COMMON PITFALLS IN INTRODUCTION WRITING

Stephanie Weber, Simon Engler, and Zuri Sullivan

The introduction is your first chance to make an impression on your readers and to convince them that your paper is worth their time. While there are many ways to make a good first impression (see "Crafting an Academic Introduction in Graduate and Professional Writing" if you are just starting out), there are several categories of missteps that students often make.

This guide describes common problems encountered in graduate student introduction writing and offers suggestions for how to avoid or correct these mistakes. You may notice certain advice applies to multiple pitfalls (for instance, showing your writing to colleagues in your field, considering your audience, etc.)--in fact, much of this advice applies across academic writing.

In each section, after the problem is explained, we give an illustrative example or two. As an exercise, you can consider how you might improve each introductory sentence or paragraph.

Pitfalls 1A and 1B: Hooks that are too detailed or too general

The first one or two sentences of your introduction should invite your audience to read on and set the stage for the rest of your article. Crafting an effective hook, as those first few sentences are known, is essential.

One feature of a good hook is the right level of specificity. If your hook is too general, readers will struggle to understand what your paper will be about. But if it's too specific, they may have a hard time understanding your argument's broader significance. Aim for the middle ground, giving your readers a glimpse of both your particular argument and why it matters.

Tips to avoid this issue

1. Identify a question important to your target audience that your research helps answer. First, determine your target audience. Is it general practitioners in your field? Specialists? Policymakers? Depending on your answer, is there a question *in your field or subfield* to which your paper contributes an answer? Describing that general question and *how your research helps to answer that question* is a good place to start. Note that in some fields, explicitly asking questions in the introduction is frowned upon.
2. Try starting with a colorful detail, while pointing to the broader importance of your argument. Does your research question involve an interesting case study or anecdote that you can describe in a few sentences? Can you present that case study or anecdote before introducing your research question and argument?
3. Show your introduction to a trusted peer, ideally from outside your discipline. After reading the first few sentences, do they feel motivated to read on? Do they have a hunch about what your paper will discuss, and why your argument matters?

Consider the following (overly detailed) first sentences. The first introduces a paper on legal strategies to contest the pollution of rivers and streams in a U.S. state. The second introduces a paper that assesses financial reforms in a country's health sector. Notice how both dive too far into the details, too quickly, leaving readers unsure of why they're reading the introduction that follows.

> "Recreational fishermen in State X may be able to pursue lawsuits against state agencies to contest the agricultural pollution of state waterways under the state's self-executing public trust doctrine."
>
> "In Country Y, the ministry of health's acquisition of an effective financial management information system helped officials introduce performance-based financing across the country's healthcare sector."

Now, consider these introductions that start out too broadly. The first is an introduction to a paper on the efficacy of a tax incentive applied to the purchase of electric vehicles. The second introduces a paper that will examine transcription factors that regulate a specific oncogene.

> "Since the dawn of human history, people have struggled to get from one place to another. In the last century, gasoline-powered vehicles came to prominence and revolutionized transportation. Now, a new electric vehicle (EV) revolution is ongoing, albeit slowly. A number of incentives from the federal and state governments have been put in place to encourage purchases of EVs, including a $7500 tax credit intended to bring EV costs in line with conventional vehicles, but the results of these incentives are understudied."
>
> "Animals are made up of cells. DNA is the genetic material that is used by all life to store information."

Pitfall 2: Relying on abstractions

Your readers should come away from your introduction with a clear understanding of your article's argument and its significance. To impart such an understanding, you should use concrete, specific language. And you should avoid abstractions that obscure meaning and leave your readers uncertain about your intentions.

Academic writers turn to abstractions for a host of reasons. They may seek to emulate others in their discipline who have used similar language. They may suspect that their diction signals nuance or sophistication. They may be uncertain about their own argument and rely on vagaries to avoid having to pin it down.

Of course, some abstractions are useful. But in your introduction, you should be especially careful to avoid prose that leaves your readers wondering about your meaning.

Tips to avoid this issue

1. <u>Remember that your audience may be unfamiliar with your subject and are likely reading your essay without knowing what you'll argue.</u> It is your responsibility to bring them up to

speed with any background or context they will need to understand your arguments (without necessarily going back to the dawn of human history, as discussed in pitfall 1). Exactly what you expect your readers to know depends on who you believe your readers are, so be sure to write with an audience in mind.

2. Consider using more words—or more sentences. Concision is a writer's friend, but don't hesitate to expand if doing so makes your meaning clear.
3. At the same time, simplify. Avoid nouns that do the work of verbs, verbs that are so vague as to do nothing, and the passive voice.

Consider the following sentences, each of which attempts to explain a paper's purpose:

> "This essay offers a reconsideration of localized narratives regarding pro-worker social efforts in the face of assumptions about the linkages between disparate labor actions and social movements."
>
> "By highlighting existing but disjointed understandings of economy and society in Republican-era China, the prevailing view regarding women's roles in handicraft production is problematized."

Pitfall 3: Introductions that are disconnected from the main ideas of the paper

The purpose of an introduction is to give the reader a preview of the ideas you will present in your paper, and to put them in context. Sometimes, it can be tempting to rely on quotations, anecdotes, or abstractions (see above) in crafting an introduction. While these are all useful techniques, be sure that they are serving the main purpose of the introduction, which is to *introduce* the reader to the ideas that you will present in your paper.

Tips to avoid this issue

1. Put yourself in the reader's shoes. If you were to read your introduction, and only your introduction, would you have a clear idea of what the paper was going to be about?
2. Check your transitions. Does the end of your introduction transition smoothly into the first set of ideas you'll introduce in your paper?
3. Take inventory. Is each idea presented in your paper discussed in your introduction?

Consider the following introductory sentences to a paper about gene regulation in a specific type of immune cell.

> "In November 1859, Charles Darwin published *On the Origin of Species*, which describes the critical process of natural selection. Around the same time, Louis Pasteur made seminal discoveries in the realm of microbiology. These major contributions to science have influenced every aspect of modern biomedical science."

Pitfall 4: Failing to highlight the paper's contributions to the field

Part of convincing your audience that your paper is worth reading is persuading them that your ideas are novel. This can be done effectively by describing the existing literature, identifying the gaps in knowledge, and clearly explaining how your paper addresses those gaps. In some fields, it is typical to include several paragraphs discussing the literature in your introduction (though not all! Take a look at example papers in your field and see if you can determine what your field's norm is). However, graduate writers sometimes spend too much time describing other papers without making the link to their own work.

Tips to avoid this issue:

1. Be explicit about the gaps. For each paper or category of paper, you should make clear to the reader what those papers are missing (nicely! Those authors may be reading your work) and what your paper adds. Does the reader come away with an answer to the question "what is novel about this research or argument?"

2. Consider why each paper or strand of the literature is worth mentioning. Remember, it's not your job to tell the reader about every paper that is at all related to your topic. Each paper should be mentioned *for a reason*.

Consider the following discussions of literature, each of which summarizes existing research without identifying gaps and how they are addressed. The first is for a paper that examines whether people buy more flood insurance after a major flood event elsewhere in the country, and the second is an introduction to a paper about intestinal physiology.

> "This paper connects to several strands of the literature. First, there are papers that look at other insurance markets, like health insurance (Jekyll et al, 1886; Dorian and Turk, 2003) and car insurance (Ford, 1908). Second, there is survey research on the (mis-)estimation of flood risk among homeowners (Waters, 2012). Finally, there is a long line of research examining the availability heuristic and overreaction to the occurrence of a natural disaster (San Andreas, 2018)."

> "In 2018, the Locksley group showed that tuft cells regulate host defense against helminths (von Moltke et al *Cell* 2016). Another group showed in 2017 that antimicrobial peptide-producing Paneth cells increase in frequency following infection (Haber et al *Nature* 2017). Finally, in 2018, it was discovered that succinate triggers tuft cell production of IL-25 (Schneider et al *Cell* 2018)."

Pitfall 5: Too much jargon (without definitions)

An effective introduction will gently guide your reader into the material that you will present throughout your paper. It should pique the reader's interest, and motivate them to continue reading. Too much jargon in an introduction can intimidate your reader, and make them less likely to

want to continue reading. Try to limit the amount of jargon used in your introduction, and be sure to define any terms that might be unfamiliar to your reader.

Tips to avoid this issue

1. Ask a colleague. Find a colleague or friend whose background is representative of your audience. Maybe they are in your field, but not familiar with your specific area of research. Maybe they are in your discipline, and outside of your field. Or maybe they aren't in your discipline at all! Have this person read your introduction and assess whether they understand all of the terminology you use. Eliminate or define any terms that are unfamiliar.
2. Limit acronyms. An introduction can be a useful place to introduce the acronyms that you will use throughout your paper. However, it is absolutely critical that you define each acronym the first time that you use it. Unless an acronym is common knowledge (e.g., DNA), assume that your reader won't be familiar, and be sure to define it.
3. Start broad. Any technical language in your introduction should be introduced gradually. A great way to do this is by starting with a big picture idea that uses language that your audience will be familiar with, and slowly introduce more niche concepts and terms.

Consider these introductory sentences to a paper examining how a specific type of immune cell influences host defense

> "ILCs are important regulators of defense against *S. typhimurium* and other infections. By producing IL-22, IL-13, and IL-5, ILCs control tissue homeostasis and barrier defense in the intestinal epithelium."

Resources

"Crafting an Academic Introduction in Graduate and Professional Writing" on the GWL website

"Use Concrete Language," a short video tutorial on avoiding abstractions from the University of Nebraska's Office of Graduate Studies

"Complex and Abstract Words," from the federal government's Plain Language Action and Information Network

"On the Dissertation: How to Write the Introduction," in the *Chronicle of Higher Education*

Scientific Writing and Communication, by Angelicka Hoffman