LEXICAL DENSITY ACROSS LANGUAGES: A CONTRASTIVE ANALYSIS OF ENGLISH AND INDONESIAN ACADEMIC PROSE

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Abstract: This study investigates lexical density in English and Indonesian academic prose using a qualitative contrastive approach. Drawing on authentic journal articles from comparable academic fields, the analysis focuses on how each language organizes and packages meaning in academic writing. The findings reveal that English academic prose tends to achieve high lexical density through nominalization and complex noun phrases, allowing writers to compress information and advance arguments in an abstract and cumulative manner. Indonesian academic prose, by contrast, often develops meaning through verbal clauses and explicit relational markers, resulting in a more elaborative and linear style. These differences reflect distinct discourse preferences rather than differences in academic quality. The study explains how such contrasts contribute to difficulties experienced by Indonesian writers when producing English academic texts. It also highlights the importance of contrastive awareness in academic writing instruction and evaluation

Keywords: lexical density, academic prose style, information packaging, contrastive analysis, English–Indonesian academic writing, nominalization, complex noun phrases, clause structure, discourse progression, writing pedagogy

INTRODUCTION

Academic writing is shaped by how languages package information. One central feature that distinguishes academic prose from other registers is lexical density. Lexical density refers to the concentration of content words such as nouns, verbs, adjectives, and adverbs in relation to grammatical words (Chyzhykova, 2024). A text with high lexical density carries more information per clause, while a text with lower lexical density tends to distribute meaning across longer structures. This feature plays a decisive role in how arguments are developed, how ideas are perceived, and how academic authority is constructed.

English academic prose is widely associated with high lexical density. Writers often condense complex ideas into compact structures through nominalization, dense noun phrases, and reduced clauses. These strategies allow arguments to progress efficiently and abstractly. Indonesian academic prose, however, often reflects a different pattern. Meaning is frequently elaborated through full clauses, verbal predicates, and functional markers. Rather than compressing information, Indonesian writers tend to unfold ideas step by step. These contrasting strategies create noticeable differences in academic style, even when the communicative purpose is similar.

Many Indonesian students writing in English encounter difficulty in achieving what is perceived as an appropriate academic tone. Their texts may show accurate grammar and adequate vocabulary, yet lecturers and reviewers often describe them as descriptive, repetitive, or insufficiently academic. This issue is commonly attributed to limited lexical range or grammatical weakness (Hinkel, 2020). Such

explanations, however, overlook a more fundamental problem. The challenge often lies in how information is packaged rather than what information is presented. Lexical density becomes a critical factor in this mismatch. Research on lexical density has traditionally emphasized measurement. Studies often calculate ratios of lexical items to grammatical items to classify texts as spoken or written (Tömen, 2016). While this approach provides useful benchmarks, it tends to treat lexical density as a static numerical property. It rarely addresses how lexical density functions within discourse or how languages achieve density through different grammatical means. As a result, the deeper relationship between lexical density and meaning construction remains underexplored.

Cross linguistic comparison reveals that lexical density is not achieved through identical strategies across languages. English often increases density by transforming actions into abstract entities. Processes become nouns. Relationships become modifiers. Clauses shrink into phrases. Indonesian, by contrast, frequently maintains verbal forms and uses conjunctions or markers to guide interpretation. These differences do not signal deficiency. They reflect stable linguistic preferences shaped by grammar and discourse tradition.

The lack of contrastive studies on lexical density between English and Indonesian creates a gap in both theory and pedagogy. Without explicit comparison, differences in academic style may appear as individual weakness rather than systemic variation. Writers may receive feedback that their work lacks sophistication without understanding why. Teachers may encourage conciseness without explaining the linguistic mechanisms that support it. A contrastive perspective can clarify these issues by revealing how each language organizes academic meaning.

Lexical density also interacts closely with cohesion and coherence (Tömen, 2016). In English academic writing, dense noun phrases often serve as anchors for argument development. They allow writers to refer back to complex ideas efficiently. In Indonesian writing, cohesion often relies on repetition, explicit connectors, and clause chaining. These strategies create clarity but may reduce informational compactness. Understanding these patterns helps explain why direct translation between academic texts often results in stylistic imbalance.

This study views lexical density not merely as a quantitative feature but as a meaning making strategy. Lexical choices reflect how writers conceptualize knowledge. High lexical density often signals abstraction, categorization, and generalization. Lower lexical density supports explanation, elaboration, and accessibility. Neither strategy is inherently superior. Each aligns with different discourse expectations and reader processing styles. Problems arise when writers operate under one system while writing in another language. The focus of this study is academic prose because academic contexts place the highest demand on lexical density. Academic writing values efficiency, precision, and conceptual clarity. These values are encoded differently across languages. By examining English and Indonesian academic texts, this study seeks to identify how lexical density functions within each system and how these functions differ.

The analysis centers on three interrelated aspects. The first is lexical packaging, including the use of nominalization and complex noun phrases. The second is clause structure, particularly how languages balance lexical and grammatical elements. The third is discourse progression, which examines how information moves across sentences and paragraphs. Together, these aspects provide a comprehensive view of lexical density as a functional phenomenon. Authentic written data form the basis of this study. Using real academic texts ensures that the analysis reflects actual writing practices rather than constructed examples. Authentic data capture variation, stylistic choice, and disciplinary convention. This approach strengthens the explanatory power of the findings and avoids oversimplification. The implications of this study extend beyond linguistic description. For Indonesian writers of English, awareness of lexical density can support more effective academic communication. Understanding how English compresses information helps writers adjust their style without abandoning their linguistic identity. For teachers, a contrastive understanding of lexical density offers a clearer basis for instruction and feedback.

In sum, lexical density provides a valuable lens for examining cross linguistic variation in academic prose. By comparing English and Indonesian, this study aims to show how languages differ in organizing academic meaning and why these differences matter. A contrastive analysis of lexical density helps

bridge the gap between grammatical accuracy and academic effectiveness, offering insight into both linguistic theory and writing pedagogy.

RESEARCH METHOD

This study adopts a qualitative contrastive design to examine how lexical density is realized in English and Indonesian academic prose. A qualitative approach is chosen because the focus of the study is not numerical comparison alone, but the interpretation of how lexical choices function in constructing academic meaning. The analysis prioritizes patterns, tendencies, and discourse strategies rather than statistical measurement, allowing deeper insight into how each language packages information.

The data consist of academic prose texts written in English and Indonesian. The texts are drawn from peer reviewed journal articles in the fields of education and applied linguistics to ensure comparability in discipline, purpose, and audience. These fields are selected because they rely heavily on argumentation and conceptual explanation, which makes lexical density particularly salient. Only published articles are used to ensure that the texts represent accepted academic standards within each language community.

Text selection follows several criteria. The articles are similar in length, genre, and rhetorical structure. Only sections that present theoretical discussion and argument development are included, while abstracts, tables, references, and methodological descriptions are excluded. This restriction allows the analysis to focus on prose that carries a high informational load and reflects the core academic voice of the writers. The analysis begins with close reading of the selected texts to identify recurring lexical and grammatical patterns. Attention is given to the distribution of content words and grammatical words, the use of nominalization, and the complexity of noun phrases. Rather than calculating lexical density scores, the study examines how density emerges through linguistic choices and how these choices shape meaning. This interpretive process allows the researcher to connect form with communicative function. Each text is analyzed clause by clause to observe how information is introduced, expanded, and condensed.

In English texts, particular attention is paid to compressed structures such as pre modified noun phrases, embedded clauses, and abstract nouns derived from verbs. In Indonesian texts, the analysis focuses on verbal predicates, clause chaining, and the use of functional markers that support meaning expansion. These observations are then compared across languages to identify systematic differences.

To enhance analytical rigor, patterns are examined across multiple texts rather than relying on isolated examples. Recurrent features are treated as representative tendencies rather than individual stylistic choices. This approach reduces subjective interpretation and strengthens the validity of the contrastive claims. The analysis also considers the broader discourse context of each feature, ensuring that lexical density is interpreted within the flow of argumentation. Throughout the analysis, the researcher maintains reflexivity by revisiting interpretations and checking consistency across data. The goal is not to judge one language as more academic than the other, but to describe how each language realizes academic meaning through different lexical strategies. By grounding the analysis in authentic texts and focusing on functional interpretation, this qualitative method provides a robust basis for understanding lexical density across languages.

RESULTS AND DISCUSSION
Findings

The analysis reveals clear and systematic differences in how lexical density is realized in English and Indonesian academic prose. These differences are not limited to the number of lexical items, but extend to how information is structured and advanced within the text (Fadhil et al., 2023). English academic writing consistently shows a strong tendency toward lexical compression. Key ideas are frequently condensed into dense noun phrases that carry multiple layers of meaning. Indonesian academic writing, in contrast, tends to distribute information across clauses, resulting in a more linear and elaborative flow. In English texts, nominalization emerges as a dominant strategy for increasing lexical density. Processes, actions, and relationships are often transformed into abstract nouns that function as central elements within sentences. These nominalized forms allow writers to package complex ideas as stable entities that can be modified, evaluated, and linked across sentences. As a result, arguments progress through the accumulation and refinement of concepts rather than through repeated explanation. This pattern contributes to a compact and highly abstract academic style.

English writers also rely heavily on complex noun phrases to maintain informational density. Multiple modifiers are placed before or after the head noun, enabling a single phrase to convey what might otherwise require a full clause. These structures often replace explicit causal or temporal markers, requiring readers to infer relationships from grammatical positioning. This strategy supports efficiency but demands a high level of linguistic competence from both writers and readers. Indonesian academic prose shows a different pattern. Instead of compressing information into noun phrases, Indonesian texts frequently retain verbal predicates and full clauses. Ideas are developed through sequences of actions or states that unfold step by step. Functional words and discourse markers play a crucial role in guiding interpretation and maintaining coherence. This approach results in lower lexical density per clause but greater explicitness in meaning.

Another prominent finding concerns discourse progression. In English texts, dense lexical units often serve as thematic anchors that allow writers to build arguments cumulatively. Once a concept is introduced, it is repeatedly referenced through nominal forms, creating tight cohesion (Vinokurova, 2005). Indonesian texts, however, often reintroduce ideas through paraphrase or repetition of verbal structures. This strategy supports clarity but limits opportunities for lexical condensation. The findings also highlight differences in reader engagement. English academic prose assumes that readers can process high lexical density and infer unstated relations. Indonesian academic prose tends to reduce inferential load by making relationships explicit. These contrasting assumptions shape the overall texture of academic writing in each language.

The findings demonstrate that lexical density functions as a discourse strategy rather than a simple numerical feature. English and Indonesian achieve academic meaning through different linguistic pathways. Understanding these differences helps explain why Indonesian writers of English often struggle with academic style despite grammatical accuracy.

Discussion
Lexical Density as a Meaning Construction Strategy
The findings confirm that lexical density operates as a strategic resource for meaning construction rather than a surface feature of academic prose. In English academic writing, high lexical density supports abstraction and conceptual stability. By compressing actions and relationships into nominal forms, writers transform dynamic processes into objects of thought (Howarth, 2013). These objects can then be evaluated, classified, and linked across the text. This strategy allows arguments to progress efficiently and supports the cumulative nature of academic reasoning.

Indonesian academic writing constructs meaning through a different route. Instead of objectifying processes, it often preserves them as actions within clauses. Meaning unfolds through sequential explanation rather than conceptual condensation (Afifi, 2016). This approach aligns with a discourse preference for clarity and explicitness. The lower lexical density observed in Indonesian texts does not indicate weaker academic quality. It reflects a different balance between explanation and abstraction.

This contrast shows that lexical density cannot be separated from how languages encode experience. English favors grammatical resources that support compression. Indonesian favors resources that support elaboration. Both strategies are systematic and rule governed. Problems arise only when expectations from one system are imposed on the other without explanation.

Implications for Academic Writing and EFL Contexts
The contrastive patterns identified in this study help explain persistent difficulties faced by Indonesian writers of English. Many writers produce grammatically correct sentences but struggle to achieve an academic tone expected in English. Feedback often targets style rather than meaning. Without understanding lexical density, writers may revise sentences by deleting words rather than restructuring meaning. This often leads to loss of clarity instead of improvement.

A contrastive understanding reframes the issue. Indonesian writers are not lacking ideas or linguistic competence. They are applying discourse strategies that work well in Indonesian but less effectively in English academic contexts (Wahyudi, 2018). When writers learn how English uses nominalization and dense noun phrases to package meaning, they gain tools rather than rules. This shift supports more informed and purposeful writing choices.

For teaching, this means instruction should move beyond grammar and vocabulary lists. Teaching lexical density as a functional concept helps students understand why certain structures sound more academic. Explicit comparison between English and Indonesian can raise awareness without devaluing either language. Such an approach supports transfer rather than correction.

Rethinking Evaluation of Academic Prose
The findings also invite reflection on how academic writing is evaluated. High lexical density often correlates with perceptions of sophistication, authority, and expertise in English dominated academic spaces. These perceptions shape peer review, assessment, and publication standards (Gonzalez, 2013). Writers from languages with different discourse traditions may be disadvantaged, not because their arguments are weak, but because their texts do not align with dominant stylistic norms.

Recognizing lexical density as a language specific strategy encourages more nuanced evaluation (Sembiring, 2025). Reviewers and educators can distinguish between conceptual weakness and stylistic difference. This distinction is especially important in multilingual academic environments. A contrastive perspective promotes fairness and supports diversity in academic expression.

At a theoretical level, the discussion reinforces the value of qualitative contrastive analysis. Quantitative measures alone cannot capture how lexical density functions within discourse. By examining how meaning is packaged and advanced, qualitative analysis reveals the interaction between grammar, discourse, and cognition. This approach strengthens contrastive linguistics by linking form to communicative purpose.

In sum, the discussion shows that lexical density reflects deep differences in how English and Indonesian construct academic meaning. These differences shape writing practices, learning challenges, and evaluation standards. Understanding them is essential for effective academic communication across languages.

CONCLUSION

This study examined lexical density in English and Indonesian academic prose through a qualitative contrastive perspective. The analysis shows that lexical density functions as a core meaning making strategy rather than a simple stylistic feature. English academic writing tends to compress information through nominalization and complex noun phrases, which supports abstraction and cumulative argument development. Indonesian academic writing, in contrast, distributes meaning across clauses and relies on explicit verbal structures that prioritize clarity and step by step explanation.

These differences reflect stable discourse preferences rooted in each language system. English encodes academic authority through informational compactness and conceptual packaging. Indonesian encodes academic clarity through elaboration and explicit relations. Neither pattern represents deficiency. Each aligns with different expectations about how knowledge should be presented and processed. Problems emerge when writers shift across languages without adjusting these underlying strategies.

The findings help explain why Indonesian writers of English often face difficulties in achieving an expected academic style despite strong grammatical control. The challenge lies in restructuring meaning, not in reducing words. A contrastive understanding of lexical density equips writers with awareness of how academic meaning is constructed in English and how it differs from Indonesian practices.

For pedagogy, the study highlights the need to teach academic writing as discourse choice rather than rule compliance. Explicit comparison between languages can support more effective learning and fairer evaluation. At a broader level, this study reinforces the importance of qualitative contrastive analysis in revealing how languages shape academic communication. Lexical density serves as a powerful lens for understanding cross linguistic variation and for supporting multilingual academic writers.

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