

Notes on How to Read Academic Papers

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These notes are from “How to Read a Paper” by S. Keshav ([link](#))
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1 Three passes

- ★ Notes on **how to read and summarise** an academic article in three passes.
- ★ This section is **not** about selecting an article (for notes on how to conduct a literature survey go to the next section).

Do not read the paper in a start-to-end fashion in one go. Instead, read the paper in 3 passes:

Pass 1: To learn the framework of the paper, read these in sequence

- ☐ Abstract
- ☐ Introduction and conclusion
- ☐ Section headings
- ☐ Tables and diagrams (together with their captions)

During 1st pass, *underline any unfamiliar words to look up later*. Ask yourself (or keep these questions in mind):

- What is the point or thesis of this paper?
- What are the main arguments of the paper?
- Why is this paper important?
- How does it contribute to my field of study?

If you have your own questions, don’t forget to write them down!

Main aim of the 1st pass: In the end of the 1st pass, you need to be able to summarise the paper in 1-2 sentences (*using your own words*).

Pass 2: Dig deeper into the paper

- ☐ Pay closer attention to the beginning and ending of each major section
- ☐ Also, pay closer attention to the *any highlighted sections from the 1st pass*. If there are still any words or terms you don’t understand, look them up.

Try to answer *all the questions* that you wrote down earlier.

Pass 3: Tie it all together. By this stage you should understand what the paper is trying to say, now its time to look at it critically:

- ☐ Reflection and analysis. Take notes as you read looking at:
 - arguments,
 - evidence, and
 - conclusions

By the end of this pass, you should have the basis of the paper summary in your own words (well, at least try using your own words). Also, you should be able to ask and answer these types of questions by the end of this pass (details depend on the type of the paper):

- Did the authors do what they set out to do?
- Are the methods they used sound?
- Are their arguments coherent and logical?
- What assumptions did they make?

2 Conducting a Literature Survey

Step 1: Conduct a search using an academic search engine s.a. Google Scholar or Scopus. With well chosen keywords, find 3–5 *recent* papers in the area. Do one pass on each paper (**Pass 1**), then read their related works sections (or an equivalent part of the paper). If you are lucky, you might find a summary of the recent works (e.g. review article) or a pointer to a survey paper.

- ☐ Find recent papers (x3–5)
- ☐ Find review or survey article (optional)

If you have found a survey or a review paper, then you are done with the literature search and you can start by reading the survey/review (*previous section*).

Step 2: Otherwise, you need to find a set of shared citations and repeated author names in the bibliographies of the papers that you have found. These are the *key papers and researchers* in that area(s). Download the key papers and set them aside. Then go to websites of the key researchers and see where they have published recently. That will help you to identify the *top conferences and journals* in that field (the best researchers usually publish in the top conferences and journals).

<i>Key authors</i>	<i>Their papers</i>	<i>Publication venues</i>
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Step 3: Afterwards, go to the websites of these top conferences/journals and look through their recent proceedings/issues. A quick scan will usually identify recent related high-quality works. These papers, together with the ones you previously set aside, constitute the first version of your survey. Make two passes through these papers. If they all cite a key paper that you did not find earlier, obtain and read it. Iterate through the last step as many times as necessary.

- ☐ A quick scan of the top publishing venues.
- ☐ Read the key papers from step 2 (Pass 1 and 2).
- ☐ Did you find any new important papers?
- ☐ Repeat the steps above (if necessary).