



# THE *Craft* of Research

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buy important books or photocopy important passages. You can save hours of note-taking if you own a work and can legitimately highlight passages that you think you will use. (We need not dwell on the fact that marking up a library book violates a first principle of every research community: preserve sources for those who follow. If you must keep notes in a book, insert sheets of paper between pages or use big Post-it notes that you can remove.) You will profit even more if you get in the habit of summarizing what you have read *in writing*. The more you write along the way, the more easily you will face that looming first draft.

Among these resources you will probably find titles right on your question. You may even experience that moment of panic when you discover *your* title: "Transforming the Alamo Legend: History in the Service of Politics." At that moment, you might think, *There goes my project, nothing new for me to say*. You might be right, but probably not. Study the source to see if it settles *your* question. If it does, then you have to formulate a new one. But when you see how your topic has been treated by another, you will probably find something new to say. In fact, with the help of someone who has worked through your topic before you, you can usually ask a better question. Or it may be that the author has gotten things not quite right. If so, you have found an unwitting friend.

## CHAPTER SIX

### Using Sources

IF YOU CAN GATHER INFORMATION and report it accurately and intelligibly, you have a skill valued highly in both the classroom and workplace. More valuable yet is the ability to work through conflicting opinions and arguments, to weigh data of different kinds and from different sources, to bring together information not usually conjoined, and to arrive at an original slant on an important problem. To do that, you need to learn how to analyze your sources not just accurately but critically.

#### 6.1 USING SECONDARY SOURCES

Many published reports are useless, even harmful, because their authors substituted speedy note-taking for thoughtful, critical reading. Here are the first two principles for using sources: One *good* source is worth more than a score of mediocre ones, and one *accurate* summary of a good source is sometimes worth more than the source itself.

Those principles seem obvious, but evaluating sources is a difficult art. Ask anyone taken in by con artists in print: *I thought it was true because I saw it in Reader's Digest*—the sad words of those who discover too late how easily dishonest or careless "researchers" can make bogus results seem plausible and get them published. *Nine out of ten doctors agree . . .* Well, which doctors? Polled when and how? Behind every "miraculous cure" there is a "study" that "proves" its superiority over its rivals, but many do not stand up under close scrutiny.

When research is distorted, though, it is usually inadvertent. Fraud does occur, but research published by respected journals is almost always done by those who would never deliberately misrep-

One of Booth's students got a summer job doing "scientific research" for a drug company. He was assigned to go through stacks of doctors' questionnaires and shred enough of them until nine out of ten of those left did indeed recommend the company's product. The preserved bogus files "proved" the case. The student quit in disgust, quickly replaced, no doubt, by someone less ethically careful.

if you intend to quote it, read everything around it and anything else that you need to understand what you expect to use.

3. If you use primary data or a quotation that you find in a secondary source, attribute that material to the primary source but acknowledge as well the secondary source in which you found it. More important, if your source relies significantly on an earlier source, check that source too. If you cannot find the quoted source, so be it; but if you can track it down, do so. You will soon discover that you cannot trust researchers to quote reliably. It is intellectually lazy not to look up an important quotation in its original context if that source is easily obtainable.

### 6.3 TAKE FULL NOTES

You can easily lose what you gain by careful reading if your notes do not reflect the quality of your thinking. Some believe that the best notes are kept on cards like this:

Sharman, Swearing, p. 133. HISTORY/ECONOMICS (GENDERS?)

Says swearing became economic issue in 18th c. Cites

Gentleman's Magazine, July 1751 (no page reference) woman sentenced to ten day's hard labor because couldn't pay one shilling fine for profanity.

"... one rigid economist practically entertained the notion of adding to the national resources by preaching a crusade against the opulent class of swearers."

(way to think about swearing today as economic issue?)

Comedians more popular if they use bad language? Movies more realistic? A gender issue here? Were 18th c. men fined as often as women?)

GT3080/56

- At the top left of the card is the author, the title, and a page number.
- At the top right are key words that will let the researcher sort and re-sort cards into different categories.
- The body of the card contains a summary of the source, a direct quotation, and a thought about further research.

resent their results. Yet ask almost any scholar whose work has been discussed by others, and she will tell you her work is as often as not reported inaccurately.

Sometimes misreporting happens when a lazy researcher relies on hearsay. Colomb heard a prominent researcher confess after her talk that she had never read an author whose work she had just discussed. Booth has been "refuted" by a critic who apparently read only a section title, "Novels Must Be Realistic," and did not know that in attacking the title he was agreeing with Booth's argument. Sometimes reports are both misquoted and misunderstood. One reviewer misquoted Williams and then, thinking he was disagreeing with him, used the misquoted evidence to argue for the point Williams originally made.

More distortions, though, result from conviction that grows too passionate: some researchers become so committed to their case that they find support for it wherever they look. They don't quite "cook their evidence," but they reach too far for their proofs. And of course there is always simple human error: a word dropped, a quotation mark omitted or ignored.

### 6.2 READ CRITICALLY

How do you deal with sources that might be unreliable, and how do you avoid misreporting them? Here are a few suggestions helpful to any beginner, perhaps even to established scholars.

#### 6.2.1 Evaluate Your Sources

1. Take seriously our advice about narrowing your sources to the few most valuable to your inquiry. In the early stages, this means a lot of skimming of books and articles to identify which ones you want to know better. Of course, you will make mistakes as you practice this speedy, and in some sense careless, reading. And you will have to re-read carefully. But only by skimming a lot can you settle on a few sources that deserve your most careful attention.

2. Once you locate a source that seems crucial, read *all* of it. In contrast to speedy reading, you must now read *slowly* to get a sense of the whole argument in its complete context. A common cause of misunderstanding is piecemeal reading—what is called "raiding." If you expect to use an argument or an idea, especially

but also the electronic source—a discussion or news list, a commercial database, etc. Many electronic sources are as public as libraries, but if you intend to quote something posted to a discussion or news list, it is a good idea to ask the sender's permission.

### 6.3.2 Get Attributions Right

When taking notes, you must clearly and consistently distinguish summary from paraphrase, and paraphrase from direct quotation. Make sure you

put quotation marks around direct quotations and *avoid close paraphrases* (see pp. 166–71). Some researchers have seen their careers ruined when they published research that included a passage that they thought summarized what they had read, or even that they thought they had come up with on their own, and the passage turned out to be a direct quotation or a too-close paraphrase from a secondary source. When that was discovered, they were publicly accused of plagiarism. Their defense—in their notes they had inadvertently omitted quotation marks—may have been true, but it did them little good in the eyes of their research community. The best way to be certain that you distinguish the language of your source from your own and that your quotations are correct is to photocopy quotations longer than a few lines. Always record page numbers, not only of quotations and data, but of anything you paraphrase.

### 6.3.3 Get the Context Right

To support their claims, your sources build complex arguments out of several elements (we discuss this in detail in Part III). As you read your sources to assemble material for your own arguments, you should be analyzing theirs.

- In the lower right corner is the library call number for the book.

This format encourages systematic note-taking, but we three authors confess that we rarely use such cards. We record notes on a lined pad or on a computer, because a 3 × 5 space is too small for everything we want to say.

We should also point out that if you mix on the same card summary, paraphrases, quotations, and notes about your own thinking, you risk confusing them when you draft. It is safer to transcribe direct quotations, paraphrases, and close summaries on a card of one color, your own thinking on a card of another color, then paper-clip or staple the two cards together.

### 6.3.1 Get Complete Bibliographical Data

However you decide to take your notes, be certain that they record all the information you need to recover your critical reading and to let your readers know *exactly* how to find that same information. Here are some key elements.

*Before* you begin reading a work, record *all* of its bibliographical information. We can promise you that no habit will serve you better for the rest of your career. Record

- author,
- editor(s) (if any),
- volume,
- publisher,
- if an article is in an anthology or journal, all page numbers,
- title (including subtitle),
- edition,
- place published,
- date.

If you photocopy a section from a book, copy the title page as well and then write in the publication date from the reverse side of that title page. Finally, record the library call number of the book or journal. You won't cite this in your report, but most researchers can tell you how frustrating it is to find in their notes the perfect quote or the essential bit of data whose source was incompletely documented or not even identified. The call number will save you steps when you have to go back to the library to recheck a source.

If your source came over the internet, save all information about where and when you got it, not only the sender and date,

A few years ago, Williams had to withhold publication of an article on Elizabethan social structure for a time because he failed to document a source fully. He had earlier come across information that no one else had thought to use for the problem he was addressing, but he could not use the data because he had failed to record complete information on the source. He searched the library at the University of Chicago for hours, until one night he sat up in bed, realizing the source was in a different library.

1. When you quote or summarize a source, be careful about context. You cannot completely avoid quoting out of context, because you obviously cannot quote all of an original. But if you read carefully, and re-read everything crucial to your own conclusions, your summaries and quotations will be made within the context that matters most, *the context of your own grasp of the original*. When you use a claim or argument, look for the *line of reasoning* that the author was pursuing and note it:

NOT: "Bartolli (p. 123): The war was caused by Z."

NOT: "Bartolli (p. 123): The war was caused by X, Y, and Z."

BUT: "Bartolli: The war was caused by X, Y, and Z (p. 123). But the most important cause was Z (p. 123), for three reasons: Reason 1 (pp. 124–26); Reason 2 (p. 126); Reason 3 (pp. 127–28)."

Sometimes you will care only about the conclusion, but experienced researchers rarely just add up votes—*four out of five sources said X, so I do too*. Readers want to know which conclusions result from arguments, those of your sources and especially your own. When you take notes, record not only conclusions but also the chief arguments that support them. That way, you'll be working in the context of *argued and related points*. (See Part III.)

2. When you record the claims made by your source, note the relative rhetorical importance of that claim in the original: Is it a main point? a minor point of support? a qualification or concession? a framing suggestion not a part of the main argument? Avoid this kind of mistake:

Original by Jones: "We cannot conclude that one event causes another just because the second follows the first. And statistical correlation can never prove causation. But nobody who has studied the data doubts that smoking is a causal factor in lung cancer."

Misleading Report about Jones: "Jones makes the point that 'we cannot conclude that one event causes another just because the second follows the first. And statistical correlation can never prove causation.' No wonder responsible researchers distrust statistical evidence of health risks."

Jones did not make this point at all. He merely *conceded* a point that he stated was relatively trivial as compared to what he said in the final sentence, which is the point he really wanted to make. Anyone who deliberately misreports in this way violates basic standards of truth. But a writer might make such a mistake inadvertently if her notes record only the words without noting their role as a minor concession.

Be especially attentive to "framing" statements at the beginning and end of an argument. Even careful scholars frame their discussions with large contextualizing statements. Sometimes those are their most interesting claims, but while they may believe them, they do not always try to support them.

Distinguish statements that are central to an argument from qualifications or concessions the author acknowledges but downplays. Unless you are reading a source "against the grain" of the writer's plan—for example, you want to expose hidden tendencies—do not report minor aspects of a research report as though they were major ones, or worse, the only information in the report.

3. Be sure about the scope and level of confidence an author expresses in making a claim. These are not the same:

X seems often to cause Y.

X causes Y.

4. Don't mistake the summary of another writer's views for those of the author summarizing them. Many writers do not clearly indicate through a long report that they are summarizing another's arguments, so it is easy to quote those authors as saying the opposite of what they in fact believe.

5. When dealing with sources that agree on a major claim, decide whether they also agree on how they interpret and support that claim. For example, two social scientists might claim that some social problems are caused not by environmental forces but by personal factors, but one might support that claim with evidence from genetic inheritance while the other points to religious beliefs. How and why sources agree is as important as the fact that they do.

6. When dealing with sources that disagree, be sure to locate the source of the disagreement. You need to know whether they disagree over evidence, over their interpretation of the same evidence, or over their basic approach to the problem.

Do not attach yourself to what any one researcher says about your subject. It is not "research" if you simply summarize and uncritically accept another's work. If you rely on at least two sources, you will almost always find that they do not agree entirely, and that's where your own research begins. Which has the better argument? Which better respects the evidence? Is there an even better account that subsumes or refutes one or both of them? In short, at this stage be critical of your sources, guard against being easily convinced by any of them.

Finally, remember that your report can be accurate only if you double-check your notes against your sources. After your first draft, check your quotations against your notes. If you use one source extensively, skim its relevant parts after you have finished your draft. By this time, you may be in the grip of the enthusiasm we mentioned earlier. You'll believe in your argument so strongly that you will see all your evidence in its favor. Despite our best intentions, that temptation afflicts us all. There is no cure, save for checking and rechecking. And rechecking again.

#### 6.4 GET HELP

As your research progresses, you face a growing danger that you will collect information faster than you can handle it. Most researchers face that confusing moment when everything they have learned runs together. While they know a lot, they can't be sure what's really useful. You can't expect to

Whether you are a beginner or expert, mistakes are part of the game; all three of us have discovered them in things we have published (and hoped that no one would find them). Mistakes are most likely when you copy a long quotation. When Booth was in graduate school, his bibliography class was told to copy a poem exactly as written. Not one student in his class of 20 turned in a perfect copy. His instructor said that he had given that assignment to hundreds of students, and perfect copies had been returned by just three. So check everything more carefully than you think necessary. But do not feel that you are the only one ever to make an especially silly mistake. Booth still winces when he remembers the graduate paper he turned in on Shakespeare's *MacBeth*. And Williams would prefer to forget the report he was supposed to give but never did because he could find no references to his assigned topic, that great Norwegian playwright, Henry Gibson.

avoid all such moments, but you can minimize the anxiety they create by taking every opportunity to organize and summarize what you have gathered in writing and as you go.

At such moments, you can again turn to friends, classmates, teachers—anyone who can be a sympathetic but critical audience. Pause regularly to explain what you have learned to nonexperts. Try to articulate a coherent account of how and why what you have learned bears on your question and moves you toward a resolution of your problem. Give your friends progress reports and then ask them questions: *Does this make sense to you? Am I missing an important aspect or question? Given what I said, what else would you like to know?* You will profit from their reactions, but even more from the mere act of explaining your ideas to nonspecialists.

At first you may find it awkward to ask others to listen to your ideas, but don't let that stop you. Make a deal with some classmates that you will help them if they will help you. Form a study group with three or four people who will listen to one another report on their work. Researchers do this all the time. The three of us would never submit a research report to a journal or to a press until we tried it out in public; and before that, we try out our ideas on friends, often on each other. In fact, this book grew out of such conversations, out of testing ideas over coffee.

**QUICK TIP:**  
**SPEEDY READING**

You owe your readers a careful reading of your important sources to be certain that you report not only their main points reliably, but also their contexts, qualifications, and connections. But to discover which sources deserve a detailed reading, you must know how to do a speedier kind of reading to select out those works that are likely to be most important. Such speedy reading cannot be done just by running your eyes over the words of a source.

To identify quickly and reliably the main elements of an argument, you must know where to look for them. To do that, you must understand both the structure of an argument (a matter we discuss in Part III) and the geography of the book or article that reports it (the topic of Part IV). If you are ready to read your sources but have not yet read those two parts, do that first, then review this Quick Tip before you head off to the library.

As you read quickly, your goal is an overview of what your source offers: its topic, research problem, resolution, and the outlines of its argument. At this point, take only enough notes to remind yourself of its gist. You might then set that source aside, but it could turn out to be relevant later as your project develops.

**STEP 1: BECOME FAMILIAR WITH THE GEOGRAPHY OF THE SOURCE.**

Before you begin skimming a source, get a sense of its whole.

1. If your source is a book,
  - read the first few sentences of each paragraph in the preface;
  - look at the Table of Contents for prologues, summary chapters, etc.;
  - skim the index for those topics with the most page references;
  - skim the bibliography, noting dates (current is best, of course) and sources cited most often;
  - flip through the chapters to see if they are divided

into sections with headings and if they have summaries at the end.

If your source is a very long book, a short published review of it can give you a sense of its argument, major claims, and probably an idea of its structure. (Look for a review in the relevant bibliographical source: see pp. 273–90.)

2. If your source is an article,
  - read the abstract, if it has one;
  - flip through its pages to see if there are section headings;
  - skim the bibliography.

**STEP 2: LOCATE THE POINT OF THE ARGUMENT.**

Read the introduction, particularly its last few paragraphs, then the conclusion. In one or the other, you will find a statement of the problem and its resolution. Identify as well the kind of evidence that supports the main claim.

**STEP 3: IDENTIFY KEY SUB-POINTS**

Once you have some notion of the problem and its resolution, you can either reject your source as irrelevant or set it aside for later close reading. If you cannot yet decide, look for the major sub-points that support the main claim.

1. For a book or article, repeat step 2.
2. If the chapter or article does not have headings, identify its major chunks. Look for places where the writer wraps up one major topic and introduces another with transitional words. Train your eye to look for transitions (“First . . . Second . . . Third . . .” “Finally,” or “Now we have to consider Y”).

3. In each chunk, read the first and last paragraph, looking for its major claim. Try to identify the kind of evidence used in the chunk.

**STEP 4: IDENTIFY KEY THEMES.**

Once you have notes on the problem, main claim, and supporting points, scan the source for key concepts. List those concepts along with any bibliographical information on your source. That list of words will help when you review your notes to see

whether sources you did not read carefully at first might later seem worth a closer look.

**STEP 5: (IF NECESSARY) SKIM PARAGRAPHS.**

Steps 1–4 will likely give you the information you need to decide whether to read a source more carefully, but if you are still unsure, skim each paragraph, looking for its point or main idea. If you find nothing in the first sentence or two that feels like a point, skip to the last one.

Whenever these five steps suggest that the source is relevant to your question, put it aside for more careful reading, a process that will be easier because you have already a sense of the most important features of its argument. As you will see when we turn to the matter of planning and doing your own first draft, practice in this kind of speedy reading can help guide your own strategy of writing and revision. If your readers cannot skim *your* reports and discover the outlines of your argument, the organization of your own writing will not have served them well.

**PART THREE**

Making a Claim and Supporting It

*Prologue: Arguments,*

*Drafting, and Conversations*

FIRST THOUGHTS ABOUT A FIRST DRAFT

If you have accumulated a bushel of notes, photocopies, and summaries, and they are spilling off your desk or filling up your hard disk, it's time to think about a first draft. You may have only dim outlines of answers to your most important questions—in fact, you may not yet know exactly what they are. But once you accumulate a substantial body of data, you have to start thinking about what they add up to. One way to get closer to an answer is to sort through your materials in a way that will help you discover in them some pattern or implication and formulate a claim you think you could support.

When beginning researchers start to organize their material, too many sort it under the most obvious topics, arrange those topics into a plausible sequence, and start writing. Unfortunately, the most obvious topics may be the least useful, because they probably reflect not what you discovered through your own hard thinking, but only what your sources gave you. And even if those topics do go beyond the obvious, they are likely to constitute only a linear sequence (A + B + C + . . .), a rhetorical structure rarely strong enough to support a long and complex argument. The worst result is that you just summarize someone else's ideas.

To be sure, sorting is a good way to *prepare* for a first draft—sort your data by any topics that seem appropriate. Finally, though, as you close in on the moment when you have to start planning a first draft, you need a principle of organization that comes not from the categories of your data but from your questions and their answers. You have to organize those answers to support some central *claim* that you want to make, a claim that will stand as the answer to your hardest question, as justification for writing your