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Writing in College : From Competence to Excellence

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Writing in College: From Competence to Excellence

Amy Guptill
The College at Brockport, SUNY
Writing in College: From Competence to Excellence

Amy Guptill

with Aly Button, Peter Farrell, Kaethe Leonard, and Timothée Pizarro

The College at Brockport, SUNY

Open SUNY Textbooks
2016
About the Book

*Writing in College* is designed for students who have largely mastered high-school level conventions of formal academic writing and are now moving beyond the five-paragraph essay to more advanced engagement with text. It is well suited to composition courses or first-year seminars and valuable as a supplemental or recommended text in other writing-intensive classes. It provides a friendly, down-to-earth introduction to professors’ goals and expectations, demystifying the norms of the academy and how they shape college writing assignments. Each of the nine chapters can be read separately, and each includes suggested exercises to bring the main messages to life.

Students will find in *Writing in College* a warm invitation to join the academic community as novice scholars and to approach writing as a meaningful medium of communication. With concise discussions, clear multidisciplinary examples, and empathy for the challenges of student life, Guptill conveys a welcoming tone. In addition, each chapter includes Student Voices: peer-to-peer wisdom from real SUNY Brockport students about their strategies for and experiences with college writing.

While there are many affordable writing guides available, most focus only on sentence-level issues or, conversely, a broad introduction to making the transition. *Writing In College*, in contrast, provides both a coherent frame for approaching writing assignments and indispensable advice for effective organization and expression.

About the Author

Amy Guptill is an Associate Professor of Sociology at The College at Brockport, SUNY where she has a joint appointment with the Delta College Program, an alternative interdisciplinary General Education option. Her research focuses on spatial and structural shifts in agriculture and food systems with recent work on innovative agricultural marketing. She teaches courses in the sociology of food, development and globalization, community and social change, social statistics and college writing. In addition to *Writing In College: From Competence to Excellence*, and she is the coauthor of a recent college textbook entitled *Food & Society: Principles and Paradoxes* (Malden, MA: Polity, 2012).
Reviewer’s Notes

*Writing in College: From Competence to Excellence* assists well-prepared high school students as they transition to college writing, helping them understand how they, as young independent scholars, fit into the university and can improve their writing to succeed in their new environment. Focusing on the argument-driven essay, Guptill guides beginning college students through the sometimes arcane practices of the academy and does so with warmth, enthusiasm, and humor. The textbook takes students through deciphering assignments, developing sophisticated arguments, finding and using appropriate sources, and some basics of paragraphing, sentence structure, and style. Instructors will find this textbook to be a handy tool for explaining the argument-driven essay and reference for addressing common college-level writing issues. With a diverse range of examples, useful references to other sources, and purposeful exercises, *Writing in College* focuses on developing students’ skills in practical ways—and helps students understand why their instructors have them do what they do.

*Jennifer Haytock is professor and chair in the English Department at the College at Brockport, SUNY.*

About Open SUNY Textbooks

Open SUNY Textbooks is an open access textbook publishing initiative established by State University of New York libraries and supported by SUNY Innovative Instruction Technology Grants. This initiative publishes high-quality, cost-effective course resources by engaging faculty as authors and peer-reviewers, and libraries as publishing service and infrastructure.

The pilot launched in 2012, providing an editorial framework and service to authors, students and faculty, and establishing a community of practice among libraries.

Participating libraries in the 2012-2013 pilot include SUNY Geneseo, College at Brockport, College of Environmental Science and Forestry, SUNY Fredonia, Upstate Medical University, and University at Buffalo, with support from other SUNY libraries and SUNY Press. The 2013-2014 pilot will add more titles in 2015. More information can be found at [http://textbooks.opensuny.org](http://textbooks.opensuny.org).
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Chapter 1

Really? Writing? Again?

Yes. Writing. Again.

Obviously you can write. And in the age of Facebook and smartphones, you might be writing all the time, perhaps more often than speaking. Many students today are awash in text like no other generation before. You may have even performed so well in high school that you’re deemed fully competent in college level writing and are now excused from taking a composition course.

So why spend yet more time and attention on writing skills? Research shows that deliberate practice—that is, close focus on improving one’s skills—makes all the difference in how one performs. Revisiting the craft of writing—especially on the early end of college—will improve your writing much more than simply producing page after page in the same old way. Becoming an excellent communicator will save you a lot of time and hassle in your studies, advance your career, and promote better relationships and a higher quality of life off the job. Honing your writing is a good use of your scarce time.

Also consider this: a recent survey of employers conducted by the Association of American Colleges and Universities found that 89 percent of employers say that colleges and universities should place more emphasis on “the ability to effectively communicate orally and in writing.” It was the single-most favored skill in this survey. In addition, several of the other valued skills are grounded in written communication: “Critical thinking and analytical reasoning skills” (81%); “The ability to analyze and solve complex problems” (75%); and “The ability to locate, organize, and evaluate information from multiple sources” (68%). This emphasis on communication probably reflects the changing reality of work in the professions. Employers also reported that employees will have to “take on more responsibilities,” “use a broader set of skills,” “work harder to coordinate with other departments,” face “more complex” challenges, and mobilize “higher levels of learning and knowledge.” If you want

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2 Ibid., 5.
to be a professional who interacts frequently with others—presumably you do; you’re in college—you have to be someone who can anticipate and solve complex problems and coordinate your work with others, all of which depend on effective communication.

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Writing is one of the most important skills to our society, and it almost always has been. Having the ability to write is what separates history from pre-history! That’s a pretty big deal! Because most professors have different expectations, it can be tricky knowing what exactly they’re looking for. Pay attention to the comments they leave on your paper, and make sure to use these as a reference for your next assignment. I try to pay attention and adapt to the professor’s style and preferences.

Aly Button

The pay-off from improving your writing comes much sooner than graduation. Suppose you complete about 40 classes for a 120-credit bachelors’ degree, and—averaging across writing-intensive and non-writing-intensive courses—you produce about 2500 words of formal writing per class. Even with that low estimate, you’ll write 100,000 words over your college career. That’s about equivalent to a 330-page book. Spending a few hours sharpening your writing skills will make those 100,000 words much easier and more rewarding to write. All of your professors care about good writing, whether or not they see their courses as a means to improve it. Formal written work is the coin of the academic realm. Creating and sharing knowledge—the whole point of the academy—depends on writing. You may have gotten a lot of positive feedback on your writing before college, but it’s important to note that writing in college is distinct in ways that reflect the origins of higher education.

The origins of higher education

College may look and feel similar to high school, and, for the most part, you already know how to perform your student role within this setting. However, there are some fundamental differences. The most obvious ones are that high school is mandatory (to a certain point), freely available, and a legal right. They have to offer you the opportunity, regardless of your grades. College is optional, costly, and performance-based. Most institutions will dismiss you if your grades don’t meet a certain minimum. But college is different in more subtle ways as well, and those differences reflect the evolution of the university.

In their original ancient and medieval forms, universities were centers for scholarship, existing at the pleasure of the crown, church, or state. While centers of study go at least back to ancient Mesopotamia 2500 years BCE, the Islamic and European universities of the first and second millennium CE are usually considered the first of the modern model. Highly privileged people went to these universities as students, but they didn’t really attend classes,

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3 If you don’t want to be as interactive, but you want to make good money, you’re better off seeking training in a skilled building trade like plumbing or electrical work. Frankly, a lot of plumbers make more money than a lot of your professors!

write papers, and take exams like college students today. Instead they acted as independent, though novice, scholars: they read everything they could find in their areas of interest, attended lectures that expert scholars gave, and, if they were lucky (and perhaps charming), got some feedback from those scholars on their own work or assisted scholars in theirs. Students were simply the most junior of scholars at a university, enjoying the extraordinary privilege of interacting with the revered academic superstars of their day.

Obviously, colleges and universities today are much more student-centered, and most higher education faculty spend most of their time carefully crafting educational experiences for students. But the notion of the university as a center for scholarship and exchange still shapes how colleges and universities operate today. Some points:

1. **Professors are scholars and artists**: Most of your professors have had little to no formal training in pedagogy (the science of teaching). They’re extensively trained in their scholarly or creative fields, well versed in relevant theories, methods, and significant findings. Many taught during graduate school, but most come to their jobs relative novices about teaching. Professors apply themselves to the craft of teaching with the same creative and intellectual fervor that drew them into their fields. They attend conferences and presentations about effective teaching and learning (such as The Lilly Conference, the AAC&U, or the American Educational Research Association), keep journals and portfolios to reflect on their teaching work, and read books and articles about cognitive neuroscience, trends in higher education, and the social worlds of their students. There are some professors who still see themselves in the classical model—as someone who delivers content through lectures and assesses performance through a final exam or term paper, but that approach is becoming ever rarer. Almost all professors seek out innovative and engaging pedagogies.

2. **Professors have competing obligations**: While you may view your professors primarily as teachers, your instructors are also collecting data, writing books and articles, making films, writing poetry, consulting with businesses and organizations, or inventing things. Even those who spend a majority of their time on teaching think of themselves as scholars or artists who also teach. Scholarship and creative activity are central ways that colleges and universities serve society. In addition to educated graduates, higher education also produces ideas, findings, and innovations. High

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5 You may have noticed that some instructors have the title “assistant professor” or “associate professor.” It’s because in the original European model there could be only one “Professor” for a given topic, and those other titles were developed for younger scholars. Nowadays most universities have several “professors.” Many newer faculty are still called “assistant professors” even though they don’t assist other faculty.

6 As students became a larger and larger presence at European universities, “colleges” emerged as semi-autonomous units within universities to provide housing, meals, and venues for social interaction. The model of the stand-alone “college” emerged in the Americas after European colonization.

7 At big research universities, a full-time faculty member might teach only one or two courses a year. At a community college, an instructor might teach five or six classes a semester. Undergraduate four-year colleges are usually somewhere in between.

8 This is why some instructors are VERY persnickety about being addressed as “Doctor” or “Professor” and not “Mr.” or “Ms.” Not all fields have doctoral degrees—for example, many professors in the arts have MFA degrees (Masters of Fine Arts) -- but “Professor” is always an appropriate choice for addressing your instructors.
school teachers, though similarly engaged in the craft of teaching, have much more formal training in instruction and are more likely to see themselves primarily as teachers, even those that are writing magazine articles, restoring wetland ecologies, or composing music on the side.

3. **Professors design their own classes:** While both college professors and high school teachers teach, one condition of their work is substantially different. Most high school teachers in public school systems are contractually obligated to deliver a particular curriculum and, in some cases, to use particular methods to do so. The topics and materials are often determined by state regulators, local boards of education, and school administrators. There is room for innovation, but under the current mania for standards, many teachers are no longer treated (and respected) like craftspersons in their own right. Higher education instructors still have a lot more latitude than their high-school counterparts. Your instructor may be required to cover particular concepts and skills or even assign a particular textbook, especially if one class is a prerequisite to more advanced classes. However, he or she still has a lot of freedom to determine what students should learn, what they will do to learn it, and how their achievements will be measured. As a result, two different sections of the same college course (such as Ancient World History) could differ dramatically, much more so than two parallel high school sections.

4. **Students drive their own learning:** The assumption behind high-school instruction is that the teacher is the engine of learning. Consequently, a lot of time is spent in direct face-to-face instruction. Homework is for further practice to reinforce material from that day. Teachers will often tell students what each night's homework assignment is, follow up on missing work, and closely track students' progress. The assumption behind college instruction, in contrast, is that students are the engine of learning, and that most of the significant learning happens outside of class while students are working through a dense reading or other challenging intellectual task on their own. Most college classes meet only 1-3 times a week for a total of about 3 hours. Consequently, college instructors think of class meetings as an opportunity to prepare you for the heavy-lifting that you'll be doing on your own. Sometimes that involves direct instruction (how to solve a particular kind of problem or analyze a particular kind of text). More often, though, professors want to provide you with material not contained in the reading or facilitate active learning experiences based on what you read. The assumption is that all students—like their medieval counterparts—have the skill and self-motivation to carefully read all the assigned texts. Professors lay out a path for learning—much like how personal trainers develop exercise routines—but it is up to students (and athletes) to do the difficult work themselves.

While university systems have clearly shifted toward student-centered practices, colleges and universities still see themselves as communities of scholars, some senior (i.e., faculty), most junior (i.e., students). Your professors are passionate about their fields, and they want to share their excitement with you as effectively as they can. However, they also know that you came to them on a voluntary basis, and they fully expect you to take complete responsibility for your own learning.
College writing is different

The origins of the university help explain why even skilled wordsmiths benefit from studying the assumptions and expectations behind college-level writing. College is a fundamentally different educational model; as a result the purposes and expectations for writing are different. You have learned many of the essential skills and practices of formal written communication throughout your schooling; now it’s time to take your writing a step further.

By the end of high school you probably mastered many of the key conventions of standard academic English such as paragraphing, sentence-level mechanics, and the use of thesis statements. The essay portion of the SAT measures important skills such as organizing evidence within paragraphs that relate to a clear, consistent thesis, and choosing words and sentence structures to effectively convey your meaning. These practices are foundational, and your teachers have given you a wonderful gift in helping you master them. However, college writing assignments require you to apply those skills to new intellectual challenges. Professors assign papers because they want you to think rigorously and deeply about important questions in their fields. To your instructors, writing is for working out complex ideas, not just explaining them. A paper that would earn a top score on the SAT might only get a C or D in a college class if it doesn’t show original and ambitious thinking.

Professors look at you as independent junior scholars and imagine you writing as someone who has a genuine, driving interest in tackling a complex question. They envision you approaching an assignment without a pre-existing thesis. They expect you to look deep into the evidence, consider several alternative explanations, and work out an original, insightful argument that you actually care about. This kind of scholarly approach usually entails writing a rough draft, through which you work out an ambitious thesis and the scope of your argument, and then starting over with a wholly rewritten second draft containing a mostly complete argument anchored by a refined thesis. In that second round, you’ll discover holes in the argument that should be remedied, counter-arguments that should be acknowledged and addressed, and important implications that should be noted. When the paper is substantially complete, you’ll go through it again to tighten up the writing and ensure clarity. Writing a paper isn’t about getting the “right answer” and adhering to basic conventions; it’s about joining an academic conversation with something original to say, borne of rigorous thought.

My own experience as an instructor indicates that few students approach writing college papers in the way that professors envision. Many students first figure out what they want to say and then (and only then) write it down as clearly (and quickly) as they can. One quick round of proof-reading and they’re done. Many students have a powerful distaste for truly revising (i.e., actually rewriting) a paper because it feels like throwing away hard-won text. Consequently, when students are invited or required to revise an essay, they tend to focus on correcting mechanical errors, making a few superficial changes that do not entail any rethinking or major changes. Professors find that tendency incredibly frustrating. Some instructors craft an assignment sequence to force a true revising process; others leave it up.

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9 The term of art for this, coined by novelist and memoirist Anne Lamott is “shitty first drafts.” “Zero draft” is a more polite term for it.

10 Most parts of this book, for example, took about four drafts to write even though they’re based on lecture notes that I’ve been developing for years.
to you. Virtually all shape their expectations for the final project around the idea that you’re writing to learn, writing to develop, writing to think—not just writing to express.

On my first college paper, I was scared. I did not know what to expect or what my professor would want. All I kept thinking about was whether or not I would get a good grade. But do not fear! At the end of the day, I talked to my professor about how I could better my writing. Professors love to be asked questions and interact with students. If you ever need help, do not hesitate to ask for advice on how you could do better.

Timothée Pizarro

Another major impact of this shift to a junior-scholar role is that you not only have to learn to write like a scholar, you also have to learn to write like a political scientist, a chemist, an art historian, and a statistician—sometimes all in the same semester. While most of the conventions of academic writing are common across disciplines, there is some variation. Your professors—immersed as they are in their own fields—may forget that you have such varied demands, and they may not take class time to explain the particular conventions of their field. For every new field of study, you’re like a traveler visiting a foreign culture and learning how to get along. Locals will often do you the kindness of explaining something, but you’ll have to sleuth out a lot of things on your own.

So what do professors want?

At one time or another, most students will find themselves frustrated by a professor’s recalcitrant refusal to simply “Tell us what you want!” It’s a natural feeling and, at times, a legitimate one. While all professors want to set you up to succeed, they may find their expectations hard to articulate, in part because they struggle to remember what it’s like to be a beginner in the field. Often, however, the bigger and better reason that professors won’t just tell you what to do is that there simply isn’t a particular “answer” they want you to give in the paper. They want to see your own ambitious and careful analysis. Some students assume that they should be able to envision a paper and its thesis within minutes of receiving the assignment; if not, they complain that the assignment is unclear. Other students assume that every professor has a completely different set of expectations and, consequently, conclude that writing papers is just an unavoidable guessing game about entirely subjective and idiosyncratic standards. Neither of those assumptions are true. Good, well constructed writing assignments are supposed to be challenging to write, and professors are, above all, looking for your own self-motivated intellectual work.

Despite some variations by discipline, college instructors are bringing similar standards to evaluating student work. Recently, the Association of American Colleges and Universities has brought together faculty members from across the country to deliberate on the core knowledge and skills that define liberal arts education. They have also worked out benchmarks of success, as summarized in a rubric for written communication. Check it out! While few instructors are sitting down with the AAC&U rubric to determine grades on papers, you can be confident that these are the kinds of things almost all professors are
looking for. The language of the “capstone” column illustrates especially well the scholarly mindset and independent work habits they expect students to bring to their work:

“thorough understanding of context, audience, and purpose,“

“mastery of the subject,”

“detailed attention” to writing conventions,

“skillful use of high-quality, credible, relevant sources,” and

“graceful language.”

Professors want to see that you’ve thought through a problem and taken the time and effort to explain your thinking in precise language.

The following chapters in this book seek to concretize these ideas. They begin with the most fundamental issues (the purpose of the assignment and the thesis), move through organizational strategies, and end with sentence-level expression. The expectations laid out here may seem daunting—and perhaps unreasonable, given that very few of you are going to follow your professors into academic life. But communication isn’t just about expressing yourself; it’s about connecting with others. And it’s other people—in families, couples, communities, and workplaces—that shape the most important experiences of your life.

Don't get discouraged! On my first college paper I got a very low grade. It felt like a slap in the face because I was a straight-A student in high school. It's just a fact of life. Talk to your professor about what you could have done differently. This will help you be better prepared for future papers.

Kaethe Leonard

Other resources

1. *The Transition to College Writing 2nd ed.* (New York: Norton, 2009), by Keith Hjortshoj (pronounced “Hort-shoy”) is written expressly for the new college student. It offers a nicely plain-spoken and comprehensive introduction to college writing.

2. *This online text* (also called “Writing In College”) by Joseph M. Williams and Lawrence McEnerney provides another good process-based run-down.

3. This *fun website* summarizes the daily routines of some famous writers.

Exercises

1. Interview a professor about his or her work. What drew them into their field? What do they work on in their scholarly or creative endeavors? What do they most enjoy about teaching? What behaviors do they like to see in students?
2. Go to Professor Stephen Chew’s website about good study practices and watch the first video titled “Beliefs that Make You Fail … or Succeed.” How can the concept of metacognition be used to explain why good papers are challenging to write?
Chapter 2

What Does the Professor Want? Understanding the Assignment

Writing for whom? Writing for what?

The first principle of good communication is knowing your audience. This is where writing papers for class gets kind of weird. As Peter Elbow explains:

When you write for a teacher you are usually swimming against the stream of natural communication. The natural direction of communication is to explain what you understand to someone who doesn't understand it. But in writing an essay for a teacher your task is usually to explain what you are still engaged in trying to understand to someone who understands it better.

Often when you write for an audience of one, you write a letter or email. But college papers aren't written like letters; they're written like articles for a hypothetical group of readers that you don't actually know much about. There's a fundamental mismatch between the real-life audience and the form your writing takes. It's kind of bizarre, really.

It helps to remember the key tenet of the university model: you're a junior scholar joining the academic community. Academic papers, in which scholars report the results of their research and thinking to one another, are the lifeblood of the scholarly world, carrying useful ideas and information to all parts of the academic corpus. Unless there is a particular audience specified in the assignment, you would do well to imagine yourself writing for a group of peers who have some introductory knowledge of the field but are unfamiliar with the specific topic you're discussing. Imagine them being interested in your topic but also busy; try to write something that is well worth your readers' time. Keeping an audience like this in mind will help you distinguish common knowledge in the field from that which must be defined and explained in your paper. Understanding your audience like this

also resolve the audience mismatch that Elbow describes. As he notes, “You don’t write to teachers, you write for them.”

Another basic tenet of good communication is clarifying the purpose of the communication and letting that purpose shape your decisions. Your professor wants to see you work through complex ideas and deepen your knowledge through the process of producing the paper. Each assignment—be it an argumentative paper, reaction paper, reflective paper, lab report, discussion question, blog post, essay exam, project proposal, or what have you—is ultimately about your learning. To succeed with writing assignments (and benefit from them) you first have to understand their learning-related purposes. As you write for the hypothetical audience of peer junior scholars, you’re demonstrating to your professor how far you’ve gotten in analyzing your topic.

Don’t be scared whenever you are given an assignment. Professors know what it was like to be in college and write all kinds of papers. They aren’t trying to make your lives difficult, but it is their jobs to make us think and ponder about many things. Take your time and enjoy the paper. Make sure you answer the question being asked rather than rant on about something that is irrelevant to the prompt.

Timothée Pizarro

Professors don’t assign writing lightly. Grading student writing is generally the hardest, most intensive work instructors do. With every assignment they give you, professors assign themselves many, many hours of demanding and tedious work that has to be completed while they are also preparing for each class meeting, advancing their scholarly and creative work, advising students, and serving on committees. Often, they’re grading your papers on evenings and weekends because the conventional work day is already saturated with other obligations. You would do well to approach every assignment by putting yourself in the shoes of your instructor and asking yourself, “Why did she give me this assignment? How does it fit into the learning goals of the course? Why is this question/topic/problem so important to my professor that he is willing to spend evenings and weekends reading and commenting on several dozen novice papers on it?”

As I briefly discussed in Chapter 1, most instructors do a lot to make their pedagogical goals and expectations transparent to students: they explain the course learning goals associated with assignments, provide grading rubrics in advance, and describe several strategies for succeeding. Other professors … not so much. Some students perceive more open-ended assignments as evidence of a lazy, uncaring, or even incompetent instructor. Not so fast! Professors certainly vary in the quantity and specificity of the guidelines and suggestions they distribute with each writing assignment. Some professors make a point to give very few parameters about an assignment—perhaps just a topic and a length requirement—and they likely have some good reasons for doing so. Here are some possible reasons:

1. They figured it out themselves when they were students. Unsurprisingly, your instructors were generally successful students who relished the culture and traditions of higher education so much that they strove to build an academic career. The current

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2 Ibid., 220.
3 A lot of professors joke, “I teach for free. They pay me to grade.”
emphasis on student-centered instruction is relatively recent; your instructors much more often had professors who adhered to the classic model of college instruction: they gave lectures together with, perhaps, one or two exams or papers. Students were on their own to learn the lingo and conventions of each field, to identify the key concepts and ideas within readings and lectures, and to sleuth out instructors’ expectations for written work. Learning goals, rubrics, quizzes, and preparatory assignments were generally rare.

2. They think figuring it out yourself is good for you. Because your professors by and large succeeded in a much less supportive environment, they appreciate how learning to thrive in those conditions gave them life-long problem-solving skills. Many think you should be able to figure it out yourself and that it would be good practice for you to do so. Even those who do include a lot of guidance with writing assignments sometimes worry that they’re depriving you of an important personal and intellectual challenge. Figuring out unspoken expectations is a valuable skill in itself.

3. They’re egg-heads. As I explained in Chapter 1, many of your instructors have been so immersed in their fields that they may struggle to remember what it was like to encounter a wholly new discipline for the first time. The assumptions, practices, and culture of their disciplines are like the air they breathe; so much so that it is hard to describe to novices. They may assume that a verb like “analyze” is self-evident, forgetting that it can mean very different things in different fields. As a student, you voluntarily came to study with the scholars, artists, and writers at your institution. Rightly or wrongly, the burden is ultimately on you to meet them where they are.

4. Professors value academic freedom; that is, they firmly believe that their high-level expertise in their fields grants them the privilege of deciding what is important to focus on and how to approach it. As I also explain in Chapter 1, college professors differ in this way from high school teachers who are usually obligated to address a defined curriculum. Professors are often extremely wary of anything that seems to threaten academic freedom. Some see specified learning goals and standardized rubrics as the first step in a process that would strip higher education of its independence, scholarly innovation, and sense of discovery. While a standardized set of expectations and practices might make it easier to earn a degree, it’s also good to consider the benefits of the more flexible and diversified model.

It is understandably frustrating when you feel you don’t know how to direct your efforts to succeed with an assignment. However, except for rare egregious situations, you would do well to assume the best of your instructor and to appreciate the diversity of learning opportunities you have access to in college. Like one first-year student told Keith Hjortshoj: “I think that every course, every assignment, is a different little puzzle I have to solve. What do I need to do here? When do I need to do it, and how long will it take? What does this teacher expect of me?” The transparency that you get from some professors—along with guides like this one—will be a big help to you in situations where you have to be scrappier and more pro-active, piecing together the clues you get from your professors, the readings, and other course documents.

The prompt: what does “analyze” mean anyway?

Often, the handout or other written text explaining the assignment—what professors call the assignment prompt—will explain the purpose of the assignment, the required parameters (length, number and type of sources, referencing style, etc.), and the criteria for evaluation. Sometimes, though—especially when you are new to a field—you will encounter the baffling situation in which you comprehend every single sentence in the prompt but still have absolutely no idea how to approach the assignment. No one is doing anything wrong in a situation like that. It just means that further discussion of the assignment is in order. Here are some tips:

1. **Focus on the verbs.** Look for verbs like “compare,” “explain,” “justify,” “reflect” or the all-purpose “analyze.” You’re not just producing a paper as an artifact; you’re conveying, in written communication, some intellectual work you have done. So the question is, what kind of thinking are you supposed to do to deepen your learning?

2. **Put the assignment in context.** Many professors think in terms of assignment sequences. For example, a social science professor may ask you to write about a controversial issue three times: first, arguing for one side of the debate; second, arguing for another; and finally, from a more comprehensive and nuanced perspective, incorporating text produced in the first two assignments. A sequence like that is designed to help you think through a complex issue. Another common one is a scaffolded research paper sequence: you first propose a topic, then prepare an annotated bibliography, then a first draft, then a final draft, and, perhaps, a reflective paper. The preparatory assignments help ensure that you’re on the right track, beginning the research process long before the final due date, and taking the time to consider recasting your thesis, finding additional sources, or reorganizing your discussion.⁵

If the assignment isn’t part of a sequence, think about where it falls in the semester, and how it relates to readings and other assignments. Are there headings on the syllabus that indicate larger units of material? For example, if you see that a paper comes at the end of a three-week unit on the role of the Internet in organizational behavior, then your professor likely wants you to synthesize that material in your own way. You should also check your notes and online course resources for any other guidelines about the workflow. Maybe you got a rubric a couple weeks ago and forgot about it. Maybe your instructor posted a link about “how to make an annotated bibliography” but then forgot to mention it in class.

3. **Try a free-write.** When I hand out an assignment, I often ask students to do a five-minute or ten-minute free-write. A free-write is when you just write, without stopping, for a set period of time. That doesn’t sound very “free;” it actually sounds kind of coerced. The “free” part is what you write—it can be whatever comes to mind. Professional writers use free-writing to get started on a challenging (or distasteful) writing task or to overcome writers block or a powerful urge to procrastinate. The

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⁵ Most professors are perpetually frustrated with the “one-and-done” attitude that most students bring to their work, and some sequences are specifically designed to force you to really rethink your conclusions.
idea is that if you just make yourself write, you can’t help but produce some kind of useful nugget. Thus, even if the first eight sentences of your free write are all variations on “I don’t understand this” or “I’d really rather be doing something else,” eventually you’ll write something like “I guess the main point of this is …” and—booyah!—you’re off and running. As an instructor, I’ve found that asking students to do a brief free-write right after I hand out an assignment generates useful clarification questions. If your instructor doesn’t make time for that in class, a quick free-write on your own will quickly reveal whether you need clarification about the assignment and, often, what questions to ask.

4. Ask for clarification the right way. Even the most skillfully crafted assignments may need some verbal clarification, especially because students’ familiarity with the field can vary enormously. Asking for clarification is a good thing. Be aware, though, that instructors get frustrated when they perceive that students want to skip doing their own thinking and instead receive an exact recipe for an A paper. Go ahead and ask for clarification, but try to convey that you want to learn and you’re ready to work.

In general, avoid starting a question with “Do we have to …” because I can guarantee that your instructor is thinking, “You don’t have to do crap. You’re an adult. You chose college. You chose this class. You’re free to exercise your right to fail.” Similarly, avoid asking the professor about what he or she “wants.” You’re not performing some service for the professor when you write a paper. What they “want” is for you to really think about the material.

<table>
<thead>
<tr>
<th>Potentially annoying questions</th>
<th>Preferable alternatives</th>
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<tr>
<td>I don’t get it. Can you explain this more?</td>
<td>I see that we are comparing and contrasting these two cases. What should be our focus?</td>
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<td>OR</td>
<td>Their causes? Their impacts? Their implications? All of those things?</td>
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<td>What do you want us to do?</td>
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<td></td>
<td>I’m unfamiliar with how art historians analyze a painting. Could you say more about what</td>
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<td>questions I should have in mind to do this kind of analysis?</td>
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<td>How many sources do we have to cite?</td>
<td>Is there a typical range for the number of sources a well written paper would cite for</td>
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<td>this assignment?</td>
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<td>OR</td>
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<td></td>
<td>Could you say more about what the sources are for?</td>
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<td>Is it more that we’re analyzing these texts in this paper, or are we using these texts</td>
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<td></td>
<td>to analyze some other case?</td>
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Rubrics as road maps

If a professor provides a grading rubric with an assignment prompt, thank your lucky stars (and your professor). If the professor took the trouble to prepare and distribute it, you can be sure that he or she will use it to grade your paper. He or she may not go over it in class, but it’s the clearest possible statement of what the professor is looking for in the paper. If it’s wordy, it may seem like those online “terms and conditions” that we routinely accept without reading. But you really should read it over carefully before you begin and again as your work progresses. A lot of rubrics do have some useful specifics. Mine, for example, often contain phrases like “makes at least six error-free connections to concepts or ideas from the course,” or “gives thorough consideration to at least one plausible counter-argument.” Even less specific criteria (such as “incorporates course concepts” and “considers counter-arguments”) will tell you how you should be spending your writing time.

Even the best rubrics aren’t completely transparent. They simply can’t be. Take, for example, the AAC&U rubric discussed in Chapter 1. It has been drafted and repeatedly revised by a multidisciplinary expert panel and tested multiple times on sample student work to ensure reliability. But it is still seems kind of vague. What is the real difference between “demonstrating a thorough understanding of context, audience, and purpose” and “demonstrating adequate consideration” of the same? It depends on the specific context. So how can you know whether you’ve done that? A big part of what you’re learning, through feedback from your professors, is to judge the quality of your writing for yourself. Your future bosses are counting on that. At this point, it is better to think of rubrics as roadmaps, displaying your destination, rather than a GPS system directing every move you make.

Behind any rubric is the essential goal of higher education: helping you take charge of your own learning, which means writing like an independently motivated scholar. Are you tasked with proposing a research paper topic? Don’t just tell the professor what you want to do, convince him or her of the salience of your topic, as if you were a scholar seeking grant money. Is it a reflection paper? Then outline both the insights you’ve gained and the intriguing questions that remain, as a scholar would. Are you writing a thesis-driven analytical paper? Then apply the concepts you’ve learned to a new problem or situation. Write as if your scholarly peers around the country are eagerly awaiting your unique insights. Descriptors like “thoroughness” or “mastery” or “detailed attention” convey the vision of student writers making the time and rigorous mental effort to offer something new to the ongoing, multi-stranded academic conversation. What your professor wants, in short, is critical thinking.
What’s critical about critical thinking?

Critical thinking is one of those terms that has been used so often and in so many different ways that it often seems meaningless. It also makes one wonder, is there such a thing as uncritical thinking? If you aren’t thinking critically, then are you even thinking?

Despite the prevalent ambiguities, critical thinking actually does mean something. The Association of American Colleges and Universities usefully defines it as “a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.”

That definition aligns with the best description of critical thinking I ever heard; it came from my junior high art teacher, Joe Bolger. He once asked us, “What color is the ceiling?” In that withering tween tone, we reluctantly replied, “Whiiite.” He then asked, “What color is it really?” We deigned to aim our pre-adolescent eyes upwards, and eventually began to offer more accurate answers: “Ivory?” “Yellow-ish tan.” “It’s grey in that corner.” After finally getting a few thoughtful responses, Mr. Bolger said something like, “Making good art is about drawing what you see, not what you think you’re supposed to see.” The AAC&U definition, above, essentially amounts to the same thing: taking a good look and deciding what you really think rather than relying on the first idea or assumption that comes to mind.

The critical thinking rubric produced by the AAC&U describes the relevant activities of critical thinking in more detail. To think critically, one must …

(a) “clearly state and comprehensively describe the issue or problem”,

(b) “independently interpret and evaluate sources”,

(c) “thoroughly analyze assumptions behind and context of your own or others’ ideas”,

(d) “argue a complex position and one that takes counter-arguments into account,”

and

(e) “arrive at logical and well informed conclusions”.

While you are probably used to providing some evidence for your claims, you can see that college-level expectations go quite a bit further. When professors assign an analytical paper, they don’t just want you to formulate a plausible-sounding argument. They want you to dig into the evidence, think hard about unspoken assumptions and the influence of context, and then explain what you really think and why.

Interestingly, the AAC&U defines critical thinking as a “habit of mind” rather than a discrete achievement. And there are at least two reasons to see critical thinking as a craft or art to pursue rather than a task to check off. First, the more you think critically, the better you get at it. As you get more and more practice in closely examining claims, their underlying logic, and alternative perspectives on the issue, it’ll begin to feel automatic. You’ll no longer make or accept claims that begin with “Everyone knows that …” or end with “That’s just

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7 Thank you, Mr. Bolger!

8 Ibid.
human nature.” Second, just as artists and craftspersons hone their skills over a lifetime, learners continually expand their critical thinking capacities, both through the feedback they get from others and their own reflections. Artists of all kinds find satisfaction in continually seeking greater challenges. Continual reflection and improvement is part of the craft.

As soon as I see the phrase “critical thinking,” the first thing I think is more work. It always sounds as if you’re going to have to think harder and longer. But I think the AAC&U’s definition is on point, critical thinking is a habit. Seeing that phrase shouldn't be a scary thing because by this point in many people's college career this is an automatic response. I never expect an answer to a question to be in the text; by now I realize that my professors want to know what I have to say about something or what I have learned. In a paper or essay, the three-step thesis process explained in Chapter 3 is a tool that will help you get this information across. While you’re doing the hard work (the thinking part), this formula offers you a way to clearly state your position on a subject. It’s as simple as: make a general statement, make an arguable statement, and finally, say why it is important. This is my rule of thumb, and I would not want to start a thesis-driven paper any other way!

Aly Button

Critical thinking is hard work. Even those who actively choose to do it experience it as tedious, difficult, and sometimes surprisingly emotional. Nobel-prize winning psychologist Daniel Kahneman explains that our brains aren't designed to think; rather, they're designed to save us from having to think.9 Our brains are great at developing routines and repertoires that enable us to accomplish fairly complex tasks like driving cars, choosing groceries, and having a conversation without thinking consciously and thoroughly about every move we make. Kahneman calls this “fast thinking.” “Slow thinking,” which is deliberate and painstaking, is something our brains seek to avoid. That built-in tendency can lead us astray. Kahneman and his colleagues often used problems like this one in experiments to gauge how people used fast and slow thinking in different contexts:10

A bat and ball cost $1.10.

The bat costs one dollar more than the ball.

How much does the ball cost?

Most people automatically say the ball costs $0.10. However, if the bat costs $1 more, than the bat would cost $1.10 leading to the incorrect total of $1.20. The ball costs $0.05. Kahneman notes, “Many thousands of university students have answered the bat-and-ball puzzle, and the results are shocking. More than 50% of students at Harvard, MIT, and Princeton gave the intuitive—incorrect—answer.” These and other results confirm that “many people are overconfident, prone to place too much faith in their intuitions.”11 Thinking critically—

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10 Ibid., 44.
11 Ibid., 45.
thoroughly questioning your immediate intuitive responses—is difficult work, but every organization and business in the world needs people who can do that effectively. Some students assume that an unpleasant critical thinking experience means that they’re either doing something wrong or that it’s an inherently uninteresting (and oppressive) activity. While we all relish those times when we’re pleasantly absorbed in a complex activity (what psychologist Mihaly Czikszentmihalyi calls “flow”), the more tedious experiences can also bring satisfaction, sort of like a good work-out.

Critical thinking can also be emotionally challenging, researchers have found. Facing a new realm of uncertainty and contradiction without relying on familiar assumptions is inherently anxiety-provoking because when you’re doing it, you are, by definition, incompetent. Recent research has highlighted that both children and adults need to be able to regulate their own emotions in order to cope with the challenges of building competence in a new area. The kind of critical thinking your professors are looking for—that is, pursuing a comprehensive, multi-faceted exploration in order to arrive at an arguable, nuanced argument—is inevitably a struggle and it may be an emotional one. Your best bet is to find ways to make those processes as efficient, pleasant, and effective as you can.

The thing no one tells you when you get to college is that critical thinking papers are professors’ favorites. College is all about learning how to think individual thoughts so you’ll have to do quite a few of them. Have no fear though; they do get easier with time. The first step? Think about what you want to focus on in the paper (aka your thesis) and go with it.

Kaethe Leonard

As Chapter 1 explains, the demands students face are not at all unique to their academic pursuits. Professional working roles demand critical thinking, as 81% of major employers reported in an AAC&U-commissioned survey, and it’s pretty easy to imagine how critical thinking helps one make much better decisions in all aspects of life. Embrace it. And just as athletes, artists, and writers sustain their energy and inspiration for hard work by interacting with others who share these passions, look to others in the scholarly community—your professors and fellow students—to keep yourself engaged in these ongoing intellectual challenges. While writing time is often solitary, it’s meant to plug you into a vibrant academic community. What your professors want, overall, is for you to join them in asking and pursuing important questions about the natural, social, and creative worlds.

Other resources

1. This website from the Capital Community College Foundation has some good advice about overcoming writer’s block. And student contributor Aly Button recommends this funny clip from SpongeBob Squarepants.

14 Hart Research Associates, Raising the Bar, 9.
2. The Foundation for Critical Thinking maintains a website with many useful articles and tools.

3. The Online Writing Laboratory (OWL) at Purdue University is a wonderful set of resources for every aspect of college writing. Especially germane to this chapter is this summary of the most common types of writing assignments.

4. This website, BrainBashers.com offers logic puzzles and other brain-teasers for your entertainment.

Exercises

1. Free-write on an assignment prompt. If you have one, do that one. If not, here's one to practice with:

   A. “Please write a five-page paper analyzing the controversy surrounding genetically modified organisms (GMOs) in the food supply.”

   B. What clarification questions would you like to ask your professor? What additional background knowledge do you need to deeply understand the topic? What are some starter ideas that could lead to a good thesis and intriguing argument?

2. Find a couple of sample student papers from online paper mills such as this one (Google “free college papers”) and journals featuring excellent undergraduate writing (such as this one from Cornell University), and use the AAC&U rubric on critical thinking to evaluate them. Which descriptor in each row most closely fits the paper?
Chapter 3

Constructing the Thesis and Argument—From the Ground Up

Moving beyond the five-paragraph theme

As an instructor, I've noted that a number of new (and sometimes not-so-new) students are skilled wordsmiths and generally clear thinkers but are nevertheless stuck in a high-school style of writing. They struggle to let go of certain assumptions about how an academic paper should be. Chapter 1 points to the essay portion of the SAT as a representative artifact of the writing skills that K-12 education imparts. Some students who have mastered that form, and enjoyed a lot of success from doing so, assume that college writing is simply more of the same. The skills that go into a very basic kind of essay—often called the five-paragraph theme—are indispensable. If you're good at the five-paragraph theme, then you're good at identifying a clear and consistent thesis, arranging cohesive paragraphs, organizing evidence for key points, and situating an argument within a broader context through the intro and conclusion.

In college you need to build on those essential skills. The five-paragraph theme, as such, is bland and formulaic; it doesn't compel deep thinking. Your professors are looking for a more ambitious and arguable thesis, a nuanced and compelling argument, and real-life evidence for all key points, all in an organically1 structured paper.

Figures 3.1 and 3.2 contrast the standard five-paragraph theme and the organic college paper. The five-paragraph theme, outlined in Figure 3.1 is probably what you're used to: the introductory paragraph starts broad and gradually narrows to a thesis, which readers expect to find at the very end of that paragraph. In this idealized format, the thesis invokes the magic number of three: three reasons why a statement is true. Each of those reasons is explained and justified in the three body paragraphs, and then the final paragraph restates

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1 “Organic” here doesn’t mean “pesticide-free” or containing carbon; it means the paper grows and develops, sort of like a living thing.
the thesis before gradually getting broader. This format is easy for readers to follow, and it helps writers organize their points and the evidence that goes with them. That's why you learned this format.

Figure 3.2, in contrast, represents a paper on the same topic that has the more organic form expected in college. The first key difference is the thesis. Rather than simply positing a number of reasons to think that something is true, it puts forward an arguable statement: one with which a reasonable person might disagree. An arguable thesis gives the paper purpose. It surprises readers and draws them in. You hope your reader thinks, “Huh. Why would they come to that conclusion?” and then feels compelled to read on. The body paragraphs, then, build on one another to carry out this ambitious argument. In the classic five-paragraph theme (Figure 3.1) it hardly matters which of the three reasons you explain first or second. In the more organic structure (Figure 3.2) each paragraph specifically leads to the next.

Figure 3.1, The five-paragraph “theme”

The last key difference is seen in the conclusion. Because the organic essay is driven by an ambitious, non-obvious argument, the reader comes to the concluding section thinking “OK, I’m convinced by the argument. What do you, author, make of it? Why does it matter?” The conclusion of an organically structured paper has a real job to do. It doesn't just reiterate the thesis; it explains why the thesis matters.
The substantial time you spent mastering the five-paragraph form in Figure 3.1 was time well spent; it’s hard to imagine anyone succeeding with the more organic form without the organizational skills and habits of mind inherent in the simpler form. But if you assume that you must adhere rigidly to the simpler form, you’re blunting your intellectual ambition. Your professors will not be impressed by obvious theses, loosely related body paragraphs, and repetitive conclusions. They want you to undertake an ambitious independent analysis, one that will yield a thesis that is somewhat surprising and challenging to explain.

The three-story thesis: from the ground up

You have no doubt been drilled on the need for a thesis statement and its proper location at the end of the introduction. And you also know that all of the key points of the paper should clearly support the central driving thesis. Indeed, the whole model of the five-paragraph theme hinges on a clearly stated and consistent thesis. However, some students are surprised—and dismayed—when some of their early college papers are criticized for not having a good thesis. Their professor might even claim that the paper doesn’t have a thesis when, in the author’s view it clearly does. So, what makes a good thesis in college?

1. A good thesis is non-obvious. High school teachers needed to make sure that you and all your classmates mastered the basic form of the academic essay. Thus, they
were mostly concerned that you had a clear and consistent thesis, even if it was something obvious like “sustainability is important.” A thesis statement like that has a wide-enough scope to incorporate several supporting points and concurring evidence, enabling the writer to demonstrate his or her mastery of the five-paragraph form. Good enough! When they can, high school teachers nudge students to develop arguments that are less obvious and more engaging. College instructors, though, fully expect you to produce something more developed.

2. **A good thesis is arguable.** In everyday life, “arguable” is often used as a synonym for “doubtful.” For a thesis, though, “arguable” means that it’s worth arguing: it’s something with which a reasonable person might disagree. This arguability criterion dovetails with the non-obvious one: it shows that the author has deeply explored a problem and arrived at an argument that legitimately needs 3, 5, 10, or 20 pages to explain and justify. In that way, a good thesis sets an ambitious agenda for a paper. A thesis like “sustainability is important” isn’t at all difficult to argue for, and the reader would have little intrinsic motivation to read the rest of the paper. However, an arguable thesis like “sustainability policies will inevitably fail if they do not incorporate social justice,” brings up some healthy skepticism. Thus, the arguable thesis makes the reader want to keep reading.

3. **A good thesis is well specified.** Some student writers fear that they’re giving away the game if they specify their thesis up front; they think that a purposefully vague thesis might be more intriguing to the reader. However, consider movie trailers: they always include the most exciting and poignant moments from the film to attract an audience. In academic papers, too, a well specified thesis indicates that the author has thought rigorously about an issue and done thorough research, which makes the reader want to keep reading. Don’t just say that a particular policy is effective or fair; say what makes it is so. If you want to argue that a particular claim is dubious or incomplete, say why in your thesis.

4. **A good thesis includes implications.** Suppose your assignment is to write a paper about some aspect of the history of linen production and trade, a topic that may seem exceedingly arcane. And suppose you have constructed a well supported and creative argument that linen was so widely traded in the ancient Mediterranean that it actually served as a kind of currency. That’s a strong, insightful, arguable, well specified thesis. But which of these thesis statements do you find more engaging?

**Version A:**

Linen served as a form of currency in the ancient Mediterranean world, connecting rival empires through circuits of trade.

**Version B:**

Linen served as a form of currency in the ancient Mediterranean world, connecting rival empires through circuits of trade. The economic role of linen raises important questions about how shifting environmental conditions can influence economic relationships and, by extension, political conflicts.

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Putting your claims in their broader context makes them more interesting to your reader and more impressive to your professors who, after all, assign topics that they think have enduring significance. Finding that significance for yourself makes the most of both your paper and your learning.

How do you produce a good, strong thesis? And how do you know when you’ve gotten there? Many instructors and writers find useful a metaphor based on this passage by Oliver Wendell Holmes Sr.:³

There are one-story intellects, two-story intellects, and three-story intellects with skylights. All fact collectors who have no aim beyond their facts are one-story men. Two-story men compare, reason, generalize using the labor of fact collectors as their own. Three-story men idealize, imagine, predict—their best illumination comes from above the skylight.

One-story theses state inarguable facts. Two-story theses bring in an arguable (interpretive or analytical) point. Three-story theses nest that point within its larger, compelling implications.⁴

The biggest benefit of the three-story metaphor is that it describes a process for building a thesis. To build the first story, you first have to get familiar with the complex, relevant facts surrounding the problem or question. You have to be able to describe the situation thoroughly and accurately. Then, with that first story built, you can layer on the second story by formulating the insightful, arguable point that animates the analysis. That’s often the most effortful part: brainstorming, elaborating and comparing alternative ideas, finalizing your point. With that specified, you can frame up the third story by articulating why the point you make matters beyond its particular topic or case.

Thesis: that’s the word that pops at me whenever I write an essay. Seeing this word in the prompt scared me and made me think to myself, “Oh great, what are they really looking for?” or “How am I going to make a thesis for a college paper?” When rehearing that I would be focusing on theses again in a class, I said to myself, “Here we go again!” But after learning about the three story thesis, I never had a problem with writing another thesis. In fact, I look forward to being asked on a paper to create a thesis.

Timothée Pizarro

For example, imagine you have been assigned a paper about the impact of online learning in higher education. You would first construct an account of the origins and multiple forms of online learning and assess research findings about its use and effectiveness. If you’ve done that well, you’ll probably come up with a well considered opinion that wouldn’t be obvious to readers who haven’t looked at the issue in depth. Maybe you’ll want to argue that online

³ Oliver Wendell Holmes Sr., *The Poet at the Breakfast Table* (New York: Houghton & Mifflin, 1892),

⁴ The metaphor is extraordinarily useful even though the passage is annoying. Beyond the sexist language of the time, I don’t appreciate the condescension toward “fact-collectors,” which reflects a general modernist tendency to elevate the abstract and denigrate the concrete. In reality, data-collection is a creative and demanding craft, arguably more important than theorizing.
learning is a threat to the academic community. Or perhaps you’ll want to make the case that online learning opens up pathways to college degrees that traditional campus-based learning does not. In the course of developing your central, argumentative point, you’ll come to recognize its larger context; in this example, you may claim that online learning can serve to better integrate higher education with the rest of society, as online learners bring their educational and career experiences together. To outline this example:

• **First story:** Online learning is becoming more prevalent and takes many different forms.

• **Second story:** While most observers see it as a *transformation* of higher education, online learning is better thought of as an *extension* of higher education in that it reaches learners who aren’t disposed to participate in traditional campus-based education.

• **Third story:** Online learning appears to be a promising way to better integrate higher education with other institutions in society, as online learners integrate their educational experiences with the other realms of their life, promoting the freer flow of ideas between the academy and the rest of society.

Here’s another example of a three-story thesis:

• **First story:** Edith Wharton did not consider herself a modernist writer, and she didn’t write like her modernist contemporaries.

• **Second story:** However, in her work we can see her grappling with both the questions and literary forms that fascinated modernist writers of her era. While not an avowed modernist, she did engage with modernist themes and questions.

• **Third story:** Thus, it is more revealing to think of modernism as a conversation rather than a category or practice.

Here’s one more example:

• **First story:** Scientists disagree about the likely impact in the U.S. of the *light brown apple moth* (LBAM), an agricultural pest native to Australia.

• **Second story:** Research findings to date suggest that the decision to spray pheromones over the skies of several southern Californian counties to combat the LBAM was poorly thought out.

• **Third story:** Together, the scientific ambiguities and the controversial response strengthen the claim that industrial-style approaches to pest management are inherently unsustainable.

A thesis statement that stops at the first story isn’t usually considered a thesis. A two-story thesis is usually considered competent, though some two-story theses are more intriguing and ambitious than others. A thoughtfully crafted and well informed three-story thesis puts the author on a smooth path toward an excellent paper.

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The concept of a three-story thesis framework was the most helpful piece of information I gained from the writing component of DCC 100. The first time I utilized it in a college paper, my professor included “good thesis” and “excellent introduction” in her notes and graded it significantly higher than my previous papers. You can expect similar results if you dig deeper to form three-story theses. More importantly, doing so will make the actual writing of your paper more straightforward as well. Arguing something specific makes the structure of your paper much easier to design.

Peter Farrell

Three-story theses and the organically structured argument

The three-story thesis is a beautiful thing. For one, it gives a paper authentic momentum. The first paragraph doesn’t just start with some broad, vague statement; every sentence is crucial for setting up the thesis. The body paragraphs build on one another, moving through each step of the logical chain. Each paragraph leads inevitably to the next, making the transitions from paragraph to paragraph feel wholly natural. The conclusion, instead of being a mirror-image paraphrase of the introduction, builds out the third story by explaining the broader implications of the argument. It offers new insight without departing from the flow of the analysis.

I should note here that a paper with this kind of momentum often reads like it was knocked out in one inspired sitting. But in reality, just like accomplished athletes and artists, masterful writers make the difficult thing look easy. As writer Anne Lamott notes, reading a well written piece feels like its author sat down and typed it out, “bounding along like huskies across the snow.” However, she continues,

This is just the fantasy of the uninitiated. I know some very great writers, writers you love who write beautifully and have made a great deal of money, and not one of them sits down routinely feeling wildly enthusiastic and confident. Not one of them writes elegant first drafts. All right, one of them does, but we do not like her very much.6

Experienced writers don’t figure out what they want to say and then write it. They write in order to figure out what they want to say.

Experienced writers develop theses in dialog with the body of the essay. An initial characterization of the problem leads to a tentative thesis, and then drafting the body of the paper reveals thorny contradictions or critical areas of ambiguity, prompting the writer to revisit or expand the body of evidence and then refine the thesis based on that fresh look. The revised thesis may require that body paragraphs be reordered and reshaped to fit the

emerging three-story thesis. Throughout the process, the thesis serves as an anchor point while the author wades through the morass of facts and ideas. The dialogue between thesis and body continues until the author is satisfied or the due date arrives, whatever comes first. It’s an effortful and sometimes tedious process. Novice writers, in contrast, usually oversimplify the writing process. They formulate some first-impression thesis, produce a reasonably organized outline, and then flesh it out with text, never taking the time to reflect or truly revise their work. They assume that revision is a step backward when, in reality, it is a major step forward.

Everyone has a different way that they like to write. For instance, I like to pop my earbuds in, blast dubstep music and write on a white board. I like using the white board because it is a lot easier to revise and edit while you write. After I finish writing a paragraph that I am completely satisfied with on the white board, I sit in front of it with my laptop and just type it up.

Kaethe Leonard

Another benefit of the three-story thesis framework is that it demystifies what a “strong” argument is in academic culture. In an era of political polarization, many students may think that a strong argument is based on a simple, bold, combative statement that is promoted it in the most forceful way possible. “Gun control is a travesty!” “Shakespeare is the best writer who ever lived!” When students are encouraged to consider contrasting perspectives in their papers, they fear that doing so will make their own thesis seem mushy and weak. However, in academics a “strong” argument is comprehensive and nuanced, not simple and polemical. The purpose of the argument is to explain to readers why the author—through the course of his or her in-depth study—has arrived at a somewhat surprising point. On that basis, it has to consider plausible counter-arguments and contradictory information. Academic argumentation exemplifies the popular adage about all writing: show, don’t tell. In crafting and carrying out the three-story thesis, you are showing your reader the work you have done.

The model of the organically structured paper and the three-story thesis framework explained here is the very foundation of the paper itself and the process that produces it. The subsequent chapters, focusing on sources, paragraphs, and sentence-level wordsmithing, all follow from the notion that you are writing to think and writing to learn as much as you are writing to communicate. Your professors assume that you have the self-motivation and organizational skills to pursue your analysis with both rigor and flexibility; that is, they envision you developing, testing, refining and sometimes discarding your own ideas based on a clear-eyed and open-minded assessment of the evidence before you.

Other resources

1. The Writing Center at the University of North Carolina at Chapel Hill offers an excellent, readable run-down on the five-paragraph theme, why most college writing assignments want you to go beyond it, and those times when the simpler structure is actually a better choice.
2. There are many useful websites that describe good thesis statements and provide examples. Those from the writing centers at Hamilton College, Purdue University, and Clarkson University are especially helpful.

Exercises

1. Find a scholarly article or book that is interesting to you. Focusing on the abstract and introduction, outline the first, second, and third stories of its thesis.

2. Here is a list of one-story theses. Come up with two-story and three-story versions of each one.
   A. Television programming includes content that some find objectionable.
   B. The percent of children and youth who are overweight or obese has risen in recent decades.
   C. First-year college students must learn how to independently manage their time.
   D. The things we surround ourselves with symbolize who we are.

3. Find an example of a five-paragraph theme (online essay mills, your own high school work), produce an alternative three-story thesis, and outline an organically structured paper to carry that thesis out.

4. Go to the SAT website about the essay exam, choose one of the highly rated sample essays. In structure, how does it compare to the five-paragraph theme? How does it compare to the organic college essay? Use the SAT essay example you found to create alternative examples for Figures 3.1 and 3.2.
Chapter 4

Secondary Sources in Their Natural Habitats

Ah, the research paper

Such exhilaration! Such consternation! Educators are fond of research papers because they require you to find your own sources, confront conflicting evidence, and synthesize diverse information and ideas—all skills required in any professional leadership role. Research papers also allow students to pursue their own topic of interest; your professors have to assume that you are genuinely interested in at least some major part of the course. The open-endedness of research papers sets you up to do your best work as a self-motivated scholar.

Research papers are, by far, the best kind of papers! If you have an original twist to an old idea and about five good sources, you pretty much have a research paper. Most of the hard work is done for you already! If I can give you one piece of advice for research papers, it would be to know what you’re looking for in an article. If you want statistics, skim for statistics. Knowing what you want will cut down the time it takes you to find sources.

Kaethe Leonard

This chapter is about secondary sources: what they are, where to find them, and how to choose them. Recall the distinction between primary and secondary sources. Primary sources are original documents, data, or images: the law code of the Le Dynasty in Vietnam, the letters of Kurt Vonnegut, data gathered from an experiment on color perception, an in-

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1. If you aren’t actually interested in anything relating to the course, you’d do well to keep that information to yourself.
2. Obviously, not all writing assignments require you to find and use secondary sources. This chapter is relevant to those that do.
terview, or Farm Service Administration photographs from the 1930s. Secondary sources are produced by analyzing primary sources. They include news articles, scholarly articles, reviews of films or art exhibitions, documentary films, and other pieces that have some descriptive or analytical purpose. Some things may be primary sources in one context but secondary sources in another. For example, if you’re using news articles to inform an analysis of a historical event, they’re serving as secondary sources. If you’re counting the number of times a particular newspaper reported on different types of events, then the news articles are serving as primary sources because they’re more akin to raw data.

Some sources are better than others

You probably know by now that if you cite Wikipedia as an authoritative source, the wrath of your professor shall be visited upon you. Why is it that even the most informative Wikipedia articles are still often considered illegitimate? And what are good sources to use? The table below summarizes types of secondary sources in four tiers. All sources have their legitimate uses, but the top-tier ones are preferable for citation.

<table>
<thead>
<tr>
<th>Tier</th>
<th>Type</th>
<th>Content</th>
<th>Uses</th>
<th>How to find them</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Peer-reviewed academic publications</td>
<td>Rigorous research and analysis</td>
<td>Provide strong evidence for claims and references to other high-quality sources</td>
<td>Google Scholar, library catalogs, and academic article databases</td>
</tr>
<tr>
<td>2</td>
<td>Reports, articles, and books from credible non-academic sources</td>
<td>Well researched and even-handed descriptions of an event or state of the world</td>
<td>Initial research on events or trends not yet analyzed in the academic literature; may reference important Tier 1 sources</td>
<td>Websites of relevant agencies, Google searches using (site: *.gov or site: *.org), academic article databases</td>
</tr>
<tr>
<td>3</td>
<td>Short pieces from newspapers or credible websites</td>
<td>Simple reporting of events, research findings, or policy changes</td>
<td>Often point to useful Tier 2 or Tier 1 sources, may provide a factoid or two not found anywhere else</td>
<td>Strategic Google searches or article databases including newspapers and magazines</td>
</tr>
<tr>
<td>4</td>
<td>Agenda-driven or uncertain pieces</td>
<td>Mostly opinion, varying in thoughtfulness and credibility</td>
<td>May represent a particular position within a debate; more often provide keywords and clues about higher quality sources</td>
<td>Non-specific Google searches</td>
</tr>
</tbody>
</table>

3 Bored? Browse these images and other collections of the Library of Congress’ American Memory Project; memory.loc.gov. Fascinating!
Tier 1: Peer-reviewed academic publications
These are sources from the mainstream academic literature: books and scholarly articles. Academic books generally fall into three categories: (1) textbooks written with students in mind, (2) monographs which give an extended report on a large research project, and (3) edited volumes in which each chapter is authored by different people. Scholarly articles appear in academic journals, which are published multiple times a year in order to share the latest research findings with scholars in the field. They’re usually sponsored by some academic society. To get published, these articles and books had to earn favorable anonymous evaluations by qualified scholars. Who are the experts writing, reviewing, and editing these scholarly publications? Your professors. I describe this process below. Learning how to read and use these sources is a fundamental part of being a college student.

Tier 2: Reports, articles and books from credible non-academic sources
Some events and trends are too recent to appear in Tier 1 sources. Also, Tier 1 sources tend to be highly specific, and sometimes you need a more general perspective on a topic. Thus, Tier 2 sources can provide quality information that is more accessible to non-academics. There are three main categories. First, official reports from government agencies or major international institutions like the World Bank or the United Nations; these institutions generally have research departments staffed with qualified experts who seek to provide rigorous, even-handed information to decision-makers. Second, feature articles from major newspapers and magazines like the New York Times, Wall Street Journal, London Times, or The Economist are based on original reporting by experienced journalists (not press releases) and are typically 1500+ words in length. Third, there are some great books from non-academic presses that cite their sources; they’re often written by journalists. All three of these sources are generally well researched descriptions of an event or state of the world, undertaken by credentialed experts who generally seek to be even-handed. It is still up to you to judge their credibility. Your instructors and campus librarians can advise you on which sources in this category have the most credibility.

Tier 3. Short pieces from periodicals or credible websites
A step below the well-developed reports and feature articles that make up Tier 2 are the short tidbits that one finds in newspapers and magazines or credible websites. How short is a short news article? Usually, they’re just a couple paragraphs or less, and they’re often reporting on just one thing: an event, an interesting research finding, or a policy change. They don’t take extensive research and analysis to write, and many just summarize a press release written and distributed by an organization or business. They may describe things like corporate mergers, newly discovered diet-health links, or important school-funding legislation. You may want to cite Tier 3 sources in your paper if they provide an important factoid or two that isn’t provided by a higher-tier piece, but if the Tier 3 article describes a particular study or academic expert, your best bet is to find the journal article or book it is reporting on and use that Tier 1 source instead. If the article mentions which journal the study was published in, you can go right to that journal through your library website. Sometimes you can find the original journal article by putting the scholar’s name and some keywords into Google Scholar.
What counts as a credible website in this tier? You may need some guidance from instructors or librarians, but you can learn a lot by examining the person or organization providing the information (look for an “About” link). For example, if the organization is clearly agenda-driven or not up-front about its aims and/or funding sources, then it definitely isn’t something you want to cite as a neutral authority. Also look for signs of expertise. A tidbit about a medical research finding written by someone with a science background carries more weight than the same topic written by a policy analyst. These sources are sometimes uncertain, which is all the more reason to follow the trail to a Tier 1 or Tier 2 source whenever possible.

Personaly, research papers are my thing! They give me a chance to further explore a topic that I usually am genuinely interested in, and it gives me the opportunity to write down everything I know. Sources are easy to find; they’re everywhere. Unfortunately, the useful ones you have to put in a little more effort to find. As much as I love Wikipedia, if I’m going to take the time to write a paper, I want it to be taken seriously. There are so many resources out there to help students find scholarly information. The better the source, the more supported your paper will be. But it doesn’t matter how well supported or amazing your paper is if you don’t cite your sources! A citing mistake could definitely get you a big fat zero on the paper you worked so hard on, and maybe even kicked out of school. Utilize resources like www.easybib.com for a quick works cited, and Purdue’s OWL (english.purdue.edu/owl) for a complete and easy explanation on APA and MLA citing formats.

Aly Button

Tier 4. Agenda-driven or pieces from unknown sources
This tier is essentially everything else, including Wikipedia. These types of sources—especially Wikipedia—can be hugely helpful in identifying interesting topics, positions within a debate, keywords to search on, and, sometimes, higher-tier sources on the topic. They often play a critically important role in the early part of the research process, but they generally aren’t (and shouldn’t be) cited in the final paper. Throwing some keywords into Google and seeing what you get is a fine way to get started, but don’t stop there. Start a list of the people, organizations, sources, and keywords that seem most relevant to your topic. For example, suppose you’ve been assigned a research paper about the impact of linen production and trade on the ancient world. A quick Google search reveals that (1) linen comes from the flax plant, (2) the scientific name for flax is *Linum usitatissimum*, (3) Egypt dominated linen production at the height of its empire, and (4) Alex J. Warden published a book about ancient linen trade in 1867. Similarly, you found some useful search terms to try instead of “ancient world” (antiquity, Egyptian empire, ancient Egypt, ancient Mediterranean) and some generalizations for linen (fabric, textiles, or weaving). Now you’ve got a lot to work with as you tap into the library catalog and academic article databases.

4 Wikipedia is a conundrum. There are a lot of excellent articles on there, and I, like many other professors, embrace the open-access values that embody things like Wikipedia and this very textbook. It’s not that Wikipedia is crap; it’s just that there are much more solid alternatives.
Origins and anatomy of a journal article

Most of the Tier 1 sources available are academic articles, also called scholarly articles, scholarly papers, journal articles, academic papers, or peer-reviewed articles. They all mean the same thing: a paper published in an academic periodical after being scrutinized anonymously and judged to be sound by other experts in the subfield. Their origin explains both their basic structure and the high esteem they have in the eyes of your professors.

Many journals are sponsored by academic associations. Most of your professors belong to some big, general one (such as the Modern Language Association, the American Psychological Association, the National Association for Sport and Physical Education, or the American Physical Society) and one or more smaller ones organized around particular areas of interest and expertise (such as the Association for the Study of Food and Society, the International Association for Statistical Computing, or the Slavic and East European Folklore Association). There are also generalist organizations organized by region of the country or state, such as the Eastern Sociological Society or the Southern Management Association. Each of these associations exists to promote the exchange of research findings and collaboration in their disciplines. Towards this end, they organize conferences, sponsor working groups, and publish one or more academic journals. These journals are meant to both publicize and archive the most interesting and important findings of the field.

Academic papers are essentially reports that scholars write to their peers—present and future—about what they’ve done in their research, what they’ve found, and why they think it’s important. Thus, in a lot of fields they often have a structure reminiscent of the lab reports you’ve written for science classes:

1. **Abstract**: A one-paragraph summary of the article: its purpose, methods, findings, and significance.
2. **Introduction**: An overview of the key question or problem that the paper addresses, why it is important, and the key conclusion(s) (i.e., thesis or theses) of the paper.
3. **Literature review**: A synthesis of all the relevant prior research (the so-called “academic literature” on the subject) that explains why the paper makes an original and important contribution to the body of knowledge.
4. **Data and methods**: An explanation of what data or information the author(s) used and what they did with it.
5. **Results**: A full explanation of the key findings of the study.
6. **Conclusion/discussion**: Puts the key findings or insights from the paper into their broader context; explains why they matter.

Not all papers are so “sciencey.” For example, a historical or literary analysis doesn’t necessarily have a “data and methods” section; but they do explain and justify the research question, describe how the authors’ own points relate to those made in other relevant articles and books, develop the key insights yielded by the analysis, and conclude by explaining their significance. Some academic papers are review articles, in which the “data” are published papers and the “findings” are key insights, enduring lines of debate, and/or remaining unanswered questions.

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5 Where MLA citation style comes from.
6 Where APA citation style comes from.
Scholarly journals use a peer-review process to decide which articles merit publication. First, hopeful authors send their article manuscript to the journal editor, a role filled by some prominent scholar in the field. The editor reads over the manuscript and decides whether it seems worthy of peer-review. If it’s outside the interests of the journal or is clearly inadequate, the editor will reject it outright. If it looks appropriate and sufficiently high quality, the editor will recruit a few other experts in the field to act as anonymous peer reviewers. The editor will send the manuscript (scrubbed of identifying information) to the reviewers who will read it closely and provide a thorough critique. Is the research question driving the paper timely and important? Does the paper sufficiently and accurately review all of the relevant prior research? Are the information sources believable and the research methods rigorous? Are the stated results fully justified by the findings? Is the significance of the research clear? Is it well written? Overall, does the paper add new, trustworthy, and important knowledge to the field? Reviewers send their comments to the editor who then decides whether to (1) reject the manuscript, (2) ask the author(s) to revise and resubmit the manuscript, or (3) accept it for publication. Editors send the reviewers’ comments (again, with no identifying information) to authors along with their decisions. A manuscript that has been revised and resubmitted usually goes out for peer-review again; editors often try to get reviews from one or two first-round reviewers as well as a new reviewer. The whole process, from start to finish, can easily take a year, and it is often another year before the paper appears in print.

Understanding the academic publication process and the structure of scholarly articles tells you a lot about how to find, read and use these sources:

1. **Find them quickly.** Instead of paging through mountains of dubious web content, go right to the relevant scholarly article databases in order to quickly find the highest quality sources.

2. **Use the abstracts.** Abstracts tell you immediately whether or not the article you’re holding is relevant or useful to the paper you’re assigned to write. You shouldn’t ever have the experience of reading the whole paper just to discover it’s not useful.

3. **Read strategically.** Knowing the anatomy of a scholarly article tells you what you should be reading for in each section. For example, you don’t necessarily need to understand every nuance of the literature review. You can just focus on why the authors claim that their own study is distinct from the ones that came before.

4. **Don’t sweat the technical stuff.** Not every social scientist understands the intricacies of log-linear modeling of quantitative survey data; however, the reviewers definitely do, and they found the analysis to be well constructed. Thus, you can accept the findings as legitimate and just focus on the passages that explain the findings and their significance in plainer language.

5. **Use one article to find others.** If you have one really good article that’s a few years old, you can use article databases to find newer articles that cited it in their own literature reviews. That immediately tells you which ones are on the same topic and offer newer findings. On the other hand, if your first source is very recent, the literature review section will describe the other papers in the same line of research. You can look them up directly.

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From an author’s perspective, a verdict of “revise and resubmit”—colloquially called an “R & R”—is a cause for celebration. In many fields, most papers are revised and resubmitted at least once before being published.
Research papers, amongst others, are the most common papers a college student will ever write, and as difficult as it may sound, it is not impossible to complete. Research papers are my favorite kind of papers because of sourcing, paraphrasing, and quoting. Naturally as you would in other papers, your own paper should come from yourself, but when you are proving a point about a specific area of your topic, it is always ok to have a credible source explain further. In college, sources are very important for most, if not all papers you will have, and citing those sources is important as well. After you are able to familiarize yourself with citations, it will come natural like it has for many students.

Timothée Pizarro

Students sometimes grumble when they’re ordered to use scholarly articles in their research. It seems a lot easier to just Google some terms and find stuff that way. However, academic articles are the most efficient resource out there. They are vetted by experts and structured specifically to help readers zero in on the most important passages.

Finding Tier 1 sources: article databases

Your campus library pays big money to subscribe to databases for Tier 1 articles. Some are general purpose databases that include the most prominent journals across disciplines, and some are specific to a particular discipline. Often they have the full-text of the articles right there for you to save or print. We won’t go over particular databases here because every campus has different offerings. If you haven’t already attended a workshop on using the resources provided by your library, you should. A one-hour workshop will save you many, many hours in the future. If there aren’t any workshops, you can always seek advice from librarians and other library staff on the best databases for your topic. Many libraries also have online research guides that point you to the best databases for the specific discipline and, perhaps, the specific course. Librarians are eager to help you succeed with your research—it’s their job and they love it!—so don’t be shy about asking.

An increasingly popular article database is Google Scholar. It looks like a regular Google search, and it aspires to include the vast majority of published scholarship. Google doesn’t share a list of which journals they include or how Google Scholar works, which limits its utility for scholars. Also, because it’s so wide-ranging, it can be harder to find the most appropriate sources. However, if you want to cast a wide net, it’s a very useful tool.

Here are three tips for using Google Scholar effectively:

1. Add your field (economics, psychology, French, etc.) as one of your keywords. If you just put in “crime,” for example, Google Scholar will return all sorts of stuff from so-

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8 Examples include Academic Search Premier (by EBSCO), Academic Search Complete (by EBSCO), Academic OneFile (by Cengage), General OneFile (by Cengage), ArticleFirst (by OCLC), and JSTOR (by ITHAKA).

9 Some examples: PsycINFO (for psychology), CINAHL (for nursing), Environment Complete (for environmental science), Historical Abstracts (for history).
ciology, psychology, geography, and history. If your paper is on crime in French literature, your best sources may be buried under thousands of papers from other disciplines. A set of search terms like “crime French literature modern” will get you to relevant sources much faster.

2. **Don't ever pay for an article.** When you click on links to articles in Google Scholar, you may end up on a publisher’s site that tells you that you can download the article for $20 or $30. Don’t do it! You probably have access to virtually all the published academic literature through your library resources. Write down the key information (authors’ names, title, journal title, volume, issue number, year, page numbers) and go find the article through your library website. If you don’t have immediate full-text access, you may be able to get it through inter-library loan.

3. **Use the “cited by” feature.** If you get one great hit on Google Scholar, you can quickly see a list of other papers that cited it. For example, the search terms “crime economics” yielded this hit for a 1988 paper that appeared in a journal called *Kyklos*:

The economics of crime deterrence: a survey of theory and evidence
S Cameron - Kyklos, 1988 - Wiley Online Library

Since BECKER [1968] economists have generated a large literature on crime. Deterrence effects have figured prominently; few papers [eg HOCH, 1974] omit consideration of these. There are two reasons why a survey of the economics of deterrence is timely. Firstly, there ...

1988 is nearly 30 years ago; for a social-science paper you probably want more recent sources. You can see that, according to Google, this paper was cited by 392 other sources. You can click on that “Cited by 392” to see that list. You can even search within that list of 392 if you’re trying to narrow down the topic. For example, you could search on the term “cities” to see which of those 392 articles are most likely to be about the economic impact of crime on cities.

Library research as problem-solving

You’ll probably engage the subscription article databases at different points in the process. For example, imagine you’ve been assigned a research paper that can focus on any topic relevant to the course. Imagine further that you don’t have a clue about where to start and aren’t entirely sure what counts as an appropriate topic in this discipline. A great approach is to find the top journals in the specific field of your course and browse through recent issues to see what people are publishing on. For example, when I assign an open-topic research paper in my Introduction to Sociology course, I suggest that students looking for a topic browse recent issues of *Social Problems* or *American Journal of Sociology* and find an article that looks interesting. They’ll have a topic and—booyah!—their first source. An instructor of a class on kinesiology might recommend browsing *Human Movement Science*, *Journal of Strength and Conditioning Research*, or *Perceptual and Motor Skills*.

When you have a topic and are looking for a set of sources, your biggest challenge is finding the right keywords. You’ll never find the right sources without them. You’ll obviously start with words and phrases from the assignment prompt, but you can’t stop there. As explained
above, lower tier sources (such as Wikipedia) or the top-tier sources you already have are great for identifying alternative keywords, and librarians and other library staff are also well practiced at finding new approaches to try. Librarians can also point you to the best databases for your topic as well.

As you assess your evidence and further develop your thesis through the writing process, you may need to seek additional sources. For example, imagine you’re writing a paper about the added risks adolescents face when they have experienced their parents’ divorce. As you synthesize the evidence about negative impacts, you begin to wonder if scholars have documented some positive impacts as well. Thus you delve back into the literature to look for more articles, find some more concepts and keywords (such as “resiliency”), assess new evidence, and revise your thinking to account for these broader perspectives. Your instructor may have asked you to turn in a bibliography weeks before the final paper draft. You can check with your professor, but he or she is probably perfectly fine with you seeking additional sources as your thinking evolves. That’s how scholars write.

Finding good sources is a much more creative task than it seems on the face of it. It’s an extended problem-solving exercise, an iterative cycle of questions and answers. Go ahead and use Wikipedia to get broadly informed if you want. It won’t corrupt your brain. But use it, and all other sources, strategically. You should eventually arrive at a core set of Tier 1 sources that will enable you to make a well informed and thoughtful argument in support of your thesis. It’s also a good sign when you find yourself deciding that some of the first sources you found are no longer relevant to your thesis; that likely means that you have revised and specified your thinking and are well on your way to constructing the kind of self-driven in-depth analysis that your professor is looking for.

Other resources

1. The Online Writing Laboratory (OWL) at Purdue University provides this list of links to freely available article databases.

2. Google provides some great tips for getting the most out of Google Scholar.

3. This resource from Bowling Green State University explains how searching subject headings in a database (compared to key words) can more quickly bring you to relevant sources.

Exercises

1. Choose a research topic, enter it into Google and then into Google Scholar, and compare your results. Some topics you could try: college athletes and academics, antibiotic resistance, Ptolemaic dynasty.

2. Using various databases, find one source in each of the four tiers for a particular topic.

3. Enter a topic into a general subscription database that has both scholarly and non-scholarly sources (such as Academic Search Complete or Academic OneFile);

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10 One fairly recent article is Ilana Sever, Joseph Gutmann, and Amnon Lazar, “Positive Consequences of Parental Divorce Among Israeli Young Adults”, Marriage and Family Review 42, no. 4 (2007): 7-28.
browse the first few hits and classify each one as scholarly or not-scholarly. Look at the structure of the piece to make your determination.
Chapter 5

Listening to Sources, Talking to Sources

Theses and sources

Everyone knows that a thorough analysis and persuasive argument needs strong evidence. The credibility of sources, addressed in Chapter 4, is one key element of strong evidence, but it also matters how sources are used in the text of the paper. Many students are accustomed to thinking of sources simply as expert corroboration for their own points. As a result, they tend to comb texts to find statements that closely parallel what they want to say and then incorporate quotes as evidence that a published author agrees with them. That’s one way to use sources, but there is a lot more to it.

Recall from prior chapters that writing academic papers is about joining a conversation. You’re contributing your own original thinking to some complex problem, be it interpretive, theoretical, or practical. Citing sources helps situate your ideas within that ongoing conversation. Sometimes you’re citing a research finding that provides strong evidence for your point; at other times you’re summarizing someone else’s ideas in order to explain how your own opinion differs or to note how someone else’s concept applies to a new situation. Graff and Birkenstein encourage you to think about writing with sources is a “They Say/I Say” process. You first report what “they” say; “they” being published authors, prevalent ideas in society at large, or maybe participants in some kind of political or social debate. Then you respond by explaining what you think: Do you agree? Disagree? A little of both?

This “They Say/I Say” approach can help student writers find balance in their use of sources. On one extreme, some students think that they aren’t allowed to make any claims without citing one or more expert authors saying the same thing. When their instructors encourage them to bring more original thinking into their writing, they’re confused about how to do it. On the other extreme, some students tend to describe, more or less accurately, what sources say about a topic but then go on to state opinions that seem unrelated to the claims they just summarized. For example, a student writer may draw on expert sources to explain

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how the prevention and early detection of cancer has saved lives but then argue for more funding for curing advanced cancer without making any explicit link to the points about prevention and screening. On one extreme, the sources are allowed to crowd out original thinking; on the other, they have seemingly no impact on the author’s conclusions.

How can you know when you’re avoiding both of these extremes? In other words, what kinds of theses (“I Say”) can count as an original claim and still be grounded in the sources (“They Say”)? Here are five common strategies:

1. **Combine research findings from multiple sources to make a larger summary argument.** You might find that none of the sources you’re working with specifically claim that early 20th century British literature was preoccupied with changing gender roles but that, together, their findings all point to that broader conclusion.

2. **Combine research findings from multiple sources to make a claim about their implications.** You might review papers that explore various factors shaping voting behavior to argue that a particular voting-reform proposal will likely have positive impacts.

3. **Identify underlying areas of agreement.** You may argue that the literature on cancer and the literature on violence both describe the unrecognized importance of prevention and early intervention in order to claim that insights about one set of problems may be useful for the other.

4. **Identify underlying areas of disagreement.** You may find that the controversies surrounding educational reform—and its debates about accountability, curricula, school funding—ultimately stem from different assumptions about the role of schools in society.

5. **Identify unanswered questions.** Perhaps you review studies of the genetic and behavioral contributors to diabetes in order to highlight unknown factors and argue for more in-depth research on the role of the environment.

There are certainly other ways authors use sources to build theses, but these examples illustrate how original thinking in academic writing involves making connections with and between a strategically chosen set of sources.

**Incorporating sources**

Here’s a passage of academic writing (an excerpt, not a complete paper) that illustrates several ways that sources can figure into a “They Say/I Say” approach:

Willingham (2011) draws on cognitive science to explain that students must be able to regulate their emotions in order to learn. Emotional self-regulation enables

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2 Recommended read: Siddhartha Mukherjee’s *The Emperor of All Maladies: A Biography of Cancer* (New York, Scribner, 2010).

students to ignore distractions and channel their attention and behaviors in appropriate ways. Other research findings confirm that anxiety interferes with learning and academic performance because it makes distractions harder to resist (Perkins and Graham-Bermann, 2012; Putwain and Best, 2011).

Other cognitive scientists point out that deep learning is itself stressful because it requires people to think hard about complex, unfamiliar material instead of relying on cognitive short-cuts. Kahneman (2011) describes this difference in terms of two systems for thinking: one fast and one slow. Fast thinking is based on assumptions and habits and doesn't require a lot of effort. For example, driving a familiar route or a routine grocery-shopping trip are not usually intellectually taxing activities. Slow thinking, on the other hand, is what we do when we encounter novel problems and situations. It's effortful, and it usually feels tedious and confusing. It is emotionally challenging as well because we are, by definition, incompetent while we're doing it, which provokes some anxiety. Solving a tough problem is rewarding, but the path itself is often unpleasant.

These insights from cognitive science enable us to critically assess the claims made on both sides of the education reform debate. On one hand, they cast doubt on the claims of education reformers that measuring teachers’ performance by student test scores is the best way to improve education. For example, the Center for Education Reform promotes “the implementation of strong, data-driven, performance-based accountability systems that ensure teachers are rewarded, retained and advanced based on how they perform in adding value to the students who they teach, measured predominantly by student achievement” (http://www.edreform.com/issues/teacher-quality/#what-we-believe). The research that Willingham (2011) and Kahneman (2011) describe suggests that frequent high-stakes testing may actually work against learning by introducing greater anxiety into the school environment.

At the same time, opponents of education reform should acknowledge that these research findings should prompt us to take a fresh look at how we educate our children. While Stan Karp of Rethinking Schools is correct when he argues that “data-driven formulas [based on standardized testing] lack both statistical credibility and a basic understanding of the human motivations and relationships that make good schooling possible” (http://www.rethinkingschools.org/archive/26_03/26_03_karp.shtm), it doesn’t necessarily follow that all education reform proposals lack merit. Challenging standards, together with specific training in emotional self-regulation, will likely enable more students to succeed. 4

In that example, the ideas of Willingham and Kahneman are summarized approvingly, bolstered with additional research findings, and then applied to a new realm: the current debate surrounding education reform. Voices in that debate were portrayed as accurately as possible, sometimes with representative quotes. Most importantly, all references were tied directly to the author’s own interpretative point, which relies on the quoted claims.

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4 A side note: You may have noticed that the verbs used in referencing tend to be in present tense: so-and-so “writes” or “claims” or “argues”. That’s what academic writers do, even if the piece and author are from far in the past. It’s called “the historical present” and it’s just one convention of academic writing.
I think the most important lesson for me to learn about sources was that the best way to use them is to create a new point. What I mean by this is instead of using them only to back up your points, create your own conclusion from what your sources say. As a psychology major, I look at a lot of data from researchers who have created a conclusion from a meta-analysis (a combination of many studies about the same thing). So that’s how I like to think of using sources, I will look at many articles about the same subject and then come up with my own opinion. After using your sources, it is very important to cite them correctly. Personally, I want to be a respected and trustworthy scholar. However, if any of my papers were to be found without proper citations, all of my hard work would be for nothing and people would be wary about the rest of my work.

Aly Button

As you can see, there are times when you should quote or paraphrase sources that you don’t agree with or do not find particularly compelling. They may convey ideas and opinions that help explain and justify your own argument. Similarly, when you cite sources that you agree with, you should choose quotes or paraphrases that serve as building blocks within your own argument. Regardless of the role each source plays in your writing, you certainly don’t need to find whole sentences or passages that express your thinking. Rather, focus on what each of those sources is claiming, why, and how exactly their claims relate to your own points.

The remainder of this chapter explains some key principles for incorporating sources, principles which follow from the general point that academic writing is about entering an ongoing conversation.

Principle 1: Listen to your sources

Have you ever had the maddening experience of arguing with someone who twisted your words to make it seem like you were saying something you weren’t? Novice writers sometimes inadvertently misrepresent their sources when they quote very minor points from an article or even positions that the authors of an article disagree with. It often happens when students approach their sources with the goal of finding snippets that align with their own opinion. For example, the passage above contains the phrase “measuring teachers’ performance by student test scores is the best way to improve education.” An inexperienced writer might include that quote in a paper without making it clear that the author(s) of the source actually dispute that very claim. Doing so is not intentionally fraudulent, but it reveals that the paper-writer isn’t really thinking about and responding to claims and arguments made by others. In that way, it harms his or her credibility.

Academic journal articles are especially likely to be misrepresented by student writers because their literature review sections often summarize a number of contrasting viewpoints. For example, sociologists Jennifer C. Lee and Jeremy Staff wrote a paper in which they note
that high-schoolers who spend more hours at a job are more likely to drop out of school.\(^5\) However, Lee and Staff’s analysis finds that working more hours doesn’t actually make a student more likely to drop out. Instead, the students who express less interest in school are both more likely to work a lot of hours \(\text{and}\) more likely to drop out. In short, Lee and Staff argue that disaffection with school causes students to drop-out, not working at a job. In re-viewing prior research about the impact of work on dropping out, Lee and Staff write “Paid work, especially when it is considered intensive, reduces grade point averages, time spent on homework, educational aspirations, and the likelihood of completing high school.”\(^6\) If you included that quote without explaining how it fits into Lee and Staff’s actual argument, you would be misrepresenting that source.

**Principle 2: Provide context**

Another error beginners often make is to drop in a quote without any context. If you simply quote, “Students begin preschool with a set of self-regulation skills that are a product of their genetic inheritance and their family environment” (Willingham, 2011, p.24), your reader is left wondering who Willingham is, why he or she is included here, and where this statement fits into his or her larger work. The whole point of incorporating sources is to situate your own insights in the conversation. As part of that, you should provide some kind of context the first time you use that source. Some examples:

> Willingham, a cognitive scientist, claims that …

> Research in cognitive science has found that … (Willingham, 2011).

> Willingham argues that “Students begin preschool with a set of self-regulation skills that are a product of their genetic inheritance and their family environment” (Willingham, 2011, p.24). Drawing on findings in cognitive science, he explains “…

As the second example above shows, providing a context doesn’t mean writing a brief biography of every author in your bibliography—it just means including some signal about why that source is included in your text.

Even more baffling to your reader is when quoted material does not fit into the flow of the text. For example, a novice student might write,

> Schools and parents shouldn’t set limits on how much teenagers are allowed to work at jobs. “We conclude that intensive work does not affect the likelihood of high school dropout among youths who have a high propensity to spend long hours on the job” (Lee and Staff, 2007, p. 171). Teens should be trusted to learn how to manage their time.

The reader is thinking, who is this sudden, ghostly “we”? Why should this source be believed? If you find that passages with quotes in your draft are awkward to read out loud, that’s a sign that you need to contextualize the quote more effectively. Here’s a version that puts the quote in context:


\(^6\) Ibid., 159.
Schools and parents shouldn’t set limits on how much teenagers are allowed to work at jobs. Lee and Staff’s carefully designed study found that “intensive work does not affect the likelihood of high school dropout among youths who have a high propensity to spend long hours on the job” (2007, p. 171). Teens should be trusted to learn how to manage their time.

In this latter example, it’s now clear that Lee and Staff are scholars and that their empirical study is being used as evidence for this argumentative point. Using a source in this way invites the reader to check out Lee and Staff’s work for themselves if they doubt this claim.

Many writing instructors encourage their students to contextualize their use of sources by making a "quotation sandwich"; that is, introduce the quote in some way and then follow it up with your own words. If you’ve made a bad habit of dropping in unintroduced quotes, the quotation sandwich idea may help you improve your skills, but in general you don’t need to approach every quote or paraphrase as a three-part structure to have well integrated sources. You should, however, avoid ending a paragraph with a quotation. If you’re struggling to figure out what to write after a quote or close paraphrase, it may be that you haven’t yet figured out what role the quote is playing in your own analysis. If that happens to you a lot, try writing the whole first draft in your own words and then incorporate material from sources as you revise with “They Say/I Say” in mind.

Principle 3: Use sources efficiently

Some student writers are in a rut of only quoting whole sentences. Some others, like myself as a student, get overly enamored of extended block quotes and the scholarly look they give to the page. These aren’t the worst sins of academic writing, but they get in the way of one of the key principles of writing with sources: shaping quotes and paraphrases efficiently. Efficiency follows from the second principle, because when you fully incorporate sources into your own explicit argument, you zero in on the phrases, passages, and ideas that are relevant to your points. It’s a very good sign for your paper when most quotes are short (key terms, phrases, or parts of sentences) and the longer quotes (whole sentences and passages) are clearly justified by the discussion in which they’re embedded. Every bit of every quote should feel indispensable to the paper. An overabundance of long quotes usually means that your own argument is undeveloped. The most incandescent quotes will not hide that fact from your professor.

Also, some student writers forget that quoting is not the only way to incorporate sources. Paraphrasing and summarizing are sophisticated skills that are often more appropriate to use than direct quoting. The first two paragraphs of the example passage above do not include any quotations, even though they are both clearly focused on presenting the work of others. Student writers may avoid paraphrasing out of fear of plagiarizing, and it’s true that a poorly executed paraphrase will make it seem like the student writer is fraudulently claiming the wordsmithing work of others as his or her own. Sticking to direct quotes seems safer. However, it is worth your time to master paraphrasing because it often helps you be more clear and concise, drawing out only those elements that are relevant to the thread of your analysis.

It took me a long time to stop abusing block quotes. They made me feel like my paper was an unassailable fortress of citation! With the friendly but pointed feedback of my professors, I gradually came to see how they took too much space away from my own argument.
For example, here’s a passage from a hypothetical paper with a block quote that is fully relevant to the argument but, nevertheless, inefficient:

Drawing on a lifetime of research, Kahneman concludes our brains are prone to error: 8

System 1 registers the cognitive ease with which it processes information, but it does not generate a warning signal when it becomes unreliable. Intuitive answers come to mind quickly and confidently, whether they originate from skills or from heuristics. There is no simple way for System 2 to distinguish between a skilled and a heuristic response. Its only recourse is to slow down and attempt to construct an answer on its own, which it is reluctant to do because it is indolent. Many suggestions of System 1 are casually endorsed with minimal checking, as in the bat-and-ball problem.

While people can get better at recognizing and avoiding these errors, Kahneman suggests, the more robust solutions involve developing procedures within organizations to promote careful, effortful thinking in making important decisions and judgments.

Even a passage that is important to reference and is well contextualized in the flow of the paper will be inefficient if it introduces terms and ideas that aren’t central to the analysis within the paper. Imagine, for example, that other parts of this hypothetical paper use Kahneman’s other terms for System 1 (fast thinking) and System 2 (slow thinking); the sudden encounter of “System 1” and “System 2” would be confusing and tedious for your reader. Similarly, the terms “heuristics” and “bat-and-ball problem” might be unfamiliar to your reader. Their presence in the block quote just muddies the waters. In this case, a paraphrase is a much better choice. Here’s an example passage that uses a paraphrase to establish the same points more clearly and efficiently:

Drawing on a lifetime of research, Kahneman summarizes that our brains are prone to error because they necessarily rely on cognitive shortcuts that may or may not yield valid judgments. 9 We have the capacity to stop and examine our assumptions, Kahneman points out, but we often want to avoid that hard work. As a result, we tend to accept our quick, intuitive responses. While people can get better at recognizing and avoiding these errors, Kahneman suggests that the more robust solutions involve developing procedures within organizations to promote careful, effortful thinking in making important decisions and judgments.

Not only is the paraphrased version shorter (97 words versus 151), it is clearer and more efficient because it highlights the key ideas, avoiding specific terms and examples that aren’t used in the rest of the paper. If other parts of your paper did refer to Kahneman’s System 1 and System 2, then you might choose to include some quoted phrases to make use of some of Kahneman’s great language. Perhaps something like this:

Drawing on a lifetime of research, Kahneman summarizes that our brains are prone to error because they necessarily rely on cognitive shortcuts that may or may not yield valid judgments. 10 System 1, Kahneman explains, “does not generate

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9 Ibid.
10 Ibid.
a warning signal when it becomes unreliable.”

System 2 can stop and examine these assumptions, but it usually wants to avoid that hard work. As a result, our quick, intuitive responses are “casually endorsed with minimal checking.” While people can get better at recognizing and avoiding these errors, Kahneman suggests, the more robust solutions involve developing procedures within organizations to promote careful, effortful thinking in making important decisions and judgments.

Whether you choose a long quote, short quote, paraphrase or summary depends on the role that the source in playing in your analysis. The trick is to make deliberate, thoughtful decisions about how to incorporate ideas and words from others.

Paraphrasing, summarizing, and the mechanical conventions of quoting take a lot of practice to master. Numerous other resources (like those listed at the end of this chapter) explain these practices clearly and succinctly. Bookmark some good sources and refer to them as needed. If you suspect that you’re in a quoting rut, try out some new ways of incorporating sources.

Principle 4: Choose precise verbs of attribution

It’s time to get beyond the all-purpose “says.” And please don’t look up “says” in the thesaurus and substitute verbs like “proclaim” (unless there was actually a proclamation) or “pronounce” (unless there was actually a pronouncement). Here’s a list of 15 useful alternatives:

- Claims
- Asserts
- Relates
- Recounts
- Complains
- Reasons
- Proposes
- Suggests (if the author is speculating or hypothesizing)
- Contests (disagrees)
- Concludes
- Shows
- Argues
- Explains
- Indicates
- Points out
- Offers

More precise choices like these carry a lot more information than “says”, enabling you to relate more with fewer words. For one thing, they can quickly convey what kind of idea you’re citing: a speculative one (“postulates”)? A conclusive one (“determines”)? A contro-

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11 Ibid, 416.
12 Ibid, 417.
13 Google “verbs of attribution” to find other suggestions.
versial one ("counters")? You can further show how you’re incorporating these sources into your own narrative. For example, if you write that an author “claims” something, you’re presenting yourself as fairly neutral about that claim. If you instead write that the author “shows” something, then you signal to your reader that you find that evidence more convincing. “Suggests” on the other hand is a much weaker endorsement. As I’ll discuss in Chapter 8, saying more with less makes your writing much more engaging.

Sources are your best friend. They either help you reaffirm your thesis or offer a differing opinion that you can challenge in your paper. The biggest thing to worry about, when it comes to sources, is citing. However, there are a multitude of resources to help you cite properly. My personal favorite is called Knightcite.com. You just pick the type of resource, fill in the information on it and voila, you have a perfectly cited resource!

Kaethe Leonard

Conclusion

Like so many things in adult life, writing in college is often both more liberating and burdensome than writing in high school and before. On the one hand, I’ve had students tell me that their high-school experiences made it seem that their own opinions didn’t matter in academic writing, and that they can’t make any claims that aren’t exactly paralleled by a pedigreed quotation. Writing papers based on their own insights and opinions can seem freeing in contrast. At the same time, a college student attending full time may be expected to have original and well considered ideas about pre-Columbian Latin American history, congressional redistricting, sports in society, postcolonial literatures, and nano-technology, all in about two weeks. Under these conditions, it’s easy to see why some would long for the days when simple, competent reporting did the job. You probably won’t have an authentic intellectual engagement with every college writing assignment, but approaching your written work as an opportunity to dialogue with the material can help you find the momentum you need to succeed with this work.

Other resources


2. Another excellent resource is Gordon Harvey’s Writing with Sources: A Guide for Students 2nd ed. (Indianapolis: Hackett, 2008). In it, he discusses the key principles for incorporating sources, the stylistic conventions for quoting and paraphrasing, and the basics of common citation styles. That’s all information you want to have at the ready.
3. Many university writing centers have nicely concise on-line guides to summarizing, paraphrasing, and quoting. I found some especially good ones at the University of Wisconsin, the University of Washington, and, as always, the Purdue Online Writing Laboratory.

Exercises

1. Here is a passage from a world history textbook.¹⁴

Like so many things desired by Europeans and supplied by Asians—at first luxury items for the elite such as silk or porcelain, but increasingly products like tea from China for the mass market—cotton textiles were produced well and cheaply in India. The British textile manufacturers focused on the “cheap” part and complained that with relatively higher wages, British manufacturers could not compete. India had a competitive advantage in the eighteenth century, being able to undersell in the world market virtually any other producer of textiles. Some thought the reason for cheap Indian textiles was because of a low living standard, or a large population earning depressed wages, but all of those have been shown to not be true: Indian textile workers in the eighteenth century had just as high a standard of living as British workers. So, if it was not a low standard of living that gave India its competitive advance, what did?

In a word: agriculture. Indian agriculture was so productive that the amount of food produced, and hence its cost, was significantly lower than in Europe. In the preindustrial age, when working families spent 60-80 percent of their earnings on food, the cost of food was the primary determinant of their real wages (i.e. how much a pound, dollar, a real, or a pagoda could buy). In India (and China and Japan as well), the amount of grain harvested from a given amount of seed was in the ration of 20:1 (e.g., twenty bushels of rice harvested for every one planted), whereas in England it was at best 8:1. Asian agriculture thus was more than twice as efficient as British (and by extension European) agriculture, and food—the major component in the cost of living—cost less in Asia.

Drawing on this passage, try out different quoting, paraphrasing and summarizing options:

a. Quote a key phrase or part of a sentence, naming the source and incorporating the quote within your own logic.

b. Quote an entire sentence or two, providing context and incorporating the quote within your own logic.

c. Construct an unacceptable paraphrase of part of the passage; copying a couple sentences and change just a few of the key words.

d. Construct a successful paraphrase of part of the passage; describing it in your own words.

e. Write a sentence, with a citation, that summarizes the general point of the passage.

2. Rewrite your responses to 1a and 1b, above, changing the verbs of attribution. How do the new verbs change the meaning or tone of your sentence?

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Back to Basics: The Perfect Paragraph

Paragraphs

As Michael Harvey writes, paragraphs are “in essence—a form of punctuation, and like other forms of punctuation they are meant to make written material easy to read.”

1 Effective paragraphs are the fundamental units of academic writing; consequently, the thoughtful, multifaceted arguments that your professors expect depend on them. Without good paragraphs, you simply cannot clearly convey sequential points and their relationships to one another. The purpose of this chapter is to highlight strategies for constructing, ordering, and relating paragraphs in academic writing. It could just as well be titled “Organization” because whether or not readers perceive a paper to be well organized depends largely on effective paragraphing.

Many novice writers tend to make a sharp distinction between content and style, thinking that a paper can be strong in one and weak in the other, but focusing on organization shows how content and style converge in deliberative academic writing. A poorly organized paper may contain insightful kernels, but a thoughtful, satisfying argument can’t take shape without paragraphs that are crafted, ordered, and connected effectively. On the other side, one can imagine a string of slick, error-free sentences that are somehow lacking in interesting ideas. However, your professors will view even the most elegant prose as rambling and tedious if there isn’t a careful, coherent argument to give the text meaning. Paragraphs are the “stuff” of academic writing and, thus, worth our attention here.

Key sentences (a.k.a. topic sentences)

In academic writing, readers expect each paragraph to have a sentence or two that captures its main point. They’re often called “topic sentences,” though many writing instructors

prefer to call them “key sentences.” There are at least two downsides of the phrase “topic sentence.” First, it makes it seem like the paramount job of that sentence is simply to announce the topic of the paragraph. Second, it makes it seem like the topic sentence must always be a single grammatical sentence. Calling it a “key sentence” reminds us that it expresses the central idea of the paragraph. And sometimes a question or a two-sentence construction functions as the key.

The key to staying on topic within a paragraph is starting with a topic sentence. It doesn't even have to be perfect to work from it! Just figure out what you really want to say in that one specific paragraph and go. Then, you … EDIT (haha, made you flinch!) All joking aside, editing really is a very important step in this process. By going back over what you wrote, you can check to see if what you wrote in that paragraph fits with what you actually intend to say as well as to make sure everything is cohesive and coherent!

Kaethe Leonard

Key sentences in academic writing do two things. First, they establish the main point that the rest of the paragraph supports. Second, they situate each paragraph within the sequence of the argument, a task that requires transitioning from the prior paragraph. Consider these two examples:

**Version A:**

Now we turn to the epidemiological evidence.

**Version B:**

The epidemiological evidence provides compelling support for the hypothesis emerging from etiological studies.

Both versions convey a topic; it's pretty easy to predict that the paragraph will be about epidemiological evidence, but only the second version establishes an argumentative point and puts it in context. The paragraph doesn't just describe the epidemiological evidence; it shows how epidemiology is telling the same story as etiology. Similarly, while Version A doesn't relate to anything in particular, Version B immediately suggests that the prior paragraph addresses the biological pathway (i.e. etiology) of a disease and that the new paragraph will bolster the emerging hypothesis with a different kind of evidence. As a reader, it's easy to keep track of how the paragraph about cells and chemicals and such relates to the paragraph about populations in different places.

By clearly establishing an essential point within its analytic context, a well written key sentence gives both you and your reader a firm grasp of how each point relates. For example, compare these two sets of key sentences, each introducing a sequential paragraph:

**Etiology is the cause of a disease—what's actually happening in cells and tissues—while epidemiology is the incidence of a disease in a population.**

**This example is drawn from key points from Steven Epstein's *Impure Science: AIDS, Activism, and the Politics of Knowledge* (Berkeley, CA: University of California Press, 1996). An excellent read.**
Version A:

At the beginning of the AIDS epidemic, the cause of the disease was unclear. …

The cause of AIDS is HIV. …

There are skeptics who question whether HIV is the cause. …

Version B:

At the beginning of the AIDS epidemic, the cause of the disease was unclear, leading to a broad range of scientific speculation. …

By 1986 HIV had been isolated and found to correlate almost exactly with the incidence of AIDS. …

HIV skeptics, on the other hand, sought to discredit claims based on epidemiology by emphasizing that the pathogenesis of HIV was still unknown. …

Version A isn’t wrong per se; it just illustrates a lost opportunity to show the important connections among points. Both versions portray a process unfolding over time: initial uncertainty followed by a breakthrough discovery and then controversy. Even with the same substantive points, a person reading Version A would have to work harder to see how the material in the paragraphs connects. Readers experience Version B as clearer and more engaging.

Thinking of key sentences as sequential points in an argument reminds one that a key sentence doesn’t have to always be a single declarative one. Sometimes you need two sentences together to achieve the work of a key sentence, and sometimes a question or quotation does a better job than a declarative sentence in clarifying a logical sequence:

Version C:

At the beginning of the AIDS epidemic the cause was unclear. Virologists, bacteriologists, immunologists, and epidemiologists all pursued different leads, reflecting their particular areas of expertise…

If drug use, lifestyle, and “immune overload” didn’t cause AIDS, what did?…

“I’ve asked questions they apparently can’t answer,” claimed retrovirologist Peter Duesberg who became an oft-quoted skeptical voice in media accounts of AIDS research in the mid-1980s. …

Version C is based on the same three sequential points as Versions A and B: (1) the cause of AIDS was initially unclear (2) HIV was accepted as the cause (3) lone dissenters questioned the claims. However, versions B and C have much more meaning and momentum, and version C, depending on the nature of the argument, features more precise and lively stylistic choices. Opening the second paragraph with a question (that then gets answered) carries forth the sense of befuddlement that researchers initially experienced and helps to convey why the discovery of HIV was a hugely important turning point. Using the self-

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4 This Duesberg quote is from Epstein, Impure Science, 112.
glorifying Duesberg quote to launch the third paragraph makes the point about lingering skepticism while also introducing a portrait of a leading figure among the skeptics. While Version B is effective as well, Version C illustrates some of the more lively choices available to academic writers.

A last thing to note about key sentences is that academic readers expect them to be at the beginning of the paragraph. That helps readers comprehend your argument. To see how, try this: find an academic piece (such as a textbook or scholarly article) that strikes you as well written and go through part of it reading just the first sentence of each paragraph. You should be able to easily follow the sequence of logic. When you’re writing for professors, it is especially effective to put your key sentences first because they usually convey your own original thinking, which, as you’ve read here, is exactly what your instructors are looking for in your work. It’s a very good sign when your paragraphs are typically composed of a telling key sentence followed by evidence and explanation.

Knowing this convention of academic writing can help you both read and write more effectively. When you’re reading a complicated academic piece for the first time, you might want to go through reading only the first sentence or two of each paragraph to get the overall outline of the argument. Then you can go back and read all of it with a clearer picture of how each of the details fit in. And when you’re writing, you may also find it useful to write the first sentence of each paragraph (instead of a topic-based outline) to map out a thorough argument before getting immersed in sentence-level wordsmithing. For example, compare these two scaffolds. Which one would launch you into a smoother drafting process?:

**Version A (Outline Of Topics):**

I. Granovetter’s “Strength of weak ties”
   a. Definition
   b. Example—getting jobs

II. Creativity in social networks
   a. Explanation
   b. Richard Florida’s argument

III. Implications
   a. For urban planners
   b. For institutions of higher education

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5 This sentence right here is an example!
6 I hesitate to add that this first-sentence trick is also a good one for when you haven’t completed an assigned reading and only have 10 minutes before class. Reading just the first sentence of each paragraph will quickly tell you a lot about the assigned text.
7 This example is from Katherine Giuffre, *Communities and Networks: Using Social Network Analysis to Rethink Urban and Community Studies* (Malden, MA: Polity, 2013).
Version B (Key-Sentence Sketch):

The importance of networking for both career development and social change is well known. Granovetter (1973) explains that weak ties—that is, ties among acquaintances—are often more useful in job hunting because they connect job-seekers to a broader range of people and workplaces. …

Subsequent research in network analysis has shown that weak ties can promote creativity by bringing ideas together from different social realms. …

Richard Florida (2002) argues that cities would do well to facilitate weak ties in order to recruit members of the “creative class” and spur economic development. …

Florida’s argument can inspire a powerful new approach to strategic planning within colleges and universities as well. …

As you can see, emphasizing key sentences in both the process and product of academic writing is one way to ensure that your efforts stay focused on developing your argument and communicating your own original thinking in a clear, logical way.

A good paper has cohesion. I love outlines, so I really like the idea of writing my first sentence of each paragraph as my plan. This way, you know what to write about and you know that your paper will flow easily. As a reader, this is an important characteristic to me. If the paragraphs are just jumping around in all different directions, I quickly lose interest in trying to follow along. The reader should not have to struggle to follow your paper. Flow can make the difference between an okay paper and a scholarly product.

Aly Button

Cohesion and coherence

With a key sentence established, the next task is to shape the body of your paragraph to be both cohesive and coherent. As Williams and Bizup explain, cohesion is about the “sense of flow” (how each sentence fits with the next), while coherence is about the “sense of the whole”. Some students worry too much about “flow” and spend a lot of time on sentence-level issues to promote it. I encourage you to focus on underlying structure. For the most part, a text reads smoothly when it conveys a thoughtful and well organized argument or analysis. Focus first and most on your ideas, on crafting an ambitious analysis. The most useful guides advise you to first focus on getting your ideas on paper and then revising for organization and wordsmithing later, refining the analysis as you go. Thus, I discuss creating cohesion and coherent paragraphs here as if you already have some rough text written and

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9. Ibid., 71.
are in the process of smoothing out your prose to clarify your argument for both your reader and yourself.

Cohesion refers to the flow from sentence to sentence. For example, compare these passages:

Version A (That I Rewrote):
Granovetter begins by looking at balance theory. If an actor, A, is strongly tied to both B and C, it is extremely likely that B and C are, sooner or later, going to be tied to each other, according to balance theory (1973:1363). Bridge ties between cliques are always weak ties, Granovetter argues (1973:1364). Weak ties may not necessarily be bridges, but Granovetter argues that bridges will be weak. If two actors share a strong tie, they will draw in their other strong relations and will eventually form a clique. Only weak ties that do not have the strength to draw together all the “friends of friends” can connect people in different cliques.

Version B (The Original By Giuffre):
Granovetter begins by looking at balance theory. In brief, balance theory tells us that if an actor, A, is strongly tied to both B and C, it is extremely likely that B and C are, sooner or later, going to be tied to each other (1973:1363). Granovetter argues that because of this, bridge ties between cliques are always weak ties (1973:1364). Weak ties may not necessarily be bridges, but Granovetter argues that bridges will be weak. This is because if two actors share a strong tie, they will draw in their other strong relations and will eventually form a clique. The only way, therefore, that people in different cliques can be connected is through weak ties that do not have the strength to draw together all the “friends of friends.”

Version A has the exact same information as version B, but it is harder to read because it is less cohesive. Each sentence in version B begins with old information and bridges to new information. Here’s Version B again with the relevant parts emboldened:

Granovetter begins by looking at balance theory. In brief, balance theory tells us that if an actor, A, is strongly tied to both B and C, it is extremely likely that B and C are, sooner or later, going to be tied to each other (1973:1363). Granovetter argues that because of this, bridge ties between cliques are always weak ties (1973:1364). Weak ties may not necessarily be bridges, but Granovetter argues that bridges will be weak. This is because if two actors share a strong tie, they will draw in their other strong relations and will eventually form a clique. The only way, therefore, that people in different cliques can be connected is through weak ties that do not have the strength to draw together all the “friends of friends.”

The first sentence establishes the key idea of balance theory. The next sentence begins with balance theory and ends with social ties, which is the focus of the third sentence. The concept of weak ties connects the third and fourth sentences and concept of cliques the fifth and sixth sentences. In Version A, in contrast, the first sentence focuses on balance theory, but then the second sentence makes a new point about social ties before telling the reader that the point comes from balance theory. The reader has to take in a lot of unfamiliar

11 Guiffre, Communities and Networks, 98.
information before learning how it fits in with familiar concepts. Version A is coherent, but the lack of cohesion makes it tedious to read.

The lesson is this: if you or others perceive a passage you’ve written to be awkward or choppy, even though the topic is consistent, try rewriting it to ensure that each sentence begins with a familiar term or concept. If your points don’t naturally daisy-chain together like the examples given here, consider numbering them. For example, you may choose to write, “Proponents of the legislation point to four major benefits.” Then you could discuss four loosely related ideas without leaving your reader wondering how they relate.

While cohesion is about the sense of flow; coherence is about the sense of the whole. For example, here’s a passage that is cohesive (from sentence to sentence) but lacks coherence:

Your social networks and your location within them shape the kinds and amount of information that you have access to. Information is distinct from data, in that makes some kind of generalization about a person, thing, or population. Defensible generalizations about society can be either probabilities (i.e., statistics) or patterns (often from qualitative analysis). Such probabilities and patterns can be temporal, spatial, or simultaneous.

Each sentence in the above passage starts with a familiar idea and progresses to a new one, but it lacks coherence—a sense of being about one thing. Good writers often write passages like that when they’re free-writing or using the drafting stage to cast a wide net for ideas. A writer weighing the power and limits of social network analysis may free-write something like that example and, from there, develop a more specific plan for summarizing key insights about social networks and then discussing them with reference to the core tenets of social science. As a draft, an incoherent paragraph often points to a productive line of reasoning; one just has to continue thinking it through in order to identify a clear argumentative purpose for each paragraph. With its purpose defined, each paragraph, then, becomes a lot easier to write. Coherent paragraphs aren’t just about style; they are a sign of a thoughtful, well developed analysis.

The wind-up

Some guides advise you to end each paragraph with a specific concluding sentence, in a sense, to treat each paragraph as a kind of mini-essay. But that’s not a widely held convention. Most well written academic pieces don’t adhere to that structure. The last sentence of the paragraph should certainly be in your own words (as in, not a quote), but as long as the paragraph succeeds in carrying out the task that it has been assigned by its key sentence, you don’t need to worry about whether that last sentence has an air of conclusiveness. For example, consider these paragraphs about the cold fusion controversy of the 1980s that appeared in a best-selling textbook:

The experiment seemed straightforward and there were plenty of scientists willing to try it. Many did. It was wonderful to have a simple laboratory experiment on fusion to try after the decades of embarrassing attempts to control hot fusion. This effort required multi-billion dollar machines whose every success seemed to be

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capped with an unanticipated failure. ‘Cold fusion’ seemed to provide, as Martin Fleischmann said during the course of that famous Utah press conference, ‘another route’—the route of little science.

In that example, the first and last sentences in the paragraph are somewhat symmetrical: the authors introduce the idea of accessible science, contrast it with big science, and bring it back to the phrase “little science.” Here’s an example from the same chapter of the same book that does not have any particular symmetry:

The struggle between proponents and critics in a scientific controversy is always a struggle for credibility. When scientists make claims which are literally ‘incredible’, as in the cold fusion case, they face an uphill struggle. The problem Pons and Fleischmann had to overcome was that they had credibility as electrochemists but not as nuclear physicists. And it was nuclear physics where their work was likely to have its main impact.

The last sentence of the paragraph doesn’t mirror the first, but the paragraph still works just fine. In general, every sentence of academic writing should add some unique content. Don’t trouble yourself with having the last sentence in every paragraph serve as a mini-conclusion. Instead, worry about developing each point sufficiently and making your logical sequence clear.

Conclusion: paragraphs as punctuation

To reiterate the initial point, it is useful to think of paragraphs as punctuation that organize your ideas in a readable way. Each paragraph should be an irreplaceable node within a coherent sequence of logic. Thinking of paragraphs as “building blocks” evokes the “five-paragraph theme” structure explained in Chapter 2: if you have identical stone blocks, it hardly matters what order they’re in. In the successful organically structured college paper, the structure and tone of each paragraph reflects its indispensable role within the overall piece. These goals—making every bit count and having each part situated within the whole—also anchor the discussion in the next chapter: how to write introductions and conclusions that frame—rather than simply book-end—your analysis.

Other resources

1. Michael Harvey’s The Nuts and Bolts of College Writing 2nd ed. (Indianapolis, IN: Hackett Publishing, 2013) is another short and affordable guide. His discussion of paragraphing is among the many gems in the book.

2. Online resources from university writing centers offer a lot of great information about effective paragraphing and topic sentences. I especially admire this one from Indiana University, this one from Colorado State, and this one from the University of Richmond.

3. In addition to Williams’ and Bizup’s excellent lesson on cohesion and coherence in Style: Lessons in Clarity and Grace 11th ed. (New York: Longman, 2014), check out

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13 Ibid., 74.
this site at George Mason University, this handout from Duke University, and this resource from Clarkson University.

Exercises

1. Find a piece of academic writing you admire and copy down the first sentence of each paragraph. How well do those sentences reflect the flow of the argument? Show those sentences to other people; how clearly can they envision the flow of the piece?

2. For each of the following short passages, decide whether they lack cohesion or coherence.

   A. The Roman siege of Masada in the first century CE, ending as it did with the suicide of 960 Jewish rebels, has been interpreted in various ways in Jewish history. History is best understood as a product of the present: the stories we tell ourselves to make sense of our complicated world. History lessons in elementary school curricula, however, rarely move beyond facts and timelines.

   B. Polar explorer Earnest Shackleton is often considered a model of effective leadership. The Endurance was frozen into the Antarctic ice where it was subsequently crushed, abandoning Shackleton and his 22-person crew on unstable ice floes, hundreds of miles from any human outpost. Two harrowing journeys by lifeboat and several long marches over the ice over the course of two Antarctic winters eventually resulted in their rescue. Amazingly, no one died during the ordeal.

   C. A recent analysis of a 1.8 million year-old hominid skull suggests that human evolutionary lineage is simpler than we thought. Homo erectus, a species that persisted almost 2 million years, lived in most parts of Africa as well as Western and Eastern Asia. Some scientists are now arguing that Homo erectus individuals varied widely in their body size and skull shape, a claim strongly supported by the recently analyzed skull. Thus, some other named species, such as Homo habilis and Homo rudolfensis are not separate species but instead regional variations of Homo erectus.

3. Rewrite passages B. and C. above to make them more cohesive.
In today’s world ...

Those opening words—so common in student papers—represent the most prevalent misconception about introductions: that they shouldn’t really say anything substantive. As noted in Chapter 2, the five-paragraph format that most students mastered before coming to college suggests that introductory paragraphs should start very general and gradually narrow down to the thesis. As a result, students frequently write introductions for college papers in which the first two or three (or more) sentences are patently obvious or overly broad. Charitable and well rested instructors just skim over that text and start reading closely when they arrive at something substantive. Frustrated and overtired instructors emit a dramatic self-pitying sigh, assuming that the whole paper will be as lifeless and gassy as those first few sentences. If you’ve gotten into the habit of beginning opening sentences with the following phrases, firmly resolve to strike them from your repertoire right now:

    In today’s world …
    Throughout human history …
    Since the dawn of time …
    Webster’s Dictionary defines [CONCEPT] as …

For one thing, sentences that begin with the first three stems are often wrong. For example, someone may write, “Since the dawn of time, people have tried to increase crop yields.” In reality, people have not been trying to increase crop yields throughout human history—agriculture is only about 23,000 years old, after all—and certainly not since the dawn of time (whenever that was). For another, sentences that start so broadly, even when factually correct, could not possibly end with anything interesting.
I started laughing when I first read this chapter because my go-to introduction for every paper was always “Throughout history...” In high school it was true—my first few sentences did not have any meaning. Now I understand it should be the exact opposite. Introductions should scream to your readers, HEY GUYS, READ THIS! I don’t want my readers’ eyes to glaze over before they even finish the first paragraph, do you? And how annoying is it to read a bunch of useless sentences anyways, right? Every sentence should be necessary and you should set your papers with a good start.

Aly Button

So what should you do? Well, start at the beginning. By that I mean, start explaining what the reader needs to know to comprehend your thesis and its importance. For example, compare the following two paragraphs:

Five-Paragraph Theme Version:
Throughout time, human societies have had religion. Major world religions since the dawn of civilization include Zoroastrianism, Hinduism, Animism, Judaism, Christianity, and Islam. These and all other religions provide a set of moral principles, a leadership structure, and an explanation for unknown questions such as what happens after people die. Since the dawn of religion, it has always been opposed to science because one is based on faith and the other on reason. However, the notion of embodied cognition is a place where physical phenomena connect with religious ones. Paradoxically, religion can emphasize a deep involvement in reality, an embodied cognition that empowers followers to escape from physical constraints and reach a new spirituality. Religion carefully constructs a physical environment to synthesize an individual’s memories, emotions, and physical actions, in a manner that channels the individual’s cognitive state towards spiritual transcendence.

Organically Structured Version:
Religion is an endeavor to cultivate freedom from bodily constraints to reach a higher state of being beyond the physical constraints of reality. But how is it possible to employ a system, the human body, to transcend its own limitations? Religion and science have always had an uneasy relationship as empiricism is stretched to explain religious phenomena, but psychology has recently added a new perspective to the discussion. Embodiment describes the interaction between humans and the environment that lays a foundation for cognition and can help explain the mechanisms that underlie religion’s influence on believers. This is a rare moment where science and religion are able to coexist without the familiar controversy. Paradoxically, religion can emphasize a deep involvement in reality,

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1 This example is slightly adapted from a student-authored essay: Victor Seet, "Embodiment in Religion," *Discoveries*, 11 (2012). Discoveries is an annual publication of the Knight Institute for Writing in the Disciplines of Cornell University which publishes excellent papers written by Cornell undergraduates.
an embodied cognition that empowers followers to escape from physical constraints and reach a new spirituality. Religion carefully constructs a physical environment to synthesize an individual's memories, emotions, and physical actions, in a manner that channels the individual's cognitive state towards spiritual transcendence.

In the first version, the first three sentences state well known facts that do not directly relate to the thesis. The fourth sentence is where the action starts, though that sentence (“Since the dawn of religion, it has always been opposed to science because one is based on faith and the other on reason”) is still overstated: when was this dawn of religion? And was there “science,” as we now understand it, at that time? The reader has to slog through to the fifth sentence before the intro starts to develop some momentum.

Training in the five-paragraph theme format seems to have convinced some student writers that beginning with substantive material will be too abrupt for the reader. But the second example shows that a meatier beginning isn’t jarring; it is actually much more engaging. The first sentence of the organic example is somewhat general, but it specifies the particular aspect of religion (transcending physical experience) that is germane to the thesis. The next six sentences lay out the ideas and concepts that explain the thesis, which is provided in the last two sentences. Overall, every sentence is needed to thoroughly frame the thesis. It is a lively paragraph in itself, and it piques the reader’s interest in the author’s original thinking about religion.

Sometimes a vague introductory paragraph reflects a simple, obvious thesis (see Chapter 3) and a poorly thought-out paper. More often, though, a shallow introduction represents a missed opportunity to convey the writer’s depth of thought from the get-go. Students adhering to the five-paragraph theme format sometime assume that such vagueness is needed to book-end an otherwise pithy paper. As you can see from these examples, that is simply untrue. I’ve seen some student writers begin with a vague, high-school style intro (thinking it obligatory) and then write a wonderfully vivid and engaging introduction as their second paragraph. Other papers I’ve seen have an interesting, original thesis embedded in late body paragraphs that should be articulated up front and used to shape the whole body. If you must write a vague “since the dawn of time” intro to get the writing process going, then go ahead. Just budget the time to rewrite the intro around your well developed, arguable thesis and ensure that the body paragraphs are organized explicitly by your analytical thread.

Here are two more examples of excellent introductory paragraphs written by undergraduate students in different fields. Note how, in both cases, (1) the first sentence has real substance, (2) every sentence is indispensable to setting up the thesis, and (3) the thesis is complex and somewhat surprising. Both of these introductory paragraphs set an ambitious agenda for the paper. As a reader, it’s pretty easy to imagine how the body paragraphs that follow will progress through the nuanced analysis needed to carry out the thesis:

From Davis O’Connell’s “Abelard”:²

He rebelled against his teacher, formed his own rival school, engaged in a passionate affair with a teenager, was castrated, and became a monk. All in a day’s work. Perhaps it’s no surprise that Peter Abelard gained the title of “heretic” along the way. A 12th-century philosopher and theologian, Abelard tended to alienate nearly everyone he met with his extremely arrogant and egotistical personality. This very flaw is what led him to start preaching to students that he had stolen

from his former master, which further deteriorated his reputation. Yet despite all of the senseless things that he did, his teachings did not differ much from Christian doctrine. Although the church claimed to have branded Abelard a heretic purely because of his religious views, the other underlying reasons for these accusations involve his conceited personality, his relationship with the 14-year-old Heloise, and the political forces of the 12th century.

From Logan Skelly’s “Staphylococcus aureus:”

Bacterial resistance to antibiotics is causing a crisis in modern healthcare. The evolution of multi-drug resistant Staphylococcus aureus is of particular concern because of the morbidity and mortality it causes, the limited treatment options it poses, and the difficulty in implementing containment measures for its control. In order to appreciate the virulence of S. aureus and to help alleviate the problems its resistance is causing, it is important to study the evolution of antibiotic resistance in this pathogen, the mechanisms of its resistance, and the factors that may limit or counteract its evolution. It is especially important to examine how human actions are causing evolutionary changes in this bacterial species. This review will examine the historical sequence of causation that has led to antibiotic resistance in this microorganism and why natural selection favors the resistant trait. It is the goal of this review to illuminate the scope of the problem produced by antibiotic resistance in S. aureus and to illustrate the need for judicious antibiotic usage to prevent this pathogen from evolving further pathogenicity and virulence.

If vague introductory paragraphs are bad, why were you taught them? In essence you were taught the form so that you could later use it to deepen your thinking. By producing the five-paragraph theme over and over, it has probably become second nature for you to find a clear thesis and shape the intro paragraph around it, tasks you absolutely must accomplish in academic writing. However, you’ve probably been taught to proceed from “general” to “specific” in your intro and encouraged to think of “general” as “vague”. At the college level, think of “general” as context: begin by explaining the conceptual, historical, or factual context that the reader needs in order to grasp the significance of the argument to come. It’s not so much a structure of general-to-specific; instead it’s context-to-argument.

My average for writing an intro is three times. As in, it takes me three tries at writing one to get it to say exactly what I want it to. The intro, I feel, is the most important part of an essay. This is kind of like a road map for the rest of the paper. My suggestion is to do the intro first. This way, the paper can be done over a period of time rather than running the risk of forgetting what you wanted to say if you stop.

Kaethe Leonard

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In conclusion ...

I confess that I still find conclusions hard to write. By the time I’m finalizing a conclusion, I’m often fatigued with the project and struggling to find something new to say that isn’t a departure into a whole different realm. I also find that I have become so immersed in the subject that it seems like anything I have to say is absurdly obvious. A good conclusion is a real challenge, one that takes persistent work and some finesse.

Strong conclusions do two things: they bring the argument to a satisfying close and they explain some of the most important implications. You’ve probably been taught to re-state your thesis using different words, and it is true that your reader will likely appreciate a brief summary of your overall argument: say, two or three sentences for papers less than 20 pages. It’s perfectly fine to use what they call “metadiscourse” in this summary; metadiscourse is text like, “I have argued that …” or “This analysis reveals that ….” Go ahead and use language like that if it seems useful to signal that you’re restating the main points of your argument. In shorter papers you can usually simply reiterate the main point without that metadiscourse: for example, “What began as a protest about pollution turned into a movement for civil rights.” If that’s the crux of the argument, your reader will recognize a summary like that. Most of the student papers I see close the argument effectively in the concluding paragraph.

The second task of a conclusion—situating the argument within broader implications—is a lot trickier. A lot of instructors describe it as the “So what?” challenge. You’ve proven your point about the role of agriculture in deepening the Great Depression; so what? I don’t like the “so what” phrasing because putting writers on the defensive seems more likely to inhibit the flow of ideas than to draw them out. Instead, I suggest you imagine a friendly reader thinking, “OK, you’ve convinced me of your argument. I’m interested to know what you make of this conclusion. What is or should be different now that your thesis is proven?” In that sense, your reader is asking you to take your analysis one step further. That’s why a good conclusion is challenging to write. You’re not just coasting over the finish line.

So, how do you do that? Recall from Chapter 3 that the third story of a three-story thesis situates an arguable claim within broader implications. If you’ve already articulated a thesis statement that does that, then you’ve already mapped the terrain of the conclusion. Your task then is to explain the implications you mentioned: if environmental justice really is the new civil rights movement, then how should scholars and/or activists approach it? If agricultural trends really did worsen the Great Depression, what does that mean for agricultural policy today? If your thesis, as written, is a two-story one, then you may want to revisit it after you’ve developed a conclusion you’re satisfied with and consider including the key implication in that thesis statement. Doing so will give your paper even more momentum.

Let’s look at the concluding counterparts to the excellent introductions that we’ve read to illustrate some of the different ways writers can accomplish the two goals of a conclusion:

Victor Seet on religious embodiment:

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4 A lot of people have that hang-up: “If I thought of it, it can’t be much of an insight.” It’s another good reason to get others to read your work. They’ll remind you that your points are both original and interesting.

5 Seet, “Embodiment in Religion.”
Embodiment is fundamental to bridging reality and spirituality. The concept demonstrates how religious practice synthesizes human experience in reality—mind, body, and environment—to embed a cohesive religious experience that can recreate itself. Although religion is ostensibly focused on an intangible spiritual world, its traditions that eventually achieve spiritual advancement are grounded in reality. The texts, symbols, and rituals integral to religious practice go beyond merely distinguishing one faith from another; they serve to fully absorb individuals in a culture that sustains common experiential knowledge shared by millions. It is important to remember that human senses do not merely act as sponges absorbing external information; our mental models of the world are being constantly refined with new experiences. This fluid process allows individuals to gradually accumulate a wealth of religious multimodal information, making the mental representation hyper-sensitive, which in turn contributes to religious experiences. However, there is an important caveat. Many features of religious visions that are attributed to embodiment can also be explained through less complex cognitive mechanisms. The repetition from religious traditions exercised both physically and mentally, naturally inculcates a greater religious awareness simply through familiarity. Religious experiences are therefore not necessarily caused by embedded cues within the environment but arise from an imbibed fluency with religious themes. Embodiment proposes a connection between body, mind, and the environment that attempts to explain how spiritual transcendence is achieved through physical reality. Although embodied cognition assuages the conflict between science and religion, it remains to be seen if this intricate scientific theory is able to endure throughout millennia just as religious beliefs have.

The paragraph first re-caps the argument, then explains how embodiment relates to other aspects of religious experience, and finally situates the analysis within the broader relationship between religion and science.

From Davis O’Connell:

Looking at Abelard through the modern historical lens, it appears to many historians that he did not fit the 12th-century definition of a heretic in the sense that his teachings did not differ much from that of the church. Mews observes that Abelard’s conception of the Trinity was a continuation of what earlier Christian leaders had already begun to ponder. He writes: “In identifying the Son and Holy Spirit with the wisdom and benignity of God, Abelard was simply extending an idea (based on Augustine) that had previously been raised by William of Champeaux.” St. Augustine was seen as one of the main Christian authorities during the Middle Ages and for Abelard to derive his teachings from that source enhances his credibility. This would indicate that although Abelard was not necessarily a heretic by the church’s official definition, he was branded as one through all of the non-theological social and political connotations that “heresy” had come to encompass.

O’Connell, interestingly, chooses a scholarly tone for the conclusion, in contrast to the more jocular tone we saw in the introduction. He doesn’t specifically re-cap the argument about Abelard’s deviance from social norms and political pressures, but rather he explains his summative point about what it means to be a heretic. In this case, the implications of the argument are all about Abelard. There aren’t any grand statements about religion

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and society, the craft of historiography, or the politics of language. Still, the reader is not left hanging. One doesn't need to make far-reaching statements to successfully conclude a paper.

From Logan Skelly:7

Considering the hundreds of millions of years that *S. aureus* has been evolving and adapting to hostile environments, it is likely that the past seventy years of human antibiotic usage represents little more than a minor nuisance to these bacteria. Antibiotic resistance for humans, however, contributes to worldwide health, economic, and environmental problems. Multi-drug resistant *S. aureus* has proven itself to be a versatile and persistent pathogen that will likely continue to evolve as long as selective pressures, such as antibiotics, are introduced into the environment. While the problems associated with *S. aureus* have received ample attention in the scientific literature, there has been little resolution of the problems this pathogen poses. If these problems are to be resolved, it is essential that infection control measures and effective treatment strategies be developed, adopted, and implemented in the future on a worldwide scale—so that the evolution of this pathogen's virulence can be curtailed and its pathogenicity can be controlled.

Skelly’s thesis is about the need to regulate antibiotic usage to mitigate antibiotic resistance. The concluding paragraph characterizes the pathogens evolutionary history (without recapping the specifics) and then calls for an informed, well planned, and comprehensive response.

All three conclusions above achieve both tasks—closing the argument and addressing the implications—but the authors have placed a different emphasis on the two tasks and framed the broader implications in different ways. Writing, like any craft, challenges the creator to make these kinds of independent choices. There isn’t a standard recipe for a good conclusion.

**Form and function**

As I’ve explained, some students mistakenly believe that they should avoid detail and substance in the introductions and conclusions of academic papers. Having practiced the five-paragraph form repeatedly, that belief sometimes gets built into the writing process; students sometimes just throw together those paragraphs thinking that they don’t really count as part of the analysis. Sometimes though, student writers know that more precise and vivid intros and outros are ideal but still settle on the vague language that seems familiar, safe, and do-able. Knowing the general form of academic writing (simplified in the five-paragraph theme) helps writers organize their thoughts; however, it leads some student writers to approach papers as mere fill-in-the-blank exercises.

I hope you will instead envision paper-writing as a task of working through an unscripted and nuanced thought process and then sharing your work with readers. When you’re engaged with the writing process, you’ll find yourself deciding which substantive points belong in those introductory and concluding paragraphs rather than simply filling those paragraphs out with fluff. They should be sort of hard to write; they’re the parts of the paper

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7 Skelly, “*Staphloccocus aureus*.” 97.
that express your most important ideas in the most precise ways. If you're struggling with intros and conclusions, it might be because you're approaching them in exactly the right way. Having a clear, communicative purpose will help you figure out what your reader needs to know to really understand your thinking.

Other resources

1. *Writing in College*, a guide by Joseph L. Williams (the co-author of *Style*) and Lawrence McEnerney for the University of Chicago, offers some excellent advice on drafting and revising introductions and conclusions.

2. The Writing Center at the University of North Carolina also offers excellent advice on writing introductions and conclusions.

3. Discoveries is a journal published by Cornell University from which the excellent examples in this chapter were drawn. It's a great source of inspiration.

Exercises

1. Find some essays on plagiarism websites such as termpaperwarehouse.com, allfreeessays.com, or free-college-essays.com and evaluate the quality of their introductions and conclusions based on the principles explained in this chapter.

2. Use this list maintained by the Council on Undergraduate Research to find some peer-reviewed papers written by undergraduates in a field you're interested in. Evaluate the quality of their introductions and conclusions based on the principles explained in this chapter and talk about them with your classmates. As a group, try to summarize what makes introductions and conclusions engaging for readers.
Chapter 8

Clarity and Concision

Writing like you drive

This and the following chapter discuss sentence-level composition, the kinds of things that many people associate with “writing.” Writing guides, especially those targeted at college students, offer excellent advice on sentence construction and word choice. However, many student writers get hung up on sentence-level expression, thinking that only elegant, erudite sentences will earn top grades. Or worse, some students assume that they’ll never produce strong papers if they do not already have some kind of inborn gift for wordsmithing. While it is true that some people can produce extraordinarily elegant and graceful prose, it is also true that anyone can learn to write effectively in ways that will persuade and satisfy readers. Producing and reading elegant writing is a pleasure, but what really matters in academic writing is precision.

Focusing first or only on sentence-level issues is a troublesome approach. Doing so is like driving while looking only at the few feet of the road right in front of the bumper. Experienced drivers instead take in the larger scene and more effectively identify and avoid potential hazards with ongoing course corrections. Writing well is like that. When you’ve put in the time and effort to take in the bigger picture of your analysis, most of the micro-scale moves happen automatically. That is, if you have a well-developed thesis and a carefully sequenced argument organized into cohesive and coherent paragraphs, many of the sentence-level issues take care of themselves. It’s easier to write effective sentences when their purpose is clear. You’ll still have to edit for clarity, concision, and mechanics, but if the thinking process behind the writing is well developed, editing shouldn’t be a huge chore. It can actually be a satisfying part of the process. One common metaphor notes that a good edit is like the last twist of a camera lens that brings the whole picture into focus.

One approach that often leads to a difficult writing process and a clunky result is the pursuit of “academese”: an effort to write in an ornamented and “scholarly” way. As Michael Harvey explains¹, the desire to sound more academic might prompt a student to write “To satisfy her hunger for nutrition, she ate the bread” rather than simply “She was hungry, so she ate the bread.” It is true that a lot of academic writing is laden with unnecessary jargon,

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¹ Michael Harvey, The Nuts and Bolts of College Writing, (Indianapolis, IN: Hackett, 2003), 3.
but the culture is shifting among scholars to favor plainer language and insist on clarity. Your professors are much more likely to find a self-consciously highbrow writing style tedious than impressive. As the saying goes\(^2\), any fool can make simple things complicated; it takes a genius to make complicated things simple.

My hope with this chapter is to help you see those habits for yourself and, most importantly, how your readers experience them. If you’ve fallen prey to habits of academese, I hope this chapter helps you develop a more straightforward writing style, one well-suited to nuanced thinking and effective communication. And while I don’t want you to think of sentence-level wordsmithing as some kind of abstract, enchanted virtue, I do want you to understand that clarity and concision are more than aesthetics. Convoluted or wordy prose may contain some insightful or intriguing ideas, but if you can render those ideas in clear and concise prose, then you will inevitably develop those ideas even further in the course of writing. Unclear and bloated prose isn’t just tedious to your reader; it’s a needless obstacle to your own thinking.

One of our professors’ primary reasons for assigning writing assignments is to evaluate how thoroughly we have digested the assigned reading material and lectures. They are not as interested in our ability to write Shakespearean prose as they are in our ability to absorb information, wrestle with it until we can comprehend it, and then convey that understanding logically in writing. This is why writing assignments often start something like, “Drawing on Locke’s narrative …” or “Given what you’ve read about Darth Vader’s aversion to democratic governance … .”

It is important to note that this process presupposes that we actually read the assigned readings and take notes during class lectures and discussions. Unsurprisingly, the hardest writing assignments I have had in college were the ones for which I was least prepared. I can try my darnedest to write beautifully, but if I have not put in the necessary time to actually read (and reread) the assigned material, I will have nothing meaningful to say and my professors will see straight through my bloviating.

That being said, the writing process is actually a highly effective exercise for digesting material and developing a cohesive argument. Often it is not until I start writing that I realize the holes in my thinking and the areas that I need to go back and study more thoroughly. This chapter provides many great practical pointers for editing our papers in order to produce clear, refined arguments and should be returned to frequently.

Peter Farrell

The best way to achieve clarity and concision in writing is to separate the drafting process from the revision process. Highly effective writers routinely produce vague, tortuous, and bloated drafts, and are happy to do so. It usually means that they’re onto an interesting idea. Similarly, writers often write the same idea three or four different ways as they’re

\(^2\) Variously attributed to Albert Einstein, E.F. Schumacher, and Woody Guthrie.
getting their thoughts down on paper. That’s fine. In fact, that’s better than fine because each repetition helps to develop key ideas and alternative approaches to the argument. A snarly first draft is often a great achievement. One just needs to take the time to develop relevant ideas and make them clear to the reader. For that reason, I write this section of the chapter envisioning someone who has already cranked out a very rough draft and is now in the process of revising for clarity and concision.

Revising for clarity: who did what to whom?

What makes a complex line of thinking easy to follow? The tricks of cohesion and coherence, discussed in Chapter 6, are a big help. Williams and Bizup offer another key point. They explain that readers experience writing as clear when the “character” of a sentence is also its grammatical subject and the key “action” a grammatical verb. They provide this fanciful example:

Once upon a time, as a walk through the woods was taking place on the part of Little Red Riding Hood, the Wolf’s jump out from behind a tree caused her fright.

Grammatically, the subject of the first part is “a walk through the woods,” and the verb is “taking place”. The character, though, is obviously Little Red Riding Hood and the action is walking. A much more straightforward version—“As Little Red Riding Hood walked through the woods”—makes the character the subject and the action the key verb. That example goes out of its way to be silly, but consider this example from a website offering free college papers:

Another event that connects the colonist and the English together is the event of a hated King in England trying to take away freedom and go back to the old ways. The idea of how much power the King had struck Parliament. After that, the Parliament and the people made the King sign the Magna Carta, which limits the amount of power the King has. The Magna Carta also affected the rights of the American colonies. It practically took away all relationships between the King and the colonies. After the relationship was broken, America broke off from England.

Apparently, the author is claiming that the colonists (in the 1700s?) pushed back against the power of the English crown in a manner similar to the Parliamentarians in 1215 (after having apparently been “struck” by an “idea” of “how much power the King had”). Grammatically, the subjects are an “event” and an “idea” rather than the characters, colonists, the king, and Parliament. The third sentence is refreshingly straightforward in structure (though vague on details). The fifth and sixth sentences are fairly straightforward, but also incredibly vague: the Magna Carta predated the American colonies by at least 400 years; how does that document relate to the American Revolution? The last sentence essentially says that after the relationship was broken, the relationship was broken. If the author were to rewrite the passage to make the grammatical subjects match the characters, he or she would be prompted to clarify what exactly the king, the Parliament, the English populace,

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3 Williams and Bizup, *Style*, 29.
4 [http://www.termpaperwarehouse.com/essay-on/History-Of-Magna-Carta/82596](http://www.termpaperwarehouse.com/essay-on/History-Of-Magna-Carta/82596). Let this example further demonstrate why you should never, ever even look at these websites.
5 *Encyclopædia Britannica*, s.v. “Magna Carta.”
and the American colonists did (and to who), something which the author of the above passage may not actually understand. This example illustrates how clarifying “who did what to whom” for the reader also makes writers clarify it for themselves. Writing clearly involves thinking clearly, and clear rigorous thinking is why your professors assign you writing in the first place.

While the Magna Carta example is comically bad, here’s one that is more or less logical but would still benefit from greater clarity:

IgE-dependent allergic hypersensitivity reactions such as allergic asthma and food allergy involve mast cells which are typically regarded as troublesome cells as a result. Further, the allergic sensitization-processes also involves a role for mast cells. Recent findings show that their functionality is not only pro-inflammatory, but can on the contrary have suppressive or immunomodulatory effects in allergic inflammation.

The above passage isn’t a terrible slog, and it’s fairly clear that the whole passage is about mast cells. But here’s a version of the same passage—the real version as it were—which demonstrates that the passage feels a lot clearer when mast cells, the “characters” driving the narrative, are also the grammatical subject of the sentence and the referent for the key verbs:

Mast cells are typically regarded as troublesome cells due to their prominent role in IgE-dependent allergic hypersensitivity reactions such as allergic asthma and food allergy. Further, it seems that mast cells are also able to play an additional role in the allergic sensitization-processes. Recent findings show that mast cell functionality is not only pro-inflammatory, but can on the contrary have suppressive or immunomodulatory effects in allergic inflammation.

Both versions of the passage are consistently about mast cells, but the second version makes that consistency much more obvious to readers as mast cells are the main character of every sentence. That clear consistency allows us to devote more of our brain power to recalling technical terms (like immunomodulatory) and comprehending the key ideas. That makes it both easier and more interesting to read.

To further illustrate the principle, let’s take a nicely straightforward passage and rewrite it so that the characters are objects (rather than subjects) and the actions are nouns (rather than verbs). Here’s the nicely clear original:

What most people really feel nostalgic about has little to do with the internal structure of 1950s families. It is the belief that the 1950s provided a more family-friendly economic and social environment, an easier climate in which to keep kids on the straight and narrow, and above all, a greater feeling of hope for a family’s long-term future, especially for its young.

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7 When you turn a verb into a noun it’s called a nominalization. For example, act → action, write → writings, or think → thought.

In these two sentences, the character is a belief rather than a person or thing. However, the passage is still clear to the reader because it keeps the character consistent and explains what that character does (creates nostalgia) to who (people at large). Imagine if the author wrote this instead:

People feel nostalgic not about the internal structure of 1950s families. Rather, the beliefs about how the 1950s provided a more family-friendly economic and social environment, an easier climate in which to keep kids on the straight and narrow, and above all, a greater feeling of hope for a family’s long-term future (especially for its young) are what lead to those nostalgic feelings.

This second version says substantially the same thing, but it’s tedious to read because the character changes abruptly from “people” to “beliefs” (which works against cohesion) and one has to get to the end of the sentence to learn how these beliefs fit in. The key point is this: one of the best things you can do to revise for greater clarity is to recast a passage so that the characters are the grammatical subjects and the key actions are the verbs.

### Concision and grace

Chapter 7 on introductions and conclusions notes the importance of concision, as those framing parts of the paper are often the most egregiously bloated. The general rule introduced there holds for any writing: every word and sentence should be doing some significant work for the paper as a whole. Sometimes that work is more to provide pleasure than meaning—you needn’t ruthlessly eliminate every rhetorical flourish—but everything in the final version should add something unique to the paper. As with clarity, the benefits of concision are intellectual as well as stylistic: revising for concision forces writers to make deliberate decisions about the claims they want to make and their reasons for making them.

Michael Harvey\(^9\) notes that fluffy, wordy prose does not necessarily result from an underdeveloped writing process. Sometimes it reflects the context of academic writing:

[M]any of us are afraid of writing concisely because doing so can make us feel exposed. Concision leaves us fewer words to hide behind. Our insights and ideas might appear puny stripped of those inessential words, phrases, and sentences in which we rough them out. We might even wonder, were we to cut out the fat, would anything be left? It’s no wonder, then, that many students make little attempt to be concise—[and] may, in fact, go out of their way not to be … .

As noted in the opening example of Chapter 4, effortful thinking is something most people naturally try to avoid most of the time. It’s both arduous and anxiety provoking to go beyond existing knowledge and assumptions to venture into unknown territory. In some ways, too, the general structure of education conditions students to approach papers as blanks to be filled rather than open-ended problems to explore. When students actively avoid concision, it’s often because they want to avoid the hard thinking concision requires, they assume that writing is all about expressing opinions rather than undertaking a rigorous thought process, or they fear that they can’t adequately perform and communicate an ambitious analysis.

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\(^9\) Harvey, *Nuts and Bolts*, 1.
One of the first things you will learn about writing in college is that you have to be concise. It doesn't matter whether the paper is two pages or ten; concision is key. If you start to lose your reader, expect a bad grade. Professors want to see how well you can argue a point and this includes how gracefully the paper flows as well as how long the reader’s attention is kept. If you can incorporate concision, cohesion and grace into each paper you write, then good grades are sure to follow.

Kaethe Leonard

Many writing guides describe **editing strategies that produce a vivid, satisfying concision**. Most of the advice boils down to three key moves:

1. Look for words and phrases that you can cut entirely. Look for bits that are redundant: (“each and every,” “unexpected surprise,” “predictions about the future”), meaningless (“very unique,” “certain factors,” “slightly terrifying”), or clichéd (“as far as the eye can see,” or “long march of time”).

2. Look for opportunities to replace longer phrases with shorter phrases or words. For example, “the way in which” can often be replaced by “how” and “despite the fact that” can usually be replaced by “although.” Strong, precise verbs can often replace bloated phrases. Consider this example: “The goal of Alexander the Great was to create a united empire across a vast distance.” And compare it to this: “Alexander the Great sought to unite a vast empire.”

3. Try to rearrange sentences or passages to make them shorter and livelier. Williams and Bizup recommend changing negatives to affirmatives. Consider the negatives in this sentence: “School nurses often do not notice if a young schoolchild does not have adequate food at home.” You could more concisely and clearly write, “School nurses rarely notice if a young schoolchild lacks adequate food at home.” It says the same thing, but is much easier to read which makes for a happier and more engaged reader.

Good parallelism can also help you write shorter text that better conveys your thinking. For example, Stacy Schiff writes this in her best-selling biography of Cleopatra:

A goddess as a child, a queen at eighteen, a celebrity soon thereafter, she was an object of speculation and veneration, gossip and legend, even in her own time.

Imagine if, instead, Schiff wrote this:

Cleopatra was seen as divine when she was a child. She became the sovereign ruler at eighteen, and she became well known throughout the ancient world early in her reign. People speculated about her, worshipped her, gossiped about her, and told legends about her, even in her own time.

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10 Especially, Williams, Harvey, and Lanham; see “other resources” for full references.
11 Williams and Bizup, *Style*, 130.
The second version says the same thing, but the extra words tend to obscure Schiff’s point. The original (“goddess as a child, queen at eighteen, celebrity soon thereafter”) effectively uses parallelism to vividly convey the dramatic shifts in Cleopatra’s roles and her prominence in the ancient world.

Reading with concision and grace in mind

There is less tolerance for academese than there used to be in scholarly communities; however, a lot of landmark texts were written in a time when there wasn’t such a high value placed on clarity and concision. In your studies, then, you will probably have to engage with important texts that violate almost all the advice given here.

Consider the following example from Talcott Parsons, a sociological theorist noted for both his intellectual force and utterly impenetrable writing style. In reading this passage, imagine “ego” and “alter” as two people interacting:

Communication through a common system of symbols is the precondition of this reciprocity or complementarity of expectations. The alternatives which are open to alter must have some measure of stability in two respects: first, as realistic possibilities for alter, and second, in their meaning to ego. This stability presupposes generalization from the particularity of the given situations of ego and alter, both of which are continually changing and are never concretely identical over any two moments in time. When such generalization occurs, and actions, gestures, or symbols have more or less the same meaning for both ego and alter, we may speak of a common culture existing between them, through which their interaction is mediated.

Here’s a version after I edited for concision using the three moves described above:

Reciprocity, or complementary expectations, depends on a common system of symbols. The symbolic alternatives for alter must be stable, in that they are both realistic for alter and meaningful to ego. That is, actions, gestures, or symbols must have a shared and persistent meaning for ego and alter even though ego and alter are in different situations and are constantly changing. When meanings are shared and persistent, we may say that the interaction between alter and ego is mediated by a common culture.

The revised version is about 30 percent shorter, and it demonstrates how concision makes one’s points come through more clearly. You will almost certainly have to read works of authors who did not prioritize clarity and concision (or even cohesion and coherence), and that’s a drag. But knowing how wordiness interferes with clarity can help you distill essential meanings from challenging texts. In many ways, writing well and reading incisively are two facets of the same cognitive skill set.

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Grace

Academic writing is not wholly utilitarian. An elegant and apt turn of phrase is satisfying both to write and to read. While you can’t often summon elegance out of nowhere, you can learn a few structures that are often pleasing to the reader’s ear because they harmonize what you’re saying with how you’re saying it. Here are two rhetorical tricks that you can use to reinforce your points.

1. Balance. Readers often find balanced sentences and phrases pleasing. The Cleopatra example above (“goddess as a child, queen at eighteen, celebrity soon thereafter”) illustrates parallelism, which is one kind of balance: using parallel structures to convey a parallel idea. This parallelism not only helps Schiff be powerfully concise, it quickly and vividly conveys the idea that Cleopatra led a remarkable life. Williams and Bizup offer another example of an elegant sentence in which the two parts are balanced in their structure:

A government that is unwilling to listen to the moderate hopes of its citizenry must eventually answer to the harsh justice of its revolutionaries.

The same sentence with the parallel parts marked:

A government that is unwilling to listen to the moderate hopes of its citizenry must eventually answer to the harsh justice of its revolutionaries.

The balanced structure and contrasting language reinforces the author’s either-or point: “listen” or “answer”; “moderate hopes” or “harsh justice”, “citizenry” or “revolutionaries.” The balanced structure adds rhetorical force to the argument.

2. Emphasis. Read these sentences out loud, or imagine yourself doing so:

Version 1:

But far and away, the largest weight-inducing food, out-stripping all others, was the potato chip.

Version 2:

But far and away, the potato chip was the largest weight-inducing food, out-stripping all others.

The first version places a particular rhetorical emphasis on “the potato chip” because it comes last in the sentence after a three-part build-up. The second version says the exact same thing, and it isn’t hard to see that “potato chip” is the key part of the sentence. However, the rhetorical emphasis on “the potato chip” is somewhat weaker. This common rhetorical trick is to put the part you want to emphasize at the very end of the sentence.

These are just two rhetorical structures that scholars have identified. You can find others (Google “rhetorical device”) that you can bring into your repertoire. Most people can’t set out to write elegantly per se, and you certainly shouldn’t spend your writing time crafting

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14 “Rhetoric” refers to how meaning is overtly or subtly built into the structure of language. In everyday language we often use the word rhetoric to describe speech or writing devoid of substance, but that’s not what the word means. This section describes often used structures identified and explained by rhetoricians.

15 Williams and Bizup, *Style*, 171.

elegantly balanced sentences that have little to do with your argument or analysis. But the more familiar you are with these rhetorical structures, the more often you can recognize and use them.

**Other resources**


2. Several writing centers at colleges and universities offer good advice for spotting and avoiding clichés. Among the most useful are those at the University of Richmond, Foothill College, and the University of Texas.

**Exercises**

1. Rewrite these passages to make the “characters” the grammatical subjects and the key “actions” the verbs. That is, make them clearer.
   
   A. The scarcity of research funds for nutritional scientists means that offers by food companies to fund such research may be especially attractive. The implicit pressure to shape the language of the findings to avoid alienation between scholars and companies is worrisome to consider.

   B. While educational experiences are an obvious benefit of tribal colleges, the needs tribal communities have for economic development, cultural vitality, and social ties are also addressed by educational institutions.

2. Take these straightforward passages and make them less clear without changing the meaning. Turn verbs into nouns and make subjects into objects.
   
   A. “Statisticians prepared to use spatial models need to keep the role of the models in perspective. When scientific interest centers on the large-scale effects, the idea is to use a few extra small-scale parameters so that the large-scale parameters are estimated more efficiently.”

   B. “Social scientists will be led astray if they accept the lies organizations tell about themselves. If, instead, they look for places where the stories told don't hold up, for the events and activities those speaking for the organization ignore, cover up, or explain away, they will find a wealth of things to include in the body of material from which they construct their definitions.”

3. Edit these passages for concision, using the three moves described above. Be sure to preserve all of the meaning contained in the original.
   
   A. Each and every student enrolled in our educational institutions deserves and is entitled to competent instruction in all of the key academic areas of study. No student should be without ample time and help in mastering such basic skills.

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B. If you really have no choice in regards to avoiding a long and extended bureaucratic process in making your complaint, it is very important that you write down and document every aspect of the case for use by all of the parties involved in the process.
“Correctness” in writing

Many students assume—or fear—that college writing is judged primarily on its grammatical correctness. Ideas, evidence, and arguments matter more than the mechanics of grammar and punctuation; however, many of the rules of formal writing exist to promote clarity and precision which writers much achieve in order to effectively convey ideas, evidence, and arguments. In addition, texts that observe the rules of formal written English tend to be more persuasive by making the author appear well informed and careful. Writing replete with errors does not make a great impression, and most educators want to help students present themselves well. Correctness, then, isn’t the most important thing, but it does matter.

Another common assumption among students is that one is either good at grammar or not good at grammar, and that such is one’s immutable fate. Not true. Once you master a particular rule or practice, it becomes second nature, and then you can focus your attention on mastering another. I finally nailed down commas and semicolons in college and some finer points of grammar in graduate school. I do a lot of formal writing in the course of my career, and I still look things up in a writing handbook from time to time. You can master the practices of formal written English, and college is a great time to use the feedback from your professors to identify your common errors and learn to correct them.

In thinking about correctness, it’s important to recognize that some rules are more important than others. Joseph Williams helpfully distinguishes three kinds of rules.¹ First, there are rules that are basic to English, such as “the car” not “car the.” For example,

INCORRECT: I thought whether true claims not.

CORRECT: I hadn’t thought about whether the claims were true.

If you’ve gotten most of your formal education in English, you probably observe these rules routinely. If your writing has mismatches of number (singular/plural) or tense, it might be

¹ The three types of rules are explained in Williams and Bizup’s Style. Williams first described invented rules in J. M. Williams, “A Phenomenology of Error,” College Composition and Communication, 32, no. 2 (1981): 152-168.
due to haste or carelessness rather than unawareness. Similarly, capitalizing the first word of a sentence and ending with appropriate punctuation are basic rules that most people comply with automatically when writing for a professor or in other formal situations.

Williams' second category is comprised of rules that distinguish standard written English from the informal variants that people use in their day-to-day lives. Most students with middle-class and non-immigrant backgrounds use informal vernaculars that closely parallel standard written English. Students with working-class or more modest backgrounds or who are members of transnational and multi-lingual communities may use informal variants of English in their everyday lives that are quite different from standard written English. It’s an unfortunate reality of social inequality that such students have to expend more effort than their middle-class English-speaking counterparts to master the standard conventions. It’s not really fair, but at least the mechanics and rules of formal writing are documented and unambiguous. Learning to communicate effectively in different social contexts is part of becoming an educated person.

Some examples:

INFORMAL: We ain’t got no more of them cookies.
FORMAL: We don’t have any more of those cookies.

INFORMAL: My coat, my phone, and my keys was all lock in the car.
FORMAL: My coat, my phone, and my keys were all locked in the car.

INFORMAL: u shd go 2 café b4 wrk bc coffee
FORMAL: You should go the café before work to get some coffee.

The informal versions are clearly English, and they’re widely understandable to others. The first and second examples contain choices of tense, number, and punctuation that are inappropriate in standard written English even though they don’t actually impede communication. Most students already understand that these first two categories of rules (rules fundamental to English and the rules of standard written English) are obligatory for formal writing.

There is a third category of rules that Williams notes and enthusiastically criticizes; he calls them “invented rules” because they usually arise from busybody grammarians rather than enduring patterns of customary language use. Some invented rules Williams calls “options”: those that your reader will notice when you observe them and not care if you don’t. Here’s an example of the fabled don’t-end-a-sentence-with-a-preposition rule:

OBSERVING THE RULE: With which concept can we analyze this problem?

IGNORING THE RULE: Which concept can we analyze this problem with?

Some grammarians would claim that only the first version is correct. However, you probably have the (accurate) impression that professional writers are much more likely to choose the second version. This rule does not reflect real-life customary practice, even in standard written English. That’s why Williams calls it an “invented rule.” Most of your professors are fine with the second version above, the one that ends a sentence with a preposition.
Similarly, there’s this murky idea out there that one should not split infinitives; that is, one should not have any words between “to” and the verb that follows. Here’s an example:

**OBSERVED:** to go boldly where no one has gone before

**IGNORED:** to boldly go where no one has gone before

Again, while some grammarians have argued that conscientious writers should avoid splitting infinitives, most professional writers have ignored that claim. The second version, which puts the adverb (“boldly”) within the infinitive (that is, between “to” and “go”) makes for a perfectly clear and pleasing phrase. The invented rule about splitting infinitives is an attempt to solve a problem that doesn’t exist. If you want to give your writing more of a scholarly air, you could observe some or all of these optional rules. But, unless your professor has a particular penchant for one of these invented rules, you can safely ignore them.

Williams calls the second sub-category of invented rules “folklore.” They’re invented rules (like “options”) in that grammarians think writers should observe them, but, in reality, no one does. Williams gleefully lists instances in which the very grammarians who propose these rules go on to unselfconsciously violate them.² You may have heard of these rules, but they’re widely considered absurd.

For example, some grammarians are dismayed that people use “that” and “which” interchangeably, and they argue that writers should use “that” to indicate restrictive elements and “which” to indicate non-restrictive elements. A restrictive element is one that makes a necessary specification about something; a non-restrictive element is one that simply adds extra information. Consider these two examples:

**Version 1:**

The party that Alex went to was shut down by the police.

**Version 2:**

The party which Alex went to was shut down by the police.

For almost all readers, versions 1 and 2 are saying the exact same thing. For the persnickety grammarian, version 1 is specifying the party that Alex went to, and not the party that, say, Jordan went to, while version 2 is simply inserting extra information about Alex’s attendance at the party. According to these grammarians, “that Alex went to” adds critically needed information (restrictive) while “which Alex went to” adds bonus information (non-restrictive).

As Williams and some others explain: it’s bullshit. Professional writers use commas and carefully chosen words to do the job of distinguishing restrictive and non-restrictive elements, and they choose whichever relative pronoun (“that” or “which”) sounds better in context. You could observe the distinction between that and which if you like, but no one would notice. More importantly, observing this invented rule wouldn’t necessarily make your writing any clearer, more concise, or more graceful.

There is one rule that Williams calls “folklore” that you probably have to observe in college papers nonetheless: that is, the rule that you can’t start sentences with But, And, So, For, or Yet (or other coordinating conjunctions). I’m sure you could browse through assigned read-

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² J.M. Williams, *Phenomenology of Error*
ings and articles published in major newspapers and magazines that violate this so-called rule. Here are two examples that took me about 10 minutes to find:

**From the front page of the New York Times January 7, 2014:** “But since the financial crisis, JPMorgan has become so large and profitable that it has been able to weather the government’s legal blitz, which has touched many parts of the bank’s sprawling operations.” And a little further down we see, “Yet JPMorgan’s shares are up 28 percent over the last 12 months.”

**From a news article in Science, December 21, 2007:** “Altered winds blew in more warm air from the subtropics only in models in which mid-latitude oceans warmed as observed; apparently, the warmer oceans altered the circulation. And that ocean warming is widely viewed as being driven by the strengthening greenhouse.”

If you’re writing a paper for my class, feel free to begin sentences with conjunctions. As the above examples show, it’s a concise way to support clarity and effective flow. However, I suspect most instructors still hold to the old rule. Thus, you shouldn’t start sentences with “And,” “But” or other coordinating conjunctions unless you’ve been specifically invited to.

There are countless other rules that I don’t discuss here. The point of these examples is to show that you don’t have to observe every little rule you’ve ever heard of. There are some elements of mechanics that you have to master; I summarize some common ones below. These practices will gradually become second nature. It’s sometimes hard to know at the outset which rules are standard, which are options, and which are folklore. With the help of a good handbook and your instructors, you’ll learn them over time. The larger point I want to make here is that that observing rules isn’t about traversing a minefield of potential errors; it’s just about learning and adopting the practices appropriate to your audience, which is one of the first rules of writing well.

### Elements of punctuation and language you must master

If you’ve gotten most or all of your formal education in English, you’ve mastered the vast majority of the real rules of grammar. Most of the students I work with just have to nail down a few additional practices to produce appropriate academic writing. There isn’t any great secret to learning them; they’re learned through repeated practice and feedback.

1. **Comma usage**

I didn’t really master correct comma usage until my college years. There was a year or so in which I constantly checked my work against a style guide, but since then I haven’t often had to think about commas. Here’s a brief run-down of the rules of comma usage that I see many students violating. For a more complete explanation, and an invaluable set of online exercises, see the website of handbook author Diana Hacker.

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A. Use a comma to join two independent clauses with a coordinating conjunction:

CORRECT: Her misdeed was significant, but the punishment was excessive.

ALSO CORRECT: Her misdeed was significant but justified by the circumstances.

In the first example, the comma is telling the reader that one clause (her misdeed was significant) is ending and another (the punishment was excessive) beginning. The second example does not use a comma, because the words that follow “but” (justified by the circumstances) do not add up to an independent clause; they make a dependent clause that could not stand alone as a sentence.

Note: “Because” is NOT a coordinating conjunction. It’s a subordinating conjunction. Therefore, it does not use a comma:

INCORRECT: Conspiracy theories can be compelling, because many people distrust the government.

CORRECT: Conspiracy theories can be compelling because many people distrust the government.

“Because,” like other subordinating conjunctions (such as “although,” “unless,” or “until”), is meant to knit together one indivisible thought; hence, no comma. Including a comma weakens the connection in the mind of your reader.

B. Use a comma to mark the end of an introductory element

CORRECT: While we were eating, the baby crawled out of the room.

CORRECT: Alongside the road, we found the perpetrator’s gun.

CORRECT: Because many distrust the government, conspiracy theories can be compelling.

The first example would be comically confusing without the comma. The second example shows how the comma helps your reader separate the introductory element from the part that followed. The third example might be confusing. The sentence from part A, above, beginning with “Conspiracy theories” does not use a comma, but in this example, a dependent clause is serving as an introductory element.

Learn these rules, and if you hate them, learn to love them. In college, writing stops being about “how well did you understand fill-in-the-blank” and becomes “how professionally and strongly do you argue your point.” Professionalism, I have found, is the key to the real world, and college is, in part, preparing you for it. If you do not learn how to write in a way that projects professionalism (i.e. these rules), then expect to get, at best, Cs on your papers.

Kaethe Leonard
C. Use a comma to set off non-essential information (so-called non-restrictive elements)
Both of these sentences are correct, but they convey different ideas:

EXAMPLE 1: Gathering places vital to their communities are worth the investment.

EXAMPLE 2: Gathering places, vital to their communities, are worth the investment.

The first says that only those gathering places that are vital to their communities are worth the investment (implying that some are not vital and therefore not worth investing in). In that first example, “vital to their communities” is a restrictive element. In the second example “vital to their communities” is extra information. The sentence implies that gathering places in general are worth the investment (ostensibly because they’re vital to their communities). The commas mark the phrase as non-essential information, which is a non-restrictive element. In writing the second sentence, you might enclose the non-essential information in parentheses instead.

2. Use punctuation and coordinating conjunctions to avoid sentence fragments
At some point, you were probably instructed that all sentences must have a subject (which includes a noun) and a predicate (which includes a verb) and that they must be written to stand alone. Consider this example of a sentence fragment:

INCORRECT: When you go to the supermarket. You don’t often think about the work behind the scenes.

It has a subject (you) and predicate (go to the supermarket), but the “when” indicates that the sentence is incomplete. When people write sentence fragments, they usually have the missing elements in the preceding or following sentences, so it’s really a punctuation error.

CORRECT: When you go to the supermarket, you don’t often think about the work behind the scenes.

ALSO CORRECT: You don’t often think about the work behind the scenes when you go to the supermarket.

In the first version the dependent clause (the part that couldn’t stand alone) comes first, necessitating a comma. In the second, the main clause (the part that could stand alone) comes first, so no comma is used.

3. Use punctuation and coordinating conjunctions to avoid run-on sentences and comma splices
A run-on sentence (one that smooshes two sentences together) may be incorrectly connected with a comma, which is then called a comma splice. This error is easily corrected with punctuation and some coordinating words.
INCORRECT (run-on): The Epic of Gilgamesh is one of the earliest literary works it had a major influence on Mesopotamian culture.

INCORRECT (comma splice): The Epic of Gilgamesh is one of the earliest literary works, it had a major influence on Mesopotamian culture.

Clearly, the writer wants the reader to see these two sentences as connected. He or she has three options to show their reader how the sentences relate.

CORRECT OPTION 1 (semi-colon): The Epic of Gilgamesh is one of the earliest literary works; it had a major influence on Mesopotamian culture.

The semi-colon is an elegant and underutilized option. By joining two sentences with a semi-colon, the writer can subtly tell the reader that the epic’s earliness and influence, together, make it important.

CORRECT OPTION 2 (comma and coordinating conjunction): The Epic of Gilgamesh is one of the earliest literary works, and it had a major influence on Mesopotamian culture.

The use of “and” in this option also tells the reader to put the two claims together. A more specific conjunction—such as “but,” “so,” or “yet”—is usually a better choice than “and” or a semi-colon because it would provide more information about how the two claims relate.

CORRECT OPTION 3 (separate sentences): The Epic of Gilgamesh is one of the earliest literary works. It had a major influence on Mesopotamian culture.

If you don’t want your reader to consider the two sentences closely related, you can convey that by choosing separate sentences. With the Gilgamesh example, you might choose this option if the paragraph is mostly about the influence of the epic on Mesopotamian culture but you have a good reason to include a sentence about how early it is. These two sentences would function well as the first two sentences of an introductory paragraph.

4. Use colons correctly for lists, quotations, and explanatory information

INCORRECT: We packed: clothes, camping equipment, and a first-aid kit.

CORRECT: We packed the essentials: clothes, camping equipment, and a first-aid kit.

For lists, use a colon when the part before the colon can stand alone as a sentence. Otherwise, leave the colon out (“We packed clothes, camping equipment, and a first-aid kit”).

INCORRECT: Mitchell explains that: “Part of the fascination of Gilgamesh is that, like any great work of literature, it has much to tell us about ourselves.”

CORRECT: Mitchell explains the power of the epic: “Part of the fascination of Gilgamesh is that, like any great work of literature, it has much to tell us about ourselves.”

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6 Ibid.
You can use a colon to introduce a quote if the parts before and after the colon can stand as complete sentences. A comma is an option here as well. Introducing a quote with your own complete sentence and a colon is another underutilized trick in student writing. Recall from Chapter 5 that you have to use source material within your own analytical thread. Introducing a quote with your own complete sentence can make it immediately clear why the quote you choose is important to your argument.

5. Use modifiers clearly and precisely

Modifiers are words and phrases that add information to a sentence. They specify the meaning of (that is, they modify) a noun or verb. Sometimes the modifier is misplaced, ambiguous, or not clearly pertaining to a noun or verb (a so-called dangling modifier). These problems can lead the reader to wonder what exactly you're claiming.

MISPLACED: The ski-jumper looked sleek in his new suit weighing only 140 pounds.

CORRECT: The ski-jumper looked sleek wearing a new suit and weighing only 140 pounds.

The suit didn't weigh 140 pounds (one hopes); the ski-jumper did.

AMBIGUOUS: When formal rules and day-to-day practices differ, they should be changed.

CLEAR: Formal rules should be changed to match day-to-day practices.

CLEAR: Day-to-day practices should be changed to match the formal rules.

In the first version, it's not clear what should be changed. The two clear versions make it obvious what the author is arguing.

DANGLING: Walking down the street, the houses glowed pink in the sunset.

CORRECT: Walking down the street, she saw houses glowing pink in the sunset.

The first version suggests that the houses were walking down the street. The pronoun to which that first phrase refers (“she”) is missing. The second version corrects that by bringing in the needed pronoun.

6. Choose correct words

Many wrong-word errors that I see seem to be artifacts of the spell-checkers built into word-processing programs. For example, I often see “costumers” where students meant “customers,” “defiantly” instead of “definitely” and, somewhat comically, “marital” instead of “marital.”

Other wrong-word errors come from homonyms, two or more words that sound the same, such as the there/their/they’re or your/you’re errors. In college writing, another common one is the misuse of effect/affect. Use “effect” if you’re talking about the result of a cause as a noun, and “affect” if you mean influence or talking about emotion in psychology (in which case it’s pronounced AF-fect).

CORRECT: The effects of the conflict have been long-lasting.
CORRECT: The conflict has affected everyday life throughout the country.

CORRECT: Research shows that the presence of living plants impact both cognition and affect.

“Effect” can also be a verb, in which case it means to bring about:

CORRECT: The conflict effected major international policy changes.

That sentence is saying that the conflict brought about policy changes. If you wanted to say that the conflict influenced (but did not itself cause) policy changes, you would write that the conflict affected policy changes.

The dilemma of gendered language in English

What to do about gender with an unspecified subject? In the past, the consensus was to always use “he” and readers were supposed to understand that the subject might be female. As you know, that’s no longer accepted. The culture of formal academic writing hasn’t settled on a widely supported solution yet, which creates a pervasive problem for the student writer.

Informally, using “they/their” as the neutral singular is becoming a common practice. For example, if a Facebook friend hasn’t specified a gender, Facebook used to exhort you to “write on their timeline” for “their birthday.” I hear this more and more in spoken language as well. For example, most people who hear this sentence spoken wouldn’t note a glaring problem: “A doctor who makes a mistake is often too scared to admit their slip-up.” However, in an academic paper, that sentence would be considered a pronoun-antecedent error because “doctor” is singular and “their” is still considered plural. Most of your professors still don’t accept they/their as a gender-neutral singular possessive. Hopefully in coming years, academic writing will come to accept this perfectly reasonable solution to the gendered language problem, but we’re not there yet.

My first semester in college, it was my standard practice to rotate back and forth between the male and female pronouns. I did not want to appear sexist and was unsure how to avoid doing so. Referring to the same hypothetical person in one of my papers I wrote, “When one is confronted by new information that does not fit tidily onto her personal map…” Later in the paragraph I referred to the same individual by saying, “This new information demands that he forsake the world of the Cave in which he had been raised.” Obviously, in retrospect, that was confusing and certainly not the best option. But it illustrates the point that this can be a challenging dilemma. Thankfully for you, three more appropriate solutions are provided in this chapter.

Peter Farrell

So what to do? Here are three possible solutions.
1. **Choose plurals when possible.** For example, “Doctors who make mistakes are often too scared to admit their slip-ups.”

2. **Write “he or she” or “his or her” if it’s not too repetitive.** You don’t want to have more than two or three such “ors” in a paragraph, but a couple wouldn’t be tedious for the reader. For example, one might write, “A doctor who makes a mistake is often too scared to admit his or her slip-up. He or she might be forbidden from doing so by hospital attorneys.”

3. **Consider whether a real-life example is better than a hypothetical subject.** Long passages about hypothetical people and situations often lack argumentative force. If you’re writing a paper about medical errors, you might do better to replace hypothetical claims like the above example with real-life examples of physicians who have made mistakes but were reluctant or forbidden to acknowledge them. Better yet, discuss the results of studies of medical errors and their outcomes. In addition to solving the gendered language problem, real examples are more persuasive.

Remember, it’s about precision and respect. Whatever you do, don’t just write “he” for doctors, attorneys, and construction workers and “she” for nurses, social workers, and flight attendants. You also shouldn’t just write “he” or “his” for everything, expecting your readers to mentally fill in the “or she” and “or her” themselves. **Doing so seems lazy, if not actively sexist.** Showing respect through precise language about gender makes you seem much more credible.

**Conclusion**

This chapter does not (and could not) provide a complete run-down of formal English language usage. You would do well to bookmark a couple good reference sources to consult when questions arise. If your writing usually has a lot of errors in it, don’t despair. Identify one or two practices to master and then learn them, using the feedback from your instructors as a guide. You can’t become a flawless writer overnight (and no one writes flawlessly all the time). But over the course of a few semesters, you can certainly produce more precise text that presents your ideas in their best light.

**Exercises and other resources**

1. As noted above, the website associated with Diana Hacker’s popular writing guides offer excellent practice in grammar and mechanics. If you keep getting dinged in your papers for misplaced apostrophes, for example, you can review a lesson and take practice quizzes on that site until you nail it. She also provides exercises especially useful to writers learning English as a second (or third or fourth) language.

2. Most college libraries subscribe to online reference sources for their students. Go to your library’s website and look for proprietary guides like the *Oxford Dictionary of American Usage and Style*. These are often of much higher quality than the first few hits you get on Google.
3. In Andrea Lunsford’s *The Everyday Writer* 5th ed. (New York: Bedford-St. Martin’s, 2012) she includes a list of the 20 most common errors in student writing. This site, like Diana Hacker’s, also offers free online exercises in mechanics.