# Language in Argumentative Academic Writing

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## Key Points

- Argumentative writing is crucial for academic success, yet many students struggle with it
- Systemic Functional Linguistics can aid our understanding how linguistic features reflect the contextual demands of argumentative writing in academic contexts
- Ideational resources realize the content and ideas in an argumentative text and the logical relations between them.
- Interpersonal resources realize the relationship between writer and reader, particularly how the writer acknowledges alternative perspectives and guides the reader toward the author's viewpoint.
- Textual resources realize the organization and cohesion of an argumentative text.

## Abstract

The ability to write argumentative genres is crucial for academic success across school levels and subject areas. Students' success with argumentative academic writing largely depends on their mastery of the lexical and grammatical structures that achieve the text's social purpose. Through the lens of Systemic Functional Linguistics, this article describes some of the linguistic resources important for effective argumentative writing. Understanding these linguistic features, and their application in educational contexts, can support student success in mastering argumentative academic writing.

## Introduction

Argumentative genres pose gateway milestones across school levels and subjects. A successful argument depends on one's mastery of a host of linguistic features which function to achieve an argument's surrounding social demands. The interplay between an argument's social demands and the text's linguistic features has been investigated within the tradition of Systemic Functional Linguistics (SFL). The social demands of a given text can be understood with the SFL concept of *register*. According to Halliday and Matthiessen (2014), register is composed of *field*, or disciplinary knowledge of the topic of an argument; *tenor*, or the relationships among the argument's interlocutors; and *mode*, or the argument's communication channels.

To meet the exigencies of register, argument writers must exploit appropriate linguistic resources. The linguistic resources fit for an argument can be categorized according to the relevant *metafunction* they achieve, of which there are three, corresponding to *field*, *tenor*, and *mode* respectively (Humphrey et al., 2010). The *ideational* metafunction concerns integration of accurate, relevant, and sufficient content concerning the external world. The *interpersonal* metafunction concerns a writer's relationship-building with the reader. Finally, the *textual* metafunction concerns the construction of a cohesive product.

## Ideational Resources

The ideational metafunction concerns how the external world is represented in a text and contains two subfunctions, the *experiential* function and the *logical* function. The experiential function is concerned with the content and ideas that the text is about, while the logical function addresses the logical relationships between those ideas. In argumentative writing, a central, overarching argument or claim is typically presented alongside multiple sub-claims that support and elaborate on the main claim. Thus, the ideational metafunction realizes both the ideas represented in these claims as well as the logical relations among them. Ideational meanings are typically expressed through the *transitivity* system in SFL, which includes three elements: *participants*, *processes*, and *circumstances*. Participants are who or what is involved, processes indicate what is happening, and circumstances specify when, where, why, or how something happens.

Participants are most often realized as nominal groups, akin to noun phrases in traditional grammar. At a basic level, nominals indicate the specific people, things, or concepts that the argument is about. Additionally, nominals that pack and condense information, such as superordinate terms, allow writers to create an overarching framework for their argument and to identify points that are taken up and developed later in the text (Schleppegrell, 2006). Often, these are what Schmid (2000) calls *shell nouns*, words that abstract and condense ideas, such as *issue*, *reason*, or *problem*. In argumentative writing, shell nouns are useful for organizing and structuring an argument. For example, shell nouns can be used to encapsulate a complex idea or even multiple points, which can then be unpacked in the following discourse, such as in *The **problem** is* or *There are three **problems** with this approach*. Similarly, shell nouns can serve as signposts to guide the reader through the text and create cohesion between individual points. For example, after stating that *There are three problems* in the main claim, the author could then state *The first problem is …*, *Another problem is*, etc.

Processes are typically realized as verbal groups (similar to verbs in traditional grammar). In arguments, it is often important to define terms, necessitating verbs that construe relational processes (i.e., verbs of being or having) to enable writers to explain what something *means*, *indicates*, *involves*, or *is associated with* (Schleppegrell, 2006). Authors also often need to cite information from outside sources or express their own opinions, necessitating mental and verbal processes (i.e., verbs of thinking and saying, respectively). Examples of mental processes include *I **think***, *Researchers **believe***, and *We **consider***, while examples of verbal processes are *Smith **argues***, *The report **states***, *Jones **mentions***, *Researchers **claim***, and *Scholars **have debated***.

The above examples show how participants and processes are used congruently, such that the semantics align with the lexicogrammar; that is, participants are realized as nominal groups and processes are realized as verbal groups. However, in argumentative writing, these are often used incongruently through *ideational metaphor* (To et al., 2020). For example, in the sentence *The man played the drum loudly*, *the man* and *the drum* are nominal groups that realize participants, *play* is a verbal group realizing a process, and *loudly* is an adverbial that realizes a circumstance describing the manner of playing; that is, all elements are realized congruently. However, these elements can be reconfigured through ideational metaphor into the form *The man's loud drum playing*. Here, the elements are together realized as a single nominal group that can function as the subject of a sentence. Important to ideational metaphor is nominalization, which allows processes and properties to be reworded metaphorically as nouns, thus enabling more information-dense discourse (To et al., 2020). For example, instead of the congruent (i.e., non-metaphorical) sentence *The government decided to implement new policies*, an author could use ideational metaphor to say *The government's implementation of new policies*, followed by additional information, such as an elaboration or evaluation, to make a claim or to create logical connections with other parts of the argument.

Furthermore, it is important to consider how choices of participants, processes, and circumstances are affected by the disciplinary context in which an argument occurs. It is important for argumentative writing to be grounded in accurate and relevant discipline-specific knowledge, often achieved through specialized disciplinary terminology (Pessoa et al., 2017). Writers draw on ideational resources to represent the specialized knowledge of their discipline while also expanding that knowledge in order to make their own argument. Mitchell and Pessoa (2021) identify patterns of ideational resources as important for contextualizing arguments. For example, a text can be organized such that it oscillates between a claim using disciplinary knowledge and knowledge from a specific case used to illustrate or support the claim. Mitchell et al. (2021) suggest that disciplinary knowledge is often expressed using abstract nouns (e.g., *motivation*), while knowledge from specific examples often uses concrete nouns (e.g., *employees were crying at work after the merger*). Furthermore, Mitchell et al. (2021) show how writers contextualize arguments through the heuristic *I know; I see; I conclude*. Here, *I know* moves draw on disciplinary knowledge, *I see* moves relate knowledge from a specific case, and *I conclude* moves articulate the writer's conclusions based on their understanding of the case through the lens of the disciplinary knowledge. Mitchell et al. (2021) emphasize the importance of logical connectors to relate information in the argument, such as through comparison (e.g., *like*, *as if*, *similarly*, *in contrast*), causation (*so*, *because*, *since*), conditionality (*if*, *provided that*, *unless*), or consequence (*in conclusion*, *thus*, *therefore*).

## Interpersonal Resources

The interpersonal metafunction includes resources used to manipulate relationships with readers. Persuasive arguments are the result of the exploitation of a writer's awareness of the "reader-in-the-text" (Thompson & Thetela, 1995). A writer must anticipate the putative reader's reactions, questions, and so forth and correspondingly construct the argument as a series of responses. In other words, an argument is construed against a dialogic backdrop "made up of contradictory opinions, points of view and value judgments … pregnant with responses and objections" (Bakhtin, 1981, p. 281). This so-called *heteroglossic* dialogic backdrop contributes

to the advancement of an argument by making space for readers to co-construct the argument and further its goals. Thompson (2001) notes that successful co-construction happens with readers when they are implicitly cast into constructive roles such as that of a dubious inquisitor or skeptical contrarian, roles for which a writer will employ interpersonal resources (e.g., modals for recognizing multiple viewpoints, discussed below) to match, overcome, and ultimately achieve the reader's convergence on the writer's argument. Linguistic resources which achieve these ends can be understood with Martin and White's (2005) system of *Engagement*. Within the Engagement system are two broad categories: those resources which are dialogically Expansive and those which are Contractive (see Fig. 1).

## Expansive Engagement

Expansive Engagement resources function to recognize alternative viewpoints, both putative (e.g., *you might say*) and real (e.g., citation of published sources). Expansive resources do not narrow readers' interpretations toward those of the writer, but merely *add* external voices to the text. Nevertheless, resources for Expansion have the vital functions of demonstrating evidence for claims and recruiting readers into constructive roles by inviting their alternative viewpoints. Categories of Expansion include the moves *Entertain* and *Attribute*.

### Entertain

An Entertain move grounds a proposition in the writer's own subjectivity, thereby recognizing alternative viewpoints. Resources for an Entertain move include modals (*may, might, could,* etc.) as well as certain adverbs (*hardly, barely*). In traditional theories of modality (e.g., Palmer, 1986), modals function to attenuate a writer's commitment to the truth value of propositions. However, as resources for Engagement, modals and other adverbs function to highlight the proposition's subjectivity. For example, an argument on "AI panic" might claim that *AI hardly poses a threat,* an Expansion on a categorical assertion (*AI does not pose a threat*) now less falsifiable by a skeptical reader.

### Attribute

Whereas Entertain resources ground viewpoints in the writer's internal subjectivity, Attribute resources ground viewpoints in the subjectivity of an external source. Attribution is achieved by the framing devices associated with direct and indirect reported speech, including their nominalizations (*X's belief that, the assertion that*); adverbial adjuncts (*according to, in X's view*); and references to an unspecified source (*it is said that, people nowadays think, some believe*). Depending on the desired evaluative comment, Attribution can be realized in one of two ways: to *Acknowledge* or to *Distance*.

An Acknowledge move is the referencing of an external source with no evaluative comment. Resources include reporting verbs with a neutral connotation, such as *said, found,* or *reported* (e.g., *Congress reported their reservations about the bill*). In contrast, resources of Distance signal an unaligned stance with the source. Resources for this move include reporting verbs with a negative or weak connotation, such as *believe* or *claim* (e.g., *Congress claimed there was cause for concern over the bill*). Distance resources are particularly strategic before a Contractive move as Distance resources invite an alternative viewpoint but prepare readers for that viewpoint to be discounted (see the Interpersonal Resources in Combination section for more on interpersonal resources in combination).

It is important to consider the rhetorical consequences of Attribution resources, both Acknowledge and Distance, in the context of an academic discourse community. Not only do Attribute resources bolster central claims with evidence, but the attribution of disciplinary sources further contributes to an ethos grounded in a dialogic tradition with which readers may identify (Hyland, 1999).

## Contractive Engagement

Like Expansive Engagement, Contractive Engagement functions to incorporate external voices into an argument, thereby recruiting reader participation into the co-construction of a text. However, Contractive resources advance an argument by narrowing a reader's
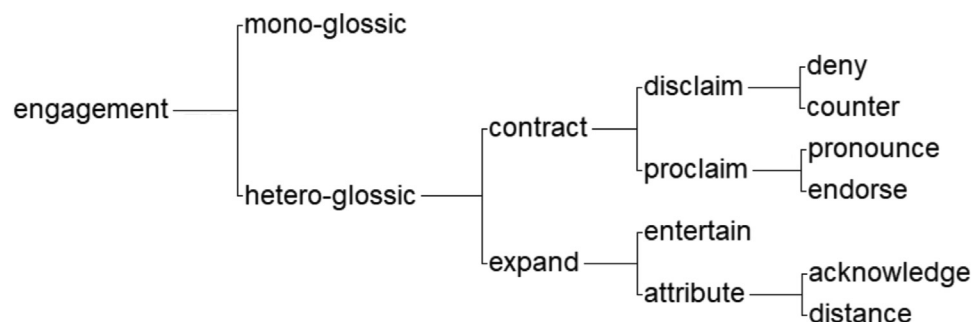


**Fig. 1**    Resources within the Engagement system (Martin & White, 2005) that are important for argumentative academic writing.

interpretation down to that of the writer by excluding alternative points of view. Categories of Contractive Engagement include the moves *Disclaim* and *Proclaim*.

### Disclaim

Disclaim resources advance an argument by discounting alternative viewpoints or by supplanting them. Moves within this category include *Deny* and *Counter.* Deny resources function to discount alternative viewpoints. Resources for the Deny move include grammatical negation, including auxiliary (*not, cannot*), phrasal (*no*), and adjectival (*impossible*) negations. Deny resources may cast alternative viewpoints as problematic, but do not quite provide writer viewpoints. Counter resources, on the other hand, function to supplant those problematic alternatives with the writer's preferred viewpoint. Counter resources include certain subordinators (*although, even though, but*), clause-level adverbials (*however*), and prepositions (*despite, in spite of*). These resources normally operate with an immediacy to an explicitly stated, alternative proposition raised with an Expansive resource. An example includes ***Although vegetarians may risk vitamin deficiencies, they can thrive if they are smart dieters.***

In arguments, it is important to not only Entertain alternative viewpoints and Attribute external evidence, but to further *set oneself apart* from these Expansive elements via Disclaim resources. As Mitchell (1994) notes, not only must writers "manage the actual voices and meanings of others in the forms of citations and references to existing writers in the field" but must further go "beyond this, to construct an argument out of and in response to these voices" (p. 21). Disclaim resources thus function to separate a writer's argument from the text's Expansive elements, thereby constructing a novel claim worth reader attention, or "bringing difference into existence" (Coffin & Hewings, 2005, p. 33).

### Proclaim

Proclaim resources function to advance an argument by explicitly stating a writer's defendable position. Moves within this category include *Endorse* and *Pronounce.* Endorsement refers to a move which is similar to an Attribution (Expansive) but is Contractive in that it signals a favorable stance toward that source. Resources for Endorsement include reporting verbs with a strong or positive connotation such as *X shows, X demonstrates, X proves, X supports.* Whereas the grounding of an Endorse move remains in an external source, a Pronounce move grounds a proposition into the subjectivity of the writer. Resources include constructions such as *the facts of the matter are, I contend, there can be no doubt that, the truth is, it is clear that,* and so on.

Proclaim resources are often employed in concluding, latter sequences of discourse (i.e., often after Expansive consideration of other points of view, often Disclaimed) to justify a writer's viewpoints (Miller et al., 2014). The explicitness of Proclaim resources allows for the signaling of a clear line of reasoning (Ryshina-Pankova, 2014). Moreover, Proclaim resources signal to readers that these lines of reasoning are inferential propositions and not explanations to be accepted uncritically (Coffin, 2006).

### Interpersonal Resources in Combination

Interpersonal resources are used in tandem to guide a reader toward convergence on a well-supported and explicitly stated argument construed as distinct or novel from discounted alternatives. According to Ryshina-Pankova (2014), Expansive and Contractive resources are employed in an alternating "wave-like fashion" (p. 295) in which arguments typically Attribute others, Disclaim those views, then support one's own views by Attributing evidence and Proclaiming explicit lines of reasoning (see also Miller et al., 2014). This alternation of expansive-contractive resources is corroborated by well-documented argumentative rhetorical patterns, such as Hypothetical-Real (Winter, 1994), Problem-Solution (Hoey, 2001), and the model for Creating a Research Space in research articles (Swales, 1990).

### Textual Resources

Textual resources function to construct a cohesive text. Textual resources hinge on the theory of a clausal *theme*, referring to the information in the first position of a clause. To Halliday and Matthiessen (2014), a theme is "the point of departure of the message," the subject or topic "with which the clause is concerned" (p. 89). Functioning as commentary material on the theme is the clausal *rheme*, in clausal final position. The applications of a theory of theme and rheme can be used to discuss textual resources at a whole-text, clausal, and lexical level.

At the whole-text level, cohesive arguments employ a strategic theme pattern, or *theme progression*. A theme progression common to academic arguments is the development of a Macro-theme by the unpacking of related Hyper-themes (Humphrey et al., 2010; Hyland, 1990). In the beginning of an argument, a Macro-theme realizes a central proposition to be argued for. As a textual resource, the Macro-theme employs nominal elements to forecast a hierarchy which predicts the order of propositions subsequent discourse will take up. This hierarchy is sustained by Hyper-themes which begin paragraphs, referred to commonly as *topic sentences*. A Hyper-theme realizes an abstract proposition which is then unpacked or developed throughout a paragraph by concrete details: the Hyper-theme's exemplification, demonstrations of its causal links, and other concrete ideational and interpersonal resources.

At the clausal level, cohesive arguments employ a strategic theme progression described as *given-new*. A given-new theme progression enables writers to introduce new meanings which both cohere to and unpack previous discourse. A given-new theme progression places given material in the theme, then introduces new and related material in the rheme. That rheme (now *given* material) is

then invoked in the following theme and unpacked in introduced material in the following rheme. Thus, this chain-like progression continues (Fries, 1995).

Crucial to cohesive theme development at the clausal level is a writer's ability to achieve grammatical metaphor. On the one hand serving as an ideational resource (as discussed in the **Ideational Resources** section), grammatically metaphorical nominalization further functions as a textual resource in that it enables writers to strategically manipulate clausal themes (Schleppegrell, 2004). Densely embedded nominal groups may function as themes which simultaneously cohere to previous discourse and highlight the points which will be unpacked in later discourse.

Further serving to help writers achieve cohesive discourse are lexical signposts. One framework for these signposts is that of Hyland's (2005) *interactive metadiscourse markers*. Interactive metadiscourse refers to non-propositional information (a fuzzy distinction from ideational information, which refers to worldly material) which functions to assist readers to connect, organize, and interpret propositional information in a way that is preferred by the writer. According to Hyland and Tse (2004), these resources include *transitions*, devices which function to mark additive, contrastive, and/or consequential steps within the discourse (e.g., *in addition to*, *but, thus, and, furthermore*). The devices known as *frame markers* refer to text boundaries such as discourse acts, sequences, or textual stages (*finally, in conclusion, my purpose here is to*). *Endophoric markers* make other points of a text salient (*as noted above, see Figure, in the* **Ideational Resources** *section*). *Code glosses* help to restate ideational information (*namely, e.g., such as, in other words*). Finally, Hyland and Tse (2004) include as textual resources *evidential*s, devices which refer to external sources (*according to*, reporting verbs, etc.). Although in the framework in which we have operated, evidentials have been considered an interpersonal resource, such devices also segment sections of discourse and help readers predict what cited information is to be unpacked or developed.

## Conclusion

Argumentative writing is vital for success in many academic contexts, from elementary school through to high school and university (Newell et al., 2015). Despite its importance, many students struggle with argumentative writing (Miller & Pessoa, 2016; Pessoa et al., 2017). In this entry, we have highlighted some of the key linguistic features of argumentative academic writing from an SFL perspective. To conclude, we discuss how this understanding can be applied in educational contexts to support student success.

Argumentation is central to what Schleppegrell (2004) calls the "language of schooling." This academic language used in school contexts differs from the language students use in social contexts outside of school. Schleppegrell argues that an SFL-based approach to language, "reveals the challenges that the "language of schooling" presents to students unfamiliar with this variety, including nonnative speakers of English, speakers of nonstandard dialects, and other students with little exposure to academic contexts outside of school" (p. ix) by making visible the linguistic features that achieve an argumentative stance.

These linguistic features can be taught in the classroom using an SFL-based pedagogy called the Teaching and Learning Cycle (TLC) (Martin & Rose, 2005). The TLC contains three stages: joint deconstruction (the teacher guides students to notice the stages, functions, and linguistic features of a text), joint construction (the teacher and students co-construct a new text based on their analysis), and independent construction (students work independently to produce the target genre). This cycle emphasizes the importance of explicit instruction and scaffolding in helping students understand and apply the linguistic features of academic writing.

SFL research has identified many key linguistic features of argumentative writing, as outlined in this entry, and SFL-based pedagogical frameworks like the TLC have been used to explicitly teach such linguistic features. Such efforts can enable all students, particularly those with limited exposure to academic discourse, to succeed in academic contexts.

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