The Impact of Listening Phonological Errors on Speaking

Syahfitri Purnama*a, aEnglish Education Study Program, Faculty of Language and Art, Indraprasta PGRI University, Jakarta, Indonesia, E-mail: aasyahfitripurnama@gmail.com

Phonological error in communicating will let the listener gain a different meaning and communication becomes impeded. Students’ errors are due to their lack of understanding of the sound system of language as their second-language acquisition. This research tried to examine what type of phonological errors are made by students when they are listening to the short and how it will impact their speaking. The data collecting was conducted in the English Department language laboratory of The National University in Jakarta by second-semester students of the Faculty of Letters in the subject of spoken English. The purpose of this research study is to ascertain the difficulties which are faced by the students when learning basic Spoken English I. The method used is descriptive with content analysis technique. The result showed the biggest of surface structure taxonomy of phonological errors created by the students when they are listening to the short story and has impacted on speaking is global errors in diphthong (61.21%). This is because in Indonesia there is no sound of a diphthong. These global errors will have an effect on good communication. The students should study structure of the phonological system in the target language, especially diphthong sound, in addition to vowels and consonants. It is expected that the lecturer often guides student’s pronunciation based on the point and the manner of articulation and able to.

Key words: Error analysis, manner of articulation, phonology, point.
Introduction

Humans are social beings that always interact with other human beings through language, without human beings’ interactions through language and without human language, it is impossible for them to express their thought. Developing relationships through human communication can be achieved through spoken and written language.

English pronunciation is one of the most difficult skills to acquire and learners should spend lots of time to improve their pronunciation. Understandable pronunciation is one of the basic requirements of learners’ competence and it is also one the most important features of language instruction. Good pronunciation leads to learning while bad pronunciation promotes to great difficulties in language learning (Abbas Pourhosein Gilakjani 2016, International Journal of Research in English Education.)

According to Rachael and Knight (2012), there are a large number of body parts in speaking. Aside from anything else, we need our brain to plan words and sentences and to send appropriate signals to the rest of our body, those are the lips, nose and the lungs. The sounds of language are made by humans to express something and can be manifested in singing or in speech whereas, according to Finch (2013) a language speaker must have two speaking skills that govern grammar and use it. To be able to use language speaker must have two speaking skills that govern grammar and use it. To be able to use language (performance), learners must learn the language well. Learning the target language has constraints; it is due to differences in sound system (phonology), sentence structure (morph synthesis) and meaning (semantics). The differences in vowels and consonants in the target language cause the learner to make mistakes in speech.

The production of an individual speech sound typically involves the coordination of various articulator events, each contributing in some way to the overall acoustic signature of the sound. Speech sounds can be cross-classified according to these physical properties; some subset of the labels resulting from these cross-classifications are generally assumed to be part of our cognitive representations assumed to be part of our cognitive representations of speech sounds, typically going by the name of distinctive features or often simply “features” (The Oxford Handbook of language Production, 2014). Most students in kindergarten classrooms in Los Angeles will get some difficulties in learning, especially learning in pronouncing the syllable-blending task. Those of sounds of it are bamboo, napkin, peptic, table, wafer and window. During data collection, there is an about one second silence between the first and the second syllable in the prompts.(ISCA Archive, http://www.isca-speech.org/archive. This is common in the learning process; the learner makes his/her mistakes. It also happens in Indonesia in multiple various of languages. Errors can occur due to lack of exercise, limited study time, or lack of interest.
Learners’ errors are usually classified in different categories. Burt (1975) made a distinction between “global” and “local” errors. Global errors hinder communication and they prevent the learner from comprehending some aspects of the message. Local errors only affect a single element of a sentence, but do not prevent a message from being heard. According to Hendrickson (1980), global errors need to be corrected and they are generally held true. But the expressions such as “a news”, or “and advice” are systematic errors and they need to be corrected. As for pre-systematic errors, teachers can simply provide the correct one. For systematic errors, since learners have already had the linguistic competence, they can explain this kind of errors and correct themselves. So teachers just remind them when they commit such errors. As to what kind of errors should be corrected, it needs teachers’ intuition and understanding of errors. At the same time, the teacher should consider the purpose of the analysis and analyze them in a systematic way (2015: Errors Correction in Foreign Language Teaching, Naimi Amara). Thus, it is expected that the teacher is able to detect faults and then determine the right way or method to minimize or avoid mistakes made by the learner.

Related to my teaching experience, I am particularly concerned about the phonological errors made by the students of the English Department, Faculty of Letters, National University. The teacher’s error analysis was used to determine the student capability and difficulty in learning the target language (Corder, 1981). Richards and Schmidt (2010) refer it as language transfer, which is the effect of one language to another in the learning process. The two types of language transfer are the positive transfer which is a transfer that makes learning easier and may occur when both the native language and the target language have the same the form. Interference is the use of a native-language pattern or rule which leads to an error or inappropriate form in the target language (Richards and Schmidt, 2010; Ganyi, 2016).

The student’s difficulties in knowing the difference in English sounds can be overcome by learning the point of articulation and the place of articulations, vocal and diphthong maps that are utilized by teaching how to pronounce the English phonemic sounds. In addition, lecturers should ask the students to repeat and drill it several times so they know the difference between vowels, consonants and diphthongs.

Chomsky (2015) stated that the process of listening to speaking is the process of competence and performance. The problem of this research is determining what would be the biggest surface structure taxonomy of phonological errors created by the students when they are listening to the short story and how this has impacted on speaking. The result of the student pronunciation will be made in phonetic symbols and the errors of sound that they make can then be known. When a person conveys his or her minds, it takes several components of the language, for example, vocabulary, grammar and sound. To know the meaning of their pronunciation, the students should pronounce well. These speech skills require not only the
characteristics of language knowledge but also the ability to process information and process the language during a conversation.

Speaking is one aspect of language skills, which speaks as a process of communication, the process of changing the form a thought or feeling into a form of speech or meaningful language sound delivered to others. Speaking is an event of conveying one’s ideas (ideas, thought, feelings) to others. Speaking is not just the words of the utterance, but the main idea is to convey the points of thought regularly, in various languages, in accordance with the function of communication. Speaking skills as a productive language skill are the process of conveying, generating and informing. The purpose of this research is to know the phonological difficulties of students when learning Basic Spoken English I and also hope it can be used as an input in the development of teaching material by lecturers.

Materials and methods

The data was collected from students in the second semester of English Department, National University using the descriptive qualitative method with the content analysis technique, that is, analysis of phoneme error in listening and its impact when speaking. Identifying this phonemic error in speaking is done through the process of identification, categorization, description, classification and tabulation, interpretation and conclusion of research results. This method is used to provide an explanation of the errors encountered in the speech that begins with data collection, processing and analysis in order to obtain conclusions. The process of data analysis uses phonological theory, especially related to pronunciation. After learning of phonemic error in speaking, then the process of identification, categorization, description, classification and tabulation and also the interpretation, as well as the conclusion of the research, will be done. The instrument used to collect the data was the researcher herself with assisted tapes to record the recounted results of 20 students as respondents in the language laboratory. The recorder data is then phonetically transcribed and reviewed.

The steps in this research are as follows:

1. Make phonetic transcriptions based on the wrong pronunciation
2. Reconstruct sentences pronounced in accordance with acceptable pronunciation
3. Calculate and tabulate the frequency of phonological error
4. Makes a conclusion

Theoretical

According to Harmer (2015), there is two characteristics of language 2: (1) Communication:
Communication not only produces English Phonemes but also requires the speed of speech, for example, modifying the sound (assimilation), eliminating some phonemes when speaking (elision) and eliminating r (r), or also weakening the sound through contraction and emphasis pattern (through contractions and stress patterning); (2) Communication device: Communication requires paralinguistic when using velocity and pressure on certain parts of speech; varying volume and velocity also use signals that can be supportive when one is at the forefront of intuition. The use of communication tools contributes or helps in conveying the speaker’s intent. Harmer (2001) thinks that the speaker can use the tools when they are communicating, besides the use of structures.

He also says some social processes play an active role in communication, which is: (1) Language processing: Effective speakers require a set of language competencies for meaning to the listener. The language process includes words, phrases and sentences; and sentences to be said to be coherent in order to be understood; (2) interacting with others: Speaking interactions can be done with one, two, or more people, which means that speakers and listeners must respond directly to the information conveyed by the speaker, which is also related to the cultural knowledge of the listener.

In addition, speech skills can be interpreted as a person’s ability to use the language orally. To achieve that goal, one must not only possess a set of linguistic knowledge but also cultural rules.

**Cause/source of error**

The cause of the error that the learner has made in achieving the target language is ignorance. According to James (2013), this ignorance is due to a lack of declarative knowledge. This error is related to uncertainty when someone will use it and the learner borrows the source language instead if he does not know the word to be used, (L1 transfer error). If the learner knows the target language’s usage but fails to use it and still uses the source language (interference). According to James (2013), the main source of error based on the error category is: interlingual, intralingual, communication strategy and induced. It can be seen from the explanation below.

The steps in this research are as follows:

1. **Interlingual error**
   - This type of error is influenced by mother tongue: error between languages (interlingual errors). Learners will easily learn the target language if there is a resemblance to the mother tongue, but it will be difficult if there is a difference.

2. **Intralingual error**
   - Learners using target languages always make mistakes, which is due to an intralingual
error. An intralingual error is a mistake in the development of language acquisition. For example, learners use language strategies according to their needs and language strategies, which are needed in communicating; whereas, communication strategies are used to send ideas (encode) and receive ideas (decode).

(3) Morphophonology

Morphophonology is a branch of linguistics which analyzes the phonological or grammatical factors that determine the form of phonemes: also called morphophonemic. The basic unit recognized in such an analysis is the morphophoneme; for example, the notion of “plural” in English nouns includes /s/ (as in cats), /z/ (as in dogs), /iz/ (as in horses), zero (as in sheep) and the several other forms.

**Phonological error**

According to James (2013), a phonological error will result in mistakes in words and grammar (phonological in the cause but grammatical in effect), for example, in the use of third persons *make √ makes. In a loud reading, one will clearly make a phoneme sound; for example, the mistake made by a Thai learner is to replace the consonant sound of the target language with a consonant sound similar to the mother tongue’s consonant sound, the error in the interdental fricatives. This pronunciation error is one of those due to frequent interference caused by differences in the phonological system contained in the mother tongue in a foreign language. Making improvements in interference not only requires the development of mastery of word counts, but continuous practice, system understanding and habituation.

James (1998) also said that the error of the utterance consists of three kinds, namely, segmental error, combination error and suprasegmental error. Segmental errors include consonants and vowels; combination errors include cluster consonant, linkage and weak form and suprasegmental errors include rhythm, stress and intonation. The tendency to drop final consonants results in omissions or incorrect pronunciation of -s at the end of the words. This will make people difficult to understand and confuse their listeners.

**Segmental element**

Segmental elements of the unit in phonology show the difference in each sound. For example, in the interdental sound of fricative [ð] and [Ө], the learner pronounces becomes [t] while the word with [Ө] becomes [s], in the word [ð] sounded [d] as in there, they and either. Speech failure also occurs in the segmental vowel [Λ] spoken [z] in the word once as in the words trouble and up.

**Combinatorial**

Learners get into trouble pronouncing cluster consonants, especially on word end position;
for example, [wons] “once” is pronounced [won] and [neimd] named pronounced [neim], as in the words mind and fresh. The learner mispronounces the word in the last syllable /1/, for example in actual trouble [trʌb*u] [trʌbl]. The learner actually has no difficulty in pronouncing [l] sounds, as in like, only and learn. The difficulty faced by the learner is the position of sound /l/ adjacent to be [b]. She/he also has difficulty in pronouncing the combination of the linkage form for example, the Thai learner cannot say ‘linking’ [r]’ to the word whenever his /r/, she/he says [wenevɔ hiz]. In addition, linking also occurs when speech is quickly spoken, such as “do it and see it”. In this sentence, there will be a linkage when reading is [dɔitnsijit]. The English learner will say [duː? N dsiː? It]. In the words go out, it will be sounded [gouwaut], no etheir [nouwai] and would only [wu (d) ounli] In addition, there is also a weak form; this form is a non-standard form of speech, for example, to [tu] and [ænd] or [n].

Indonesian speakers who learn English should train themselves to hide /r/ in the final position, so the car should be pronounced / ɔr / ka: * / not / kar /, bars with / ba: * / not / bar /. British pronunciation has a large number of diphthongs (sounds which consist of a movement or glide from one vowel to another). According to Roach (2002), the important thing to remember about all diphthongs is the first part is much longer and stronger than the second part, for example, the word eye [ai] (Roach, 2010).

Students should practice more to pronounce the third person -s and plural -s, as well as the past tense-ed, for example, “He cooked by Fred”. Some students have great difficulty hearing pronunciation features that we want them to produce. Frequently, speakers of different first languages have problems with different sounds, especially sounds that they do not have in their first language.

Results

The data in this study would be grouped and analyzed based on phonological errors of consonants, vowels and diphthongs. The phonological errors are described in the following table. The first contains the phonological error level of the error type based on the taxonomy of the surface (addition, omission and substitution), the phonological error and the cause of the error (interlingual and intralingual), while the third table contains the frequency based on the phonological error and the cause of the error (interlingual and intralingual) and the phonological error of the error effect (local and global). Creation of error frequency table followed by exposure percentage of error frequency. Having known the number of errors, then made the discussion explains the number of errors that often occur. Here are the reasons why mistakes were based on theory, what caused them and what the impact of the error was. Finding of Phonological Error Based on the Taxonomy of Surface Structure Based on the
analysis that has been done, the phonological error could be grouped on the form taxonomy of surface structure, the cause of the error and the impact of errors as in the following tabulation.

Tabulation of phonological error based on the form of error (taxonomy of birth structure)

(1) Frequency of Phonological Error

Table 1: Frequency of phonological error

<table>
<thead>
<tr>
<th>Phonem</th>
<th>Substitution</th>
<th>Addition</th>
<th>Omiss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphthong</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consonant</td>
<td>6</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Cluser</td>
<td>2</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Consonant</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>∑</td>
<td>37</td>
<td>1</td>
<td>19</td>
</tr>
</tbody>
</table>

(2) Percentage of phonological error based on the form of error

Table 2: Percentage of phonological error based on the form of error

<table>
<thead>
<tr>
<th>Phonem</th>
<th>Substitution</th>
<th>Addition</th>
<th>Omiss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphthong</td>
<td>54.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consonant</td>
<td>16.22</td>
<td>100</td>
<td>2</td>
</tr>
<tr>
<td>Cluser</td>
<td>5.41</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Consonant</td>
<td>24.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>∑</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1 and 2 above shows that phonological based on the most common form of error occurred in diphthongs, vowels and consonants. Based on the surface taxonomy, the most common errors were substitution and omission.

Tabulation of phonological errors based on the cause of the error

(1) Frequency of phonological error based on cause of error

Table 3: Frequency of phonological error based on cause of error

<table>
<thead>
<tr>
<th>Phonem</th>
<th>Intralingual</th>
<th>Interlingual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphthong</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Consonant</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Cluser</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>
Based on the cause of the error (Table 3 and 4), the target, the target influence language (intralingual) was more common than the error because of the influence of the first language (interlingual). Most errors occur in diphthongs and cluster consonants.

**Tabulation of phonological error based on error impact**

(1) Frequency of phonological error based on cause of effect

<table>
<thead>
<tr>
<th>Phonem</th>
<th>Intralingual</th>
<th>Interlingual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphthong</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Consonant</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Cluster Consonant</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Vowel</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Σ</strong></td>
<td><strong>27</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

(2) Percentage of phonological error based on error impact

<table>
<thead>
<tr>
<th>Phonem</th>
<th>Intralingual</th>
<th>Interlingual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphthong</td>
<td>3.71</td>
<td>61.29</td>
</tr>
<tr>
<td>Consonant</td>
<td>14.81</td>
<td>16.13</td>
</tr>
<tr>
<td>Cluster Consonant</td>
<td>66.67</td>
<td>9.68</td>
</tr>
<tr>
<td>Vowel</td>
<td>14.81</td>
<td>12.90</td>
</tr>
<tr>
<td><strong>Σ</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
The impact of global errors was more common than local errors due to phonological errors mistakes were common in diphthongs and consonants which can be seen in Table 5 and 6 above. Overall, the phonological error that occurred in the speech of the students who were studying listening comprehension can be described as Table 7 below:

<table>
<thead>
<tr>
<th>No.</th>
<th>Form</th>
<th>∑ (%)</th>
<th>Cause</th>
<th>∑ (%)</th>
<th>Effect</th>
<th>∑ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Substitution</td>
<td>37/65</td>
<td>Intraling</td>
<td>37/69</td>
<td>Local</td>
<td>27/47</td>
</tr>
<tr>
<td>2</td>
<td>Add</td>
<td>1/2</td>
<td>Intraling</td>
<td>17/31</td>
<td>Global</td>
<td>31/53</td>
</tr>
<tr>
<td>3</td>
<td>Omiss</td>
<td>19/33</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

From the results, it is found that global errors used more than local errors. Burt (1975) made a distinction between “global” and “local” errors. Global errors hinder communication and they prevent the learner from comprehending some aspects of the message. Local errors only affect a single element of a sentence, but do not prevent a message from being heard. According to Hendrickson (1980), global errors need to be corrected and they are generally held true. But the expressions such as “a news”, or “and advice” are systematic errors and they need to be corrected. As for pre-systematic errors, teachers can simply provide the correct one. For systematic errors, since learners have already had the linguistic competence, they can explain this kind of errors and correct themselves. So teachers just remind them when they commit such errors. As to what kind of errors should be corrected, it needs teachers’ intuition and understanding of errors. At the same time, the teacher should consider the purpose of the analysis and analyze them in a systematic way (Naimi Amara, 2015: Errors Correction in Foreign Language Teaching). Below is the discussion of some components related to errors found in the result.

**Diphthong**

(1) Omission

The omission is performed by the respondents. The diphthong sound ending in [ı] ie [ei] is pronounced as front vowel [e]. Example: R1 K1 in waiter word [weitə*], R3 K2 on steak word [steık], R4 K1 in table [teıbl].

(2) Substitution error

Subtitution error of ending diphthong [ı] ie [ei] becomes front vowel [æ]. Example: Example: R6 K2 in Waiter word [weitə*].
Consonant

(1) Substitution error
Replacement of alveolar plosive voiceless [t] sounds into dental fricative voice [θ], eg R2 K1 in waiter [weitə*. Replacement of alveolar fricative voiceless [s] is sounds into alveolar fricative voiceless palate [ʃ], for example, R4 K3 in soup [su:p].

(2) Omission error
The omission of R5 K4 was the disappearance of [s] in the cluster [ks] consonant of the asks] and also in the gets, R7 k1 the sound disappearance [t] in the cluster [nt] cluster on the word restaurant, R14 K5 the sound disappearance [t] in the final consonant sound [st] at suggest [sed3est], R15 K2 disappearance of consonant [s] in consonant cluster sound [ls] on the word call [kɔls]. Alveolar stop voiced consonance abnormalities [d] in the cluster [ld] consonant of the word [kɔuld].

(3) Incremental error
The error of adding the voiceless plosive velar consonant sound [k] at the beginning of nasal consonant sound [n] to word knife [naïve], for example in R8 K3.

Cluster Consonant

(1) Omission error
The disappearance error in R6 K3 was the loss of consonant sound [s] in the cluster consonant [ks] in the word asks [a;sks] and the disappearance of consonant [s] in the cluster [ts] Consonant on the gets word [get], on R4 K4 the loss of the sound of alveolar stop voiced consonant [d] in the cluster consonant [1d] in cold [kɔld], on R5 K3 il loss of stop as voiceless alveolar consonant [t] in the cluster [ts] consonant of word restaurant [restɔrant] at R13 K2 the disappearance of alveolar voiceless [t] sounds in the cluster [kt] consonant in the checked [tʃekt].

(2) Adding error
Error in addition of back vowel sound [ɔ] in the custer consonant [sn] to the name Johnson [dʒɔŋsn], for example on R3 K1.

Vowels

(1) Additional error
The high front vowel [ɪ] addition to the middle front vowel sound [e] in pen [pen], for example, on R4 K1.

(2) Replacement error
Replacement of the vowel sound [u:] into diphthong sound [əu], in pen [pen], for example on R12 K1.
The cause of phonological error

From the data obtained, the cause of the error was students have difficulty pronouncing English phonemes because they did not have the sound in their first language. From the errors caused, the target language influence (intralingual) was more common than the error due to the first language influence (interlingual).

This error occurred in the diphthong, consonant and clustered consonants. a. Diphthong on R2 * [e] √ [ei] in the word stake, R3 * [e] √ [ei] in the word table and * [ei] √ [e] to pen word, R1 K1 to waiter [weita *], b. Consonant on R2 K1 * [t] √ [ð], in the word waiter [wetə *]. R4 K3 * [∫] √ [s] to the word soup [su: p] c. Cluster Consonants on R6 K3 * [s] √ [ks] on asks [a: sks], [s] √ [ts] in gets gets [gets].

Impact of Phonological Errors

From the results of phonological error analysis, the global error was the most common error, which could affect the success of communication where the speaker or author’s intention could be misinterpreted by the listener or reader. a. Diphthong on R3 K2 * [e] √ [ei] on steak word, R5 K1 * [i] √ [ei] on word steak [stek] ' b. Vocals on R13 K 4 * [u] √ [ə] on suggest [səd3est]. c. Consonant On R5 K1 * [g] √ [d3] on suggest [səd3est].

Conclusion

Based on the analysis results obtained, the most common errors created by students in connection with a surface structure taxonomy are substitutions in diphthong (54,05%), intralingual error in diphthong (48, 65%) and global errors in diphthong (61,29%). The biggest phonological errors of diphthong are caused by listening errors. If the students pronounce errors in speaking, the listeners cannot understand the meaning of the sentences. In this case, the lecturers should check and teach their capabilities in phonology, such as vowels, consonants and diphthongs, well and the result can help students to improve their speaking abilities.

In the target language learning process, it is normal to make mistakes as the learners are lacking knowledge of the language system. They still find it difficult to pronounce English phonemes because their first language sound is different from the learner target language system is the cause of the mistake. The students should study the English sound system well and are expected to practice English with their friends or lecturers for smooth communication. The lecturers can assist the students while they are studying spoken English and determine the way or the right method to minimize or avoid the mistakes.
Acknowledgement

Author would like to thank National University, Jakarta and the students of English Language and Literature for their support in this research.

Declaration of interest statement

Author declares that there is no conflict of interest in this research.
REFERENCES


Linguistics: Sound and meaning in the world’s languages 2018, http://www.nature.com , taken on 25 May 2018

Rachael and Knight (2012), Phonetics: A coursebook, United Kingdom: Cambridge University Press


