or hypotheses, presenting the evidence that supports or contradicts each of them. You will build the argument for your thesis from claims and the demonstrations of their truth or likelihood. You should structure your argument – that is, the order in which you treat the claims – to make it flow logically toward the conclusion you have drawn from your research.

This example shows that an argument is not necessarily completely positive. Sometimes, you build an argument only of claims that you think the evidence and sound reasoning support, but that is not common. Most often, a good argument deals with claims – representing possible answers to your question or the sub-questions it raises – that you want to reject as well as those you think are supportable. The claims are hypotheses, and you try to support or knock down each of the hypotheses you consider. The rejected claims or hypotheses are counter-arguments, and they strengthen your main argument by showing that you have considered other possible answers and by dealing with evidence that you have decided is not significant but that a reader might point to if you didn't. (Imagine your reader saying, "Oh really? What about these documents that show that…" If you have considered counter-arguments, you have shown or at least argued that those documents don't undermine your answer to the question.)

Your question guides you in figuring out what you need to know to answer it. What background material will you need to cover? What kind of claims will you have to make or deal with? and What points will you need to make?

If, for example, you wanted to address a question about how a European city, such as Florence, responded to the great plague of 1348, you would need to consider:

- The general history of the plague
- The kind of evidence we have – records, histories, literary works – that tells us something about the plague in Florence and what the Florentines knew about its causes and progress
- What these different sources said about the Florentines' response to the plague, both when they were anticipating it and when it finally hit them, and how the authors' goals and points of view affected the way they portrayed the response
- What scholars have written about the response of the Florentines to the plague

Reflecting on your question as you proceed

As you continue reading, you may revise your research question several times. You may find that you cannot gather what you think is the right kind of background information. You may find that you cannot give a plausible explanation, with supporting evidence, of one of the points you thought you would have to make to answer the question as you formulated it. You may recognize that your question is too big; you would need too much time and too many pages to answer it. The focused reading that you do at this stage of your work will take you into the heart of the argument that will support a satisfactory answer to your question. Whenever you feel that you've got a mass of undigested material – information that you know is relevant to your topic but that you do not feel in control of – stop and reassess where you are.

At these stopping points, you should try to organize your notes and write some paragraphs or pages setting down your view of what it all means. Then, you should look at your research question again. How do the materials you've collected and the thoughts you've had help you answer the question? Do you have to revise the question? You can only answer a question if you find relevant information. You know that you have relevant information if you can use it to argue that an answer to the question is at least plausible, if not compelling.

You also need enough information. It will do you no good if you find material to answer one part of the question but not another. Thus, if you were working on Florence and the plague, you might have found evidence of religious responses – church attendance, processions in the streets, the government's appeals to the saints – but not much evidence about what the physicians were telling people or the way the hospitals functioned. So, you would have to revise your question to focus on the religious response to the disease. While you are doing your focused reading, you have to pay close attention to what you need to answer your question, and you have to stop occasionally to sort your findings and think about the results of your research. These stops for ordering and reflection will speed your research and make it better. You will not get off course, and you will not spend time reading texts that do not serve your purpose.

Chapter 5
Answering Your Question and Constructing Your Argument

About three weeks before your paper is due (or about two weeks before you have to submit a rough draft) you will have to transform all of your notes and ideas into a coherent draft. You can accomplish this task by working through the following steps.

Sort notes and texts

Gather together all of the material you've generated in the course of your research: notes, copies of pages from primary and secondary sources, and pictures. Sort the material into piles representing different aspects of your topic. You might have one pile for introductory information and one for each part of your argument. Each batch of materials might include notes on the primary and secondary sources, copies of pages you judged significant when you read them, and notes recording your own thoughts as you did your reading.

Sorting your research materials accomplishes a number of goals. First, it allows you to review all of the information you've gathered, alerting you to any gaps in your research and reminding you of some things you might have forgotten. Second, it reveals the way you now think you will argue the case that your thesis is sound. Third, it constitutes a first step in putting together a rough draft. The order into which you organize your piles of information will become the order in which you present that information in your draft.

Write a working thesis

As often noted, the thesis of your paper will be the answer to your research question. You might already have formulated a thesis as you did your research; if not, you will most likely find that it comes to you as you organize your notes. Write down your working thesis, stating it in a few declarative sentences. For example, here is a plausible working thesis that responds to the question of Florentines' religious response to the plague of 1348:

> Florentines regarded the plague as a divine punishment not only of themselves but also of the established church. So, they stayed away from the churches and paid no heed to the bishop and his priests. Instead, they joined informal, intensely religious groups that practiced new rituals and held views that the church regarded as heretical.

Note the specificity of this thesis; it goes beyond a broad response – "The Florentines became more religious as a result of the plague" – to elaborate how they became more religious. The

more specific you can make your working thesis, the easier it will be to write your rough draft and the more focused and coherent that draft will be.

Note also that this thesis tells you a lot about what you have to argue in your paper. You have to explain, at least briefly, traditional religious practice and the organization of the church in Florence. Then, you have to show that the citizens began to engage in all sorts of new practices and rituals and held unorthodox beliefs (perhaps promulgated by lay preachers wandering around the city during the plague). Finally, you have to show that the bishop and his hierarchy of officials considered these practices and beliefs heretical.

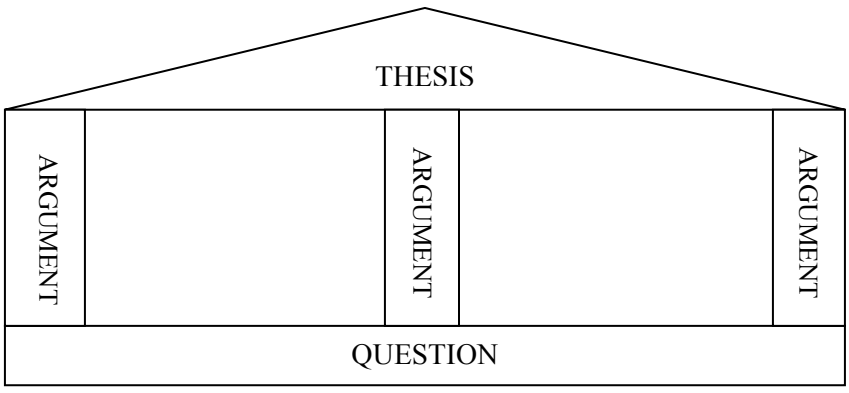
Note, finally, that this statement is a working thesis; it is only a provisional thesis, one that you might change as you think through your research material during the course of writing your draft. Use your working thesis as a guide but don't be afraid to change it if further reflection convinces you that you've found a better answer to your question.

Organize the information you've found

Once you've formulated a working thesis you can refine the organization of the material you've collected. As you put your information in order you will create the outline of your paper: the train of information and explanation that leads readers from your research question through the main points of your argument to your conclusion or answer to the question.

The structure of the paper

Just as your argument should flow logically from point to point – that is, it should have a logical structure – so your paper as a whole should have a structure. If you write an outline of your argument, you should be able to see the structure easily, and it should have a shape. In fact, you can think of your paper as a building. The roof (thesis) cannot stand without supporting columns (an argument based on evidence). The whole rests on a foundation (the research question). As you organize your paper, keep in mind that every bit of information—every fact or claim that something is a fact—and every argument must contribute to supporting the thesis (roof).



As in real architecture, some elements of your structure might serve more than one purpose. One piece of evidence might support two or more different aspects of your argument. For example, if you are writing about the Ottoman adoption of gunpowder technology, you might use a document to show when that happened and then go on to argue that the Ottomans got the technology from the Swedes. In making that argument, assuming that you do not have direct evidence (such as a document from the Swedish ministry of war saying that they had provided cannons to the Ottomans), you would have to show that there was a plausible mechanism (a spy network, the capture of an artillery unit etc.) through which the transfer of technology could have taken place. In making the case for the plausibility of your version of what happened, you would almost certainly find that some of your evidence, such as the documents you use to argue about the date of the technology transfer, could also be used to support an argument about how the transfer took place.

So, your paper should have a formal structure. Here are the components of that structure:

The Introduction:

- Introduce the topic – what is it, why is it interesting?
- Provide background information (orient your readers, assuming a general audience)
- State the research question (implicitly or explicitly but clearly; your reader should know what the question is)
- Allude to the controversy over the question (Why would anyone ask the question in the first place? What difference would one answer make as opposed to another answer? Why don't scholars or people agree on an answer? What are some of the different answers that have been offered and what arguments have been advanced to support those answers?) What's the significance of the question?
- State your thesis

The Body of the paper:

- Make your argument. The argument will be made up of parts that follow from one another (if I've shown X to be true or highly likely, then we can see that Y is also true or highly likely). Each element of your argument should be backed up by evidence and discussion
- As noted in the last chapter, you may summarize one or more other arguments that have been offered to answer your question followed by your rebuttal. If you discuss other arguments, deal with the way the evidence is used in them.
- You may anticipate and refute possible criticisms of your argument. (Doing this supplies counter-arguments when other writers have not done it for you. However, do not make up a weak or outlandish counter-argument. That is a called a "straw man," and it weakens rather than strengthens your own argument, because it makes the reader think that your thesis cannot stand up to a real challenge.)
- Note that you should occasionally remind the reader why your question is significant, why he or she should care what the answer is.

The Conclusion:

No new points or evidence!
Tie together your argument
Expand on the significance of your argument (the "so what?"): how does your argument help readers to understand your topic better?

Argument chart

Here is a useful bookkeeping tool for organizing your paper:

Question: What was the Florentines' religious response to the plague of 1348?

Working thesis: They disregarded the established church and created new religious groups, new rituals, and new ideas.

Evidence/Data	Claim	Explanation and supporting sources	Counter-argument and supporting sources (optional)	Rebuttal and supporting sources (optional)
Descriptions of religious behavior	New behavior, new rituals	People thought the church was corrupt and God was punishing the people for their adherence to it	People were just crazed by fear	
Literature written during and after the plague	Can be interpreted as explanation of popular attitudes	Literary writers reflected the views of their audience	Different interpretations of the literary texts	
Sermons by the bishop and clergy	Shows that they were concerned with what the people were doing and their rejection of the church	Bishop and clergy would not have been concerned if they regarded the people merely as crazed with fear		

Reports of sermons by lay preachers	The new religious groups were unorthodox	People no longer followed the dictates of the traditional clergy		

Chapter 6
Using Evidence Effectively

The proper use of evidence is the key to writing a good research paper. If you take the proper approach to the evidence, you will almost automatically create a coherent argument that moves towards the answer to your research question. So, what constitutes a proper use of evidence?

Determining what counts as valid evidence

Some evidence is obviously relevant; other evidence requires a demonstration or argument to show that it is relevant. If you are asking about the date of an event and no primary source gives it to you, then you have to approach the question obliquely. A dated document that refers to the event gives you a date before which the event must have occurred. Other dated documents might give you information that shows that the event had to have taken place after they were written. Consider again the question, "When did the Ottomans acquire gunpowder?" An account by a chronicler writing in 1453 (when we know that they had cannons, because they used them against Constantinople that year) might mention a battle in 1449 in which the Ottomans used cannon. You could argue from that text that the Ottomans had the technology by 1449. How could one determine when the Ottomans actually learned of the technology and began experimenting with it? The records of the Sultanate might have entries, dating from the mid-1440s, that could be interpreted as commissions to ironworks to produce prototypes of cannon. But, the records might not be clear enough to clinch the case. So, you would have to argue that the records do refer to cannon and can be dated to about 1445. You can use a good deal of space in a research paper arguing that a document, a picture, a story told by a contemporary, and so forth, is valid evidence for a claim you are making. You give reasons why this piece of evidence supports your answer to the question you are considering, while another piece of evidence does not. You'll find as you read scholarly works that much scholarship concerns questions of which evidence is relevant and that the way a scholar answers these questions of relevance determines the answer the scholar gives to the research question he or she is trying to answer.

Using the work of others: crediting your sources

In all research projects you will gather the findings and opinions of others who have gone before you. As you would want to be given credit for your discoveries and ideas, so you must give credit to all of those whose work you have used.

You will use the work of others in several ways:

- You will borrow passages from others' work—that is, you will quote them or paraphrase their words. You must cite that source precisely, usually in a footnote or endnote. (If

you are quoting, use quotation marks.) The citation should include the name of the author, the title of the work from which the passage comes, the place of publication (if a journal article, the name of the journal), the name of the publisher, the date of publication, the page on which the passage can be found.

- You will use sources used by others or brought to your attention by others. You must acknowledge that you learned of these sources from such and such a scholar, citing the place where he or she published it or cited it in the same way as you would cite a quotation from the scholar.

- You will borrow ideas or arguments from others. You must cite the author from whom you got the idea. Often, a proper citation will have not only a plain citation to the book or article and page number(s) where the scholar expressed the idea but also an explanation of the way the author used the idea. The explanation can be especially useful if you are using the idea in a way different from the way its originator did. Then, your careful citation will help your reader distinguish your ideas and contributions from those of your sources and help your reader give you credit for what you've done.

You lose nothing by citing the work of others properly. Indeed, by doing so you show that you are part of the tradition of scholarship in your subject, that you understand that scholarship, and that you are making an independent contribution to the subject. By honoring those whose work you have used, you honor your own work.

To credit the authors you have read properly, you must keep excellent bibliographic records as you do your research. Always start by recording complete information about the publication – author, title, place where it was published, publisher, and date (or, for journal articles, the title of the journal, volume number, and date). Then, record the page number of every note you take from that source. If you keep good records, you will minimize the possibility that you will use another's work without attribution, and you will save a great deal of time when you sit down to write your paper. You will not have to go back to the library to look for the source of quotations or comments that you want to use.

To prevent yourself from inadvertently using another's words, do not copy text from your sources directly into your notes without marking the passage clearly – usually with quotation marks – as a quotation. If you just copy the sentences or phrases into your notes, you are unlikely to remember, when you finally get around to using the information in your paper, that they were not your words. One good way to avoid using another's words without attribution is to avoid copying text verbatim into your notes. If you put the book or article you are reading aside, or turn it over, before you make your note on it, you ensure that the information you are recording from it passes through your mind on the way to the page. You must still note the bibliographic data identifying where you got the information, but you probably won't have to worry that you are inadvertently quoting someone without proper attribution.

Deciding how much evidence is enough

To make it clear what this decision is about, consider some examples. First, a scholar makes a claim and cites a document to support it. Readers look up the cited text and discover that he did not cite the whole relevant passage. He did not use the evidence fairly.

Second, a scholar may make a claim and cite a single sentence from a primary source to support it. There is no other evidence to cite. Readers may judge that there is not enough evidence to support the scholar's claim.

Third, a scholar does hundreds of interviews for a study. In her published study, she reviews the interview process, gives statistics on the interviews, explains the way the questions were asked, and then asserts, explicitly or implicitly, that the particular interviews she cites in making her argument are representative of the whole survey. If her peers think that she interviewed a sufficient number of people and that she has provided enough information about the overall results of her interviews, then they are likely to accept that she has used her evidence properly. There is enough of it, and it is fairly treated.

There is no bright-line rule to guide you in deciding when you've made your argument and need say no more. To say that you need just enough evidence to be convincing or to make your case is not much guidance. So, try to put yourself in your reader's position and imagine what sort of and how much evidence would persuade you that your argument is sound. By asking how much evidence is enough you will keep in mind the need to explain the evidence and your principles of selection, so that your reader does not second-guess you. The explanation of how you have used the evidence is also an argument that you've used the evidence fairly and that there is no other evidence out there that either is relevant or would alter the answer to your question.

You want to construct a persuasive argument. An argument that ignores some of the evidence will fall and bring you and your ideas down with it. An argument that cites too much evidence wobbles at least and often obscures the points you are trying to make. Young writers often want to cite every bit of information they found during their research. They did all that work and want to show it off. However, an argument loaded with a superfluity of evidence becomes digressive, leading into discussions that have nothing to do with the thesis being argued. Or, it becomes unpersuasive because the superfluous evidence creates the impression of special pleading. A repetitive or digressive argument is not an effective argument, because it diverts the reader's attention to the repetitiveness or digressions and away from the case being made.

However, if you are selecting evidence from a large mass of material that you've discovered, you have to explain to the reader why you think the evidence you've selected is sufficient. Such an explanation will consist in arguing that what you've selected is representative of the material you did not cite as well as that it proves your argument. Such an explanation is an argument that you have used the right amount of evidence in the right way; it is not too much or too little, and it is used fairly – that is, you have not left out information that would support a thesis different from yours and have not taken quotations or "facts" out of context. In political campaigns, candidates

often take quotations from their opponents or from government reports out of context, thereby distorting their meaning. Scholars occasionally do something similar to shore up a weak argument – quoting part of a text while leaving out the part that shows that the quoted text does not really say what the scholar wishes it did. In general, you need to persuade your reader that you have not used the evidence just to make your argument come out the way you wish. If you think you have used the evidence fairly, then you probably have. If your answer to your question has become more important to you than the evidence you've found regarding it, as often happens with politicians, then you probably have not used the evidence fairly or persuasively.

Chapter 7
Shaping the Paper: Writing a Prospectus and a Rough Draft

Once you've organized your materials, you will have to write a rough draft. Sometimes, you will be required to write a prospectus before you create the rough draft and sometimes you will find it useful to write a prospectus as a way to prepare yourself for writing the rough draft. You approach both a prospectus and a rough draft in the same way, so I will treat them together.

It is at the point writing a draft that many writers bog down, uncertain about how to proceed. The worksheet at the end of this chapter will help you get started. You can use it in any of the following ways:

- As a template for writing a prospectus, if your assignment asks you to provide one or if you think it would be useful to you as a starting point for writing your draft
- As an aid in solidifying your argument, helping you to see what its "moving parts" are
- As a guide for structuring your rough draft
- As a tool for evaluating your rough draft during substantive revision

A prospectus is a very brief summary of your paper. A rough draft is a first attempt at actually writing the paper. Thus, a prospectus is almost like an outline, except that you write out your question, thesis, and arguments in full sentences. The advantage of writing a prospectus, as opposed to an outline, is that when you try to write out your arguments, you often find that you need to hone the way you are making them. A prospectus is practice for the rough draft, which is more than practice for the final version of the paper. The rough draft is the basis for the paper you will turn in.

Your rough draft should be longer than the target length of the final paper, which means you should put into it most, if not all, of the material you have found through your research. The reason you want to write a long rough draft is that when you revise it to produce your second draft, you want to be paring it down, not adding new material. New material added when you write a second draft is rough-draft writing. If you have a second draft that contains significant new material, what you really have is a mixed draft. Some of it has been honed and improved over the rough draft; some of it is just as rough as what you started with. The point of writing a rough draft and then editing it is to hone your argument – tighten it, assure that the argument flows logically, improve your use of evidence, get rid of extraneous material, and so forth. If you have added significant new material while revising your rough draft, then you've gone back to the first stage of your writing and have to start the revision process over again. If you just go on without starting over, your final paper will not be very good.

Using a rough draft worksheet

- **As a prospectus template**: Fill in all of the blanks on the worksheet. Use the completed worksheet as a rough outline for writing your prospectus. A prospectus is usually a 1- to 2-page summary of your paper. In it you set out your question and thesis, outline your argument and at least the main counter-arguments, and indicate what kind of evidence you have to support your argument. One way to think about a prospectus is as part of an application for grant support. If you were asking a granting agency to support your project, you would have to tell its reviews what you proposed to do with the grant. They would want to know your question, your working thesis, the outline of your argument, and the kind of evidence you expect to use. Their judgment would rest on whether they thought your question was worth investigating, whether your working thesis was plausible, whether it looked like your argument, if you made it, could support your thesis, whether you were using the right kind of evidence, and whether you could finish the project in the time you had. In the context of a university course, the prospectus gives that kind of information to your reader – your professor, teaching assistant, or yourself. For some people, writing a prospectus is a good first step towards writing a rough draft.

- **As a guide to solidifying your argument**: Fill in as many blanks on the worksheet as you can. If there are any blanks that you cannot fill, take it as a signal that your argument has some weak spots. Review your notes or do more research until you can complete the worksheet.

- **As a guide for structuring your rough draft**: The worksheet's elements are arranged in the order in which they might typically appear in a research paper. The first part of the worksheet – the topic, question, alternative arguments, rebuttal, and statement of the thesis – corresponds to a paper's introduction. The next section constitutes the body of the paper, advancing the different parts of your argument, each part accompanied by supporting evidence, scholarly opinion, and explanation. The final section, on the significance of your thesis, constitutes a crucial part of the conclusion.

- **As an evaluative tool during revision**: After you have written a complete rough draft, make sure that it contains at least some material that corresponds to each element in the worksheet. Go back to your notes or do additional research to fill in the gaps and to strengthen underdeveloped areas.

The Rough Draft/Prospectus Worksheet

In my research on the topic of: _____

_____

I have learned the following: _____

_____

_____

_____

_____

_____

These observations lead me to pose the following question: _____

_____

_____

This question has several plausible answers. For example, scholars such as _____ and _____ have claimed that _____

_____

_____

_____

It is also possible to argue that _____

_____

_____

_____

[*add more if necessary*]

While the above answers are plausible, they have several weaknesses. These weaknesses include:

_____

_____

_____

_____

My own answer to the question (my thesis) is as follows: _____

_____

_____

_____

My thesis is supported by the following piece of evidence: _____

_____

_____

_____

(*Reference*: _____)

My thesis is also supported by: _____

_____

_____

_____

(*Reference*: _____)

My thesis is further supported by: _____

_____

_____

_____

(*Reference*: _____)

[*add more if necessary*]

My thesis is significant because it modifies and/or adds to current thinking on this topic in the following way: .

Chapter 8
Revising the Rough Draft

When you revise a rough draft for the first time, you should aim for substantive changes – improvements in organization, the logical flow of the argument, and the use of evidence. During that first revision, you should spend as little time as possible on sentence-level editing for two reasons: first, focusing on grammar and word choice will make it more difficult for you to see where you need to make more significant substantive or structural changes; second, reworking sentences that you might ultimately decide to amend or delete will waste time. You should therefore save sentence-level revision for your last revision. At this stage in the process, your goals will be to:

- organize the main sections of your paper to make your argument as persuasive as possible; the argument should march through the paper
- strengthen the organization within each of your paragraphs
- delete redundant passages
- note where you need to do additional research
- make sure that your paper has an explicitly stated thesis and that each paragraph contributes to the argument that the thesis is right
- make sure your paragraphs step logically from one to the next
- make sure that your conclusion and your thesis match up; that is, make sure that the main point of your conclusion is the same as the point of the thesis you advance in your introduction
- make sure that you have cited your sources properly

Organizing the paper

Number the paragraphs of your rough draft. On a separate sheet of paper, make a numbered list in which you write one brief sentence summarizing the main point of each of your paragraphs. Analyzing the list will help you improve the organization and flow of your paper. In particular, you should do the following:

- **Make sure that each of your paragraphs has only one main idea**. If you find that you cannot easily summarize a paragraph, it probably makes more than one point. (Just like

the rule "one idea to a sentence," each paragraph should present one point of your argument.) If necessary, divide paragraphs into two or more shorter paragraphs.

- **Eliminate redundancy**. If you find that two or more paragraphs contain the same information, combine that information into one paragraph or a smaller number of paragraphs.

- **Make sure that all the material related to a single point is in the same place**. If two or more paragraphs address the same topic or main idea, make sure that they are in the same part of the paper, moving them if necessary. Don't discuss a topic in two different parts of a paper. Treat each topic completely and then move on to the next topic. If necessary, you can refer to an earlier discussion or remind your reader that you have already argued a point, but you should not divide your discussion of a topic.

- **Look at where you have placed each of your main points**. Your argument will be most persuasive if you place your strongest point last, your next strongest point first, and all other points in the middle of your paper. Move paragraphs around if necessary.

- **Look at where you have placed counterarguments and rebuttals**. Remember that whatever comes last in your paper will have the strongest effect; for that reason, make sure that counterarguments are not in either the last or next-to-last paragraph. Counterarguments and rebuttals are more effectively placed after the introduction or within the body of the paper, as appropriate.

Chapter 9
Copyediting and Final Revision

Experienced writers know that there is no limit to the number of times one can revise a piece of writing. In fact, the one and only rule of limitation in revising a paper is:

When it's due, it's done.

Final Revisions

Final revision takes place in the last day or two before your paper is due. Remind yourself that you cannot rewrite your entire paper in that amount of time, no matter how many flaws you think you have found in it or how much new evidence you have just discovered. If you have stuck to a strict writing schedule, you will have already completed your substantive revision – for organization, presentation, and effective use of evidence – by the time you need to copyedit your paper.

What follows is a very brief and incomplete list of problems to look for in your writing as you go through the paper for the last time. There are many guides to good writing, and your teacher has probably required you to buy one.[1] It will be a much better guide that the one provided here. None of the suggestions here is meant to be a hard and fast rule, but following them will improve your writing and make you aware of your tendencies as a writer. Good writers know the rules of grammar and style, and they break them when doing so will produce clarity or a desirable effect in the reader (a smile, a grumble, a recognition).

The ways in which you can improve the clarity of your writing include:

- **Avoiding overuse of "to be" verbs** ("is," "are," "was," "were," "have been," and so forth)

  Before: "Jesus <u>was</u> publicly predicting the destruction of the Roman Empire by God."

  After: "Jesus publicly predicted God's destruction of the Roman Empire."

[1] When I was a first-year student, the book was Strunk and White, *The Elements of Style*, and its effect on me was so great that I often quote it without being aware of it. William Strunk, Jr. and E.B. White, *The Elements of Style*, New York, Macmillan, 1959. Strunk wrote this little book for his composition students at Cornell University. White, the author of *Charlotte's Web* and many other beloved works, had been Strunk's student. He revised and enlarged the book.

- **Using the active voice rather than the passive voice**

  Before: "The animosity between medieval Muslims and Jews is underestimated."

  After: "Modern historians underestimate the animosity between medieval Muslims and Jews."

  Note that using the active voice allows you to specify who the *actors* are: that is, who (in the example) have underestimated the animosity.

- **Substituting concrete nouns for pronouns** such as "this," "these," "those," "it," or "they," and clarifying your references.

  Before: "The messages that these women projected through their literature supposedly encouraged other women to do the same. Yet this is not the case. For women, writing diaries was not a form of empowerment. It was a source of escapism . . . . These remarkable masterpieces left from this era are poignant reminders of how women looked to escape from the hardships of life."

  After: "The message of empowerment projected by the nineteenth-century literature written by women supposedly encouraged other women, their readers, to do their own writing. Yet, contemporary women did not write diaries as a form of empowerment but as an escape from the burdens and constraints of their lives. . . .The masterpieces of women's literature from the era poignantly remind us that women then had to escape from the hardships of their lives."

  Note that the original passage suffered not only from the use of vague pronouns but also from passive constructions.

- **Omitting needless words** (be *ruthless* in your editing):[2]

  Before: "This shows how important it was for Muslims to acquire knowledge, no matter where they had to look for it. This was characteristic of Muslims. Throughout their conquests in various regions of the world, they adopted scientific and technological knowledge from their neighbors. As a result, the Muslims acquired different forms of knowledge from various cultures and civilizations." (58 words)

  After: "The above verse demonstrates the Muslim love of learning. The Islamic conquests brought Muslims scientific and technological knowledge from the many cultures incorporated into their empire." (26 words)

[2] One of Strunk and White's rules.

In general, you should try to write as tersely as you can. Always look for words and phrases that can be deleted. Always seek to tighten up your writing. By doing that, you will move your argument and your reader along.

- **Cutting pairs of nouns and pairs of adjectives**, when one noun or adjective would suffice. In the last example, note "cultures and civilizations." Choose one of these terms.

- **Avoiding verbs made from nouns**. Many verbs that end in "ize," such as "prioritize," are made from nouns ("priority"). Some of these verbs, such as "legitimize," have been fully absorbed into the language and are fine. Others are new formations and will not look right to readers. They may also not have a completely settled meaning. "Priority" means the first thing; "prioritize" usually means putting a group of things in order, but that meaning is not consistent with the noun it came from. In general, you do not want your reader to focus on your choice of words but on your choice of meaning. Don't trip up the reader with new, trendy, not-quite-clear words.

- **Putting connective words at the beginning of sentences**. "The V-8 engine is, however, a gas guzzler" is not as good as "However, the V-8 engine is a gas guzzler." Putting the connective in the middle of the sentence misleads the reader, who doesn't know that come not to praise the V-8 but to bury it. Words and phrases indicating the direction of your thought or placing what you have to say in time or place – "In the 19th century," "In Beijing" –almost always belong at the beginning of the sentence. They qualify or condition whatever the sentence says.

Last suggestions

As you go through your paper, don't try to do everything at once. Instead, concentrate on one (or maybe two) aspects of revising on each read-through. For example, you might highlight all the "to be" verbs" and then try to transform most of them into active verbs. (Note: sometimes "to be" is the correct verb. When you use a form of "to be," you set up an equation, "x is y," that you might use as a transition from one part of your argument to another.) Or you might locate all instances of the passive voice and revise those sentences into the active voice.

One of the best things you can do is to read your paper aloud; since your ear is less tolerant than your eye, you can often hear the awkwardness of sentences that seem fine when you read them silently.

So, revising is a repetitive process. You go through your paper several times, concentrating on one writing issue after another. Each of these passes through the paper should go quickly.

Final revision checklist

- Revise for clarity
- Revise for subject-pronoun agreement and subject-verb agreement
- Use your computer's spell-check
- On a hard copy, double-check for spelling errors that the spell-check software won't catch (that is, any typographical error that is a real word but the wrong word for the sentence)
- Make sure that each of the authors you cite in the body of the paper is included in your "works cited" page and that each of the authors listed under "works cited" has at least one reference in the body of your paper

Conclusion

If you get through the process described in this pamphlet, you will produce a paper you can be proud of. In addition, you'll learn and practice intellectual skills that will serve you in everything you do in school and after you've left school. You are getting a university education because you want to make your way in the world using your intellect. The essence of intellectual work is using knowledge to find things out and to persuade others that your conclusions about a topic or question are correct. You learn to use knowledge by doing research papers.

You are not in school merely to pick up a ton of facts. You are here to learn how to use facts – that is, to learn what facts are and how they can be put to use in forming and supporting ideas. When you've learned how to formulate a research question, to do research to answer it, and to construct an argument to support your answer, you have learned the most important skills a university can teach you. And, you'll do superior work in school and in whatever profession you enter. You came to the university with intellectual potential. Projects like the one outlined in this pamphlet will turn that potential into high achievement and the ability to succeed in your chosen work.