How to read a (linguistics) paper

1   Reasons to read research papers

The primary reason academic papers are written is for the author(s) to communicate their ideas, theories, and discoveries with others in the Library and Information Science field, by:

- Reporting new data/results

- Relating the new findings to previous knowledge in the field

The reasons we read papers include:

- To understand the context of a specific research area

- To help formulate our own research problems

- To familiarize ourselves with relevant data and/or analyses of particular phenomena

What should we focus on when we read a research paper?

- Identify the problem being addressed

- Identify the results of the research

- Identify the importance of the results

- Identify which parts of the paper are worth studying in detail

2   The structure of a paper

- The **abstract** summarizes the topic and main findings of the paper, as well as their relevance in the context of other findings in the field.

- The **introduction** presents the background information needed to understand why the findings of the paper advance the field. This may include a description of the current state of knowledge in the relevant area, references to work already published, a description of the data/phenomenon to be studies in the paper and its basic (known) characteristics.

- The **body of the paper** may be structured in more than one way.

    - For experimental papers, we often find a **methods** section, a **results** section, and a **discussion** section (repeated for different experiments), followed by a *general discussion* section summarizing the conclusions from all the studies presented in the paper.

    - For theory papers, one of two structures are common: (a) **survey** of prior work, **new data, ideas, or proposal**, discussion of the **virtues** of the new proposal and **vices** of the previous ones, and sometimes more **extensions** of the analysis, or outstanding problems. (b) alternatively, some papers begin with the new proposal and its virtues, and introduce previous analyses and their problems later on.

- The **conclusion** provides a summary of the paper, including a description of the initial aims of the investigation, the main results and how they were achieved, a discussion of how the results fit in with other people's work, and outstanding issues for future research.

3   Suggested steps for critically reading an article

- Start with the **Introduction** and **Conclusion**: This is the fastest way to determine the problem statement and the approach taken to the problem by the authors.

- Some papers have an **Abstract** that summarizes the main points of the paper, and a **Roadmap** explaining how the paper is structures.

- **Scan the paper** and determine the **Purpose**, **Structure**, and **Direction** before reading for a detailed understanding. Once you know the general point (purpose), the outline (structure), and the author's slant on a topic (direction) then all the details are much easier to place in the correct context. Thus, if you find an idea confusing on your first pass reading through a paper, you may know not to worry about it because it is described in detail in a future section.

- **Do not read every single word!** There are bound to be words or phrases that trip you up as you read. If you take the time to continually re-read a word, phrase, or paragraph until you completely understand it, then you will end up wasting quite a bit of time. Often, if you simply plow past the part you don't understand, the meaning will be become clear in the next paragraph or section. Note the part that you found confusing and return to it later to see if the rest of the paper made it clear.

- **The first sentences of each paragraph** often give you the author's main points. This can help you learn what the author is going to say and set your expectations.

- **Pay attention to the example sentences** and their description in the text. Ask yourself: why is this example here? What does it show? Is it what the author says it shows?

- After you have read the paper, **identify the main point, the strengths, and the weaknesses**.

- **Iterate:** you may need to read the paper more than once, with different goals in mind. The **First read** should focus on the **abstract, introduction, section headings,** and **conclusion**. At this point you should know what problem the author is addressing, why it is important, and what the solution is. The **Second read** should be a more careful reading of the entire paper, without getting stuck on anything that isn't clear (make a note and move on!). At this point you should know what new data is introduced, how the arguments are constructed based on this data, what the analysis looks like, and how it is motivated. Finally, your **Third read** should be a critical reading of the paper. Go back to anything that wasn't clear and make sure you understand the main points that are made. Ask yourself if the author indeed shows what they say they will. Are the arguments convincing? Are there any outstanding issues?

- Sometimes it's ok if there are things you never completely figure out, as long as you have determined that they have not impeded your overall understanding of the paper.

4   Takes notes while reading

It's useful to keep notes while you read, and to mark both things you are not sure you understood, and the mains points of the paper (use different colors or some other way of telling these two kinds of notes apart!).

- What are the main points of the paper?

- What is the data used to illustrate these points?

- What parts of the paper do you not understand?

- Are there parts where you question the authors' solution/proof/methods/results?