Introduction – academic careers and the process of writing

If you are an academic, the chances are that your career development is defined by what you write.

This simple fact is often the basis of a cynicism and hostility within the academic world. Despite the inevitable problems associated with how writing is evaluated and rewarded across the disciplines, academic writing continues to be seen as the fulcrum on which many other aspects of scholarship depend.

It is a process that lies at the very centre of academic performance and success for both academic professors and students.

This presentation engages in that analysis in order to provide an empowering framework for academic writers.

It aims to help you to develop effective approaches to your own writing challenges. It offers insights and lessons that we think will be particularly useful for you, but will also help with the re-conceptualization of writing-related issues for those who have been operating in academic environments for some time.

Academic writing is often a highly problematic but always **potentially transformational activity**. Despite the great diversity within and between different academic disciplines, several common themes are associated with the experience of writing in academia. It is often encountered as a process that is full of paradoxes.

This presentation aims to identify and explore those common themes and to help you, the academic writer, to address and resolve the paradoxes for yourself. It will do this in a way that can also help you to become a more productive, effective writer with healthier, more positive approaches to what it means to be an academic, and more particularly what it means to be a writer of academic text. The field of research requires persistence and most researchers devote many a sleepless night towards conducting research and documenting results. In the competitive world of academia, you are expected to start publishing early in your career, and many early-career researchers are faced with the looming worry of how to publish a journal article.

Although original research sometimes takes years to complete, it does not mean you cannot have any publications to your credit till the time you complete your research.

Writing involves starting, progressing and finishing a complicated, challenging combination of tasks. It requires you to activate lots of different skills and orientations, sometimes at different stages and phases in the process, sometimes all at the same time.

Some researchers have claimed that **writing can be experienced as one of the most difficult of all skills**, requiring an intricate combination of neurological, physical, cognitive and affective competencies (see, for example, Levine, 2004). Others (perhaps most notably Elbow and Belanoff, 2000) claim that even if writing makes complicated demands on your skills and abilities, it is possible to make writing easy, or at least easy enough for it to feel worth tackling regularly and with good effect.

Writing for academic journals is highly competitive. It can be extremely stressful. Even making time to write can be stressful. And there are health risks in sitting for long periods, so try not to sit writing for more than an hour at a time. Finally, be sure to celebrate thoroughly when your article is accepted. Remind yourself that writing for academic journals is what you want to do – that your writing will make a difference in some way.

It is important to remember that not all journals publish every kind of article. Therefore, most journal publishers provide prospective authors with accurate and specific guidelines for the different articles they publish. Specifications about the types of articles published can be found under the guidelines to authors section on a journal's website. If you have a target journal in mind, you should check whether it publishes the kind of manuscript you are planning to write.

Feedback

Listen to input from others on how to improve a report. Don't take offense at what they tell you. Realize that there is no pride in authorship and that producing intelligence is a team effort. Additionally, don't be offended if others recommend you remove pet sentences that you may think are clever and witty. You must be open to the suggestions of others in order to improve your Writing and produce reports that others want to read. Also, by **reading well-written articles you will better understand how to pattern your writing t may seem to be impossible to cut down 30 pages to just into some 120 words^{*}. Still, this is the part of your work upon which readers will decide whether they want to keep reading your paper.**

Write a Catchy Text

A well written abstract balances between being concise and having a nice flow. You want to give the optimal amount of information in a way that is easy to grasp. As the text is very short, every word should be carefully calculated and weighed against its alternatives. To achieve that, the abstract should be the last bit of your work you write.

Abstracts

Once you have finished your manuscript, you have read tens and tens and tens of articles. Go back to them and pay attention to their abstracts. You know the content of the paper – how do the authors summarise it?

Describe the key points of your research: the topic, research questions, participants, methods, results, data analysis and conclusions. Keep it to the essential – do not enlist all the results and all the analysis you conducted, just mention what was the most important. Start off by writing down the first draft of your abstract, check the word count and then try to work from there – should it be shortened? Do you really need to express everything you did or can some things be omitted?

Local redundancy - attempt to "fluff up" their writing with big words and added length.

Global redundancy occurs when a writer repeats him or herself throughout the paper. For example, a writer may continuously bring up the same point over and over. While repetition can be effective in some cases, this "beating a dead horse" will quickly annoy readers and cause them to lose interest. Think about a time you lost interest in a speech or lecture. The speaker probably sounded dull and monotone, perhaps returning to the same tired ideas over and over. Redundant writing is like monotone speech: it lacks variety. Keep your readers interested in your writing by constantly giving them new words and new ideas to think about. **The best way to eliminate global redundancy is to read your own writing slowly and carefully**. For each sentence you read, ask yourself these questions:

- Am I sure what each word I use really means? Am I positive, or should I look it up?
- Have I found the best word or just settled for the most obvious, or the easiest, one?
- Am I trying too hard to impress my reader?
- What's the easiest way to write this sentence? (Sometimes it helps to answer this question by trying it out loud. How would you say it to someone?)
- What are the key terms of my argument?
- Can I outline out my argument using only these key terms? What others do I need? Which do I not need?

- Have I created my own terms, or have I simply borrowed what looked like key ones from the assignment? If I've borrowed the terms, can I find better ones in my own vocabulary, the texts, my notes, the dictionary, or the thesaurus to make myself clearer?
- Are my key terms too specific? (Do they cover the entire range of my argument?) Can I think of specific examples from my sources that fall under the key term?
- Are my key terms too vague? (Do they cover more than the range of my argument?)

In the last decade, 'big data' has become a ubiquitous buzzword in academic and professional circles and in the media. Some commentators have praised big data as 'the new oil of the 21st century', 'the world's most valuable resource' and 'the foundation of all of the megatrends that are happening today, from social to mobile to the cloud to gaming'.

Good start - De Mauro and her colleagues to define big data through a survey of 1,581 conference papers and journal articles on the topic. The resulting definition considers big data to be 'the information assets characterized by such a high volume, velocity and variety to require specific technology and analytical methods for its transformation into value'.

The 'big data' craze has also gained traction within government, including in intelligence agencies, which have always relied on data sources to collect raw what big data means and what roles big data tools play in national security decision-making. While explicit definitions of big data are rare in security studies, other fields such as computer sciences, computer engineering, information sciences and business administration have already produced a vast literature on the subject. Examples.

In the national security context, more than in any other field, data **and information should be approached skeptically** because adversaries often actively alter data with the intention to deceive and mislead. National security professionals must question the representativeness and validity of data collected on social media, for instance.

While the growth of big data analytics is changing the character of national security processes, the human element in these processes remains unchanged.

prices in a grocery store, algorithms will almost always outperform human judgement.

However, in unpredictable environments characterized by sudden, dramatic changes, automated analysis is likely to be wrong.85 The security environment is characterized both by long-term trends, which are most visible at the strategic level, and sudden, dramatic changes causing surprises in the short term. In the latter situations, experts—who can follow their intuition and think outside the box—

are essential to take into account 'broken-leg' variables. Research in the field of forecasting reinforces this lesson and finds that human judgement combined with algorithms is a significantly more accurate combination than either algorithms or human judgement alone.86

On their own, machines and the deterministic algorithms they use 'strip out much of the context' in which humans interact, and are 'oblivious to social clues or shades of agreement'.87 Some important national security insights, such as information on the intentions of foreign leaders, are not easily expressed through data. An important insight, then, is that big data cannot, and should not, replace

the central role of humans, as either producers or consumers of intelligence, in national security decision-making. Big data applications are best used when they free humans 'to do what they do well—think, ask questions, and make judgements about complex situations'.88 In the age of big data, as Cukier and Mayer-Schoenberger note, 'the most human traits will need to be fostered—creativity, intuition, and intellectual ambition—since human ingenuity is the source of progress'.89 These human characteristics can help refine the intelligence process by taking into account unexpected variables like the 'broken leg', or even discarding false positive errors.90 The future of big data and national security lies in humans' ability to embrace the power and mitigate the limits of algorithms. Doing so requires a better understanding of the role big data is playing in core national security functions such as intelligence.