AfricanStatesAlliance (ASA) How to Read Critically & Write a Research Paper

How to Read Critically:

NOTE:
This memo is based on Barry Posen's MIT course 17.468, Foundations of Security Studies. His handout is "Suggested Approaches to Each Work." Posen's memo was modified by Dan Lindley at Notre Dame, and additionally modified by Y. Martin-Benansio at African States Alliance.

Learning to read critically, write clearly and argue persuasively are central purposes of liberal arts and graduate school education. The first purpose of this memo is to help students read critically. Reading critically means understanding the author's argument(s), critiquing them, and improving on them. Graduate students in particular should be able to pull apart any argument they come across. While this sounds arrogant, this ability properly understood, should induce respect and humility.

The second purpose of this memo is to help students write and argue effectively. Most of the criteria for reading can be applied to one's own writing and argumentation.

The final purpose is to help readers use their time efficiently. Often, there is not enough time to fully read an article or a book. Articles and books must instead be "confronted" or "harvested." By focusing one's attention on key points and issues when reading (those summed up in the next paragraph), one can grasp most of what one needs to learn from the article or book without reading every word.

The following are questions to ask of each work you read. (1) What is being argued? What causes what? (2) How persuasive is the argument? Is it crafted with well-chosen and executed methodology and with convincing evidence? (3) Who cares? Why is the argument important?

1. **What is/are the argument(s)? What causes what?**

a. This has two parts: the puzzle to be explained or question to be answered, and the argument/explanation/answer. What is the puzzle and what is the argument?

b. The argument usually takes the form of something (the independent variable) that caused something (the dependent variable). Most arguments have intermediary steps (intervening variables): clouds cause rain which causes the grass to grow.

c. What is/are the Independent Variable(s)?

d. What is/are any Intervening Variables(s)?
e. What is the Dependent Variable?
f. Can you arrow diagram the causal chain? (IV—>DV)

2. How logically valid are the arguments?

a. Are the hypotheses/arguments clear?
i. Again, can they be arrow diagramed?
ii. Again, what causes what?
b. Do the hypotheses/arguments build on one another?
i. A well-made major argument often consists of a number of subarguments that are well-sewn together. One cause of weak arguments is that the subarguments are contradictory, do not support each other, or are otherwise unraveled and
unconnected. They must be logically consistent.
c. Is the causal chain plausible?
i. Deductively: is there a sound explanation about how and why the
independent variable affects the dependent variable?
ii. In the real-world?
d. What does the argument assume?
i. What preconditions must exist for the theory/argument to work?
ii. Given the assumptions, is the argument still interesting or does it assume a tautological or garbage in, garbage out quality?
e. Are the hypotheses and arguments parsimonious?
i. Truth is often found in the clearest and simplest answers. Authors
(and you) should avoid elegant but unreal, implausible, and irrelevant arguments.

3. Are the arguments empirically well supported?

a. Are there clear predictions and observable implications?
i. If so, how well does the evidence match the predictions?
b. How are the variables defined and measured?
c. How do we know the causal chain is at work?
d. Are the cases or other data well chosen to answer the questions and make the argument?

i. For example, if a comparative case study is being conducted using John Stewart Mill's method of difference, then the cases should be as similar as possible,

while showing variance in the dependent variable. Does the book or article do this? Could better cases be chosen? Were relevant cases excluded and how does this skew the results?
ii. Bottom line: does the evidence speak to the argument?

e. Are there any alternative explanations for the phenomena being explained?

i. What other theories predict the behavior found in the cases?
ii. Which of these theories provides the best alternative explanation and why?

(1) How do the theory at hand and its most likely alternative fare when applied to other cases?

f. Does the author argue against her/himself? Does s/he contend with the alternative explanations?
g. What would it take to falsify or weaken the argument?

i. New or missing evidence?
ii. New or missing variables or arguments?
iii. What research should be done that might strengthen (or weaken) the findings?

h. Are the findings strong and decisive or weak and uncertain?

i. Is the theory given an easy test or a hard test?

(1) If easy, could it pass a harder test?

i. How well do the findings stand up to counterfactual analysis?
ii. What would have happened in the absence of the independent variable or if its value had been different?
j. How could the argument be modified to strengthen it?
i. Can the assumptions be better specified? Are there unspecified but necessary conditions for the argument to work? Are there unspecified but important intervening variables?

4. How useful are the argument(s)? Who Cares?

a. Are they new? Creative?
b. Are they important or trivial?

i. Do they help resolve, create, or otherwise contribute to scholarly debates?
(1) What is the intellectual heritage of the arguments and how will they shape future arguments and debates?
ii. Do they have policy relevance?

(1) Do they address important issues?

c. Will anyone care about this work in 5, 10, or 50 years? Why?
d. Would you assign this article or book when teaching? Why?

5. What is the author's purpose?

a. Again, what is the puzzle or question?
b. Who are the targets? Who or what is the author arguing for or against?
i. In policy world
ii. In academe

6. What are the author's possible biases?

a. What else have they published?
b. Where are they coming from?
c. Are biases evident in the argument or in the use of evidence?

7. Style

a. Is the writing clear?
i. Should this article or book serve as a role model for others?

How to Write a Research Paper:

By Dan Lindley, Notre Dame.

Good papers have clear summary introductions, are well written, have clear arguments supported by theories/models/concepts, use specific references to history and other factual evidence to support the argument, argue against themselves, and have citations to identify what sources were used where. These papers are persuasive.

Poor papers are marked by higher levels of writing errors (including foggy, vague, and colloquial writing), no summary introductory paragraph, no clear argument, insufficient specific references to history or course concepts, and no citations. There are many reasons not to be persuaded by these papers.

In brief, be persuasive. That means having an argument to be persuasive about, having deductive/conceptual/theoretical support for your argument, and having real-world evidence to support your argument.

If you start your paper by being foggy and unclear, then it is highly likely that the rest of the paper will meander and that your arguments and evidence will be poorly connected. Remedy: put a clear argument and roadmap up front! (A roadmap briefly lays out the upcoming sections of the paper.) Write your introduction, then re-write it after you have written the rest of your paper.

Have the courage to listen to your inner voice that tells you when you are not being clear and that something needs to be cut or re-written. Yes, it is an effort to change what you have already written, or to delete it and start again. Good writing is hard work for almost everyone. Your inner editor will get better over time. As you become more willing and able to self-criticize and edit, your writing will improve.

Writing Tips borrowed from Stephen Van Evera, MIT

I. INTRODUCTION FORMAT

Begin your paper with a short summary introduction. This summary introduction should answer up to five (5) questions:

1. What question or questions do you address?

2. Why do these questions arise? From what literature or real-world events? Offer background that clarifies your questions and puts them in context.

3. What answer or answers do you offer? Summarize your bottom line in a few sentences.

4. How will you reach your answers? Say a few words about your sources and methods.

5. What comes next? Provide a roadmap to the rest of the paper: "Section I explains how I began my life of crime; Section II details my early arrests; Section III describes my trip to death row; Section IV offers general theoretical conclusions and policy implications." Something of that sort.

Summary introductions of this sort help readers grasp your argument. They also help you diagnose problems with your paper. A summary introduction can be hard to write. A possible reason: gaps or contradictions in your arguments or evidence, which summary exposes. Solution: rethink and reorganize your paper.

II. CONCLUSION FORMAT

Authors often recapitulate their argument in their conclusion. However, a good summary introduction often makes a full summary conclusion redundant. If so, recapitulate quickly and then use your conclusion to explore the implications of your argument. What policy prescriptions follow from your analysis? What general arguments does it call into question and which does it reinforce? What further research projects does it suggest?

III. ARGUMENTATION

Four injunctions on argumentation should be kept in mind.

1. Use evidence—facts, numbers, history—to support your argument. Purely deductive argument is sometimes appropriate, but argument backed by evidence is always more persuasive.

2. Clearly frame the general point(s) that your evidence supports. Do not ask facts to speak for themselves.

To sum points #1 and #2: offer evidence to support your arguments and state the arguments your evidence supports.

3. "Argue against yourself." After laying out your argument, briefly address questions or objections that a skeptical reader might raise. This shows readers that you were thoughtful, thorough, and paid due regard to possible objections or alternate interpretations. Often, of course, the skeptic would have a good point, and you should grant it. Do not claim too much for your theories or evidence!

4. Use citations to document all sources and statements of fact.

IV. WRITING

Good writing is essential to clear thinking and effective communication. So, bear the following points in mind:

1. Your paper should make a single point or a handful of related points and should follow a simple organization. Avoid cluttering it with extra points. If you developed an argument that later became ancillary as you rethought your paper, drop the argument from the paper. This is painful ("I sweated hours on that idea!") but extraneous arguments drain power from your main argument.

2. Break your paper into sections and subsections. More sections are better than fewer. Sections help readers see the structure of your argument. Label sections with vivid section headings that convey the main message of the section.

3. The following structure for sections/subsections often is useful:

a. Your argument;
b. Your supporting evidence;
c. Counter-arguments, qualifications, and limiting conditions of your argument.

4. Start each section with several sentences summarizing the argument presented in the section. You may cut these summaries from your final draft if they seem redundant with your summary introduction, but you should include them in your first drafts to see how they look. Writing such summaries is also a good way to force yourself to decide what you are and are not doing in each section, and to force yourself to confront contradictions or shortcomings in your

argument. Often these section summaries are best written after you write the section, but do not forget to add them at some point.

5. Start each paragraph with a topic sentence that distills the point of the paragraph. Later sentences should offer supporting material that explains or elaborates the point of the topic sentence. Qualifications or refutation to counter-arguments should then follow. In short, paragraphs should have the same structure as whole sections. A reader should be able to grasp the thrust of your argument by reading only the first sentence of every paragraph.

6. Write short, declarative sentences. Avoid the passive voice. (Passive voice: "the kulaks were murdered"—but who did it? Active voice: "Stalin murdered the kulaks.")

7. Write from an outline. Outlines are major aids to coherence and readability. You might prefer to use some other organizing scheme, such as a “web” or bubble diagram. The point is the same: use a mechanism for clearly organizing your thoughts and arguments before you write.

V. VETTING

Ask a friend or two to give your paper a look before you turn it in; and return the favor for them when they have a paper underway. Two heads are better than one and giving and receiving comments are important skills.

VI. GENERAL BEAUTY TIPS

Take care to turn in a neat, clean paper. Run your spellchecker. A messy-looking paper suggests a messy mind.

VII. HOW TO LEARN MORE ABOUT HOW TO WRITE PAPERS

Re-read articles you or others admire and imitate their better aspects.
For more advice on writing see William Strunk Jr. and E.B. White, The Elements of Style, 3rd. ed. (NY: Macmillan, 1979); and Teresa Pelton Johnson, "Writing for International Security: A Contributor's Guide," International Security, Vol. 16, No. 2 (Fall 1991), pp. 171-180. If you are doing a research paper, you might also consult the most recent edition of Kate L. Turabian, A Student's Guide to Writing College Papers, 3rd ed. (Chicago: University of Chicago Press, 1976) for more clues on how to do research.