ACADEMIC LANGUAGE

Academic language refers to the language used in various **genres** of academic texts such as **articles**, **books**, and **reports**, as well as in **digital genres**. Academic language differs from ordinary language in a number of ways. It tends to use a formal register, so typically does not use idiomatic expressions, slang, and contractions of verbs (e.g., *doesn't*) (Swales & Feak, 2012). In addition, verbs in academic **sentences** may have a more complex structure (e.g., present perfect, past perfect) than everyday language typically uses. Moreover, acronyms (e.g., APA for American Psychological Association) are often used to achieve succinctness. Another feature of academic language is the use of **jargon** or disciplinary terminology, namely, specialized sets of words and phrases related to particular (sub)disciplines.

The language of academic texts often includes **citations** or **footnotes** to establish the relationship between the **arguments** being made and disciplinary knowledge. For instance, in Held and Soden's (2006, p. 5688) article on climate change, the sentence, "We presume that this 1% reduction is due to an increase over the century in absorbing aerosols (Ramanathan et al. 2001)," cites previous research to support their assertion.

The use of **metadiscourse** to guide the reader's interactions with the text is another characteristic of academic language (Feak & Swales, 2009). For instance, types of metadiscourse called *boosters* (that strengthen claims) and *hedges* (that weaken claims) are often used to moderate the strength of claims, as the use of the adverb *clearly* in this example shows: "As a result, it is only the models that warm the most strongly that *clearly* show an increase in precipitation over the twentieth century" (Held & Soden, 2006, p. 5688).

A common feature of academic language is the passive **voice**, which removes the agent, or actor, and shifts the focus to the process, as Example 2 from Gosselin et al.'s (2016) article on 3D printing shows, with the passive forms italicized.

Example 2: Passive Voice in a Journal Article

The paper *is organized* as follows. First, the design and processing chain *is described*. The material considered for validating this new process route *is presented and tested* in Section 3. (p. 103, emphasis added)

Gosselin et al.'s use of the present tense with the passive voice follows the convention of using the present tense to refer to research texts (Feak & Swales, 2009).

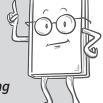
Variations and Tensions

Academic language varies across disciplines. For example, the use of personal and informal language is accepted in some humanities and social sciences disciplines (Sword, 2012). In contrast, many science disciplines use language that aims to convey objectivity, especially in **methodology/methods** sections (Ping Alvin, 2014), such as the passive **voice**.

Reflection Questions

- What aspects of the academic language used in your discipline did you have to learn? If you are still learning some aspects, what are they?
- Do genres in your discipline tend to value objective academic language or also allow for the use of a personal voice?

To me, academic English can be easier to understand than ordinary English, because it has fewer culture-related idioms and slang expressions. However, it took me a while to become familiar with the terminology in my discipline.



ANALYSIS

The term *analysis* in academic writing and research has multiple meanings. A common meaning of analysis is to take something apart in order to understand its component parts and how they relate to each other. In studies of literature, an approach to analyzing a text is to explain how one or more of its components functions and contributes to the whole (Barnet & Cain, 2012). In Example 3, Madsen and Ruderman's (2016) analysis of Robert Frost's poem "Mending Wall" claims that the speaker of the poem cannot decide whether to repair a wall:

Example 3: Analysis of a Poem

A modern pastoral in blank verse, [the poem] is also an elegy, in this case for an unstated or un-nameable loss: "something there is that doesn't love a wall." Besides the tortured syntax of the line, the speaker acknowledges not only his ambivalence about the activity of mending a wall, but also his befuddlement, his inability to say with any certainty what it is in the world or in us that does not love a wall. (p. 87)

In the first sentence, the authors present their claims, quoting from the poem; in the next sentence, they connect the use of the indefinite noun *something* to a larger claim they make about uncertainty and ambivalence as the overall message of the poem.

A related definition of analysis is to identify connections, patterns, and the underlying workings of a phenomenon or a set of data. In qualitative research, analysis often begins with the researcher writing codes, or labels, for the data. In the process, researchers also write analytic memos that describe how they have generated codes and subsequent stages of analysis as well as larger ideas that emerged over time (Saldaña, 2015). However, analysis of research data often requires moving from a description of what a researcher observed to interpreting its significance, by filtering it through a theoretical lens and connecting the results/findings to the existing knowledge base (Thomson, 2018).

Variations and Tensions

In social sciences and humanities fields, analysis often involves using theoretical lenses to understand data and other phenomena. As findings emerge from qualitative data analysis, a researcher may consider which aspects of a **theoretical framework** might help in understanding a phenomenon (Creswell & Creswell, 2018). For instance, Jiang's (2018) article on how students use texts, images, and sources in digital writing draws on investment theory to understand students' motivation for learning and a theory of identity to analyze how students' efforts in writing changed as they used digital means of expression and how their identity developed.

Analyses of quantitative data typically use statistical methods to compare **results**, describe trends, and simulate outcomes (Creswell & Creswell, 2018). Writers of quantitative texts usually describe analysis by explaining how the data were organized and prepared for calculation and the procedures performed to test their hypotheses.

Reflection Questions

- When you read texts in your discipline, how do authors describe data analysis processes, if they are analyzing data?
- If your discipline uses theory in the process of analysis, how do writers use theoretical lenses in their analysis?

Writing analyses of poems, novels, or empirical data means discussing not only my argument or findings, but also how I arrived at them, often by responding to my guiding research questions.

—Weijia Li

ARGUMENT

While in everyday usage, the term *argument* tends to be interpreted as "disagreement," in the academic context an argument signals taking a position on a topic or asserting new knowledge. As in ordinary conversations, however, academic arguments can be made in different contexts—and in speaking and writing various **genres**. The grounds for making an argument can include what Aristotle (2006) calls the "three artistic modes of persuasion" (p. 111): emotion (ethos), character (pathos), and facts and reason (logos). Academic communication tends to value the use of facts (evidence) and reason to convince an **audience** of the validity and significance of ideas, new information, or research **results/findings**, though emotions and impressions are also tools of persuasion. A secondary aim of an argument may be to persuade the audience to take action (Lunsford et al., 2016).

The structure of an argument typically comprises one or more claims, various types of evidence, and a **warrant**, or the implicit or explicit reasons supporting the argument (Toulmin, 2003). A claim is an assertion that is usually supported by evidence, including facts, data, examples, and **citations** to the research literature (see **sources**). An academic argument is often built from multiple claims. Example 4 illustrates an overarching argument and the claims that support it, italicized in the example.

Example 4: Argument and Claims

Supervisors' feedback is of particular importance to doctoral students [Argument]. It functions as one main form of instruction (Basturkmen et al., 2014; Xu, 2017) [Claim 1]. Through writing and rewriting upon supervisors' feedback, doctoral students build up and demonstrate their subject knowledge ... (Carter & Kumar, 2017; East, Bitchener, & Basturkmen, 2012; Xu, 2018) [Claim 2]. (Xu & Hu, 2019, p. 2, emphasis added)

Here the authors use two claims to support the argument that providing feedback is important and include citations as evidence to support each claim.

In addition, an explicitly stated warrant may explain the underlying assumptions that connect reasons or evidence to the claim, though warrants are often left implicit. Warrants may include theories, concepts, or logic.

The strength of claims is influenced by the choice of verbs (e.g., *demonstrates* is stronger than *suggests*), the use of qualifiers such as modal auxiliary verbs (e.g., *may*), adverbs of frequency (e.g., *occasionally*), and other linguistic elements that affect the degree of certainty. In Example 5, the author uses the

adverb *often* and the modal auxiliary verb *can* to moderate the strength of the claim that students may find writing dissertations difficult.

Example 5: Mitigating the Strengths of Claims

Thesis and dissertation writing *often* entails significant challenges for many PhD candidates. It *can* be even more demanding for multilingual doctoral students who use English as an additional language (EAL). (Ma, 2019, p. 72)

Finally, addressing possible counterarguments can help writers to defend claims and make arguments more convincing (Nussbaum & Schraw, 2007).

Variations and Tensions

Different academic fields have various understandings of what counts as acceptable evidence (Booth et al., 2016). For example, humanities disciplines such as literature and history use passages of a literary text or extracts from personal narratives and government documents (Hyland, 2009). In contrast, in some natural sciences, the results of experiments as well as computer modeling are used as evidence. Social sciences disciplines draw on both qualitative data (e.g., field notes from participant observations and extracts of interviews) and quantitative data (e.g., analyzed data from surveys and measurements) as well as documentary evidence.

Reflection Questions

- What is the main argument of the text you are writing? What are its claims and evidence?
- How does your argument respond to the existing knowledge base, if you
 are discussing how the research literature views your topic or question?

Argument is at the heart of most of the academic texts I have written in the field of education. To make arguments in the papers I have written so far, I have supported my claims with evidence from the research literature.

—Fangzhi He

ARTICLE

As a **genre**, an article refers to a paper published in a **journal** or other periodical (e.g., newspaper, newsletter, magazine), whether in print or on a **publisher's** website or another **digital genre**. Articles are usually **peerreviewed**. As an element of **grammar**, the term *article* refers to linguistic particles (*a*, *an*, *the*) that precede certain classes of nouns (Caplan, 2019). This entry discusses the article as a genre.

What is included in a journal article depends on its **audience** and type. Specifically, research articles aim to contribute new knowledge generated from scholarly investigations, data analysis, or modeling. For example, the research article, "Making Nursing Work: Breaking Through the Role Confusion of Advanced Practice Nursing" (Gardner et al., 2007), tested a model of health care service against the professional practices of a random sample of advanced practice nurses and validated the model.

Practitioner-oriented articles tend to share information drawn from research results/findings, reframed for application in real-life contexts. For example, focusing on the role of nurses, the practitioner article, "A Conceptual Framework for Advanced Practice: An Action Research Project Operationalizing an Advanced Practitioner/Consultant Nurse Role" (Manley, 1997) discusses the competences and qualities entailed in a specific nursing role. Practitioner articles may use a less formal writing **style** and **voice** than do research articles.

Review articles are a type of complex **literature review** that synthesize an overview of a topic within a discipline. Other kinds of academic articles include **book reviews**, letters, and short communications that report preliminary research **results** to establish claims to new knowledge. Yet other types of articles include essays and conceptual articles.

The format and components of a particular type of article may be constrained by the guidelines of the publication or digital platform, though some flexibility may exist in terms of length and features such as graphics.

Journal publishers assign a Digital Object Identifier (DOI) to each article. A DOI is a unique combination of letters and numbers that creates a hyperlink to the publisher's website, thereby making it easy to find the article and to check its bibliographic information.

Variations and Tensions

Certain types of journal articles are common in certain disciplines. For instance, letters and short communications are genres often published in science journals such as *Brain and Language* and *Solid State Communications*.

Different types of articles have different **formats** (length, sections, etc.). Research articles typically include **abstracts** and keywords to help readers find the article in a search and get a quick sense of its focus (Belcher, 2019). They may also include visual features that draw the reader's interest, such as sidebars and graphics (see **data presentation**).

Increasingly, academic writers also write articles for **digital genres** such as blogs (Thomson, 2020) and emails (James & Guerin, 2019) to share ideas and experiences and to disseminate research.

Reflection Questions

- What categories of articles are commonly published in different kinds of journals in your discipline?
- Have you been involved in writing different types of articles? Which kinds of articles might you be interested in producing, and for which audiences?

I read empirical journal research articles more than other types because they provide current information on the topics I follow in education and applied linguistics. However, I also consult practitioner-oriented journal articles for information about teaching.

—Yanhong Zuo