

Writing Persuasively

(This session is not being recorded, to allow everyone to be more comfortable with sharing their personal experiences in writing application)

Questions for [Daniel Newman](#):

*DGP: Please add questions here for inclusion in Q&A session on **Wednesday, Dec 16th***

[ANSWERED] questions are in the [meeting notes below](#)

Written in blue are answers by Dr. Newman himself, after workshop's conclusion

Writing grant applications

- Forming proposals: are there specific types of papers (like taxonomies, or reviews) that make for better material to reference in your proposal? *Not necessarily--what you cite depends on what you need to say (are you citing to support a specific claim, or are you citing to establish a general fact?) But because space is always at a premium, it's good to be selective about what and how much you cite. For this reason, citing a recent review can be a good way to avoid citing multiple other studies--but this is only the right approach for certain kinds of claim.*
- How do you decide which technical terms are effective communicators of a CS topic, and which are technical jargon? *If the term allows you to say something you can't say otherwise, it's a necessary technical term (but you may want to define/explain it to the readers). If you can say it more simply without sacrificing much information/accuracy/precision, then it's "jargon" and can be omitted. Another way to look at it: if it's a term you would use numerous times in the proposal, it's worth the space to define/clarify it for the readers; if you're just going to mention it once or twice, then maybe it's worth using a less technical/precise/accurate stand-in. The same is true of acronyms: there is literally no point in listing an acronym for a term you'll only mention once or twice. Just spell out the whole term. (Acronyms are usually more helpful to the writer--they save space--than they are to the readers. Most acronyms are actually just confusing, and force the reader to have to go back for a reminder--not what you want them to do as they read your proposal. To use acronyms, like technical terms, sparingly unless they're very broadly known, like RAM or something like that.)*
- In a grant application-- what are you selling? Yourself or the project? **[ANSWERED]**
- Who are the right type of people for eliciting feedback on proposals? (advisors, writing support) **[ANSWERED]**
- If your project is already underway, what amount of progress do you report on? How do you create a compelling narrative out of preliminary results? *Good question. It's obviously a good idea to report on work completed, but the danger is that this focus overtakes the crucial task of the proposal: to *propose* something new. For this reason, it's good to limit reporting completed work by treating it as background for what has yet to be done. For example, instead of starting a paragraph with something like "In work already completed, I developed XYZ..." (note the past tense), you can frame the past work in the context of the proposed work, for example, "My next study will build on work*

already completed, in which I developed XYZ..." (note the future tense). This small difference shifts the rhetoric from "here's what I did!" to "here's what I'm going to do," the latter being more in line with proposal-writing.

- What do you do if you disagree with the feedback you have been given? Is ghosting the person a valid strategy? **[ANSWERED: Do not ghost people plz. Agreed. You can ignore advice but you should nevertheless thank or otherwise acknowledge those who offer advice.]**
- Should I dumb down my ideas in favor of clarity? Should I use simple analogies to get my ideas across? **[ANSWERED: Speaking to multiple audiences]**
- Is there such a thing as "too many cooks" when looking for feedback? **[ANSWERED: The more, the merrier]**
- I liked my first draft more than my tenth draft after applying feedback. Should I go back to square one or hammer away until I like my proposal again? **Tough question. I would generally suggest showing your writing to someone else (supervisor, postdoc, colleague) before going through 10 drafts! There are inevitably diminishing returns to re-re-re-revising a document, and the best way to avoid that rabbit hole is to get another pair of eyes on it. If you find yourself in an endless revision cycle, I would generally recommend starting from scratch rather than going back to a first draft (this might be a good time to stop writing/revision, open a new document, and write a new abstract in one shot: no checking your data, no looking up articles, just writing from the top of your head. Then you can go back to writing.) BUT... it's good to keep all old drafts too.**
- For more technical writing, giving wider impact can be a challenge. How can I justify a relatively niche research topic as solving something that matters more broadly? (Ex. nserc reviewers usually represent a mix of different subfields) **[ANSWERED]**
- Is it okay to cite (and laud) my own work in my proposal? Would it be poorly received if I talk about myself in third person and call myself an eminence in the field? **If it's published, your own work counts as "the literature" so it's fair game. But make sure to cite it for the right reasons (because it serves your proposal, not because you want to name drop yourself!). I wouldn't call anyone an eminence in the field, except maybe Alan Turing, John von Neumann and the like--and even so... :)**

Persuasive writing questions

- What are some of the best pieces of persuasive writing you've ever read? **Great question. Grant proposals by really strong academics in "useless" fields (like mine) are generally very effective because they *have to be*. If you're working on curing cancer, you can get away with letting the obvious importance of your research do the talking; but if you study the role of second-person narration in 1960s Irish fiction, you need to demonstrate the study's importance. Unfortunately it's not easy to get your hands on these proposals. High-quality pop science or pop history by authors with a case to make or an axe to grind is often highly persuasive, clear and yet technical. Stephen Jay Gould's essays are fantastic. See also nonfiction by Christopher Hitchens, Richard Dawkins, Margaret Macmillan, Jared Diamond, Laurie Garrett, and so on. These examples reflect my own interests, but surely there are great nonfiction writers who write about your interests too. The *New Yorker* is a good source of writing in general.**

- Passive voice: in or out? **[ANSWERED]**
- Is the first person plural voice needed even when there is a single author? **[ANSWERED]**
- Grammarly tells me that I repeat the same words over and over again, but they are technical terms. How can I make my text less repetitive? **[ANSWERED]**

Writing as a craft

- I think I'm a good writer, but I want to be an excellent writer. How do I bridge that gap? It seems like I have somewhat stagnated and I'm not sure how to push past that plateau. **[ANSWERED]**
- How do I convince people to come to my writing cafe and treat writing as a craft, especially in the time of quarantine? [Pitch it as community as well as information? Also, see if you can get some faculty to do some endorsing/advertising for you. If faculty say this is a good idea, people who are on the fence might be more likely to take a chance with it.](#)
- How do you add structure to a narrative in writing? Creating a compelling narrative out of factual information. [This is one of the questions I deal with in my own work on writing support as well as in my research on scientific narratives. The quick answer is that the narrative provides a link between the big-picture concerns of your project and the nitty-gritty of your actual project. It might help to think of your project as a problem-solving story, rather than a report on research. But this is a big topic!](#)

What can we write statements for?

- Fellowships / scholarships / grants
- Jobs
- Personal websites
- Academic job market
- MSc/PhD applications

Strategies

- Asking for feedback
- Writing early
- Outlining concepts
- Drafting

Subskills

- Persuasive writing.

Meeting Notes

- Why should you apply for grants if the department already funds you?
 - DN: Because getting a grant is an important achievement / part on your CV
 - It helps snowball to more grants. Helps show that you have a good track record.
- Is the first person plural voice needed even when there is a single author?
 - DN: It's the convention in some fields (esp. math) but if this is not the case for your field, I would avoid it. The best way to figure out whether this is all right, read the really great papers in your subfield and see what people are doing re: first person."
- Grammarly tells me that I repeat the same words over and over again, but they are technical terms. How can I make my text less repetitive?
 - DN: "Use Grammarly, but be ready to ignore what it says. It's "smart" but not designed for technical writing."
- Becoming an excellent writer
 - DN: Read literature outside your field (New Yorker, Scientific American, History, other academic fields etc.)
 - DN: Picking up strategies from these other modes of expression
 - DN: Took a year off and read a lot of fiction, 5 novels a week, which helped me a lot with my writing
 - DN: Become aware of what you are doing when you are writing
 - Why am I saying it, how am I saying it, etc.
- Who are the right type of people for eliciting feedback on proposals? (advisors, writing support):
 - DN: "The best is a variety: supervisors/faculty for the technical/content stuff; non-specialists for big-picture stuff; non-academics, non-scientists for basic flow, logic, etc."
- Passive voice:
 - DN: It depends, don't believe anyone who tells you either extreme
 - DN: Passive voice is a tool like any other writing construct, and there are abuses and uses for it.
 - DN: When people tell you to stop using the passive voice, they are cutting corners. By doing that, they are also missing opportunities.
 - DN: A writing workshop is needed to go through examples of when it is ideal to use it.
- Speaking to multiple audiences:
 - DN: Trying to satisfy the expert readers (i.e. supervisor), and non-experts (can't assume they will know the terms, or why your project matters).
 - DN: You have to satisfy the specialists without losing the general
 - DN: At the beginning and the end of the paragraph you should talk about what it is you want to talk about and why it's important
 - Easy way to keep the general readers on-board while giving the specialist what they need

- Specialist readers also want to see you communicate
- I would put more emphasis on the big picture rather than technicality
 - What is the point of the proposal?
 - Not to get money
 - Specific goal: convince your readers that you have a project that's exciting, do-able, and important.
 - You don't have to give them as much information as say, if you were publishing an article on that topic.
 - It's a pitch
 - Most common problem: people don't see the proposal as a pitch
 - Here is a problem that exists in my field
 - Here is how I am going to approach the problem
 - A lot of proposals don't do this
 - People feel like they have to demonstrate that they know their stuff
 - Point of the proposal is not to demonstrate your abilities
- If you disagree with feedback
 - DN: Ignore it, it's your proposal. Keep it in mind. Although it seems scary - it's actually liberating because you have a choice on what feedback to keep.
 - DN: Weigh in if you disagree with the idea because it is "more work" or because it is "incompatible" with your ideas.
- DN: Three top problems with proposals:
 - DN: Not giving rationale
 - Weak proposals don't give justification for why they are doing, instead of just detailing
 - DN: Don't give the big picture
 - Bigger than the question you are approaching
 - DN: Drown their reviewers in detail
 - What do your readers *need* to know?
 - i.e. do the readers at NSERC need to know your sample size?
 - DN: It is important to mention or justify the rationale
 - "My project will use method X which has been demonstrated by author Y as a..."
- DN: Need to sell yourself - you need to convince them that *you* are capable of executing the project, i.e. it has to be feasible
 - There are ways to talk about this without saying I am a perfect person to do this
 - Training in industry, degree that gives you a special edge
 - But this is a small part of this application - the proposal should focus on the project
 - There is a new document in NSERC now which is basically why are you the right person for this project?
 - Skills, training, experience etc.
 - Could also include support (like access to experts, collaboration with hospitals)
 - Clearly research oriented that make the feasibility of the project clearer

- DN: Algorithmic technique for flow:
 - Basically, it works at a sentence by sentence level
 - Starting sentences with familiar information (i.e. information mentioned recently, within 3-4 sentences). As long you are putting information that you expect your reader to know at the beginning then that will create flow
 - Ask yourself, is there familiar information at the start of the sentence? Transform your draft from minds of a writer to the minds of a reader
 - Chances are there is familiar information somewhere in the sentence but not at the beginning - cut that information and put it at the start. Then fix the grammar
 - If it's taking a lot of work to do this then forget about it, just move on
 - **Strategy advice:** Change passive to active or active to passive. That will naturally change the order of the information.
 - If there is no familiar information, then add it
 - Might need a whole new sentence to bridge the ideas
 - Don't need to overthink it - take familiar info and put it at the beginning
- DN: Advice on making the draft to begin with?
 - Don't worry about anything when you are sitting to write for the first time
 - Write an abstract first - provisional abstract
 - Like an outline, don't worry about making it perfect
 - Give yourself some strong constraints - 150 words, 30min
 - Doing this will help you think of the structure of the paper as a whole
 - Have faith in the revision process
- DN: Recommendations for putting the research in context, where the research is niche and doesn't matter to computer scientists. How to make the research matter more to people on a range of subfields
 - Any good project has implications beyond itself for the field. If you are developing a technique or algorithm for use in a very specific context. What other family of problems could your approach or similar approaches address?
 - "Although I am using the algorithm in this very specific context, variances of it can be used in X, Y, ... " (different fields, broader spectrum). Not every study can claim to do that, but surely if the context was broadened a little bit then you might say how your approach can be helpful for other fields.
 - What larger family of problems are you addressing (not necessarily that you will solve within your degree, but conceivable someone can take your work and extend it)

Future Workshop Idea (could be self led, not during meeting)

- Everybody rewrites their website statement of interest and we critique.

Examples

https://drive.google.com/drive/folders/1mSalt1zITT_abAx_FvS3qjgTVbAWtRKI?usp=sharing

- Personal website statements you really like (nice to be from phd students, profs, etc).:
 - ???
- Your own personal website statement of interest
 - Blaine Lewis
 - My research interests vary widely depending on the week, but in general my research aims to solve problems users encounter when learning software. I mostly achieve this goal through designing new interaction techniques, like KeyMap. But more and more I've realised we don't truly understand why users fail to learn software so I seek to understand the underlying breakdowns users experience while learning.
- NSERC CGS-M and P/CGS-D
- Job Hunt statement of interest

Resources

- Anything by Philip guo.
 - <https://web.archive.org/web/20200504163239/http://pgbovine.net/PhD-application-tips.htm>
 - <http://web.archive.org/web/20191004073407/http://www.pgbovine.net/faculty-job-application-materials.htm>
- Matt Might tips are fantastic too.
- SGS Writing workshops

Questions (on topic in general)

- How do I dedicate time to being a better writer?
 - Maybe starting clubs? Maybe within the DGP. Is there funding or something for it we could maybe find to encourage people?

Notes Dump

SGS Grant writing workshop (Dr. Jane Freeman, GCAC, School of Graduate Studies, U of T)

- [Resources directory](#) (public access but not my material, **please do not circulate**), includes:
 - Cells & Systems Biology dept notes on NSERC proposals
 - SGS worksheet from this session
 - Slides from this session
- [Previous session recording](#)
- [SGS Info Sessions Quercus link to other workshop recordings](#) (includes doctoral award information)
- DCS might have copies of past CGSM winners
- Proofread aloud
- When revising, go macro before you go micro
- Awards office at Uoft: call them, or message them to ask whether the project is NSERC or CIHR

Seven questions that most research proposals must answer

1. What do you plan to do? (hypothesis, research question or statement)
 - Can't demonstrate originality if you don't know what has already been done
 - Theoretical framework, methodology, etc
2. Where does your work fit with other work in your field? (originality of project and research context)
3. How you will go about doing it (theoretical framework and/or methodology)
4. Will you be able to deliver what you promise? (feasibility of plan and timeline, justification of location)
5. Who will do the work and who will benefit from it? (expertise of researcher and potential significance)
6. Why it is worth doing? (objective/contribution to the field)
 - What makes this knowledge worth having?
7. What do you not know?
 - You're proposing, not describing what you've already done
 - What you don't know, is what you're seeing the money to learn
 - What you don't know isn't known by anybody, and for the benefit of the field as a whole it should be studied

Effective structure

- Good first impression
 - No acronyms that are unfamiliar
 - General readers need more basic info
- Space is equated with the importance of the information

- Your project, what you're proposing to do, should take up the most space in the proposal, not lit review etc
- Ends strong
- Three Rhetorical Moves in Introductions:
 - Move 1: Establish a research territory (by showing the general research area is important, central, interesting, problematic, or relevant in some way)
 - Move 2: Identify a niche (by indicating a gap in the previous research, raising a question about it, or extending previous research in some way)
 - "As This gap needs to be filled. My research aims to do this by..."
 - "Current approaches have critical flaws: ... I propose to use... in order to..."
 - Move 3: Occupy the niche (by outlining purposes or stating the nature of your research and explaining how your research will fill the gap identified in Move 2)
 - (*adapted from John M. Swales and Christine B. Feak, Academic Writing for Graduate Students, Ann Arbor: U of Michigan Press, 1994.*)
- Things to pay attention to:
 - How long / how much space does each part take? Importance = space allotted
 - What sequence of information will best resonate with your audience?
 - After draft 1, reverse outline: in the margin of every paragraph, annotate what each paragraph is about. Is the sequence in the right order? Does it need to be condensed/expanded to show its importance appropriately?
 - What is your department's/granting organization's evaluation criteria?
 - Order of writing operations: Content 1st, structure 2nd, language 3rd
- Spatial diagramming: laying out the moves. Moves start with the upper left part of a page is most important, travelling to bottom right, due to the reading pattern of English
 - Spatial logic diagram: start mid-left side, project tagline
 - Move 1: facets of the tagline
 - Move 2: BUT points that come out of the facets section
 - Move 3: proposed project (bottom right)
 - Then based on diagram flow, see how to order your ideas (see below for example)



Graduate Applications / Statement of Purpose

- Resources
 - [A Five-Minute Guide to Ph.D. Program Applications](#) (!)
 - [Washington Statement of Purpose General Advice](#)
 - [Berkeley General Tips](#)
 - [UCSD General Tips](#)
 - [MIT Statement of Objectives Sample](#)
 - [University of Washington iSchool Checklist](#)
 - [University of Washington Checklist](#)
 - [Stanford Checklist](#)
 - [Michigan Checklist](#)
- Things I struggled with
 - Right balance of technical language. The statement will probably be read by people in different CS disciplines who'll have no clue what HCI is, need to convey that I am knowledgeable of the field and make sure that the scientific relevance and merit of my research gets across.

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- **Ask for feedback.** Get advisor and other HCI people to look over your letter.
- Feedback received:
 - Focus on selling yourself - showing your potential
 - What skills do you have?
 - Where did you learn those skills?
 - Are you able to think critically and develop interesting questions / research ideas?
 - Are your research experiences related to one another? Was it a bunch of separate projects or was there an underlying motive behind them?
 - Did you come up with the ideas or were they given to you?
 - Checklist for describing a typical technical HCI project:
 - State the research questions.
 - Describe the approach.
 - Tell me you implemented it and how.
 - Separate discussion of the research question from the technical implementation. Both are a good idea to include, just make it clear the tech is in service of answering the RQ's.
 - Tell me you ran a study.
 - End with the contributions
 - Also, go back to how you answered your research questions
 - Misc
 - Weave in other professional experiences (like being a TA)
 - Can use alternate reference formats like (Hayatpur 2020) instead of [1] to show first authorship on a publication without needing to explicitly mention it.
 - Don't use the word "affordances", it's a land-mine in HCI
- **Look at requirements / checklists of specific universities** you are applying to, for example CMU HCII requires a specific format:
 - Part I. Describe your primary interest of study within HCI. Be as specific as possible in discussing your research interests, and any relevant experiences you have had that have informed and inspired those interests. Include a discussion of the potential societal impact of the work you envision doing as an HCI researcher. Existing research areas and projects in the HCI Institute are listed on the HCII research summary page. Other HCI research interests are also welcome.
 - Part II. State your objective in pursuing a PhD and why you are applying to Carnegie Mellon.
 - Part III. Describe your background in fields related to your objective. List here any relevant industrial or commercial experience. Please note that we welcome students from diverse educational, cultural, and geographic backgrounds with a variety of strengths — strong technical skills, strong social science skills, strong design skills, and combinations of the above.

- Part IV. The HCII values students who exhibit persistence and resilience in the face of challenge and adversity, demonstrate a commitment to ethics, and show concern for others and for their community. Describe how your background and your experiences attest to these personal attributes.