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The analysis of cohesive devices on efl learners' argumentative text

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Abstract Cohesive devices play an essential role in organizing ideas and constructing coherent argumentative texts, but many English as a Foreign Language (EFL) learners still experience difficulties in using them effectively. This study aims to identify the types of cohesive devices employed by EFL learners in argumentative writing and examine how the dominant cohesive devices reflect the way students construct meaning. Adopting a qualitative case study design, the research analyzed thirty-three argumentative texts written by sixth-semester students of the English Literature Study Program at Universitas 17 Agustus 1945 Surabaya. The data were analyzed using Halliday and Hasan's cohesion framework, classifying cohesive devices into grammatical cohesion (reference, substitution, ellipsis, and conjunction) and lexical cohesion (repetition, synonymy, antonymy, hyponymy, meronymy, and collocation). The findings reveal that conjunction (50.9%) and reference (48.8%) were the dominant grammatical cohesive devices, whereas substitution (0.2%) and ellipsis (0.1%) were rarely used. In lexical cohesion, synonymy (32.4%) emerged as the most frequent device, followed by repetition (22.2%), collocation (16.8%), hyponymy (15.1%), antonymy (9.7%), and meronymy (3.8%). Furthermore, the dominance of conjunction and synonymy demonstrates that students primarily construct meaning by explicitly organizing logical relationships among ideas and reinforcing central arguments through lexical variation. These findings suggest that cohesive devices function not only as linguistic connectors but also as discourse resources that support coherent argument development in EFL argumentative text.

Keywords: argumentative writing, cohesive devices, EFL learners, grammatical cohesion, lexical cohesion

INTRODUCTION

Writing is one of the most important productive language skills in learning English because it allows learners to communicate ideas, opinions, and knowledge through written text (Myles, 2002, as cited in Alghasab, 2025). Unlike speaking, writing requires learners to organize ideas, choose appropriate vocabulary, construct grammatically accurate sentences, and present information coherently. The simultaneous cognitive and linguistic demands make writing one of the most challenging skills for English as a Foreign Language (EFL) learners (Alghasab, 2025). In academic writing, students are expected not only to produce grammatically correct sentences but also to develop logical arguments and organize them into coherent texts that effectively convey meaning.

Among various genres of academic writing, argumentative writing requires a fairly high level of language proficiency because the writer must present claims, provide supporting evidence, justify their reasoning, and persuade the reader through logical arguments (Hyland, 2015). To achieve this goal, ideas should be linked systematically so that the reader can easily follow the development of the argument. Therefore, the quality of argumentative writing depends not only on grammatical accuracy but also on the writer's ability to establish meaningful connections between ideas throughout the text (Rahman et al., 2023).

Writing is closely connected to the concept of discourse. Discourse refers to language in use, and it shows how meaning is built through the relationships among sentences, ideas, and context, not just through individual sentences (Magnell, 2020). Discourse is concerned not only with what is written, but also with how language reflects the writer's perspective, purpose, and social context. In this way, discourse helps construct meaning rather than simply reflecting reality (Hjelm, 2013).

Understanding discourse is important for analyzing academic writing. Discourse analysis examines how language works in context and how meaning is created across a whole text, rather than in single sentences. One key element of discourse analysis is cohesion, which explains how the different parts of a text are linked to create unity. By examining cohesive devices, researchers can see how writers organize ideas and connect sentences to build meaning throughout a text (Katili & Mahmud, 2023).

One important linguistic resource that helps organize texts is cohesion. According to (Halliday & Hasan, 2014), cohesion refers to the semantic relationships that connect different parts of a text, allowing readers to interpret it as a unified whole, rather than just separate sentences. Cohesion is realized through grammatical cohesion, including reference, substitution, ellipsis, and conjunction, as well as lexical cohesion, including repetition, synonyms, antonyms, hyponyms, meronyms, and collocations. These cohesive tools help writers organize information, maintain topic continuity, and create logical relationships between propositions, which ultimately contribute to a coherent discourse.

Despite its importance, many EFL learners still experience difficulties in using cohesive devices effectively. Nindya & Widiati (2020) found that students frequently rely on a limited range of cohesive devices or apply them inappropriately, resulting in repetitive expressions, weak logical connections, and fragmented arguments; their study on Indonesian students' argumentative essays further reported that reference and

conjunction were the most frequently used grammatical cohesive devices, while substitution and ellipsis appeared only rarely. Similarly, Siregar et al. (2023) identified the same pattern of limited and inappropriate use of cohesive devices, and found that reference dominated grammatical cohesion while repetition was the most common lexical cohesive device in students' essays.

Such problems reduce the readability of argumentative texts, as readers may struggle to identify the relationships between ideas and understand how arguments are developed. Rahman et al. (2023) also demonstrated that grammatical cohesion occurred more frequently than lexical cohesion in undergraduate students' academic writing. These findings consistently indicate that EFL learners tend to rely heavily on a limited number of cohesive devices when producing academic texts. Consequently, analyzing the use of cohesive devices provides valuable insights into students' writing competence and their ability to construct coherent academic discourse.

Although previous studies have successfully identified the frequency and distribution of cohesive devices, most of them only describe linguistic occurrences without explaining how dominant cohesive devices contribute to the construction of meaning in argumentative text. In other words, existing studies largely focus on which cohesive devices students use, rather than how these devices function to organize logic and develop persuasive arguments. This limitation creates a research gap because cohesive devices should be understood not only as grammatical features but also as discourse resources that shape the organization of meaning throughout the text (Halliday & Matthiessen, 2014).

To address this gap, this study employs the perspective of Systemic Functional Linguistics (SFL), particularly Halliday & Matthiessen (2014) concept of textual metafunction. Within this framework, cohesive devices are seen as resources for organizing discourse, rather than merely connecting sentences. Conjunctions help writers establish logical relationships between propositions, while lexical cohesion, especially synonyms, supports the gradual development of meaning through lexical variation during the meaning-making process. Therefore, this theoretical perspective allows for analysis that goes beyond mere frequency counts and explains how cohesive devices construct meaning in argumentative texts.

Based this perspective, this study investigates cohesive devices in argumentative texts written by sixth-semester EFL students of the English Literature Program at Universitas 17 Agustus 1945 Surabaya. Specifically, this study aims to identify the types of grammatical and lexical cohesive devices used by the students and to examine how dominant cohesive devices construct meaning in argumentative texts. The findings are expected to enrich the existing literature on discourse analysis and Systemic Functional Linguistics while also providing practical implications for English writing instruction, particularly in enhancing students' ability to organize arguments coherently through the use of effective cohesive devices.

METHOD

This study employs a qualitative approach with a case study design to investigate the use of cohesive devices in argumentative texts by EFL learners. Qualitative research is suitable for exploring and interpreting the meanings contained in textual data rather than measuring numerical relationships (Creswell & Poth, 2018). Furthermore, a case study design allows researchers to examine specific phenomena in depth within real-life contexts (Yin, 2014). In this study, the phenomenon under investigation is the use of cohesive devices in argumentative texts produced by EFL learners.

The research was conducted at the English Literature Study Program, Universitas 17 Agustus 1945 Surabaya. The participants consisted of thirty-three sixth-semester students enrolled in the Creative Writing course. Purposive sampling was employed because the participants had completed several writing-related courses, including Paragraph Writing and Academic Writing, and were therefore considered capable of producing argumentative texts suitable for discourse analysis.

The primary data consisted of handwritten argumentative texts on the topic of freedom of expressing opinions on social media. Each participant was instructed to write an individual argumentative text containing a minimum of 250 words within 40–50 minutes during regular class hours. Students were allowed to access the internet to obtain supporting information relevant to the topic; however, the use of artificial intelligence (AI) writing tools was prohibited. After the writing session, all manuscripts were collected and transcribed into digital format while preserving the students' original wording and punctuation to ensure the authenticity of the data.

The collected texts were analyzed using Halliday & Hasan (2014) cohesion framework. The analysis focused on identifying two major categories of cohesive devices, namely grammatical cohesion and lexical cohesion. Grammatical cohesion was classified into reference, substitution, ellipsis, and conjunction, whereas lexical cohesion included repetition, synonymy, antonymy, hyponymy, meronymy, and collocation. Each occurrence of cohesive devices was identified, classified, and quantified to determine its frequency of use.

Following the classification process, the dominant cohesive devices were interpreted using the Systemic Functional Linguistics (SFL) perspective proposed by Halliday & Matthiessen (2014), particularly the concept of the textual metafunction. This analytical framework was employed to explain how the dominant cohesive devices functioned not only as linguistic connectors but also as discourse resources that organized ideas and supported meaning construction throughout the students' argumentative texts.

RESULT AND DISCUSSION

This section presents the findings on the use of cohesive devices in argumentative texts written by EFL learners and discusses how these devices contribute to meaning construction. The analysis was conducted based on Halliday & Hasan (2014) classification of cohesion, which distinguishes cohesive devices into grammatical cohesion (reference, substitution, ellipsis, and conjunction) and lexical cohesion (repetition, synonymy, antonymy, hyponymy, meronymy, and collocation). Furthermore, the dominant cohesive devices were interpreted using

Halliday & Matthiessen (2014) Systemic Functional Linguistics (SFL), particularly the textual metafunction, to explain how cohesion functions in organizing meaning throughout the students' argumentative texts.

The data consisted of thirty-three argumentative texts produced by sixth-semester students of the English Literature Study Program, Universitas 17 Agustus 1945 Surabaya. Overall, the findings indicate that students employed both grammatical and lexical cohesive devices, although their distribution varied considerably. Grammatical cohesion appeared far more frequently than lexical cohesion, suggesting that students relied primarily on grammatical resources to establish coherence in their argumentative text. Among grammatical cohesive devices, conjunction and reference were the dominant categories, whereas substitution and ellipsis occurred only occasionally. In lexical cohesion, synonymy emerged as the most frequently used device, followed by repetition and collocation. These findings indicate that students tended to organize their arguments through explicit logical relations while simultaneously maintaining thematic continuity through semantically related lexical items.

3.1 Grammatical Cohesion

Grammatical cohesion refers to the grammatical resources that connect clauses and sentences into a coherent text Halliday & Hasan (2014). In argumentative text, grammatical cohesion enables writers to establish logical relationships among propositions, maintain referential continuity, and organize arguments systematically. The analysis identified four types of grammatical cohesion, namely reference, conjunction, substitution, and ellipsis.

Table 1 *Distribution of Grammatical Cohesion*

Type	Frequency	Percentage
Conjunction	489	50.9%
Reference	468	48.8%
Substitution	2	0.2%
Ellipsis	1	0.1%
Total	**960**	**100%**

As shown in Table 1, a total of 960 grammatical cohesive devices were identified in the students' argumentative texts. Conjunction was the most frequently used grammatical cohesive device, accounting for 489 occurrences (50.9%), followed closely by reference with 468 occurrences (48.8%). In contrast, substitution and ellipsis appeared only twice (0.2%) and once (0.1%). The findings demonstrate that students mainly used

conjunctions and references to connect ideas, while more complex grammatical cohesive devices were rarely used.

The dominant use of conjunction indicates that students preferred to make logical relationships between ideas explicit. Various conjunctions, including additive (and, moreover, in addition), adversative (however, but), causal (because, therefore, as a result), and temporal (then, until, ultimately) conjunctions, were frequently used to organize arguments. Through these conjunctions, students added supporting evidence, introduced contrasting viewpoints, explained their claims, and guided readers toward concluding statements. Consequently, conjunction functioned not merely as a sentence connector but as a discourse resource that structured the progression of arguments throughout the text.

Reference also appeared extensively throughout the data. Students frequently used personal references (they, we, it, them), demonstrative references (this, that, these, those), and possessive references (their, our, your) to maintain continuity without unnecessarily repeating the same words. The extensive use of reference shows that students were generally able to build clear connections that helped readers identify previously introduced participants, entities, or concepts. As proposed by Halliday & Hasan (2014), reference contributes significantly to textual cohesion by creating meaningful links between different parts of a discourse.

In contrast, substitution and ellipsis occurred only minimally. The very low use of substitution indicates that students rarely replaced previously mentioned words with substitute forms such as *one* or *ones*. Similarly, ellipsis was almost absent, suggesting that students preferred to write complete grammatical structures rather than leaving out words that could be understood from context. This tendency may reflect the learners' limited familiarity with these cohesive resources, or their preference for writing clear, complete sentences to avoid confusion. Similar patterns have been reported by Rokhaniyah et al. (2022), and Zentia & Suharjono (2025), who found that EFL learners generally relied on conjunction and reference while rarely using substitution and ellipsis in academic writing.

Overall, the findings suggest that grammatical cohesion in the students' argumentative texts was mainly achieved through clear logical connectors and consistent use of reference. The dominant use of conjunction and reference indicates that students tended to prioritize clarity and logical organization when building their arguments. Although this approach effectively supports coherence, the minimal use of substitution and ellipsis also shows that the students' grammatical cohesion stayed limited to fairly simple cohesive tools rather than the wider range of cohesive devices described by Halliday & Hasan (2014).

3.2 Lexical Cohesion

Lexical cohesion refers to the semantic relationships among lexical items that contribute to the continuity of meaning throughout a text Halliday & Hasan (2014). Unlike grammatical cohesion, which depends on grammatical structures, lexical cohesion is established through the selection of vocabulary that is semantically related. In argumentative text, lexical cohesion enables writers to maintain thematic consistency while avoiding excessive repetition of identical lexical items.

Table 2 *Distribution of Lexical Cohesion*

Type	Frequency	Percentage
Synonymy	60	32.4%
Repetition	41	22.2%
Collocation	31	16.8%
Hyponymy	28	15.1%
Antonymy	18	9.7%
Meronymy	7	3.8%
Total	**185**	**100%**

Table 2 shows that 185 lexical cohesive devices were found in the students' argumentative texts. Synonymy was the most commonly used lexical cohesive device, with 60 occurrences (32.4%), followed by repetition with 41 occurrences (22.2%). Collocation accounted for 31 occurrences (16.8%), while hyponymy accounted for 15.1%, antonymy for 9.7%, and meronymy for only 3.8% of the total lexical cohesive devices.

The dominant use of synonymy shows that students tried to maintain the central topic by expressing similar meanings through different word choices. Instead of repeating the same words, they frequently used synonymous expressions related to concepts such as freedom of expression, freedom of speech, expressing opinions, and speaking their minds. This word variation reduced unnecessary repetition while keeping the meaning connected across paragraphs. Halliday & Hasan (2014) argue that synonymy strengthens textual cohesion because words with related meanings stay connected within the same lexical chain despite their different forms.

Repetition was the second most common lexical cohesive device. Students repeatedly used key terms such as social media, people, opinion, and freedom of expression throughout their essays. The repeated use of these words kept readers' attention on the main topic and reinforced the central arguments being developed. Although too much repetition may reduce stylistic variety, moderate repetition contributes positively to coherence by making it easy for readers to identify the topic under discussion. Similar findings have been reported by Albana et al. (2020), Putri & Sumiati (2022), and Aribatado & Jamora (2025), who identified repetition as one of the main strategies used by EFL learners to maintain textual cohesion.

Collocation also played an important role in organizing the students' texts. Words related to social media, digital communication, online risks, legal regulations, and psychological pressure frequently appeared together, creating recognizable topic areas. The consistent pairing of these words helped students develop their arguments while making it easier for readers to understand the issues being discussed.

Meanwhile, hyponymy, antonymy, and meronymy appeared less often but still contributed to textual organization. Hyponymy allowed students to connect general concepts with more specific examples, while antonymy allowed them to present opposing viewpoints, which are common in argumentative texts. Meronymy occurred only occasionally, showing that part-whole relationships were not commonly used as a strategy for maintaining cohesion.

Overall, the findings show that lexical cohesion in the students' argumentative texts relied mainly on synonymy and repetition. These devices allowed students to maintain topic continuity while presenting arguments with enough word variation. Although less common, collocation, hyponymy, antonymy, and meronymy further strengthened the meaning connections throughout the texts and contributed to the overall coherence of the discourse.

3.3 Dominant Cohesive Devices and Meaning Construction

The second objective of this study was to examine how the dominant cohesive devices reflect the way EFL learners construct meaning in argumentative texts. Rather than functioning merely as linguistic connectors, the findings demonstrate that conjunction and synonymy work together to organize logical reasoning and maintain thematic continuity throughout the students' writing.

Table 3 *Functions of the Dominant Cohesive Devices in Meaning*

Dominant Device	Linguistic Function	Contribution to Meaning Construction
Conjunction	Establishes logical relationships between clauses and ideas	Organizes arguments through additive, adversative, causal, and
		temporal relations, enabling readers to follow the progression of reasoning.
Synonymy	Maintains lexical cohesion through semantically related vocabulary	Reinforces central themes by developing lexical chains and avoiding unnecessary repetition, thereby sustaining topic continuity.

As presented in Table 3, conjunction primarily contributes to the logical organization of argumentative text. Students used additive conjunctions to introduce supporting ideas, adversative conjunctions to acknowledge opposing viewpoints, causal conjunctions to justify claims, and temporal conjunctions to show the progression of arguments toward a conclusion. These findings suggest that conjunction functions beyond sentence linking; it serves as a textual resource that structures the overall flow of arguments. This interpretation is consistent with Halliday & Matthiessen (2014) concept of the textual metafunction, in which conjunction organizes discourse into a coherent sequence of meaning.

In contrast, synonymy primarily contributes to thematic continuity. Students frequently expressed the same central concepts through different words, allowing them to maintain focus on the discussion while reducing excessive repetition. The use of semantically related vocabulary created lexical chains that connected ideas across different parts of the text. According to Halliday & Hasan (2014), such lexical relationships strengthen textual cohesion by preserving semantic continuity throughout the discourse.

The interaction between conjunction and synonymy shows that meaning construction in argumentative text depends on both logical and semantic cohesion. Conjunction provides the structural framework through which arguments are developed systematically, while synonymy reinforces the central ideas by maintaining lexical continuity. Together, these cohesive devices enable writers to produce argumentative texts that are coherent in structure and consistent in meaning.

By interpreting the findings through the framework of Systemic Functional Linguistics, this study shows that cohesion should be understood not only as a grammatical feature but also as a discourse strategy that enables EFL learners to organize reasoning, maintain thematic development, and construct persuasive argumentative texts.

CONCLUSION

This study investigated the use of cohesive devices in argumentative texts written by EFL learners and examined how the dominant cohesive devices reflected meaning construction. The findings revealed that students used both grammatical and lexical cohesion, although grammatical cohesion occurred more often. Among the grammatical cohesive devices, conjunction was the most dominant, followed by reference, while substitution and ellipsis were rarely used. In terms of lexical cohesion, synonymy was the most frequently used device, followed by repetition, collocation, hyponymy, antonymy, and meronymy.

The findings further show that conjunction and synonymy play complementary roles in constructing meaning within argumentative texts. Conjunction allows students to organize arguments through explicit logical relationships, while synonymy maintains thematic continuity by building lexical connections throughout the text. Together, these cohesive devices help produce argumentative texts that are coherent and persuasive, showing that cohesion functions not only as a linguistic feature but also as a resource for organizing meaning across discourse. This study contributes to the understanding of

cohesive devices by going beyond frequency counts to explain their role in meaning construction. The findings offer practical implications for EFL writing instruction, particularly by encouraging teachers to provide explicit instruction on a wider range of cohesive devices, especially substitution and ellipsis, which were found to be underused. Students are also encouraged to use a greater variety of grammatical and lexical cohesive devices to improve the coherence and quality of their academic writing. Future studies may examine cohesive devices in different genres of writing, larger participant groups, or diverse educational contexts to gain a broader understanding of meaning construction in EFL discourse.

REFERENCES

Albana, H. H., Marzuki, A. G., Alek, & Hidayat, D. N. (2020). Cohesive Devices in Student's Writing (A Discourse Analysis on Argumentative Text). *Jurnal Pendidikan Humaniora*, *8*(1), 2.

Alghasab, M. B. (2025). English as a foreign language (EFL) secondary school students' use of artificial intelligence (AI) tools for developing writing skills: unveiling practices and perceptions. *Cogent Education*, *12*(1). https://doi.org/10.1080/2331186X.2025.2505304

Aribatado, R., & Jamora, M. J. (2025). Coherence of essay through the use of lexical and grammatical devices: An analysis. *International Journal of Research Studies in Education*, *14*(10). https://doi.org/10.5861/ijrse.2025.25133

Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (4th ed.). SAGE Publications.

Halliday, M. A. K., & Hasan, R. (2014). *Cohesion in English*. Routledge.

Halliday, M. A. K., & Matthiessen, C. M. I. M. (2014). *Halliday's Introduction to Functional Grammar* (4th ed.). Routledge.

Hyland, K. (2015). *Teaching and Researching Writing* (3rd ed.). Routledge.

Magnell, M. (2020). Academic Staff on Connections to Professional Practice and Research in Engineering Education: A Discourse Analysis. *European Journal of Engineering Education*, *45*(5), 780–793. https://doi.org/10.1080/03043797.2020.1729103

Nindya, M. A., & Widiati, U. (2020). Cohesive devices in argumentative essays by Indonesian EFL learners. *Journal on English as a Foreign Language*, *10*(2), 337–358. https://doi.org/10.23971/jefl.v10i2.1949

Putri, R. D. S., & Sumiati, A. (2022). Grammatical and Lexical Cohesion Devices Found in Coldplay's Song Lyrics in the Ghost Stories Album. *Lililacs Journal*, *2*(2), 33–38.

Pariyanto, P., & Sugiharti, D. R. (2022). WRITTEN CORRECTIVE FEEDBACK: INDONESIAN EFL LEARNERS'PERCEPTIONS AND

PREFERENCES. *PARAFRASE: Jurnal Kajian Kebahasaan & Kesastraan*, *22*(1), 106-114.

Pariyanto, P., & Tungka, N. F. (2024). TRANSFORMING NARRATIVES: ENHANCING EFL LEARNERS' WRITING WITH AI FEEDBACK. MEDIA DIDAKTIKA, 10(2), 44–52. https://doi.org/10.52166/didaktika.v10i2.8662

Pariyanto, P., Sharmini, A., Novalita Fransisca, T., & Shabrina Dwi, A. (2026). Linking Academic Vocabulary Use to Writing Quality in EFL Academic Essays: A Mixed-Methods Study. Proceedings of the 4Th International Conference on English Studies in Indonesia (ICONESIA 2025), Advances in Social Science, Education and Humanities Research 1021, 1021, 122–136. https://www.atlantis-press.com/proceedings/iconesia-25/126024998

Rahman, G., Zaigham, M. S., & Umer, M. (2023). A Study of Cohesive Devices in Students' Academic Writing. *Qlantic Journal of Social Sciences and Humanities*, *4*(4), 372–384. https://doi.org/10.55737/qjssh.897009451

Rokhaniyah, H., Adila, W., & Yulianti, D. A. B. (2022). Cohesive Devices Used in Argumentative Essays by Undergraduate EFL Learners. *Langkawi: Journal of The Association for Arabic and English*, 32– 44.

Siregar, J., Nurlela, N., & Zein, T. T. (2023). An Analysis of Cohesive Devices in EFL Students' Essay Writing. *Indonesian Journal of EFL and Linguistics*, 39–53. https://doi.org/10.21462/ijefl.v8i1.577

Yin, R. K. (2014). *Case Study Research: Design and Methods* (5th ed.). SAGE Publications.

Zentia, M., & Suharjono, S. (2025). Analysing The Grammatical Cohesive Devices in Narrative Texts of The Fourth Semester Students of The English Education Study Program of Muhammadiyah University Kotabumi Academic Year 2023/2024. *Griya Cendikia*, *10*(1), 213–218.