

## Organizing Literature Reviews - Advanced

One of the most difficult parts about writing a lit review is organizing it. Part of this difficulty lies in dealing with the large number of sources that will be part of the review, while the other lies in connecting sources to each other in a way that will support your purpose for writing the review. This handout outlines some common structural patterns used in lit reviews and provides two examples of these patterns in different disciplines.

### Lit Review Structural Patterns

When deciding on how to structure your literature review, think about how the sources you collected relate to each other. You might notice, for example, that researchers continue to reference a specific study in relation to what their studies have done. You might also find that the sources you collected center around a specific debate in the field. What is important is that you decide how to organize the information (likely using some of the patterns below) and connect that structure to your review's specific purpose.

NOTE: Although the patterns below are separated into categories, they may be used in combination with one another in the same paragraph or in the larger review itself. In addition, it is important to examine sample lit reviews in your field or discipline in order to identify the structural patterns most commonly used.

Pattern	Function	Sample Language
Topical	Breaks topic/collected research into subtopics & discusses/critiques each.	"An important component..." "Another area..."
Debate	Shows & critiques strands of debate, criticism, &/or opposition.	"Scholars hold a range of views..." "Some resist this..."
Chronological	Shows progression of thinking through time &/or paradigm shift in progression	"Much has changed since..." "It was not until later that..."
Distant to Close/Close to Distant	Orders studies in relation to their relevance to topic.	"The least related aspect of..." "The study most integral to..."
Seminal Study	Begins lit review with the most significant/central/cited study.	"One of the most salient contributions..." "The most significant study to date..."

### Sample Lit Review Excerpts & Patterns

The following two paragraphs contain excerpts from lit reviews in different disciplines. The bolded words signify the structural patterns used in each paragraph, and the tables following each identify and explain the patterns being used.

**Example 1:** “Glycan arrays are high--throughput assays that allow for rapid identification of protein binding glycans (Fig. 3 A). These arrays have been used to identify virus attachment factors and receptors and to determine the specificity of virus–glycan interactions (Table 1). The **first** glycan--based arrays were based on immobilization of microbe--derived polysaccharides on a nitrocellulose--coated glass slide [112]. **Alternatively**, smaller glycans can be chemically linked to amino--lipids resulting in neoglycolipids [113] and printed [114]. Importantly, clustered neoglycolipid printing allows for the analysis of low affinity, avidity--dependent interactions [115,116]. **Another variation** is the immobilization of cyclopentadiene--conjugated monosaccharides on gold--coated glass slides containing benzoquinone and pentaethyleneglycol groups [117]. The different variants of printed arrays were used to examine specificities of a broad spectrum of glycan--recognizing antibodies and glycan binding proteins. Moreover, this **early work laid the foundation** for the development of more stable glycan arrays with increased sensitivity (1870).”

Sentence	Pattern	Explanation
“The <b>first</b> glycan--based arrays were based on immobilization of microbe--derived polysaccharides on a nitrocellulose--coated glass slide [112].”	Chronological	The authors are offering a brief history of these arrays.
“ <b>Alternatively</b> , smaller glycans can be chemically linked to amino--lipids resulting in neoglycolipids [113] and printed [114].”	Topical	The authors are now showing shifts or variations in this topic.
“ <b>Another variation</b> is the immobilization of cyclopentadiene--conjugated monosaccharides on gold--coated glass slides containing benzoquinone and pentaethyleneglycol groups [117].”	Topical	The authors are continuing to discuss these variations.
“Moreover, this <b>early work laid the foundation</b> for the development of more stable glycan arrays with increased sensitivity” (1870).”	Chronological	The authors have established the point of this paragraph: to examine the early work of glycan arrays and show how that work acted as a foundation for the development of more stable arrays.

**Example 2:** “To address these questions, writing scholars and instructors have explored **several spheres of inquiry**. The **first sphere** of inquiry articulates wiki pedagogy. **One of the most salient contributions to this scholarship was** Mark’s Phillipson’s (2008) taxonomy of wikis in the classroom because this work helped to map other contributions. For example, **there were studies examining** what Phillipson identified as resource wikis, which traditionally served as collections of information (Anson & Miller--Cochran, 2009;; McCorkle, 2008). **In addition, there were studies examining what** Phillipson identified as presentation wikis, which primarily supported the work of a course (Carr, Morrison, Cox, & Deacon, 2007;; Fernheimer et al., 2009;; Martin & Dusenberry, 2008;; Walsh, 2010). Beyond these case studies

of wikis, **other scholars have employed** Wikipedia as a situated writing context to teach students about audience and contributing original information to existing discourse communities (Caeton, 2008;; Cummings, 2009;; Vetter, 2013). And **finally, there is scholarship that does not look at specific cases but instead makes** rhetorical arguments for practicing wiki pedagogy, both its affordances and challenges (Barton, 2008;; Lundin, 2008;; Nelson, 2008). All of these contributions have made wiki pedagogy a rich and active sphere of scholarship within rhetoric and composition.”

Sentence	Pattern	Explanation
“To address these questions, writing scholars and instructors have explored <b>several spheres of inquiry.</b> ”	Topical	The author establishes that there are many subtopics/areas within this topic.
“The <b>first sphere</b> of inquiry articulates wiki pedagogy.”	Chronological	The author lists these areas in terms of importance.
“ <b>One of the most salient contributions to this scholarship was</b> Mark’s Phillipson’s (2008) taxonomy of wikis in the classroom because this work helped to map other contributions.	Seminal	The author identifies the most significant contributions to this area/subtopic.
“ <b>In addition, there were studies examining what</b> Phillipson identified as presentation wikis, which primarily supported the work of a course (Carr, Morrison, Cox, & Deacon, 2007;; Fernheimer et al., 2009;; Martin & Dusenberry, 2008;; Walsh, 2010).”	Topical	The author explains additional subtopics within the topic of wiki pedagogy.
Beyond these case studies of wikis, <b>other scholars have employed</b> Wikipedia as a situated writing context to teach students about audience and contributing original information to existing discourse communities (Caeton, 2008;; Cummings, 2009;; Vetter, 2013).	Topical	The author identifies more subtopics of wiki pedagogy.
“And <b>finally, there is scholarship that does not look at specific cases but instead</b> makes rhetorical arguments for practicing wiki pedagogy, both its affordances and challenges (Barton, 2008;; Lundin, 2008;; Nelson, 2008).”	Topical	The author identifies the last subtopic of work about wiki pedagogy.

While the examples above show how these patterns can appear within paragraphs, you could organize your lit review globally by one of these patterns as well. For example, you might discuss the literature from least relevant to most relevant to your research question. Alternatively, you might structure the review overall by topics or key debates in the field.

## References

Example 1 excerpt from Lasswitz, L., Chandra, N., Arnberg, N., & Gerold, G. Glycomics and proteomics approaches to investigate early adenovirus–host cell interactions. *Journal of Molecular Biology*, 430(13), 1863--1882.

Example 2 excerpt from Sura, T. (2015). Infrastructure and wiki pedagogy: A multi--case study. *Computers and Composition*, 37, 14--30.

Lit review structural patterns in this handout are adapted from Weiss, M. (2018). Strategies for writing literature reviews. Handout from the Penn State Writing Center.

*Last updated 5/11/20*