When asked to describe academic writing in their fields, scholars and scientists use many of the terms defined below:

**Thesis:** A paper’s central claim or promise.

In humanistic disciplines, the thesis is an arguable claim—i.e., an assertion someone could reasonably argue against; as such, it provides unexpected insight, goes beyond superficial interpretations, or challenges, corrects, or extends other arguments. In scientific disciplines, the thesis is a statement of purpose indicating that a particular investigation will be described and significant results presented—results that challenge standard opinions or methodology, or add to knowledge in the field.

**Motive:** Defined by Gordon Harvey as the “intellectual context” that’s established at the beginning of a paper to suggest why the thesis is original or worthwhile.*

In both humanistic and scientific disciplines, the motive is typically an incongruity, puzzle, or surprise in the primary sources or data; and/or holes, limitations, or disagreements in the secondary literature. All good academic papers have a well-defined motive, which, according to Harvey, is “usually defined by a form of the complicating word ‘But.’”

**Structure:** A paper’s line of reasoning, from beginning to end and also within and between paragraphs.

A successful structure is logical, coherent, and easy to follow. In humanistic disciplines, the structure allows for a dynamic development of ideas (is not merely a list of points or examples). In scientific disciplines, the overall structure is typically signaled with subheadings, such as Title, Abstract, Introduction, Literature Review, Methods, Results, Discussion, and References; within each section, the structure allows for a logical development of ideas.

**Key Words:** A paper’s main terms or concepts.

Key Words usually appear in the title, are defined early on (often with the aid of sources), and could be used in a library or Web search to locate the paper if it were published.

**Methodology:** The methods and strategies used to make an argument or conduct an investigation.

In humanistic disciplines, scholars typically don’t discuss their methodology, except to describe an analytic framework, but social scientists and scientists always do, whether their projects are empirical or theoretical. One reason for the difference is that social scientists and scientists value reproducible *results*, which are dependent on methodology.

**Evidence, or Data:** Interpreted primary sources, empirical observations, or factual information.

In humanistic disciplines, evidence is usually quoted and analyzed. In scientific disciplines, data are visually summarized in labeled graphs and figures.

**Analysis:** The interpretation of sources.

In humanistic disciplines, analysis of primary sources is used to support claims, while analysis of other kinds of sources is used to advance the overall argument (for example, by providing a theoretical framework). In scientific disciplines, analysis of data leads to results (described in the Results section); the results are further analyzed for their larger implications (in the Discussion section).
Sources: The various materials used to develop an argument, including artifacts, information, and other people’s ideas.

*Primary sources* are uninterpreted documents, artifacts, data, or information that, when analyzed, function as evidence. *Secondary sources*, also known as “the literature” or “the secondary literature,” are texts that make direct claims about the topic and may be used to establish a problem or question worth addressing, the standard opinion(s) on the topic, the standard way in which the problem or question is approached, or the current state of knowledge in the field. Other *relevant sources* are texts that relate indirectly to the topic and may be used to provide context or background information, key words or concepts, or points of comparison.

Sources appear in any of several forms: they may be quoted (if the style of writing is special or significant), paraphrased (if the style of writing is complex or jargon-laden), summarized (if the source is long and complicated), or referenced (if the source is briefly mentioned). In humanistic disciplines, sources appear in each of these forms. In scientific disciplines, sources are usually referenced or summarized, almost never quoted or paraphrased.

**Orienting: Defined by Harvey as “bits of information, explanation, and summary that orient the reader.”**

The amount of orienting, or context, a writer provides depends on readers’ likely expertise in the subject. Even experts require some orienting; those with less expertise require more.

**Citations:** Bibliographic information that enables readers to track down a paper’s sources.

In academic writing, sources are always cited; the citation style employed (e.g., MLA, APA, CMS, CSE) depends on the discipline. A list of sources is called the Works Cited, Bibliography, or References, depending on purpose and discipline.

**Conventions:** The accepted standards of various elements of academic writing, such as paper format, voice, tone, diction, and citation style.

Academic writing in different disciplines follows distinctive conventions. Should a writer include a roadmap at the beginning of a paper or divide the paper up into conventional sections? Is the active or passive voice preferred? May a writer refer to him- or herself in the first-person singular? Is there a specialized language, or jargon, that the writer should use? Which citation style is appropriate? Writers can infer answers to these and other questions of convention by glancing through the most widely read journals in the field—for example, *PMLA, Social Science Research*, and *Nature*—or by reading excellent papers (by students or professionals) distributed by the professor or graduate student instructor.

**Mechanics:** Grammar, punctuation, spelling, and citation format.

Writing guides that focus on mechanics are readily available online, as are guides to the citation styles used in various disciplines. See, for example, “Resources for Writers” at http://www.princeton.edu/writing/resources and “Citing Sources” at http://library.princeton.edu/help/citing.php.

---

* This lexicon was developed by Kerry Walk, Former Director of the Princeton Writing Program, with assistance from Judith A. Swan, Associate Director for Writing in Science and Engineering (WSE). The lexicon was inspired and informed by Gordon C. Harvey’s “Elements of the Academic Essay,” available at www.princeton.edu/writing/university/resources/elements.pdf.