How to Write a Research Paper

(With an eye on publication)



Paul Talcott



trAndeS

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Abstract

This document is a guide for writers of social scientific articles based on empirical research, including course papers and theses as well as conference papers, discussion/working papers, journal articles, book chapters, and monographs. It offers tips for structuring research articles and tailoring them to specific audiences, warns of common mistakes, and allows insights from an experienced editor into what the most important elements are for a successful publication.

Keywords: research paper | publishing | structure | academic writing

Biographical Notes

Paul Talcott holds a Ph.D. in political science from the University of Harvard and is a longtime academic English-language editor.

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1. Prequel – observations of an editor

These remarks are intended for writers of social scientific papers based on empirical research. This is because that is where I had my training and have used in practice in various disciplinary and cross-disciplinary settings. I am taking for granted that you have been convinced of the need to write like this, at least for a paper for a social science class. As I work in an interdisciplinary environment, I recognize the value in other kinds of papers. For other disciplines, there are other guides to writing, and the conventions are too numerous to explore in detail here.

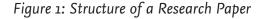
This paper focuses on the general concept of "research paper" because it is the format out of which other products can be developed for publication. It is also the first format of academic writing that you will encounter as an academic – and perhaps the last form if you plan to go into (or stay in) another profession. In the presentation, I develop distinctions between conference papers, discussion papers/working papers, book chapters, and papers for publication in journals. I will spend less time on monographs because these have their own set of conventions, and the expectations of the book market are different from those of the professional journals at the core of publishing today. All of these products share in common the transmission of findings from your research in a way that others can understand and apply to what they already know.

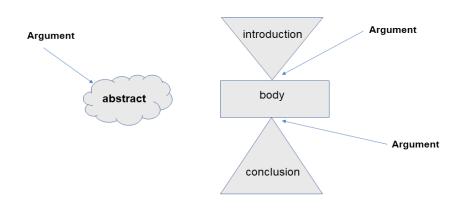
In this paper, I present a structure, the purpose of which can be expressed as: "tell them what you are going to say, say it, then tell them what you said." More seriously, why use a particular structure for writing research papers? The main purpose of using a consistent structure is to provide the transparency required to bring your research to interested readers. Readers tend to bring the same expectations to each research paper: having the same structure in every paper allows readers who read considerable numbers of papers in a brief time, or who are not experts in the subject of the paper, to understand your contribution. In this way you are writing for a certain kind of audience. For conference papers, the audience is attendees at a particular panel at a specific conference. That audience may be new to you, and your panelists as well, or it can be a community of like-minded people who meet quite regularly in many different venues. By contrast, the audience for papers that will be published includes a range of people whom you may not know directly: the editor of the journal, the reviewers assigned to your paper, the readers of the journal, and a larger audience as well in your area of specialization. And while a journal has a specific area of concerns, determined strategically by the editorial board and in practice by the editors, the publishers of printed or online monographs or edited volumes have a broader target, including people further outside your specialty. As a result, publications such as book chapters, or monographs will change more in a review process than journal articles. However, the process is similar: presenting your contribution in a format that your audience expects. The basic structural ingredients will be the same.

This also makes it important to use this consistent structure when starting out and submitting papers for a course. It is not just a form of training – it is also a way to find out whether the format is something you want to pursue in further academic work, or as a professional in the academic field. In this business, for those people not immediately in your surroundings, you are what you write. That is why it makes sense to look at how to structure what you write in a way that is fair both to your contribution and lives up to the general expectations of others. This is also indeed what makes social science "social" – it is a conversation.

The structure I discuss in this paper will be appropriate for all kinds of social science writing, including course papers and theses as well as conference papers, discussion/working papers, journal articles, book chapters, and monographs. Although each type will modify the parts according to difference in scope, length, audience, etc., they all share these common elements. Having said that, the closer you are to a class or another group that meets regularly, they may be extremely specific in their expectations, which can at times be more important than general guidelines. Graders, reviewers, peers, and other informed readers will be best able to understand and evaluate your argument when you follow this format.

At the most general level, a research paper should have a structure which provides certain components in a certain order. Please refer to Figure 1. It begins with an introduction, ends with a conclusion, and in between, there are a number of elements that are collected into the body of the paper. This structure represents a consensus of sorts but is more than just an arbitrary set of customs. It also has a purpose. For social science papers, this purpose is to convey your argument clearly in the context of arguments made by other scholars, as part of a larger discourse. One of the most important things to keep in mind to achieve this goal is that your argument needs to be at the center of everything.





This particular structure also has a history. Social science is a relatively new discipline, and in its current form in English is mostly the product of the post-World War Two expansion of universities in the United States (and later in the United Kingdom). At first, writing conventions were developed in the publishing houses and journal editors employed by those universities, but as the number of universities grew, the role of private publishing companies expanded with the rapid increase of the output of research publications – which now hold a keystone role in the hiring, promotion, and tenure of scholars.

The nature of the publishing industry has implications for how to write as well. Because reviewing publications consumes an enormous amount of energy and time, and even the private publishers do not pay their reviewers, it is essential to meet the expectations of the reviewers regarding the structure of papers. The reviewer community has generally converged on a collective understanding of what needs to be in a publication, how it is to be structured to make the argument as clear as possible, and how all of the aspects that underpin it must be as transparent as possible to the reader. While previously access to personal networks played a large role in the publication process, with the proliferation of journals, unpaid external reviewers are in the position to judge whether contributions will be accepted or not. This makes the common form of expectations for the structure of a paper essential to pass the first judgment: whether to initiate the review of the paper, or to simply reject it outright. The common standards for content are much more specific to each journal, of course, but one thing they all share is the expectations about how papers will be organized, and the kinds of components of which they consist.

In other words, as a writer of a social science paper, you have several responsibilities. These can appear overwhelming when you do this for the first time at a professional level. The good news is that there are any number of things that are not necessary, unproductive, or simply too much work for one social science research paper. Cutting them out makes your task less complicated. For example, given the physical limit on words (8,000 to 10,000), and also the close focus of editors and reviewers on examining your unique contribution, you do not have to attempt to show how much you know about a subject and try to describe the full background of empirical phenomena in such a limited space. You can also discuss just the one part of the literature most applicable to your paper, and not everything remotely connected with it. In the world of 40 years ago, universities employed specialized reference librarians to help orient scholars to the key corners of the subfield into which they were entering. Now this task has been outsourced to algorithms and the individual scholars, and the temptation is great to summarize the vast amounts of literature that touch on your topic. Another thing that you can omit from your paper is a direct attempt to prove the argument of established scholars to be unequivocally wrong. Sometimes it is tempting to point out serious problems in the work of previous scholars, if you are just starting out. Trying to prove experts in the field conclusively wrong in one paper may not help get your publication accepted, since some of these experts or their followers (*or their students!) may be deciding on whether to accept your paper for a particular conference panel, journal, or manuscript publication. As a motivating force, however, challenging arguments as being wrong is quite powerful, so if this is your approach, be sure not to assign the argument too closely to a person or a "personal" brand.

The more difficult implication of the common expectations is that within these limitations, however, you still are responsible for making sure that several points have been covered. The overall goal of convincing readers that your argument is valid and important involves showing readers that you understand the subject, how the subject is understood in the field, and what your argument does that reinforces or challenges one or more (ideally contemporary) approaches to the subject. What this means in practice is that choosing what sources to read involves reading many more sources than you will end up citing, because some of them will turn out to be obsolete, unrelated to your argument, or unhelpful. You may also find some of your findings to be already in the major literature. It is good to keep a record of your decisions about which authors to include and which to disregard, it is an issue that may come up in reviewer comments.

In other words, the writing process for a research paper in social science includes the reading process as well. Although there are some subfields such as anthropology where the intellectual journey of the author is a key part of presenting research findings, in other fields this is not the case, so in general, a research paper is a summary of your research, not a complete record of your research journey like a lab field book – although keeping a journal about how you wrote the paper can be an ideal resource, for example, to reflect on parts of the paper that did not fit in this one and use it for others.

Both reading and writing are done in service of your argument, which is at the center of this paper structure. What kind of arguments work best in a paper? I would side with those who advocate the principle of one paper, one contribution. Address one problem in the literature. Analyze a new set of evidence that challenges a consensus or supports one of several contending understandings. Present a completely new argument that makes sense of existing evidence that produced competing explanations in the literature. Point out a disagreement in the literature that can be resolved by more close attention to building the arguments. All of these approaches try to accomplish just one job. By making one point, readers (and especially busy reviewers and busier editors) will understand more quickly what your contribution is going to be. Along the way, be particularly careful to make a constructive argument, and not focus too much on discrediting others (depending on how it is done, this could even expose you to claims of libel or disparagement). In the end, you want to be known for what you contribute more than for what you tear down.

2. The writing process and the elements of the paper

The writing process responds to the demands of the structure of a social science paper. In particular, the structural elements of the paper all contribute to fleshing out an argument. The writing process is not only linear. In the actual writing process, each of these elements are developed, combined, recombined, interlaced, and revised after the first draft. The problem with using published scholarly work as an example for writing is that it might seem like the papers have been written in exactly the order that the words and sections appear in the paper. While this is in part possible for the structuring of the paper, the various parts may indeed be written in a completely different order. Particularly for new work, such as for a conference paper proposal, one often begins with about as much information as would go in the abstract. For more detail on the abstract, please see Figure 7, since for a research paper the abstract should be revised at the final stage of paper writing. This idea can then be worked into the standard structure (Figure 1) as an initial stage, and each section can be worked on in turn. In practice, some sections will require more additional work than others, particularly the theory section, parts of the evidence, and when reading you may notice other sources quite close to your argument that make it necessary to change your approach slightly. At the end of the first draft, it is time to assess whether you need to change the paper in these respects.

For example, you may find that the evidence you have found is not as strong as you anticipated. This can happen when a paper is agreed to (or even accepted to a panel) based on an abstract before it has been written. Then you may even need to go back to adjust your question to something that your evidence can speak to or look for additional or various kinds of evidence than you originally anticipated. You may also find during your review of the existing literature that there is a lesser-known stream of literature that has already addressed your main argument – and in the worst case, has already published an argument remarkably similar to yours.

You may also find that certain sections do not provide enough information, and should be cut, or provide far too much information, and should be reduced, or placed in another paper entirely if your findings go in a completely different direction. For these reasons, the introduction and conclusion, while important to complete in the first draft, are going to change entirely while writing the paper. The conclusion has more freedom to move into areas where your findings have implications – but the introduction should be the important map, and it will have to be revised last after all of the other sections have found their final form. After all, in the first version, you may have referred to sections that were revised out. In one sense, this may appear to be multitasking, but unlike juggling different streams of work responding to different demands, all these tasks are related to the main task of developing your argument – within the limited space of a paper.

The elements that do not change are where to put the elements of your argument, and how to link together the various parts. I will discuss these in the order as they appear in the structure of the final paper, but certain processes will happen out of this sequence, it is a dynamic process.

2.1 Research question

Developing a solid research question is a crucial step before making an argument. For the writing process, it is an essential bridge that also serves a social function: creating the link between what has been said before and what you are saying. When formulating a research question (and when reviewing it later), use a series of questions to make the jump from what you are thinking to what is written out on the page.

- What do I want to say?
- Which approaches from the field are guiding my research on this issue?
- What have other scholars said about the specific or general issue I am addressing?
- How do I phrase the question as a question that is subject to a clear answer?
- What is my answer?
- What does my answer mean for the field where I am making a contribution?

There is a back-and-forth process between the research question and how you plan to answer it. The choices you make about methodology and evidence both have a reciprocal effect on the research question – certain questions imply certain methods or kinds of evidence. In turn, certain kinds of evidence suggest certain methods and limit the kind of research questions that you are able to ask and answer. Furthermore, some questions have already been addressed in the literature sufficiently to reduce the interest in the community in publishing one more contribution in that area. Because they keep a close eye on value-added for their own publication venue, this concern affects journal articles and monographs or edited volumes more than conference papers, but for competitive panels and papers, it matters even at conferences.

A research question can be motivated by several diverse kinds of responses to evidence: surprise (finding something unexpected by current approaches), revision (reconsidering existing evidence using an innovative approach), or even novelty (first consideration of something seen for the first time). In asking a question, the answer should not be obvious from its formulation. In particular, it should not just restate your position in a question form. What it must do is convey to the reader that you have understood what other scholars have said about the issue at hand. In a class, this should draw on your readings for the class, including any optional readings. Your question then is the springboard that applies the approaches (or takes issue with them) to develop your argument. As it is social science, we are usually looking into what is causing what. The big question is always "why" something can be expected to happen or fails to happen despite expectations. Given the constraints of word counts, the

"how" questions are also interesting: even when the general causes are well-known, there can be processes that have emerged and are yet to be fully explored, for example, consultative processes brought about by international treaties. This can also introduce factors that appear to either stop causes previously considered to be important from having their effect, or to have an unexpected effect. Often these kinds of "how" questions will also be examining newer evidence made possible by first-time observations (new data, new interviews, newly opened archives).

2.2 State of research

Present the main arguments in the field and position your argument in agreement with, opposition to, or supplemental to them. There are several ways to position your argument, and the way you position it has implications for what you must do to present the state of research. For empirical phenomena: describe in as few words as possible in a way that a non-specialist in the same field could understand what you are researching empirically. There is limited space, so a concise description is important. Use your own words, cite useful larger reference works so readers can look for themselves for more empirical information.

When presenting the state of research, keep in mind that space is limited, so most of the paper should be your analysis. If you find yourself citing sentence after sentence over several pages, or multiple paragraphs of block quotations, consider rewriting these sections to make clear how the argument of the author relates to your argument. With lots of text from other authors, you will have that much space less to make your own contribution clear. For conference papers and journal articles, the readership will know the content of the major approaches in the literature, so you do not need to hold an exposition of exactly how all the parts of their approaches work and fit together. Instead, describe the position as briefly as possible, and embed it in a conversation with other approaches. By creating such a discussion, not only do you demonstrate your engagement with the material, but you also open space to bring your argument into focus in the same space.

2.3 Methodology

Choosing the method is a core part of writing a paper. Each method has implications for how the paper will be researched – which in turn shapes how it will be written. The method will also shape where the paper will be presented, conferences, panels, and journals are all sorted finely across this kind of decision. Papers that do not use a clear method are harder to evaluate for reviewers, in general, and therefore it is in your interest to be as specific as possible in describing yours. The use of multiple methods is also rising, but these are more often collaborative efforts involving specialists cooperating on a panel or in an edited volume. In any event, if you use multiple methods, explain why this is an advantage.

2.4 Where to place your argument, and why

Your argument should be clearly made in three places in the paper. First, at the end of the introduction. Second, at the beginning of the conclusion. And third, it belongs in the abstract (see Figure 7) so that readers know where you are going to argue. Placing your argument clearly in all three places makes it easier for reviewers to find your argument quickly. In the introduction, the content of your paper should be discussed in a short form - your argument is indicated in an abbreviated form, placed in a general context in the literature, the method you are using is described, and what evidence you are examining. By contrast, in the conclusion, you can discuss the broader implications of your argument and leave some doors open for future research, whether your own, your future team of researchers, and others. What links both of them is a clear statement of what you are claiming. In some languages other than English, and in other forms of prose in English, authors put out small pieces along the way and the reader is expected to pick them up like breadcrumbs on the forest floor, leading the way to safety in myths. In social science papers, by contrast, people need to be told relatively often what you are trying to show, how you have shown it, and what it means for what is already being discussed. People also try to read all the recent papers on a subject – and if your chapter/article/book does not make a clear argument, it may not be accepted for publication, or if it is published, it will join the ranks of the "uncited" papers and chapters that are the majority of social science publications. The other place to put your argument is at each step of the way in the body of the paper. This involves linking each paragraph back to the argument, I will discuss this more under the "paragraph" section below. The main point is that each structural element in the paper supports the building of the argument transparently.

More bluntly, people are busy. Especially scholars in your field. They are busy writing their own papers. (They want to read your paper but not to spend too much time, after all, their own work is still waiting). They are also in the business of reviewing many papers, not just yours. Conference organization, teaching, administration – all of these requirements make it important that your contribution is quickly visible to an interested, but busy reader. Content is not the only thing that is at stake here – it is a matter of presenting your research and argument in a way that is quite easy to find. In English publications, there are a series of conventions that you need to consider, at least when finalizing your paper. This can happen from the beginning if you write from beginning to end, but at the latest in the revision stage this part needs to be done.

To be fair, sometimes you do not know how your argument will develop with the evidence you present until it is written out for the first time. Sometimes people will give you feedback that only one aspect of your complex argument is worth emphasizing in that particular paper. There are many paths to the final product – but the standard for making it accessible to busy people needs to be applied before sending it out.

3. How to structure the paper: a general guide

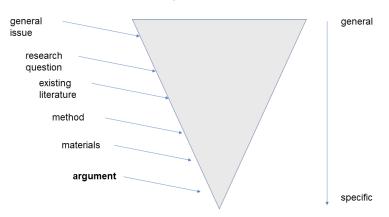


Figure 2: Introduction: The Inverted Pyramid

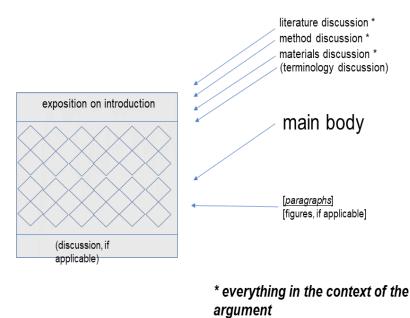
3.1 The Introduction

The introduction - this holds everything needed to introduce your argument briefly: the research question, the literature, the method, the body of evidence examined, and most importantly your argument. Figure 2 shows the list of what it needs to do and where it should go. Notice what is missing: it does not need to map out the parts of the paper, but it should instead introduce the content of each of them. For example, while it can be useful in a presentation to orient listeners that "first I will discuss the existing literature, then I will address the method I used, then point out the implications of my argument," most readers tacitly expect this kind of structure without it being listed separately. Furthermore, they are extremely interested in what literature you address, which method you use, and what the specific implications are for what they know. Go ahead and state them directly. That is what an introduction is for: an introduction to your argument. In general, the introduction will follow an inverted pyramid format, from the general concerns that motivated you to write the paper, through what the literature says about the subject of your paper, then the evidence you will examine and the method you will use to examine it. Moving through from the general to the specific will attract the attention of readers and reviewers and give them enough to determine quickly what it is you are setting out to do.

3.2 The Body

The body is where you develop your argument fully. Figure 3 shows how the various parts of the body are expected in separate places. One of the aspects reviewers examine is that you have made clear the context of where your argument fits (the literature), the method of evaluating your claims (method), and what empirical evidence supports your argument (material). This makes these elements important to discuss in the beginning of your paper at the same time as you set out with your analysis. It can also be performed in the context of presenting your case. This is easier in a format that allows extensive footnotes. Some formats

discourage footnotes and ask that they be used only sparingly. Others use footnotes as a venue to present these elements such as the state of the literature in order to save space in the text for the main argument.



In addition to text, the body will include any figures, tables, images, or block citations that you use to present your analysis or evidence. Be sure to discuss the visual elements in the text completely. Depending on your method, the tables and charts may show significant amounts of your findings. The results might be apparent to you from looking at them, but be sure to spell out their implications for your argument in the text itself. If you have used data or images from another source, check that you have permission to use them (see the Points of Caution section at the end of this paper).

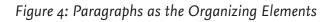
Depending on the focus of your contribution, the sizes of the various pieces in the body will be different. The main thing is to tailor the relative space you use to the importance for your argument. For example, a contribution that compares different expectations from two different approaches on a similar empirical phenomenon to something that has not yet been examined in depth would spend more time explaining and contrasting the two approaches, before using them to look at the new phenomenon. On the other hand, a discussion of completely new kinds of evidence (Twitter feeds? Facebook traffic?) would need to spend more time describing how this new material can be used and the methods that can be used to understand it. Still, each piece that you put in your paper should build your argument. This is what I mean by placing your argument at the center of paper writing.

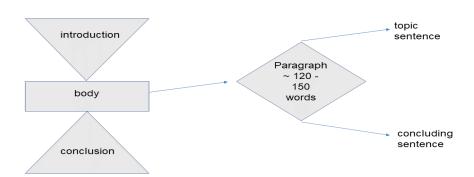
Figure 3: The Body

One issue that might require an additional section involves terminology. For example, if the paper introduces or discusses terms that are not common in English or some specialized technical terms in a particular industry. In this case, a paragraph toward the front should introduce these terms, define and describe them, and give links to more information about their meaning. Then the term can be used subsequently without further explanation.

3.2.1 Body parts: Paragraphs

The core components of the body of the paper are paragraphs. A paragraph for social science serves a specialized purpose. They should be long enough to state something, but short enough to make mostly one point. To make that point, reviewers expect to know what that point is by what is stated at the beginning and the end of the paragraph. Whereas for the introduction (and conclusion) the structure looks like a pyramid, the paragraphs in the body look more like diamonds (see Figure 4).





Each paragraph should discuss one topic. Readers expect that each sentence begins with a topic sentence that starts the paragraph to orient the reader to what will come next. At the end of the paragraph(s), a concluding sentence tells the reader what was just discussed in the paragraph. This custom has a considerable advantage for developing your argument in a way that a busy reader can understand quickly what your findings are, how you found them, and what it means for what the reader already knows and cares about. Reviewers are expected to read the entire manuscript, but readers deciding whether to read your paper in depth tend to skim. Skimming strategies usually involve reading the introduction, then only the first and last lines of each paragraph in the body of the paper, then the first part of the conclusion. So, this structure is a kind of advertising campaign in a way: using it helps attract new readers. At the reviewing stage, there is the risk that if reviewers do not find an uncomplicated way to piece together your argument from how the paragraphs begin and end, they may form a negative

impression of your manuscript. This negative impression starts with the perception that you sent in a preliminary version that had not been fully completed and can even get to the point that readers think that you are unsure of what you want to convey. The more that your paper can follow this kind of structure, the more interest your readers will have in reading further.

The ideal length of a paragraph also has an optical component: paragraphs that spread over two or more full pages simply look too long. Aim for about 150 words. Anything less than 75 words should be expanded or combined with another shorter paragraph.

When writing paragraphs for your paper, try to avoid too many long sentences in the same paragraph. Help busy people to read your paper! It helps the reader maintain focus while reading your paper, whether slowly or quickly (most of them). While some thoughts are quite complicated and require longer sentences with a complicated structure to say exactly what is meant, the reader's eyes tend to lose track when looking at a page that is only this kind of sentence. Furthermore, if all the sentences are long, paragraphs can only have a few sentences each, and it is harder to make an argument in a limited amount of space. In the 18th century, one fashion in English writing considered long sentences that went on over an entire page, or pages, to be the height of literary ability. This was not just limited to literature: political pamphlets, magazines, and certain scholarly texts are quite wordy. Then came Ernest Hemingway, mass-market newspapers, and the focus by the early 20th century shifted to writing sentences as short as possible. This had the advantage of fitting more information on the same page, saving space (and money!), and making text accessible in cheap printed magazines to a much broader public than the elites who could afford exquisitely printed and bound books in the 18th century. This is a caricature, of course, but the principle of economy of prose is now most important.

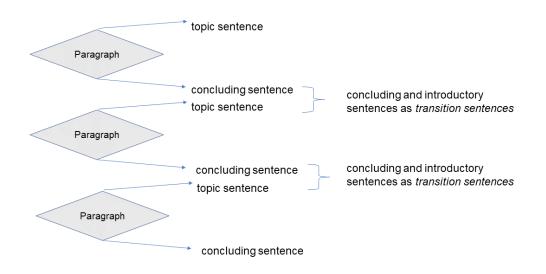
The most famous example, and by now controversial for its very restrictive rules: *William Strunk's Elements of Style*¹. Initially aimed at newspaper articles, the advice slowly spread to academic writing. It is useful advice because there can only be a certain number of articles in any given volume of a journal. For each article to have a fair amount of space, an arbitrary word count is set. Writing with as few words as possible thus has an advantage for the author as well: the shorter the sentences, the more you can say in the same article. Translating this to scholarly papers turns out to be much more complicated in practice, because some thoughts are actually quite complex and require rather ornate sentences, but the main idea as applied is to keep things as simple as possible, then there will be room to say more in the same amount of words. This remains useful guidance, but some points are more nuanced than others.

¹ Now in the public domain (New York: Harcourt, Brace & Company, 1920 online at: https://www.gutenberg. org/files/37134/37134-h/37134-h.htm).

3.2.2 Transition sentences: linking the parts

The rhythm within a paragraph is important to vary – how can you connect paragraphs with each other? Often the temptation is to simply write up each part on its own, and this is indeed an important first step. But readers like to have an orientation to where things have been, and where they are going. After all, the exposition of the argument takes some time. At 10,000 words, and an average paragraph length of 125 words, there are about 80 paragraphs in a standard research paper. Therefore, in these topic sentences, and especially in concluding sentences, you should try wherever possible to make some sort of transition between what has come before and what will come next. Figure 5 shows how they link up the paragraphs to provide a framework to link the paper.

Figure 5: Transitions between the Paragraphs



In a practical sense, it is not easy to do this when writing the first draft. One reason is that sometimes the sections are written out of order, due to availability of sources, the time required for compiling a table or chart, and the need to rewrite previously written material for a different paper. This makes the revision step even more important: the paper will consist of some elements that have been prepared on their own. In this revision, think of ways to link the various sections of the paper by including transitions in the topic sentence and concluding sentence. This will make your work hold together for readers and reviewers to understand quickly.

3.3 The Discussion

The discussion brings together all the different strands of the paper into a single setting where you discuss your results taken together and place the answer to your research question in the context of the existing literature. A discussion section is not necessary in every paper, for example, a close textual analysis can build each point in the body of the paper, leading directly to the conclusion. On the other hand, when you are interpreting data, a certain amount of the paper is devoted to explaining what each piece of the analysis means in detail. Any number of subpoints about the analysis must be discussed, such as testing for problems with the data, which require more tables to be explained. Each of the parts of the paper then becomes large, so at the end, it is useful to add a discussion of how it all fits together.

3.4 The Conclusion

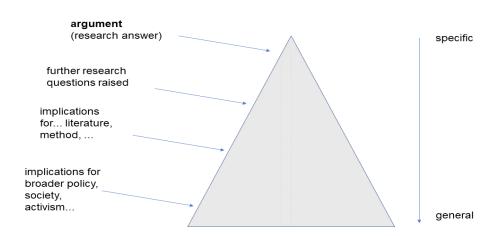


Figure 6: Conclusion: The Pyramid Reverts

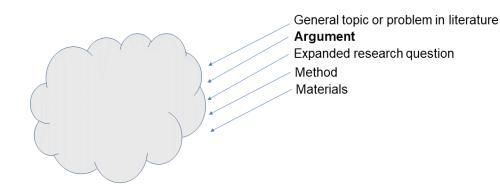
In the conclusion, give the reader first of all the strongest statement of your argument. Then go on to discuss its implications for the literature and indicate steps for further research to explore your argument in other empirical fields, or address questions raised beyond the scope of the paper that can contribute to further research. As Figure 6 shows, the inverted pyramid of the introduction reverts to right-side-up. One important feature of the conclusion is not to introduce any new evidence or new facets of your argument here. All the ingredients necessary to prepare your argument should have been presented in the body of the paper. What the conclusion does is to recombine what had been laid out step by step in the body, and then draw more implications beyond the scope of the paper itself. For example, further research may be suggested on cases like that discussed in the paper but did not fit in the space limits. Perhaps an older line of the literature turns out to have been useful after it had been rejected by subsequent generations. Or you can suggest the ways out of a dead-end that the literature had ended up settling into. If your topic is relevant for policy or activism, you can suggest these aspects in the conclusion as well. Overall, the conclusion should also not be much longer than two pages, since most of the work of the paper is done in the body.

You may wish to write a first draft of the concluding statement while you develop your abstract and introduction. The remainder of the conclusion can be written after finishing the first draft of the body or wait until the body and introduction of the paper have been revised into their final form. In any event, the conclusions are subject to change once you perform your revision. And by all means, revise the abstract (see Figure 7) after finishing the paper to make sure it reflects how it looks after the writing process has been concluded.

3.5 Final Stage: Revising the Abstract

Since this paper focuses on research paper structure, I present the abstract last instead of first. In one way, the abstract is separate from the structure of the research paper. As a summary, it appears upon publication, or as part of a conference paper, and serves the purpose of publicity and increasing interest for readers to choose to read your paper as opposed to other papers. Attracting attention is related to but different from demonstrating an argument over the length of the entire paper. Indeed, writing (the final version of) the abstract is easier to do once the paper has been completed. In particular, writing the introduction and conclusion will contribute to the writing of the abstract. Both of these parts are much longer than the abstract and worth completing first (unless it is a conference paper proposal).

Figure 7: The Abstract



The first element of the abstract, the general topic or problem in the literature that your paper addresses, is the most likely to change during the writing process. The next part, the expanded research question, should frame your research in an open-ended way. By this I mean that this question should have more than one possible answer. Next, the method and materials should be chosen in a way that makes it possible to demonstrate how your argument is persuasive. Sometimes you are specializing in a method that suggests certain kinds of questions, and sometimes you are choosing your method depending on your research question. In both cases, state as specifically as possible what you have chosen for the paper. If this is for a conference, the conference call for paper may also guide how you fit your research topic into a larger discussion, so be sure your abstract fits the objectives of the conference.

4. A few elements of caution

4.1 Figures and tables

These elements of the body of the paper serve to present complicated information visually, or as a list. When your argument is supported by visual or numerical information, figures, tables, graphs, maps, and sometimes photographs can be useful to present a lot of information all at once. Having said that, even though for you as a writer many of these speak for themselves, it is still important to discuss each of these elements as part of the paragraphs of text. Discuss them completely. The more complex, the more likely it is that at least one paragraph on one figure will be needed. Referring to these elements throughout the paper is also a way to save time in presenting your argument, but it is imperative to have a full discussion about each one. One other consideration is that publishers can only support a limited number of figures in a printed version, so do not use as many as you might in a longer presentation of the same work.

4.2 Bullet point lists

- In general bullet point lists can be used
- Keep them as short as possible
- If the individual items in the list are exceedingly long, and there is information that requires more discussion, rewrite the bullet point list into regular paragraphs.
- In English scholarly writing it is better not to have long lists of bullet points or numbered points (exception: some kinds of economics texts)
- Have at least three points in a list.

4.3 Permissions

Once a paper is published, whether online, in print, or even on a self-published venue, the rights of others to material must be strictly respected. Primarily, this applies to any direct citation, which must be marked as such with complete bibliographic information. (* many German politicians did not do this properly and have recently had their dissertations and Ph.D. titles revoked due to plagiarism). Software and search engines make it easy for curious people to find, and the penalties can be very high.

If you work with interviews: for publication, your interview partners must have signed a form authorizing the use of their words. This permission is ideally obtained at the time of the interview. Be sure to embed each interview quoted in the analysis – comparing with other interviews, and above all stating what the interview demonstrates in the context of your

argument. If you have a human subjects review board at your institution, be sure to state that you obtained approval before beginning interviews. If your interview subjects are vulnerable persons, they do not need to be identified by name in the paper, but you still need to have obtained their approval and signature.

Maps are almost always copyrighted, be incredibly careful when using publicly available maps. Some are quite restrictive about whether you can add your own information to that presented by the information provider. Google Earth does allow you to use their material but has extremely specific rules about attribution to it and the data providers it uses (https://about. google/brand-resource-center/products-and-services/geo-guidelines/#required-attribution) There are also some open-source map systems that can be published with proper attribution. Each publisher of map information and data will have specific instructions on the types of material.

What you may not be aware of is that epigraphs – placing lines from poetry, movies, song lyrics on their own – require permission, which can be expensive, USD 500 and more, even for one line. Authors and their agents are quite active in looking for works that use theirs without permission. The good news is that citations from poetry, movies, and song lyrics can be used if they are the subject of the scholarly analysis. It is just a problem when they are inserted just to draw attention or liven up the paper.

Databases can also be copyrighted and require permission for use! Some like the OECD and IMF grant permission for non-commercial uses, but only under the condition that the complete citation that they require is added as well. The open-source movement has brought about many data, maps, and other sources that publish under the various Creative Commons (CC) licenses. These are complicated in terms of what can or cannot be done with the information, whether it can be modified, how it needs to be cited, etc. The good news is that this is available on the CC licensing website.

You may even need permission to re-use your own work! Depending on the publisher, you may need to request permission to re-use material published elsewhere, unless it is 30% or more different from the previous publication. There may also be a time window where you cannot use it at all, so please check with the terms of your publisher if you are re-using previously published material. This can also include a translation of your work in another language – some publishers also claim copyright to any translations. Just be sure to check before re-using your own material.

5. Final remarks

This paper presented a set of concerns from an editor's perspective about the writing process in general and discussed a particular "blueprint" for writing social science papers with an eye toward publication. It set out the context for why the conventions around paper writing have developed and offered some concrete ways to make the argument of the paper as transparent as possible for reviewers and readers. Many other issues are quite specific to the course you are taking, the conference to which you are applying, or the venue where you will publish. Each publication will have a lengthy list of requirements for how to format citations and bibliographic entries, submit permissions for the use of work from third parties, whether UK or US English spellings are preferred, and a much longer list of issues than can be addressed here. Future guides in this series could present the general sets of issues to think about and strategies to employ when applying these style sheets and author instructions.

While this paper does describe the writing process in terms of the general structure of a research paper and how to build it, in effect this was a guide to your first draft. As hinted at in several mentions of how the paper could be put together in a different order, the revision process is equally important to a successful paper. Keeping in mind what you will look for in the revision stages can also help you during the writing process!

One way to help your revision process is to try to have someone friendly read it over and give constructive comments before sending it off somewhere else. You can be extremely specific about which aspects you would like to have comments on and ask different people about different issues. This is another element of "social" in "social science." Also, it can be useful to let your paper sit for a week without looking at it before starting the revision. Then you can have a certain distance from the writing and ask the challenging questions:

- Is my argument visible in the right places?
- Do all the parts get enough space, but not too much?
- Do the parts of the paper hold together with transitions?
- Are the sentences of various lengths?
- Are all the paragraphs about the right length?
- Are the paragraphs linked together with transition sentences?
- Are there elements of caution that need to be addressed (permissions, mentioning figures in the text, etc.?)





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Deutscher Akademischer Austauschdienst German Academic Exchange Service



Federal Ministry for Economic Cooperation and Development