

Strengthening Your Structure

Day to Do Task	Week 6 Daily Writing Tasks	Estimated Task Time
Day 1 (Monday?)	Read through page 185 and fill in the boxes on those pages; start documenting your time (page 187)	30 minutes
Day 2 (Tuesday?)	Outline a model article (page 185)	60 minutes
Day 3 (Wednesday?)	Outline your article (page 186)	60 minutes
Day 4 (Thursday?)	Restructure your article (page 186)	60 minutes
Day 5 (Friday?)	Restructure your article (page 186)	60 minutes

Above are the tasks for your sixth week. Some articles need a lot of restructuring; other articles will be fine. Start this week by scheduling when you will write and then tracking the time that you actually spend writing.

FIFTH WEEK IN REVIEW

You have now spent five weeks working on establishing a writing schedule, revising your argument, selecting the right journal, and reviewing the related literature. By this week, you should be in the groove, writing away, making progress, getting closer to done. But, that may not be happening. Instead, you may be wondering about your ability to convert my writing advice into better writing. Maybe the problem isn't you! Maybe the problem is that this workbook divides an organic process up into steps. The workbook posits a rigid structure, unlike real writing.

As Peter Elbow puts it, writing is not a "two-step process" where you get ideas and then write them down and then are done. Rather "writing is an organic, developmental process" (Elbow 1973, 15). You can't really start with argument and move to structure. And you can't write one right word and then another right word and then another right word. Rather you have to feel your way forward. As Elbow comments,

The common model of writing I grew up with preaches control. It tells me to think first, make up my mind what I really mean, figure out ahead of time where I am going, have a plan, an outline, don't dither, don't be ambiguous, be stern with myself, don't let things get out of hand. As I begin to try to follow this advice, I experience a sense of satisfaction and control: 'I'm going to be in charge of this thing and keep out of any swamps!' Yet almost always my main experience ends up one of *not* being in control, feeling stuck, feeling lost, trying to write something and never succeeding. Helplessness and passivity. The developmental model, on the other hand, preaches, in a sense, *lack* of control: don't worry about knowing what you mean or what you intend ahead of time; you don't need a plan or an outline, let things get out of hand, let things wander and digress. Though this approach makes for initial panic, my overall experience with it is increased control. (Elbow 1973, 32–33)

If the rigidity of the workbook order is throwing you off, try revisiting some of the previous

chapters, opening up the electronic file of your article, and working on whatever attracts your attention given that review of the previous chapters. On the other hand, if the workbook order is helping you, keep going! This week, you'll focus on improving the overall structure of your article.

ON THE IMPORTANCE OF STRUCTURE

Structure is the organization of your argument and the evidence for your argument. When each part of your article leads logically to the next part, you have a coherent structure.

You can think of structure as the skeleton of your article: invisible but essential. Without a skeleton, you have a collapsed biomass. With a skeleton, you have a living, breathing, moving entity. With a structure, your article can support the weight of its own ideas.

A strong article structure is important to both you and your readers. Since regular patterns aid readability, readers can more easily grasp the ideas in a structured article than a disorganized one. The research shows that people read a structured article faster and remember more of it (Meyer 2003). Regular patterns also aid *your* thought. Organizing your ideas helps you to understand them better and their connections to each other. Yet, revising your article for structure can be the most difficult revision you do.

My experience, particularly with long projects, is that how well the middle works depends on the structure. Beginnings often go smoothly because of the initial inspiration and enthusiasm. Endings may exist as a goal to work toward. But the middle of a long work needs strong structural elements to support its weight.

The deepest level of revision is to make or discover the structure, the central order of a work, and this often cannot be done until the work is well underway. (Willis 1993, 156)

Adhering rigidly to a plan you made in the beginning may not work. Revising requires an ability to be flexible. When I am teaching my course, this week is when students will make some of the most drastic changes to their work: moving paragraphs, cutting cases, throwing out whole sections. Your structure can improve dramatically if you are willing to entertain the possibilities for revising deep structure.

Unfortunately, since many of us write on computers, it can be easy to lose the thread, a sense for the whole. Seeing just part of a paragraph doesn't help you keep the overall structure in mind. That's why you may need to develop some techniques to keep your grasp of the whole and ensure the parts of your text are properly linked.

TYPES OF STRUCTURES

Article structure occurs both at the level of the whole article and within each paragraph. Studying these different structures—micro and macro— may aid you in thinking about your article's best structure.

Micro Structure

Scholars argue that there are five basic organizational structures and that journal articles use them in combination (Meyer et al. 1989, 115–116; Meyer, Brandt, and Bluth 1980, 16, 72–103). When they train students to recognize these basic structures, their reading and retention improves, so they can aid us in understanding paragraph structure. The structures are:

Description. A structure organized by information about a topic (e.g., introduction section; who, what, where, when). Signals of this structure are “for example,” “such as,” or “that is.”

Sequence. A structure organized by sequential order, most often chronological or procedural (e.g., background section, histories, experiments). Signals of this structure are “before,” “after,” or “more recently.”

Causation. A structure organized by cause and effect relationships (e.g., results section). Signals of this structure are “because,” “thus,” or “therefore.”

Problem/solution. A structure organized by a problem and a solution, it asks a question and answers it (e.g., discussion section). Signals of this structure are “argues that,” “proposes,” “responds.”

Comparison. A structure organized by the differences and similarities among things (e.g., literature review). Signals of this structure are “in contrast,” “instead,” “on the other hand.”

Knowing these structural types doesn’t necessarily help you to know which organizational principle you should use when, however. Some principles that scholars recommend when structuring information are:

- Go from what your readers know to what they don’t know. That is, start with the familiar.
- Go from the simple to the complex. Get your reader comfortable before introducing the difficult.
- Go from the uncontested to the more contested. Readers who have been convinced to believe one thing may more easily believe the next.
- Go from the general to the particular. Start with the large picture and then focus in on details.
- Go chronologically from the past to the present. (This common structure is not always the best one for your particular argument and evidence.)
- Go spatially through a succession of linked objects, as if on a guided tour. This works particular well for art history, geography, and so on.

But what about the macro structure of the journal article? What comes first and then second usually? How do journal articles usually end?

Macro Structure

The journal article has some rhetorical features that have persisted for thousands of years. The Greeks long ago contended that you should start a public speech with an introduction that attracts the audience (called an exordium) and follow this with background on the topic or issue. You then should propose your claim or argument, provide evidence for your argument, and refute potential criticisms of your argument. Finally, you should articulate a moving conclusion, often some kind of call to arms (called a peroration).

This ancient structure persists in the topic, thesis, evidence, and conclusion structure of most scientific articles. It also persists in the essay that many undergraduates are taught to write: set the context (who, what, where, when); introduce your argument (why, how); provide three proofs; and conclude and/or recommend.

In the humanities, a slight variation on this structure is proposing and proving successive arguments through the article. The article depends on making a series of arguments, each argument enabled by proving the previous argument. In nonscientific writing, there have been some real alterations to the Greek structure. Since you are unconsciously aware of the conventions of these structures, they may cause you some problems in the structuring of your article. For instance, a classic newspaper article does not circle round or wrap up. It starts with a lead that answers at least one of the six basic journalistic questions: who, what, where, when, why, or how. For instance, “Former President Clinton [who] told one of the nation’s largest Latino civil rights groups [where] Saturday [when] that the conservative wing of the Republican Party is using the immigration issue to divide Congress and the nation [what]” (Rabin 2006). Such an article then proceeds with a pyramid structure, in which the most important information appears first and the least important information last. (For instance, the Clinton article ended with comments by the California governor Arnold Schwarzenegger, comments that were related to Clinton’s speech but not from it.) This pyramid structure emerges from a past technological limitation. Before publishers had computers, such a structure allowed editors to cut the article from the bottom up and fit it into the space that was available.

Another variant structure from the Greek model is in magazine article writing, which has a type of article called a “feature.” Such articles start with a “billboard,” an anecdotal narrative that captures the reader’s attention, about one to three paragraphs long. This anecdote is followed by a “lede,” a sentence that announces the articles’ argument. This sentence is the pivot of the article, guiding readers in reading the rest of the article. The conclusion then refers back to the billboard. For instance, a feature will start with a story about Johnny, whose mother noticed that he was gaining weight and urinating more than usual. When she took him to the doctor, she found out that he had juvenile diabetes. The lede will then state that millions of children have undiagnosed juvenile diabetes, the argument that the anecdote illustrates. Often the feature will conclude with a return to the anecdote, in this case that Johnny is feeling better.

In addition to these common structures, we experience new forms every day. For instance, blogs

have particular structures, often loose in style but chronological. Knowing the multiplicity of writing structures can help you write better journal articles, since it helps you prevent other structures from creeping into your academic writing.

Returning to journal article structure, some disciplines have more rigorous structures than others. The sciences have absolute formulas, the humanities have quite loose ones. Those in the sciences sometimes wish that their discipline's structural requirements were less rigid; those in the humanities sometimes wish that they had simple formulaic structures they could follow. The good news is that you can improve your writing by knowing the structuring principles of journal articles in various disciplines.

ARTICLE STRUCTURES IN THE SOCIAL SCIENCES AND HUMANITIES

Let's start with social science article structures and then move on to humanities article structures. Each of the three kinds of social science articles—quantitative, qualitative, and interpretive—has a different typical structure. Quantitative articles are the most scientific in their structure. Qualitative articles can have the same structure as quantitative articles, but they often don't. Interpretive social science articles are similar to humanities articles.

Quantitative Social Science Article Structure

Quantitative articles often follow what is called IMRD, an acronym for the order of the article's sections: Introduction, Methods, Results, and Discussion. This type of article moves from why and how the scholars got the results to what the results mean. Each section has specific formats organized around the research question. Here is a bit more detail on that structure.

Section One—pyramid structure, general to specific

- Introduction—general subject of investigation (often a problem)
- Review of the literature—literature on the subject of investigation (gaps and lacks)
- Statement of the hypothesis—your argument in the context of other work

Section Two—Description of study, all information needed to replicate study

- Methods
- Procedures
- Materials and Instruments
- Experiment
- Context and Setting
- Population

Section Three—inverse pyramid structure, specific to general

- Results—report on findings
- Discussion—comment on validity of methods and findings
- Conclusions—place research into the context of other work Works Cited

Below is an example of the structure of an actual quantitative article, selected precisely because it is ordinary rather than spectacular. The article was about 3,000 words.

Sleep Habits, Prevalence, and Burden of Sleep Disturbances Among Japanese Graduate Students (Pallos et al 2004)

I. Abstract

II. Introduction (2 paragraphs, no subheads)

- A. Sleep disorder is a common problem.
- B. Sleep disorder among graduate students is rarely studied.
- C. The purpose of this study is to:
 1. estimate rates of sleep disturbance among graduate students in Japan
 2. determine if these sleep disturbances have an adverse affect
 3. find if affected students seek help from physicians

III. Methods (5 paragraphs, 3 subheads)

- A. Study design and subjects
 1. dates of study
 2. setting of study
 3. population studied
 4. survey implementation and analysis
- B. Questionnaires
 1. their use of the Pittsburgh Sleep Quality Index (PSQI)
 2. the questions they asked about sleep
 3. the questions they asked about demographics
 4. the questions they asked about attitudes and consequences

C. Statistical analysis

IV. Results (4 paragraphs, 4 subheads)

- A. Sample characteristics
 1. states the number of respondents and their gender
- B. Prevalence rates of sleep disturbances and hypnotic medication use
 1. table of rates

2. rate findings

3. no significant differences in rates found between the genders

C. Sleeping characteristics of graduate students

1. table of characteristics

2. findings

3. no significant differences in characteristics found between the genders

D. Consultation rate and the adverse consequences of sleep problems

1. rate findings

2. consequences findings

V. Discussion (6 paragraphs, no subheads)

A. The purpose of the study was to learn the rate of sleep disturbances among Japanese graduate students.

B. Why were these students less sleepy than others their age?

1. prevalence rates were similar to what other researchers found

2. except regarding gender (speculation on why that might be)

3. perhaps students were less sleepy than other young adults because they might be taking naps

C. Why aren't these students consulting doctors about sleep disturbance?

1. sleep medications were not used much, perhaps because students did not consult doctors about the problem

2. why didn't students consult doctors?

3. further research should investigate this lack of consultation

D. Literature review of related studies

1. literature review of studies on undergraduate students' sleep habits shows similar findings to these findings on graduate students

2. limitations of the study

3. conclusion: hypothesis rejected: graduate students do not suffer more frequently from sleep disturbances than does the general Japanese young adult population.

Qualitative Social Science Article Structure

Qualitative article structure can vary quite a bit. Only dedicated study of articles in your own field can reveal typical article structures.

One of my students who studied linguistics articles found some standardization among articles in her field, which tended to be thirty to thirty-five pages in length with abstracts of 150–250 words. They had short introductions followed by literature reviews of three to five pages reviewing approximately forty to fifty citations. After a short methods section, they proceeded to the analysis or discussion, which typically took up about 75 percent of the article and was organized around the

debate announced in the literature review. Another student did the same for articles in her field of anthropology. She found that, contrary to my advice, articles in her field devoted half their space to reviewing the literature and related theories. Most had literature reviews at least eight pages long and reviewed several different bodies of literature. Many of the articles also had about two paragraphs of background on the field site and population. Just as she did, you should test my advice by studying the norms of articles in your particular field.

Two scholars have formally studied articles in applied linguistics, finding that they often stray from the IMRD structure. For instance, they often include sections after the introduction that address the theoretical background, the related literature, or background information (Ruiying and Allison 2004). Applied linguistics articles also often had a section before the conclusion on the pedagogical implications of the research. The body of applied linguistics articles were taken up with argumentation, but of three different types. One body type was oriented toward theory, pursuing a series of sub-arguments. Another type had a problem-solution format. The last type had a problemsolution format but added a component on the application of the solution. I mention these variations in applied linguistics as just one example of variation from the ostensibly universal rules for social science articles.

Below is an example of the structure of an actual qualitative article. It demonstrates that no article follows the typical structure exactly—it must be altered to accommodate the particular data and findings. Something this article does brilliantly is organize the results or findings by theme, rather than dumping a stream of data on readers. Identifying patterns in the data and then creating and presenting a typology is a helpful way to organize a results or discussion section.

Changing Women: An Ethnographic Study of Homeless Mothers and Popular Education (Rivera 2003)

I. Introduction (3 paragraphs)

A. Context

1. Who, what, where when. “Between 1995 and 1998, I studied the impact of popular education on a group of fifty homeless and formerly homeless mothers who participated in a shelterbased adult literacy program located in one of Boston’s poorest neighborhoods.”
2. Background. “The popular education classes... were . . .”

B. Argument

1. “The purpose of this article is to examine how the homeless mothers were affected by their participation in the popular education program at the Family Shelter. Based on my observations, I argue that the Family Shelter’s popular education philosophy and the provision of comprehensive social services addressed the women’s personal, academic, and community needs. I argue that popular education had a positive impact on the lives of the homeless mothers

that extended beyond learning important reading and numeracy skills.”

II. Methodology (how and when data collected) (2 paragraphs)

III. Profile of Sample (description of women in the study) (3 paragraphs)

IV. Theoretical Framework

A. What is Popular Education? (7 paragraphs)

1. History in U.S.
2. Roots in Brazil
3. Review of Freire’s thought
4. History of the specific shelter in this study

B. Studies on the Impact of Popular Education (2 paragraphs)

1. Literature review
2. How her research relates to the literature

V. Findings

A. First question: “Why do the Women Return to School?” (9 paragraphs)

B. Second question: “What Are the Benefits of Popular Education?” (narratives about women and quotes from them)

1. “I Have More Self-Esteem” that is, “participation in adult literacy education has a positive impact on adult learners’ self-esteem” (3 paragraphs)
2. “So You Teach Somebody Else” that is, the women “began to develop a community of support within the context of their popular education classes” (8 paragraphs)
3. “It Gave Me a Backbone” that is, the women “increased [their desire] to address the root causes of problems and they often talked about changing ‘the system’ ” (4 paragraphs)
4. “We Sit Down and Do Homework. They Do Theirs, I Do Mine” that is, “Popular education strengthened the women’s ability to advocate for their children’s education” (5 paragraphs)

VI. Outcomes (what happened to the women later?) (5 paragraphs)

VII. Implications of the Study (4 paragraphs)

A. Positive change. “Through a process of collective sharing and reflection, the homeless mothers in this study began to ‘act upon the world,’ challenging their internalized oppressions and understanding how structural forces shaped and constrained their lives”

B. Possible problems. “The impact of ‘work-first’ welfare reform legislation on popular education programs”

C. Policy implications. “As Congress prepares to reauthorize the Personal Responsibility and Work Opportunity Act, it should increase access to education... Indeed, the time is ripe for change.”

Humanities Article Structure

Precisely because the structure of humanities articles can vary so much, it is difficult to give specific advice about how to structure such an article. Humanities articles proceed differently than in the social sciences, in that discussion occurs continuously, not just at the end of the article. The author presents a piece of evidence (usually a quote or observation about the text), interprets that evidence, suggests how that evidence supports the argument, and repeats this process until satisfied that the argument is convincing. Humanities articles start with an introduction to the subject or problem, discuss critical approaches, apply the approach to the subject, speculate on the implications, and conclude that the subject or approach has been validated. Here is a bit more detail on that structure.

I. Introduction

- A. Vivid context: who, what, why, where, when
- B. Review of the scholarly debate and/or general perception of the text
- C. Statement of author's argument relevant to context, debate, and perceptions (your new insight)
- D. Claim for the significance of the subject, approach, or argument
- E. Summary of article structure and points

II. Body

- A. Background (e.g., description, history)
- B. Analysis 1
 1. Subject of analysis 1 (e.g., book, artwork, event)
 2. Subject subjected to argument
 3. What was discovered, found, concluded
- C. Analysis 2
 1. Subject of analysis 2
 2. Subject subjected to argument
 3. What was discovered, found, concluded
- D. Analysis 3
 1. Subject of analysis 3
 2. Subject subjected to argument
 3. What was discovered, found, concluded

III. Summary (how all subjects, discoveries, and argument relate)

IV. Conclusion

- A. Why these discoveries are fascinating
- B. Why this article is a contribution to the scholarly debate and/or a contribution to the field

Below is an example of the structure of an actual humanities article. It follows the classic writing

advice to detail an example (in this case a text) and then analyze and interpret the example. One strength of this article is the way it moves forward and summarizes at the same time, with regular reminders to the reader of what is at stake and what has been found so far.

‘Indians’: Textualism, Morality, and the Problem of History (Tompkins 1986)

I. Introduction (3 pages)

- A. Anecdote
- B. Problem: how to teach a nonracist history?
- C. Primary sources announced
- D. Theory being tested (poststructuralism)
- E. Problem with the theory
- F. Argument suggested

II. Body: Textual Analysis/Close Reading

A. Modern history books

- 1. Perry Miller’s book analyzed (1964) (2 pages)
- 2. Alden Vaughan’s book analyzed (2 pages)
- 3. Francis Jennings’s book analyzed
- 4. Summary sentence of analysis so far
- 5. Calvin Martin’s book analyzed (2 pages)
- 6. Charles Hudson’s book analyzed (2 pages)
- 7. Summary of analysis so far
- 8. Problem restated in relation to what has been found

B. Captivity narratives and their analysis

- 1. James Axtell’s book analyzed
- 2. Norman Heard’s book analyzed
- 3. Mary Rowlandson’s book analyzed
- 4. Summary of analysis so far
- 5. Problem restated in relation to what has been found

C. Seventeenth-century histories

- 1. William Wood’s book analyzed
- 2. Alexander Whitaker’s book analyzed
- 3. Robert Berkhofer’s book analyzed
- 4. Karen Kuperman’s book analyzed
- 5. Summary of analysis so far

III. Results/Summary

- B. What to do with these conflicting accounts?

B. Summary of analysis

C. The problem restated in relation to what has been found

IV. Discussion/Solution

A. The original problem was not formulated properly.

B. This failure is due to the failure of poststructuralism.

C. Argument stated: That facts are embedded in particular ways of seeing the world is not an argument against facts.

D. Solution for teaching history: “If the accounts don’t fit together neatly, that is not a reason for rejecting them all in favor of a metadiscourse about epistemology.”

Synaptic Article Structure

Over the years that I have taught my writing workshop, a contingent of students has argued against rigid article structures. They insist that some published articles are not so argument driven but instead pose a question, move through a process of discovery, and reveal an answer only in the conclusion (if then). Such articles proceed with merely the promise of an answer or with only a provisional argument that cannot be understood until the piece has been read through. Argument is not a structure but a plot, these students say, a seductive puzzle that foments critical desire and depends on a perhaps endlessly deferred closure. I call such articles “synaptic,” since they proceed by sparking readers’ imaginations, lighting synapses up like fireworks with a series of epiphanies. Synaptic articles are often highly theoretical; Homi Bhaba and Judith Butler are masters of the form. The Tompkins article outlined above borders on synaptic, since it only fully announces the argument, or finding, in the final paragraphs. However, her article is extremely clear, while most synaptic articles revel in obscurity.

In warning students against writing endless plot summary, rehearsing others’ theory, or stringing together tiny insights without any organizing principle, perhaps I *am* prohibiting the development of more sophisticated, intuitive, and open articles. It’s worth discussing synaptic articles with those in your field to find out how such articles do in the peer-review process and whether they can be successful. They are certainly more difficult to write well. The Achilles heel of the synaptic article is organization; it is easy for readers to get lost in the maze or miss the payoff. If you are dedicated to this style, study the best examples of the type.

SOLVING STRUCTURAL PROBLEMS

The literary scholar Richard D. Altick once said that the sentences and paragraphs of your article “should fit as tightly as the teeth of a zipper” (1963, 188). This is a useful image. Each sentence is connected to the next— non sequiturs and digressions are absent. Such sentence connections aid the whole article in being more unified and coherent. So do logical connections between paragraphs. What can you do to improve the structure of your article at the paragraph and article level?

Use subheads. Subheads help you the author, and your reader. One study showed that teaching college students to use descriptive headings in their writing resulted in a “marked improvement” in their article’s organization, source use, and argument (Murphy 1998; Moore 2006). Other studies have found that readers do better when a text is organized and that organization is clearly signaled (Meyer 2003). Some useful signals of structure are headings and subheadings. Visible cues to structure are particularly helpful in getting reviewers to look on your article favorably. That is, even if you haven’t succeeded in doing what you set out to do, your general project comes across more clearly, and they can push you to do what you promised rather than rejecting you.

Could I use more subheads? Where?	
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Use summary. Peter Elbow advises writers to make “lots of summings up” (Elbow 1973, 35). He’s right. Studies have found that preview statements, summary statements, and pointer words are useful signals of structure that aid the reader (Meyer 2003). If you don’t like summaries, then you may have been reading bad ones. Good summaries move the article forward by articulating the argument and providing strong links between what has been said and what will be said. Good summaries are not simplistic, verbatim restatements.

Could I use more summarizing? Where?	
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Do not use a discovery structure. Just because your precious insights took forever to arrive at, doesn’t mean you should force us through your process. Only rarely will an article structured by the order in which you discovered the evidence provide a strong and satisfying structure. An order derived from the order in which you retrieved evidence from memory is unlikely to work well either. Such orders will most likely seem random to the reader. That’s why it is best to start in the data collection stage to organize your notes and evidence by theme and topic. Then your structure can emerge from the beginning.

Do not use the mystery novel structure. Many students love the mystery novel format. They believe that readers will stop reading if told the argument too early, so they withhold it. Such students want to reach the last sentence of their article and then reveal, “the butler did it.” Yet, readers are far more likely to read your article if they have a good sense of where it is going. Further, an article that announces the argument early and summarizes what is coming is more democratic and less controlling. Knowing the destination, the reader follows the evidence more carefully, evaluating at each stage if the evidence supports the argument. Such a structure enables the reader to be a fellow investigator instead of a passive observer waiting for the mystery to be solved. Most of all, students who withhold their article’s purpose, import, or conclusions until the end of the article often have

very tortured structures. They have to avoid being clear so that the mystery is sustained. Nothing is more likely to help you structure your article properly than to avoid mystery. If you are committed to the mystery structure, remember that the best mysteries give lots of clues so that the revelation is not a surprise.

Do I use a discovery or mystery structure? If so, what better structure could I use?	
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Present evidence second. Many problems with structure arise from the author’s failure to relate the particular, usually evidence or proofs, to the general, usually the theory or argument. We should learn no fact without knowing how it relates to your argument. Present codifying information first, evidence second. Don’t give a close reading without making clear why you are doing the close reading. Don’t provide a paragraph in the conclusion that shows us for the first time the meaning of everything that came before. As the late Guillermo E. Hernández used to say to me, “Remember, you don’t eat a cake the way you make a cake.” When you make a cake, the frosting arrives last; when you eat a cake, the frosting arrives first. We, the readers, want the richest part first.

Do I introduce evidence properly?	
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Organize around your argument. Unlike a book or chapter, your article must be carefully organized around a single significant idea. Make sure each section and paragraph relates to your single significant idea. If it doesn’t, delete it. Align your insights around your main point. Don’t fall into the trap of letting your data organize your article. We should get a sense for your argument in the title, see it clearly in the abstract, again in the introduction, at least once in each section of the article, and clearly in the conclusion. If you can do this organically, simply by logical flow, great. If not, feel free to provide lots of road signs.

Stay on topic. Everyone knows that you shouldn’t digress, but not everyone is ruthless about identifying what is relevant and what isn’t. For instance, an article about drug use among homeless teenagers should not have long passages about teen pregnancy. Teen pregnancy is indirectly, not directly, related. Likewise, if your article is on mining metaphors in a certain body of literary texts and the word “mining” does not appear in nearly every paragraph, the article is not staying on topic.

Does my main topic or argument appear in every paragraph? If not, should I include it more?	
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Develop the examples evenly. The article should be balanced between sections. Case studies don’t have to be exactly the same length, but they need to be balanced. Your examples are not evenly developed if, for instance, in an article about drug use among homeless teenagers, you (1) address

heroin use at length, detailing its use among homeless teens, its impact, and their comments about heroin, and then (2) include very little about ecstasy, but (3) proceed to discuss the history of marijuana in the United States as well as its use and impact among homeless teens. You have covered the first example more carefully, more in depth than the second. Heroin, ecstasy, and marijuana use among homeless teenagers should be covered with the same depth. The last example is not about drug use at all. You may need to cut some sections entirely if you cannot develop them to the same level as the others.

Could I develop my examples more evenly? Where?	
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REVISING YOUR STRUCTURE

Day 1: Reading the Workbook

On the first day of your writing week, you should read the workbook up to this page and answer all the questions posed in the workbook up to this point.

Day 2: Outlining a Model Article

Return to the model article you examined in Week 1—the article that does well what you want to do in your article. Using the outline examples above, make an outline of the model article. Underline the subheadings and topic sentences that you find. Write up a summarizing sentence next to each paragraph. What do you find about how the article is put together? Are there parts that surprised you by being shorter or longer than you thought they would be? Are there more or less citations than you thought there would be? What are the implications of the model article for yours? If you have the time, study the structure of a number of articles in your field. You only have to do this once and it will help you for years.

Day 3: Outlining Your Article

Using the examples of outlines above, make an outline of your article as it stands. Many students have found this the most useful exercise in my whole course, so don't skip it. One way to do this is to print out your article, underline the subheadings and topic sentences that you find, and then use those to start constructing an outline. Another way is to write a summary phrase or sentence next to each paragraph, and then use those to construct an outline. When creating the outline, use numbered headings so that you can show the relationship among the various parts of your article.

Once you put an outline together, read through it. Do the parts follow logically? Does one paragraph lead to the next? Did you digress? Did you say enough on a topic? Have some of your methods wandered into the results section? If you find this outlining difficult to do, it may be because your article lacks a structure. If paragraphs are poorly constructed and contain discordant ideas, they are hard to outline.

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Tasks Completed							



Presenting Your Evidence

Day to Do Task	Week 7 Daily Writing Tasks	Estimated Task Time
Day 1 (Monday?)	Read through page 199 and fill in the boxes on those pages; start documenting your time (page 200)	30 minutes
Day 2 (Tuesday?)	Discuss evidence with colleagues (page 199)	60 minutes
Day 3 (Wednesday?)	Revisit your evidence (page 199)	60 minutes
Day 4 (Thursday?)	Shape your evidence around your argument (page 199)	60 minutes
Day 5 (Friday?)	Shape your evidence around your argument (page 199)	60 minutes

Above are the tasks for your seventh week. Keep track of how long each task takes you on the weekly calendar provided at the end of the chapter.

SIXTH WEEK IN REVIEW

You have now spent six weeks working on your article. You have reached the halfway mark! It isn't easy doing such concentrated work, so congratulate yourself.

As Arthur L. Stinchcombe noted years ago, “The crucial peculiarity of research is that one has to choose an objective for oneself, and motivate oneself by that objective alone. . . . This means that only a person's own conviction that the result will be worthwhile is available as a motivation. [This] . . . is a weak reed to sustain... drudgery” (Stinchcombe 1986, 271–281).

In response to this drudgery, one of the readers of my monthly micro newsletter *Flourish* came up with an incentive system she called the “sexy dress fund.” She e-mailed me that,

Now that I am writing all the time, I'm feeling very unsexy because all I wear is sweats. So the idea of ever wearing a dress again, let alone a sexy one, feels like a nice thing. Every day before I officially begin my writing, I break my work for the day into a series of smaller tasks. They are generally tasks I think I can accomplish within 30 to 60 minutes, or 90 at the most. For example, ‘read a section of my chapter draft and make editorial notes.’ Or, if I have the notes done, then, ‘rewrite a section.’

I then estimate the amount of time it should take and set a kitchen timer (I occasionally cheat and add in an extra one or two minutes as a cushion). If I finish within the allotted time, I give myself a dollar. I have a beautiful wood antique box, and I physically put the dollar in each time I meet my deadline. I still belt out a cheer every time I make it. While the money I have now will only buy me a Barbie doll size dress, I anticipate that the fund will grow over time (even though I did not earn a single dollar today!)

One of the big benefits of this system is that it forces me to gain a more accurate understanding of how much time I need for certain tasks. It has convinced me that I have been working as fast as I possibly can, which is *very slow*. But this system has convinced me that this slowness is an integral part of how my mind works—and so I'm more willing to accept that now. I would previously beat myself up for being slow. And of course, the anxiety about my slowness made me even slower. I think that by

accepting my slowness, I have actually become quicker!

So, if you are still searching for your incentive, now may be the time to think up a fund that might work for you.

TYPES OF EVIDENCE

This week I will give you the least amount of advice and the most amount of work. That's because it is easier to advise you how to have an argument and structure your article around your argument than advise you on how to select and present the evidence for your argument. The main body of research articles, where you present your evidence, varies tremendously by discipline, argument, writing style, and personality. Forms of proof in the humanities and social sciences are so different as to be impossible to discuss together. No universal rules exist.

Therefore, this week I am going to direct you to do some research on types of evidence in your particular discipline and field. Call some friends or drop by professors' offices, and ask the big question, "What constitutes evidence in our discipline?" You should have some fascinating and fruitful metadiscussions. We benefit from having such discussions more often; turning our critical eye on our own process aids us in making more sophisticated arguments. If you still need more advice than I give here, I recommend some books below that provide detailed instructions on writing up evidence by type and discipline.

What types of evidence do scholars bring to bear in convincing others of their arguments? Below are some of the more common types of data, which authors sift and select depending on their explanatory power regarding their particular arguments.

Qualitative evidence. Data on human behavior collected in the field through direct observation, in-depth interviews, and written documents; in other words, through ethnographic research. Excellent books exist on writing up qualitative evidence in a variety of social science fields. If you regularly do field research, you should own the *SAGE Handbook of Qualitative Research* (2005), which some consider the best on the topic.

Quantitative evidence. Data collected using standardized instruments that yield statistical information. For information on writing up quantitative evidence, see *Best Practices in Quantitative Methods* (Osborne 2007), which describes options for data analysis, or *Statistics for People Who (Think They) Hate Statistics* (Salkind 2007). Such data is frequently used in education, medicine, sociology, political science, psychology, and economics.

Historical evidence. Data collected through an examination of time and the relationship of people to particular periods and events. Such data is used in all disciplines and often collected from archives of primary materials.

Geographic evidence. Data collected through an examination of space and the relationship of people to particular places and environments. Archeological evidence is a form of geographic evidence.

Textual evidence. Data collected from texts like diaries, novels, poems, ship's logs, histories, sacred books, court testimonies, and so on. The humanities depends almost entirely on this type of evidence. The information collected and analyzed has to do with the work's form (e.g., genre, length, point of view, tone, characters, plot, scenes, setting, images, title), language (e.g., rhyme, rhythm, pace, diction, rhetoric), purpose (e.g., message, function), meaning (e.g., symbolism, theme, motif, subject matter, allusions, metaphors, figures of speech), and milieu (e.g., sources, influences, nation, culture, conflict, race, gender, identity, author).

Artistic evidence. Data collected from images like paintings, photographs, sculptures, maps, films, videos, television, and architecture, as well as from live performances like ballet, soccer, and demonstrations. The information collected and analyzed has to do with the work's physical properties (e.g., size, scale, material, form, medium, color, contrast, location, composition, sound, style, technique, date), purpose (e.g., message, function, title), meaning (e.g., symbolism, theme, motif, subject matter, category), and milieu (e.g., sources, influences, nation, culture, conflict, race, gender, identity, creator).

What type of evidence am I using?	
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WRITING UP EVIDENCE IN THE SOCIAL SCIENCES

Since quantitative and qualitative social science articles have standard forms, it is possible to give some information about writing up evidence in the social sciences according to each section of the article. My assumption, as always in this workbook, is that you have already conducted your experiment and are trying to find the best way to interpret and present your data.

Methods

In this section, you detail the methods you used to get your quantitative or qualitative data. In some ways, this is an easy section to write—you just describe what you did. Do so in enough detail that someone else could repeat your experiment and test your results. At the same time, although they seem simple, some typical problems plague methods or methodology sections. Here are some rules for writing a good methods section.

Identify your methodology. Your methodology is usually clear if you do the following correctly.

Describe your sample and sampling procedure. Who or what did you study? How did you pick your subjects? How many did you study? What were their characteristics? Are there any possible

problems with your sample or procedures (e.g., not random, no control group)?

Describe your measurement instrument. What did you do to measure the findings (e.g., unstructured interview, closed questionnaire)? What did you measure? Who did the measuring? How long did you measure? Are there any possible problems with your instrument (e.g., observer effects, statistical problems)?

Describe your research context. Where did you do the study? Which people and events were key? Are there any possible problems with your test setting (e.g., context effects)?

Describe your variables. What are your independent variables? What are your dependent variables? What are your control variables?

Write in the past tense. This isn't difficult to remember if you did the study in the past. If you are still conducting research, you may have to work to describe the study as if it is over. Alternately, if you are using your study proposal to draft the methods section, don't let any future tense creep in (e.g., "this study will").

Don't give a statistics tutorial. Your aim is to describe the statistics you used, not to teach others how to do statistical analysis. Most statistical methods can be described very briefly. It's true that you may need to defend some statistical approaches, but that can usually be done quickly with citations to studies that defend those approaches.

Don't mix in your results. This is one of the most frequent mistakes that students make. The methods section is for describing how you did the study, not what you found. Be sure to check the last paragraph of your methods section for any results that have crept in.

Match methods' subheads to results' subheads. Some debate this advice; others think it is useful to structure your methodology section similarly to your results and discussion sections to help your reader keep track of the findings. Often the methods will be too short for subheads, but if you have them it is worth correlating them with the results.

Watch repetition. If you order your methods section chronologically— first you did x, then you did y—you may find yourself repeating a lot of information. Try to find an order that keeps repetition at a minimum.

Check your journal for instructions. Some journals prefer the methods section to be written in a particular way; that information is good to find out early.

Watch passive voice and dangling phrases. Because the social sciences often frown on the use of "I" or "we," most authors write their methods sections with passive voice (e.g., "the data were collected"). Just be sure to keep track in your own head of who is doing what. Sentences that start

with gerunds (words ending in “ing”) and use the passive voice are often incorrect. They reference the wrong actor (a grammatical error called dangling).

- *Passive and dangling.* Having chosen a regression method, the data were simplified. [This is incorrect because the data did not choose the method.]
- *Passive but correct.* The data were simplified once a regression method was chosen.
- *Active and correct.* Choosing a regression method helped simplify the data.

Keep it short. It is a real gift to give all the methods detail needed and yet be brief. The descriptive nature of the section tempts wordiness. Study any examples of short methods sections that you find in the literature in your field. You will learn much from them.

Now, go through your methods and check each of the points above. If you find any problems, correct them. Below, write some general instructions to yourself for improving the methods section.

How could I improve my methods section?	
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Results

In the results or findings section, you describe what you found, the quantitative or qualitative data you collected, and the new information you have to offer.

Be choosy. Any study has more results than can be presented in one article. Don’t use the results section as a data dump. Present only those results that relate to your argument or hypothesis.

Use tables and graphs. Information that is difficult to read in paragraph form becomes easily readable once in a table. Use only as many tables as necessary—remembering the point above about not dumping data. Just be sure to standardize tables so they appear the same way throughout.

Use rich tables and graphs. The purpose of a table or graph is to represent information that would be difficult to grasp in prose. Thus, it defeats the purpose if a table has only three or four bits of information. These bits could be more easily presented in the body of the text. Use a table only if the complexity of the data warrants it.

Design tables and graphs properly. Bad tables or graphs are worse than none at all. The expert on presenting data and information effectively is Edward Tufte, referred to as the “Galileo of graphics.” See any of his books including *Beautiful Evidence*, *Visual Explanations*, and *The Visual Display of Quantitative Information*. He has the website www.edwardtufte.com, which includes some examples.

Title tables properly. The title should describe the variables that appear in the table as well as the type of data that is being presented. For example, “Attitudes Toward Racial Integration by Residential

Neighborhood by Race.” If you have dates, those are excellent to give as well. If your table title has only three or four words, it probably is not comprehensive enough.

Don’t repeat the tables. Another frequent problem that students have is writing in great detail about information that appears in the tables. Don’t pack a sentence with a list of percentages. Let the tables work for you; that is what they are there for. Use the text to point out trends in the tables or highlight the significance of some of the most interesting data; do not repeat the data. At the same time, make sure to mention all the tables in the text.

Don’t organize your results by discovery. The chronology in which you discovered your information is usually irrelevant. Remember the advice to write like a lawyer, not a detective (see Week 3). We don’t want to know how you came across each result. We are reading your article precisely because we want to save time.

Organize your results around your argument. If you are asking whether identity is a function of variable A, variable B, or variable C, organize your results section around variable A then B then C. If you are asking

how homeless women’s coursework is helping them, organize your results section by the types of benefits the women are receiving. If you are investigating the progression of multiracial identity, organize your results section by the stages of that progression. If you are examining how socialites participate in groups, organize your results section by types of participation.

Identify respondents. If you are quoting study participants, it may be helpful to include identifying information at the end of block quotes (e.g., male, 43, fourth-grade teacher).

Don’t mix in your methods. This is a frequent mistake. Be sure to check the first paragraph of your results section for any methods. If you find them, move them back to their section.

Write in the past tense. You found your results in the past, describe them as such.

Keep it short. Unless you are combining your results section with your discussion section, this section should be short.

Now, go through your Results and check each of the points above. If you find any problems, correct them. Below, write some general instructions to yourself for improving the results section.

How could I improve my results section?	
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Discussion

This is the most difficult section to write and yet the most important. How you write this section can determine your article’s rejection or acceptance. Even if you have great data, your article can get

rejected for poor or incorrect interpretation. Structuring your discussion around your argument will best enable readers to understand the significance of your study for their own research and the field.

State whether you confirmed your hypothesis. It is useful to start your discussion by stating your argument or conclusion. That is, what you thought would happen, what did happen, and why you think it happened. Many will have skipped reading your methodology and your results, so it is good to reiterate your findings and hypothesis here.

Link results. Identify the relationships among the results. That is, show which variables correlated and which didn't.

Relate results to previous research. State whether your findings confirmed other studies or contradicted them. Discuss why contradictions might exist.

List some implications. What do your findings suggest? What can we conjecture about the world based on your results? Should policy change?

Claim significance. Don't let readers walk away thinking "so what?" Spell out the significance of the results for them. Just be careful in claims about causality, as they are the trickiest to prove. What is novel about the findings?

Question the findings. Evaluate the evidence for the hypothesis: its relevance, contradictions, mechanisms, explanatory power. What degree of certainty does the evidence enable? Is causality shown or just correlation? Are there alternative explanations for the findings? Are there anomalies in the data? What could explain the differences in findings (e.g., gender)? Anticipate rebuttals and note unresolved questions and possible biases.

Note the limitations. All studies have some limitations. It is best to acknowledge the more important of these. Sometimes you can mention how you would do the study differently next time. Just be careful not to overemphasize or apologize for your study's limitations.

Suggest future research. You don't actually have to suggest future research, and some experts even advise against it as clichéd, but it used to be a typical part of many articles. If you have some suggestions, give them.

Discuss the results, don't repeat them. Since the discussion depends on the results, it can be tough to keep them separate. Still, you do want to discuss the results' meaning, not simply list the results.

Focus. Although this is often the longest section, be careful that it is not too long. It is easy to use this section to brainstorm about all the possible meanings of the data. Don't overanalyze. Before writing the discussion, spend some time categorizing and recategorizing your data, then linking it in

different ways, so that you don't use the discussion section to brainstorm.

Now, go through your Discussion and check each of the points above. If you find any problems, correct them. Below, write some general instructions to yourself for improving the discussion section.

How could I improve my discussion section?	
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WRITING UP EVIDENCE IN THE HUMANITIES

In the humanities, instruction abounds on such micro-writing issues as shortening your sentences, improving your diction, and correcting your grammar. Instruction on such macro-writing issues as marshalling and presenting evidence in a humanities article is much rarer. Few say much beyond noting that you should have evidence to support an argument. Rather than attempt to provide recommendations for a series of disciplines, I've selected just one and focused on it below.

Evidence in Literary Articles

The bodies of humanities' articles often consist of interpreting or analyzing texts. The approach to the text depends deeply on the author's theoretical approach. In literary criticism, two theoretical modes are common: interpretive new criticism (also called close reading) and analytical cultural studies. In the 1990s, these two modes were infrequently paired; now you often see them together. I continue to separate them out here so as to discuss the strengths and pitfalls of each.

Close Readings

In literary criticism articles that focus on "close reading"—an interpretative practice forwarded in the early twentieth century by the New Critics—the scholar focuses on discrete parts of the text, digging into the meanings of individual words and tropes in order to reveal the text's truths and beauties. The scholar interprets the text's poetic or aesthetic meaning, rather than analyzing its cultural context or complicity. Many wonderful articles have been published using this mode, but it can pose certain challenges. As a graduate student once said to me, "It's a lot more fun to write close readings than it is to read them." To present evidence fruitfully through close reading, remember the following.

Quote meaningfully. A close reading is not an excuse to pack your article with dozens of beautiful quotes from the text. You are to interpret the text, not replicate it. Be selective. Don't quote when you can paraphrase, don't quote material irrelevant to your argument, and don't quote at length unless your argument fails without that quote. The more famous the text, the less you should quote it and the more you should paraphrase. Always introduce quotes and interpret them, rather than letting them stand as ciphers.

Summarize briefly. Classroom papers often devote many pages to summarizing the plot of texts or describing texts. If any part of your article seems to move chapter by chapter through the text, you are probably not being argumentative enough.

Select carefully. Don't try to analyze every part of the text. Select only a few parts for analysis. To help you do this, ask "why" or "how" of the text not "what." For instance, "why is this particular rhyme scheme used?" rather than "what is the rhyme scheme?"

Reference the larger picture. Classroom papers often stop at simply discovering a particular theme, symbolism, or fact in the text. You must go beyond discovery and use what you discover to make an argument. Further, you must make that argument in the context of your critical approach, whether feminist, psychoanalytic, postcolonial, queer theory, cultural studies, and so on. Make sure to make the connections.

Limit notes. More and more humanities journals are limiting the number and type of footnotes or endnotes that authors are allowed. Some allow notes only for sources (documentary notes), and some allow only a few notes for defenses or explanations (substantive notes). Almost none allow them for digressions.

Cultural Studies

In literary criticism articles that focus on analyzing texts as a symptom of society, the evidence is not in close reading the themes, imagery, or diction of a text, but in asking questions of the social and political location of the text. The evidence in such articles will consist of exploring how the text reproduces the conflicts of its period or culture, participates in constructing particular knowledge systems, or highlights social or political contradictions. For instance, which characters get to speak when and to whom? How does the rhetoric, narrative, or language of the text enable relationships of power? How can understanding this text better enable us to create a more just society?

Avoid discussing intentionality. Classroom papers often focus on what the author or creator intended, or might have intended. In this mode of criticism, it is more typical to focus on the text and your reading of it, not the author. If you want to discuss intentionality, find a recent article in your field that does so, and study how the author successfully makes this analysis.

Avoid biography. Classroom papers often focus on how the life experiences of authors or creators shaped their creation. Again, in the cultural analysis mode it is better to focus on the text itself. If you feel that biography is important, find a recent article in your field that does such analysis well.

Avoid simple politicizing. Classroom papers often vulgarize cultural studies arguments by misusing its terms to bludgeon texts or peoples. The essence of sophisticated cultural studies criticism is an acknowledgement that it is difficult to know anything for certain, and that we all (strong and weak)

participate in creating the world we live in, whether we are perpetuating or resisting its injustices. Be careful to nuance your argument.

Deploy theory; don't replicate it. Classroom papers often bog down in presenting literary theory rather than using it. Don't spend long sections of your paper explaining feminist theory, for instance; rather, make a feminist analysis of your text.

REVISING YOUR EVIDENCE

Day 1: Reading the Workbook

On the first day of your writing week, you should read the workbook up to this page and answer all the questions posed in the workbook up to this point. Then work on any tasks remaining from previous weeks or on your own list of tasks to accomplish.

Day 2: Discussing Evidence in Your Field

Make some appointments with colleagues to discuss what constitutes evidence in your field. This can be a good task to do in the library with access to journal volumes, so that you can study how those in your field present evidence. Then write up your notes about what you have found, send it to other colleagues, and ask them what they think. It's important to think about the meta aspects of writing in your field.

Day 3: Revisiting Your Evidence

Print out a copy of your article and pick up a pen. Using the instruction above, review each paragraph of the body of your article to determine whether your evidence is clear, and whether your interpretation of that evidence progresses logically and has explanatory power. If it doesn't, note in the margin how it could be improved. Use the information you gathered yesterday to aid you in this review.

Day 4 and 5: Shaping Your Evidence Around Your Argument

Using the same print out, review each paragraph of the body of your article to determine if the evidence is supporting your argument. If it doesn't, note in the margin how you could refocus the paragraph around your argument or delete it. Once you are done with this second evaluation, go through and revise the body of your article accordingly.

DOCUMENTING YOUR WRITING TIME AND TASKS

On the following weekly plan, please graph when you expect to write and what tasks you hope to accomplish this week. Then keep track of what you actually did. Remember, you are to allot fifteen minutes to one hour every day to writing. At the end of the week, take pride in your accomplishments and evaluate whether any patterns need changing.



Week 7 Calendar

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
5:00 a.m.							
6:00							
7:00							
8:00							
9:00							
10:00							
11:00							
12:00 p.m.							
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9:00							
10:00							
11:00							
12:00 a.m.							
1:00							
2:00							
3:00							
4:00							
Total Minutes Actually Worked							
Tasks Completed							