

QUICK TIP**Manage the Unavoidable Problem of Inexperience**

We all feel anxious when we start work in a new field whose values, concerns, and ways of thinking and arguing we don't entirely understand. In fact, we authors still experience that newcomer's anxiety again when we begin new kinds of projects on new topics. You can't avoid experiencing that feeling at times, but there are ways to manage it:

- *Know that uncertainty and anxiety are natural and inevitable.* Those feelings don't signal incompetence, only inexperience.
- *Get control over your topic by writing about it along the way.* Don't just retype or photocopy sources: write summaries, critiques, questions, responses to your sources. Keep a journal in which you reflect on your progress. This kind of writing not only helps you understand what you read but stimulates your thinking about it. The more you write early on, no matter how sketchily, the easier it will be to face that intimidating first draft.
- *Break the task into manageable steps and know that they are mutually supportive.* Once you formulate a good question, you'll draft and revise more effectively. The more you anticipate how you will write and revise a first draft, the more effectively you will produce it.
- *If you are a student, count on your teachers to understand your struggles.* They want you to succeed, and you can expect their help. (If they don't help, look for others who will.)
- *Set realistic goals.* You do something significant when you wind up your project feeling that it has changed just what *you* think and that your readers think you did it well, even if they don't agree with your claims.
- *Most important, recognize the struggle for what it is—a learning experience.* To overcome the problems that all beginners face, do what successful researchers do, especially when discouraged: review your plan and what you've written, then press on, confident that it will turn out OK. Perhaps only "OK—considering," but probably a lot better than that.

5**From Problems to Sources**

If you are a new researcher and expect to find most of your sources in your library or on the Internet, this chapter will help you develop a plan for your research. If you are more experienced, you might skip to the next chapter.

If you have not yet formulated a research question, you may have to spend time reading generally on your topic to find one. But if you have a question and at least one promising answer (the philosopher C. S. Peirce called it a *hypothesis on probation*), you can start looking for data to test it.

To do that efficiently, you need to have a plan. If you plunge into any and all sources on your topic, you risk losing yourself in an endless trail of books and articles. To be sure, aimless browsing can be fun, even productive. We indulge in it a lot. Many important discoveries have begun in a chance encounter with an unexpected idea. But if you have a deadline, you need more than luck to find good sources in time: you have to search systematically for those sources that will help you advance your research project or, just as usefully, challenge you to improve it. In this chapter, we discuss different ways you can use sources in your research, how you can find useful sources, and how you can winnow your sources to a manageable number. In the next chapter, we focus on how to use sources in your writing.

5.1 THREE KINDS OF SOURCES AND THEIR USES

Sources are conventionally categorized into three kinds: primary, secondary, and tertiary. Their boundaries are fuzzy, but knowing these categories can help you plan your research.

5.1.1 Primary Sources

Primary sources are “original” materials that provide you with the “raw data” or evidence you will use to develop, test, and ultimately justify your hypothesis or claim. What kinds of materials count as primary sources vary significantly by field. In history, primary sources are artifacts or documents that come directly from the period or event you are studying: letters, diaries, objects, maps, even clothing. In literature or philosophy, your main primary source is usually the text you are analyzing, and your data are the words on the page. In arts criticism, your primary source would be the work of art you are interpreting. In social sciences, such as sociology or political science, census or survey data would also count as primary sources. In the natural sciences, reports of original research are sometimes characterized as primary sources (although scientists themselves rarely use that term).

5.1.2 Secondary Sources

Secondary sources are books, articles, or reports that are based on primary sources and are intended for scholarly or professional audiences. The body of secondary sources in a field is sometimes called that field’s “literature.” The best secondary sources are books from reputable university presses and articles or reports that have been “peer-reviewed,” meaning that they were vetted by experts in the field before they were published. Researchers read secondary sources to keep up with developments in their fields and, in this way, to stimulate their own thinking. The standard way of framing new research problems is to challenge or build on the conclusions or methods of others, as presented in secondary sources they have written. You can also borrow evidence from secondary sources to use in your own arguments, but you should do so only if you do not have access to the primary sources from which that evidence was originally taken. Otherwise you risk appearing careless or lazy.

5.1.3 Tertiary Sources

These are books and articles that synthesize and report on secondary sources for general readers, such as textbooks, articles in ency-

clopedias (including *Wikipedia*), and articles in mass-circulation publications like *Psychology Today*. In the early stages of research, you can use tertiary sources to get a feel for a topic. But if you are making a scholarly argument, you should rely on secondary sources, because these make up the “conversation” in which you are seeking to participate. If you cite tertiary sources in a scholarly argument, you will mark yourself as either a novice or an outsider, and many readers won’t take you—or your argument—seriously.

This response may seem unfair, but it’s not. Tertiary sources aren’t necessarily wrong—many are in fact written by distinguished scholars—but they are limited. Because they are intended for broad audiences who are unfamiliar with the topics that they address, they can sometimes oversimplify the research on which they are based, and they are susceptible to becoming outdated. But if you keep these limitations in mind, tertiary sources can be valuable resources: they can inform you about topics that are new to you, and if they have bibliographies, they can sometimes lead you to valuable secondary sources.

5.1.4 Differentiating Primary, Secondary, and Tertiary Sources

Researchers haven’t always divided their sources into these three categories. The distinction between primary and secondary sources originated with historians in the nineteenth century and then spread to other fields. The category of tertiary sources was added later. Although this scheme is now the standard way that students are taught to classify sources, it fits some disciplines better than others: it works very well for history, in which primary sources are materials directly connected to a historical event or moment, and for criticism, in which primary sources are the original works of art, music, or literature that you are interpreting. But it works less well for, say, philosophy, chemistry, or nursing.

It is also important to understand that the classifications of primary, secondary, and tertiary are not absolute but relative to a researcher’s project. In most instances, an article in a scholarly journal would generally be considered a secondary source. But it would become a primary source if your research problem concerned its

author or the field itself: if, for example, you are writing the author's biography or trying to figure out whether patriotic historians have distorted stories of the Alamo. Likewise, an encyclopedia article would usually be considered a tertiary source, but it would become a primary source if you were studying the way encyclopedias deal with gender issues. T. S. Eliot's essay "Hamlet and His Problems" would be a primary source if you were studying Eliot but a secondary source if you were studying Shakespeare. Change your focus and you change the classification of your sources.

If this is confusing, it need not be. Remember that these classifications are just a means to an end. The important thing, ultimately, is not what you *call* your sources but how well you *use* them to address your research problems, develop new ideas, and make interesting arguments. In the next chapter, we will talk more about how you can use sources in your writing.

5.2 NAVIGATING THE TWENTY-FIRST-CENTURY LIBRARY

Walk into a university library today and you might wonder, "Where are the *books*?" (Answer: they are still there, though many have been moved to off-site storage.) The card catalog has long since been replaced by electronic search engines, and print materials—books, journals, photographs, films, video and audio recordings—are increasingly being digitized. Today you don't even need to enter the library to use many of its resources. But whether you visit in person or through a website, the library is an indispensable tool for research.

Given the volume of data available on the Internet, you might think that libraries are no longer necessary—except, perhaps, for highly specialized research. We believe the opposite is true. Because *so much* information is now at our fingertips, libraries are more essential than ever when conducting research. Libraries not only let us access information but also ensure that our sources are reliable. Even if your public or academic library is comparatively small, it can serve as a *portal* to a much broader range of resources—research guides, reference works, and online databases—that extends the li-

brary's reach. Of course, to benefit from these resources, you must learn to navigate the twenty-first-century library.

5.2.1 Planning Your Library Search

Before you can use sources, you must first find and evaluate them. Some materials that will eventually serve as sources will be physically located in your library, but others are likely to be located elsewhere, whether online or at another library. To take advantage of what libraries have to offer, then, you must *plan* your search. Fortunately, this is where libraries—and librarians—are most useful.

Knowing where to begin your search can be overwhelming at first. It is tempting to simply search a few terms and see what comes up. We do this too, but we also know that the library offers more systematic and productive methods for discovering useful and credible sources. Use the library to learn more about your topic and about promising avenues for exploring your research question.

Ask a Librarian. Perhaps the best advice we can offer is to rely on the research expertise of librarians. Both general reference librarians and (in larger libraries) subject area specialists can help you refine your search parameters and direct you to the right tools for your specific research question. They can help you use the catalog to locate materials held by your library or by other libraries (and obtainable through interlibrary loan). These same librarians typically design research guides that identify reference works and online databases for specific fields.

And don't be shy. Librarians love to assist researchers of all levels and at all stages of the research process. They can help you formulate your research question and plan, develop search terms, and inventory your results to ensure you haven't overlooked something of value. The only embarrassing question is the one you *failed to ask* but should have. Of course, it pays to meet busy librarians halfway by preparing in advance. If you have a well-developed re-

search question ready to share, your librarian will be able to give you better advice. You might describe your project using the three-step rubric from chapter 3:

1. I am working on educational policy in the 1980s
2. to find out how school boards in the Midwest dealt with desegregation,
3. because I want to understand regional differences in race relations.

Consult Reference Works. If you already know a lot about your topic, you probably also know how to find sources on it. But if you are new to a topic, resist the temptation to go straight to primary or secondary sources that strike you as relevant. This approach is unreliable and unpredictable and probably won't save you any time. A more successful strategy is to allow reference works to shape your search efforts. Compiled by experts, both general reference works such as the *Encyclopaedia Britannica* and more specialized works such as the *Encyclopedia of Philosophy* will give you the lay of the land, so that later it will be easier to see how your sources fit within the bigger picture. In addition, reference works often include citations or bibliographies that can lead you to sources you might otherwise overlook.

Especially valuable at early stages of research are bibliographic works, many of which provide abstracts summarizing significant articles or books on a topic. Look, especially, for annotated bibliographies or annual literature reviews that sum up recent books or articles; these offer the most promising leads for your research.

Explore Online Databases. What sets libraries apart from the Internet are their subscriptions to indexes and databases. After books, these are arguably a library's most valuable assets, since they give researchers access to materials they could not obtain otherwise. Each library's subscriptions will differ, with major research libraries offering the most comprehensive access to specialized indexes and databases. However, every academic library and many pub-

lic libraries offer a powerful set of online tools that greatly extend their actual collections. You will certainly want to make use of these general and specialized resources in your research. At least become familiar with the major databases to which your library subscribes, such as Academic Search Premier, MLA International Bibliography, or PubMed. Many academic databases either provide abstracts or direct you to articles that include abstracts. Looking at these can help you decide if an article itself is worth reading carefully. Some databases allow you to access full-text articles and even books. But be aware: If your library does not subscribe to a particular journal included in a database, you might be asked to pay a fee to access a full-text article. Before doing so, *always* speak with a librarian about other means of access.

5.2.2 Finding Specific Sources

Having identified a range of search strategies and resources, you are now in a position to look for specific sources in and beyond the library. Of course, this process is not strictly linear. A single source can lead to others and return you to catalogs and databases you have already visited, only this time with new search terms. Novice researchers often rely too heavily on only a few terms or on terms that prove to be too broad—or narrow—to call up relevant sources. Successful researchers know they have to be flexible: searches typically involve trial and error to discover those terms that will yield the most relevant sources.

Search Your Library Catalog. In your research, you will probably need to use your library's catalog in two complementary ways: keyword searching and browsing. When you have examined some sources to identify a list of *keywords* associated with your topic, you are ready to use these terms to search the catalog. In most libraries, you must choose the category (books, articles, journals, etc.) you wish to use for your search.

If your sources include books, you can use Library of Congress subject headings, found either on the back of their title page or on

their “details” page in the online catalog, to search for related materials. On the back of this book’s title page are the terms

1. Research—Methodology.
2. Technical writing.

If you search an online catalog for those terms, you will find all the books on those subjects in that library. A book may be cross-listed under multiple subject headings. In that case, take a quick look at the titles listed under those headings as well. You may find useful sources you would have missed otherwise. You can also *browse* the catalog for books with similar *call numbers*. Once you identify a book that seems on target, use its call number to find others shelved along with it. Look for the browse link in your book’s catalog entry. This list will be less focused than a keyword list, but it may also contain unexpected gems. So don’t restrict yourself to books nearest your target. Invest the time to browse widely.

The problem with any online search is that it may produce an overwhelming number of titles. The University of Chicago library has more than three hundred books on Napoleon and thousands with the word *environment* in their titles. If your search turns up too many sources, narrow it down. Today’s online catalogs let you limit searches in many ways: by date of publication, language, subject, resource type (books, articles, databases, etc.), and possibly others depending on the catalog. If you can’t decide how to narrow your search, start with the date of publication. Restrict it to those sources published in the last fifteen years; if that still turns up too many, cut to the last ten years.

After you search the Library of Congress or a large university catalog, you may discover that your own library holds only a fraction of what you found, but that it can borrow most of what you need. For books too new to be in a library catalog but crucial to your research, find an online bookseller. Those books might turn up on your library’s new acquisitions shelf, and you can always recommend books to your library for acquisition. But if you need those books quickly, you’ll probably have to buy them.

On the other hand, if you find nothing, your topic may be too narrow or too far off the beaten track to yield quick results. But

you could also be on to an important question that nobody else has thought about, at least not for a while. For example, “friendship” was once an important topic for philosophers, but it was then ignored by major encyclopedias for centuries. Recently, though, it has reemerged as a topic of serious research. Chances are you’ll make something of a neglected topic only through your own hard thinking. In the long run, that research might make you famous, but it probably won’t work for a paper due in a few weeks.

Prowl the Stacks. Doing research online is faster than on foot, but if you never go into the stacks of your library (assuming you’re allowed to), you may miss crucial sources that you’ll find only there. More important, you’ll miss the benefits of serendipity—a chance encounter with a valuable source that occurs only when a title happens to catch your eye. (All of us have found important sources in this way.)

If you can get into the stacks, find the shelf with books on your topic, then scan the titles on that shelf, then on the ones above, below, and on either side, especially for books with new bindings published by university presses. Then turn around and skim titles behind you; you never know. When you spot a promising title, skim its table of contents and index for keywords related to your question and answer. Then skim its bibliography for titles that look relevant. You can do all that faster with a book in your hand than you can online. Be suspicious of a book with no index or bibliography. (See 5.4 for more on systematic skimming.)

You can check tables of contents for most journals online, but browsing among shelved journals can be more productive. Once you identify promising journals online or in bibliographies, find them on the shelf. Skim the bound volumes for the last ten years (most have an annual table of contents in front). Then take a quick look at journals shelved nearby. You’ll be surprised how often you find a relevant article that you would have missed online.

Follow Bibliographic Trails. Most sources will give you trailheads for bibliographical searches. When you find a book that seems useful,

skim its bibliography or works cited. Its index will list the authors cited most often (generally, the more citations, the more important an author is). Journal articles usually begin with a review of previous research, all cited. By following this bibliographic trail, you can navigate the most difficult research territory, because one source always leads to others, which lead to others, which lead to . . .

Use Citation Indexing. Many online catalogs and databases let you look up *other* sources that cite one that you already know. This technique, called citation indexing, is like following a bibliographic trail, forward or backward. Instead of searching for sources that a given source cites, *backward* citation, you can search for sources that cite a given source, or *forward* citation. A source's credibility can thus be gauged both by the sources it cites and by the sources that cite it. The more a given source is later cited, the greater its reputation and its impact factor.

To do this kind of research, researchers used to have to consult printed citation indexes, a process that could take hours or even days. But today's online catalogs and databases make it easy. By following bibliographic trails and using citation indexing in tandem, you can build up a rich network of sources to support your own research.

5.3 LOCATING SOURCES ON THE INTERNET

You probably already know how to search the publicly available Internet: type a few words into the text box of a public search engine like Google, and pages of links—delivered as URLs, or uniform resource locators—arrive on your screen. We use this technique all the time, to find movie times, restaurant reviews, stock prices, news items, and so on. Its ubiquity in our everyday lives is reflected in our language. We've turned the name of a company into a verb: in everyday parlance, to "Google" something is to search for it.

Your practical experience with such everyday research might lead you to regard the Internet as comprehensive and reliable. (You use it to price a smartphone or pair of jeans, so why not for your academic or professional research?) But that would be a mistake.

Again, remember that your library's catalogs and databases will allow you to access a great deal of information that you cannot get through a search engine. When using the Internet for research, maintain a healthy skepticism: most of what we retrieve using Google or some other search engine is perfectly reliable, but not everything is. In contrast to your library's catalogs and databases, the Internet is essentially unmonitored. There is no one to vouch for the credibility of materials posted to, and sent from, countless websites. And finally, keep in mind that companies offering free search engines make their money by acquiring data about you through your online behavior and by selling advertising, and that webmasters routinely modify their sites to make them appear higher in search results. These practices are not necessarily nefarious, but you should remember that search engine companies and websites themselves have an interest in where you go and what you see online.

But if you keep these limitations in mind, using the Internet can be a valuable component of your research plan. Here are some ways in which we use the Internet in our own research:

- To get our bearings with respect to a new topic—regarding everything we learn at this stage as provisional
- To explore potential keywords to use in a more systematic search
- To remind ourselves of dates or facts—again remembering to check these against more reliable sources
- To locate the authors of sources whom we might wish to contact: profiles of many scholars and researchers are available on college and university websites
- To get a "ballpark" sense of what we are likely to find through a search of specialized databases by a quick search using Google Scholar

Publicly available general tertiary sources such as *Wikipedia* and specialized ones such as the Victorian Web are often quite reliable. But you should still view them skeptically. In general, don't use the Internet to find secondary sources, as these depend for their credibility on the checks inherent in the academic publishing

system, especially that of peer review. You can, however, use the Internet freely as a primary source. For example, if you study how soap opera story lines respond to their fans' reactions, fan blogs would be fine primary sources. (We discuss evaluating sources in the next section.)

Respecting Authors' Rights. Sites such as Project Gutenberg and Google Books can provide reliable online copies of older texts no longer in copyright. But postings of more recent texts (in the United States, those published in 1923 or later) may violate the author's copyright. Careful readers dislike seeing unauthorized copies cited not only because that breaks the law but also because such texts are often inaccurately reproduced. So unless a recent text is posted with the author's clear permission (as in a database), use its print rather than its e-version.

5.4 EVALUATING SOURCES FOR RELEVANCE AND RELIABILITY

When you start looking for sources, you'll find more than you can use, so you must quickly evaluate their usefulness. To do so use two criteria: relevance and reliability.

5.4.1 Evaluating Sources for Relevance

If your source is a book, do this:

- Skim its index for your keywords, then skim the pages on which those words occur.
- Skim the first and last paragraphs in chapters that use a lot of your keywords.
- Skim prologues, introductions, summary chapters, and so on.
- Skim the last chapter, especially the first and last two or three pages.
- If the source is a collection of articles, skim the editor's introduction.
- Check the bibliography for titles relevant to your topic.

If your source is an e-book, you should still follow these steps, but you can also search the whole text for your keywords.

If your source is an article, do this:

- Read the abstract, if it has one.
- Skim the introduction and conclusion; or if they are not marked off by headings, skim the first six or seven paragraphs and the last four or five.
- Skim for section headings, and read the first and last paragraphs of those sections.
- Check the bibliography for titles relevant to your topic.

If your source is online, do this:

- If it looks like a printed article, follow the steps for a journal article, and also search on your keywords.
- Skim sections labeled "introduction," "overview," "summary," or the like. If there are none, look for a link labeled "About the Site" or something similar.
- If the site has a link labeled "Site Map" or "Index," check it for your keywords and skim the referenced pages.
- If the site has a "search" resource, type in your keywords.

This kind of speedy reading can guide your own writing and revision. If you do not structure your paper so your readers can skim it quickly and see the outlines of your argument, your paper has a problem, an issue we discuss in chapters 12 and 13.

5.4.2 Evaluating Sources for Reliability

You can't judge a source until you read it, but there are signs of its reliability:

1. Is the source published or posted online by a reputable press?

Most university presses are reliable, especially if you recognize the name of the university. Some commercial presses, which are presses not associated with a university, are reliable in some fields, such as Norton in literature, Ablex in sciences, or West in law. Be skeptical of a commercial book that makes sensational claims, even if its author has a PhD after his name. Be especially careful about sources on hotly contested social issues such as stem-cell

research, gun control, and global warming. Many books and articles are published by individuals or organizations driven by ideology. Libraries often include them for the sake of coverage, but don't assume they are reliable.

2. **Was the book or article peer-reviewed?** Most reputable presses and journals ask experts to review a book or article before it is published; this is called peer review. Essay collections published by university presses are often but not always peer-reviewed; sometimes they are reviewed only by the named editor or editors. Few commercial magazines use peer review. If a publication hasn't been peer-reviewed, be suspicious.
3. **Is the author a reputable scholar?** This is hard to answer if you are new to a field. Most publications cite an author's academic credentials; you can find more with a search engine. Most established scholars are reliable, but be cautious if the topic is a contested social issue such as gun control or abortion. Even reputable scholars can have axes to grind, especially if their research is financially supported by a special interest group. Go online to check out anyone an author thanks for support, including foundations that supported her work.
4. **If the source is available only online, is it sponsored by a reputable organization?** A website is only as reliable as its sponsor. You can usually trust one that is sponsored and maintained by a reputable organization. But if the site has not been updated recently, it may have been abandoned and may no longer be endorsed by its sponsor. Some sites supported by individuals are reliable; most are not. Do a web search for the name of the sponsor to find out more about it.
5. **Is the source current?** You must use up-to-date sources, but what counts as current depends on the field. In computer science, a journal article can be out-of-date in months; in the social sciences, ten years pushes the limit. Publications have a longer shelf life in the humanities: literary or art criticism, for example, can remain relevant for decades and even centuries. In general, a source that sets out a major position or theory that other researchers accept will stay current longer than those that respond

to or develop it. Assume that most textbooks are *not* current. If you are unsure whether a source will be considered current, take your lead from the practice of established researchers in the field. Look at the dates of articles in the works cited lists of a few recent books or articles in the field: a good rule of thumb is that you can cite works as old as the older ones in that list (but to be safe, perhaps not as old as the oldest). Try to find a standard edition of primary works such as novels, plays, letters, and so on: it is usually not the most recent. Be sure that you consult the most recent edition of a secondary or tertiary source: researchers often change their views, even rejecting ones they espoused in earlier editions.

6. **If the source is a book, does it have notes and a bibliography?** If not, be suspicious, because you have no way to follow up on anything that the source claims.
7. **If the source is a website, does it include bibliographical data?** You cannot judge the reliability of a site that does not indicate who sponsors and maintains it, who wrote what's posted there, and when it was posted or last updated.
8. **If the source is a website, does it approach its topic judiciously?** Your readers are unlikely to trust a site that engages in heated advocacy, attacks those who disagree, makes wild claims, uses abusive language, or makes errors of spelling, punctuation, and grammar.

The following criteria are particularly important for advanced students:

9. **If the source is a book, has it been well reviewed?** Many fields have indexes to published reviews that tell you how others evaluate a source (see our "Appendix: Bibliographic Resources").
10. **Has the source been frequently cited by others?** You can roughly estimate how influential a source is by how often others cite it. Citation indexing makes this easy to do (see 5.2.2). If you find that a source is cited repeatedly by other scholars, you can infer that experts in the field regard it as reliable and significant. Such sources are said to have a high "impact factor." You should keep an

Whom Can You Trust?

The highly respected *Journal of the American Medical Association* appointed a committee to review articles published by reputable journals for reliability. Even though those papers had been approved by experts in the field, the reviewers reported that “statistical and methodological errors were common” (“When Peer Review Produces Unsound Science,” *New York Times*, June 11, 2002, p. D6). In the face of such revelations, some just dismiss what scientists publish: if the reviewers of scientific articles can’t guarantee reliable data, what is a mere layperson to do? You do what we all do—the best you can: read critically, and when you report data, do so as accurately as you can. We’ll return to this question in chapter 8.

Error is bad, but dishonesty is worse. One of Booth’s students got a summer job with a drug company and was assigned to go through stacks of doctors’ answers to questionnaires and shred certain ones until nine out of ten of those left endorsed the company’s product. These bogus data were then used to “prove” that the product worked. The student quit in disgust and was, no doubt, replaced by someone less ethical.

eye out for such sources and use them to orient yourself in your field of research.

These indicators do not guarantee reliability. Reviewers sometimes recommend that a reputable press publish something weakly argued or with thin data because other aspects of its argument are too important to miss—we have each done so. So don’t assume that you can read uncritically just because a report is written by a reputable researcher and published by a reputable press.

5.5 LOOKING BEYOND PREDICTABLE SOURCES

For a class paper, you’ll probably use the sources typical in your field. But if you are doing an advanced project, an MA thesis, or a PhD dissertation, search beyond them. If, for example, your project were on the economic effects of agricultural changes in late

When They Beat You to the Punch

Don’t panic if you find a source that seems to pose and solve precisely your problem: “Transforming the Alamo Legend: History in the Service of Politics.” At that moment you might think, *I’m dead. Nothing new to say.* (It happened to Williams when he was writing his doctoral dissertation and to Colomb just before his first book came out.) You may be right, but probably not. If the source does in fact settle your exact question, you have to formulate a new one. But the question your source asked is probably not as close to yours as you first feared. And you may find that you can do the source one better: if the author failed to get things entirely right, you have an unwitting ally in formulating your problem.

sixteenth-century England, you might read Elizabethan plays involving country characters, look at wood prints of agricultural life, find commentary by religious figures on rural social behavior. Conversely, if you were working on visual representations of daily life in London, you might research the economic history of the time and place. When you look beyond the standard *kinds* of references relevant to your question, you enrich not only your analysis but your range of intellectual reference and your ability to synthesize diverse kinds of data, a crucial competence of an inquiring mind. Don’t ignore a work on your topic that is not mentioned in the bibliographies of your most relevant sources—you will get credit for originality if you turn up a good source that others have ignored.

5.6 USING PEOPLE TO FURTHER YOUR RESEARCH

One of the paradoxes of twenty-first-century research is that even as new technologies allow us to access an unprecedented wealth of materials with unprecedented ease, research has also become more personal. So as you undertake your project, don’t forget about the human element.

Most obviously, people can be sources of primary data, collected through observation, surveys, or interviews. Be creative when us-

ing people for primary research: don't ignore people in local business, government, or civic organizations. For example, if you were researching school desegregation in your town, you might go beyond the documents to ask the local school district whether anyone there has memories to share. We can't explain the complexities of interviewing (there are many guides to that process), but remember that the more you plan by determining *exactly* what you want to know, the more efficiently you will get what you need. You don't need to script an interview around a set list of questions—in fact, that can be a bad idea if it makes the interviewee freeze up. But prepare so that you don't question your source aimlessly. You can always reread a book for what you missed, but you can't keep going back to people because you didn't prepare well enough to get what you needed the first time. And always remember that when conducting primary research that involves people, you must adhere to rigorous ethical standards (see the Quick Tip at the end of this chapter).

People can also lead you to good secondary sources or serve as such sources themselves. We noted earlier that the body of secondary sources on a topic constitutes the scholarly "conversation" about it. That was a metaphor. But you can and should have real conversations about your research as well. Above we encouraged you to discuss your research with one kind of expert: your reference librarian. Your librarian is an expert on the processes of library research. You can also benefit from talking directly with experts on your topic. Ask them about the important open questions in the field. Ask them what they think of your project or provisional thesis. Ask them to suggest secondary sources for you to read. This kind of personal guidance can be invaluable to a novice researcher, and many experts will be happy to talk with you (or at least engage in a little e-mail correspondence).

All of us have made these kinds of queries with great success in our own research, and all of us have responded to them in turn, by helping those who have contacted us. One of us once invited an eminent scholar to talk about his research process to a group

of first-year college students. He began his talk by saying, "I don't really have a research process; I just ask my smart friends what I should read." This scholar was being at least a bit tongue in cheek, but we could all do worse than to rely on such smart friends, at least to get us started.

QUICK TIP**The Ethics of Using People as Sources of Data**

In recent years we have become increasingly aware that research using people may inadvertently harm them—not just physically but by embarrassing them, violating their privacy, and so on. So every college or university now has a committee that reviews all research directly or indirectly involving people, whether done by students or professional researchers. These committees go by different names—Human Subjects Committee, Institutional Review Board, Ethics Research Board, and so on—but they all aim to ensure that researchers follow the maxim that should govern research as it does medicine: *Do no harm*. Consult with that committee if you use people as sources of data—whether by interviewing, surveying, perhaps even just observing them. Jumping through these hoops may feel like bureaucratic make-work, but if you don't, you could harm those who help you and may even damage your institution.

6 Engaging Sources

To make your research reliable, you must use your sources fairly and accurately. In this chapter, we explain how to engage your sources productively and how to take notes so that readers can trust you when you rely on or critique a source.

In this chapter, we show you how to get the most out of your sources, especially your secondary sources. We've chosen that focus for a simple reason: it's a topic on which we can offer useful, general advice. The ways that researchers find or create their data, and the kinds of data readers expect as evidence, vary wildly from field to field. Historians and literary critics typically comb primary sources for passages they can use as evidence. Other researchers, however, don't use primary sources at all: depending on their fields, they might analyze soil samples in a lab, or conduct a survey, or build a computer model. But every field has its body of secondary sources, sometimes called its *literature*, that document the field's conversation. And researchers in all fields engage these sources in similar ways.

How you use your secondary sources depends on where you stand in your search for a project. Experienced researchers read secondary sources regularly to keep up with work in their fields, and so they usually begin their projects with a question or problem in mind. But if you are new to a subject or you still have only a topic, you may have to read a lot of sources to find a problem to pursue, and then even more to figure out how to solve it. In this chapter, we show you how to read secondary sources as experienced researchers do: not just for data you can use in your own argument but more importantly for questions, problems, and arguments that spur your own thinking.