

# How to Read an Academic Journal Article\*

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Caveats: One size does not fit all! Take this as generic advice. If this appears obvious or common sense to you, feel free to ignore this advice. However, most of you may find this helpful.

## 1 Reading Process (aka “The Art of the Skim”)

1. Read the abstract (if applicable)
2. Read the introduction
3. Read the conclusion
4. Skim the middle, looking first at section titles, tables, figures, etc to get the main thrust of the paper.
  - Try to get a feel for the style and flow of the article
  - Discern the argument(s) made and the method(s) of argumentation (theoretical models, empirical tests, case studies, etc)
5. Is this paper primarily methodological, conceptual, theoretical (verbal or mathematical), empirical, or something else?
6. Is this paper primarily a survey, a novel theoretical contribution, an empirical application of an existing theory or technique, a critique, or something else?
7. Go back and read the whole thing quickly, ignoring all equations and most figures and tables.
  - Can you make general sense of the basic arguments, theoretical framework, or evidence tested without digging into the technical (mathematical model/empirical regression/etc) details?
8. Go back and read the whole thing carefully, focusing on the sections or areas that seem the most important.
9. Once you’ve grasped the basic argument the author is trying to make, critique it!
  - Does the argument make sense? Is it internally consistent? Is it well supported by argument or evidence?
    - This skill takes experience to develop!
  - Compare the article to others you have read on the same or a closely related subject.
    - If this is the first paper you’ve read on the subject, find a few more and skim them. The introductions and conclusions are key here. Are the arguments consistent, contradictory, completely unrelated?
  - Find other articles that cite the one you are reading (if it’s reasonably old).
  - (Advanced: For research projects) Check out a reference work, e.g. a survey article from the Journal of Economic Literature, a Handbook or Encyclopedia article, or a similar source, to see how this article fits in the broader context of its subject area.

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\*The first section is largely a modified version of Peter Klein’s “[How to Read an Academic Article.](#)”

## 2 Questions to Ask Yourself to Ensure Comprehension

1. Why did the author write the paper?
  - What is the context of the paper?
  - Who is the paper responding to, or engaging?
  - What have others said on the issue?
2. What is the author's argument?
  - Summarize the thesis of the paper in 1-2 sentences.
  - What major examples does the author use to illustrate their points? Examples are often the most memorable parts.
3. If the paper is theoretical and/or the author has a model:
  - What are the theory/model's most important parts/variables?
  - What assumptions are made? What if they do not hold?
  - How do changes in key variables affect the outcome?
  - Does the model give us useful predictions that could (in principal or in practice) be tested?
  - Be sure to answer all of the above in plain English!
4. If the paper is empirical/has regressions:
  - What is the strategy for estimating causal relationships?
  - Are the hypotheses in the paper adequately tested, refuted, or verified by the data?
  - What are the major findings? What are the 1-3 quantitative "statistics" or "numbers" that might be repeated in a journalistic outlet reporting the study?
  - Are the findings robust to different functional forms or datasets?
  - Even if the findings are statistically significant, are they *economically* significant? How big is "big?"
5. If you were to give a 5 minute lecture summarizing this paper, what would you say?
6. Critique the paper:
  - Does the argument, model, and choice of evidence make sense? Is it logically and economically sound?
  - What assumptions are made? How vital are they, and what if these assumptions do not hold in reality? Is the insight still useful?
  - What theory, examples, or data in the paper best make the case for the paper's claim? Which detract from the claim?
  - Is this paper consistent with other findings in the relevant literature?
  - How might the paper's findings affect policy? Could proposals realistically be implemented, and what would their effects be?
  - Always ask *yourself*: what evidence, no matter how unlikely, would convince you to change your mind about a subject?

### 3 A Typical Modern (c. 1980s+) Economics Paper

#### 1. Introduction/Literature Review

- Summarizes the research question or claim motivating the paper
- Fits into a literature of articles where other researchers have asked and answered similar questions
- *Differentiates* itself from the literature by explaining its *novel contribution*
- Previews the methods of argumentation and the conclusions found

#### 2. Theory/Model

- An inquiry into the explanation or value of a particular causal effect or relationship between economic variables (e.g. the effect of education on wages)
- Conclusion of the model is usually a prediction (that can be verified with data) about the causal effect
- Papers with mathematical models tend to follow this structure:
  - Agents maximize an objective function (e.g. profit, utility, votes, expected utility)
  - Agents face constraints on their choices (e.g. a budget)
  - Solve for a mutually-consistent equilibrium (i.e. all agents have maximized their objective function subject to their constraints; if game theoretic: optimize given what every other agent is doing)
  - Generate *testable hypotheses* from the model, often the equilibrium conditions, (to be verified by data below)
  - Sometimes there is a welfare analysis

#### 3. Empirics/Data

- Finds a dataset that allows tests of the hypotheses generated by the theoretical model
- Provides summary statistics about the data (e.g. describing each variable, its mean, standard deviation, scatterplots, histograms, etc)
- Provides an econometric strategy to achieve causal relationship between variables (e.g. instrumental variables, difference-in-difference, fixed effects)
- Creates empirical models (regressions) to estimate the value of parameters from data (quantify causal relationships between variables)
- Often there are several models and several different methods to check if the results are *robust*

#### 4. Conclusion/Implications

- May or may not resummairize what was said in the paper
- More importantly, indicates lines of future research, limitations of the paper
- Also may consider policy implications – how might policies be crafted to reflect the importance of the paper’s findings, how would this impact people?