

Researching and Writing Literature Reviews

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Goals of the Workshop

- To help students understand the purpose and basic requirements of an effective literature review.
- To help students critically assess research materials.
- To develop strategies for inventing, organizing, and drafting a literature review.

Outline

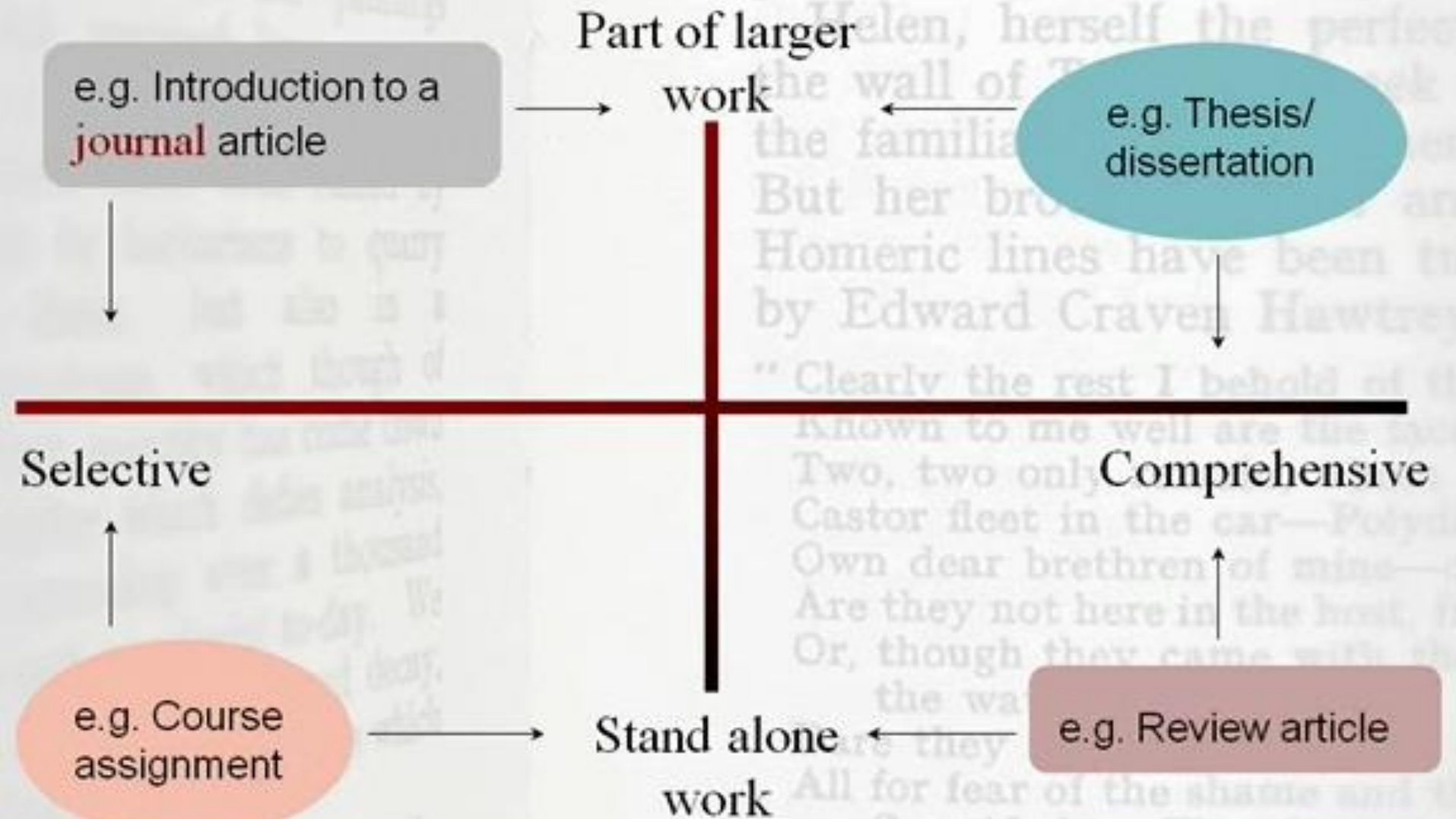
- What is Literature Review
- Purposes of Literature Review
- Reading and Researching
- Analyzing
- Writing

What is a Literature Review?

- ❑ Surveys scholarly sources relevant to a particular issue, area of research, or theory
- ❑ Provides a description, summary, and critical evaluation of each work
- ❑ Offers an overview of significant literature published on a topic
- ❑ Gives future research context by telling the story of work done so far

(adapted from <http://library.ucsc.edu/ref/howto/literaturereview.html>)

Types of Literature Reviews



Purposes of Literature Reviews

- Outlining important research trends
- Assessing the strengths and weaknesses of existing research
- Identifying potential gaps in knowledge
- Establishing a need for current and/or future research projects

Steps for Writing a Lit Review

- Reading and Researching
- Analyzing
- Writing

Reading and Researching

What Materials
Am I Going to Use?

Reading and Researching

- Collect and read material.
- Summarize sources.
 - Who is the author?
 - What is the author's main purpose?
 - What is the author's theoretical perspective? Research methodology?
 - Who is the intended audience?
 - What is the principal point, conclusion, thesis, contention, or question?
 - How is the author's position supported?
 - How does this study relate to other studies of the problem or topic?
 - What does this study add to your project?
- Select only relevant books and articles.

Housekeeping Tips

- Use a citation management system
 - Such as RefWorks, Zotero, Mendeley, etc.
 - One word for these: ***invaluable***. You are absolutely doing more work in NOT learning about these.
- Always get the complete citation information
 - Article title, journal title, author, year/volume, pages, abstract
- Keep track of searches, notes, ideas, etc.
- Fully citing sources = avoiding plagiarism

Analyzing

How Do I Assess
Existing Research?

Analyzing Sources

- A literature review is NOT just a list of studies—it always offers an argument about a body of research
- Analysis occurs on two levels:
 - Individual sources
 - Body of research

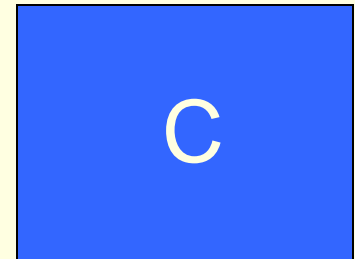
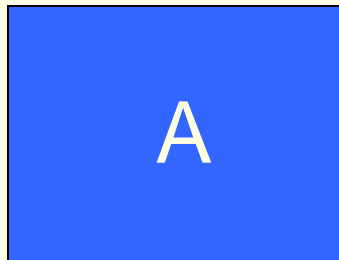


A Literature Review is NOT!

- An annotated bibliography
- A list of unrelated sources
- An argument about the importance of your research

Connecting the Literatures

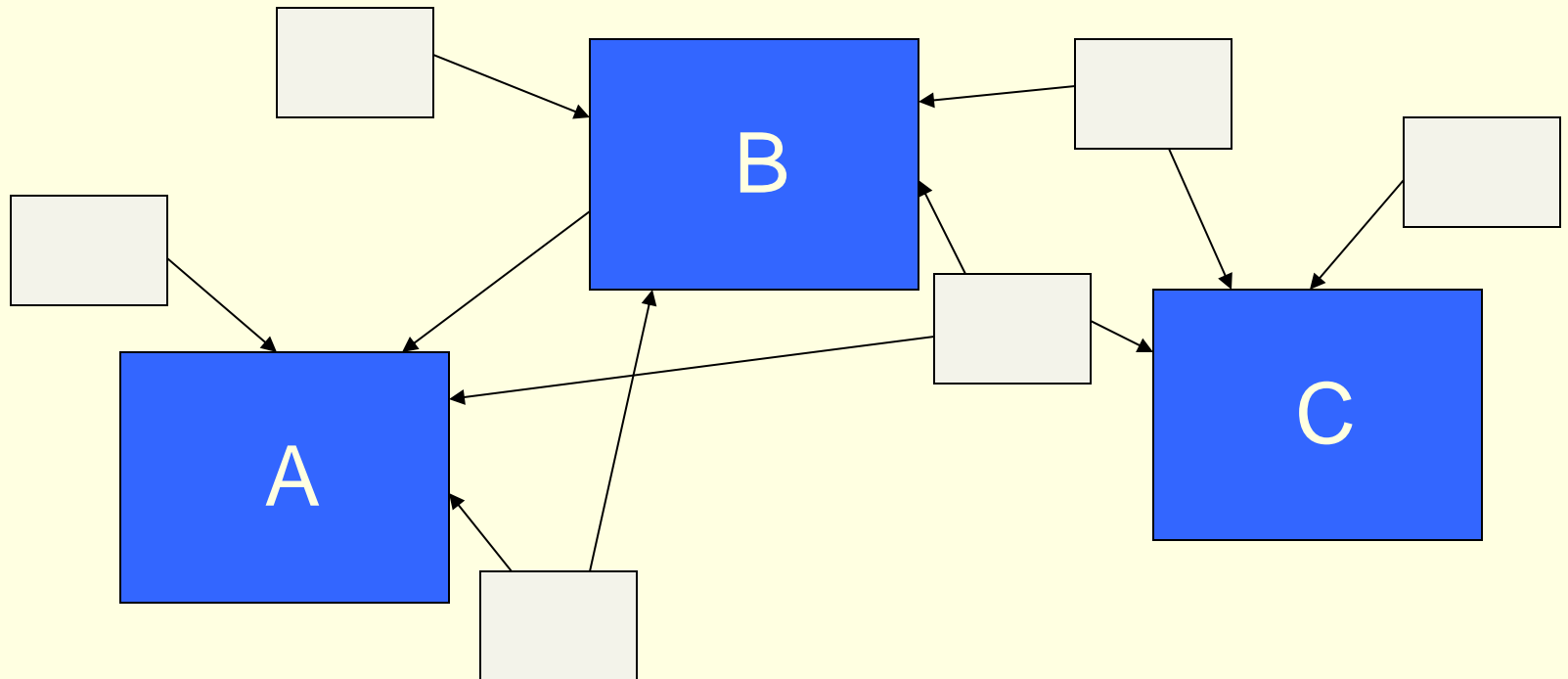
 = Major works



Connecting the Literatures

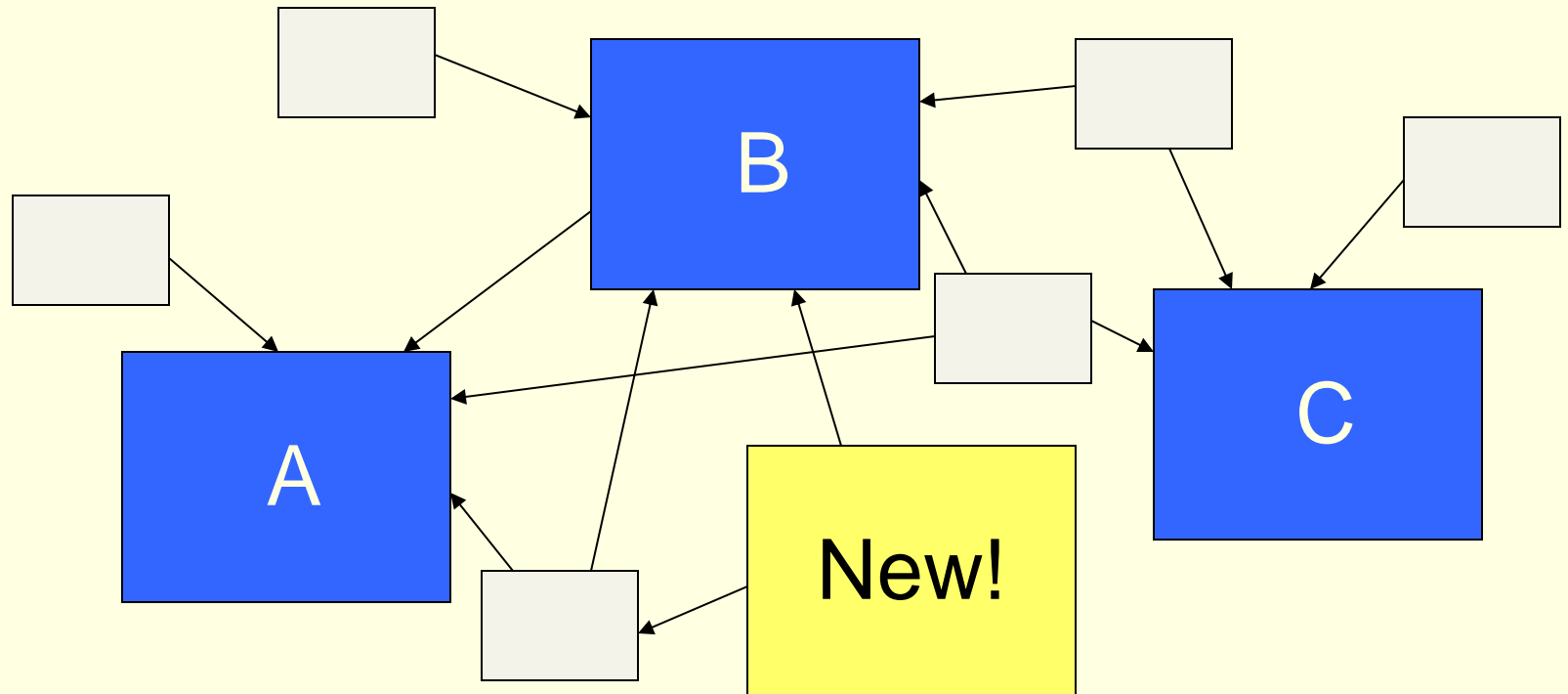
 = Major works

 = Studies that rely on major works



Connecting Into the Literature

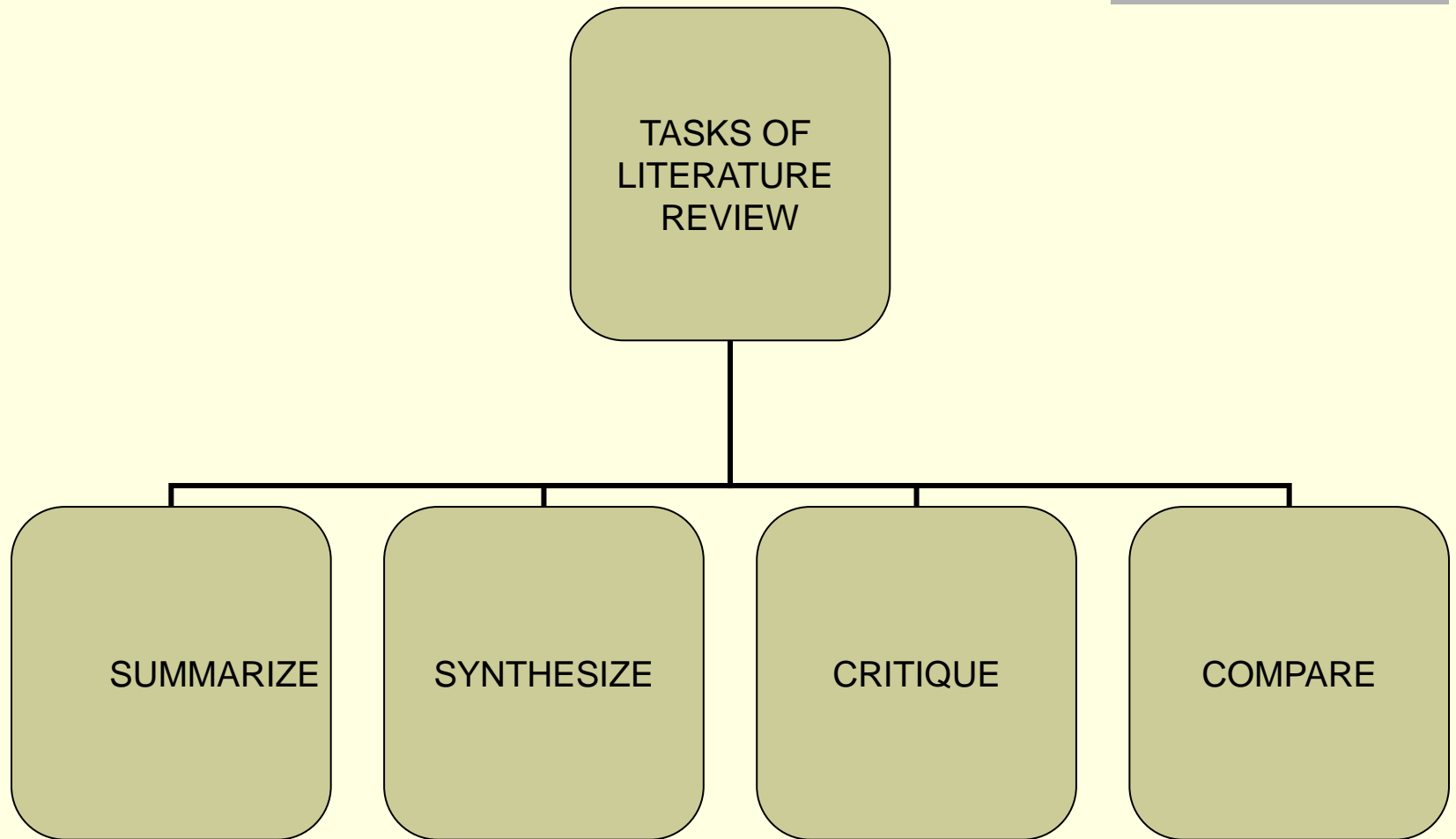
- = Major works ■ = Something new!
- = Studies that rely on major works



Read Synthetically

- Look at all articles to identify relationships
- Classify or group papers, or paper sections, by topic, method, theme
- Compare and contrast papers addressing similar questions
 - Discover relationships between sources
 - Discover critical gaps and disagreements

Four Analysis Tasks of the Literature Review



Summary and Synthesis

In your own words, summarize and/or synthesize the key findings relevant to your study.

- What do we know about the immediate area?
- What are the key arguments, key characteristics, key concepts or key figures?
- What are the existing debates/theories?
- What common methodologies are used?

Example: Summary and Synthesis

Under the restriction of small populations, four possible ways [to avoid premature convergence] were presented. The first one is to revise the gene operators. . . .Griffiths and Miles applied advanced two-dimensional gene operators to search the optimal cross-section of a beam and significantly improve results. The second way is to adjust gene probability. Leite and Topping adopted a variable mutation probability and obtained an outperformed result.

Comparison and Critique

Evaluates the strength and weaknesses of the work:

- How do the different studies relate? What is new, different, or controversial?
- What views need further testing?
- What evidence is lacking, inconclusive, contradicting, or too limited?
- What research designs or methods seem unsatisfactory?

Example: Comparison and Critique

- The situationist model has also received its share of criticism. One of the most frequently cited shortcomings of this approach centers around the assumption that individuals enter into the work context *tabula rasa*.

Writing

What Am I
Going to Write?

Structure of LR

- Introduction
- Body
- Conclusion:

Organization

Five common approaches to organizing the body of your paper include:

- Topical
- Distant to close
- Debate
- Chronological
- Seminal Study

Topical: Characteristics

- Most common approach
- Breaks the field into a number of subfields, subject areas, or approaches
- Discusses each subsection individually, sometimes with critiques of each
- Most useful for organizing a large body of literature that does not have one or two studies that stand out as most important or a clear chronological development

Topical: Typical Language

- Three important areas of this field have received attention: A, B, C.
- A has been approached from two perspectives F and G.
- The most important developments in terms of B have been...
- C has also been an important area of study in this field.

Distant to Close: Characteristics

- A type of topical organization, with studies grouped by their relevance to current research.
- Starts by describing studies with general similarities to current research and ends with studies most relevant to the specific topic.
- Most useful for studies of methods or models.

Distant to Close: Typical Language

- Method/Model M (slightly similar to current research) addresses ...
- Drawing upon method/model N (more similar to current research) can help ...
- This study applies the procedure used in method/model O (most similar to current research) to ...

Debate: Characteristics

- Another type of topical approach, with a chronological component.
- Emphasizes various strands of research in which proponents of various models openly criticize one another.
- Most useful when clear opposing positions are present in the literature.

Debate: Typical Language

- There have been two (three, four, etc.) distinct approaches this problem.
- The first model posits...
- The second model argues that the first model is wrong for three reasons. Instead, the second model claims...

Chronological: Characteristics

- Lists studies in terms of chronological development
- Useful when the field displays clear development over a period of time
 - Linear progression
 - Paradigm shift

Chronological: Typical Language

- This subject was first studied by X, who argued/found...
- In (date), Y modified/extended/contradicted X' s work by...
- Today, research by Z represents the current state of the field.

Seminal Study: Characteristics

- Begins with detailed description of extremely important study.
- Later work is organized using another pattern.
- Most useful when one study is clearly most important or central in laying the groundwork for future research.

Seminal Study: Typical Language

- The most important research on this topic was the study by X in (date).
- Following X' s study, research fell into two camps (extended X' s work, etc.)

Introductions

- Indicate scope of the literature review.
- Provide some background to the topic.
- Demonstrate the importance or need for research.
- Make a claim.
- Offer an overview/map of the ensuing discussion.

Conclusions

- Summarize the main findings of your review.
- Provide closure.
- Explain “so what?”
- Implications for future research.

OR

- Connections to the current study.

Writing a Literature Review: In Summary

- As you read, try to see the “big picture”—your literature review should provide an overview of the state of research.
- Include only those source materials that help you shape your argument. Resist the temptation to include everything you’ve read!
- Balance summary and analysis as you write.
- Keep in mind your purpose for writing:
 - How will this review benefit readers?
 - How does this review contribute to your study?
- Be meticulous about citations.