"Tips to Article-Writers" Ezra W. Zuckerman MIT Sloan School of Management February 6, 2008

Dear web-surfer:

Over the past several years, I often find that I am giving similar advice or reactions to colleagues and students (or as referee to authors) on how to improve their papers, usually with an eye to improving the paper's likelihood of contributing to the social scientific literature. Since I give this advice often, I thought it might be of some use to compile the advice and post it on my website.

Please note that this is by no means a recipe for writing great papers. God knows that if I had such a recipe, I would have an easier time writing great papers myself! And please note that the converse is also true: there are many published articles that violate one or more of these tips. Of course, many published papers are awful. And very good papers sometimes do not get accepted for publication. Consequently, all I can say is that I think these tips generally make for better papers. And what keeps me in this business is the faith that our journals generally publish the better papers and reject the weaker ones, though that faith is often tested.

A final note: I plan on updating these from time to time, as I continue to play the mentor/commentator/critic/discussant/referee roles and think of something else that might be useful. Comments (via email) are also welcome.

- 1. **Motivate the paper**. The first question you must answer for the reader is why they should read your paper. There is A LOT out there to read and it is very easy to find an excuse not to read a paper. Most people don't even read all the articles published in their field's flagship journals. So if you want your paper to be read, you need to sell the reader on why your paper is so great. The introduction of your paper has to be exciting. It must motivate the reader to keep on reading. They must have the sense that if they keep on reading, there is at least a fair chance that they will learn something new.
- 2. **Know your audience**. Since different people get excited about different things, you cannot get them motivated unless you know their taste. And different academic communities/journals have very different tastes for what constitutes an interesting question and what constitutes a compelling approach to a question. (My friend and colleague Roberto Fernandez has an excellent framework for thinking about audiences, known widely at Sloan as "Rows and Columns." I will not go into it here, but the basic idea is that social scientific communities are arrayed by two dimensions, where the "rows" are "phenomena" [e.g., area studies; topics such as entrepreneurship or racial inequality] and the "columns" are disciplines or theories. One key lesson is that one typically needs to choose whether one is aiming for a "row" audience/journal or a "column"

- audience/journal, and motivate/frame one's paper accordingly. Trying to motivate both row and column simultaneously usually does not work).
- 3. Use substantive motivations, not aesthetic ones. By an aesthetic motivation, I mean that the author is appealing to the reader's sense that a certain kind of theory or approach should be preferred regardless of its explanatory power (e.g., we should be avoiding "economistic" or "functionalist" or "reductionist" explanations). Sometimes aesthetic motivations work (for getting a paper accepted), but the contribution tends to be hollow because the end of research (figuring out how the world works) is sacrificed for the means (telling each other how much we like certain ideas). Another way of putting this is that we should not like a paper simply because it proudly displays the colors of our tribe.
- 4. **Always frame around the dependent variable**. The dependent variable is a question and the independent variables are answers to a question. So it makes no sense to start with an answer. Rather, start with a question/puzzle! (Note that I don't mean the literal dependent variable in the analysis in the paper, but the larger process/pattern that it is supposed to represent).
- 5. **Frame around a puzzle in the world, not a literature**. The only reason anyone cares about a literature is because it is helpful in clarifying puzzles in the world. So start with the puzzle. A related point is that just because a literature has not examined some phenomenon, that does not mean that you should. The only reason a phenomenon is interesting is if it poses a puzzle for existing ways of viewing the world. (Too often, I read papers that try to get motivation from the fact that a literature "has not looked at" x, y, or z. So what? There will always be a great deal of unstudied [by academics] phenomena. The question is why that matters.)
- 6. One hypothesis (or a few tightly related hypotheses) is enough. If people remember a paper at all, they will remember it for one idea. So no use trying to stuff a zillion ideas in a paper. A related problem with numerous hypotheses is that it's never clear what implications the invalidation of any one hypothesis has for the theory. (Note: the organizations community apparently does not agree with me on this one)
- 7. **Build up the null hypothesis to be as compelling as possible.** A paper will not be interesting unless there is a really compelling null hypothesis. If there is no interesting alternative to the author's argument, why would anyone care about it? Flogging straw men is both unfair and uninteresting.
- 8. **Save the null**. Since the null is compelling, it must be right under certain conditions. The author's job is to explain to the reader that s/he was right to believe x about the world, but that since x doesn't hold under certain conditions, s/he should shift to belief x`. This helps the reader feel comfortable about shifting to a new idea. Moreover, a very subtle shift in thinking can go a long way.

- 9. **Orient the reader**. The reader needs to know at all times how any sentence fits into the narrative arc of the paper. All too often, I read papers where I get lost in the trees and have no sense of the forest. The narrative arc should start with the first paragraph or two where a question/puzzle is framed and lead to the main finding of the paper. Everything else in the paper should be in service of that arc, either by clarifying the question or setting up the answer (including painstakingly dealing with objections). A related tip is:
- 10. **Never write literature reviews**. No one likes to read literature reviews. They are borrring. So don't write them. But that doesn't mean you should ignore "the relevant literature." To the contrary. You have raised a puzzle about the real world (see tips 3-5). One reason why it is a puzzle is because existing answers are compelling (see point 7), but flawed. So you review the literature not as an end in itself but because you show what is compelling but flawed about existing answers. Any research that does not pertain to that objective can remain unmentioned. (Ok, ok. Some reviewers will demand to see their names or that of their favorite scholars even when their work is essentially irrelevant. And it is usually good to anticipate that. But try to do as little as possible.).