

Stylish Academic Writing

Introduction

JUDITH D. SINGER: Good afternoon, everybody. I'm Judy Singer. I'm the Senior Vice Provost for Faculty Development and Diversity and I want to welcome all of you on behalf of the Office of the Provost to this event on stylish academic writing. I was describing to a colleague over the weekend this particular event. And he said, isn't that an oxymoron? And unfortunately, having to read a lot of prose across a lot of disciplines, sometimes it does sound like it is an oxymoron. But I think today what we're going to learn is that it is possible to write well, write clearly, and write for your colleagues.

I approach thinking about this event from several different perspectives. One is, I remember my first year of graduate school, turning in a paper to my advisor. My PhD is in statistics. My advisor was Fred Mosteller. He was known as a very good writer. And I turned in my paper and I got it back and there was so much red ink on it I was just traumatized. From the first sentence, he just circles. My sentence began, there are. I thought that was a perfectly fine way to begin a paper. Never begin a paper with the words there are I have never written a paper or a paragraph with the words there are since. In fact, I basically avoid it.

And then over the years, I see this from in multiple perspectives of thinking about the problem space, one are the arguments, sometimes heated, that I get into with my colleagues, both about our own writing and in collaborative work, but also with our graduate students, arguments about the active voice versus the passive voice. The number of papers I read where it's not clear that any human being was ever involved in the research, because it either comes from God or is done by monkeys. But there is certainly no human in the prose.

Coming up with students who say to me, but my other reader said I had to edit all these words out. And I'm, no, you have to put them back in. So it's obviously an area in which we can hold different views about what is considered stylish academic writing. I also have a particular perspective of being involved in most of the appointments processes across the university, and therefore reading appointments dossiers and tenure dossiers across the universities, as well as

papers from a variety of fields. And what goes for stylish writing in one field is very different from what happens in another field. I also make a parenthetical note that my favorite dossiers are written by Steve Pinker. You should be lucky enough to have Steve make your case for tenure. It's really quite a statement.

The idea for this event came when Helen Sword contacted me, said she was going to be in the States and was interested in speaking with a group of faculty about this topic. And we have been running a series on publishing more generally for the faculty from a variety of perspectives. And the notion of thinking about how to write well was something that was quite appealing to us. But we had to figure out how to time this with Helen's schedule since she comes from the other side of the planet.

And then we wanted to have two other perspectives on the panel, one of a faculty member who thinks quite closely about writing and every word and how it's presented, and Steve Pinker was very gracious in accepting our invitation, as well as Elizabeth Knoll from Harvard University Press, who has done a lot of work with us on these book publishing events. And if you're interested in learning about the book publishing business, I can think of no one better than Elizabeth Knoll to be your guide.

So with those opening remarks, I'm going to turn this over to Amy Brand, my colleague in the Provost's office, Assistant Provost for Faculty Appointments and Faculty Appointments, who by the way, was an editor at MIT Press in a former lifetime, so really comes out of the book publishing industry as well. And thank you very much for coming. Bye, bye.

AMY BRAND: Good afternoon and welcome. We're delighted to see faculty from across the university at this event. And we're going to start the panel out with our invited guest, Helen Sword. Helen is the author of the book that you now have in your hands I hope, the namesake for the panel, *Stylish Academic Writing*. Helen is originally from Southern California. She received her PhD in comparative literature from Princeton and now teaches at the University of Auckland as Professor and Director for the Center of Learning and Research in Higher Education.

Helen is an outspoken advocate for creativity and craftsmanship in scholarship and has offered workshops on popular academic writing all over the world. In fact, we are just the second stop on

a 14 university tour that she's in the middle of right now. Helen will be followed by Elizabeth, Executive Editor at Large at Harvard University Press. And as Judy mentioned our offices go to person on all matters related to book publishing. Elizabeth holds a PhD in the history of science and has been doing book acquisitions since 1988. As the range of fields that she acquires and continues to expand, she in her own words, consequently knows less and less about more and more. I take issue with that, actually. Elizabeth knows a lot about a lot and will offer an editor's perspective on Helen's remarks.

And batting clean up we have Steve Pinker. Steve is Harvard College Professor and Johnstone Family Professor in the Department of Psychology and author of many blockbuster titles for the general reader on language evolution, the mind, and most recently on violence, with *Better Angels of Our Nature*. Steve has received so many awards and recognitions that I won't attempt to list them, but most recently he was named one of *Prospect Magazine's* top 10 World Thinkers for 2013.

So our plan for the panelists comments to last, hopefully no more than an hour, leaving plenty of time for your questions and discussion. So Helen, start with you.

Helen Sword

HELEN SWORD: Well, thank you, Amy and Judy, for organizing this. And thank you, Steve and Elizabeth, for taking part. Judy mentioned sort of a formative moment as a graduate student. And I'll start with one of mine.

When I was doing my PhD at Princeton in comparative literature, I remember a moment at the end of my first year when somebody in my department was in his second year and was just taking his general exams, PhD qualifying exams. And so we all clustered around him afterwards. And we said, how'd it go? How'd it go? And he said, oh, I think it went really well. I've just spent the last hour writing about the slippage of the signifier.

And I thought, I don't even know what that means. But of course, by a year later when I took my exams, I had made damn sure that I knew what it meant. And also, I'm pretty sure that I managed to get that phrase into my exam, because I could tell that it sounded really impressive.

And so that was one of those moments when I internalized this idea that being an academic writer was primarily about impressing other academics with your erudition. I've come to believe that it is or should be about communicating effectively, whether with colleagues or with people outside of the academy. And I think learning to make that distinction was also an important part of my education. I went on from there, then, to teach in an English department for about 10 years.

I wrote a couple of books of literary criticism. I prided myself that they were well-written. I thought of myself as a good writer. And I think I did manage to avoid the worst temptations of jargon that people in that discipline in particular can fall into. And yet, I would go to academic conferences, and people would come up and say, loved your book. And that was great. There was a real sense of communicating with the colleagues. But I would give a copy to my mother. And she'd flip through the first chapter. And she'd say, my, you know a lot of big words.

So the moment for me when I really started to think about academic writing more broadly outside of my discipline came maybe seven or eight years ago, when I shifted into working in faculty development and higher education research. And so I was charged with developing and teaching on a program that was for faculty at my university who wanted to become more research-informed teachers. So I naturally went out, trying to find readings for them.

I wanted to find people working in higher education research who could kind of summarize the best of that research so that people could benefit from that research in their own teaching. Found plenty of good books that did that, and I could pull chapters out of those books. And I think there's a lesson there that the bar is higher with book publishing. You go through a lot more-- you have to step through a lot more gates.

But when I looked in the top international higher education research journals, what I found were a whole bunch of articles that, by and large, were, at best, wooden and dry, at worst, spongy and soggy, and that really seemed to be communicating-- they seemed to be higher education researchers trying to impress other higher education researchers with their jargon, and with their language, and with their methodology. And most of these articles I couldn't use.

At first, I thought maybe it was just because I came from literary studies. And maybe it was just me. So I did distribute a few of these to my colleagues. So these would be people from law, population health, music, engineering. And they pretty much all said, no, we don't want to read this stuff. Don't understand it. They're taking 20 pages to say something they could say in five pages, et cetera.

And that was when I started to think there's something wrong here if people who are doing research on higher education teaching and learning cannot-- are either not able to or can't be bothered to communicate that research to other people working in higher education teaching and learning-- so educated people with PhDs-- then what are those articles for? What are they doing?

So at that point, I decided to do a little bit of empirical research of my own. I sent out an email basically to everybody I knew and asked them to send it on to everybody they knew. And I asked a couple of questions. I asked, what is your definition of stylish academic writing? And it isn't intentionally oxymoronic and slightly provocative phrase. Not everybody likes the word stylish. If that doesn't ring your bell, you can replace it with engaging, or even just effective academic writing.

So if you ask yourself the same questions, think of who are the writers in your field who really engage you and who, when you read their writing, you think, I would like to write like that. And then think about what is it that they do? What are the characteristics of their writing? That is stylish academic writing.

So I got back responses from more than 70 people from around the world and across the disciplines. And what I found astonishing was how, despite the disciplinary differences, how consistent their responses were. They pretty much all said, in one way or another, that they value people who take complex ideas and communicate them clearly, or if not clearly-- because not every discipline values clarity as much as others. Some actually value opacity. But still, there is the idea that they communicate complex ideas in a way that illuminates those ideas for their reader.

They talked about the importance of communication. They would say, I like authors who tell a story. I like authors who use lots of examples to illustrate whatever it is they're talking about.

And this came whether, it was people in the science, or humanities, social sciences. And so from that list and also from looking at examples of some of the writers that they particularly recommended, I made a kind of 10 point, you could call it a grading rubric, 10 things that the stylish academic writers usually do.

So there are things like they usually have an engaging title, a title that kind of says, come read me. I've gone to some work with this. They usually have an opening paragraph that really pulls you in. They usually use lots and lots of examples. They usually do have a sense of a story they're telling. They always have well-crafted sentences.

So you might prefer concision in your writing. Or you might prefer really long, complex syntax. But either way, the stylish writers are the ones who have really taken the time to make those sentences well-crafted. Pretty much everybody in this room would probably agree on those things.

So I took this 10 point list. And then I checked it against a number of the stylish academic writers who had been recommended. Steve was on the list. And I did my best to find, not just books by these people, but articles where possible, so that I wouldn't be comparing apples with oranges, rated these writers on the 10 point scale. And most of them came out-- I think the average score for 10 people across the disciplines was about 9.1, which isn't too surprising, because I'd constructed the rubric based on what they do. But it was just to make the point that it is possible to write academic articles that do these things and to publish them in a range of journals.

Then I looked at 100 articles from basically the six highest rated higher education research journals. And I rated them on the same 10 point scale. Anyone want to take a guess that at average score out of 10 possible? I heard a four. I saw three. 2.5-- you were all optimists.

[LAUGHTER]

The mean score was 1.1. The median score was zero. More than half did none of these 10 things. And again, you just have to look at that and say, why? What is going on here? Why would the

authors of these journal articles not do any of the things that we all know you can do to make your work more engaging and readable?

And I think the reason is, well, there are various institutional reasons. But they kind of boil down to convention and fear, people actually thinking that they have to write that way in order to get published. So I actually wrote an article based on that research, got it published in the top journal, *Studies in Higher Education*, to prove the point that the editors actually are looking for things that are engaging, as long as the research has to be there. There can't be empty style without the substance.

At that point, I decided to broaden my research and look at academic writing across the disciplines, which has been just absolutely fascinating. I stopped using the grading rubric, because I didn't want to be pitting-- you know, it's not fair. And in some disciplines, if you're looking at a medical journal, where people are writing a seven page, very formulaic [INAUDIBLE] of a five year research project. You're not expecting the snazzy introduction and things. You have readers who want to come in and just sort of mine it for the facts. But those same writers in the sciences also have the moments when they need to communicate with, for instance, the tenure and promotion committees or the grant writing committees, when actually having those more stylish strategies would be very useful for them, the ones that engage and persuade people.

So I started looking. I looked at 1,000 articles, 100 each from 10 different disciplines across the sciences, the social sciences, and the arts and humanities and found that while, in most disciplines, things aren't quite as dire as they are in higher education, still a strikingly high number of disciplines-- of academics in pretty much all disciplines are very much ruled by convention, which I find interesting for academics. Because I think of being an academic as being about pushing the boundaries of knowledge. And yet, a lot of the training that we do with our graduate students is about disciplining them, fitting them within. And so there's a real kind of difficulty there.

So by the time I'd done that research, I also looked at well over probably 150 books and articles by people who had been recommended to me by colleagues in their own fields as stylish

academic writers. And I decided in the book not to focus on the negative side, the bad side. Turns out, I'm very good at doing these really snarky close readings of really bad sentences, and I quite enjoy doing it. But it makes people feel bad, you know.

And if you want to change things, you don't do it by criticizing people. You do it by inspiring them. So I tried to find the inspiring examples. And the book is full of these little spotlights on style, where I've taken particular writers and done close readings of their works, their sentences and paragraphs, to try to demystify what stylish writing is.

Yes, some people are more talented and more skillful at writing than others. But they are all using techniques that anybody can learn. And so I tried to really break down what they were doing into the specific techniques that they use.

At the beginning of the book, I talked about three characteristics of stylish writing that I think go across the board, no matter what the discipline. So style can vary. We can all have different stylistic preferences. But stylish academic writers, I think, always, always, always, are concerned with communication. So that's one of the characteristics.

Another is that I think they are always concerned with craft. As I've already said, it could be a short sentence, a long one, but as long as it's a well-crafted sentence. And the point there is that the author is doing the work, not expecting the reader to do the work. And think about that when you're reading something where you're really plowing through it and trying to figure it out. It's probably because the author hasn't actually taken the time to work it and work it and work it.

This may seem really obvious to most of you sitting here, but I don't think it's obvious always to our students. I've heard a lot of graduate students say, you know, I'm not a very good writer. And it's so frustrating. It's the same story of getting all the red pen back. And this is a bad thing.

My supervisor is a really good writer. And then I write these things, and it's just mush. And I have to work on it and work on it and work on it to make it any better. And it's so hard. And it's so frustrating. And I'm just not really very good.

Then you go, and you talk to the supervisor. And this is some of the research I'm doing now, interviewing academics about their writing. And they'll say, oh, when I write the first draft, it's just mush. It's a big mess. But then I work on it, and I work on it, and I work on it. And I craft it. And I'm an artisan of words.

And I work on it. And it's hard, but it's so satisfying, getting it to where it gets better and better and better. Right, same story from those two different people. But one of them is seeing it as this horrible frustration, because they don't understand that that's actually what it takes to write the stylish prose.

And so I've come to believe that one of the qualities of-- one of the sort of human qualities that goes with stylish writing is a pleasure in the craft. Until you acquire that pleasure in the craft, you won't necessarily want to put in the hard yards to get there. So communication craft, and the third C that I write about in the introduction is creativity, by which I don't mean necessarily that academics are or should be bringing techniques from creative writing into their academic writing, although some people do that very deliberately and effectively.

I mean that what I noticed amongst the stylish writers I looked at is that they don't adhere to convention if the convention doesn't suit them. And they are constantly pulling in ideas from other disciplines. Again, if you think of the top people in your own field, think of what they do, either stylistically or in terms of the research. And you'll find that most of them are quite intradisciplinary thinkers. I've seen this again and again.

They're reading widely. They're bringing in ideas from outside the discipline. And that's precisely how they're pushing the discipline forward. So for teaching our students that being an academic is about adhering to convention, we're actually teaching them not to be in that kind of top tier, I think.

By the time I finished the book, I'd come up with three more C's. Helps me remember them-- good mnemonic. And so these were things that I wasn't necessarily looking for at the beginning. But by the time I had finished, I had really noticed them. One of them is actually more a technique than an overall principle, which is concreteness.

I saw this again and again, whether in the science writing or the humanities or anywhere in between, that the writers that most of us find the most engaging are the ones who use concrete language and concrete examples, particularly when they're talking about abstract ideas. Now, being an academic is all about abstraction. That's the whole point. The definition of research is the advancement of knowledge or the creation of new generalizable knowledge. That act of generalizing is, in essence, an act of abstraction.

So it's not a matter of saying you won't be abstract. It's a matter of communicating those abstract ideas through concrete language. And I just, I notice it again and again. Sometimes it's just through the use, the choice of verbs and nouns. And that's why we have so much language in academe. Some of it kind of turns into dead metaphors at some point. But that's why we talk about exploring ideas and about constructing theoretical frameworks. Those are concrete terms that we're using to just kind of give us something we can visualize.

And my favorite example of how this works comes, not from a piece of academic writing, although you could find many examples of it again. I'm sure you think about this, Steve, when you're writing. Because you certainly do it. But it's from a political speech. Martin Luther King's "I Have a Dream" speech is about abstract concepts, right? It's about freedom and injustice and all these things.

But the way that he communicates those ideas is relentlessly concrete. So he'll say, "I have a dream that one day in the red hills of Georgia, the sons of former slaves and the sons of former slave owners will be able to sit down together at the table of brotherhood." He ends with the abstract noun. But by the time he gets you to the brotherhood, he's taken you to a place, the red hills of Georgia, giving you this visual.

He's given you these people, the sons of the slaves and the sons of the slave owners. He's given you an action. They sit down together at a place, at the table of brotherhood.

"I have a dream that my four little children will one day be able to be judged, not by the color of their skin, but by the content of their character." Same thing-- he gives you the particulars. He gives you the visual image. And then he gives the abstraction, the content of your character. So if this is something that you don't normally think about, and I'm sure some of you do, but if it's not

something you've thought about much before, pay attention to it when you're reading or when you're listening.

I particularly like the genre of the school graduation speech. You know, so the principal will be talking about striving for the attainment of excellence and all this sort of thing. And everybody is kind of nodding off. And then at some point, they'll go, let me tell you a story. And they tell you a story of a former student who has attained excellence. And suddenly, you perk up again, because you're back in the concrete world. You're in the world of bodies that we live in.

So concreteness-- that was, as a technique, that would be, for me, the number one that really came out of that book. Telling stories goes with that. But that's of forming, of making things concrete.

Another of the sort of overall principles is choice. And what I found from my research is that in most disciplines, at any given time, you actually have choices about style. And again, I hear a lot of early career academics, grad students, say that they can't do things because they're not allowed to.

So a classic example of that that I investigated a bit in the book is pronoun usage, right? Can you or can you not use first person pronouns, I and we? The number of times people have said to me, particularly social scientists, we're not allowed to use the first person, and then I go and I look at the journals in their discipline. And it may not be conventional to use the first person, but there will always be one article where somebody does, one out of 10 or something like that.

The social scientists will say, well, we're not allowed to use the first person, because we have to sound like scientists. I looked at three scientific disciplines. I looked at evolutionary biology, computer science, and medicine. And I found that in all of them, 80% or more of the authors used we. And all of the style guides in every discipline say, go ahead and use first person pronouns. I couldn't find a single one, including APA, used by most people in social sciences, that says, use the passive voice and don't include yourself. And yet, it's persisted as this kind of myth.

The most surprising finding for me was that, of the 10 disciplines I looked at, the one where first person pronouns were used least was not in the sciences. It wasn't in the social sciences. It was in history. So in history, I found that of the sample I looked at, 100 articles, about 40% used first person pronouns and about 60% did not.

In contrast to literary studies, a neighboring genre, very similar in many ways-- and there is something like 98% used first person pronouns. So I went, and I talked to the history department at my university. And I showed them these statistics. And I said, explain this to me. Why don't you use-- you write in a very personal style, generally. It's not-- most historians are not pretending to be completely objective. But they're doing that through other means, not through the first person.

And so the chair of the department stuck up his hand. And he said, well, I don't use first person pronouns because Professor So-and-So at Oxford told me in 1978 that I must never do so. And he had never since then actually questioned that.

Now, if 60% are not using personal pronouns and 40% are, that suggests to me that if you're a historian, you have a choice. It is your choice. It is not the convention that is choosing things for you. So I would encourage academics, and particularly again early career academics who are learning the genres, to learn them in terms of choices they make, rather than in terms of conventions they have to follow.

But that brings me to the final C, which is courage. I think it takes courage to be a stylish academic writer, to push on that oxymoron. And it can be difficult to be courageous, particularly if you're early in your career. So another one of the stories I hear a lot from the graduate students and pre-tenured academics is, well, so-and-so who's a really great writer-- Steve Pinker, yeah, he writes in a more personal style. But he's allowed to, because he's famous. And he's got tenure and all this.

So I've been interviewing. The project I'm doing now, I've kind of shifted from looking at academic style to talking to the people who write the books. So I'm looking at people. And by the time I finish this trip, I will have interviewed more than 100 academics from all across the disciplines and from about 15 different countries, all people who have been recommended by

colleagues, not necessarily as stylish writers, just as people who are interesting writers or interested in writing or seem to just be able to be productive writers and also to raise a family, or have a normal life, or whatever.

So I'm just talking to them and asking them lots of questions about how they learned to write, what their daily habits are, what their emotions are. And then I've been asking some of the same questions on a questionnaire, too. By the end, I'll have about 1,000 people who will have-- so academics from grad students through to emeriti professors who will have answered those questions.

And one of the things that I've been asking particularly the successful, the well-known writers is, is this true that you waited until after you had tenure to start kind of pushing the envelope on style? So I interviewed Douglas Hofstadter, the author of *Godel, Escher, Bach*, which he started writing when he was 28 years old. He won the Pulitzer Prize for it. And it made his academic career.

And he, of course, said, this is complete nonsense. I made my academic career by having written a book that was unusual and that didn't adhere to any academic genre. So I do hear the stories of people who submit things to journals. And they get pushed back. They get told to chop out all the interesting bits, or to take out the first person, or whatever.

But I've also heard a lot of wonderful stories of resistance, of going back to the editor and negotiating, or of sending the paper to another journal and then winning the prize for the best article for doing precisely the things that somebody else told them they couldn't do. That takes confidence. That takes courage.

But I think it's something that it's worth it for all of us to push on ourselves, but in particular, to encourage our students to do, so to encourage them to be the courageous writers, rather than the frightened, conventional ones. So I'll end there and see what these two have to say.

[APPLAUSE]

Elizabeth Knoll

ELIZABETH KNOLL: I'm here to speak as an editor, as a book editor, for the editors and about the editors. This is partly obviously sheer self-indulgence on my part. But it's also because an editor whom you deal with, if you're thinking about writing a book-- and I live in the book world, so that's what I'm talking about-- an editor you deal with or an agent whom you deal with-- and your agent used to be an editor before she lost her job-- your editor or your agent is sort of emblematic of all those readers you want to have whom you don't know.

So when you're writing the manuscript, or writing the proposal for the manuscript, or writing the letter that describes the proposal that you hope that the agent or the editor will read, it's going to be a lot easier to write if you think of that editor or agent as an actual human being. The person is probably an actual human being. The person I'm going to call her she, because lots of us are. The editor of the agent is a person who is very busy, very stressed, necessarily very pragmatic, and she says no a lot more than she says yes.

At least once in the last month, she has woken up and worried about the weakness of the publishing industry at 3 o'clock in the morning. But it's very important to say that editors as a class, as a type of person, are not sour, are not petty, are not hostile, and not bad tempered and not cynical. Because if we were any of those things we wouldn't last a week. Your editor-- this future editor whom you don't know-- is basically an optimistic, enthusiastic, outgoing, sympathetic person. Even the ones who seem most prickly are secret romantics.

The scariest agent whom I ever met has now retired and is spending her retirement taking beautiful photographs of flowers. Just as nobody in their right mind sets out to write a book to get rich, nobody goes into publishing to get rich. We go into publishing because we love ideas. We love new ways of thinking about things. We love to be interested in things. And we'd love to get other people interested in and excited about things.

So as the guy said in the old movie Jerry Maguire, help us to help you. Meet us halfway. Help the agent or the editor, or the entity and then the editors colleagues, and then through them that world of readers you're going to have, to understand the argument you want to make, or the story

we want to tell, or the idea that you have. Now, Helen and Steve can't talk. Helen already has talked very, very well about how to express that, how to avoid the clunky language, how to avoid the abstractions how to avoid the almost autistic self referential kind of quality that many disciplines kind of do tend to fall into.

But what I want to talk about is thinking about who's on the other side. It's not enough to talk about whatever it is you have to say in a clear and lively way. You have to think about why it matters. The question that we always ask-- and I say this all the time-- is that any proposal or any kind of book has to answer the Seder question, how is this book different from all other books? That's an important question. But an even more important question is, who cares? So what? Why does it matter?

Many things compete as we all know for people's time and attention. If you've got a TV and a computer you have access to an unlimited stream of entertainment, quasi entertainment, information, quasi information. And it's all basically free. So what is it that you have to say to somebody else that that very busy person with a computer is going to want to plunk down \$30 for, and almost even more important, commit three hours of their busy life for.

It sounds daunting. But since editors are optimistic and encouraging, let me offer you a way out. It's not enough that you know more about something than anybody in the world. You probably do. And it's not enough that it's really interesting. You need to think about and make it clear why it's interesting to somebody else. And what it is in what you have to say, the story you want to tell, the argument you want to make, that really answers a need that most people have.

And what most people are looking for, and what they will buy books for, is something that helps them make sense of the world, something that helps them not necessarily get rich, get beautiful-- although that's nice too-- but something that helps them find a thread through the labyrinth, through all this blooming and bulging confusion that we live in. How did the recession happen and when will we ever get out of it? Why are we in Afghanistan? Those are questions that are topical and on the front pages of the paper. But there's many other questions that people care about quite a lot. And if you can answer those questions, can think about how the problem that you are preoccupied with, that you really care about, can be something that someone else can

care about, you're already halfway there to writing a letter, a book proposal, a book that someone will care about.

Now, if it's many academics, if you're interested in writing a book for people outside your discipline, outside your subdiscipline, if you're interested in writing a book for nonacademic readers, it's really, really a good idea to know some nonacademic readers. And you think I'm joking, but I'm actually not joking. You're probably aware that most of us do not live in America. Most of us are not really too typical. And most of us have as our friends people who are probably kind of like ourselves.

So know some people who aren't like you. Talk to them about the stuff you care about. See what gives a glint in their eye. Your best friend from high school, the president of your high school class, your college roommate, your dentist, your brother-in-law from Western Nebraska who runs a company that sells heavy duty plastic fencing, and can only fall asleep while watching a football game on TV, but who also always, always has American political history books on his Kindle.

You have to know these people. You have to like them. And you have to respect them. You have to respect the things that they care about and worry about, and the worldview that they have. The all important question is who are you talking to? Are they real to you? And what do you have to give them? It's not just what you want to say. It's what you want to say that they can want to hear.

A few years ago after my father died, my mother gave me the assignment of going through his study and all his papers and organizing everything. And among the things I found in there were the voluminous records of a trip to Europe that he'd taken when he was a graduate student in 1948. I read them, obviously, with great interest, partly because post-war Europe was interesting to read about, but also as you can understand, it's extremely touching for a middle aged person to meet her father when he was young enough to be her son.

There were two kinds of records there. They were his diary and the letters that he wrote to his parents along the way. The diary was very clear. It was interesting, full of description, but it was a little flat. It was sort of lugubrious sometimes. It was clear he was lonely. The letters to his

parents sparkled. They conveyed the enthusiasm of the conversations he was having with people. He was trying to describe things he was seeing in ways that would make sense to his parents back in Nebraska. The letters had life.

And I thought not only as a daughter but as an editor, aha, this is the key. A book is not a diary. A book is a letter. A book is written from you to somebody else. And if you can think about everything that you write in your book as your letter to the world, it's going to have the kind of life that you wanted to have, and it's going to make your editor love you.

[APPLAUSE]

Steven Pinker

STEVEN PINKER: Thank you. The invitation to this conference summarized its theme in words that I think that Helen wrote, "Pick up any guide to effective writing and what will you find? Probably some version of the same advice that Strunk and White offered in the 1950s," which I think actually dates back to the 19-teens from course lectures from Professor Strunk.

"Engage your reader's attention through examples, illustrations, and anecdotes. Use clear, precise language to express complex ideas. Avoid obfuscating jargon. Favor active verbs and concrete nouns. Write with conviction, passion, and verve. Pick up a peer-reviewed journal in just about any academic discipline and what will you find? Impersonal, stodgy, jargon-laden prose that ignores or defies most, if not all, of the principles listed above."

Absolutely. And I'm going to follow the implicit advice in that passage by engaging my listeners' attention through some examples. To define the problem that we are dealing with, here are just a half a dozen examples that I have collected from papers of students and colleagues. All of us have read passages like this. Some of us have written passages like this.

Quote, "Most importantly, there is a lot of variability in this population regarding the level of linguistic difficulty that is being exhibited," which means children differ a lot in their language problems.

"In fact, it is most likely impossible to prove causality between violence in media and violent behavior in children, and only a small amount of correlation has been shown through studies." That is, it's impossible to prove that violence in the media causes violence in children. The two are not even strongly correlated.

"Genetic influences are implied when non-adoptive siblings who share approximately 50% of their segregating genes are more similar than adoptive siblings." Translation, if biological siblings who share half their variable genes are more similar than adoptive siblings who share none of their variable genes, then genes must matter.

"Comprehension checks were used as exclusion criteria." Translation, we excluded participants who did not understand the task.

Finally, "Gilbert, et al, asked subjects to learn a fictitious vocabulary by reading assertions, e.g. A [? manishna ?] is an armadillo, whose veracity was either affirmed or denied by the subsequent presentation of an assessment word." Which means that people in this experiment looked at a computer screen, the computer screen said a [? manishna ?] is an armadillo, it disappeared, and then the word True or False appeared on the screen.

Now, by the way, the locution, the subsequent presentation of an assessment word is a wonderful example of what Helen has dubbed a zombie noun. That is, a nominalization, the conversion of a verb to a noun that reifies or thingifies a process, and which we, academics, are all too fond of.

So the question is, why are we so prone to passives, abstractions, and zombie nouns, all of these sins that we point out over and over again, but that so many of us can't avoid using? Now, the most common explanation appeals to motives, to nefarious motives. That academics, and bureaucrats, and legal scholars, and so on, want to affect an impression of expertise, they want to sound sophisticated and [INAUDIBLE], and so they try to bamboozle their readers with highfalutin verbiage.

And I think there's no doubt that this happens, but I don't think that it is the principal explanation for why so much academic writing stinks. For one thing, I think it's just not all that plausible for

so many mediocre writers. These are perfectly unpretentious, ordinary people. You can have a beer with them. And I think it's probably unfair to accuse them of trying to impress others.

Also, it gets us off the hook. It's like, it makes it too easy for us to say, well, I wouldn't just try to use opaque language just to impress. I'm a regular person. And it makes it easy to overlook the mental habits that lead us, for completely innocent reasons, to write so poorly.

I think a more complete explanation would appeal to a mismatch between ordinary thinking and speaking and what we have to do as academics. And I'll illustrate this with three principles, which I call your inner primate, the curse of knowledge, and the difference between naive realism and postmodernist self-consciousness. So let me go through each one of them.

To begin with, we are primates. This is a zoological fact, but it is also an important principle to remember as we compose writing. Our minds did not evolve to think thoughts about sociology or literary analysis or cosmology.

Our minds evolved to deal with-- to understand the world through vision, through space, through force, through motion. Things get pushed. They go clunk. They move from one place to another. Everything else is a learned abstraction.

Now, we are-- the mind is capable of making those abstractions, but it requires a particular history, which we can see, we can reverse engineer, through the ubiquitous metaphors in our language.

We say, inflation rose in July. What exactly do we see or experience or feel when we use that sentence? Well, it's highly abstract. We all understand it, thanks to two concrete metaphors, inflation, increase in size, and rise, change in position.

These distributions have thick tails. That is a way of describing a mathematical property of a power-law distribution. To distribute, of course, is to scatter, to put in numerous places. A tail is a concrete object. They can be thick or thin.

Ethnic tensions are flaring up. Again, you could walk down the street and never actually see an ethnic tension, let alone it flaring up, but we understand that, because we have the metaphor of

tension, of, say, two people pulling on a rope, and another metaphor of something that is cool suddenly bursting into flame.

And by the way, notice that each one of these has a mixed metaphor, which shows that although there were historical origins in these locutions in terms of concrete experience, we have packaged them so well that we forget what the original metaphor is, allowing us to mix our metaphors.

So this is an encapsulation of what we do as, not just as academics, but as thinkers, as citizens, as people who read Newsweek magazine. We take a concrete event, so ethnic tension might be the Irish kid throws a rock at the window of the Italian store, but then we take that event and hundreds like it, and we package it into a single cognitive unit-- cognitive psychologists call this process, chunking-- and then we build more complex chunks out of assemblies of simpler chunks.

We abstract away from the concrete particulars, so that a rise in emotion can be analogized to arise in a physical flame. And then we pick a noun and we label the chunk.

We do this so often, we don't realize how much of our vocabulary consists of applying nouns to highly abstract ideas, which, fortunately, we can then manipulate. We can feed them into still more abstract ideas with things like causality, variability, difficulty, genetic influences, comprehension checks, exclusion criteria, criteria, presentation of an assessment word. Each one of those particular expert in a discipline or, for that matter, even a literate adult, has already mastered as a simple unit in their mental vocabulary.

Now, the power from that comes from the fact that you don't have to work backwards every time and remind yourself of what exactly has to take place in the world for something to count as an ethnic tension. The problem is that this leads to the opposite of ideal prose, particularly when your reader or your listener may not have packaged a complicated series of events into the same chunks.

You might use a chunk that is overlearned, perfectly clear to you, but if someone else hasn't recapitulated the process of packaging their experience into that abstraction, they, in the worst

case, may have no idea what you're talking about, in the best case, be expending so much cognitive effort to reconstruct what went into that chunk, they have little left over to understand the rest of the passage.

This brings me to the second principle for why academic prose is so systematically bad and it is another psychological phenomenon sometimes called the curse of knowledge. That is, it is very difficult to imagine what it's like not to know something that you do know.

Now, the curse of knowledge was actually first discovered in children, where it goes by the name of, sometimes, deficient theory of mind or difficulty in mentalizing. That is, in knowing about someone else's mental state, acting as an intuitive psychologist or a folk psychologist and trying to figure out what's going on in someone else's minds.

Children are bad at that when the content of someone else's mind differs from the content of their own mind. Classic experiment. You show children a box of M&M's. They open it up. There are pencils inside. The child is surprised. You say, well, Jason is going to come into the room. What does he think is in the box? And the child will say, pencils.

Now, Jason, of course, had no way of knowing that the M&M box has pencils in it. The child, himself or herself, didn't know until a minute ago that the box had pencils instead of M&M's. But the child, now knowing it, can't imagine that someone else doesn't know it, even if they had no way of figuring that out.

Now, we can't get too smug, because we adults are prone to exactly the same shortcoming. We're apt to forget that our own chunks, our own abstractions, which we laboriously learned in our intellectual autobiography, not everyone else may have learned.

There's an old joke about the joke tellers convention. Stop me if you've heard this. But a comedian invites a friend along to the annual convention of comedians and sits in the audience, anticipating an evening of rip-roaring hilarity.

And what happens is that each comedian gets on the stage and says, 347. Uproarious laughter. Then someone else gets up and says, 212. Everyone giggles hysterically.

Friend says to the comedian, what is this? This doesn't seem funny. And he says, well, you see, we've heard these jokes so many times that we save the trouble of actually telling the joke by just referring to them by their number.

And so the punchline actually is not relevant to my point. But anyway, the friend goes up and he tries. And he goes up and he says, 417. Silence. 512. Nothing.

He sort of slinks off in humiliation. He said, I was dying up there. What happened? And the friend says, well, it's all in the way you tell it.

Now, that isn't the point of the anecdote. The point is that all of us are a bit like the comedians at the comedian convention. That is, we refer to things by abbreviations, forgetting that other people have not learned them.

Finally, there's a third reason for bad academic prose and that is that there's a mismatch between the optimal mental model of prose communication, what you ought to have in mind as you communicate, and what we actually do as academics.

Writing is a highly unnatural human activity and academic writing is more unnatural still. There is an unknown audience. They are distant in time and space. Talking about things that none of us have experienced in common.

And I think the problem is all the more acute for graduate students, who I-- people often ask me, you must see a lot of awful writing among your undergraduates. And the answer is, no. The answer is that the truly horrendous writing comes from graduate students.

The reason being, I think, that they are suddenly immersed in this world in which everyone knows so much. Everyone seems to know everything and so you just don't know who you're informing of what, since everyone just seems so knowledgeable except you. And it's very hard to gauge, and in fact, easy to overestimate how much knowledge your reader has.

But just getting back to the third reason for the awfulness of academic prose. Given this inherent difficulty that you're not really engaging in any natural form of communication, you have to have a model, a fictitious model, of how you should be pretending to communicate. And my favorite

model of this comes from a wonderful book by Mark Turner and Francis-Noel Thomas called *Clear and Simple as the Truth*, which outlines what they call classic style, a tacit model of the prose communication process that they recommend as an ideal.

The model, that is, the fictitious, pretend kind of communication that you aspire to in this style is joint attention. That is, the writer orients the reader to something in the world which the reader can see with his or her own eyes. The goal is to help the reader see reality. The style is conversation.

The classic style model has in it a number of assumptions. The assumptions are that truth can be known. That prose is a window into an objectively existing world. That the thought can stand alone and precedes the word. Writing is not thinking. That thoughts are concrete images. An agent applies force to an object, an object moves or stays put.

In that sense, classic prose is the opposite of anything that is relativist, ironic, romantic, post-modern, or self-conscious. It's a model of communication that is realist, indeed, naive realist. There is an external world. Anyone can see it. The purpose of prose communication is to get someone else to see something that is objectively out there.

Now, this is highly congenial to the worldview of a scientist and it is pretty much the worst nightmare to a post-modernist. And this might even help explain why, I think, so much of the clearest prose from academics is often from science popularizers. I know Helen did a survey of academic journals. I don't think science came out so well.

But I think our clearest prose stylists nowadays are people like Richard Dawkins and Brian Greene, who try to convey science to the public. And I think there's a systematic reason for that. Namely, the mental model of the scientist is pretty close to the ideal model for good prose, at least according to the theory of Turner and Thomas.

So let me just give you an example. Again, always illustrate your abstract ideas with concrete examples. This is from an article by the cosmologist Brian Greene and I'll just read it to you.

"In 1915, Einstein published the general theory of relativity, which was the culmination of a 10-year search to understand the force of gravity. The theory was a marvel of mathematical beauty, providing equations that could explain everything from the motion of planets to the trajectory of starlight with stupendous accuracy.

Within a few short years, additional mathematical analyses concluded that space itself is expanding, dragging each galaxy away from every other. Though Einstein at first strongly resisted the startling implication of his own theory, observations of deep space made by the great American astronomer Edwin Hubble in 1929 confirmed it.

And before long, scientists reasoned that if space is now expanding, then at ever earlier times, the universe must have been smaller. At some moment in the distant past, everything we now see, the ingredients responsible for every planet, every star, every galaxy, even space itself, must have been compressed to an infinitesimal speck that then swelled outward, evolving into the universe as we know it. The Big Bang Theory was born.

During the decades that followed, the theory would receive overwhelming observational support. Yet scientists were aware that the Big Bang Theory suffered from a significant shortcoming. Of all things, it leaves out the bang.

Einstein's equations do a wonderful job of describing how the universe evolved from a split second after the bang, but the equations break down, similar to the error message returned by a calculator when you try to divide 1 by 0, when applied to the extreme environment of the universe's earliest moment. The Big Bang thus provides no insight into what might have powered the bang itself."

Now, this is not fancy prose. It's not poetic. It's not inspiring. But it is quite astonishing in conveying highly abstract ideas, nothing less than the history of the universe, and the history of the last 50 years of theoretical cosmology, what the problem with the theory is now that scientists are attempting to deal with, in utterly transparent prose.

Now, despite that built-in advantage that I think science has, even scientists have to be a bit post-modern. That is, when you do science-- although notice how Greene conveyed the history of

cosmology in classic style. There was a great deal of confidence in the way he described things. There was very little hedging or uncertainty. And you really feel, when you read that prose, like you're standing next to him and he's saying, look at that, look at that, look at that, look at that.

Now, of course, this is entirely fictitious, because even the most realist scientist has something in common with a post-modernist. Namely, convictions such as, it's hard to know the truth. The world doesn't just reveal itself to us. None of us is objective. Objectivity, in fact, is elusive. We understand the world through our own theories and constructs. They are not just pictures or images, but sets of verbal propositions. And our ways of trying to understand the world must be constantly scrutinized, examined, and purged of error and bias.

Now, these precepts are what any scholar has to always have in mind, but even though they are the reality, they are all poisonous to clear prose style. That is, many sins of academic writing are actually accurate reflections of this self-conscious, ironic, meta aware, post-modernist stance that even the most realist scientist has to live with.

And I'll just give you-- again, I'm going to follow Helen's advice, and all of our advice, and I'm going to be concrete by what I mean. So for example, what makes academic prose so turgid? Well, one part is, one ingredient, is the focus on the activity of studying something, of the writer's job or clique or peer group or daily activities, as opposed to the thing in the world that you are writing about.

I'll give you an example from my own field. Paper-- that all too familiar opening. "In recent years, an increasing number of researchers have turned their attention to the problem of child language acquisition. In this article, recent theories of this process will be reviewed." We've all heard that, but notice it has nothing to do with the actual phenomenon of interest. It's all about what the people who study child language do.

A much better beginning would be, "All children acquire the ability to speak and understand a language. How do they accomplish this feat?"

A second sin of academic writing, and again, this comes from the necessary self-consciousness of a scholar, but again, is poisonous to clear prose, is metadiscourse, writing about the writing.

My first book for Harvard University Press, I had a copy editor who warned me about the academician's habit of metadiscourse and excessive signposting.

We tend to mistakenly think that to help orient the reader, we keep having to place signposts, telling the reader what we're going to do, what we just did, what we're going to do next, such as, and again, this ought to sound familiar. "We have just reviewed structuralist theories. Next, it will be necessary to summarize functionalist theories. But first, constructionist theories must be discussed." The problem being that the reader has to expend so much effort understanding the signposting that they have totally lost track of the actual narrative.

Yet another problem is excessive apologizing. "The problem of language acquisition is extremely complex. It is difficult to give precise definitions of the concept of language and the concept of acquisition and the concept of children. There is much uncertainty about the interpretation of experimental data and a great deal of controversy surrounding the theories. More research needs to be done." Sound familiar?

And finally, compulsive hedging. Somewhat, fairly, nearly, almost, partially, relatively, comparatively, predominately, to some extent, to a certain degree. And for me, what crystallized this bad habit was an anecdote where a fellow academic pulled out a photograph of her four-year-old daughter and she said, "We virtually adore her." Now, this shows that the academic's habit of hedging has gone too far.

Well, the question-- I think that one of the main challenges in stylish academic writing is how do we resolve the inherent discrepancy between the demands of clear prose, which basically invoke an implicit theory of naive realism-- the truth is out there, it's objective, all you have to do is look and you'll see it with your own eyes-- and the demands of reflective scholarship-- objectivity is elusive, we understand the world through our theories, and so on.

And these are not, in fact, contradictory. Because you don't have to believe that all the canons of classic prose are literally true, that the truth can be known and so on, but rather the art is to write as if they are true and to count on the reader to fill in the missing hedges, apologies, qualifications, self-conscious remarks, and so on.

That is, you can pretty much take for granted that anyone who is reading your academic article knows that what you're writing about probably has some controversy, otherwise you wouldn't have anything to say, knows that it's difficult to draw conclusions from data. That's kind of the ground rules. You don't have to state it in every sentence.

And in fact, human language is only possible because the reader or the listener naturally fills in the lines, connects the propositions, a process sometimes called conversational implicature. That's a fancy jargon word for reading between the lines, for supplying what was not explicitly stated using common sense and shared expectations to fill in what was not stated in so many words.

My favorite example comes from the little bit of poetry on the shampoo bottle, wet hair, lather, rinse, repeat. Now, when you read those instructions, you naturally know that you don't have to try to wet your hair when you repeat it, because your hair's already wet. And the author of those words didn't actually state, oh, the first time, wet your hair. The second time, you don't have to. You know that.

And also, when it says repeat, you know that means repeat once. You don't go into an infinite loop, repeat over and over again. But if an academic had written those words.

So just to summarize, the sins of academic writing, as Helen so expertly pointed out, include zombie nouns, that is, abstract nominalizations, excessive abstraction in general, passive constructions, hedging, apologizing, excessive signposting.

The reasons that these sins are so tempting are not just the attempt to affect expertise, but also because of an inherent mismatch between the demands of clear prose and the activities of scholarship. Namely, the human mind is inherently concrete and abstraction requires a laborious process of chunking, which a reader may not have replicated, that the curse of knowledge makes us forget our own history of abstract chunking, and that the mental model underlying clear prose communication, a kind of naive realism or joint attention, are incompatible with the actual demands of scholarship, which depends on a certain degree of self-consciousness, skepticism, and irony.

Thanks very much.

[APPLAUSE]