Analysing Morphological Errors in ESL Graduating Students’ Writing based on Surface Structure Taxonomy

Kamisah Ariffin1, Norizul Azida Darus2, Norhajawati Abdul Halim3 & Nurul Akmal Awang4

1,4Academy of Language Studies, Universiti Teknologi MARA Pahang, 26400 Bandar Tun Abdul Razak Jengka, Pahang, Malaysia. kamisah@uitm.edu.my, nurul.akmal@uitm.edu.my

2,3Academy of Language Studies, Universiti Teknologi MARA Perlis, 02600 Arau, Perlis, Malaysia. norizulazida@uitm.edu.my, norhajawati@uitm.edu.my

*corresponding author

Article history:
Received: 31 May 2021 Accepted: 24 July 2021 Published: 31 July 2021

Abstract

Empirical studies have examined errors committed by ESL learners at different levels of study in terms of its inconsistency with the standard form of English grammar rules in general. This study, on the other hand, looked into the errors in the English morphological system of a language that deals with the minimal units of linguistic form and meaning. By understanding the errors from the morphological perspective, instructors may also be able to figure out the specific causal factors that can help devise their methods and approach to teaching. As the English language performance of the graduates in this country has been publicly lamented by employers, this study focused on the writing products of graduating students to see the common errors made and to understand the interfering factors so that any intervention initiatives to improve their English language proficiency can be objectively proposed. The data were procured from a mock writing exit test of 60 graduating students from a public university. The Theory Taxonomy of Dulay or Surface Structure Taxonomy framework was used for data analysis. The data were treated quantitatively in terms of frequency counts of errors occurred in each category. The findings indicate that the errors were prevalent in the Omission category, followed by Addition, Misformation and Misordering. This has significant pedagogical implications on developing intervention or remedial programmes for graduating students.

Keywords: error analysis, morphology, interlingual, intralingual, Surface Strategy Taxonomy, textese

Introduction

English holds the status as the second important language in Malaysia. With this status, it is a compulsory subject to be learned in schools from the primary level up to the secondary level. Students who have gone through the national education system in this country must have had at least eleven years of learning the language. With this length of exposure in school and the surrounding that supports and even demands the mastery of the English language, Malaysian students are expected to be proficient users of the language. However, as in many second language contexts, it is a notable fact that this expectation is wide of the mark (English proficiency, 2018; Poor English, 2018; Rusreena et al. 2018, Zamri et al., 2021).

Studies have shown that despite the long years and huge amount of hours of learning English, some students still have problems in using the language accurately both in speaking and writing (English proficiency, 2018; Poor English, 2018; Rusreena et al. 2018, Zamri et al., 2021). The Malaysia Education Blueprint’s target is for 70% of students to pass English with a credit by 2025, but to date, less than 30% have done so.
sobering fact is, 3,500,000 students in Malaysia do not meet the minimum English proficiency required from secondary school graduates. This means that 72% of Malaysian students who will enter the workforce are at a disadvantage (Ministry of Education, Malaysian Education Blueprint 2013-2025, p.33, p.114). Graduates have been lamented over their inability to use the language. Since the current international business lingua franca is English, employers are constantly on the lookout for candidates who are proficient in the language to hire. It is found that only 20% of graduates were considered by employers to be well-prepared to use English at work (Zainab et al., 2017). Thus, poor English proficiency has major implications on the graduates’ employability chances.

There has been considerable number of research worldwide on ESL students’ proficiency, particularly errors in writing (Miko, 2018; Hasan and Munandar, 2018; Al-husban, 2017; Suwastini and Yukti, 2017, Kafipour and Khojasteh, 2011). Numerous types of errors in the second language learners’ writing output have been analysed, identified and described. Yet, the errors still remain in most contexts of learners’ writing. A look at these research indicate that most of them had examined the errors in terms of its inconsistency with the standard form of English grammar rules in general. Studies that looked into the errors from the morphological perspective of the language itself have been scarced. The researchers feel that it is important to examine the errors in the English morphological system of a language that deals with the minimal units of linguistic form and meaning. By understanding the errors from the morphological perspective, instructors may also be able to figure out the specific causal factors that can help devise their methods and approach to teaching.

Errors in Language Learning

An error signifies imperfect and incomplete learning in the use of a word, speech act or grammatical items (Richards et al., 2002). Norrish (1983) considered errors as ‘a systematic deviation that happens when a learner has not learnt something, and consistently gets it wrong’ (p.7).

The two major sources of errors in learning a second language are interlingual and intralingual errors (Brown, 2007). Interlingual errors come from interference from the first language which includes grammar rules and vocabulary. Intralingual errors, on the other hand, occur when language learners produce the language using their own hypotheses of the target language. Richard (1974) suggested this as developmental errors as the hypotheses are based on the learners’ limited knowledge and experiences. Richard (1974) put forward four types of intralingual errors: i) overgeneralization, ii) ignorance of rule restriction, iii) incomplete application of the rule, and iv) false concept hypothesis.

Overgeneralisation errors occur when students tend to apply the same rules in all situations. Ellis (1994) provides the example of ‘He cans sing’ to indicate the application of the singular subject agreement for all verbs. The ignorance of rules restriction errors are related to overgeneralization errors. They occur when a rule is not used in the context that it should have been used. The incomplete application of rules errors occur when some important elements in a word, phrase or sentence are not presented or being omitted. An example of this is, ‘You like sing?’ instead of ‘Do you like to sing?’ (Ellis, 1994). Lastly, the false concept hypothesis involves the students’ misinterpretation of the target language rule, resulting the misformation of the grammatical elements. For example, ‘It was happened last Sunday’ instead of the correct ‘It was last Sunday’ (Ellis, 1994).
Morphology

As one of the significant components in linguistics, it is crucial to understand the concept of morphology. Morphology is a term that refers to the formation of linguistic units and its structures (Katamba and Stonham, 2006) and formation (O’Grady and Archibald, 2009). In other words, it is about the study of words and its construction. In order to be proficient in any language, it is obligatory for learners to have the knowledge in morphological system so that they may practice the language well. The study of morphology requires the learners to understand about morphemes or the smallest unit in English linguistics with recognizable meaning. Each morpheme plays a vital role in every single word whereas it may lead to another particular meaning or word.

Morphemes can be separated into two sub-categories, namely, free morpheme and bound morpheme. A free morpheme is considered independent as the morpheme can always stand on its own with specific meaning. For instance, the word ‘teach’ is well-understood as to impart knowledge to someone about something. On the other hand, the morpheme ‘er’, has no absolute meaning. This is because the morpheme ‘-er’ is dependent, or it cannot stand alone. It needs to be attached to another morpheme as in ‘teach’ to form ‘teacher’ which now can be clearly understood as a person who does the teaching. Hence, the morpheme ‘-er’ is considered part of bound morpheme. Examples of bound morphemes are affixes such as prefixes (e.g.: re-) or suffixes (e.g.: -ness).

In English, both free and bound morphemes can be further divided as shown in Figure 1 below.

Free morpheme can be categorized as lexical morpheme and functional morpheme. Lexical morpheme, or also known as content word, carries lexical meaning in which it is semantically meaningful. For instance, parts of speech such as nouns (e.g.: book), verbs (e.g.: eat) and adjectives (e.g.: happy) are considered as lexical morphemes as they convey particular meaning that can be. On the other hand, functional morpheme, or function word, will function grammatically when it is attached to a lexical morpheme. Parts of speech, including prepositions (e.g.: on), conjunctions (e.g.: because) and pronouns (e.g.: I), are examples of functional morphemes as they play grammatical role in a piece of writing.

Bound morpheme can also be divided as derivational morpheme and inflectional morpheme. As the name suggests, derivational morpheme involves particular affixes that derive or construct another word with the different word class of the original word (Katamba and Stonham, 2006; Jackson, 2007). For example, the word ‘healthy’ is derived from the word ‘health’. It alters the word class of noun (health) to adjective (healthy).
Inflectional morpheme, on the other hand, will never change the word class. However, the inflection involves the grammatical function of the word. For instance, ‘book’ and ‘books’ are under the same word category of noun. Nevertheless, they are distinct from one another in terms of grammatical function, namely, plurality since ‘book’ is noticeably singular while the suffix -s conveys that the word ‘books’ is in plural.

As part of the basic element in language study, it is common to observe the errors committed by the ESL learners especially in morphological elements. This is the concern of Dulay, Burt and Krashen (1982) who classified errors in language into four taxonomies including the linguistics category, the surface structure taxonomy, the comparative taxonomy as well as the communicative effect taxonomy. However, the central point of this paper only involves the surface structure taxonomy.

**Surface Strategy Taxonomy**

The surface structure taxonomy is the framework proposed by Dulay, et al. (1982). It concerns on how surface structure is altered by the learners that eventually cause the errors. According to this theory, four types of errors can be identified, namely, omission, addition, misformation and misordering.

Omission refers to the absence of major item that must appear in a well-formed utterance. The omission can be in terms of i) content such as a missing noun, and ii) grammatical which involves the omission of grammar items. Contrastingly, addition refers to the presence of the element that should not appear in well-formed utterance. It can be further subdivided into i) double marking which occurs due to the failure to omit particular element in linguistics formation, ii) regularization which is the wrong application of the class of exceptions, and iii) simple addition which involves adding unnecessary morpheme to a word/sentence. Misformation errors are committed because of the utilization of wrong morpheme and structure in the sentence. It can be subcategorized into i) regularization occur when a regular marker is used for irregular one, ii) archi-forms which wrongly deal with demonstrative, and iii) alternation that is related to archi-forms that give way to free alternation. As for misordering, this type of error points out the incorrect arrangement or order of the morphemes in an utterance. All in all, the surface structure proposes that learners might omit necessary items, add unnecessary items, misform the items, or disorder the items (Dulay et al., 1982’ Ellis, 1994).

The following table provides some examples of these errors based on the taxonomy and its subcategories.

<table>
<thead>
<tr>
<th>TAXONOMY</th>
<th>Error</th>
<th>Correct Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omission</td>
<td>Content</td>
<td>I buy ∞.</td>
</tr>
<tr>
<td></td>
<td>Grammatical</td>
<td>She ∞ beautiful.</td>
</tr>
<tr>
<td>Addition</td>
<td>Double marking</td>
<td>She doesn’t eats.</td>
</tr>
<tr>
<td></td>
<td>Regularization</td>
<td>I saw many sheeps.</td>
</tr>
<tr>
<td></td>
<td>Simple addition</td>
<td>Go at there.</td>
</tr>
<tr>
<td>Misformation</td>
<td>Regularization</td>
<td>I cut the tree.</td>
</tr>
</tbody>
</table>
Methodology

The objectives of this study are to analyze the types of morphological errors found in ESL graduating students’ writing and the causal factors for the errors. This can be expressed by the following research questions:

1. What are the common types of morphological errors made by graduating ESL students in their writing?
2. What would be the possible factors of the morphological errors in the students’ writing?

The data were procured from a mock writing test of 60 ESL graduating students from two study programmes of a public university in Malaysia. The test is a compulsory exit test for graduating students to gauge their level of English competency for workplace level. The writing component consists of two tasks: writing an email and an expository essay on workplace situations. This test is exclusively designed by the university based on the standard Common European Framework of Reference (CEFR) for Languages. The mock test used for this data was a test set from the previous semester.

The data analysis involved using the Theory Taxonomy of Dulay or Surface Structure Taxonomy as the framework. All errors found in the students’ writing were analyzed and categorized based on this framework. The analysis were checked and confirmed by a language instructor who had more than twenty years’ experience in language teaching. The errors were treated quantitatively in terms of frequency counts for each category, and later converted into percentage. Samples of errors from each category were presented, described and discussed in terms of their anomalies from their correct forms. In addition, empirical literature related to sources of errors in writing was also used to identify the possible sources of the errors found in the students’ writing.

Findings & Discussion

Common types of morphological errors made by graduating ESL students in their writing

The analysis indicates that majority of the students, though at the graduating level, still have not mastered the English language as expected of them. The data show that out of the sixty written scripts, only six were error free, indicating a very small percentage of these students (10%), were at the proficient level in writing. The remaining scripts contained all types of errors ranging from Omission to Misordering. Table 2 shows the frequency of errors found in the students’ writing according to the taxonomy.

<table>
<thead>
<tr>
<th>TAXONOMY</th>
<th>Frequency of Errors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omission</td>
<td>Content</td>
<td>74 (19.0%)</td>
</tr>
<tr>
<td>Grammatical</td>
<td></td>
<td>140 (36.0%)</td>
</tr>
</tbody>
</table>
As can be seen from the table, errors from the Omission category top the list of errors committed by the students (55.0%) with 19.0% found in the Content and 36.0% in the Grammatical sub-categories. Although the findings are not consistent with several previous studies that reported Misformation as most prevalent among the error categories (Fitriani, 2020; Ozkayran and Yilmaz, 2020; Yakub and Hossain, 2018; Novita, 2014), the results indicate that content and grammatical omissions are the most problematic areas that should be accentuated by the educators when drawing any intervention program for these graduating students. Table 3 shows some examples of errors found in the students’ writing scripts.

Table 3: Errors in Omission Category

<table>
<thead>
<tr>
<th>TAXONOMY</th>
<th>Errors</th>
<th>(Script)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>We need to respect each other’s.</td>
<td>(Script 45)</td>
</tr>
<tr>
<td></td>
<td>The second important is maintaining a positive vibe.</td>
<td>(Script 23)</td>
</tr>
<tr>
<td>Omission</td>
<td>The diversity plays an important role in building the great reputation to the company.</td>
<td>(Script 3)</td>
</tr>
<tr>
<td>Grammatical</td>
<td>The last way to enhance better relationship among the staff is understand and appreciate the presence of workplace diversity.</td>
<td>(Script 4)</td>
</tr>
</tbody>
</table>

The above are a few of the many errors in the omission category found. Most of the missing words are nouns, verbs and adverbs that cause the sentences to be ungrammatical or incomplete in terms of content. For example, the missing nouns in the sentence ‘We need to respect each other’s’ and ‘The second important is maintaining a positive vibe’, had caused the sentences to be incomplete. Meanwhile the missing inflection of ‘–ing’ for the gerund in the sentence ‘The diversity plays an important role in building the great reputation to...’
the company’, and the preposition ‘to’ in ‘The last way to enhance better relationship among the staff is understand and appreciate the presence of workplace diversity’ have caused both sentences to be grammatically incorrect.

The second prevalent errors found in the students’ writing are in the Addition category (29.6%). This is made up of errors in Simple addition (23.9%), Regularization (3.3%) and Double marking (2.3%). The data show that the students had the tendency to add small unnecessary words in the sentences. This is in line with other studies which found errors that were related to unnecessary items in the students writing such as prepositions, articles or conjunctions (Maolida and Hidayat, 2021; Juriah and Kusumawati, 2015). In addition, Regularization errors that involve overgeneralization of grammar singular/plural rules and Double marking errors are also evident in the data. Table 4 shows some examples of errors found in the data analyzed.

<table>
<thead>
<tr>
<th>TAXONOMY</th>
<th>Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple addition</td>
<td><em>In the other words it also important for the sake of the future towards the company.</em> (Script 12)</td>
</tr>
<tr>
<td></td>
<td><em>I was thrilled to join with a few staff from the other departments.</em> (Script 16)</td>
</tr>
<tr>
<td>Addition</td>
<td><em>I am pleased to share the informations that I’ve gained with my beloved colleagues as I think it is significant to share with.</em> (Script 18)</td>
</tr>
<tr>
<td>Regularization</td>
<td><em>Furnitures should be arranged nicely to promote communication among the staff.</em> (Script 49)</td>
</tr>
<tr>
<td>Double marking</td>
<td><em>Second, we should all use language that everyone could understood when we are talking among people with different races.</em> (Script 5)</td>
</tr>
<tr>
<td></td>
<td><em>We never did thought about the importance of cross-cultural communication.</em> (Script 8)</td>
</tr>
</tbody>
</table>

The examples above show that errors occur when the students added unnecessary article ‘the’ in the sentence ‘In the other words it also important for the sake of the future towards the company’ and the preposition ‘with’ in ‘I was thrilled to join with a few staff from the other departments’. Another error found under the Addition
category is related to the students’ misunderstanding of the exception in the plural forms of ‘information’ and ‘furniture’ in the sentences ‘I am pleased to share the informations that I’ve gained with my beloved colleagues as I think it is significant to share with,’ and ‘Furnitures should be arranged nicely to promote communication among the staff.’ respectively. Errors in double marking such as ‘could understood’ in ‘Second, we should all use language that everyone could understood when we are talking among people with different races.’ and ‘did thought’ in ‘We never did thought about the importance of cross-cultural communication.’ are also evident.

While other studies highlighted Misformation errors being most prevalent in the students’ writing, the analysis in this present study reports that errors in the Misformation category ranks third after Omission and Addition. Only 11.3% of errors consisting of errors in Archi-forms (4.4%), Regularization (4.1%) and Alternation (2.8%) are evident throughout the writing scripts analyzed. Studies have claimed that errors in misformation are largely caused by students’ lack of vocabulary and grammar development (Suhono, 2016; Fitriani, 2020). This is in line with the errors shown in Table 5 in the Misformation category in this study.

<table>
<thead>
<tr>
<th>TAXONOMY</th>
<th>Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archi-forms</td>
<td>Workplace is a place that we are able to meet and work with a lot of people just like when we first enter university. (Script 12)</td>
</tr>
<tr>
<td></td>
<td>We can eat together during we rest. (Script 48)</td>
</tr>
<tr>
<td>Misformation</td>
<td>The course itself costed a lot. (Script 5)</td>
</tr>
<tr>
<td>Regularization</td>
<td>I have became an expert at using the platform. (Script 49)</td>
</tr>
<tr>
<td>Alternation</td>
<td>People should try to understand, and then they can sympathy.</td>
</tr>
<tr>
<td></td>
<td>(Script 53)</td>
</tr>
<tr>
<td></td>
<td>It is an unappropriate behaviour. (Script 51)</td>
</tr>
</tbody>
</table>

The Archi-forms type of errors in the Table 5 shows the students’ inappropriate use of grammar and vocabulary. In the sentence ‘Workplace is a place that we are able to meet and work with a lot of people just like when we first enter university.’ the wrong tense was applied in the subordinate clause ‘.. when we first enter (the) university.’ As for the sentence ‘We can eat together during we rest.’ the word ‘break’ should be used instead of ‘rest’. Regularization errors, on the other hand, are resulted from the students’ misunderstanding of
the irregularity of the verb formation in tenses. The use of ‘costed’ for the past tense of ‘cost’ in the sentence ‘The course itself costed a lot.’ shows the student’s overgeneralization of the past tense form of the verb. Similarly, ‘have become’ was used in ‘I have become an expert at using the platform.’ instead of ‘have become’. As for alternation, it can be seen that the errors are in the form of inappropriate selection of conjunction and derivation. For example, the conjunction ‘and then’ was used in the sentence ‘People should try to understand, and then they can sympathy.’ instead of ‘so that’. In the sentence ‘It is an unappropriate behaviour’, the wrong derivation of ‘unappropriate’ was used instead of ‘inappropriate’.

The least type of errors committed by the students was Misordering. Only 4.1% of errors were related to the incorrect placement of a morpheme or group of morphemes in an utterance. Table 6 shows the samples of errors under this category.

Table 6: Errors in Misformation Category

<table>
<thead>
<tr>
<th>TAXONOMY</th>
<th>Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Misordering</td>
<td>How you can show your appreciation to other cultures? (Script 26)</td>
</tr>
<tr>
<td></td>
<td>Never tell what are you thinking about their religion. (Script 32)</td>
</tr>
</tbody>
</table>

The examples in Table 6 indicate that errors occur in terms of word order of phrases which is largely due to the influence of the sentence constructions of the students’ first language (L1), Bahasa Malaysia. The misordering error occurred in the modal+subject+verb phrase in the construction of interrogative form of a sentence in ‘How you can show your appreciation to other cultures’. Similarly, the wrong word order was applied in the sentence construction using a noun phrase as an object in ‘Never tell what are you thinking about their religion.’

Possible factors of the morphological errors in students’ writing

The analysis pointed out three major factors that caused the errors in the students’ writing. These are i) interference from students’ L1, ii) students’ wrong hypotheses of the target language rules, and iii) influence of the textese register.

When examining errors in L2 learning, the issue of L1 interference has had a long history. Extensive studies have been carried out on first language interference and its effect on second language learners. It has been proposed the transfer of mother tongue (native) language is one of the causal factors for L2 learners’ errors in their writing (Lightbown & Spada, 1999; Touchie, 1986). The findings of the present study also proposed similar contention. The findings point out that interference of mother tongue, or what has been termed as interlingual errors (Brown, 2007), has led to the errors found in the students’ writing. The different rules between their L1 and English might have caused the errors especially when the literal word-to-word translation method was employed in their writing. In addition, the absence of subject-verb agreement, noun inflection of ‘s to denote possessiveness, noun inflection of s to denote plurality and verb inflection –ed to denote past tense in the mother tongue, can result in the errors of omission, addition and misformation in the students’ writing.

The findings are also in line with Brown’s (2007) and Richard’s (1974) suggestions that the errors can be intralingual or developmental errors. Students’ wrong hypotheses of the target language rules had resulted in
the production of errors. Due to their limited knowledge in the target language, and combined with the interference from L1, it is easy to see errors that are related to Omission (‘They ^ not know’), Addition (‘We have to aim highly’ (script 24), Misformation (‘Its such a great idea’ (Script 31), and Misordering (‘We don’t really understand why are we not respect other people’ (Script 60)

Another factor influencing the errors in the students’ writing is the prominent register in today’s communication, i.e textese. This is a special type of register used in chatting using mobile phone or online. Textese allows the omission of words and the use of textism such as phonetic replacements and drop words. Studies have also reported on the effects of textese on students’ written production (Wood, Kemp and Waldron., 2014; Ya-dong and Kui, 2013). However, it is not within the scope of the present study to examine the effect of textese on the students’ writing. Nevertheless, the evidence of the use of textese in the data implies that this type of register does exert its influence in the students’ writing. The examples below illustrate students’ morphological errors in terms of misformation.

At the end of the course we picture together. (Script 51)

We just wantz understanding so that we can all live happily. (Script 33)

The word ‘picture’ in this sentence is a slang or common phrase by chatters to refer to the act of taking photographs. Thus, it seems that this vocabulary has become ingrained in the student’s repertoire, influencing his or her writing. Similarly, ‘wantz’ is derived from the phonological spelling of ‘wants’ and often uses in informal online/mobile chatting.

Conclusion

Although studies on error analysis on second language learners’ writing have been replete and well-researched, revisiting this topic may be worthwhile as errors in second language learning consistently and persistently occur throughout second language learning. Analysing students’ errors is still very relevant in English language and teaching as teachers can diagnose the students’ problems in writing and provide effective remedies.

The present study is significant as it looked into the errors from the morphological perspectives. This contributes more understanding towards the types of errors made and the causal factors in this field of error analysis. Furthermore, this study focused on the sampling that has been rarely examined, i.e. the graduating students. The findings not only inform us the level of our future graduates’ English language proficiency; they also indicate the points that should be taken into consideration in proposing and designing any intervention initiatives to improve the students’ English language proficiency. For example, the high frequency of omission errors found in the writing and the causes indicate the aspect that should be focused on in any intervention or remedial programmes rather than a complete re-visit of grammar courses that may cause boredom and weariness among the students.

References


Kamisah Ariffin, Norizul Azida Darus, Norhajawati Abdul Halim, Nurul Akmal Awang

Analysing Morphological Errors in ESL Graduating Students’ Writing based on Surface Structure Taxonomy


