Online version available in : http://arbitrer.fib.unand.ac.id

JURNAL ARBITRER

| 2339-1162 (Print) | 2550-1011 (Online) |

Article

From Basic to Independent: Refining an Error Taxonomy for Dutch Word Order from Indonesian Learners at Three Proficiency Levels

Riska Risdiani[1], Untung Yuwono[2], Sisilia Setiawati Halimi[3], Sonya Puspasari Suganda[4]*

[1-4]Department of Linguistics, Faculty of Humanities, Universitas Indonesia, Depok, Indonesia

Submission Track

Received: June 30, 2026
Final Revision: October 19, 2026
Accepted: October 21, 2026
Available Online: October 25, 2026

Keywords

Word order, Dutch as Foreign Language, error taxonomy, Indonesian learner, learner corpora

Correspondence

*E-mail: untung.yuwono@ui.ac.id

A B S T R A C T

Word order errors are one of the most prominent issues in learning Dutch as a foreign language. This is particularly the case for learners whose first language is Indonesian, which has a very different syntactic structure. However, Indonesian learners are rarely the subject of research, and existing error taxonomies classify word order into a single, undifferentiated general category. This study examines the acquisition of Dutch word order among 30 Indonesian learners at CEFR levels A1-B1 who were divided into four groups and took tests at the end of three program phases. This corpus consists of 13,810 words and 3,251 coded clauses. Data were then extracted from 1,300 predefined contexts, including declarative inversion, questions, and subordinate clauses. This study has two main objectives: (1) to describe differences of learners' word order patterns in clauses with inversion and in subordinate clauses over time, and (2) to evaluate the adequacy of existing taxonomy in capturing the specific error types that occur among Indonesian L1 learners and to refine the taxonomy accordingly. One coder coded all contexts and the intra-coder agreement for a stratified sample of 274 recoded contexts yielded a weighted κ value of 0.85 (bootstrap 95% CI 0.71–0.97). Word order errors were rare (62 of 1,300 contexts, 4.8%). The existing word order category, which emphasizes verb clusters, accounted for only 4 of the 62 errors; 56 errors concerned the position of the finite-verb in main and subordinate clauses; and 2 errors concerned the order of other elements. The refined taxonomy included three subcodes (verb-second order in main clauses, the position of the conjugated verb in the subordinate clauses, and verb clusters with combined middle-position order). No significance tests were run because errors were few and clustered within learners. Teaching and feedback can therefore treat finite-verb position separately from verb clusters.

I. INTRODUCTION

Centuries of profound linguistic exchange have left a clear imprint of Dutch vocabulary and affixes on Indonesian (Istanti et al., 2020; Jones, 2007). The two languages nonetheless stand as strikingly distinct entities. Their syntactic structures differ in several fundamental ways, including word order (Nuriah, 2019). Dutch, as a Germanic language, is syntactically a subject-predicate language in which copulas and inflections are required; it also requires a strict second verb position in declarative main clauses, while permitting more flexible word order in various sentence types. In contrast, Indonesian functions as a topic-focus language without mandatory copulas or inflections. Like English or French, it is a subject-verb-object language, with no second-verb requirements and no word order distinctions between main and subordinate clauses.

In 2007, audio recordings of Indonesian test takers in the speaking proficiency section of the *Certificaat Nederlands als Vreemde Taal* (CNaVT, 'Certificate of Dutch as Foreign Language', a test

DOI: https://doi.org/10.25077/ar.13.3.325-338.2026

Under License of Creative Commons Attribution-Non Commercial 4.0 International.

responsible for assessing and certifying learners of Dutch as a Foreign Language) showed that Indonesian candidates used few inverted sentence constructions and had difficulty constructing subordinate clauses in which the verbs are located at the end (Riyanto, 2011). A later error analysis reported similar findings. The study used data from participants in the *Het Staatsexamen* NT2 (The State Exam Dutch as a Second Language) speaking exam, Program I (B1 level, Common European Framework of Reference for Languages (CEFR)). *Het Staatsexamen Nt2* is an official examination that assesses Dutch proficiency of non-native speakers of Dutch. This exam is designed for individuals aged 17 and older who are seeking citizenship, employment, or further study in the Netherlands. Based on the results of this exploratory study, it was concluded that one of the main areas in which most errors occurred was morphosyntax, particularly word order, pronouns, and incorrect word gender (Stam, 2018). Although not all participants in the test were Indonesian learners, there were twenty-four test takers representing nineteen nationalities. The findings indicate that syntactic errors were a major source of difficulty in speaking proficiency. This pattern suggests a compelling need to investigate whether similar problems persist in writing among Indonesian learners of Dutch, given the significant differences in sentence structure between Indonesian and Dutch.

For these learners, there are two possible scenarios: either they acquire Dutch word order later in the learning process, starting from scratch, or their prior knowledge of English influences how they learn Dutch (Sánchez & Bardel, 2017). While these two possibilities cannot be distinguished by the design of this study, the distribution of error types over time across proficiency levels may help to address this issue.

Writing in a foreign language such as Dutch is a task that requires significant cognitive effort, as students must simultaneously pay attention to various aspects of producing wellcrafted texts, including structure, content, phrasing, and linguistic adequacy (Beuningen, 2011). Like many other languages, Dutch has distinctive features that can pose challenges for its learners. Notably, Dutch is a verb-second (V2) language. In Dutch main clauses, V2 word order requires the finite verb with the finite verb consistently occupying the second position, irrespective of the subject's placement. This manifests as inversion when the first position is filled by the topic (e.g., subject, object, or adverb) (Jordens, 2006).

Zij leest een boek. 'She reads a book.' -> The subject is at the beginning of the sentence.

Morgen ga ik naar de bibliotheek. 'Tomorrow I go to the library.' -> The adverb of time is at the beginning of the sentence, and the subject is located after the verb.

From the example it can be seen that with inversion, the finite verb is placed before the subject. This commonly occurs when a sentence begins with a clause or phrase that is neither the subject nor a finite verb, such as an adverbial expression, a negative phrase, or a conditional clause. Inversion sentences in Dutch can be divided into the following three types (Broekhuis & Corver, 2026):

In interrogative sentences:

Ben je morgen vrij?. 'Are you free tomorrow?'

In sentences that begin with an adverb:

Gisteren was hij ziek. 'Yesterday he was sick.'

After a subordinate clause:

Als ik hem zie, word ik blij. 'When I see him, I feel happy.'

In addition to the characteristics of inversion in Dutch main clauses, the structure of Dutch subordinate clauses produced by Indonesian learners is also of interest. In many cases, the word order in subordinate clauses in Dutch is SOV, rather than SVO as in Dutch main clauses. A subordinate clause or dependent clause is a clause that lacks the grammatical completeness required to stand alone as a sentence and functions as part of a larger clause or a sentence. A common feature of a subordinate clause is that the verb occurs in the final position. As a clause, a subordinate clause can function as a subject, as can be seen in example 1; as a direct object, as in example 2; and as a subordinate clause of explanation in example 3 (Taaladvies.net, 2025).

Dat hij niet komt, *verbaast me niet.*

'I'm not surprised that he didn't show up.'

Ik heb gehoord dat hij weer terug is.

'I have heard that he is back again.'

Als je hoogtevrees hebt, ben je voor dat werk niet geschikt.

'If you are afraid of heights, you are not suited for that job.'

Inversion and subordinate clauses with verb-final positioning constitute core components of Dutch sentence structure, and therefore form particularly salient domains for analysis in the acquisition of Dutch as a foreign language. These structures determine not only grammatical accuracy

but also intelligibility and naturalness in learners' productions within academic and non-academic contexts. In languages like Indonesian, which differ significantly from Dutch in their basic word order, inversion and verb-final subordinate clauses provide a particularly useful basis for assessing the impact of L1 influence on underlying syntactic acquisition. A thorough examination of the types of errors students make in these structures over time can contribute to refining theoretical models of Dutch word order and developing targeted teaching methods.

Error analysis has received increasing attention from scholars (Khansir, 2012; Mariappan et al., 2022; McDowell, 2023; Moseley, 2013; Ranstam, 2008; Tan, 2022), including research on error analysis among Indonesian learners (Prihantoro et al., 2025; Udayana et al., 2024). There is abundant research that has focused on the grammatical errors made by English learners (Fadhilah, 2026; Gayo & Widodo, 2018; Kosasih, 2019; Nurmalia & Nuraeni, 2021; Utami & Mahardika, 2023). In term of Dutch language, there are several existing research on how learners struggle with prepositions, articles, verb spelling, and vowel pronunciation (Burgos et al., 2013; Rankin, 2011; Schmitz et al., 2018; Terziyan, 2024; Van Doremalen et al., 2013). However, there are relatively few studies focusing on the error analysis of Dutch language learners whose native language is Indonesian.

Hendrikx et al. (2019) conducted research using a corpus of learners of Dutch whose native language is French. The research showed that learners of French-speaking learners of Dutch benefit from the similarities between their L1 and Dutch (L2), especially in the use of intensifying constructions. Schetters (2020) investigated the needs of advanced learners of Dutch by analysing the written production of learners who are native speakers of German. The study used a self-designed error taxonomy to analyse the errors of learners identified in a corpus of 130 examination texts from the *Certificaat Nederlands als Vreemde Taal* (Certificate of Dutch as a Foreign Language). The findings of the distribution of learners' errors were translated into practical teaching recommendations. That study also produced an error taxonomy consisting of six overarching categories. Schetters argues that the error taxonomy was originally created for a particular group, namely, German L1 learners at the advanced levels (B1 and C1). He also claimed that it can also be applied to errors at the beginner proficiency level and could potentially be applied to learners with different L1s.

Table 1. Error Taxonomy Subcategory Word Order (Based on Schetters 3.0., 2020)

Subcategory	Error types	Examples from corpus
Word order	Syntactic errors	*Ik vind het een heel goed idee dat de universiteit *wil iets vernieuwen* instead of *ik vind het een heel goed idee dat de universiteit iets wil vernieuwen* ['I think it is a good idea that the university wants to reform itself']

No Dutch learner corpus compiled specifically for learners with Indonesian as their L1 was identified. The *Leerdercorpus Nederlands* (LCN; Cental, UCLouvain; accessed 1 October 2026), a multi-L1 corpus of written learner productions, includes 27 texts from L1 Indonesian learners (2.3% of 1,169 texts), compared with 642 texts from L1 French learners. The small size and unequal distribution of L1s limit the generalizability of any analysis based on this subcorpus. Given the limited research in this area and the absence of suitable benchmarks or comparative data, further empirical investigation is urgently needed. Therefore, there is a need for research that addresses this gap by expanding the size and diversity of learner corpora, as well as improving techniques for data compilation and analysis (Gilquin, 2020). The present study addresses two main questions (RQs):

How do the accuracy and distribution of word order errors in main clauses with inversion (declarative and interrogative) and in subordinate clauses differ across CEFR levels A1, A2, and B1 among Indonesian learners of Dutch as a foreign language who were tested at all three levels?

To what extent does an existing error taxonomy capture the word order errors in these learners' written production, and how should it be refined where it does not?

The two main objectives of this study are to describe differences across CEFR levels A1, A2, and B1, as specified by the Common European Framework of Reference for Languages (CEFR) in the accuracy and distribution of word order errors in main clauses with inversion (declarative

and interrogative) and in subordinate clauses. The second objective is to evaluate how well the existing taxonomy captures these errors and to refine it when the empirical evidence reveals shortcomings. Error analysis in Dutch learner corpora is an important field of research that provides insight into the challenges encountered by learners of Dutch. By examining the types of errors made by learners, researchers, lecturers and teachers can develop targeted interventions to improve language acquisition.

II. METHODS

In analysing language learners' errors, it is essential to follow a systematic and structured process. Error analysis involves a five-step process, namely: (1) compiling a database of learner errors by creating a corpus of their errors, followed by (2) identification, (3) description, (4) explanation, and (5) evaluation of these errors (Corder, 1967, 1975; James, 2013; Meunier, 2006). Based on these five systematic steps, Schetters (2020) designed a taxonomy of errors specifically for analysing error patterns in Dutch, divided into six main categories: spelling & punctuation, lexicon, grammar, ambiguous, appropriateness and others. Therefore, in this study, errors in the learner corpus were identified using Schetters' (2020) error taxonomy, with the analysis focusing on the grammar category (Word order). for the analysis of grammatical accuracy in Dutch inversion and subordinate clauses, Schetters' taxonomy (2020), with the analysis focusing on the grammar category (Word order) to assess grammatical accuracy in Dutch inversion and subordinate clauses. Schetters' taxonomy (2020) was designed to analyse errors in a specific learner population, namely, advanced learners of Dutch as a Foreign Language with German as their native language (L1). Further research is needed to examine the extent to which this error taxonomy can also be used to detect and systematically categorise errors produced by learners at different proficiency levels and/or with different first languages (L1s).

The study uses a within-subject, corpus-based error analysis design. The same learners were tested at the end of each of the phases of a single programme of Dutch as a foreign language. Written production data were collected from 30 Indonesian learners of Dutch as a foreign language who completed all three levels (A1, A2, B1) between March 2022 and February 2023. Each learner took the A1, A2, and B1 writing tests of the digital assessment platform of a commercial publisher of Dutch as a foreign language materials (name withheld).

Each bar runs from the A1 test to the B1 test. The colour change marks the A2 test. Numbers on the bars indicate the number of days between consecutive tests. The cohort sizes are, respectively: n = 8, 8, 7, and 7 (N = 30). As shown in Figure 1, the same learners took the A1, A2, and B1 writing tests in sequence, but the four cohorts started on different dates (10 March, 6 June, 22 September, and 3 November 2022), and their testing periods partly overlapped (Cohorts 2 and 3, and Cohorts 3 and 4). The interval between A1 and A2 ranged from 21 to 43 days across cohorts, and the interval between A2 and B1 ranged from 49 to 107 days, so the total span per learner ranged from 88 to 150 days. Because these intervals varied, the comparisons reported below are between proficiency levels, rather than measures of rates of change per unit of time.

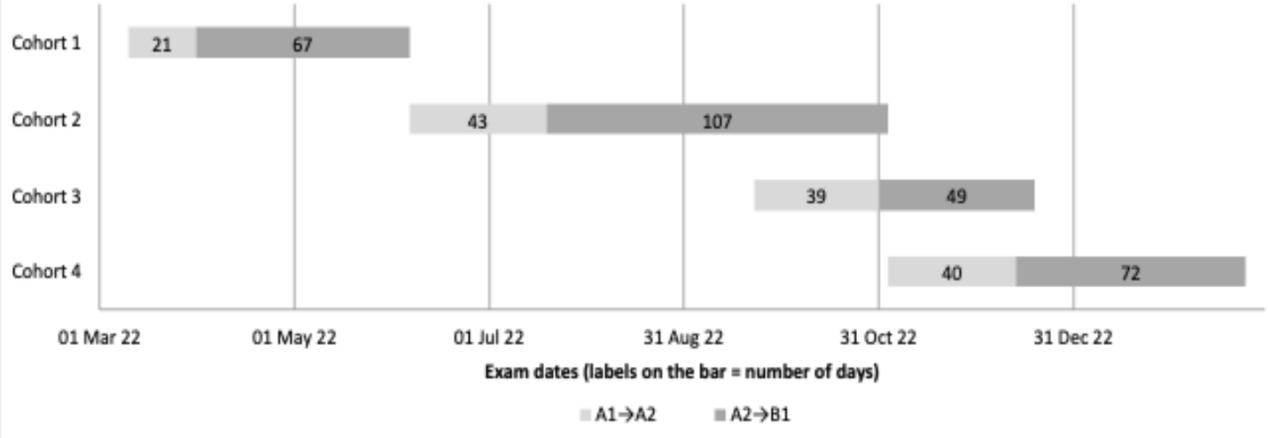


Fig. 1. Testing timeline of the four cohorts

Participants

A total of 30 Indonesian learners of Dutch (24 females and 6 males) took part in this longitudinal study. All participants were native speakers of Indonesian with no history of visual impairment (disability or special needs) and were proficient in operating computers. Information on age, institution and their knowledge of English or other languages was not collected. In line with research ethics, the names of the test takers have not been revealed.

Materials and Instruments

Primary data were obtained from the writing tests of foreign language learners taking the Dutch language exam at the A1-B1 levels. The data were obtained, with explicit consent and formal permission, directly from a publisher in Amsterdam that specializes in developing and disseminating educational materials for Dutch as a second language (NT2) and civic integration in the Netherlands. The publisher has collaborated with language institutes at four top universities in the Netherlands to develop Dutch language certification exams. This collaboration has resulted in a digital Dutch language proficiency assessment that is not tied to any specific learning method. The exam data consisted of digital texts produced by exam participants using computers provided by the exam administrators, who conducted strict supervision of the exams.

Each level had its own test form, combining closed tasks and open writing tasks of varying length. Figure 2 shows the distribution of the number of questions at each level. Each participant took the exam on a computer at the same examination location. The exam was conducted using an internet connection at the examination venue. The examinations were administered under strict time constraints: candidates at A1 level were given 45 minutes, whereas those at A2 and B1 had 60 minutes to complete the writing task. During the test, candidates were allowed to consult a printed dictionary but had no access to digital dictionaries. Therefore, the texts largely reflect the candidates' independent lexical and grammatical choices. The digital platform closed automatically once the allotted time had elapsed. Test takers could use scrap paper for planning and drafting, yet no materials, including the scrap paper or the dictionary, could be taken out of the examination room, a measure that is essential for safeguarding the confidentiality of the test materials. As part of the same examination package, the candidates also sat a speaking test and a receptive comprehension component. However, this study used only the written examination data, which were collected for the purpose of detailed error analysis.

Each clause containing a target structure, such as main clauses with inversion and subordinate clauses introduced by complements, was systematically identified and coded. The clauses were evaluated for target-like versus non-target-like word order, and when errors were detected, they were classified according to the grammatical elements of Schetters' error taxonomy. The texts collected comprise 13,810 words in 1,324 sentences (A1 1,132 words; A2 5,270 words; B1 7,408 words). The corpus contains 3,251 coded clauses.

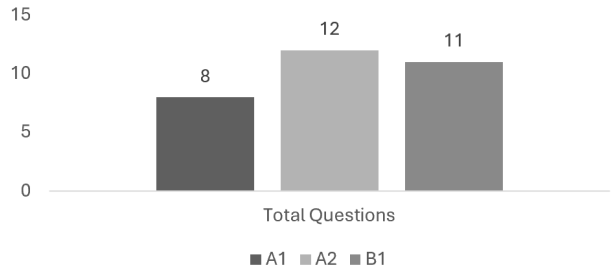


Fig. 2. The distribution of the number of questions in each level

Procedure

The program consisted of three consecutive phases, each ending in a written test and each targeting one CEFR level: Phase 1 targeted A1 (150 teaching hours), Phase 2 targeted A2 (150 hours), and Phase 3 targeted B1 (240 hours), for a cumulative total of 540 hours at the three testing points. All participants in the four cohorts received the same number of hours, and identical content and sequence of the phases, including instruction on verb-second and verb-final orders. At the end of each phase, the learners took a test consisting of writing tasks from a standardized proficiency-oriented examination series. A learner entered the next phase only after passing the test of the previous one. Participants' typed texts were collected, and each text was assigned a learner code before being analysed by the authors.

The authors extracted obligatory contexts for declarative inversion, questions, and subordinate clauses) from the full texts. A clause was included

when it met all of the following criteria: (1) the learner wrote it, and material supplied by the tasks had been removed from the texts for reasons of test confidentiality; (2) it was a finite clause, or an attempt at one with an identifiable subject and predicate or subordinator, even when the finite verb was missing; (3) it belonged to one of three context types: a declarative main clause with a fronted non-subject constituent (declarative inversion), a yes/no question or wh-question (analysed as a separate subtype of inversion), or a finite subordinate clause introduced by a subordinating conjunction, relative pronoun, or indirect-question word, including clauses coordinated under the same subordinator; and (4) it could be reconstructed to a target form with minimal changes. Clauses with errors in other categories (spelling, articles, prepositions, and verb forms) were kept, and those errors were coded separately. Clauses were excluded when they were imperatives, exclamations, subject-initial main clauses without a fronted element, non-finite clauses (for example *om ... te* clauses, i.e. 'to-infinitive clauses'), fragments, extraction duplicates from the same text (identical sentences written by different learners were retained), or subordinate-like clauses without a subordinator and with main-clause order (*Ik denk hij komt* 'I think he comes').

One of the authors extracted the items and recovered the learner ID for each item by matching it to the source text. The extraction was checked against all 1,324 sentences. Sentences without an item were fixed greetings or closing formulas (e.g., *Hoe gaat het met je?* 'How are you?') and stock questions i.e. *Wat denk je?* 'What do you think?', which were excluded from the denominators because they recur as fixed phrases across learners. Subject-initial main clauses, which are outside the target contexts and were not analysed even though some may contain word order deviations, were also excluded, as were ambiguous sentences, which were discarded before coding began. The analysis set therefore consisted of 1,300 items (Table 2). One sentence can contain more than one obligatory context (for example, a fronted adverbial and a subordinate clause) and can therefore yield more than one item, so the items are not a count of the 1,324 sentences.

Each item was coded using a four-part codebook that refines the word order category in Schetters' (2020) taxonomy: 3.9.1 verb-second in main clauses, 3.9.2 finite-verb position in subordinate clauses, 3.9.3 verb clusters and separable particles, and 3.9.4 middle field. Each word order shift receives one code, and each context is counted once per subcode. A missing finite verb is treated as an omission. It is coded as a word order error only where the context requires a particular order (inversion after a fronted element, a question, or a subordinate clause) and the verb is absent from that position, it is then coded under the subcode of its clause type and marked as a verb-ellipsis case, a provisional subcode identified after the first coding round. After *maar* 'but' and similar coordinating conjunctions, which do not require inversion, or in the cases of omitted subjects, the construction is not coded as a word order error.

To estimate reliability, a stratified random sample of 274 contexts was recoded blind to the first codes. The sample contained all 63 contexts coded as errors in the first round, plus a random 15% of the remaining contexts in each level-by-type cell, with a minimum of 10 per cell, drawn using a fixed random seed. The interval between the two rounds was one week. Agreement between the rounds is reported as Cohen's (1960) κ weighted for the sampling fractions, with positive and negative agreement, a bootstrap 95% confidence interval over contexts, and percentage agreement per subcode (3.9.3 and 3.9.4 are reported as single merged subcode because only six errors were found), against a threshold predefined as $\kappa \geq .70$.

Data Analysis

The analysis is descriptive. The unit of analysis is the context (N = 1,300). Each context was scored as 1 if it contained a word order error under the codebook and as 0 if it was target-like, so each context contributed at most one error.

Table 2. Analysis items by level and context type

Level	Declarative inversion	Questions	Subordinate clauses	Total
A1	63	34	33	130
A2	369	22	140	531
B1	239	36	364	639
Total	**671**	**92**	**537**	**1,300**

Accuracy was calculated per level (A1, A2, B1) (RQ1) and separately for each context type (declarative inversion, questions, subordinate clauses), because the types have different obligatory contexts and therefore different denominators. For each combination of level and context type, and for all contexts together, we report errors as n/N (%) with a 95% Wilson confidence interval. At the learner level, we report the number of learners who made at least one error among those who produced at least one context of that type at that level, the number who made no errors at any level, and the distribution of errors across learners.

Furthermore, errors are counted per subcode (3.9.1, 3.9.2, 3.9.3 and 3.9.4 merged) and level, showing how the refined taxonomy distributes the observed errors (RQ2). Production is expressed as the number of contexts per 100 words, computed as the total number of contexts at a level divided by the total number of words written at that level. It is reported separately from accuracy so that structures not produced by a learner are not treated as errors.

No significance tests are conducted. Only 62 errors were found, and contexts from the same learner are not independent, so the Wilson intervals, which treat contexts as independent, are likely to be somewhat too narrow. Differences between levels are therefore described by comparing the confidence intervals. When two 95% intervals do not overlap, the difference is reported as suggestive. However, when they overlap, no conclusion is drawn in either direction, because overlap does not demonstrate that the proportions are equal.

Subordinate clauses at A1 (33 contexts, 28 of them with an *Ik* + *verb* + *dat* 'I + verb + that' pattern or opening) are reported descriptively and are not compared with later levels. The label describes the form only and does not claim that the pattern was memorised. This is because the tasks set a situation that invites such an opening. A clause was flagged when it opened with *ik*, a verb, and *dat* with no other material between them, as in *Ik hoop dat…* 'I hope that..'. All 113 flagged clauses are subordinate clauses. Cohort and test form are not modelled, because the 62 errors do not support further stratification.

III. RESULTS

This section outlines the empirical results concerning the two guiding research questions. It first describes the corpus and the 1,300 contexts analysed. It then reports the proportion of contexts with a word order error by context type and level, the distribution of errors across individual learners, the extent to which the existing category captures the observed error patterns, and finally, the refined taxonomy and the reliability of its coding.

From 13,810 Words to 1,300 Contexts

The corpus comprises the written tests of 30 learners at three levels. It contains 13,810 words in 1,324 sentences (A1 1,132 words; A2 5,270; B1 7,408) and 3,251 coded clauses. Of the 1,324 sentences, 68 contained no obligatory context such as 39 fixed greetings and closing formulas, 16 subject-initial main clauses, and 13 fragments or ambiguous sentences. The remaining 1,256 sentences yielded 1,304 items because a sentence can contain multiple contexts. Four items were dropped after review, leaving 1,300 contexts for analysis. One was an extraction duplicate, and three were subject-initial main clauses without a fronted element, which fall outside the inclusion criteria and were excluded on re-review, as were the 16 sentences mentioned in the Procedure section as outside the target contexts.

RQ1: How Often Does Word Order Go Wrong, by Context Type and Level

Table 3 reports the proportion of contexts with a word order error. Word order errors were rare and accounted for 62 of 1,300 contexts (4.8%). In declarative inversion, the proportion of errors fell from 6.3% at A1 through 4.1% at A2 to 2.5% at B1, but the intervals overlap, so a decline is not established. Subordinate clauses had the highest overall proportion of errors with 34 of 537 contexts, 6.3%) but showed no clear trend across levels: 15.2% at A1 (33 contexts), 2.1% at A2, and 7.1% at B1. The A2 and B1 intervals overlap, although 16 of 30 learners made such an error at B1 compared to 3 of 30 at A2. For questions, there were 3 errors in 92 contexts, which was too few to support a comparison across levels. Most errors concerned the finite verb: 23 of the 25 errors in declarative inversion involved a failure to invert the finite verb after a fronted element (3.9.1), and 25 of the 34 errors in subordinate clauses involved placing the finite verb before the end of the clause (3.9.2).

The errors differ in kind between context types (Table 3). In declarative inversion, the learner retains subject–verb order after a fronted adverbial,

Table 3. Word order errors by context type and level

Context type	A1, n/N (%) [95% CI]	A2, n/N (%) [95% CI]	B1, n/N (%) [95% CI]
Declarative inversion	4/63 (6.3%) [2.5, 15.2]	15/369 (4.1%) [2.5, 6.6]	6/239 (2.5%) [1.2, 5.4]
Questions	0/34 (0.0%) [0.0, 10.2]	2/22 (9.1%) [2.5, 27.8]	1/36 (2.8%) [0.5, 14.2]
Subordinate clauses	5/33 (15.2%) [6.7, 30.9]	3/140 (2.1%) [0.7, 6.1]	26/364 (7.1%) [4.9, 10.3]
All contexts	9/130 (6.9%) [3.7, 12.6]	20/531 (3.8%) [2.5, 5.7]	33/639 (5.2%) [3.7, 7.2]

Note. n/N = number of contexts with a word order error / number of contexts. CI = Wilson 95% confidence interval. Contexts from the same learner are not independent, so the intervals are somewhat too narrow. At A2, 11 of the 15 declarative-inversion errors come from two learners.

Table 4. Learners with at least one word order error, out of learners with at least one context of that type

Context type	A1	A2	B1
Declarative inversion	4 of 24	6 of 30	5 of 30
Questions	0 of 28	2 of 14	1 of 25
Subordinate clauses	4 of 22	3 of 30	16 of 30
All contexts	6 of 30	7 of 30	19 of 30

for example *In 2012 mijn opa was overleden* (A2; target *In 2012 was mijn opa overleden*) and *Dan ik gebruik mijn paraplu* (B1; target *Dan gebruik ik mijn paraplu*). Of the 25 errors, 23 are of this kind (4 at A1, 14 at A2, and 5 at B1); the remaining two concern the position of the finite verb in a subordinate clause and the order within the middle field. In subordinate clauses, the finite verb occurs before the end of the clause, for example *Ik hoop dat kan je naar mijn feest komen* (A1; target *Ik hoop dat je naar mijn feest kan komen*) and *omdat de trein heeft vertraging* (B1; target *omdat de trein vertraging heeft*). This accounts for 25 of the 34 errors in subordinate clauses (5 at A1, 2 at A2, and 18 at B1); the remaining errors were coded 3.9.1 (4), 3.9.3 (4), and 3.9.4 (1). The three errors in questions all concern the position of the finite verb (2 at A2, 1 at B1).

Table 4 shows how the errors are distributed across learners rather than how often they occur. For each context type and level, it gives the number of learners with at least one word order error among the learners who produced at least one context of that type. The denominators differ because not every learner produced every context type. For example, only 14 learners produced a question at A2. These counts depend on both the error rate and the number of contexts each learner produced. On average, learners produced 4.3 contexts at A1, 17.7 at A2, and 21.3 at B1, and the corresponding numbers of sub-ordinate clause contexts were 1.5, 4.7, and 12.1 per learner, respectively. A learner who produces more contexts has more potentials instances in which an error may occur, so the counts are reported to describe the distribution of errors across learners and are not compared across levels. Contexts from the same learner are not independent.

RQ1: Errors by Learner

Errors are distributed across learners: 8 of 30 learners made no errors at any level, 8 made one error, and the others made between 2 and 10 errors (median 2 among the 22 learners with an error). Twenty-two learners made at least one error, but the errors are concentrated: the three learners with the most errors (10, 7, and 7) account for 24 of the 62 errors (39%), and the six with the most errors account for 35 (56%). Thirteen learners made errors at one level only, 8 at two levels, and 1 at all three levels. The concentration is strongest in declarative inversion at A2, where two learners produced 11 of the 15 errors in 35 of the 369 contexts. The same two learners account for 13 of the 30 errors coded 3.9.1. Subordinate-clause errors at B1 are more widespread, with 26 errors from 16 learners, with none contributing more than 5.

Because most learners have few errors and relatively few contexts per level, individual trajectories are not classified. To show what the errors look like within one learner, we describe the only learner who made at least one error at each of the three levels (selection rule: at least one error at A1, A2, and B1; one learner met this criterion). This learner also made the most errors of all (10), so the case illustrates the error types and is not a typical learner. At A1 this learner made 2 errors in

4 contexts (one in declarative inversion and one in a subordinate clause), at A2 6 in 26 (5 in declarative inversion and 1 in a subordinate clause), and at B1 2 in 26 (both in subordinate clauses, none in 8 contexts of declarative inversion). Examples (1)–(3) give the first error of this learner at each level, in the order of the items, with spelling kept as written. 3SG = third person singular, PST = past, INF = infinitive, PL = plural.

(1) A1 *Daarna* *ik* *samen* *fietsen.*
afterwards 1SG together cycle.INF
'Afterwards I cycle together.'
Target: *Daarna fiets ik samen.*

(2) A2 *Op* *maandag* *19* *oktober* *en* *dinsdag*
on Monday 19 October and Tuesday
20 *oktober,* *ik* *ga* *studeren*
20 October 1SG go.1SG study.INF
'On Monday 19 October and Tuesday 20 October, I am going to study …'
Target: *Op maandag 19 oktober en dinsdag 20 oktober ga ik studeren …*

(3) B1 *zei* *de* *docent* *dat* *alle*
say.PST.3SG the teacher that all
studenten *moeten* *hun* *mening* *geven*
students must.PL their opinion give.INF
'… the teacher said that all students must give their opinion …'
Target: *… zei de docent dat alle studenten hun mening moeten geven …*

In examples (1) and (2), the learner retains subject–verb order after a fronted adverb or time phrase (3.9.1); in (3), the finite verb *moeten* occurs before the object rather than at the end of the subordinate clause (3.9.2). This learner made inversion errors at A1 and A2 but none at B1, where the errors were in subordinate clauses. These counts are small (8 inversion contexts at B1) and are therefore described rather than tested.

RQ2: How Much of the Error Pattern Does the Existing Category Capture?

Of the 62 word order errors in the 1,300 contexts, 4 correspond to the existing word order category, which is defined with an emphasis on verb clusters (3.9.3). Fifty-six concern the position of the finite verb in main and subordinate clauses, and 2 concern the order of other elements in the middle field.

RQ2: A Refined Taxonomy and How Reliably It Can Be Coded

Table 5 shows the number of errors by subcode and level. The subcodes are defined as follows. Code 3.9.1 (verb-second in main clauses): the finite verb is not in second position after a fronted element or in a question. Code 3.9.2 (finite-verb position in subordinate clauses): the finite verb is not at the end of the verb group of the clause. Code 3.9.3 (verb clusters and particles): the order within the final verb group or the position of a separable particle is non-target-like. Code 3.9.4 (middle-field order): the order of objects, pronouns, adverbials, or negation in the middle field is non-target-like. The following examples illustrate this subcode.

Examples (1)–(4) show one error for each subcode, all from B1 texts, with the spelling preserved as written by the learner. 1SG = first person singular, 3SG = third person singular, INF = infinitive, PTCP = past participle.

(1) 3.9.1 *Dan* *ik* *gebruik* *mijn* *paraplu.*
then 1SG use.1SG my umbrella
'Then I use my umbrella.'
Target: *Dan gebruik ik mijn paraplu.*

(2) 3.9.2 *Ik* kom vandaag te laat
1SG come.1SG today too late
omdat de trein heeft vertraging.
because the train have.3SG delay
'I am late today because the train has a delay.'
Target: *Ik kom vandaag te laat omdat de trein vertraging heeft.*

(3) 3.9.3 *Ik* *hoop* *dat* *de* *volgende*
1SG hope.1SG that the next
cursus *kan* *verbeterd* *worden.*
course can.3SG improve.PTCP become.INF
'I hope that the next course can be improved.'
Target: *Ik hoop dat de volgende cursus verbeterd kan worden.*

(4) 3.9.4 *Ik* *denk* *dat* *het* *better* *ook*
1SG think.1SG that it better also
is, …
be.3SG
'I think that it is also better …'
Target: *Ik denk dat het ook beter is, …*

Table 5. Word order errors by subcode and level (number of errors)

Subcode	A1	A2	B1	Total
3.9.1 Verb-second in main clauses	4	16	10	30
3.9.2 Finite-verb position in subordinate clauses	5	2	19	26
3.9.3 Verb clusters and separable particles	0	1	3	4
3.9.4 Middle-field order	0	1	1	2
Total	**9**	**20**	**33**	**62**

Intra-coder agreement on the 274 recoded contexts was 97.1%. The sampling-weighted κ was 0.85 (bootstrap 95% CI 0.71–0.97) and the unweighted κ for the recoded sample was 0.92. Agreement was lowest at B1 (κ = .76, compared with .94 at A1 and .97 at A2). Among the 57 contexts coded as errors in both rounds, the subcode was identical in 54.

IV. DISCUSSION

Word order errors were infrequent, and the pattern across levels varied by context type. In declarative inversion, errors were highest at A1 (6.3%) and lowest at B1 (2.5%), but the intervals overlap, so the data are compatible with both a decline and no change. The A2 figure rests largely on two learners (11 of 15 errors) and describes them more than the group. In subordinate clauses, the A2 and B1 figures (2.1% and 7.1%) are likewise not separated by their intervals. Three simpler explanations have to be considered before any A2–B1 difference is interpreted as developmental. First, the reuse of an *ik* + verb + *dat* pattern: such patterns make up a similar share of subordinate clauses at A2 (14%) and B1 (18%), and removing them leaves proportions close to the full sample (2.5% and 7.4%), so this reuse gives no clear indication that it produced the difference, although this check alone cannot establish this. Second, the range of attempts: learners wrote more subordinate clauses at B1 (4.91 per 100 words) than at A2 (2.66), so the B1 figure may rest on a wider range of constructions. Third, the test itself: test form is nearly confounded with cohort at B1 and task composition was not controlled. The design does not allow us to distinguish among these explanations.

For RQ2, the errors were concentrated on the position of the finite verb: 56 of the 62 errors, 30 in main clauses and 26 in subordinate clauses, whereas the existing category, defined with an emphasis on verb clusters, matched only 4. The two patterns differ in kind. After a fronted element, learners retained subject–verb order; in subordinate clauses, the finite verb occurred before the end of the clause. Subject-first order is compatible with Indonesian transfer, English transfer, and retention of canonical order, and the data cannot distinguish among them. The coding records the position of the error, not the order that replaced the target, and knowledge of English and other languages was not recorded, so transfer remains a hypothesis. Eleven errors involve a missing finite verb, nine of them the copula *zijn*. Indonesian adjectival predicates take no copula, whereas English requires one. This is therefore the one pattern in the data that points to Indonesian rather than English, but nine cases are too few to establish Indonesian as the source.

The pattern is partly consistent with the studies that motivated this research. Jagtman & Bongaerts (1995)we compare our results with those obtained in the project entitled \"Zweitspracherwerb italienischer und spanischer Arbeiter\" on the acquisition of L2 German word order (the ZISA project followed two adult immigrant learners of Dutch over time and compared their development of verb placement with the implicational scale proposed for German in the ZISA project. The scale did not emerge in their data. Riyanto (2011) reported that few inverted sentences were used and that subordinate clauses with the verb at the end were difficult to construct. In the present written data, 23 of the 25 errors in declarative inversion lack inversion after a fronted element, and 25 of the 34 errors in subordinate clauses place the finite verb before the end of the clause; subordinate clauses also had the highest observed proportion of errors (6.3%, against 3.7% in declarative inversion and 3.3% in questions; these proportions were not compared statistically). The comparison has limitations. Riyanto's observation concerns how often inversion was used in speech, whereas the present study counts errors in contexts where a fronted element was written, so it cannot show avoidance of inversion, and the proportions found here are low. Stam (2018), in an exploratory error analysis of the speaking exam of Het Staatsexamen NT2, programme I (B1; 24 candidates of 19 nationalities, not all Indonesian), identified morphosyntax, including word order, among the main areas of error. That study cannot be compared

directly in terms of sample size with the present one, because its data were spoken, whereas the unit here is the proportion of obligatory contexts with a word order error. Together, these studies provide a basis for examining whether similar problems appear in writing; the present data suggest that they do in terms of the types of errors observed, particularly finite-verb position in main and subordinate clauses, but not in terms of frequency.

For the taxonomy, the refinement separates finite-verb position in main clauses and in subordinate clauses from verb clusters and middle-field order (3.9.3 and 3.9.4, which were merged because only six errors were found). The finding that most errors concern the finite verb comes from this group of learners and may not hold for other learner groups; testing whether the same pattern occurs elsewhere requires applying the codebook to other groups. The subcodes are a proposal, not a validated instrument. For teaching, the results suggest that feedback for this group could be organised around the position of the finite verb after a fronted element and at the end of a subordinate clause, rather than around verb clusters. Of the 30 verb-second errors, 13 come from two learners, whereas verb-final errors at B1 were spread across 16 learners. The case for targeting verb-final placement therefore rests on more learners. At B1, instruction might return to verb-final placement in a wider range of subordinate clauses. Both points are hypotheses for future intervention studies, because no instruction was manipulated in the present study.

Future research should address the limitations of the present design. First, a second independent coder should apply the codebook and report inter-coder reliability. Agreement was lowest at B1 (κ = .76), and the boundary cases are the ones most likely to produce differences between coders. Second, the order that replaced the target should be coded, so that the proportions of errors with subject–verb–object order can be reported, and learners' knowledge of English and other languages, age, and institution should be recorded; without this information, transfer from Indonesian or English remains a hypothesis. Third, task and test form should be held constant or counterbalanced across levels, so that a difference between levels can be separated from a difference between tests, which could not be done for the subordinate clauses at A2 and B1. Larger and more detailed data would also allow questions that the present data cannot answer. More learners or longer texts would make models with learner as a random effect feasible and would allow differences between levels to be tested. Coding the point at which each structure first appears, ideally from repeated measurements of the same learners, would make it possible to examine developmental sequences in Dutch directly, the only comparable study we know of, a case study of two adult learners, did not find the sequence reported for German (Jagtman & Bongaerts, 1995) we compare our results with those obtained in the project entitled \"Zweitspracherwerb italienischer und spanischer Arbeiter\" on the acquisition of L2 German word order (the ZISA project. Comparing written and spoken data from the same learners would show whether the rarity of inversion reported for speech (Riyanto, 2011) reflects avoidance, which an analysis of errors in obligatory contexts cannot show. Finally, intervention studies should test whether instruction on the finite verb after a fronted element and at the end of a subordinate clause reduces the errors found here, compared with instruction organised around verb clusters.

V. CONCLUSION

This study described word order errors in the written Dutch of 30 Indonesian learners tested at the end of A1, A2, and B1. Word order errors were infrequent in these tests: 62 of 1,300 obligatory contexts (4.8%). Differences across levels were not established. In declarative inversion at all three levels, and in subordinate clauses at A2 and B1, the confidence intervals overlapped, so no difference is claimed and any difference between levels would in any case be confounded with test form and task.

The main contribution lies in the nature of the errors. The existing word order category, which is defined with an emphasis on verb clusters, matched only 4 of the 62 errors, whereas 56 concerned the position of the finite verb: 30 in main clauses and 26 in subordinate clauses. Without further subcodes, these errors would either remain unclassified or be merged with verb-cluster errors, and the two finite-verb patterns, which arise in different structures, would not be visible as separate error types. The refined subcodes make this distinction explicit: verb-second in main clauses (3.9.1) and finite-verb position in subordinate clauses (3.9.2) are reported separately, whereas verb clusters and particles (3.9.3) and middle-field order (3.9.4) are reported as a single category, because only six errors were

found. The subcode assignment agreed in 54 of the 57 contexts coded as errors in both coding rounds.

These findings have two implications, both for the group studied. For error taxonomies, word order should not be treated as a single undifferentiated category: separating the finite verb in main clauses from the finite verb in subordinate clauses describes these learners' errors more precisely. For teaching, feedback and instruction for this group could target the finite verb after a fronted element and at the end of a subordinate clause, rather than verb clusters; however, this remains a hypothesis to be tested in intervention studies, rather than a finding of the present study. The findings are limited to 30 learners who completed all three levels of one programme, with the data coded by one coder with intra-coder reliability only ($\kappa = 0.85$, weighted for the sampling of contexts). The subcodes are a proposal, not a validated instrument. Further work should include a second coder, information about learners' other languages, controlled tasks across levels, and a comparison group, so that the extent to which the pattern found here holds for other learners of Dutch can be tested.

ETHICS STATEMENT

The data used in this study were obtained from the publisher with official permission for research purposes. All data collection procedures complied with the publisher's policies and applicable ethical standards. No unauthorized access was involved in this research.

CREDIT AUTHOR STATEMENT

Riska Risdiani was responsible for conceptualizing the research, conducting the research, writing the original draft, and arranging the formal analysis.

Untung Yuwono was responsible for methodological development, data analysis, validation, review, and revision.

Sisilia Setiawati Halimi was responsible data collection, review, and editing.

Sonya Puspasari Suganda was responsible for data collection, data analysis, and revision.

ACKNOWLEDGEMENTS

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

DECLARATION OF COMPETING INTERESTS

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

AI USE STATEMENT

During the preparation of this work, the authors used Claude to improve the clarity and readability of the manuscript. All scientific content, coding of the learner data, analyses, interpretations, and conclusions were developed by the authors. The authors reviewed and edited all AI-assisted suggestion and take full responsibility for the content of the final manuscript.

REFERENCES

Baker, P. (2006). *Using corpora in discourse analysis*. Continuum International Publishing Group. https://doi.org/10.5040/9781350933996

Broekhuis, H., & Corver, N. (2026). *Syntax of Dutch: Verbs and verb phrases: Vol. 2. Clausal complements and adverbial modification* (2nd ed.). Routledge. https://doi.org/10.4324/9781042003631

Burgos, P., Cucchiarini, C., Van Hout, R., & Strik, H. (2013). Pronunciation errors by Spanish learners of Dutch: A data-driven study for ASR-based pronunciation training. In *Interspeech 2013* (pp. 2385–2389). International Speech Communication Association. https://doi.org/10.21437/interspeech.2013-556

Corder, S. P. (1967). The significance of learner's errors. *IRAL: International Review of Applied Linguistics in Language Teaching*, 5(1–4), 161–170. https://doi.org/10.1515/iral.1967.5.1-4.161

Corder, S. P. (1975). Error analysis, interlanguage and second language acquisition. *Language Teaching & Linguistics: Abstracts*, 8(4), 201–218. https://doi.org/10.1017/S0261444800002822

De Bruycker, G., & Haeseryn, R. (1998). [Review of the book *Algemene Nederlandse spraakkunst*, by

W. Haeseryn, K. Romijn, G. Geerts, J. de Rooij, & M. van den Toorn]. *Babel: Revue Internationale de la Traduction / International Journal of Translation*, 44(4), 359–362. https://doi.org/10.1075/babel.44.4.14deb

Fadhilah, F. (2026). The role of two L1s in L3 English writing. *AILA Review*. Advance online publication. https://doi.org/10.1075/aila.24018.fad

Gayo, H., & Widodo, P. (2018). An analysis of morphological and syntactical errors on the English writing of junior high school Indonesian students. *International Journal of Learning, Teaching and Educational Research*, 17(4), 58–70. https://doi.org/10.26803/ijlter.17.4.4

Gilquin, G. (2020). Learner corpora. In M. Paquot & S. T. Gries (Eds.), *A practical handbook of corpus linguistics* (pp. 283–303). Springer International Publishing. https://doi.org/10.1007/978-3-030-46216-1_13

Hendrikx, I., Van Goethem, K., & Wulff, S. (2019). Intensifying constructions in French-speaking L2 learners of English and Dutch: Cross-linguistic influence and exposure effects. *International Journal of Learner Corpus Research*, 5(1), 63–103. https://doi.org/10.1075/ijlcr.18002.hen

Hidajat, B. (2014). *Nederlands als tweede taal voor Indonesiërs* [Master's thesis, Universiteit Utrecht]. Utrecht University Repository. https://studenttheses.uu.nl/bitstream/handle/20.500.12932/18563/Scriptie%20NT2-handleidingBI.pdf?sequence=3

Istanti, W., Seinsiani, I. G., Visser, J. G., & Lazuardi, A. I. D. (2020). Comparative analysis of verbal communication vocabulary between Indonesian-Afrikaans for foreign language teaching. *International Journal of Language Education*, 4(3), 391–402. https://doi.org/10.26858/ijole.v4i3.15106

Jagtman, M., & Bongaerts, T. (1995). Verb placement in L2 Dutch: A double case study. *Toegepaste Taalwetenschap in Artikelen*, 53, 159–170. https://doi.org/10.1075/ttwia.53.14jag

James, C. (2013). *Errors in language learning and use: Exploring error analysis*. Routledge.

Jones, R. (2007). *Loan-words in Indonesian and Malay* (with the Koninklijk Instituut voor Taal-, Land- en Volkenkunde & Indonesian Etymological Project). KITLV Press.

Jordens, P. (2006). Inversion as an artifact: The acquisition of topicalization in child L1- and adult L2-Dutch. *EUROSLA Yearbook*, 6, 101–120. https://doi.org/10.1075/eurosla.6.08jor

Khansir, A. A. (2012). Error analysis and second language acquisition. *Theory and Practice in Language Studies*, 2(5), 1027–1032. https://doi.org/10.4304/tpls.2.5.1027-1032

Kosasih, M. M. (2019). Interlingual and intralingual interferences in English narrative essays written by Indonesian students. *International Journal of English Language and Literature Studies*, 8(3), 110–122. https://doi.org/10.18488/journal.23.2019.83.110.122

Mariappan, R., Tan, K. H., Yang, J., Chen, J., & Chang, P. K. (2022). Synthesizing the attributes of computer-based error analysis for ESL and EFL learning: A scoping review. *Sustainability*, 14(23), Article 15649. https://doi.org/10.3390/su142315649

McDowell, L. (2023). Japanese scientists' English for research publication purposes. *Journal of English for Research Publication Purposes*, 4(2), 109–139. https://doi.org/10.1075/jerpp.22007.mcd

Meunier, F. (2006). [Review of the book *Analysing learner language*, by R. Ellis & G. Barkhuizen]. *International Journal of Lexicography*, 19(1), 110–111. https://doi.org/10.1093/ijl/eck003

Moseley, H. N. (2013). Error analysis and propagation in metabolomics data analysis. *Computational and Structural Biotechnology Journal*, 4(5), Article e201301006. https://doi.org/10.5936/csbj.201301006

Nuriah, Z. (2019). *Pergeseran diatesis dalam terjemahan teks ilmiah dari bahasa Belanda ke dalam bahasa Indonesia* [Doctoral dissertation, Universitas Indonesia]. UIana Institutional Repository. https://lib.ui.ac.id/detail?id=20493115&lokasi=lokal

Nurmalia, L., & Nuraeni, C. (2021). An analysis of errors in English writing: A case study the third semester students of UBSI. *Jurnal Arbitrer*, 8(1), 46–50. https://doi.org/10.25077/ar.8.1.46-50.2021

Prihantoro, P., Ishikawa, S., Liu, T., Fadli, Z. A., Rini, E. I. H. A. N., & Kepirianto, C. (2025). DICO-JALF v.1.0: Diponegoro Corpus of Japanese Learners as a Foreign Language in Indonesia with AI error annotation and human supervision. *Jurnal Arbitrer*, 12(3), 274–288. https://doi.org/10.25077/ar.12.3.274-288.2025

Rankin, T. (2011). The transfer of V2: Inversion and negation in German and Dutch learners of English. *International Journal of Bilingualism*, 16(1), 139–158. https://doi.org/10.1177/1367006911405578

Ranstam, J. (2008). Methodological note: Accuracy, precision, and validity. *Acta Radiologica*, 49(1), 105–106. https://doi.org/10.1080/02841850701772706

Riyanto, S. (2011). *Basantara Belanda-Indonesia: Kajian psikolinguistik pada tataran sintaksis* [Doctoral dissertation, Universitas Indonesia]. UIana Institutional Repository. https://lib.ui.ac.id/detail?id=20305935

Sánchez, L., & Bardel, C. (2017). Transfer from an L2 in third language learning: A study on L2 proficiency. In T. Angelovska & A. Hahn (Eds.), *Bilingual processing and acquisition* (Vol. 5, pp. 223–250). John Benjamins Publishing Company. https://doi.org/10.1075/bpa.5.11san

Schetters, P. (2020). *Accuracy in the written production of advanced learners of Dutch as a foreign language with German L1* [Master's thesis, University of Zurich]. Zurich Open Repository and Archive. https://doi.org/10.5167/UZH-187218

Schmitz, T., Chamalaun, R., & Ernestus, M. (2018). The Dutch verb-spelling paradox in social media. *Linguistics in the Netherlands*, 35, 111–124. https://doi.org/10.1075/avt.00008.sch

Sneddon, J. N., Adelaar, K. A., Djenar, D. N., & Ewing, M. C. (2010). *Indonesian: A comprehensive grammar* (2nd ed.). Routledge.

Stam, T. (2018). *Veel voorkomende fouten in spreekuitingen: Een rapportage van een foutenanalyse*. Cito. https://cito.nl/media/53jbra3w/cito-veel-voorkomende-fouten-in-spreekuitingen-een-rapportage-van-een-foutenanalyse.pdf

Taaladvies.net. (2025). *Termen: Bijzin*. Nederlandse Taalunie. https://taaladvies.net/termen-bijzin/

Tan, X. (2022). An analysis of syntactic errors: One case study. In A. Holl, J. Chen, & G. Guan (Eds.), *Proceedings of the 2022 5th International Conference on Humanities Education and Social Sciences (ICHESS 2022)* (Vol. 720, pp. 489–501). Atlantis Press. https://doi.org/10.2991/978-2-494069-89-3_58

Terziyan, T. (2024). Turkish spelling errors by Turkish-Dutch bilingual children. *Ampersand*, 13, Article 100197. https://doi.org/10.1016/j.amper.2024.100197

Udayana, I. N., Aryawibawa, I. N., & Madia, I. M. (2024). Canonical versus non-canonical passives in Indonesian. *Jurnal Arbitrer*, 11(4), 430–440. https://doi.org/10.25077/ar.11.4.430-440.2024

Utami, I. G. A. L. P., & Mahardika, I. G. N. A. W. (2023). Grammarly and grammatical errors reduction: A case for non-native English teachers' professional learning. *International Journal of Language Education*, 7(2), 226–239. https://doi.org/10.26858/ijole.v7i2.46431

van Beuningen, C. (2011). *The effectiveness of comprehensive corrective feedback in second language writing*. BOXPress.

Van Doremalen, J., Cucchiarini, C., & Strik, H. (2013). Automatic pronunciation error detection in non-native speech: The case of vowel errors in Dutch. *The Journal of the Acoustical Society of America*, 134(2), 1336–1347. https://doi.org/10.1121/1.4813304