

The Craft of Research

THIRD EDITION

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Connecting with Your Reader

(RE-)CREATING YOURSELF AND YOUR READERS

Research counts for little if few read it. Yet even experienced researchers sometimes forget to keep their readers in mind as they plan and draft their report. In this chapter we show you how to think about readers even before you begin your project.

Most of the important things we do, we do with others. Some students think research is different. They imagine that solitary scholar reading in a hushed library. But no place is more filled with imagined voices than a library or lab. Whether you read a book or a lab report, you silently converse with its writer—and through her with everyone else she has read. In fact, every time you go to a written source for information, you join a conversation between writers and readers that began more than five thousand years ago. And when you report your own research, you add your voice and can hope that other voices will respond to you, so that you can in turn respond to them. So it goes and, we hope, will continue for a long time to come.

2.1 CREATING ROLES FOR YOURSELF AND YOUR READERS

All conversations are social activities in which we are expected to play our parts. In face-to-face conversations, we can judge how well we and others do that by sensing how the conversation is going. Do we treat each other as equals, speaking and listening civilly, answering each other's questions directly? Or does one of us seem to be playing the role of expert, dismissing others as a mere audience? We can judge how well a conversation is going as we have it, and we can adjust our roles and behavior to repair mistakes and misunderstandings as they occur. But in an imagined conversa-

tion in writing, once we decide what role to play and what role to assign to readers, those roles are fixed. If as we read we think, *Well, Abrams acknowledges Stanik's evidence, but he's dogmatic in criticizing it and ignores obvious counterexamples*, Abrams can't change what we read next to recover from our judgment. (Right now, we three expect that you're judging us.)

Of course, judgments go both ways: just as we judge a writer as we read, so a writer must judge his readers, but before he writes. For example, the writers of these next two passages imagined different readers, with different questions based on different levels of knowledge about the chemistry of heart muscles. So they wrote in different ways:

1a. The control of cardiac irregularity by calcium blockers depends on calcium's activation of muscle groups through its interaction with the regulatory proteins actin, myosin, tropomyosin, and troponin in the sarcomere, the basic unit of muscle contraction.

1b. Doctors can control irregular heartbeats with the drugs called calcium blockers. When the heart contracts, its muscles are activated by calcium. The calcium in a heart muscle cell interacts with four proteins that regulate contraction. The proteins are actin, myosin, tropomyosin, and troponin. That interaction happens in the basic unit of muscle contraction, the sarcomere.

The writer of (1a) casts herself and her readers as colleagues who know how muscles work. The writer of (1b) casts himself in the role of an expert, patiently explaining a complicated matter to readers who know little. If they judged their readers correctly, their readers will judge them favorably.

• But suppose they switched passages. Someone ignorant of the way muscles work would read (1a) thinking the writer was indifferent to his needs; those who knew how muscles work would read (1b) thinking the writer was talking down to them. In either case, the writers would lose their readers because they misjudged them and their relationship.

In writing this book, we tried to imagine you—what you're like,

what you know about research, whether you even care about it. We imagined a *persona* for you, a role we hoped you would adopt: someone interested in learning how to do and report research and who shares our belief in its importance (or at least is open to being persuaded). Then we imagined a persona of our own: writers committed to the value of research, interested in sharing how it works, not talking *at* you like a lecturer or *down* to you like a pedant, but working *with* the “you” that we hoped you would be willing to be. At times we struggled trying to speak as easily to those of you starting your first project as to those doing advanced work. We hoped that new researchers would not be frustrated when we discussed issues they haven’t yet faced and that more experienced readers would be patient as we covered familiar ground. Only you can judge how well we’ve succeeded.

In fact, we can’t avoid creating *some* role for ourselves and our readers: they will infer them from our writing whether we plan them or not. So roles are worth thinking about before you write a word. If from the outset, you ignore or miscast your readers, you’ll leave so many traces of that mistake in your early drafts that you won’t easily fix them in the final one.

2.2 UNDERSTANDING YOUR ROLE

Since few people read research reports for entertainment, you have to create a relationship that encourages them to see why it’s in their interest to read yours. That’s not easy. Too many beginning researchers offer readers a relationship that caricatures a bad classroom: *Teacher, I know less than you. So my role is to show you how many facts I can dig up. Yours is to say whether I’ve found enough to give me a good grade.* Big mistake. Do that and you turn your project into a pointless drill that demeans both you and your teacher. Worse, you cast yourself in a role exactly opposite to that of a true researcher.

In a research report, you must switch the roles of student and teacher. When you do research, you learn something that others don’t know. So when you report it, you must think of your reader as someone who doesn’t know it *but needs to* and yourself as some-

one who will give her reason to want to know it. You must imagine a relationship that goes beyond *Here are some facts I've dug up about medieval Tibetan weaving. Are they enough of the right ones?*

There are three better reasons for offering those facts: the third is most common in academic research.

2.2.1 I've Found Some New and Interesting Information

You take the first step beyond data-grubbing when you say to your reader, *Here are some facts about medieval Tibetan weaving that you do not know and may find interesting.* This offer assumes, of course, that your reader wants to know, but even if not, you must still cast yourself in the role of someone who has found something your reader will find interesting and your reader as someone who wants to know, *whether she really will or not.* Down the road, you'll be expected to find (or create) a community of readers who not only share an interest in your topic (or can be convinced to), but also have questions about it that you can answer. But even if you don't have that audience right now, you must write as if you do. You must present yourself as interested in, even enthusiastic about wanting to share something new, because the interest you show in your work roughly predicts the interest your reader will take in it. And in you.

2.2.2 I've Found a Solution to an Important Practical Problem

You take big a step toward more significant research when you can say to readers not just *Here are some facts that should interest you*, but *These facts will help you do something to solve a problem you care about.* That is the kind of research that people do every day in business, government, and the professions. They confront practical problems whose solutions require research into the facts of the matter, first to understand the problem, then to figure out how to solve it—problems ranging from spam to falling profits to terrorism.

To help new researchers learn that role, teachers sometimes invent “real world” scenarios: an environmental science professor might assign you to write a report for the director of the state Environmental Protection Agency on how to clean up a local lake.

In this scenario you are not playing the role of a student dumping data on a teacher, but of a professional giving practical advice to someone who needs it. To make your report credible, however, you must use the right terminology, cite the right sources, find and present the right evidence, all in the right format. But most important, you have to design your report around a specific *intention* that defines your role: to advise a decision maker on what to *do* to solve a problem. That kind of research is typical in the world at large but is less common in academic research than the next one.

2.2.3 I've Found an Answer to an Important Question

Although academic researchers sometimes advise EPA directors on what to do, their more common role is that of scholars who help their research community simply understand something better. Others might use their findings to solve a practical problem—a discovery about the distribution of prime numbers, for example, helped cryptologists design an unbreakable code. But that research itself was aimed at solving not the practical problem of keeping secrets, but the *conceptual* problem of not entirely understanding prime numbers. Some researchers call this kind of research “pure” as opposed to “applied.”

Teachers occasionally invent “real world” scenarios involving conceptual problems: a political science professor asks you to play the role of a senator’s intern researching how violent TV affects children’s behavior. But more typically they expect you to imagine yourself as what you are learning to be—a researcher addressing a community of other researchers interested in issues that they want to understand better. Your report on medieval Tibetan weaving, for example, might help rug designers sell more rugs, but its basic aim is to help scholars better understand something about Tibetan art, such as *How did medieval Tibetan rugs influence the art of modern China?*

2.3 IMAGINING YOUR READER’S ROLE

You establish your side of the relationship with your readers when you adopt one of those three roles—I *have information for you*; I

can help you fix a problem; I can help you understand something better. You must, however, cast your readers in a complementary role by offering them a social contract: *I'll play my part if you play yours.* But that means you have to understand their role. If you cast them in a role they won't accept, you're likely to lose them entirely. In this case, the old advice to "consider your audience" means that you must report your research in a way that motivates your readers to play the role you have imagined for them.

For example, suppose you're an expert on blimps and zeppelins. You've been asked to share your research with three different groups with three different reasons for wanting to hear about it. How they receive you will depend on how accurately you imagine the role they intend to play and how well you match your role to theirs. For that, you must understand what they want and what they are in return willing *and able* to do for you.

2.3.1 Entertain Me

Imagine the first group that invited you to speak is the local Zeppelin Club. Its members are not experts, but they know a lot about zeppelins. They read about them, visit historic sites, and collect zeppelin memorabilia. You decide to share some new facts you've found in a letter from your great-uncle Otto describing his transatlantic zeppelin flight in 1936, along with some photographs and a menu he saved. His letter comments on the grilled oysters he had for dinner and tells a funny story about why he happened to take the trip in the first place.

In planning your talk, you judge that what's at stake is just a diverting hour of zeppelin trivia. You meet your side of the bargain when you share whatever you think might interest them—hunches, speculation, even unsubstantiated rumors. You won't show PowerPoint slides, present data, or cite scholarly sources to substantiate your claims. Your audience will play its role by listening with interest, asking questions, maybe sharing their own anecdotes. You don't expect them to challenge the authenticity of the letter from Great-Uncle Otto or question how the photos are relevant to the social history of zeppelins, much less of lighter-than-air travel in

general. Your job is to give an engaging talk; theirs is to be amiably engaged.

Some beginning researchers imagine their readers belong to a Zeppelin Club, already fascinated by their topic and eager to hear anything new about it. While that sometimes works for experts with the right audience (see the box below), it rarely works for students learning to do and report serious research. Your teachers expect you to report not just *what* you find, but what you can *do* with it.

2.3.2 Help Me Solve My Practical Problem

Imagine that your next meeting is with True-to-Life Films. It plans to make a movie about a zeppelin flight in 1936 and wants you to help them get the historical details right, including a scene in the dining cabin. They want to know how the cabin was furnished, what people ate, what the menus looked like, and so on. They don't care whether your facts are new, only whether they are right, so that they can make the scene authentic. You show them your photos and the menu and describe the oysters Great-Uncle Otto ate, but you don't bother with why he took the trip. To succeed in this role, you must help them solve a practical problem whose solution you base not on *all* the data you can find, no matter how new, but on just those *particular* facts that are relevant to the problem of authenticity and whose sources you can show are reliable. Your audience will listen intently and critically, because they want to get the details right.

That's the kind of task you're likely to face if your teacher invents a "real world" assignment—write to an EPA official who needs to *do* something about a polluted lake. Academic researchers sometimes address practical problems like these, but for them another kind of problem is far more common. So pose a practical problem *only if* your teacher creates one; otherwise, check with her first. (We'll discuss practical problems in more detail in chapter 4.)

2.3.3 Help Me Understand Something Better

Now imagine that your audience is the faculty of Zeppo University's Department of Lighter-than-Air Studies (with the same stand-

ing as, say, your English department). They study all aspects of blimps and zeppelins, do research on their economics and aerodynamics, and participate in a worldwide conversation about their history and social significance. They compete with other lighter-than-air scholars to produce new lighter-than-air knowledge and theories that they publish in lighter-than-air journals and books read by everyone in their lighter-than-air field.

These scholars have invited you to talk about your specialty: the social history of zeppelin travel in the 1930s. They don't want you just to amuse them with new facts (though they'll be happy if you do) or to help them *do* something (though they'd be pleased if you got them consulting work with True-to-Life Films). They want you to use whatever new facts you have to help them better *understand* the social history of zeppelin travel or, better still, of lighter-than-air culture in general.

Because these lighter-than-air scholars are intensely committed to finding the Truth about zeppelins, you know they expect you to be objective, rigorously logical, able to examine every issue from all sides. You also know that if you don't nail down your facts, they'll hammer you during the question period, and if you don't have good answers, slice you up afterward over the wine and cheese, not just to be contentious or even nasty (though some will be), but to get as close as they can to the Truth about zeppelins in the 1930s. If you offer new data, like Great-Uncle Otto's photos, letter, and menu, they'll be glad to see them, but they'll want to know why they matter and might even question their authenticity.

Above all, they will care about your documents *only* if you can show how they serve as *evidence* that helps you answer a question important to understanding something about zeppelins that is *more important* than your uncle's trip. They will receive you especially well if you can convince them that they do not understand the social history of zeppelins as well as they thought and that your new data will improve their flawed understanding. If you can't do that, they'll respond not with *I don't agree*—we all learn to live with that; some of us even thrive on it—but with a response far more devastating: *I don't care*.

So you begin your talk:

As we all have been led to believe by a number of studies on the food service on transatlantic zeppelin flights in the 1930s (especially Schmidt 1986 and Kloepper 1998), items were never cooked over an open flame because of the danger of explosions. However, I have recently discovered a menu from the July 12, 1936, crossing of the *Hindenburg* indicating that oysters grilled over charcoal were served. . . . [You then go on to show why that new knowledge matters.]

That is the kind of conversation you join when you report research to a community of scholars, lighter-than-air or not. You must imagine them imagining this conversation with you: *Never mind whether your style is graceful (though I will admire your work more if it is); don't bother me with amusing anecdotes about your great-uncle Otto (though I like hearing them if they help me understand your ideas better); ignore whether what you know will make me rich (though I would be happy if it did). Just tell me something I don't know so that I can better understand our common interest.*

Your academic readers will almost always adopt this third role. They will think you've fulfilled your side of the social contract only when you treat them as who they think they are: scholars interested in greater knowledge and better understanding. To be sure, the faculty over in chemistry or philosophy care little about zeppelins, much less their meal service. (*Can you believe the trivia they study over in Helium Hall?*) But then you don't much care about their issues, either. You are concerned with your *particular* community of readers, with *their* interests and expectations, with improving *their* understanding, based on the best evidence you can find. That's the social contract that all researchers must establish with their readers.

WHO CARES ABOUT THAT?

Academic researchers are often scoffed at for studying esoteric topics that matter to no one but themselves. The charge is usually unfair, but some researchers do become fascinated with matters that seem to have little significance. Williams once attended the dissertation defense of a PhD candidate who had discovered reels and reels of film shot by European anthropologists in Africa and Asia in the early twentieth century. This previously unknown footage fascinated the film scholars on the committee. But when Williams asked the candidate, "How do these new films improve our understanding of movies then or now?" she could answer only that "no one has ever seen this footage before." Williams put his question in different ways but never got a better answer. The film scholars, on the other hand, were untroubled (and found Williams's questions naive), because they were already imagining how the footage might change their thinking about early film. And in any event, they all loved old film for its own sake. So sometimes new data alone are enough to interest the right readers. But if that candidate hopes to write anything that interests anyone but a tiny coterie of specialists, she will have to make an offer better than *Here's some new stuff*.



QUICK TIP: *A Checklist for Understanding Your Readers*

Think about your readers from the start, knowing that you'll understand them better as you work through your project. Answer these questions early on, then revisit them when you start planning and again when you revise.

1. Who will read my report?
 - Professionals who expect me to follow every academic convention and use a standard format?
 - Well-informed general readers?
 - General readers who know little about the topic?
2. What do they expect me to do? Should I
 - entertain them?
 - provide new factual knowledge?
 - help them understand something better?
 - help them do something to solve a practical problem in the world?
3. How much can I expect them to know already?
 - What do they know about my topic?
 - Is the problem one that they already recognize?
 - Is it one that they have but haven't yet recognized?
 - Is the problem not theirs, but only mine?
 - Will they take the problem seriously, or must I convince them that it matters?

4. How will readers respond to the solution/answer in my main claim?
- Will it contradict what they already believe? How?
 - Will they make standard arguments against my solution?
 - Will they want to see the steps that led me to the solution?