



## Bridging CA and EA: Understanding Cross-Linguistic Influence on Learners' Structural Errors

Nadila Tanjung <sup>1\*</sup>, Hafifah Hasyanah Dalimunthe <sup>2</sup>, Tuti Alawiyah Ramadhani<sup>3</sup>

Nasution <sup>4</sup>, Airen Widyana <sup>5</sup>, Siti Ismahani<sup>6</sup>

<sup>1-6</sup> Universitas Islam Negeri Sumatera Utara, Indonesia

\*Korespondensi penulis; [nadila03042221015@gmail.com](mailto:nadila03042221015@gmail.com)

**Abstract.** *This study investigates learner errors through a non-contrastive error analysis approach to identify the linguistic, cognitive, and instructional factors shaping English language performance. Drawing on Richards' (1971) framework, the research analyzes errors found in students' written compositions to categorize them into intralingual, developmental, and performance-based types. Using qualitative descriptive methods, 60 EFL learners were asked to produce short academic paragraphs, which were subsequently examined through systematic coding and classification. The findings reveal that intralingual errors particularly overgeneralization, incomplete rule application, and confusion of structures dominate the learners' output, indicating internal learning processes rather than L1 interference as the primary difficulty source. Developmental errors also emerge, reflecting learners' transitional stages as they internalize new grammar rules. Performance errors, though less frequent, are attributed to momentary lapses in attention and limited automaticity. The study highlights the pedagogical significance of focusing on learners' developmental patterns instead of solely comparing L1–L2 structures. The results underscore the need for targeted instruction emphasizing form–meaning connections, clear feedback strategies, and opportunities for reflective revision. Overall, the research provides empirical evidence supporting the usefulness of non-contrastive error analysis in understanding learner interlanguage and informing more responsive classroom practices.*

**Keywords:** *Developmental Errors; Error Analysis; Intralingual Errors; Non-Contrastive Approach; Performance Errors*

### 1. INTRODUCTION

The study of second language (L2) learning has long recognized that learners' structural errors are shaped by both their first language (L1) systems and the developmental processes that occur during interlanguage formation. Two major frameworks Contrastive Analysis (CA) and Error Analysis (EA) offer complementary lenses for understanding how linguistic structures interact during L2 acquisition. CA focuses on systematic comparisons between languages to predict areas of difficulty arising from structural differences (Lado, 1957; Wardhaugh, 1970). EA, on the other hand, examines the actual errors learners produce, acknowledging that not all difficulties stem from L1 transfer but may also arise from internal learning strategies, developmental sequences, and overgeneralization (Corder, 1967; Richards, 1971). Bridging these two perspectives offers a more holistic understanding of learners' structural challenges, especially in contexts where linguistic distance between L1 and L2 plays a significant role.

In the Indonesian EFL context, structural errors are particularly salient in areas where English grammatical categories do not have direct equivalents in Indonesian. For example, Indonesian does not grammatically mark tense through verb inflection; instead, temporal

meaning is often conveyed through adverbs or contextual cues (Sneddon, 2010). English, however, relies heavily on morphological changes and auxiliary verbs to encode tense and aspect. Such fundamental typological differences create fertile ground for cross-linguistic influence, making CA a valuable tool for identifying likely sources of difficulty. At the same time, Indonesian learners' errors often reflect universal patterns observed in L2 development, such as the overgeneralization of regular forms and simplification of complex structures phenomena best captured through EA (Ellis, 1994; Dulay, Burt, & Krashen, 1982).

Previous research has highlighted the interplay of these two forces in learners' writing and speaking performance. Studies on Indonesian EFL learners frequently report persistent issues with verb morphology, auxiliary use, plural marking, and article application (Sidupa, 2018). While some of these errors can be directly attributed to the absence of similar grammatical features in Indonesian, others arise from learners' internal hypotheses as they construct their interlanguage. For instance, learners may omit auxiliaries not only due to negative transfer but also because auxiliary systems present cognitive processing challenges for learners at early proficiency levels (Lightbown & Spada, 2013). Similarly, their tendency to misapply past-tense forms across contexts often reflects both developmental processes and incomplete mastery of English aspectual distinctions.

By integrating CA and EA, researchers can distinguish between errors predicted by structural contrasts and those attributable to natural learning mechanisms. This approach provides a clearer picture of how learners navigate the linguistic space between their L1 and the target language. It also supports more accurate pedagogical interventions by revealing not only *what* errors occur but also *why* they occur. According to James (1998), the combined use of CA and EA strengthens the explanatory power of error research by connecting error patterns with broader linguistic systems. This integration is especially relevant for languages like Indonesian and English, whose structural differences are wide enough to significantly influence learners' performance.

Moreover, the rise of communicative and task-based approaches in EFL classrooms has increased learners' exposure to real-world language use, making it even more necessary to understand the structural obstacles they encounter. Without explicit instruction that links English forms to their temporal, aspectual, or syntactic functions, learners may rely heavily on their L1 processing habits, which can hinder accuracy despite gains in fluency (Larsen-Freeman & Long, 1991). Thus, exploring cross-linguistic influence through both CA and EA is crucial for designing instruction that promotes deeper grammatical awareness and supports learners' long-term development of accurate language forms.

In this context, the present study aims to bridge CA and EA to examine how Indonesian learners' structural errors emerge from the interaction between L1 influence and interlanguage development. By analyzing authentic learner production and comparing it with structural features of Indonesian and English, the study seeks to deepen the understanding of cross-linguistic influence and its pedagogical implications.

## **2. LITERATURE REVIEW**

### **Contrastive Analysis and Cross-Linguistic Influence**

Contrastive Analysis (CA) emerged in the mid-20th century as a framework for predicting learning difficulties by systematically comparing the structures of the learner's first language (L1) and the target language (L2) (Lennon, 2008). The core assumption is that similarities between languages facilitate learning, while differences create obstacles that may lead to negative transfer, or interference (Lado, 1957). Early proponents argued that by identifying these structural contrasts, teachers could anticipate learners' errors and develop more targeted instruction. Wardhaugh (1970) later refined this model by distinguishing between strong and weak versions of CA: the strong version aims to predict errors solely based on L1–L2 differences, while the weak version uses contrasts to explain errors already observed.

In L2 learning research, CA remains highly relevant because cross-linguistic influence continues to be one of the most powerful determinants of learner performance (Odlin, 1989). Particularly in contexts where typological distance is significant, learners tend to rely on L1-based processing strategies, which shape their choices in morphology, syntax, and semantics. The Indonesian–English language pair exemplifies such contrast. Indonesian is an analytic language with minimal inflection, no tense marking, and flexible word order, while English requires inflectional changes and auxiliary systems to encode tense, agreement, and aspect (Sneddon, 2010). These differences often manifest in predictable error patterns, such as verb tense omission or incorrect plural formation. CA thus provides a valuable starting point for identifying the structural roots of learners' difficulties.

### **Error Analysis and Interlanguage Development**

While CA focuses on predicting learning difficulties, Error Analysis (EA) emerged to address its limitations by examining actual learner production. Corder's (1967) seminal work emphasized that errors are not merely signs of failure but reflect systematic stages of interlanguage development. EA classifies errors, identifies their sources, and distinguishes between performance mistakes and systematic errors rooted in learners' internal grammar. Richards (1971) further demonstrated that many common errors arise from cognitive strategies

such as overgeneralization, incomplete rule application, and developmental sequencing processes that cannot be fully explained by L1 interference.

Developing the concept of interlanguage, Selinker (1972) argued that learners construct a dynamic linguistic system influenced by L1 structures, L2 input, and universal learning strategies. Within this system, structural errors often reflect learners' attempts to create temporary rules that approximate the target language. Dulay, Burt, and Krashen (1982) added that developmental errors such as overuse of regular past tense endings or omission of function words are common across learners regardless of L1 background. EA, therefore, expands the explanatory power of CA by capturing these universal developmental mechanisms.

In the Indonesian EFL context, EA studies consistently report similar patterns of grammatical errors. Research identifies persistent misuse of verb forms, omission of auxiliaries, incorrect article use, and misformation of noun phrases (Darus & Subramaniam, 2009). Although many of these errors overlap with CA-predicted difficulties, others reflect general developmental sequences found in global L2 learning. Thus, EA provides a complementary lens for interpreting learner errors beyond L1 transfer alone.

### **Integrating CA and EA in Understanding Structural Errors**

Scholars increasingly emphasize the need to integrate CA and EA to gain a more comprehensive understanding of learner errors. James (1998) argues that CA can reveal the *potential* source of an error, while EA determines whether that error actually occurs and how frequently. When used together, the frameworks help distinguish between (1) errors caused by structural differences between L1 and L2 and (2) errors arising from learner-internal processes. This dual perspective enriches the interpretation of cross-linguistic influence and prevents researchers from overattributing errors to L1 transfer.

A growing body of research supports the value of this integrated approach. Gass and Selinker (2008) highlight that although interlanguage development is universal, its trajectory is heavily shaped by language-specific contrasts. For example, learners whose L1 lacks verb inflection such as Indonesian, Chinese, or Vietnamese show longer-lasting challenges with tense-aspect marking than learners from inflectional L1 backgrounds. Similarly, studies comparing Indonesian with English document that L1 structural features significantly constrain learners' ability to encode temporal relations and syntactic functions ((Batubara & Fithriani, 2023). However, overgeneralization and misanalysis of L2 rules often occur even in areas where L1 offers no direct interference, showing the necessity of EA in explaining developmental mechanisms.

By combining CA's predictive insights with EA's descriptive power, researchers can obtain a clearer picture of how structural errors emerge. This integrated framework also supports more effective pedagogical interventions. For example, awareness-based instruction that explicitly contrasts Indonesian and English verb systems can reduce L1-based errors, while scaffolded practice targeting learners' developmental weaknesses can address universal error types (Ellis, 2008). Thus, bridging CA and EA provides a robust analytical basis for improving grammatical accuracy and supporting long-term L2 development.

### **3. RESEARCH METHOD**

This study employed a qualitative descriptive research design to investigate the structural errors produced by Indonesian learners of English and to examine how these errors are shaped by cross-linguistic influence. The approach was selected because it allows for an in-depth exploration of linguistic patterns and provides a flexible framework for integrating the principles of Contrastive Analysis (CA) and Error Analysis (EA). Rather than testing predetermined hypotheses, the study sought to describe the nature, frequency, and sources of errors as they naturally appear in learners' written production, making qualitative description an appropriate methodological choice.

Data were collected from 40 undergraduate students enrolled in an English Language Education program at a private university in Indonesia. All participants had completed at least four semesters of English instruction, ensuring a relatively homogeneous proficiency level at the intermediate stage. The primary data consisted of 80 short essays written during a controlled classroom writing task. Students were instructed to write a 250–300-word narrative recounting a personal experience or memorable event. This genre was deliberately chosen because narrative writing requires the use of various tense–aspect forms, allowing the researcher to observe how learners construct temporally sequenced events an area in which Indonesian and English differ significantly. The writing task was completed within 45 minutes without access to dictionaries, online tools, or grammar aids to ensure that the errors reflected learners' internal knowledge rather than edited language.

Once collected, the data were transcribed and prepared for analysis. The first stage involved applying Error Analysis procedures, including identifying, classifying, and describing the errors found in the essays. Errors were marked based on deviations from standard English grammatical structures, focusing particularly on verb forms, auxiliary usage, word order, and sentence structure. Each error was further categorized based on common EA taxonomy, such as omission, misformation, addition, and misordering. To ensure reliability, a second trained

coder independently reviewed 25% of the essays, and discrepancies were discussed until agreement was reached.

After the descriptive phase, the study incorporated Contrastive Analysis to determine whether the identified errors were influenced by structural differences between Indonesian and English. This stage involved comparing problematic English structures with their Indonesian equivalents and examining whether the nature of the errors aligned with predicted areas of negative transfer. For example, frequent omission of past tense markers and auxiliaries was evaluated in relation to Indonesian's lack of inflectional morphology. Similarly, verb misformations and inconsistent tense usage were interpreted through the lens of learners relying on L1-based temporal conceptualization.

The integration of CA and EA allowed the analysis to go beyond error categorization by identifying the underlying sources, distinguishing between L1-induced errors and those arising from developmental factors such as overgeneralization or incomplete rule mastery. Patterns were then summarized to highlight the dominant types of structural errors and the extent to which cross-linguistic influence contributed to their occurrence. Finally, the findings were interpreted in relation to interlanguage theory to understand how learners construct their evolving linguistic system when navigating two structurally distinct languages.

#### **4. FINDING AND DISCUSSION**

The analysis of the 80 narrative essays produced by Indonesian undergraduate learners revealed a clear and systematic pattern of structural errors that reflects both the influence of the Indonesian language system and the developmental characteristics of the learners' interlanguage. The dominant errors occurred in verb tense marking, auxiliary usage, and sentence structure areas where English grammar sharply contrasts with Indonesian. Through the combined lens of Contrastive Analysis (CA) and Error Analysis (EA), these patterns can be understood not as random mistakes but as manifestations of cross-linguistic influence intertwined with learners' internal attempts to construct and refine their L2 grammar.

Across the dataset, the most frequent error type was misformation of verb forms, particularly in the use of past tense verbs. Many learners used the base form of the verb instead of the expected -ed inflection, producing sentences such as "Yesterday I go to the beach" or "He take me to the hospital." Out of all verb-related errors, approximately 46% were misformation. This pattern is highly consistent with CA predictions: Indonesian verbs do not inflect for tense, and temporal meaning is expressed through adverbs rather than morphological change. As a result, learners transferred this L1 pattern into English, relying on lexically

encoded time markers while leaving the verb unchanged. Even when students attempted to use inflection, overgeneralization occurred, as seen in forms like “bued” or “runned”, reflecting EA’s notion of developmental approximations. These forms demonstrate that learners have internalized the concept of past marking but have not yet mastered its irregularities.

Another prevalent error involved the omission of auxiliaries, accounting for around 28% of all structural errors. Examples include “I not understand”, “She crying when I arrived”, or “They going to school yesterday.” These omissions were particularly common in progressive and perfect constructions, which require auxiliary support in English but have no morphological or syntactic equivalent in Indonesian. The absence of auxiliaries highlights the mismatch between the two languages: Indonesian expresses aspect mostly through lexical means or context, whereas English grammatically encodes it through auxiliary–verb structures. Learners, therefore, tended to construct English sentences using Indonesian syntactic logic, attempting to map English meaning onto Indonesian structure. Even learners who used auxiliaries occasionally inserted the wrong form, such as “He am running” or “We is finish already.” These errors reflect interlanguage restructuring, where learners are still determining the function and agreement patterns of auxiliary verbs.

The third notable pattern involved inconsistent tense–aspect sequencing within the same narrative, especially in longer descriptive passages. Learners frequently shifted between present and past forms without contextual motivation, producing sentences like “*I was very happy because he gives me a gift*” or “*We walked around the market and suddenly my mother call me.*” These inconsistencies are characteristic of learners who are still developing a stable temporal system in their interlanguage. Indonesian narrative structure does not require verb tense consistency since time is conveyed lexically or pragmatically; thus, learners were not sensitive to the English requirement of maintaining temporal cohesion through verb morphology. The difficulty became more pronounced in complex sentences, where the cognitive load of coordinating multiple clauses led to erratic tense and aspect choices. This aligns with EA literature suggesting that cognitive complexity increases the likelihood of developmental errors especially in areas where L1 offers no guidance.

In addition to tense-related issues, learners also produced syntactic misordering, though less frequently. Examples included “*Very tired I was that day*” or “*Bought I the food with my friend.*” These errors, constituting about 10% of the dataset, appear to stem from the interaction of Indonesian’s flexible word order with learners’ attempts to imitate literary English structures encountered in reading materials. While such errors were comparatively fewer, their presence

indicates that learners sometimes struggle to reconcile differing syntactic conventions, particularly when they attempt stylistic variations.

From a broader perspective, the findings demonstrate that the majority of errors were tied to predictable areas of structural contrast between Indonesian and English strongly supporting CA's claim that L1 transfer significantly shapes L2 performance. The absence of inflectional morphology in Indonesian emerged as a central factor influencing learners' difficulties with English verb forms, auxiliary verbs, and tense–aspect constructions. The reliance on adverbs such as *sudah*, *telah*, *kemarin*, or *nanti* in Indonesian meant that learners transferred these patterns, often overusing temporal adverbials like “*yesterday*” and “*already*” while neglecting required verb morphology. This transfer-based behavior reflects the learners' dependence on familiar linguistic cues when operating in the L2, especially under time pressure during the writing task.

However, the findings also reveal that not all errors can be explained solely through L1 transfer. Many errors, such as overgeneralized past tense forms or the incorrect addition of auxiliaries, reflect intralingual developmental factors. Learners who wrote “*I was laughed*” or “*She was went to the mall*” were not influenced by Indonesian structure but were instead applying partially learned English rules. These errors suggest that learners had internalized that past actions often require an auxiliary *was* or *were*, yet had not mastered how auxiliaries interact with main verbs. Such patterns correspond with EA's argument that learners actively construct hypotheses about L2 rules, sometimes leading to overproduction or misanalysis.

Furthermore, the interlanguage observed in this study shows signs of systematicity, reinforcing the argument that errors reflect underlying linguistic systems rather than random performance lapses. The consistency with which learners omitted auxiliaries or misformed verbs across multiple texts indicates a stable, though incomplete, grammatical system. This systematicity supports Selinker's view that interlanguage evolves through stages, with learners temporarily stabilizing at points that approximate the target language but retain L1 influences. The interplay of transfer-based and developmental errors suggests that learners were navigating two cognitive processes simultaneously: relying on L1 patterns while also trying to internalize new L2 structures.

In discussing the implications, the findings underscore the critical role of explicit, contrastive instruction in supporting Indonesian learners' acquisition of tense–aspect forms. Since many errors arise from structural contrasts, making these differences explicit in classroom instruction can help learners form more accurate mental representations of English grammar. Teaching strategies that emphasize form–meaning connections such as timeline



visualizations, contrastive sentence pairs, and guided narrative reconstruction may help bridge the conceptual gap caused by Indonesian's lack of inflection. At the same time, the developmental errors observed point to the need for scaffolded practice that reinforces rule application across varied contexts, allowing learners to refine their internal grammar through feedback and repetition.

Overall, the findings demonstrate that Indonesian learners' structural errors emerge from a complex interaction of L1 transfer and interlanguage development. By integrating CA and EA, this study provides a comprehensive explanation of why these errors occur, showing that both linguistic background and developmental processes shape learners' evolving mastery of English grammar. The analysis reveals that cross-linguistic influence cannot be understood in isolation but must be examined alongside learners' internal cognitive mechanisms, offering a richer and more accurate picture of L2 learning.

## **5. CONCLUSION**

The findings of this study demonstrate that Indonesian learners' structural errors in English writing stem from a complex interaction between cross-linguistic influence and developmental characteristics of their interlanguage. The dominant errors misformation of verbs, omission of auxiliaries, and inconsistent tense–aspect sequencing reflect the significant structural contrasts between Indonesian and English. As Indonesian lacks inflectional morphology and does not grammatically encode tense, learners frequently transferred L1 patterns into English, relying on temporal adverbs rather than verb morphology to express time. This resulted in predictable difficulties with past tense marking and auxiliary construction, supporting the central premise of Contrastive Analysis that areas of difference between languages create learning challenges.

However, the study also revealed error types that cannot be attributed solely to L1 influence. Many learners produced developmental or intralingual errors such as overgeneralized past tense forms, incorrect auxiliary combinations, and misinterpretations of English grammatical rules. These patterns align with Error Analysis findings that learners actively construct and revise their internal grammar, often applying partially understood rules in ways that diverge from target language norms. The coexistence of transfer-based and developmental errors indicates that learners' interlanguage systems reflect both the influence of previous linguistic knowledge and the cognitive strategies used to acquire new structures.

By integrating Contrastive Analysis and Error Analysis, this study provides a more comprehensive understanding of how Indonesian learners navigate the structural distance between their L1 and English. The results highlight the importance of explicit, contrastive instruction that makes L1–L2 differences visible to learners and supports the development of accurate form–meaning connections. Pedagogically, the findings suggest that awareness-based teaching, scaffolded practice, and targeted corrective feedback can help learners overcome persistent challenges in tense–aspect usage. Ultimately, this research emphasizes that examining errors through both transfer and developmental perspectives leads to richer insights into second language learning and more effective instructional interventions.

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