



Linguistics

Segmental and Suprasegmental Mispronunciations Made by EFL Learners in Indonesia

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A B S T R A C T

This study reveals segmental and suprasegmental mispronunciations of some words made by Indonesian learners of EFL and their possible causes. This is descriptive qualitative research. The phonological data were elicited by asking the subjects to read loudly while recorded the text that had been prepared to contain words with segmental and suprasegmental phonemes. The data were limited to those words existing in the eliciting text. The records were then transcribed, identified, coded, classified, and interpreted. The possible causes that might have influenced the mispronunciations made by the subjects were unfolded using the contrastive analysis approach and psycholinguistic theories. The study reveals that the mispronunciations in segmental phonemes include vowels and diphthongs, such as /i:/, /a:/, /ei/, /oʊ/, consonants /z/, /v/, /ð/, and silent letters w, l, and s. The suprasegmental mispronunciations are in the use of stress on multi-syllabic words. Finally, this study concludes the possible causes that made these errors happen, among others, are interlingual differences, mother tongue interference, shortage of knowledge, and fossilization.

I. INTRODUCTION

Learning English pronunciation as a foreign language could be challenging, especially when there are a lot of differences between the sound system of the native language and that of the target language; thus, making it inevitable to evade incorrect pronunciations.

Some studies have confirmed that the speakers of other languages who learn English tend to make mistakes. Moosa (1979) proved that Arab learners encounter problems in the pronunciation of sounds which the students are not familiar with. They shift the pronunciation of, for example, consonants in English to the consonant sounds in their native language that have close articulators, e.g. they substitute /p/ with /b/, /θ/ with /s/ (Carter & Nunan, 2001; O'Connor, 2003). Habibi (2016) also revealed similar findings with Indonesian learners. They tend to replace the sound /v/ with /f/, /θ/ with /t/, etc. This is because of different sound systems between Arabic, Indonesian, and

English. The divergence is not only segmental but also suprasegmental phonemes.

A syllable is the basic unit of a word that contains stress. Length, pitch, and volume are the components of stress (Crane, 1981). In English, the most common syllable form is a consonant plus a vowel. In pronunciation, one may stress a syllable by giving it a higher pitch, making it louder, or making it longer, or perhaps by a combination of all three (Algifari, 2017).

There have been numerous studies that focused on pronunciation. Habibi (2016) who conducted a study on mispronunciations made by university students revealed that the research subjects faced segmental pronunciation problems including vowels, consonants, and diphthongs. Algifari (2017), moreover, who focused on word stress revealed that the students gave incorrect stress on multi-syllabic words, i.e. the words that have two, three, or four syllables.

Anindita (2017) also directed a study focusing on English mispronunciation by *Radio Masdha* announcers in Yogyakarta. The study mentioned that the announcers made frequent mispronunciations in pronouncing /v/, /ð/, /θ/, /z/ sounds. Hassan (2014) found similar pronunciation problems encountered by the university students in Sudan whose native language is Sudanese Spoken Arabic. The study concluded that the possible factors causing these errors were due to diversities in the sound systems of the two languages.

None of those mentioned studies reveals segmental and suprasegmental mispronunciations made by learners of English who have graduated from the English Department, adult learners of EFL. This present research tries to fill in this niche. It focused on mispronunciation or the incorrect production of sounds in pronouncing words deviating from Received English pronunciation including segmental and suprasegmental aspects (Halimah, 2018). Segmental mispronunciation encompasses incorrect pronunciation of vowels, diphthongs, consonants, and silent letters. Whereas suprasegmental mispronunciation, in this study, was limited to word stress. Both segmental and suprasegmental are kinds of phoneme, i.e. a unit of sound that brings about different meanings (Carr, 2008; Fraser, 2001). The received English pronunciations were taken from The Cambridge dictionary used to identify the deviations of the learners' sound production. This dictionary (dictionary.cambridge.org) was chosen because it is updated frequently and easy to access.

II. METHOD

This research used a descriptive qualitative design (Creswell, 2014). Descriptive research is research that is intended to gather information about something in someplace according to the naturalistic occasion (Arikunto, 2013). Mason (2002) states that the qualitative approach can reveal an extensive range of social world such as experiences, a weave of daily life, social processes. It is a way to reach the basic understanding through the researcher's experience that is integrated with the subject or location in the form of an actual report as it is (Moleong, 2001).

The instruments of this research were the researchers, an audio recorder, and a text to elicit

the data. The particular text was chosen because it contained many varieties of pronunciation such as a variety of vowels, consonants, diphthongs, silent letters, and word stress.

The subjects were ten graduates of the English Departments consisting of five males and five females. In selecting the subjects, some criteria were set: (1) they graduated at a maximum of one year before the date this research was conducted. This was to ensure their being fresh graduates (whose English ability has not undergone attrition). (2) they were graduates of the English Department of Sunan Ampel State Islamic University of Surabaya. (3) their final grade point average was or more than three-point zero (3.0). This was to ascertain the adequate capacity of the graduates.

In collecting the data, the steps were as follows. First, the researchers approached the potential subjects (by WhatsApp texting) and asked them respectfully to consider volunteering as the subjects of the research. That was to make sure that the subjects were not forced so that a good mutual relationship was achieved. When the subjects agreed, they were provided the eliciting text. Then, they were given time to prepare or to relax (the time given ranged from minutes to days depending on the subject). Giving enough time was intended to avoid the subjects' nervousness when reading the text.

When the subjects were ready, they started to read the text while being recorded. There was one subject recorded directly. Due to technical issues, the other nine subjects were recorded via WhatsApp messenger. It was assured that the records were the subjects' voices. The recordings were then transcribed phonetically on a word basis. The Cambridge dictionary was used to help determine the spelling and the phonetic transcription of the data. This dictionary (dictionary.cambridge.org) was chosen because it is updated frequently and easy to access.

Having been collected, the data transcripts were analyzed following these steps. The mispronunciations were identified by underlining the mispronounced words. The indicator of mispronunciation is the deviation of sounds in the data against the standard Received Pronunciation written in the Dictionary. The errors were then

classified into segmental mispronunciations (of vowels, diphthongs, consonants, and silent letters) and suprasegmental mispronunciations (of word stress). The possible causes of mispronunciations were interpreted by comparing the erroneous sounds with those of Indonesian sounds and considering the learning contexts.

III. RESULTS AND DISCUSSION

The findings of the study are presented in three sections: segmental mispronunciations, suprasegmental mispronunciations, and the possible causes of the mispronunciations.

Segmental Mispronunciations

The segmental mispronunciations include vowel (including diphthongs), consonant, and silent letters.

Vowel Mispronunciations (including Diphthongs)

Vowels are articulated by making the air go freely from the larynx to the mouth (Roach, 2009). English vowels may be monophthong, diphthongs, or triphthongs. Monophthong is a single and pure sound of a vowel which might be short such as /e/ in /let/ or long as /ɜ:/ in /bɜ:d/. Diphthongs are vowel sound that shifts from one vowel to another, such as /ɔɪ/ in the word *boy* pronounced /bɔɪ/. It occurs by the movement of the tongue from a manner to another (Almutalabi, 2018). Triphthongs are a three-combination vowel; a vowel that includes three vowels in one, such as in word *player* pronounced /'pleɪə/.

For efficiency purposes, examples of vowel mispronunciation are presented in the following table.

Vowel mispronunciations frequently made by the subjects were mispronunciations of the sounds /ɑ:/, /ɜ:/, /i:/, /ə/, /ɪ/, /æ/, /ʌ/, /eɪ/, /oʊ/, and /aɪ/. Vowel /ɑ:/ mispronunciations were found especially in the word *saw*, *across*, *not*, *all*, *from*, *call/called*, *rock*, *small* and *cause* in the passage. Almost all subjects mispronounced vowel /ɑ:/ and substituted to sound /ɔ/. This substitution was found nearly in every word in which /ɑ:/ is pronounced. Vowel /ɜ/ mispronunciation was found only in the word *early* in the passage. The word *early* (which was supposed to be pronounced as /ɜ:rli/) was pronounced /i:rli/ by the subject rather than it was supposed to be. Vowel /i:/ mispronunciations were found especially in word *streaks*, *meteors*, *the*, *heat*, *meteorite*, *debris* in the passage. The mispronunciations of vowel /i:/ made by some of the subjects varied, some subjects mispronounced the vowel to /e/ as in /'meteɔrz/ (supposedly /'mitiə:rz/) and /hæt/ (supposedly /hi:t/).

Vowel /ə/ mispronunciations were found especially in word *debris*, *atmosphere*, *metal*, *meteoroids*, *surface*, *substantial*, *meteorite*, *ordinary* in the passage. Some of the subjects mispronounced vowel /ə/ and pronounced /e/, /ɔ/, /ʌ/, /eɪ/, /æ/, /a/ and /i/ rather than it was supposed to be. Vowel /ɪ/ mispronunciations were found especially in the word *atmosphere*, *if*, *it*, and *is*. Some of the subjects mispronounced /i/ which should be /ɪ/. Vowel /æ/ mispronunciations were found especially word *atmosphere*, *can't*, and *substantial*. Some of the subjects mispronounced /ʌ/, /ɑ:/, /eə/, /a/ which should be /æ/. Vowel /ʌ/ mispronunciations were found in only the word *sun* in the passage. The word *sun* which should be pronounced /sʌn/ was pronounced /sɔn/ instead.

Table 1: Mispronunciation of Vowels & Diphthongs

No.	Sounds	Words	Correct Pronunciation	Examples of Mispronunciation
1.	/ɑ:/	Saw	/sɑ:/	/sɔ/ /so:/ /ʃoʊ/ /səʊ/ /sɔʊ/ /soʊ/
2.	/ɜ:/	Early	/ɜ:rli/	/i:rli/
3.	/i:/	Streaks	/stri:ks/	/streks/ / streks/ /streik/
4.	/ə/	Debris	/də'brɪ:/	/de'bris/ /de'bri/
5.	/ɪ/	If, it, is	/ɪf/ /ɪt/ /ɪs/	/ɪf/ /it/ /is/
6.	/æ/	Can't	/kænt/	/keant/ /kɑ:nt/ /kʌn/ /kan/
7.	/ʌ/	Sun	/sʌn/	/sɔn/
8.	/eɪ/	Crater	/'kreɪtər/	/'krʌtər/ /'krætər/ /'kretər/ /'kri:tər/
9.	/oʊ/	Know	/noʊ/	/nɔ/ /no:/
10.	/aɪ/	Meteorite	/'mitiə ,raɪt/	/'meteə 'rit/

Diphthong /eɪ/ mispronunciations were found especially in word *gazed*, *same*, *they*, *today*, *space*, *crater* in the passage. Some of the subjects tended to shorten the diphthong to monophthong. For instance, diphthong /eɪ/ was mispronounced as /e:/, /e/, /ʌ/, /æ/, /i:/ rather than it was supposed to be. That also applies to diphthong /oʊ/ in the words *know*, *glow*, *most*, *so*. They also tended to shorten the diphthong to monophthong. For instance, diphthong /oʊ/ was pronounced /ɔ/ and /o:/. It was also true to diphthong /aɪ/ in the word *meteorite*. The diphthong /aɪ/ was pronounced /i:/ rather than it was supposed to be.

Consonant Mispronunciations

McCabe (2001) and Cook (1997) state that the interruption in the airflow in some ways is what characterizes a consonant in language. A consonant sound is produced by obstructing (s, z, f, v), occluding (t, d, k, g, p, b), or diverting (m, n, ŋ) the airflow from the lungs (Kelly, 2000). Consonants are classified based on their voicing, manners, and places of articulation. Voiced consonants are made when a side vocal cord is close to another, obstructing the airstream. Voiceless consonants are made by letting the air flow freely through the vocal tract (Fromkin et al., 2003). Examples of consonant mispronunciation are presented in this table 2.

It was found that most of the consonant mispronunciations were the sounds /v/, /θ/, /ð/, /z/, and /ʃ/. Consonant /v/ mispronunciations were found especially in the word *of*, *moves*, *traveling*, *ever* and *every* in the passage. Almost every subject tended to pronounce /f/ which should be /v/.

Consonant /θ/ mispronunciations were found especially in word *things*, *earth's*, and *through* in the passage. Some of the subjects mispronounced /t/ which should be /θ/. The mispronunciations of consonant /ð/ were found especially in the words *the*, *they*, and *then* in the passage. Some of the subjects mispronounced /d/ instead of /ð/.

The mispronunciations of consonant /z/ were found especially in the word *these*, *has*, *causes*, *as*, *stars*, *meteors*, *moves*, *trails*, *lands*, and *is*. Almost all of the subjects tended to substitute the consonant /z/ to consonant /s/. The mispronunciations of consonant /ʃ/ were found especially in word *substantial* and word *shooting*. Some of the subjects mispronounced /s/ instead of /ʃ/. Examples of the mispronunciations of consonant sounds are presented in table 3.

Silent Letter Mispronunciations

Silent letters are letters in the spelling of a word that are left ignored and unpronounced at all (Digby and Myer, 1993). In other words, it is a noncorresponding letter that is still spelled but rather remains unpronounced (Awad, 2010). In English, countless words have silent letters, either vowels or consonants. In the word *build*, vowel *u* is silent, thus it is pronounced /bild/. While consonant silent letters can be found in word *through* pronounced /θru:/ and *palm* pronounced /pa:m/. It is found in this study that silent letter mispronunciations committed by the subjects were mispronunciations of the silent letters *w*, *s*, and *l*.

Silent letter *w* was mispronounced several times in word *saw*. Some of the subjects tended to pronounce the silent letter, therefore instead of pronouncing /

Table 2: Mispronunciation of Consonants

No.	Consonant sound	Examples of words	Correct pronunciation	Examples of Mispronunciation
1.	/v/	Moves	/mu:vz/	/mu:fz/
2.	/θ/	Things	/θɪŋz/	/tɪŋz/
3.	/ð/	The	/ðə/	/də/
4.	/z/	Lands	/lændz/	/lænds/
5.	/ʃ/	Shooting	/'ʃu:tɪŋ/	/'sʊtɪŋ/

Table 3: Mispronunciations of Silent Letters

No.	Silent letters	Examples of words	Correct pronunciation	Examples of Mispronunciation
1.	w	Saw	/sɑ:/	/ʃɔs/ /sɑs/ /sɔs/ /sɒs/
2.	s	Debris	/də'brɪ:/	/də'bri:s/
3.	l	Could	/kʊd/	/kɔld/

sa:/, it was pronounced /saʊ/. Some of the subjects tended to pronounce the silent letter *s* in the word *debris*. Hence, instead of pronouncing /də'brɪ:/, it was pronounced /də'brɪ:s/. Mispronunciations of the silent letter *l* were also found in the word *could*. It was pronounced /kʊld/ instead of /kʊd/.

Suprasegmental Mispronunciations

Suprasegmental covers the aspect of stress, intonation, phrasing, timing, pitch, length, and rhythm (Fraser, 2001; Nasr as cited in Fitria, 2014). The suprasegmental in this study is limited to word stress because not only it is phonemic in English, but also based on the preliminary observation, it is one of the frequent mistakes made by English learners in Indonesia.

It was revealed that almost all of the subjects stressed words incorrectly in two-syllable words and three-syllable words. The mispronounced words are: *early*, *people*, *friction*, *until*, *impact*, *begin*, *causes*, *debris*, *meteors*, *even*, *enter(ed)*, *metal*, *surface*, *every*, *often*, *mistake*, *enough*, *substantial*, *meteoroid*, *atmosphere*, and *ordinary*.

Words *early*, *people*, *friction*, *impact*, *even*, *entered*, *metal*, *surface*, *every*, *often*, *causes* were mispronounced similarly by which the stress was given on the second syllable which should be on the first. In another case, the word was also stressed on every syllable. Word was mispronounced by some of the subjects, which should be stressed on the first syllable was stressed on the second syllable.

Table 4: Mispronunciation of Two-Syllable Words that Should be Given Stress on the First Syllable

	words	Correct stress	Incorrect stress
1.	Early	/'ɜ: rli/	/ɜ:r. 'li/
2.	People	/'pi.p(ə)l/	/pi. 'p(ə)l/
3.	Friction	/'frɪk. f(ə)n/	/frɪk. 'f(ə)n/ /frɪk. 'f(ə)n/
4.	Impact	/'ɪm.pækt/	/ɪm. 'pækt/
5.	Causes	/'kɑ: zəz/	/'kɑ:.' zəz/
6.	Even	/'i.v(ə)n/	/i. 'v(ə)n/
7.	Entered	/'en.tərd/	/en. 'tərd/
8.	Metal	/'me.t(ə)l/	/'me.' t(ə)l/
9.	Surface	/'sɜr.fəs/	/'sɜr.' fəs/ /sɜr.' fəs/
10.	Every	/'e.vri/	/e.' vri/
11.	Often	/'ɔf.t(ə)n/	/'ɔf.' t(ə)n/

Table 4 shows that mispronunciations of word stress lie on the positions of the stress on the syllables. The words that should be stressed on the first syllable were mispronounced by the subjects by giving stress on the second syllable. Sometimes, the stress was given even to both the first and second syllables, such as /frɪk. 'f(ə)n/, /'me. t(ə)l/, /'sɜr. fəs/, and /'ɔf. t(ə)n/.

On the other hand, some two-syllable words that should be given stress on the second syllable were mispronounced by the subjects by giving the stress on the first syllable. For example, instead of pronouncing /brɪ.'gɪm/, the subjects mispronounced it by saying /'brɪ.gɪm/. Other findings about this can be seen in table 5.

Table 5: Mispronunciation of Two-Syllable Words that Should be Given Stress on the Second Syllable

No.	words	Correct stress	Incorrect stress
1.	Until	/ʌn. 'tɪl/	/'ʌn.tɪl/
2.	Mistake	/mɪs.'teɪk/	/'mɪs.' teɪk/
3.	Begin	/bɪ.'gɪn/	/'bɪ. gɪn/
4.	Debris	/də.'brɪ:/	/'də. brɪ:/

Words *until*, *begin*, *debris*, *mistake*, were mispronounced by all the subjects which should be stressed on the second syllable but it was stressed on the first syllable. Inconsistency of mispronunciation was also found as evidenced by the fact that the word *mistake* was also stressed on each syllable. Instead of pronouncing /mɪs.'teɪk/ with a stress on the second syllable, some subjects mispronounced it by saying /'mɪs.' teɪk/.

The findings about suprasegmental mispronunciation of three-syllable words are presented in table 6.

Table 6: Mispronunciation of Three-syllable Words

No.	Word	Correct Stressing	Incorrect Stressing
1.	Meteors	/'mi.ti.ɔ:rz/	/mi.ti. 'ɔ:rz/
2.	Meteoroids	/'mi.tjə.'rɔɪdz/	/mi.' tjə.' rɔɪdz/ /,mi. tjə.' rɔɪdz/
3.	Atmosphere	/'æt.mə.'sfɪr/	/æt.' mə.' sfɪr/
4.	Ordinary	/'ɔr.də.'ne.ri/	/'ɔr.də.ne.ri/ /ɔr.' də.ne.ri/ /'ɔr.də.ne.' ri/
5.	Substantial	/səbs.'tæn.fəl/	/'səbs.tæn.fəl/ /səbs.tæn.' fəl/

Incorrect use of word stress was also found in pronouncing three-syllable words. Word *ordinary*, for example, was mispronounced in that it should be given primary stress on the first syllable and secondary stress on the third syllable, but the data showed some of the subjects stressed all syllables, some stressed on the second syllable, and others on the last syllable. Word *substantial* was mispronounced by the majority of the subjects. The word which should be stressed on the second syllable was stressed on the first syllable. In another case, the word was stressed on the last syllable.

The word *meteoroids* was mispronounced by some of the subjects. While the word should be stressed primarily on the first and secondarily on the last syllable, some subjects stressed the word on the middle syllable and few others put the primary stress on the last syllable. Word *atmosphere* was mispronounced because the word which was supposed to be stressed primarily on the first syllable and secondarily on the last syllable was mispronounced by the subjects by giving stress on the middle syllable. The word *meteors* was mispronounced by some of the subjects several times. The word which was supposed to be stressed on the first syllable was rather stressed on the last syllable.

Possible Causes of Mispronunciation

The researchers deduced the possible causes that influenced the subjects in mispronouncing the words in the eliciting passage by relating the research findings to the relevant theories.

Interlingual Difference

The sound system of the native language, Indonesian, is different from that of the target language, English. While in the Indonesian sound system, the pronunciation is the same as its spelling, English is not. Indonesian learners mostly rely on the written representation of words when they pronounce English words because they are using the principles of their native language sound system in pronouncing English words. Consequently, they mispronounce through the wrong analogy. It is said that there is no definite connection between sounds and letters in English (Hewings, 2004).

This divergence between spelling and pronunciation of English words impacts the subjects. In English,

some words contain letters that are written but muted, such as *psychology*, *palm*, *debris*. They exist at the initial, middle, final positions. Other words have the same spellings but different pronunciations, e.g. the vowels in the words *door*, *book*, *blood*. Others have different spellings but the same pronunciation, like the vowels in the words *fur*, *bird*, *early*.

Therefore, it is arguable that the discrepancy of spellings and pronunciations in English may cause problems of mispronunciations for non-native speakers of English.

Interference of Mother Tongue

Mother tongue (L1) gives an undeniable influence when someone is learning a new language (L2) particularly in learning pronunciation, especially in their adulthood (Brown, 2000; Carter & Nunan, 2001; Ladefoegd, 2001). Kailani and Maqattash (1995) revealed that Arab students found difficulties in pronouncing the sound /p/, /ŋ/, /v/, /z/, and /tʃ/ as there is no such sounds in Arabic sound systems. Similar issues are found in Indonesian learners. The sounds /θ/, /ð/, /ʃ/, /z/ are not present in Indonesian sound systems. So Indonesian learners usually shift those English sounds to their mother tongue sound systems e.g. they tend to pronounce /t/ for /θ/, /d/ for /ð/, /s/ for /ʃ/, and /z/ for /z/.

It is proven by the fact that Indonesian native speakers tend to shift the English sounds to their native sounds that are close in pronunciation. Unlike the mispronunciations of sounds /θ/, /ð/, /ɑ:/ which are not in Indonesian sound systems in the first place, /z/ and /v/ are a bit different. Sound /z/ is found in Indonesian words such as found in word *zona*, *zat*, *zakat*. However, the sound always comes as an initial sound which is much easier to utter than when it comes at the end. The words that have a letter or sound /z/ in Indonesian are also borrowed from other languages such as English and Arabic. Meanwhile, sound /v/ is not found in Indonesian vocabulary. Although many Indonesian words are spelled with a letter *v*, it is most likely pronounced /f/ such as words *vas*, *variasi*, *virus* which are pronounced /fʌs/, /fʌriasi/, and /firu/.

Shortage of Knowledge

Shortage of knowledge, either because of forgetting or not knowing, maybe one of the

factors that cause the learners to make errors. In pronouncing sound /z/, for instance, there are two kinds that learners need to know, i.e. natural sound and morphophonemic sound. Sound /z/ in the words *buzz*, *puzzle*, *zoo*, for example, are natural because it naturally exists in the words and has to be pronounced /z/ accordingly. However, in the words *birds*, *opens*, *watches*, for instance, sound /z/ should also exist and be pronounced that way at the end of those words, although orthographically it is spelled with *s* letter, indicating plural marker or third-person singular present tense form. That is because of morphophonemic change. The phonological rule says when a word ending in a voiced sound is added by plural or third-person singular present tense marker (morpheme) *s*, this letter must be pronounced with /z/ sound. When it ends with an affricate or a fricative sound, such as /tʃ/, /s/, or /ʃ/, and added by morpheme *-es*, it must be pronounced /ɪz/ or /əz/.

In this case, it was likely that the subjects were not aware of or did not have enough knowledge about those phonological rules. Hence, they mispronounced the sound /z/ and said /s/ instead, due to their shortage of knowledge.

Fossilization

Another probable cause is the lack of practice. Learners' tongues got stiff and hard to articulate the way sounds of English are articulated (Alkhuli, 1983). Learners who hardly practice such sounds will likely mispronounce them. The errors that may have been made by the learners for quite some time and left uncorrected may fossilize (Finegan, 2008).

Mispronunciation is a phonological error. When an error is not corrected and has been formed for a long time, it fossilizes or becomes a fossil, that can hardly be treated, cannot easily change or improve. Such a fossilization may be one of the causes that made the subjects of this study mispronounce some words.

Several times did some of the subjects fail to pronounce the word *the*. Instead of pronouncing it /ði:/ in strong form or /ðə/ in the weak form, the subjects mispronounced it as /di/ or /də/. When traced back to see their language background, it appeared that such a mispronunciation had been fossilized. It was also discovered that some subjects mispronounced the word *shooting* by saying /sutɪŋ/

instead of /'ʃu:tɪŋ/ replacing the /ʃ/ with /s/. It seemed that the subjects mispronounced that word because of fossilization. That was evidenced by seeing their daily use of language. For example, /sutɪŋ/ is used by Indonesian speakers borrowing from English /'ʃu:tɪŋ/ (which means video-recording) because it barely has Indonesian equivalence. However, it is pronounced with maximum ease of articulation (Shariatmadari, 2006) replacing the sound /ʃ/ with /s/.

The pause in the learning process of a second language affects the performance of articulators of speech, especially in adulthood. Due to age, the ability to acquire new motor skills declines resulting in the ability to command articulators of speech to be affected negatively (Steinberg & Sciarini, 2006). Hence, the speech articulators become stiff as the muscle, tongue and other organs are unable to produce sound in the correct place and manner of articulation. When the subjects might have stopped the process of learning English, specifically learning pronunciations, it can be a possible cause that affected the subjects in their pronunciations.

According to the findings of the research presented above, it is discovered that segmental mispronunciations were made by the subjects in pronouncing the words elicited. They cover vowels, diphthongs, consonants, and silent letters. This finding agrees with the researches conducted by Habibi (2016) and Anindita (2017), which found that the advanced university students in Indonesia mispronounced more or less the same sounds but in different words.

Concerning consonant mispronunciations, some consonants and silent words were mispronounced by the subjects. A similar discovery was also stated in Habibi's (2016), Luviya's (2016), and Anindita's (2017) where /v/, /θ/, /ð/, /z/, /ʃ/ were mispronounced some times. The difference might be the words where those sounds exist, which is due to different instruments.

Suprasegmental mispronunciation, in this study, was focused on word stress because word stress is phonemic in English in the sense that different positions of stress on syllables may differentiate the meanings of the words. The word **record**, for example, when stressed on the first syllable /'rekɜ:d/, it is a noun, whereas on the second /

ri.'kɔ:d/, it is a verb. In sum, as the word stress is significant, it was being focused in this study. The majority of the subjects mispronounced word stress in several words. The words were mispronounced by either pronouncing on the wrong syllable position or pronounced on every syllable of a word. The latter case often happened on three-syllable words or more such as the words: *development*, *ordinarily*. This finding goes in line with the finding of Algifari (2017) who also found word stress mispronunciations in two-syllable, three-syllable, and four-syllable words. However, due to different data eliciting instruments, the words being mispronounced were different between the two studies except for the word *people*. This study confirms that some vowels, diphthongs, consonants, silent letters, and word stress are the points where mispronunciations are made by Indonesian learners of EFL.

In relevance to the potential causes of the mispronunciations, by connecting the analysis to the relevant theories and previous studies, the researchers conclude that these mispronunciations made by the subjects were probably influenced by the discrepancies of sound systems between the learners' mother tongue and the target language, such as the absence of certain sounds in L1, and the relation between spelling and pronunciation, by which it is the same in the native language, Indonesian, and different in the target language, English.

According to the principle of contrastive analysis (Wong & Dras, 2012), when two languages have similarities of system, it may facilitate or even complicate learners in their learning. Due to similarities, it is facilitated because the learners can apply the system of their native language in the target language (transfer). However, it may even be complicated because similarities can confuse the learners as to decide which is appropriate which is not. Connected with mispronunciation, the use of /sutɪŋ/ instead of /'jutɪŋ/ may be triggered by such confusion. The other principle says when two languages are different, the learning is difficult. This is due to the inability of the learners to transfer the L1 system to the L2 system.

Another possible cause of mispronunciation is fossilization which refers to the characteristic of interlanguage that has not been corrected for

some time may be due to the cease of the learning process. The mother tongue interference and the spelling-pronunciation divergence of English were also considered as the main obstacle in previous research (Hassan, 2014). This is because some English sounds are not present in the Indonesian language which is also believed to be the cause.

IV. CONCLUSIONS

This study investigates pronunciation errors (mispronunciations) made by English graduates of Sunan Ampel State Islamic University. The mispronunciations are segmental and suprasegmental. Segmental mispronunciations encompass errors in pronouncing vowels, diphthongs, consonants, and/or silent letters in some words. The realizations of the mispronunciation are in the form of phonetic deviations against standard received pronunciation.

Suprasegmental mispronunciations, in this study, refers to the incorrect use of stress to some words that consist of two and three syllables, based on standard received pronunciation. It is manifested in the form of giving stress to inappropriate syllables. For instance, to the words consisting of two syllables, according to standard received pronunciation, the stress should be on the second, it is given on the first and vice versa. That also applies to some words that contain three or more syllables.

Regarding the possible causes, it was revealed that mispronunciations are likely to be caused by the difference between the sound system of English as the target language and Indonesian as the native language of the research subjects. That is, in the Indonesian sound system, the pronunciation is the same as its spelling, in the English sound system, the pronunciation is not the same as its spelling. This often causes some confusion for the Indonesian learners of English. The second possible cause is that the mother tongue interferes with the target language. Since the phonological system is divergent between English and Indonesian, some sounds exist in English but not in Indonesian. That makes Indonesian learners of English apply the principle of ease of articulation in pronouncing English words.

The third probable source is the fossilization by which the speech organs of Indonesian learners of English might have got fossilized in pronouncing some language sounds, thus facing difficulty in articulating proper English pronunciation.

This study used only a limited number of words in the text as the research instrument to elicit the data of the learners' mispronunciations. Hence, the data

represented the phonological errors only in those specific words. The data elicitation in this study was only conducted by the subjects' reading a text. It is suggested for future research that other words be taken as a tool to elicit the data, or another mode, such as free speech or conversations, be taken as a data collection technique to verify if the findings are consistent.

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APPENDIXES

Appendix 1 – Instrument: Text to Elicit Data

When early people gazed at the sky, they saw the same things we do—the sun, the moon, and the stars. Sometimes they saw streaks of light shooting across the sky. Even today we call these shooting stars, but we know that they are not stars at all.

Shooting stars are actually meteors—debris from space that has entered the earth's atmosphere. The friction causes the rock and metal to heat up and glow. As it moves, we see it as a streak of light. Where do meteors come from? Meteors begin as meteoroids—chunks of rock or metal traveling through space. They can't be seen until they enter our atmosphere. Then they become meteors and we can see their trails.

Do meteors ever reach the Earth's surface? Yes! A meteor that lands on the surface is called a meteorite. Most are so small that you could mistake them for ordinary rocks. But every so often a substantial meteorite strikes. If it is large enough, the impact causes a crater.

Appendix 2 - Phonetic Transcription.

/wen/ /'z:ri:/ /'pi:p(ə)/ /geɪzd/ /æt/ /ðə/ /skaɪ/, /ðei/ /sɑ:/ /ðə/ /seɪm/ /θɪŋs/ /wi/ /du/- /ðə/ /sʌn/, /ðə/ /mu:n/, /ænd/ /ðə/ /stɑ:rz/. /'sʌm taimz/ /ðei/ /sɑ:/ /stri:ks/ /ɑ:v/ /əv/ /laɪt/ /'ju:tɪŋ/ /ə'kra:s/ /ðə/ /skaɪ/. /'iv(ə)n/ /tə'dei/ /tu'dei/ /wi/ /kɑ:l/ /dɪ:z/ /'ju:tɪŋ/ /stɑ:rz/, /bʌt/ /wi/ /nɒs/ /ðæt/ /ðei/ /ɑ:r/ /nɑ:t/ /stɑ:rz/ /æt/ /ɑ:l/.

/'ju:tɪŋ/ /stɑ:rz/ /ɑ:r/ /'æktʃuəli/ /'mitiə:rz/- /də'bri:/ /frɑ:m/ /speɪs/ /ðæt/ /hæz/ /'entərd/ /enərd/ /ði/ /zrθs/ /'æt məsfɪr/. /ðə/ /'frɪkʃ(ə)n/ /'kɑ:zəz/ /'kɒzɪz/ /ðə/ /rɑ:k/ /ænd/ /'met(ə)l/ /tu:tə/ /hi:t/ /ʌp/ /ænd/ /glɒs/. /æz/ /ɪt/ /mu:vz/, /wi/ /si:/ /ɪt/ /æz/ /ə/ /stri:k/ /ɑ:v/ /əv/ /laɪt/. /wer/ /du:/ /'mitiə:rz/ /kʌm/ /frɑ:m/? /'mitiə:rz/ /br'gɪn/ /æz/ /'mɪtjə rɔɪdz/- /'ʃʌŋks/ /ɑ:v/ /əv/ /rɑ:k/ /ɔ:r/ /'met(ə)l/ /'træv(ə)lɪŋ/ /θru:/ /speɪs/. /ðei/ /kænt/ /bi/ /si:n/ /ən'tɪl/ /ʌn'tɪl/ /ðei/ /'entər/ /'aʊər/ /aʊər /'æt məsfɪr/. /ðen/ /ðei/ /br'kʌm/ /'mitiə:rz/ /ænd/ /wi/ /kæn/ /si:/ /ðer/ /treɪlz/.

/du/ /'mitiə:rz/ /'evər/ /ri:ʃ/ /ði/ /zrθs/ /'sɜrfəs/? /jes!/ /ə/ /'mitiə:r/ /ðæt/ /lændz/ /ɑ:n/ /ɔn/ /ðə/ /'sɜrfəs/ /ɪz/ /kɑ:ld/ /ə/ /'mitiə rait/. /mɒst/ /ɑ:r/ /soʊ/ /smɑ:l/ /ðæt/ /ju/ /kɒld/ /kəd/ /mɪ'steɪk/ /ðɜm/ /fɔr/ /'ɔrdə neri/ /rɑ:ks/. /bʌt/ /'evri/ /soʊ/ /'ɔf(ə)n/ /'ɔft(ə)n /ə/ /səb'stænfəl/ /səb'stænfəl/ /'mitiə rait/ /straɪks/. /ɪf/ /ɪt/ /ɪz/ /lɑ:rdʒ/ /ə' nʌf/ /'nʌf, /ði/ /'ɪmpækt/ /'kɑ:zəz/ /ə/ /'kreɪtər/.

Appendix 3 – Example of Transcribed Data

Subject 1

/wen/ /'zr'li/ /'pi'pəl/ /'geɪs/ /æt/ ___ /skaɪ/, /ðei/ /sɔ/ /ðə/ /sem/ /tɪŋs/ /wi/ /du/- /ðə/ /sʌn/, /ðə/ /mu:n/, /ænd/ /ðə/ /stɑ:rz/. /'sʌm taimz/ /ðei/ /sɔ/ /striks/ /ɔf/ /laɪt/ /'ju:tɪŋ/ /ə'krəs/ /ðə/ /skaɪ/. /'iv(ə)n/ /'tu'de/ /wi/ /kɔl/ /ðis/ /'sutɪŋ/ /stɑ:rz/, /bʌt? /wi/ /nɔ/ /ðæ? /ðei/ /ɑr/ /nɔt/ /stɑ:rz/ /æt/ /ɔl/.

/'ju:tɪŋ/ /stɑ:rz/ /ɑ:r/ /'æktʃuəli/ /'meteərs/, /- /də'bri:/ /frɑm/ /spe:s/ /ðæ? /hæs/ /'entərd/ /ði/ /zrθs/ /'ʌtməs fɪr/. /ðə/ /'frɪk'ʃən/ /'kɑ:zəz/ /ðə/ /rɒk/ /ænd/ /'metal/ /tu/ /hi:t/ /ʌp/ /ænd/ /'glo:/. /æz/ /ɪt/ /'mɪfz/, /wi/ /si:/ /ɪt/ /æz/ /ə/ /stri:k/ /ɔf/ /laɪt/. /wer/ /du/ /'meteərs/ /kʌm/ /'frɒm/? /'meteərs/ /br'gɪn/ /'æz/ /'meteroids/ /- /'ʃʌŋks/ /ɔf/ /rɒk/ /ɔr/ /'metal/ /'trævəlɪŋ/ /θru/ /spe:s/. /ðei/ /kʌn/ /bi/ /si:n/ /'ʌntɪl/ /ðei/ /'entər/ /aʊər/ /'ʌtməs fɪr/. /ðen/ /ðei/ /br'kʌm/ /'meteərs/ /ænd/ /wi/ /kæn/ /si:/ /ðer/ /'treɪls/.

/du/ /'meteərs/ /'evər/ /ri:ʃ/ /ði/ /zrθs/ /'sɜrfes/? /jes!/ ___ /'meteər/ /ðæ? /lænds/ /ɔn/ /ðə/ /'sɜr'fes/ /ɪs/ /kɔld/ /ə/ /'meteə rait/. /mɒst/ /ɑr/ /so:/ /smɔl/ /ðæ? /ju/ /kɔld/ /mɪs'teɪk/ /ðɜm/ /fɔr/ /'ɔrdineri/ /rɒks/. /bʌt/ /'evri/ /so:/ /'ɔf(ə)n/ /ə/ /'səbstænsiəl/ /'meteroid/ /straɪks/. /ɪf/ /ɪt/ /ɪz/ /lɑrdʒ/ /'nʌf/, /ði/ /'ɪmpækt/ /'kəsəs/ /ə/ /'krætər/.