The Rhetoric of the Grant Proposal

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Writing grant proposals makes up a substantial portion of many scholars’ workload. The content of the proposal, naturally, occupies the thoughts of most proposal writers most of the time. However, it is worth considering the proposal as a piece of writing: a document that has a particular audience and purpose, and thus creates rhetorical demands on the writer. The purpose of this article is to spell out some of those rhetorical demands in the hopes that considering a proposal as a piece of text can improve its organization and style. Although experienced writers may be familiar with some of these guidelines in an implicit way, we intend that their explicit statement will be helpful for both the novice and experienced writer of proposals. We also include some pragmatic suggestions for helping you to fulfill these goals.

First a word about us: the basic ideas stemmed from a talk that the first author has given several times at proposal writing workshops sponsored by the Council on Undergraduate Research (CUR). The second author contributed examples and insights gleaned from his own experience with writing proposals and from many years as a program officer at a major national science funder. We developed this framework based on our experience as proposal writers, reviewers, teachers of writing, and mentors of the younger proposal writers we coach at the CUR workshop and elsewhere.

What do we mean by rhetoric? What we do not mean is the current pejorative usage of the term as “insincere or grandiloquent language” (Merriam-Webster 10th ed). We firmly recommend against using “lofty, extravagantly colorful, pompous, or bombastic style” (now defining grandiloquent from the same source). Why, for example, must methods, instruments, and reagents always be “utilized” in scientific prose, when in fact we simply “use” them?

Rather, we want to use the term rhetoric in its neutral sense of “the study of writing or speaking as a means of communication or persuasion”. A proposal is a document that both communicates and persuades, both about the content of the work and the competence of the proposer. The best ideas in the world will best succeed with funders if the presentation works as a piece of successful rhetoric. And successful rhetoric depends on writing to your audience and being clear in your purpose, both in the document as a whole and in each section.

Audience

Who are they?

Communication requires a sender and receiver, and successful communication requires that the message be tailored by the sender for the receiver. Therefore, the wise grant proposal writer finds out who the readers of the proposal will be. Some proposals may be read largely by specialists in the proposer’s subfield, whereas others may be read by panels that include experts in the field, but not the precise subfield, or people with more general background such as fund administrators, or even lay members of the public. The closer that the writer and reader are in expertise levels, the more assumptions that can be made about the shared knowledge of the two parties. This awareness of shared knowledge is called “common ground” in the study of language. Incorrect assumptions about what each party to a written communication knows, or lack of common ground, can lead to serious misunderstandings (Clark, 1996). The greater the gap in levels of knowledge, the fewer assumptions that can be made, so that the writer needs to be even more careful particularly in setting the scene for the project (overview), justifying it, and explaining its implications. The reviewers for a particular program are often listed on websites for public agencies, or the program officer can be contacted for this information. A quick database search for work done by the reviewers will suggest how much common ground you can assume they have with you.

What are they looking for?

Another consideration in writing to an audience is to keep in mind why they are reading your document. Is this a pre-proposal that you may be invited to submit in full form? Is this a fully fledged proposal, or perhaps a resubmission? The audience will be looking for different things in each genre. For instance, in a pre-proposal, the outline of the main argument, and the suitability for the program, will be two important criteria that you need to address compellingly, but in a very few pages. On the other hand, in a resubmission, the audience will be paying special attention to how well you have addressed concerns raised in the previous round of reviews, especially if the reviewers have your first submission at hand. Each of these situations will require at least some conscious decisions as to writing style, type of organization, and length.

In many cases, the “pre-proposal” takes the form of a personal (or e-mail) conversation with a program officer of
the funder to which you intend to apply. It is highly tempting in this context to go into detailed technical expositions of your idea, or of the current state of the art in your research area. Avoid doing so. The job of such a conversation is to explore whether the funder has any interest in entertaining a proposal in your area, not to sell the particular research idea that you will present to an audience of expert peer reviewers in the full proposal.

II What else are they doing?

A third aspect of audience that should inform proposal writers is to consider how fast reviewers are reading your work. The answer is always “very fast.” Reviewers typically have a large pile of proposals to work through in a short amount of time. Your facilitation of that work will not only ensure their good will, but will assist them in finding all the information you want to present in the easiest possible way. Failing to adhere to format guidelines, using the smallest possible margin and font, poor proofreading, and an aversion to paragraphing will all lead to the opposite outcome of annoyed reviewers who miss important information in your proposal. And, of course, the fact that your audience is short of time is never a reason for the writer to be. We have seen blank pages, pages smeared to unreadability in the photocopying, and in one egregious case, a page headed “FOR [PI’s] EYES ONLY, NOT FOR THE PROPOSAL,” stapled neatly into the middle of a proposal.

Purpose?

We turn now to a discussion of the purpose of your proposal. Promotion and tenure dossiers certainly may benefit from a record of fund-seeking even if unsuccessful. Department chairs and administrators will recognize that serious proposal attempts represent considerable scholarly labor as well as good faculty citizenship. Proposal writing is also enormously helpful in personal planning of one’s scholarship, both during and after the process. After all, many of us heard in graduate school that “good writing is good thinking,” and the discipline of writing a proposal can be an excellent tool to clarify your thinking and evaluate the merit of your ideas.

However, the main purpose of most proposals is to promote an idea to a public or private funding agency. To accomplish that end, we suggest that proposals need to fulfill three rhetorical goals: exposition, persuasion, and credentialing. Exposition in this context means explaining or narrating. In some parts of the proposal, you need to set the stage, review information, and describe methods and procedures. In some sense the metagoal of the proposal is persuading the reader that your idea is interesting, novel, sound, and tractable. The reader should by the end of the document be convinced that this is just the project that should be done. A less obvious rhetorical goal is credentialing of yourself: not only is this the project that should be done, but you are just the person to carry it out. The reviewers should be confident that you have the scientific skills, experience, and organizational acumen to direct the project and see it to completion. Some of this credentialing can be done directly, such as noting previous publications and your attendance at short courses in the biographical sketch. However, much credentialing is accomplished indirectly, via the quality of the content and structure of the proposal.

Rhetorical Goals of Each Section

As a way of illustrating these goals, let us consider the different sections of a proposal and which goals might be most important in each. Speaking very generally, most proposals have the following subdivisions: An overview gives some context, sets out the problem, describes how you will go about solving the problem, offers hypotheses, and states implications or significance of the project. The literature review next gives the background information on what has in the past been done to address the problem, tying the selection of studies into the conceptual framework introduced in the overview. The proposed study describes the method of gathering data to solve the problem along with the statistical tools you will use. Many proposals offer pilot data that are preliminary or initial forays into the method, in the form of feasibility studies. Finally, proposals typically require budgets and budget justifications of varying degrees of elaborateness. At some level, all sections should address the goals of exposition, persuasion, and credentialing, but we think that different goals are especially worth highlighting in some sections compared to others. At least thinking about the issue can help the writer make sure that each section is functioning effectively and not just fulfilling a sterile requirement of the program announcement.

The overview is one of the most important places to implement your goal of persuasion. Although depending on format this section could be long or short, it must convince the reader of several features about your proposal: Your idea addresses the agency’s goals, it is interesting and important, you have reasonable hypotheses, and the project has an appropriate scope.

Pragmatically, the overview must persuade the reader to continue reading the rest of the proposal. The reader should, at the end of the overview, be saying to him or herself: “But of course! That is just the question that needs to be addressed.” Recently we had the opportunity to coach a beginning writer on a proposal concerning chemometrics, the statistical treatment of analytical data in chemistry. The first draft was exhausting to read because the crucial point of the research was delayed until late in the body of the narrative. Moving this section to the overview made reading this arcane and heavily mathematical material – well, still an effort, but a manageable and rewarding one.

After you set out the context and problem statement in a general way, the literature review gives the factual information the reader needs to more fully understand the genesis of your proposal idea. In addition, the review may present methodological or other technical points, theoretical arguments in the field that your proposal will help address, or any other studies that will help clarify your idea. Thus, one rhetorical goal of this section is exposition. You need to
present a clear narration, tied together by your analytic and synthetic comments so that the reader understands where your project fits in to the extant body of research.

A second rhetorical goal of the literature review, perhaps less obvious, is that of credentialing. The choice of studies, and how they are described, gives the reader a clue as to how familiar you are with relevant literature and how closely you read that literature. The second author solicited and read more than ten thousand anonymous proposal reviews in the course of his work as a grants program officer. Complaints of either significant gaps in the bibliography, or of the inclusion of irrelevant, often uncited, literature numbered in the hundreds; and it is common for more than one reviewer to make this criticism of the same proposal. Make sure your reference list is current. Significant time may have elapsed between your first literature review and your final submission, so it’s a good idea to check databases for new literature shortly before you submit.

The quality of the journals from which you choose your articles can also tell the reader about your perspicacity. If your bibliography is taken largely from the “grey” (secondary and/or unreviewed) literature, you invite the suspicion that your work is likely to be of the same caliber. Be particularly careful of using web-only resources. You need to distinguish between respectable Internet-based journals and high-quality information sites maintained by scientific or advocacy groups, vs. sites that primarily exist to influence policy or to serve as outlets for someone’s personal views. Alexander and Tate of Widener University (1996-1999) offer some helpful advice in this respect. The bibliography is a working part of your proposal, not an ornament or a piece of busywork.

Citations to your own published work, if appropriate, convey yet another credentialing message. Of course, this message will be off-putting if the citations appear to be gratuitous and thus merely self-serving. The most effective use of self-citations by new researchers are those in which the author’s prior work that is directly relevant to the new proposal is cited in context of others’ work, in logical or chronological sequence, and at the same level of emphasis.

The proposed study is of course the raison d’etre of your document. And although there is an obvious expository element to this section, we wish to emphasize the primary goal of persuasion here. The description of the study must match in persuasive power the argument you made in the overview. There, you had set up the problem, and here you propose how to solve it. The reader must be persuaded that this particular plan of attack is not only appropriate to your research question, but also efficient in terms of both time and money. A recent submission proposing a new look at the origin and dynamics of Liesegang structures (the band-and money) was discouraged on initial submission by reactive diffusion) was discouraged on initial submission by an officer of a national research funder. “Not a chance in Hell” is a close paraphrase of his remarks. But when the small-college PI demonstrated an innovative theoretical model, and a record of publication on related issues, and preliminary data obtained with undergraduate co-workers, it was fully supported by a second major funder.

A closely related goal for this section is credentialing. The appropriateness and feasibility of your methods and data analysis reflects your competence as both as a scientist and a manager. For instance, if the number of experiments you propose is simply too many for the period of support requested, no matter how good the idea, you will plant a seed of doubt in reviewers’ minds about your ability to see a project through to completion. Or if some aspect of your project is clearly beyond your competence, you can refer to the services of a consultant or co-PI on the proposal, which will reflect favorably on your abilities to divide responsibilities when appropriate. For example, a proposal dealing with the chemical evolution of seawater might well benefit from the participation of an expert mineralogist. A project in using neuroimaging methods might require the services of a magnetic resonance physicist.

Many research proposals contain a section for preliminary or pilot work. The first rhetorical goal that this section addresses is credentialing. The pilot data should be presented so as to validate your general abilities and specific skills. This is the place to convince readers that you not only plan to carry out Method X or Analysis Y, but that you have already done so successfully. If the pilot work reflects a series of steps you used to solve a problem or optimize a method, that again reflects well on your analytical abilities, as well as your persistence and inventiveness. The secondary goal of this section is persuasion by validating the basic plan of the research. Preliminary work returning promising results can help convince reviewers that your idea is on the right track and that the larger-scale plans in the grant proposal reflect a reasonable expansion of your core idea.

The last section of a proposal is typically a budget page, with accompanying justifications or explanations. While not commonly thought of as a piece of writing per se, in fact, in our current framework it is an integral part of the rhetorical package. The primary goal of this section is once again credentialing. It is here that you show your understanding of the resources needed for the project, including your time, that of co-PI’s, assistants, and students. Over or underestimating the time needed for a project can reflect poorly on your management abilities, and the same goes for being unrealistic in either direction about supplies and equipment. Ask for what you need, certainly, but “padding” your needs is easily detected and will elicit an appropriate response. Be careful to follow the budgeting format requested and to explain how you arrived at your estimates. Unusual requests are not necessarily a problem as long as a justification is included. Geologic fieldwork in areas reachable only with the aid of bush pilots, or field studies of primate behavior, may require a generous travel budget. The same level of request for social science fieldwork in the American Midwest would lead to justifiable skepticism.
Tools and Tips

Given that you have rhetorical goals in mind, we offer some ways to achieve those goals in your writing. In primarily expository sections, clarity is of the utmost importance. Of course, clarity is important throughout any document, but readers will become especially frustrated if they cannot understand the steps leading up to your idea, which will thereby lose impact. Clarity can be assisted by precision in word choice, unambiguous grammatical structures, and avoidance of mega-clausal sentences. Use subject-verb-object ordered sentence and active voice whenever possible. Contrast for instance the sentences, “The most utilized arachnicides employed in animal colonies have been silica based C20 polycyclics, comprising about 70% of arachnicides.” with “About 70% of animal colony arachnicides are silica based C20 polycyclics.” Or, “Product produced in Scheme 1 will be utilized in Reaction 4a.” vs. “Reaction 4a will use the product of Scheme 1.” (Blackburn, 2003) Clarity is enhanced by conciseness. Direct sentence structure and active voice use fewer words than noncanonical word ordering and passive voice. Repetition is not only bad style, it leads the reader to think that you are making a subtle distinction between two passages when you are simply being repetitious!

Persuasive sections benefit particularly from close attention to the organization of the passage. Making an argument requires that the reader follow you systematically from step A to step Z. Each step must be obvious and in the correct order. Well-structured paragraphs are key here: Each must open with an informative topic sentence and should stick to the point at hand. A highly recommended tool for ensuring good organization is to work from an outline, even if that is not your usual practice. To emphasize your movement from point to point in your argument, use linking language whenever possible. This allows you to flag your argument progression by use of terms such as ‘in contrast’ or ‘nevertheless’ or ‘another source of support’ as you open each paragraph. A reader should be able to generate the originating outline from text, if both outline and resulting text are well organized.

Sections that serve to credential the writer are particularly sensitive to accuracy. Make sure that literature is cited correctly. Chances are high that among your readers will be people familiar with, collectively, your entire reference list. In some cases they are the authors of the cited works. Although you are not expected to be exhaustive, omission of an important reference will harm your credentials, especially if the author is one of your panelists. On several occasions the first author has read submissions in which her own work was miscited. Frequently, this type of error is pointed out by several reviewers, and casts a negative light on the entire project (as indeed it should, if faulty premises are used to propose new work).

Under no circumstances should you electronically import entire bibliographies from other works into yours. The result is inevitably to include citations that you have not read and that are irrelevant to your proposal, and in many cases to propagate errors. You de-credential yourself immediately with this shortcut.

The budget page should be triple-checked to guard against numerical errors. Model numbers of equipment should be up-to-date, and the requested equipment should be exactly as elaborate as needed for the proposed study, and no more so; figures should agree with one another from page to page and section to section. The document as a whole should be free of grammatical and word errors (this requires human checkers, not software) and conform to format requests by the agency. Errors convey a global sense of unprofessionalism and thus they can lead the reviewer to doubt the care with which the project will be carried out, if the Call for Proposals is not even read closely. Asking several colleagues to read your proposal draft can be helpful for checking accuracy. A specialist can pick up any technical errors; someone in your field but not familiar with your specialty can be helpful in evaluating the logic of your argument. And a nonscientist or a staff member in your sponsored grants office can be helpful in evaluating the flow of language, grammar, and nontechnical word use.

If At First You Don’t Succeed...

Of course, no degree of rhetorical skill can sell a fundamentally flawed or trivial research idea. A fundable proposal is the healthy child of good science and good writing. We offer these observations because we have been frustrated and saddened by the many cases we have seen in which worthwhile, and even exciting science has gone unsupported because it was hidden, distorted, and ultimately betrayed by mediocre or ill-considered text. If you submit a proposal and it is not funded, review the panel’s comments carefully. Perhaps your ideas were fundamentally sound, but packaged in such a way as to weaken your message or to permit misreading of your real ideas. Viewing your proposal as a literary, as well as scientific endeavor, will maximize your chances of success in the funding sweepstakes.

References


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