

Review of lecture 1

Dissertation

A long piece of writing on a particular subject.

It contains the following six main elements:

- 1. Introduction
- 2. Literature review
- 3. Choice of methodological approach
- 4. Methods results/findings
- 5. Conclusions and recommendations
- 6. Final conclusions limits ideas for further study.

Writing attitude

- It's okay to be a beginner.
- You already know how to do it.
- Stay in learning mode.
- Make no effort to be original.
- Rough drafts are by definition rough.
- Practice knowing whether you know or whether you sort of know

Review of lecture 1

Abstracts pattern

- Context + Problem + Main Point
- Or: Context + Problem + Launching Point

Introductions pattern

• Context + Problem + Response

Conclusions pattern

Main Point + New Significance or
Application + Call for More Research

Outline

- 1. Using sources in academia
- 2. Summarizing
- 3. Paraphrasing

Why do we use sources?

- To gain access to information—facts, statistics, narratives, etc.
- To see what other people think about the topic
- To respond to other statements; to put ourselves in conversation with other scholars
- To build our work on the methods and theories that others have developed, so we don't have to reinvent them

Why do we cite sources?

- To credit other scholars' work
- To show the sources of our information
- To show how our own ideas developed from thinking about the work of other scholars
- To identify which scholarly conversations we're entering
- To allow other scholars to find and use our sources
- To allow other scholars to judge the relevance, expertise, reliability, and accuracy of our sources
- To allow other scholars to trace our methods and lines of reasoning as a way of testing our ideas
- To allow the discipline as whole to trace the collective development of knowledge (and thus to know what needs correcting if theories are disproven, etc.)

How do we make use of sources?

Examine the following examples—

- How do the ideas and information from a source enter this text?
- How do we know what is from a source and what is from this author?
- How does the citation function? Why does it take the form it does?

Example 1

From Marketing

Only one in five new product ideas are commercialized (Markham and Lee 2013). Once commercialized, new products require considerable resources (i.e., time and money), which renders new product strategies very risky. Commercialized new products are believed to have a very slim chance of success—various sources reported that the new product failure rate nears 95% (Christensen et al. 2005; Gourville 2006). However, several new product development benchmarking studies have shown much lower rates, concluding those extreme failure rates are at odds with most available empirical evidence.

Victory, K., Nenycz-Thiel, M., Dawes, J., Tanusondjaja, A., & Corsi, A. M. (2021). How common is new product failure and when does it vary?. Marketing Letters, 32, 17-32.

Example 2

From Machine Learning

Among the machine learning methods used in practice, gradient tree boosting [10] is one technique that shines in many applications. Tree boosting has been shown to give state-of-the-art results on many standard classification benchmarks [16]. LambdaMART [5], a variant of tree boosting for ranking, achieves state-of-the-art result for ranking problems. Besides being used as a stand-alone predictor, it is also incorporated into real-world production pipelines for ad click through rate prediction [15]. Finally, it is the de facto choice of ensemble method and is used in challenges such as the Netflix prize [3].

Chen, T., & Guestrin, C. (2016, August). Xgboost: A scalable tree boosting system. In Proceedings of the 22nd acm sigkdd international conference on knowledge discovery and data mining (pp. 785-794).

Example 3

From Politics

Trust contributes to many desirable societal outcomes (Beugelsdijk and van Schaik 2005; Zak and Knack 2001). It fosters collective action and increases the likelihood of reaping the benefits of cooperation (Denzau and North 1994; Ostrom and Walker 2003). In a common definition, it is regarded as an individual's readiness or willingness to make him or herself vulnerable to others (Coleman 1994; Fehr 2009), where "others" can refer to both individuals or institutional third parties, such as politicians and public officials. The literature therefore typically makes a distinction between authority-bounded, or vertical, forms of trust and social, or horizontal, trust.

Martinangeli, A. F., Povitkina, M., Jagers, S., & Rothstein, B. (2023). Institutional Quality Causes Generalized Trust: Experimental Evidence on Trusting under the Shadow of Doubt. American Journal of Political Science.

Citation styles differ

BECAUSE different fields care about:

- specific wording and its location in a text (author-page number styles)
- currency (author-date styles)
- using unpublished sources (footnotes)
- data from many sources more than authorship (citation-sequence styles

How do we incorporate others' ideas?

- Direct Quotation
- Paraphrase
- Summary

All paraphrases, quotations, summaries, images, ideas, and facts from a source must be cited.

Summarizing

Write a 3-sentence summary of the introductory section of the article "Abu-Mostafa, Y. S. (2012). Machines that think for themselves. Scientific American, 307(1), 78-81."

Paraphrasing

A Paraphrase Must:

Accurately reflect the meaning of the source

BUT

Substantially change the source's wording and structure

How to Paraphrase

First, identify the central concepts and their logical relationship. Then, keeping that logical relationship intact, invert the structure of the central concepts

Next, look for ways to change syntax and diction. For example:

- changing from first to third person;
- reordering phrases and clauses and using different subordinating conjunctions to keep the logical relationship intact;
- translating phrases into more formal or less formal diction;
- breaking long sentences into smaller parts, or linking similar smaller parts into one unit;
- translating concepts from more concrete to more abstract, or vice versa

Check for accuracy and completeness—has the language sufficiently changed? Has the sentence structure sufficiently changed? Has the meaning not changed?

Paraphrasing

Paraphrase this passage from The Structure of Scientific Revolutions

"Normal science does and must continually strive to bring theory and fact into closer agreement, and that activity can easily be seen as testing or as a search for confirmation or falsification. But science students accept theories on the authority of teacher and text, not because of evidence."

Kuhn, T. S. (2012). The structure of scientific revolutions. University of Chicago press.

Is this an acceptable paraphrase?

"Normal science always tries to make theory and fact agree; for example, scientists test theories and try to confirm or deny them. Students of science, though, don't test the evidence but just take the theories as true based on the authority of their teachers."

Is this an acceptable paraphrase?

"Because he's interested in how scientific revolutions occur, Kuhn compares how normal scientists and students learn. Normal scientists, he claims, constantly work to make their theories fit the evidence, testing, confirming, and falsifying their ideas, but students don't work like normal scientists; instead, they ignore the evidence due to their concern for their teachers' authority."

Is this an acceptable paraphrase?

"Thomas Kuhn identifies an incongruity between how "normal science" works and how students learn to become scientists. Students learn scientific theories by listening to their professors and reading their textbooks, he points out, rather than by actively questioning and assessing the fit between theory and reality themselves."

References

- Graduate Technical Writing Workshop (https://ocw.mit.edu/courses/21w-794-graduate-technical-writing-workshop-january-iap-2019/pages/syllabus-and-calendar/)
- Booth, W. C., Colomb, G. G., Williams, J. M., Bizup, J., Fitzegerald, W. T. (2016). The craft of research. University of Chicago press.