

THE EDUCATOR'S FORUM

Improving a Manuscript's Readability and Likelihood of Publication

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ABSTRACT: This note discusses several ways to make journal articles more readable. It discusses the incentives of editors to publish "good," readable papers, and some common misconceptions about publishing articles. Some suggestions for improving a paper's likelihood of publication and its impact on the profession once published include writing the paper for the largest possible target audience; circulating the paper to colleagues before submission; summarizing the paper's major findings early and clearly; limiting the number of footnotes, acronyms, and *mays*; and making the tables' titles and legends descriptive.

THIS note offers some techniques to make papers more readable and some ways to increase the likelihood of publication in a refereed journal. Many manuscripts submitted to journals contain at least one of the mistakes or writing problems discussed in this note. Because most of these are made by junior researchers submitting their first papers to journals, the primary audience of this paper is academics beginning their careers. But even senior researchers commit some of these categorized mistakes.

This note is neither a guide to English grammar nor a primer on writing

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This note is based on an Editor's Roundtable at the American Accounting Association Doctoral Consortium held at Tahoe City, Nevada, in June 1988. Michael Jensen played a large role in developing and explicating many of the ideas discussed in this paper. The comments of Ray Ball, Linda DeAngelo, Paul Griffin, Thomas

style. There are several good sources already [Lambuth, 1964; Strunk and White, 1959; and Wydick, 1978]. This note is more modest.¹ The first section catalogs five common misconceptions about scholarly journals. The second section describes seven frequently encountered constructions that hamper readability, and the final section is a brief conclusion.

MISCONCEPTIONS ABOUT THE REVIEW PROCESS

Journals Do Not Have Monopoly Power

Journal editors seek to publish "good" papers, ones in demand by their subscribers. They prefer to publish higher- rather than lower-quality papers; *quality* is as perceived by the editor and the readership. One dimension of *quality* is the paper's ultimate influence on the field. A paper's readability—its accessibility to the intended audience—affects its ultimate influence. Readers value papers that clearly, concisely, and quickly communicate the findings. The success of a journal is represented by the number of readers, the size of its subscription base, and the frequency with which papers published in the journal are cited by other authors in the field. Good papers increase the journal's reputation. Rejecting important papers or publishing papers with errors or papers that only trivially extend the frontiers hurts a journal's reputation. Eventually, these practices reduce the flow of manuscripts to the journal and the number of its readers.

A given journal does not have a monopoly on publication. If a journal

editor acts capriciously or in an arbitrary manner, good papers can be published elsewhere. Although rejection rates at top-rated journals are very high (sometimes above 80 percent), the large number of refereed journals means that most reasonable papers get published *somewhere*. In accounting, there are well over 20 refereed journals. Besides these academic journals, there are many conference volumes, professional association monograph series, and commercial publishers. The question is not whether a paper can get published but where it will be published.

To attract the better papers, editors must develop and sustain reputations for delivering quality, timely reviews. Authors of good papers are in a "seller's market." They can demand conscientious refereeing and timely editorial reports. Editor and referee comments should not only address the scholarly substance of the paper but also make suggestions to improve its readability. Journals that are better able to deliver these services will gain in the competition for the best papers, and ultimately the perceived rank of the journal will rise.

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¹ McCloskey [1985] is related to this paper and discusses some of the same issues.

Advice: Submit papers to journals with an audience most interested in your work and with reputations for supplying responsive and high-quality refereeing and editorial services.

"Good" Papers Are Not Difficult to Read

A paper's impact is greater if it is written for the largest possible audience of the intended journal. Thus, papers should be written for the least sophisticated rather than the most sophisticated reader of the target journal. For example, suppose one is interested in submitting a paper to a technical research-oriented journal such as *The Accounting Review*. Write the manuscript in such a way that it will be assigned to and read by doctoral students. Doctoral seminars review the current literature and acquaint students with topical problems and methodological improvements. These seminars critically examine papers as a way to train students to conduct research. Not every "good" paper is assigned to doctoral students, but as a target audience, doctoral students should be considered the primary readers of research-oriented journals. A doctoral student audience is in direct contrast to an audience of other "experts" in the field. Choosing to write for an expert audience results in shorter, easier to write papers but at the expense of narrowing the journal's readability and influence. Also, doctoral students are the new entrants into the profession and will be the source of new ideas and manuscripts in the future. Journal editors have incentives to "advertise" the quality and influence of

their journals to the primary source of future manuscripts. Moreover, writing for the least technically sophisticated reader communicates more effectively with experts.

Advice: Write manuscripts for the largest possible audience of the target journal (e.g., doctoral students for research-oriented journals).

The Virgin Paper Syndrome

Occasionally, an author submits a manuscript to a journal and no one, except the author, has read the paper. The paper contains no acknowledgements, numerous typographical errors, extremely hard to follow prose, and convoluted logic. The manuscript's first exposure to light is when the journal editor opens the envelope.

The strategy of submitting virgin papers to journals often precludes resubmission to that same journal. In asking an author to revise and resubmit the paper to the journal, the editor is entering an implicit good faith contract. If the author follows the advice of the referee and editor, and if no further technical problems or errors are uncovered in later reviews, the editor implicitly agrees to publish the paper. Editors have incentives to develop reputations of not reneging on such good faith implicit contracts. They decide to ask authors to revise and resubmit papers by assessing the relative costs and benefits of bringing the paper to a publishable state. Papers with many expositional problems are time consuming for the editor and referee to review. Authors of articles that promise only marginal benefits but contain

numerous writing problems are not asked to revise their papers; rather, these papers are rejected.

Advice: Circulate your papers to colleagues and ask them for both substantive and expository comments. Give the paper in seminars at your school and other institutions before submitting it to a journal. And, expect to rewrite your paper numerous times (ten or 12 times is not uncommon) before it is finally published.

Dumb Editor/Referee Assumption

After reading an editor's rejection letter and accompanying referee report(s), a novice author's first reaction is occasionally that the editor and/or referee did not understand the analysis. If this is the case, it is neither the editor's nor the referee's problem. The author has failed to communicate the ideas clearly and convincingly.

An author chooses a particular journal presumably because he or she wants the paper to reach that journal's audience. An editor chooses a referee for expertise in evaluating the paper. Therefore, the referee usually has a skill level at least as high as the average reader of that journal. If the referee and editor are unable to understand the paper, it is unlikely that the typical reader will understand it. The editor's or referee's inability to understand the study is a failure by the author to communicate the analysis and/or findings, not a failure by the editor or referee to comprehend.

Advice: Instead of immediately writing back to the editor complaining about the referee's reading comprehen-

sion skills, wait three weeks and think about what the editor and referee said. Ask more experienced colleagues for advice interpreting the review and editor's letter. Rewrite those misunderstood sections of the paper and revise the paper to address the referee's and editor's other concerns. Then return the paper to the editor with a cover letter that explains the response to the referee's report on a point-by-point basis.

The Omnipresent Reviewer

A paper rejected by one journal and submitted to another journal is occasionally sent to the same referee by the second journal editor. Because the first editor picked the referee based on the reviewer's expertise, there is a reasonable likelihood the second journal editor will select the same reviewer, even though the second editor is unaware of the referee's previous involvement with the paper. Usually, the reviewer informs the second editor of the previous review and the author's willingness or unwillingness to revise the paper in light of the first referee report.

The author errs by not revising the paper based on the reviewer's comments before submitting the paper to a second journal. First, the author misses an opportunity to improve the paper. Second, by not revising the paper, the author discloses a propensity to shirk in subsequent revise-and-resubmit situations. This causes the second editor to be wary of inviting the author to revise and resubmit the paper.

Advice: Do not submit papers rejected from one journal to another be-

fore revising the paper based on the first journal reviewer's comments.

CONSTRUCTIONS THAT HAMPER READABILITY

The Great Mystery Story

A common error usually made by a novice author is not summarizing the purpose, major findings, and conclusions at the beginning and end of the paper. The author adopts the view that "because I struggled to make this discovery, the reader will wait until the very end to learn 'who done it.'" Unfortunately, anticipation does not increase the value of the scholarly contribution.

Journal readers are busy people. They read the scientific literature to enhance their own work and that of their students, not for personal enjoyment. (Most scholarly treatises fare poorly when compared to Hemingway, Galbraith, or even *The New York Times* for literary enjoyment.) Journal readers, be they doctoral students or senior researchers, do not read every paper in every journal. They scan the table of contents and read a few abstracts. Next, they skim interesting studies, often backwards, starting with the conclusions and tables and ending with the introduction. Then, if the paper is sufficiently interesting, they read it in its entirety.

Papers should be written with this reading behavior in mind. Readers are much better able to assimilate and comprehend complex material when they know the major findings of the study. Good papers quickly help readers understand why they should (or should

not) devote time to a complete reading. If the paper's major finding, result, or conclusion is highlighted, readers are more likely to remember it and use it in their own work.

Advice: Reveal the study's purpose, findings, and conclusions in the abstract, in the introduction, and again in the conclusion. Write the conclusion as though the reader has not read the paper; that is, do not use jargon, acronyms, or terms defined only in the body of the paper in the conclusion. In empirical papers, structure the paper to present the most important findings early. Analytical papers should emphasize early the intuition and empirical implications of the theoretical contributions.

My Diary

A problem related to the Mystery Story is My Diary. Researchers enjoy uncovering some fact, proving some theorem, or discovering something they did not know before they started. Research is a circuitous process of trial and error. Because researchers find the hunt enjoyable, they naturally assume that the reader will as well. Unfortunately, readers of other people's research do not. Readers want to know the key findings—not every turn, twist, and false start.

For example, Thomas A. Edison tried thousands of substances before discovering the tungsten filament for the electric light. A hypothetical scholarly journal article of this invention would outline the properties of tungsten and discuss some of the thousands of other filaments he tried, to the extent that these other compounds illustrate

why tungsten works the way it does. But few journal editors and readers would respond favorably to a lengthy chronology of the tungsten filament research process. Such a treatise belongs in a monograph that illustrates the discovery process.

Advice: Write the paper in a straightforward, linear fashion, not necessarily in the same order as the time sequence of the research. Unsuccessful forays are best eliminated or relegated to later sections of the paper as a way to illuminate or to provide sensitivity checks for the study's findings.

Footnotes Galore

Authors, especially those with newly minted doctoral degrees rewriting their theses, tend to produce long manuscripts that must be reduced by a factor of one-third to one-half to conform to the *de facto* manuscript lengths allowed by most journals. Beside the obvious tactic of expanding the margins, resourceful authors discover the power of the *footnote*. Footnotes are single spaced; they can reduce text length by one-half. Instead of pruning nonessential and tangential material, such gems are preserved for posterity in the footnote.

All authors have faced the problem of shortening long manuscripts. Once they have struggled to get their thoughts down on paper, these words become part of their flesh. This is especially true of doctoral theses, which consumed too many years of youth. Every thought, conjecture, and false start is archived. The footnote becomes the attic in which authors save their

senior high school dance program, old lecture notes, and obsolete sporting equipment.

There are two types of footnotes: bibliographic footnotes that cite the literature and nonbibliographic footnotes that present new material. Bibliographic footnotes are not a problem because the reader can quickly skim them. Nonbibliographic footnotes provide more detail on a point in the text. Some contain random and often cryptic thoughts crammed into three or four sentences. These footnotes break the flow of the paper's logic and make its reading difficult. The reader does not know whether to skip the nonbibliographic footnote and miss some essential information or to read every footnote at the risk of reducing the flow and comprehension of the paper.

Advice: As a rough rule of thumb, limit nonbibliographic footnotes to none or one per page of text. Most nonbibliographic footnotes can either be expunged or incorporated into the text.

DUA (Don't Use Acronyms)

Another space-saving tactic is the acronym. Within a given paper, phrases such as public interest theory (PIT), generally accepted accounting principles (GAAP), or maximum likelihood estimation (MLE) are repeated frequently. Writers like to invent new acronyms (such as PIT) and to rely on acronyms familiar in specialized literatures: MLE or GAAP.

Acronyms also creep into papers as the names of variables, either in mathematical models or in empirical analyses. After defining a variable (e.g., percentage change in disposable income)

the author assigns the variable an acronym, PCDI. Then, throughout the remainder of the paper, the author refers to PCDI instead of percentage change in disposable income.

Unfortunately, acronyms impose costs on readers and make manuscripts more difficult to read. After reading half a paper with five or six acronyms and having been interrupted several times by telephone calls and colleagues, the reader is barely able to follow the paper's logic, let alone what all the acronyms mean.

Advice: If you want your paper read, DUA (or at least use them sparingly).

May-Day

Researchers are trained to be careful in conducting their studies and in describing their findings. Peer review requires that research findings support the conclusions; nothing more or less. But this attempt at caution may translate into a writing style that produces empty statements. One way this happens is that the cautious writer inserts the word *may* into a sentence to connote a likelihood of occurrence less than probability one. To illustrate, consider the following sentence which appeared earlier in this paragraph: "But this attempt at caution *may* translate into a writing style that produces empty statements." The problem with using *may* is that the phrase *may not* can be inserted into the sentence without changing the meaning. ("But this attempt at caution *may not* translate into a writing style that produces empty statements.") *May* connotes diffuse priors. A stronger statement results

when the writer indicates the likelihood is less than one-half (*occasionally*) or the likelihood is greater than one-half (*usually*). For example, the following two sentences convey more information than the first two containing *may* and *may not*: "But this attempt at caution *occasionally* translates into a writing style that produces empty statements." "But this attempt at caution *usually* translates into a writing style that produces empty statements."

Other reasons writers use *may* to connote a possibility is that they are lazy in developing the analysis or they have tried to shorten the text. For example, consider the following conditional "If . . . then . . ." expression: "If capital markets are efficient and managers on average undertake profitable investments, then stock prices (adjusted for the market) will rise on average at the manager's announcement of an unanticipated new investment." This lengthy "If . . . then" conditional statement is abbreviated as: "Stock prices (adjusted for the market) *may* rise on average at the manager's announcement of an unanticipated new investment."

Notice that *may* converts the conditional statement into an uncertain statement. Excessive use of *may* often indicates that the analysis is not fully developed. The author knows the unconditional statement is false but does not know what conditions are necessary to make it a conditional statement. The researcher takes a short cut and makes the statement a possibility by inserting *may*.

In one working paper by a senior scholar, I recall counting 24 uses of *may* on one double-spaced typed page.

The excessive use of *may* produced a piece of analysis that was very confusing and hard to follow. It was, for the most part, empty.

The preceding discussion applies equally to the use of the word *might*.

Advice: Avoid using *may* in your writing. If you must use *may*, verify that you are expressing your belief that the likelihood of the event is one-half.

Table the Tables

Authors frequently make two mistakes with tables: they include too many and construct them so they can be understood only by reading the paper. Papers should not contain tables displaying replications of the tests with minor changes in methods. For example, after estimating a linear model using Probit, an author estimates and reports the same model using Logit and ordinary least squares. Usually, the results differ trivially from those reported in the first table.

Another mistake is that the tables cannot be read without reading the text; they are not "free standing." A free-standing table is one with a descriptive title and a legend describing/defining all the variables (including row and column headings). The number of observations underlying the reported statistics is displayed in the table, and the reader is informed whether one- or two-tailed hypothesis tests are used. A table is free standing if a graduate student can be handed the table and infer from it what the numbers mean, how they are defined, and how they were calculated. Free-standing tables allow readers to skim the paper and increase the chance the paper is read.

Advice: Include only those tables with new information. Instead of including separate tables for each replication of the methodology, report in the text that alternative methods were used, that they are available from the author upon request, and that the results do not differ materially from those reported. If acronyms are used in the table, define them in it. Use legends liberally, make them complete, and use descriptive table titles.

The Royal "We"

Most academic articles are written in the third person. Some authors prefer to write in the first person. An annoying writing style is the use of first person plural subjects when single first person subject construction applies. Single authors try to take comfort in creating fictitious co-authors by using the subject "we" instead of "I" in their papers. For example, instead of writing "I collected the sample from . . .," authors of singly authored papers write "We collected the data from . . ."

Advice: If you must write in the first person, use the first person singular, not first person plural form when writing singly authored papers. Also, use an active, not passive construction.

CONCLUSION

Researchers are more interested in conducting their studies than in writing the papers. Many researchers view writing as a necessary evil and the least enjoyable part of the research process. But there is competition in the marketplace of ideas. There are more papers to read than time available to read them.

The more researchers can reduce the costs of transmitting their ideas, the greater will be the value added by their studies, the more widely known and cited are their studies, and the more prestige accruing to the researchers and

their institutions. Extra effort in writing and following the suggestions in this paper can improve a paper's likelihood of publication, its readability, and its value in the competitive academic market for ideas.

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