



PHONOLOGICAL ERRORS PRODUCED BY STUDENTS IN PRONOUNCING ENGLISH SILENT LETTERS

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ABSTRACT

Hampir semua huruf mulai dari 'a' sampai 'z' kecuali huruf 'j', 'q', dan 'v' ditemukan *silent* (sunyi/ tidak dilafazkan) pada posisi atau lingkungan bunyi tertentu. Misalnya, huruf /b/ sunyi dalam kata 'plumber', /g/ sunyi dalam kata 'gnome', huruf /p/ dalam kata 'coup', /i/ dalam 'zaria', /l/ dalam 'salmon', /m/ dalam 'mnemonic', /s/ dalam 'debris', /x/ dalam 'faux', /z/ dalam rendezvous (Oxford Advanced Learner Dictionary). Kajian ini membahas tentang pola, bentuk, posisi, dan lingkungan dari *silent letter* tersebut. Data adalah semua kata-kata yang mempunyai *silent letter* diambil dari Oxford Advanced Learner Dictionary, kemudian dianalisa dengan menggunakan teori Carney (1994). Hasil analisa menunjukkan bahwa *silent letter* terdapat dalam dua pola yaitu pola 'endocentric digraph' dan 'empty letter'. Dari pola endocentric digraph ditemukan bermacam-macam bentuk *digraph* yang mengambil posisi diawal, ditengah, atau diakhir sebuah kata. Sedangkan pola *empty letter* tidak punya bentuk. Hubungan bunyi dua huruf yang mengapit satu huruf sangat kuat, sehingga bunyi huruf yang terapit jadi *silent*. Kemudian diteliti bagaimana mahasiswa melafazkan kata-kata yang mengandung *silent letter* tersebut. Hasil penelitian penunjukkan bahwa secara keseluruhan kemampuan mahasiswa senior dalam melafazkan kata-kata yang mengandung *silent letter* masih sangat rendah.

Kata Kunci: silent letter, endocentric digraph, discontiguous digraph, empty letter.

INTRODUCTION

Many Indonesian English learners are influenced by the Indonesian pronunciation system in pronouncing English words. One example is that they tend to pronounce the silent letter in the English words such as /h/ in hour, /l/ in salmon, and /t/ in ballet. Indonesian alphabetic spelling represents the pronunciation of words, so all Indonesian words are phonemic. They are pronounced the same as they are written. English words, however, are not as phonemic as those of Indonesian. Fromkin, & Rodman (1983: 181) describe that "The

sounds of the English words are rather unsystematically represented by orthography, that is, by spelling.” Thus, English words are not always pronounced as they are written. In looking at the way different sounds are produced, it may therefore be confusing and difficult to refer to the sounds as spelled in English words. This difficulty is apparent when we look at the orthographic representation of the English words as illustrated by Fromkin, & Rodman (1983: 183) as in *to*, *too*, *two*, *through*, *threw*, *clue*, or *shoe*, where the italic letters represent a single sound /u/. A single letter ‘a’ may represent different sounds, as in *dame*, *dad*, *father*, *call*, *village*, and *many*. A combination of letters may represent a single sound, as in *shoot*, *character*, *physics*, and *theatre*. Some letters may have no sound at all in certain words, as in *mnemonic*, *whole*, *resign*, *ghost*, *write*, *psychology*, *sword*, *debt*, *gnaw*, *lamb*, and *knot*. Some sounds are not represented in spelling as the sound /y/ in *cute*, *futile*, and *utility*. One letter may represent two sounds; the final x in *Xerox* represents a /k/ followed by an /s/ as in *Xerox*, *box*, *fix*, and *mix*.

The unsystematic relation between the spelling and pronunciation of English words shows us that we cannot depend on their spelling to know how to pronounce them. According to Brown (2005), as cited in Lanteigne (2006), the goal of language learners is to make sure that they can communicate what they have in mind effectively; they have to be understood when they are uttering the words. Knowing that precision in pronouncing words is essential, language learners should pay more attention to the way they articulate foreign words and, most importantly, master pronunciation of the language they are learning.

Odden (2006: 2) relates pronunciation to the foundation areas of linguistics that deal with the specific study of language structure, that is, phonology. Furthermore, he mentions that different from other linguistic fields, language structure discussed in phonology is closely related to the study of sound structure in a language. Subsequently, in essence, phonology deals with two main things, phonemics, that is, the study of distinctive sound units, and phonetics that mainly deals with speech sounds (Richards, Platt, & Weber, 1992: 215). It should be noticed as with phonology, pronunciation also basically deals with sounds. The difference is that pronunciation does not concern with the phonemics, but focuses mainly on phonetics. As Brown (1992) explains that what language learners must understand about pronunciation is that essentially ‘any attention to pronunciation is phonetics’ (as cited in Browman, 2002: 1).

In the area of pronunciation, English can be categorized as a difficult language to master by Indonesian English learners. This statement is proved by the above examples where different letters may represent a single sound; a single letter may represent different sounds; a combination of letters may represent a single sound; some letters have no sound at all; some

sounds are not represented in spelling; and one letter may represent two sounds. As a consequence of all the difficulties presented by the English pronunciation, many English language learners tend to generate errors in the articulation of the sounds. Therefore, this study will be focused on answering two research questions: 1) What are the patterns of silent letters in English words?; 2) How do students pronounce frequently used words containing silent letters?

THEORETICAL FRAMEWORK

In an alphabetic writing system, a silent letter is a letter that does not correspond to any sound in the word's pronunciation. For example, letter 'b' is silent in *comb*; the letter 'c' in *scene*; and the letter 'k' in *knock*. The silent letter can be found in the initial, middle, and final positions in a word like 'k' in *knife*, 'h' in *vehicle*, and 'b' in *lamb*. Many words in English have silent letters. However, for non-native English speakers, silent letters create problems because it is difficult for them to guess the spelling of spoken words or the pronunciation of written words.

According to Crystal, (1988: 74-75) there are reasons why English has so many silent letters today. The majority of old English words were phonemic, they sounded the same as they looked. After the Norman Conquest, English began to borrow words from other languages. These adopted words did not follow the rules of English pronunciation because the grammar and usage rules of other languages are different from English. The English language 'borrowed' the Latin alphabet and so English has only got 26 letters to represent around 41 different significant sounds. This means that English must attempt to use combinations of letters to represent the sounds.

The introduction of printing by William Caxton in 1476 brought further consequences. In the early fifteenth century, there were many ways of spelling words, reflecting regional variations in pronunciation. Caxton had to choose one system as a standard to follow in his printing. He chose the system which reflected the speech of the London area. As a result, the spelling of many words became stable for the first time. As time passed, pronunciation continued to change, but the printing press preserved the old spelling. Consequently, the gap between spelling and pronunciation widened, which is why today English has become less phonemic compared to the old English as reflected, for example, by the silent letters.

Carney (1994) divides the silent letters into auxiliary letters and dummy letters.

Auxiliary letters

Two letters are combined to constitute a digraph which represents a single phoneme. These may further be categorized as the exocentric graph and endocentric digraph. The "Exocentric" digraph is the combination of two letters, where the sound of the digraph is different from that of either of its constituent letters. These are rarely considered "silent". For example: the phoneme has no standard single-letter representation, as with consonants 'ng' for /ŋ/ as in *sing*, 'th' for /θ/ as in *thin* or /ð/ as in *bath*, and 'sh' for /ʃ/ as in *show*, and [diphthongs](#) 'ou' in *out* or 'oi' in *point*. These are the default spellings for the relevant sounds and present no special difficulty for readers or writers. The standard single-letter representation uses another letter, as with 'gh' in *enough* or 'ph' in *physical* instead of 'f'. These are irregular for writers but may be less difficult for readers.

The "Endocentric" digraph is the combination of two letters, where the sound of the digraph is the same as that of one of its constituent letters. These include most doubled consonant as 'bb' in *clubbed*; 'ss' in *misspell*. It may present a difficulty to writers but not to readers. Then the discontinuous digraphs whose second element is "magic e", e.g. 'a_e' in *rate*, 'i_e' in *fine*. This is the regular way to represent "long" vowels in the last syllable of a morpheme. Others include 'gu' as in *guard*, *vogue*; 'ea' as in *bread*, *heavy*, etc. These are difficult for writers and sometimes for readers.

Dummy letters

These are letters which bear no relation to neighboring letters and have no correspondence in pronunciation. Some are **inert letters**, where the letter is sounded in a [cognate](#) word: e.g. 'n' in *damn* (cf. *damnation*); 'g' in *phlegm* (cf. *phlegmatic*); 'a' in *practically* (cf. *practical*). If the cognate is obvious, it may aid writers in spelling, but mislead readers in pronunciation. The rest are **empty letters** which never have a sound, e.g. 'w' in *answer*, 'h' in *honest*, 's' in *island*, 'b' in *subtle*. These present the greatest difficulty to writers and often to readers.

RESULT AND DISCUSSION

Silent /a/

The silent letter /a/ has two patterns, endocentric digraph and empty letter. The endocentric digraph is found to have three forms. The first form is 'e' and 'a' forming a digraph 'ea'. The sound of this digraph is represented by the letter 'e', so the 'a' is silent. This digraph is usually found in the middle of words as in *seat*, *team*, *spread* and at the end as in *tea*. The second

form is 'o' and 'a' forming a digraph 'oa'. The sound of this digraph is represented by the letter 'o', so the sound 'a' is silent. This digraph can be found in the middle of words as in *boat*, and at the end as in *cocoa*. The third form is 'a' and 'i' forming a digraph 'ai'. The sound of this digraph is represented by the letter 'i', so the sound 'a' is silent. This digraph can be found at the beginning of words as in *aisle*.

The second pattern of the silent letter /a/ is empty letter, where 'a' is silent in the middle of words preceded by 'c' and proceeded by 'lly' as in *realistically*, *musically*, *logically*. In this environment, the relation between the preceding letter 'c' and proceeding letter 'lly' tends to overwhelm the sound of letter 'a', so the 'a' becomes silent.

To test how students pronounce the words containing silent /a/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words containing the silent letter /a/. The endocentric digraph pattern is represented by "tea", and the empty letter pattern is represented by "logically". The result of the analysis indicates that for the endocentric digraph pattern out of 20 students, 16 students or 80 % pronounce it correctly (silent /a/), 4 students or 20% pronounce it wrongly (sounded /a/). For the empty letter pattern, it is found that only 6 students or 30% pronounce it correctly (silent /a/), and the rest 14 students or 70% pronounce it wrongly (sounded /a/).

Silent /b/

The silent letter /b/ consists of two patterns, the endocentric digraph and empty letter. The endocentric digraph is found to have two forms. The first is 'm' and 'b' forming a digraph 'mb'. The sound of this digraph is represented by the letter 'm', so the 'b' is silent. It is usually found at the end of words as in *climb*, *crumb*, *dumb*, *comb*, *lamb*, *bomb*, *crumb*, *thumb*, *dumb*, *limb*, *tomb*, *womb*, *numb*. The second form is 'b' and 't' forming a digraph 'bt'. The sound of this digraph is represented by the letter 't', so the 'b' is silent. This digraph can be found in the middle of words as in *doubtful*, *subtle*; and at the end as in *debt*.

The second pattern of the silent letter /b/ is an empty letter, where 'b' is silent in the middle of words as in *subpoena*, *plumber*. The environment of the letter 'b' is preceded and proceeded by either a vowel or consonant. The relation between the preceding letter and the proceeding letter tends to overwhelm the sound of letter 'b', so the 'b' becomes silent.

To test how students pronounce the words containing silent /b/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20

students as the respondents to read the representative words containing the silent letter /b/. The endocentric digraph pattern is represented by “comb”, and the empty letter pattern is represented by “plumber”. The result of the analysis indicates that for the endocentric digraph pattern out of 20 students, 16 students or 90 % pronounce it correctly (silent /b/), 4 students or 10% pronounce it wrongly (sounded /b/). For the empty letter pattern it is found that only 0 students or 0% pronounce it correctly (silent /b/), but all 20 students or 100% pronounce it wrongly (sounded /b/).

Silent /c/

The silent letter /c/ consists of two patterns, the endocentric digraph and empty letter. The endocentric digraph is found to have two forms. The first is ‘s’ and ‘c’ forming a digraph ‘sc’. The sound of this digraph is represented by the letter ‘s’, so the ‘c’ is silent. This digraph is usually found at the beginning of words as in *scène, scent, science, and scissors*; and in the middle of words as in *abscess, descend, effervescent, convalescent viscid, omniscient, muscle, corpuscle*. The second form is ‘c’ and ‘k’ or ‘q’ forming a digraph ‘ck’ or ‘cq’. The sound of this digraph is represented by the letter ‘k’ or ‘q’, so the ‘c’ is silent. This digraph is usually found in the middle of the words as in *acknowledge, acquiesce, acquainted, acquire*,

The second pattern of the silent letter ‘c’ is an empty letter, where the letter ‘c’ is silent in the middle of the words as in *indict, yacht*. The environment is words ending with the sound ‘t’. The relation between the preceding letter and the final sound ‘t’ tends to overwhelm the sound of letter ‘c’, so the ‘c’ becomes silent.

To test how students pronounce the words containing silent /t/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words that containing the silent letter “C”. The endocentric digraph pattern is represented by “muscle”, and the empty letter pattern is represented by “yacht”. The result of the analysis indicates that for the endocentric digraph pattern out of 20 students, 3 students or 15 % pronounce it correctly (silent /c/), 15 students or 85% pronounce it wrongly (sounded /c/). For the empty letter pattern, it is found that 11 students or 55% pronounce it correctly (Silent /c/), and 9 students or 45% pronounce it wrongly (sounded /c/).

Silent /d/

The silent letter /d/ only has one pattern, the endocentric digraph. The endocentric digraph is found to have four forms. The first form is ‘n’ and ‘d’ forming a digraph ‘nd’ and

followed by a consonant sound. The sound of this digraph is represented by the letter 'n', so the 'd' is silent. This digraph is usually found in the middle of words as in *handkerchief*, *handsome*, *sandwich*, *grandfather*, *grandmother*, *grandchildren*. The second form is 'd' and 'n' forming a digraph 'dn'. The sound of this digraph is represented by the letter 'n', so the 'd' is silent. This can be found in the middle of the word as in *Wednesday*. The third form is 'd' and 'j' forming a digraph 'dj'. The sound of this digraph is represented by the letter 'j', so the 'd' is silent. This digraph can be found in the middle of the words as in *adjourn*, *adjunct*, *adjudicate*, and *adjust*. The fourth form is 'd' and 'g' forming a digraph 'dg'. The sound of this digraph is represented by the letter 'g', so the 'd' is silent. This digraph can be found in the middle of words as in *edge*, *hedge*, *badge*, and *wedge*.

To test how students pronounce the words containing silent /d/, only one representative word is taken because there is only one pattern found. It is the pattern of endocentric digraph. There are 20 students as the respondents to read the representative words containing the silent letter /d/. The endocentric digraph pattern is represented by "wednesday". The result of the analysis indicates that for the endocentric digraph pattern out of 20 students, 5 students or 25 % pronounce it correctly (silent /d/), 15 students or 75% pronounce it wrongly (sounded /d/).

Silent /e/

The silent letter /e/ is found in many English words. Basically, it has two patterns, endocentric digraph and empty letter. The endocentric digraph is found to have ten forms. The first form is 'e' and 'i' forming a digraph 'ei' and followed by a consonant sound. The sound of this digraph is represented by the letter 'i', so the 'e' is silent. This digraph can be found at the beginning of words as in *either*, and in the middle of words as in *heist*, *weird*. The second form is 'e' and 'u' forming a digraph 'eu' and followed by a consonant sound. The sound of this digraph is represented by the letter 'u', so the 'e' is silent. This digraph can be found in the middle of words as in *feud*, *feudal*, *feudatory*.

The third form is 'i' and 'e' forming a digraph 'ie'. The sound of this digraph is represented by the letter 'i', so the 'e' is silent. This digraph can be found at the end of words as in *pie*, *tie*, *lie*, *die*. The fourth form is 'o' and 'e' forming a digraph 'oe'. The sound of this digraph is represented by the letter 'o', so the 'e' is silent. This digraph can be found at the end of words as in *toe*, *Joe*. The fifth form is 'u' and 'e' forming a digraph 'ue'. The sound of this digraph is

represented by the letter 'u', so the 'e' is silent. This digraph can be found at the end of words as in *clue*, *blue*, *true*.

The sixth form of silent 'e' is 'a' and 'e' forming a discontinuous digraph 'a_e'. This digraph is always found at the end of words. The sound of this digraph is represented by the letter 'a', so the 'e' is silent. This environment produces the long sound of letter 'a' and a sounded consonant in front of it in the last syllable of words as in *have*, *please*, *made*, *dane*, *pale*.

The seventh form of silent is 'e' and 'e' forming a discontinuous digraph 'e_e'. This digraph is always found at the end of words. The sound of this digraph is represented by the first letter 'e' of the constituent, so the final 'e' is silent. This environment produces the long sound of letter 'e' and sounded consonant in front of it in the last syllable of the words as in *cheese*, *Pete*, *serve*, *scene*.

The eighth form is 'i' and 'e' forming a discontinuous digraph 'i_e'. This digraph is always found at the end of words. The sound of this digraph is represented by the letter 'i', so the 'e' is silent. This environment produces the long sound of letter 'i' and sounded consonant in front of it in the last syllable of words as in *arrive*, *give*, *bite*, *wine*, *bridge*, and *lime*.

The ninth form is 'o' and 'e' forming a discontinuous digraph 'o_e'. This digraph is always found at the end of words. The sound of this digraph is represented by the letter 'o', so the 'e' is silent. This environment produces the long sound of letter 'o' and sounded consonant in front of in the last syllable of words as in *horse*, *love*, *note*, *hope*, *note*, *stove*

The tenth form is 'u' and 'e' forming a discontinuous digraph 'u_e'. This digraph is always found at the end of words. The sound of this digraph is represented by the letter 'u', so the 'e' is silent. This environment produces the long sound of letter 'u' and sounded consonant in front of it in the last syllable of the words as in *because*, *house*, *pause*, *purse*, *cute*, *huge*, *fuse*

Another pattern of silent 'e' is in the form of 'empty letter' where the letter 'e' has no relation with its neighbours. But the relation between the preceding and proceeding neighbours tends to overwhelm the sound of the letter 'e', so the 'e' becomes silent as in *played*, *stayed*, *cried*, *snowed*, *glued*, *rubbed*, *loved*, *judged*, *rolled*, *canned*, *buzzed*. Not many data are found for this pattern and they are mostly those from verbs ending 'ed', but the 'e' is sounded when the 'ed' is preceded by letter 't' and 'd' as in *wanted*, *ended*.

To test how students pronounce the words containing silent /e/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words containing the silent letter /e/. The endocentric digraph pattern is represented by "either", and the empty letter patten is

represented by “loved”. The result of the analysis indicates that for the endocentric digraph pattern out of 20 students, 2 students or 10 % pronounce it correctly (silent /e/), 18 students or 90% pronounce it wrongly (sounded /e/). For the empty letter pattern, it is found that only 1 student or 5% pronounce it correctly (Silent /e/), and the rest 19 students or 95% pronounce it wrongly (sounded /e/).

Silent /f/

Only one datum is found for the silent /f/, “halfpenny”, and the ‘l’ before ‘f’ is also not sounded. It takes the form ‘empty letter’ where the letter ‘lf’ has no relation with its neighbours. But the relation between the preceding and proceeding neighbors ‘a’ and ‘p’ overwhelm the sound of letter ‘lf’, so the ‘lf’ becomes silent as in *halfpenny*.

To test how students pronounce the words containing silent /f/, only one representative word is taken because, there is only one pattern found, it is the pattern of empty letter. There are 20 students as the respondents to read the representative words containing the silent letter /f/. The empty letter pattern is represented by “halfpenny”. It is found that out of 20 students, 0 students or 0 % pronounce it correctly (silent /f/), but 20 students or 100% pronounce it wrongly (sounded /f/).

Silent /g/

The silent letter /g/ in English words only consists of one pattern, endocentric digraph. The endocentric digraph is found to have two forms. The first form is ‘g’ and ‘n’ forming a digraph ‘gn’. The sound of this digraph is represented by the letter ‘n’, so the ‘g’ is silent. This digraph is found at the beginning of words as in *gnome, gnaw, gnats, gnosis, gnu, gnarl, gnash*; in the middle as in *foreigner, lasagna, champagne, cologne*; and at the foreign, *sign, feign, align, resign, assign, benign, consign, feign, align, reign, design, reign, sign, campaign*. The second form is ‘g’ and ‘m’ forming a digraph ‘gm’. The sound of this digraph is represented by the letter ‘m’, so the ‘g’ is silent. This digraph can be found at the end of word as in *phlegm, diaphragm*.

To test how students pronounce the words containing silent /g/, only one representative word is taken because, there is only one pattern found, it is the pattern of endocentric digraph. There are 20 students as the respondents to read the representative words containing the silent letter /g/. The endocentric digraph pattern is represented by the word “foreigner”. It is found that for the endocentric digraph pattern, out of 20 students, 9 students or 45 % pronounce it correctly (silent /g/), 11 students or 55% pronounce it wrongly (sounded /g/).

Silent /h/

There are many silent letters /h/ in English words. From the data collected, there are two patterns found: endocentric digraph and empty letter. The endocentric digraph is found to have six forms. The first form is 'w' and 'h' forming a digraph 'wh' and followed by a vowel sound. The sound of this digraph is represented by the letter 'w', so the 'h' is silent. This digraph is usually found at the beginning of words as in *what, wham, whip, whiz, when, where, whether, why, whistle, wheel, while, wish, whoopee, whale, whisky, white*.

The second form is 'r' and 'h' forming a digraph 'rh'. The sound of this digraph is represented by the letter 'r', so the 'h' is silent. This digraph can be found at the beginning of words as in *rhyme, rhubarb, rhythm, rhombus, rheumatism, rhinoceros, rhythm, rheumatic, rhino, rhumba*; in the middle of words as in *diarrhea, perhaps, hemorrhage*; and at the end of words as in *myrrh, catarrh*.

The third form is 'g' and 'h' forming a digraph 'gh'. The sound of this digraph is represented by the letter 'g', so the 'h' is silent. This digraph can be found at the beginning of words as in *ghasty, gherkin, ghetto, ghost, ghoul*; and at the middle of words as in *spaghetti, Birmingham, dinghy*.

The fourth form is 'c' and 'h' forming a digraph 'ch'. The sound of this digraph is represented by the letter 'c', so the 'h' is silent. This digraph can be found in the middle of words as in *ache, anchor, archeology, architect, saccharine*; and at the end of words as in *stomach, stomach, much, such, punch, brach, clutch*.

The fifth form is 'x' and 'h' forming a digraph 'xh'. The sound of this digraph is represented by the letter 'x', so the 'h' is silent. This digraph is usually preceded by 'e' and mostly found at the beginning of words as in *exhibition, exhausted, exhort, exhume, exhausting*.

Another pattern of silent letter 'h' is empty letter. The empty letter is found to have three positions. The first is silent 'h' at the beginning of some words as in *hour, honest, honor, heir*. The second position is silent 'h' in the middle of some words as in *vehement, vehicle, vehement, shepherd, John, annihilate, silhouette*. The third position is silent 'h' at the end of some words as in *mynah, cheetah, Sarah, Messiah*.

To test how students pronounce the words containing silent /h/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words containing the silent letter /h/. The endocentric digraph pattern is represented by "Birmingham", and the empty letter pattern is represented by "honest". It is found that for the endocentric digraph pattern out of 20

students, 4 students or 20 % pronounce it correctly (silent /h/), 16 students or 80% pronounce it wrongly (sounded /h/). And for the empty letter pattern, only 6 students or 30% pronounce it correctly (Silent /h), and the rest 14 students or 70% pronounce it wrongly (sounded /h/).

Silent /gh/

A 'gh' is an 'exocentric' digraph of where the combination of these letters produces the sound /f/ when it is preceded by 'ou' and positioned at the end of the words as in cough, rough, enough, tough. However, this digraph can also be silent in many English words. From the data collected, there is one pattern of silent 'gh' found. It is empty letter where the 'gh' is silent in the middle words before 't' as in daughter, bought, night, eight, tight, fight, might, right, ought, fought, thought, taught, night, light, fight; and at the end of words preceded by 'i' as in high, thigh, sigh, weigh, neigh, sleigh.

To test how students pronounce the words containing silent /gh/, only one representative word is taken because, there is only one pattern found, it is the pattern of exocentric digraph. There are 20 students as the respondents to read the representative words containing the silent letter /gh/. The exocentric digraph pattern is represented by "daughter". It is found that for the exocentric digraph pattern out of 20 students, 10 students or 50 % pronounce it correctly (silent /gh/), while other 10 students or 50% pronounce it wrongly (sounded /gh/).

Silent /i/

There are not many silent letters /i/ found in the source of data. Among the data collected, there is only one pattern found, empty letter. The empty letter is found to have one position where the letter 'i' is silent in the middle of the words as in bruise, business, zaria, pail, receive, believe, juice.

To test how students pronounce the words containing silent /i/, only one representative word is taken because, there is only one pattern found, it is the pattern of empty letter. There are 20 students as the respondents to read the representative words that containing the silent letter /i/. The empty letter pattern is represented by "juice". The result of the analysis indicates that for the empty letter pattern, out of 20 students, 12 students or 60 % pronounce it correctly (silent /i/), but 8 students or 40% pronounce it wrongly (sounded /i/).

Silent /k/

From the data collected, two patterns of silent /k/ are found, endocentric digraph and empty letter. The endocentric digraph is found to have one form where 'k' and 'n' form a digraph 'kn' followed by a vowel sound. The sound of this digraph is represented by the letter 'n', so the 'k' is silent. This digraph is usually found at the beginning of words as in *knife, knee, know, knock, knowledge, knot, knew, knight, knob, kneel, knickers, knuckle, knack, knead, knapsack, knead, knell, knobby, knave, knoll, knife*.

The second pattern of silent letter 'k' is empty letter, where 'k' is silent between letters 'c' and 'g'. The relation between these letters tends to overwhelm the sound 'k' as found in the middle of the word *background*.

To test how students pronounce the words containing silent /k/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words that containing the silent letter /k/. The endocentric digraph pattern is represented by "knife", and the empty letter pattern is represented by "background". The result of the analysis indicates that for the endocentric digraph pattern, out of 20 students, 8 students or 40 % pronounce it correctly (silent /k/), 12 students or 60% pronounce it wrongly (sounded /k/). For the empty letter pattern, it is found that all students or 100% pronounce it correctly (Silent /k/).

Silent /l/

The silent letter /l/ has only one pattern, endocentric digraph. The endocentric digraph is found to have four forms. The first form is 'l' and 'd' forming a digraph 'ld' and preceded by the vowel 'u'. The sound of this digraph is represented by the letter 'd', so the 'l' is silent. This digraph is usually found at the end of words as in *would, should, and could*. The second form is 'l' and 'f' or 'v' forming a digraph 'lf' or 'lv', where the letter 'l' is silent. The sound of this digraph is represented by the letter 'f' or 'v', so the 'l' is silent. This digraph can be found in the middle of the words as in *halves, save*; and at the end of the words as in *half, calf*.

The third form is 'l' and 'k' forming a digraph 'lk'. The sound of this digraph is represented by the letter 'k', so the 'l' is silent. This digraph can be found at the end words as in *talk, walk, balk, yolk, chalk, folk*. The fourth form is 'l' and 'm' forming a digraph 'lm'. The sound of this digraph is represented by the letter 'm', so the 'l' is silent. This digraph can be found in the middle of words as in *almond, salmon*; and at the end of words as in *calm, balm, palm, psalm, overwhelm*.

To test how students pronounce the words containing silent /l/, only one representative word is taken because, there is only one pattern found, it is the pattern of endocentric digraph. There are 20 students as the respondents to read the representative words containing the silent letter /l/. The endocentric digraph pattern is represented by “could”. It is found that for the endocentric digraph pattern, out of 20 students, only 2 students or 10 % pronounce it correctly (silent /l/), 18 students or 90% pronounce it wrongly (sounded /l/).

Silent /m/

There is only one datum of silent ‘m’ found. It takes the form of endocentric digraph where ‘m’ and ‘n’ form a digraph ‘mn’, followed by ‘e’. The sound of this digraph is represented by the letter ‘n’, so the ‘m’ is silent. This digraph is found at the beginning of word as in *mnemonic*.

To test how students pronounce the words containing silent /m/, only one representative word is taken because, there is only one pattern found, it is the pattern of endocentric digraph. There are 20 students as the respondents to read the representative words containing the silent letter /m/. The endocentric digraph pattern is represented by “mnemonic”. The analysis indicates that for the endocentric digraph pattern out of 20 students, all of them or 100% pronounce it wrongly (sounded /m/).

Silent /n/

There are not many silent letters /n/ in English words. From the data collected, there is only one pattern found, endocentric digraph. This digraph is found to have only one form where ‘m’ and ‘n’ form a digraph ‘mn’. The sound of this digraph is represented by the letter ‘n’, so the ‘m’ is silent. This digraph is usually found at the end of words as in *autumn*, *hymn*, *damn*, *column*, *autumn*, *column*, *hymn*, *condemn*, *hymn*, *solemn*, *damn*.

To test how students pronounce the words containing silent /n/, only one representative word is taken because, there is only one pattern found, it is the pattern of endocentric digraph. There are 20 students as the respondents to read the representative words containing the silent letter /n/. The endocentric digraph pattern is represented by “autumn”. It is found that for the endocentric digraph pattern of silent /n/, out of 20 students, all of them or 100% pronounce it correctly (silent /m/).

Silent /o/

There are only a few data of silent letter /o/ found in English words. The silent 'o' takes the form of endocentric digraph where 'e' and 'o' form a digraph 'eo'. The sound of this digraph is represented by the letter 'e', so the 'o' is silent. This digraph is usually found in the middle of words as in leopard, people, and jeopardy.

To test how students pronounce the words containing silent /o/, only one representative word is taken because, there is only one pattern found, it is the pattern of endocentric digraph. There are 20 students as the respondents to read the representative words containing the silent letter /o/. The endocentric digraph pattern is represented by "leopard". The analysis indicates that for the endocentric digraph pattern of silent /o/, out of 20 students, only 1 student pronounces it correctly (silent /o/), while the rest 19 students or 95% pronounce it wrongly (sounded /o/).

Silent /p/

The silent letter /p/ has two patterns, endocentric digraph and empty letter. The endocentric digraph is found to have two forms. The first is 'p' and 'n' forming a digraph 'pn' and followed by a vowel sound. The sound of this digraph is represented by the letter 'n', so the 'p' is silent. This digraph is usually found at the beginning of words as in *pneumatic*, *pneumonia*, *pneumonic*.

The second form is 'p' and 's' forming a digraph 'ps' and followed by a vowel sound. The sound of this digraph is represented by the letter 's', so the 'p' is silent. This digraph is usually found at the beginning of words as in *psalm*, *psychiatry*, *psychology*, *psychotherapy*, *psychotic*.

The second pattern of silent letter 'p' is empty letter where 'p' is silent in the middle of words as in *cupboard*, *receipt*, *campbell*, *raspberry*, and at the end of words as in *corps*, *coup*.

To test how students pronounce the words containing silent /p/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words that containing the silent letter /p/. The endocentric digraph pattern is represented by "pneumatic", and the empty letter pattern is represented by "psychology". The result of the analysis indicates that for the endocentric digraph pattern out of 20 students, 0 students or 0 % pronounce it correctly (silent /p/), while 20 students or 100% pronounce it wrongly (sounded /p/). For the empty letter pattern, it is found that 9 students or 45% pronounce it correctly (silent /p/), and 11 students or 55% pronounce it wrongly (sounded /p/).

Silent /r/

There are not many silent letters /r/ in English words. Among the data there is only one pattern found, it is empty letter. The empty letter is found to have one position where the letter 'r' is silent in the middle of words as in February, ironing.

To test how students pronounce the words containing silent /r/, only one representative word is taken because, there is only one pattern found, it is the pattern of empty letter. There are 20 students as the respondents to read the representative words that containing the silent letter /r/. The empty letter pattern is represented by "ironing". The analysis indicates that for the empty letter pattern, out of 20 students, 0 students or 0 % pronounce it correctly (silent /r/), but all 20 students or 100% pronounce it wrongly (sounded /r/).

Silent /s/

From the data collected, there are two patterns of silent /s/ found, endocentric digraph and empty letter. The endocentric digraph is found to have one form where 's' and 'l' form a digraph 'sl' followed by a vowel sound. The sound of this digraph is represented by the letter 'l', so the 's' is silent.. This digraph is usually found in the middle of the words as in island, isle, and aisle.

The second pattern of the silent letter /s/ is empty letter. The empty letter is found in two positions. The first is the 's' is silent in the middle of the word as in viscount, and the second is at the end of the word as in chassis, debris, chamois.

To test how students pronounce the words containing silent /s/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words that containing the silent letter /s/. The endocentric digraph pattern is represented by "island", and the empty letter pattern is represented by "debris". The analysis indicates that for the endocentric digraph pattern, out of 20 students, 10 students or 50 % pronounce it correctly (silent /s/), and other 10 students or 50% pronounce it wrongly (sounded /s/). For the empty letter pattern, it is found that 9 students or 0% pronounce it correctly (silent /s/), and 20 students or 100% pronounce it wrongly (sounded /s/).

Silent /t/

There are many silent letters /t/ in English words. From the data collected, there are two patterns found, endocentric digraph and empty letter. The endocentric digraph is found to have three forms. The first form is 's' and 't' forming a digraph 'st' and usually followed by 'en' or 'le'. The sound of this digraph is represented by the letter 's', so the 't' is silent. This digraph

is usually found in the middle of words as in *fasten, listen, glisten, hasten, christen, moisten, castle, thistle, whistle, rustle, wrestle, apostle, bristle, bustle, hustle, jostle, nestle, rustle, trestle, castle, mustn't, Christmas*.

The second form is 'f' and 't' forming a digraph 'ft' followed by 'en'. The sound of this digraph is represented by the letter 'f', so the 't' is silent. This digraph can be found in the middle of words as in *soften, often*. The third form is 't' and 'c' forming a digraph 'tc' usually followed by 'h'. The sound of this digraph is represented by the letter 'c', so the 't' is silent. This digraph can be found in the middle of words as in *witch, watch, butcher, scratch, and match*.

Another pattern of silent /t/ is empty letter. The empty letter is found to have two positions; in the middle of words as in *mortgage, potpourri*; and at the end of words as in *rapport, depot, ballet*.

To test how students pronounce the words containing silent /t/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words that containing the silent letter /t/. The endocentric digraph pattern is represented by "castle", and the empty letter pattern is represented by "depot". The result of the analysis indicates that for the endocentric digraph pattern, out of 20 students, 3 students or 15 % pronounce it correctly (silent /t/), and other 15 students or 85% pronounce it wrongly (sounded /t/). For the empty letter pattern, it is found that 0 students or 0% pronounce it correctly (silent /t/), and 20 students or 100% pronounce it wrongly (sounded /t/).

Silent /th/

A 'th' is an 'exocentric' digraph which usually produces the sound /h/ or /d/ as in *thump* and *bath*. This digraph is silent in some English words. From the data collected, there is only one pattern of silent /th/ found. It is empty letter where the 'th' is silent in the environment between 's' and 'm' found in the middle of words as in *asthma, isthmus*.

To test how students pronounce the words containing silent /th/, only one representative word is taken because there is only one pattern found, it is the pattern of empty letter. There are 20 students as the respondents to read the representative words that containing the silent letter /th/. The empty letter pattern is represented by "asthma". The analysis indicates that for the empty letter pattern, out of 20 students, 20 students or 100 % pronounce it correctly (silent /th/).

Silent /u/

There are many silent letters /u/ in English words. From the data collected, there are two patterns found, endocentric digraph and empty letter. The endocentric digraph is found to have four forms. The first form is 'u' and 'a' forming a digraph 'ua' commonly preceded by 'g'. The sound of this digraph is represented by the letter 'a', so the 'u' is silent. This digraph is usually found in the middle of words as in *guarantee*, *guard*, and *guardian*. The second form is 'u' and 'e' forming a digraph 'ue' commonly preceded by 'g' and 'q'. The sound of this digraph is represented by the letter 'e', so the 'u' is silent. This digraph is usually found in the middle of words as in *guerrilla*, *guess*, *guest*, *baguette*, *etiquette*.

The second pattern of silent letter 'u' is empty letter where 'u' is silent in the middle of words as in *buoy*, *gauge*, *laugh*,

The third form is 'u' and 'i' forming a digraph 'ui' commonly preceded by 'b', 'c', and 'g'. The sound of this digraph is represented by the letter 's', so the 'u' is silent. This digraph is usually found in the middle of words as in *build*, *building*, *circuit*, *biscuit*, *guidance*, *disguise*, *guild*, *guile*, *guillotine*, *guilty*, *guinea*, *guise*, *roguish*, *guide*, *guilty*, *guitar*.

The fourth form is 'u' and 'e' forming a digraph 'ue'. Then this digraph is combined with letter 'g' or 'q' to form new digraph 'gue' or 'que'. The sound of this digraph is represented by the letter 'g' or 'q', so the 'ue' is silent. This silent digraph is usually found at the end of words as in *intrigue*, *league*, *tongue*, *vague*, *rogue*, *vogue*, *catalogue*, *plague*, *antique*, *cheque*, *mosque*, *technique*.

To test how students pronounce the words containing silent /u/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words that containing the silent letter /u/. The endocentric digraph pattern is represented by "biscuit", and the empty letter pattern is represented by "mosque". The result of the analysis indicates that for the endocentric digraph pattern out of 20 students, only 1 student or 5% pronounces it correctly (silent /u/), and other 19 students or 95% pronounce it wrongly (sounded /u/). For the empty letter pattern, it is found that 6 students or 30% pronounce it correctly (silent /u/), and 14 students or 70% pronounce it wrongly (sounded /u/).

Silent /w/

From the data collected, there are two patterns of silent /w/ found, endocentric digraph and empty letter. The endocentric digraph is found to have two forms. The first is 'w' and 'r' forming a digraph 'wr' commonly followed by a vowel sound. The sound of this digraph is

represented by the letter 'r', so the 'w' is silent. This digraph is usually found at the beginning of words as in wrap, wreck, wrench, writ, write, wrong, wren, wrinkle, wrote, wrestle, wrestling, wrack, wrangle, wrath, writhe, wreath, wrist, wreak, wrest, wrung, wryer, wretch, wrangle, wrapped, wrapper, wrong.

The second form is 'w' and 'h' forming a digraph 'wh' commonly followed by 'o'. The sound of this digraph is represented by the letter 'h', so the 'w' is silent. This digraph is usually found in the beginning of words as in who, whose, whom, whore, whole.

The third pattern of silent letter 'w' is empty letter where the environment of this letter is preceded by a vowel and proceeded by a consonant or vice versa. The relation between its neighbours tends to overwhelm the sound of letter 'w', so it becomes silent. This can be found in the middle of words as in answer, Greenwich, knowledge Norwich, sword, two, toward.

To test how students pronounce the words containing silent /w/, two representative words according to each pattern are taken to be pronounced by the respondents. There are 20 students as the respondents to read the representative words that containing the silent letter /w/. The endocentric digraph pattern is represented by "who", and the empty letter pattern is represented by "knowledge". The following are the tables of respondents' pronunciations. The analysis indicates that for the endocentric digraph pattern out of 20 students, only 2 students or 10 % pronounce it correctly (silent /w/), and other 18 students or 90% pronounce it wrongly (sounded /w/). For the empty letter pattern it is found that 2 students or 10% pronounce it correctly (silent /w/), and 18 students or 90% pronounce it wrongly (sounded /w/).

Silent /x/

There is only one word found in the source of data that contains the silent letter 'x'. It takes the pattern of empty letter and the position is at the end of the word as in faux.

To test how students pronounce the words containing silent /x/, only one representative word is taken because, there is only one pattern found, it is the pattern of empty letter. There are 20 students as the respondents to read the representative words that containing the silent letter /x/. The empty letter pattern is represented by "faux". The analysis indicates that for the empty letter pattern, out of 20 students, 20 students or 100 % pronounce it wrongly (sounded /x/), none pronounces it correctly (silent /x/).

Silent /y/

There are only two words representing the silent letter /y/. Both have the same pattern, empty letter, with one position as in says and prayers.

To test how students pronounce the words containing silent /y/, only one representative word is taken because, there is only one pattern found, it is the pattern of empty letter. There are 20 students as the respondents to read the representative words that containing the silent letter /y/. The empty letter pattern is represented by “prayers”. The analysis indicates that for the empty letter pattern, out of 20 students, 20 students or 100 % pronounce it wrongly (sounded /y/), none pronounces it correctly (silent /y/).

Silent /z/

There are not many silent letters /z/ in English words. Among the data there is only one pattern found, empty letter. The empty letter is found to have positions where the letter ‘z’ is silent in the middle of words as in rendezvous, laissez-faire, and at the end as in chez.

To test how students pronounce the words containing silent /z/, only one representative word is taken because there is only one pattern found, it is the pattern of empty letter. There are 20 students as the respondents to read the representative words that containing the silent letter /z/. The empty letter pattern is represented by “rendezvous”. The result of the analysis indicates that for the empty letter pattern, out of 20 students, 2 students or 10 % pronounce it correctly (empty /z/), while the rest 18 students or 90% pronounce it wrongly (sounded /z/).

The following table presents how students pronounce the English silent words.

Silent Letter	Patterns	Representative Words	Percentage (Correct Pronunciation)	Percentage (Wrong Pronunciation)
/a/	Endocentric Digraph	tea	80	20
	Empty Letter	logically	30	70
/b/	Endocentric Digraph	comb	90	10
	Empty Letter	plumber	00	100
/c/	Endocentric Digraph	muscle	15	85
	Empty Letter	yacht	55	45
/d/	Endocentric Digraph	Wednesday	25	75
/e/	Endocentric Digraph	either	10	90
	Empty Letter	loved	5	95
/f/	Empty Letter	halfpenny	0	100
/g/	Endocentric Digraph	foreigner	45	55
/h/	Endocentric Digraph	Birmingham	20	80
	Empty Letter	honest	30	70
/gh/	Endocentric Digraph	daughter	50	50
/i/	Empty Letter	juice	60	40
/k/	Endocentric Digraph	knife	40	60
	Empty Letter	background	00	100
/l/	Endocentric Digraph	could	10	90
/m/	Endocentric Digraph	mnemonic	0	100

/n/	Endocentric Digraph	autumn	100	00
/o/	Endocentric Digraph	leopard	5	95
/p/	Endocentric Digraph	pneumatic	0	100
	Empty Letter	psychology	45	55
/r/	Empty Letter	ironing	00	100
/s/	Endocentric Digraph	island	50	50
	Empty Letter	debris	00	100
/t/	Endocentric Digraph	castle	15	85
	Empty Letter	depot	00	100
/th/	Empty Letter	asthma	100	00
/u/	Endocentric Digraph	biscuit	5	95
	Empty Letter	mosque	30	70
/w/	Endocentric Digraph	who	10	90
	Empty Letter	knowledge	15	85
/x/	Empty Letter	faux	00	100
/y/	Empty Letter	prayers	00	100
/z/	Empty Letter	rendezvous	10	90
Average Percentage			26.38%	73,62%

CONCLUSION

Many people are perhaps not aware of the fact that nearly every letter of the English alphabet is silent in some words. As indicated by the data collected only letters 'j', 'q', and 'v' have not been found to be silent, but the others are. Therefore, it cannot be ignored that one source of difficulty in pronouncing English words is its silent letters. The findings of this study can be concluded as the followings.

1. The endocentric digraph is the combination of two letters of which the sound of this combination is represented by only one of the constituent letters. From the analysis we can find the following silent letters in their digraphs; silent 'a' in digraph 'ea', 'oa', 'ai'; silent 'b' in digraph 'mb', 'bt'; silent 'd' in digraph 'nd', 'dn', 'dj', 'dg'; silent 'e' in digraph 'ea', 'ei', 'eu', 'ie', 'oe', 'ue', 'a_e', 'e_e', 'i_e', 'o_e', 'u_e'; silent 'g' in digraph 'gn', 'gm'; silent 'h' in digraph 'wh', 'rh', 'gh', 'ch', 'xh'; silent 'k' in digraph 'kn'; silent 'm' in digraph 'mn'; silent 'n' in digraph 'mn'; silent 'o' in digraph 'eo'; silent 'p' in digraph 'pn', 'ps'; silent 's' in digraph 'sl'; silent 't' in digraph 'st', 'ft', 'tc'; silent 'u' in digraph 'ua', 'ue', 'ui', 'ue'; silent 'w' in digraph 'wr', 'wh'. The positions of the digraphs are found at the beginning, in the middle and at the end of the words.
2. The empty letter is the letter which has no relation with its neighbours but the relation between the preceding and proceeding neighbours overwhelms the sound of that letter. The letters that have this pattern are 'a' in musically; 'b' in subpoena; 'c' in indict; 'e' in played;

'f' in halfpenny; 'h' in hour, vehicle, Messiah; 'i' in business; 'k' in background; 'p' in receipt, coup; 'r' in ironing; 's' in chassis; 't' in mortgage, depot; 'u' in buoy; 'w' in answer; 'x' in faux; 'y' in says; 'z' in rendezvous, chez. The empty letter is not only found in the form of a single letter but also in the form of exocentric digraph as 'gh' which is silent in daughter, and as 'th' silent ' in isthmus.

3. After having tested the senior students who have got good command of English as proved by their TOEFL Score above 500. The result of their pronunciation of the English silent letters can be concluded in this manner: the total percentage of correct pronunciation is 950, divided by 36 (the number of representative words). The result is 26,38%. So the result of the research shows that the senior student's ability in pronouncing the English silent letters is still low.

The findings of this study are expected to help resolve one of the problems of pronunciation. Therefore, it is hopefully useful for both English learners and teachers whose mother tongue is Indonesian. Since Indonesian is a phonemic language where the words are pronounced as they are written and Indonesian English learners tend to learn English from written forms, this will likely mislead the learners in their pronunciation as they will sound the silent letters in the English words. Therefore, they need to be more aware that most of the English silent letters come from digraphs in which only one letter of the combination represents the sound of both letters and the other one is silent. In this case, they need to learn not to pronounce both sounds as is the case in Indonesian. Another pattern of silent letters is empty letter where the sound of the letter is overwhelmed by its neighbour, so they need to learn not to pronounce the overwhelmed sound.

The constraint of this study is that the analysis of the patterns and the forms of silent letters is done only with the words that contain silent letters. The findings are therefore not applicable to the pronunciation of other English words outside the data that also contain digraphs as well as the characteristic of empty letters as found in this study. The findings of this research cannot be considered as giving definitive rules in pronunciation but rather can only be used as guidelines in teaching and learning the pronunciation of the words with silent letters.

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