

PHONOLOGICAL ADAPTATION OF ENGLISH LOANWORDS TO INDONESIAN WORDS IN *JAWA POS* NEWSPAPER

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Abstrak

Adaptasi kata serapan adalah salah satu model studi dalam penelitian sejarah linguistik. Dalam penelitiannya, penelitian ini menghubungkan antara kontak bahasa pada tingkat linguistik seperti fonologi dan morfologi yang masyarakat Indonesia terapkan. Dengan menerapkan analisis dalam bentuk perbandingan, muncul suatu pandangan tentang bagaimana proses adaptasi di level tersebut dan bagaimana kontak bahasa mempengaruhi proses itu. Penelitian ini menggunakan metode deskriptif kualitatif untuk melakukan analisis dalam rangka untuk mengekspos hasil tujuan; (1) penggambaran adaptasi fonologis dari bahasa Inggris ke bahasa Indonesia, (2) dampak dari afiksasi di kata-kata pinjaman dari bahasa Inggris. Penelitian ini mengambil kata pinjaman dari surat kabar Jawa Pos sebagai sumber data. Secara khusus, data yang diambil sebagian besar dari rubrik halaman judul, politik dan ekonomi. Muncul kesimpulan bahwa masyarakat Indonesia telah mengatasi kendala sistem bahasa Inggris dengan melakukan proses adaptasi. Dalam adaptasi fonologi, Indonesia memiliki kecenderungan untuk mengikuti ejaan dari kata pinjaman untuk pengucapannya. Tujuan kedua, ada dua dampak afiksasi yang diterapkan ada perubahan kelas kata dan fenomena morfofonemik pada awalan itu sendiri. Penelitian ini berpendapat bahwa adaptasi dari bahasa donator (Inggris) akan berhasil jika bahasa penerima (Indonesia) dapat mencapai tingkat kepuasan. Tingkat kepuasan mengacu pada keberhasilan sistem bahasa Indonesia agar sesuai dengan sistem bahasa Inggris. Tingkat kepuasan tergantung pada aspek yang ingin dicapai Indonesia.

Kata Kunci: *kontak bahasa, adaptasi, fonologi, kata serapan.*

Abstract

Loanwords adaptation is one of studies under historical linguistics research. In its execution, this study correlates language contact to linguistic level such as phonology and morphology. By applying comparative display, there comes a view of how process of adaptation in those levels and how language contact influences Indonesian linguistic system. This study used descriptive qualitative method to do the analysis in order to expose the result of aims which are; (1) the depiction of phonological adaptation from English to Indonesian, (2) the impact of affixation in loanwords from English. This study took loanwords from *Jawa Pos* newspaper as source of data. In specific, data were taken mostly from headline, politic and economy columns. There comes a finding that Indonesian language system has overcome the constraint of English language system by doing adaptation and transition process. In phonological adaptation, Indonesian has tendency to follow the spelling of loanwords to pronounce it. As the second aim, there are two impacts of affixation which is applied to loanwords; there is derivational affix since it changes part of speech of pertinent word, and there is morphophonemic phenomena on the prefix itself which based on certain condition of pertinent word too. This study argues that adaptation from donator language (English) is success if recipient language (Indonesian) can achieve the level of satisfaction. This refers to the successful of Indonesian language system to fit to English language system. Level of satisfaction depends on what linguistic system that Indonesian intend to achieve.

Keywords: *language contact, adaptation, phonology, loanword.*

INTRODUCTION

World is the finest map to depict a language spreads which come through history and social processes.

History of languages has been believed to be all considerations of what coming up now among linguists to discover the initial of it. Studying language history is kind of reviewing a long term development and change

by looking backwards. For instance, one language never had single development in its making; it might have the interference of outer environments or languages. It could be the dialect, accent, lexical or even the bigger level of interference. This phenomenon is very common among linguistics schools. It has been named as language contact. Regarding to the relation between language contact and language history study, one of the outputs of studying history of language is that knowing the existence of language contact. It cannot be denied that language contact had influenced languages one another and created sibling within them.

Globalization is on the top rank to be the cause of language contact. The free mobilization to cross countries will lead immigration. Within this phenomenon, the language contact is happening, when two or even more languages meet. Therefore, an illustration can be imagined; a group of Americans immigrate to Spain. In particular neighborhoods of Spain they are living do not speak English as their tool to communicate. In a society demand, a social relationship must exist. At first, both of speakers will use their native language. Immediately, the output of this contact is borrowing each other language. The case such adaptation process and change from source language to recipient language were the focus of this research.

In particular, the essence of this thesis was the importance of knowing how the diachronic or the study of language history was crucial matter which embeds the beginning of a language and reveals the factors that was able to bring facts of how one language was conducted. Regarding to borrowing as the output of language contact, Hickey said that morphological paradigm has been treated as a gap in many cases of borrowing from another language (2010). Indonesian is one of the 'recipient' languages that develop its language establishment by borrowing from other languages. Through its history, it was one of the planning to develop national language of Indonesia by borrowing that came from Javanese, Malay, Dutch and also English (Sneddon, 2003).

There must be adaptation in the way of many courses, such phonological and morphological. These adaptations normally occur by the recipient language for the inequality between source language and recipient language. The most adaptation happens is in the course of phonology and morphology. This is due to the tongue of Indonesian are difficult to pronounce English words, in order to maintenance the borrowing, the way it is fixed is by adaptation or transition. And the case for morphology is that language is a system where all the pieces fit together. This means that through adaptation, recipient language can make, it can be said, a modification to fit the borrowed lexical with origin context and culture, so that the change of morphological may happens.

This study was not something new in linguistics research. Many scholars had addressed their interest toward loanword adaptation. The following researches which have been done by them mostly concerned on phonological change. There is Mie Hiramoto from University of Arizona. His object was the same with

object of this study, however both have difference. The first difference was source of data. He aimed loanwords from languages that closely connected to Indonesian; Dutch, Sanskrit, English and Arabian. His focus was to analyze the morphophonemic of prefix *mə-* to stems of Indonesian lexical. Morphophonemic that he wanted to enclose was how the coherence of prefix *mə-* and stems made boundaries of stronger or weaker degree based on the origins of the stem vocabulary (Hiramoto, 2007). In other words, he showed how the prefix *mə-* is influenced by the phonetic of stems. Another difference was the data analysis technique. Hiramoto directly aimed morphophonemic structure on *me-* prefix and stem. The proper analysis of morphophonemic analysis to be done is doing the analysis of phonetic script first, in this case, phonetic script of stem. He did not go through this analysis. Thus, this study put phonetic transcription of both Indonesian and English first to get to know the phonetic behavior of stem. Later on, morphophonemic analysis was put in second research question and was added with derivational suffix impact too.

In building the problems that would be aimed, this study proposed three research questions that had not been analyzed by previous study. The first problem was the depiction of phonetic transcription of both languages in loanwords. They were classified into categorization into twelve phonological adaptation types. It helped the analysis of morphophonemic in second research question that was also added by derivational suffix change. They were wrapped into affixation impact on loanwords. This study uses several theories to support the analysis.

Adaptation is a topic of much interest in language contact research. One of the areas of studying language contact is loanword phonology. These loan words might have sounds that are not the same in the phonology system of the recipient language, thus they will probably undergo adaptations or transmissions to cause the lexical item to sound more native and less foreign (Major, 2001). As the cause of English entrance to Indonesia is by technology, government, education, and commerce, one's idea proposed by Major, she argued that this happens because native language transfer dominates loan phonology. The speaker will try to fit the borrowed word into his native phonological system (2001). For example, Indonesian system borrows English words which have complex syllables but they will insert vowels as needed to make it able to be pronounced in their phonological system.

One of the problems in this study is revealing the phonetic adaptation which is displayed in comparison from English to Indonesian.

Phonetics is a study of sound speech, specifically in the study of physical articulatory of sound speech. This study had significance in understanding the escape of confusion. The problem is that sounds of spoken English never matched up with the written version (Yule, 2010). Variety of speech sounds are settled under this study and are called as phonetic alphabet.

The sounds of language can be represented with three main subjects; voicing, place of articulation and

manner of articulation. Voicing deals with vocal folds. This feature has voiced and voiceless classification (Yule, 2010). Place of articulation deals with consonants classification according to where in the vocal tract the restriction occurs. Bilabial, dental, labiodental, alveolar, etc. are settled under this feature. Manner of articulation is the classification of sound class by the way of the flow of air stream. It consists of fricative, affricate, nasal, stop, etc. (Fromkin et al., 2011).

The figure below is the International Phonetic Alphabet. It is used to make parallel comparison between English phonetic and Indonesian Phonetic transcription. Therefore, it is seen how the phonetic of English is changed.

| | Bilabial | Labiodental | Dental | Alveolar | Post-alveolar [= palatoalveolar] | Retroflex | Palatal | Velar | Uvular | Pharyngeal | Glottal |
|-----------------------|----------|-------------|--------|----------|-------------------------------------|-----------|---------|-------|--------|------------|---------|
| Plosive [= stop] | p b | | | t d | | ʈ ɖ | c ɟ | k ɡ | q ɢ | | ʔ |
| Nasal | m | ɱ | | n | | ɳ | ɲ | ŋ | ɴ | | |
| Trill | ʙ | | | r | | | | | | | |
| Tap or Flap | | ɸ β | | ɾ | | | | | | | |
| Fricative | ɸ β | f v | θ ð | s z | ʃ ʒ | ʂ ʐ | ç ʝ | x ɣ | χ ʁ | ħ ʕ | h ɦ |
| Lateral fricative | | | | ɬ ɮ | | | | | | | |
| [Central] approximant | | ʋ | | ɹ | | ɻ | j | ɰ | | | |
| Lateral approximant | | | | l | | ɭ | ʎ | ʟ | | | |

Figure 1 Classification of International Phonetic Alphabet

Phonetics consists of consonant and vowel. Chart of IPA above shows the position of consonant. This figure shows the voicing, place of articulation and useful for showing the shift from English to Indonesian system. The figure below shows the difference between vowel chart in English and vowel chart of IPA. This comparison is useful to analyze the change of vowel from English to Indonesian.

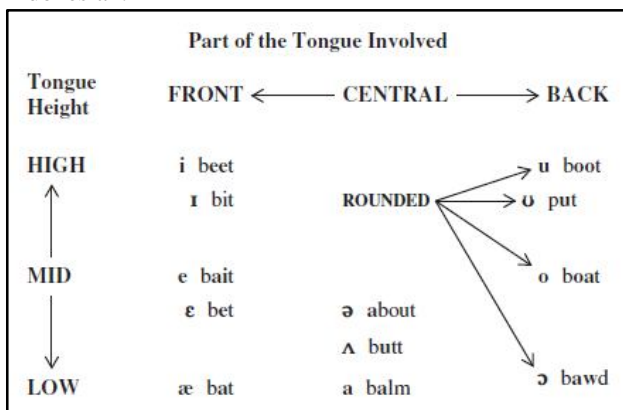


Figure 2 Vowel Chart of IPA

Vowel chart IPA is used to specify vowel in Indonesian. And vowel chart below is English vowel. Both of charts are used in comparing and seeing the shift of position from one phoneme to another.

| | Front | Central | Back | | Diphthongs |
|------------|-----------|-----------|------------|------------|----------------------------------------------|
| | Unrounded | Unrounded | Unrounded | Rounded | |
| Upper high | /i/ beat | | | /u/ boot | /aɪ/, /aʊ/, /ɔɪ/ bite, bout, Coit |
| Lower high | /ɪ/ bit | | | /ʊ/ foot | |
| Upper mid | /eɪ/ bait | /ə/ abbət | | /oʊ/ boat | Rhotacized upper mid central unrounded |
| Lower mid | /ɛ/ bet | | /ʌ/ but | /ɔ/ bought | |
| Low | /æ/ bat | | /ɑ/ father | | /ə/ Bert |

Figure 3 Vowel Chart of English Phoneme

Phonetic comparison of loanword adaptation is easily seen as language contact product in the way of changing in phonology matter. Language contact occurrence exists when two or more languages interact. It is worth to know that the study of language contact is called as contact linguistics. When speakers of different language contacted intensely, it triggers one language will influence another one. The result of this phenomenon could be language convergence and borrowing. The products are pidgins, creole, code-switching and mixed language. If it is seen through history, language contact occurs due to wars, conquests, colonialism, slavery, and migrations-forced and otherwise. These can enclose to borrowing and substratum interference. Thomason and Kaufman said that reserve the term *borrowing* to refer only to "the incorporation of foreign elements into the speakers' native language" (1988: 21). When the influence goes the other way, and native language structures influence the second language, they speak of substratum interference. In language contact, there must be contact situation to be its background of situation. There are two major contact situation; conquest and immigrant. This thesis chose immigration as the cause of language contact. It is because immigration as the impact of globalization thus words from English enter Indonesian freely. Going further to the effect of language contact, it comes to what extent this interaction between languages influence one's nation language. Two major aspects that cannot be denied are phonological level and lexical level. In Indonesian, the first influenced aspect was the lexical level.

METHOD

Since the data were words, this study used descriptive qualitative approach. Qualitative approach is usually used to analyze and describe particular phenomena and their factors. And the descriptive method was useful to analyze and interpret, or even figured out intriguing finding of certain phenomena. This method was supported with the finding of high quality analysis which will embed particular factors, that was needed for this kind of qualitative research method. The data listed had been analyzed by referring to theoretical framework on chapter 2.

Object of the study were loanwords that were taken from Indonesian newspaper; *Jawa Pos*. Primarily, they were taken from headline, politic and economy columns. There were classifications of data for each research question that was explained in data display. There were two types of loanwords in this study; stems and modified. Stems referred to loanwords that had not been added yet with affixes. Modified referred to stems that had already added by affixes. Stems data were needed to complete the first and third research question. Modified data were obtained to employ second research question. This study selectively chose one of Indonesian newspaper (*Jawa Pos*). There were 100 loanwords were taken from *Jawa Pos*. It was due to the spreading of English loanwords were easily found in mass media such newspaper. Data were taken based on a certain classification from research question. Another source was Cambridge Advanced Learner's Dictionary Third Edition to gain the phonetic transcription of English words. Data documentation was focused on the following categorization:

- 1) Loanwords with changed phonology system
- 2) Loanwords with added affixation

Data analysis technique involves three sequence processes. They are data reduction, data display and drawing conclusion and verification. In the requirement of first research question, data reduction was done by only included loanwords which have undergone phonetic change. Data display shows how the this study display the analysis and this study puts the analysis of phonetic change in comparison by showing each of phonetic transcription. Lastly, drawing conclusion and verification shows how this study does the analysis.

RESULTS

This study finds seven types of phonetic change. They are last syllable substitution, vowel substitution, voicing change, deletion, consonant substitution, epenthesis and metathesis. This study divides the analysis into two points based on how the method of Indonesian system adapts loanwords. The first point is analyzing the phonology adaptation method by following what is seen. This refers to the way Indonesian system takes what is seen while adapting the phonology. Therefore, it does not follow what is said (pronunciation), but follows the spelling of English loanwords to pronounce it. This study gives names to spelling adaptation for the following what is seen method and phonetic adaptation for the following pronunciation method.

1) Last Syllable Substitution

Last syllable substitution is the substitution which occurs only in the last syllable of word. There are two last syllable substitution types which occur from English to Indonesian; syllable */-si/* and syllable */-tas/*. Syllable */-si/* is derived from syllable */fən/* of English loanwords. The following samples shows type syllable */-si/*.

Data 1

| English | Phonetic Transcription | Indonesian | Phonetic Transcription |
|---------|------------------------|------------|------------------------|
|---------|------------------------|------------|------------------------|

| | | | n |
|---------------|---------------------|--------------------|-------------------|
| corruption | /kə'ɾʌp.fən/ | <i>korupsi</i> | /kə.rup.si/ |
| Commission | /kə'mɪʃ.ən/ | <i>komisi</i> | /kə.mi.si/ |
| participation | /pɑ:ˈtɪs.iˈpeɪ.ʃən/ | <i>partisipasi</i> | /pɑɾˈtiːsi.pɑːsi/ |

The first datum is word 'corruption' which is adapted into '*korupsi*'. By looking at spelling adaptation, it has undergone change. The first is the last syllable spelling which change from *-tion* to *-si*. The second change is the initial consonant which is changed from 'c' into 'k'. The third change is double consonant reduction in '*corruption*' which appears in Indonesian as '*korupsi*'. Double consonants which consist of same letter are not used by Indonesian system. Indonesian system of double consonant which is put in one syllable is *-kh*, *-ng* and *-ny*. All of them do not consist of same letter and can be put in one syllable. Indonesian system does not need double consonant with same letter to represent one phoneme, thus it is reduced.

By looking at phonetic adaptation, it undergoes several processes. The phonetic transcription is changed from */kə'ɾʌp.fən/* into */kə.rup.si/*. The first is change of last syllable sound from */-fən/* to */-si/*. Concerning on this, it considerably occurs since Indonesian system does not have phonetic behavior to put */-fən/* in its last syllable. Thus, it overcomes this inability by transforming */-fən/* to */-si/*.

The second change in */kə'ɾʌp.fən/* is phoneme substitution which is vowel. Vowel *o* is pronounced differently in English and in Indonesian. In English, it becomes */ə/*, while Indonesian pronounces it as */ɔ/*. Phoneme */ə/* involves upper mid and central of part of the tongue and is in unrounded position. Phoneme */ɔ/* involves upper low and back of part of the tongue and is in rounded position. Another one is vowel *u* is also pronounced differently. In English, it is pronounced as */ʌ/*, while Indonesian system pronounces it as */u/*. It is pronounced as */ʌ/* in English; it involves lower-mid and back of part of the tongue and is in unrounded position. While in Indonesian, it is pronounced as */u/* which involves high-back position of part of the tongue and is in rounded position (see figure 2.2 for IPA vowel chart and figure 2.3 for English vowel chart, page 13). The phoneme comparison shows the different phoneme realization of English and Indonesian. One more change in 'corruption' is the substitution of phoneme */ʃ/* into */s/*. Both of them are fricatives, yet */ʃ/* belongs to voiced palatoalveolar and phoneme */s/* belongs to voiceless alveolar. In place of articulation, palatoalveolar is in inner position than alveolar, and it is voiced. Thus, it can be concluded that English system pronounce it bolder than Indonesian (see figure 2.1 to see chart of consonant, page 12).

The second datum is 'commission' which is adapted into '*komisi*'. By looking at spelling adaptation, it undergoes change which is almost similar to 'corruption'. The last syllable is transformed from *-sion* to *-si*. Secondly, the initial consonant is changed from 'c' to 'k'. There is also double consonant reduction

(**comm**ission) which is composed from same consonant to be one consonant only (*komisi*).

In phonetic adaptation, 'commission' also has almost similar process. The word is adapted phonetically from /kə'mɪʃən/ into /kə.mi.si/. Similarly, phoneme substitution of /ə/ is changed into /ə/ and phoneme substitution from /ʃ/ into /s/. The different thing is the change of phoneme /ɪ/ into /i/. Place of articulation of vowel /ɪ/ is in lower high of tongue and is front unrounded position. Meanwhile, vowel /i/ position is in upper high of tongue (see figure 2.2 for IPA vowel chart and figure 2.3 for English vowel chart, page 13).

The third datum is word 'participation' which transform its spelling into '*partisipasi*'. Obviously, the last syllable is changed from -tion to -si. The rest of it is the change of consonant 'c' into 's' in third syllable. In other hand, phonetic adaptation shows difference in the change from /pɑː.tɪs.i'peɪ.ʃən/ to /pɑr-ti-si-pa-si/. The first is last syllable sound change from /-ʃən/ to /-si/. There are two phonemes of vowels in /pɑː.tɪs.i'peɪ.ʃən/ which transforms in one phoneme in /pɑr-ti-si-pa-si/. This one phoneme is /ʌ/ which is derived from /ɑː/ in first syllable, and is derived from /eɪ/ diphthong in fourth syllable. Common diphthongs in Indonesian are /aɪ/, /au/, /ia/ and /æ/. Inexistence of diphthong /eɪ/ makes Indonesian system chooses one vowel to represent pertinent phoneme which is /ʌ/. Meanwhile, phoneme /ʌ/ is also derived from /a/ in the first syllable. Comparing them based on vowel chart position, phoneme /ʌ/ is at lower-mid and back of part of the tongue and is in unrounded position, while phoneme /a/ is in the lowest back position with unrounded tongue.

Another type of last syllable substitution is syllable /-tas/ which is derived from syllable /-ti/. The following samples shows type syllable /-tas/.

Data 2

| English | Phonetic transcription | Indonesia | Phonetic transcription |
|----------|------------------------|------------------|------------------------|
| Activity | /æk'tɪv.i.ti/ | <i>aktifitas</i> | /ʌk.ti.fi.tas/ |
| Facility | /fə'sɪl.i.ti/ | <i>fasilitas</i> | /fʌ.si.li.tas/ |
| Capacity | /kə'pæs.ə.ti/ | <i>kapasitas</i> | /kʌ.pʌ.si.tas/ |

There is phenomenon of Indonesian system to change English loanwords with last syllable -ty to last syllable -tas. Indonesian vocabulary has many words which are ended by -ti. However, they are not loanwords from English such as *berarti*, *mati*, *hati* etc. Loanwords from English with -ty last syllable are adapted into last syllable -tas, instead of changing consonant 'y' with 'i'.

The first datum is 'activity' which the spelling is adapted into '*aktifitas*'. Both of them share no big deal spelling change. It is only seen on the change of 'c' to 'k' and 'v' to 'f' which is a common phenomenon in spelling adaptation from English to Indonesian.

Concerning on phonetic adaptation, the transcription is pronounced differently between /æk'tɪv.i.ti/ (English) and /ʌk.ti.fi.tas/ (Indonesian). Phoneme realization of vowel 'a' is various, and one of them is shown by diphthong /æ/. It is located in lowest

front of place of articulation. Therefore, this diphthong derives to be /ʌ/ which is located in upper-low central position. So, there is change position of tongue height and part of the tongue position. Another phonetic change is phoneme /ɪ/ to /i/. Phoneme /ɪ/ is in lower high front place of articulation, while /i/ appears in upper high position (see figure 2.2 for IPA vowel chart and figure 2.3 for English vowel chart, page 13). The last point is the change of voicing from voiced fricative /v/ to be voiceless fricative /f/. Since both of them come from the same place of articulation which is labiodental, the different point only can be seen in voicing change (see figure 2.1 for consonant chart, page 12).

The second datum is 'facility' which becomes '*fasilitas*'. Spelling adaptation in this word takes part in the change of last syllable spelling and consonant 'c' which transforms into 's'. Consonant 'c' from English loanword is commonly substituted by 's' in Indonesian spelling system.

Meanwhile, phonetic adaptation takes part in phoneme substitution which comes from vowel. There is change of /ə/ into /ʌ/ in first syllable. Vowel a is pronounced differently in English and Indonesian phoneme. By looking at vowel chart, /ə/ in English is located in upper mid and central part of the tongue. It changes the position into upper low and back part of the tongue. There is also change of phoneme /ɪ/ to /i/. In vowel chart, phoneme /ɪ/ is in lower high front place of articulation, while /i/ appears in upper high position.

The third datum is 'capacity' which transforms into '*kapasitas*'. Other than last syllable substitution, this word also undergoes consonant substitution of consonant 'c' into 'k' and 'c' into 's' which commonly happen in spelling adaptation of English loanword to Indonesian word.

In phonetic adaptation, the transcription is changed from /kə'pæs.ə.ti/ into /kʌ.pʌ.si.tas/. There are phoneme substitutions which come from vowel; phoneme /ə/ becomes /ʌ/, diphthong /æ/ becomes /ʌ/ and phoneme /ə/ becomes /i/. The first is phoneme /ə/ becomes /ʌ/ in first syllable. The tongue position is changed from upper mid and central to be upper low and back. The second is diphthong /æ/ becomes /ʌ/ in second syllable. The tongue position is changed from lowest front to be upper low and back. The last is phoneme /ə/ becomes /i/ in third syllable. The tongue position is changed from upper mid and central to be highest and front of place of articulation.

The change in last syllable substitution is divided into two kinds of adaptation; spelling and phonetics. If it is seen as whole adaptation process, every word can undergo both spelling and phonetic. Indonesian system can pronounce certain segment by following spelling or phonetic as well.

2) Vowel Substitution

The second type is vowel substitution. It is the substitution which occurs to the phoneme which comes from vowel. Vowel has various phoneme realizations. Revealing the shift of phoneme realization from English to Indonesian is the focus of this sub section.

| English | Phonetic transcription | Indonesian | Phonetic transcription |
|---------|------------------------|------------|------------------------|
| Public | /ˈpʌb.lɪk/ | publik | /pu.blik/ |
| Success | /səkˈses/ | sukses | /suk.ses/ |

The first datum is ‘public’ which is adapted into ‘*publik*’. This word undergoes spelling adaptation only at the change of last consonant that is seen in ‘c’ becomes ‘k’.

Phonetic adaptation is seen in phoneme substitution of /ʌ/ becomes /u/. These phonemes are realizations of vowel u. The position shifts from lower mid and back into high back. Looking at that shift, the phoneme undergoes quite far changing position. Another change is vowel i which has phoneme /ɪ/ in English and /i/ in Indonesian. The change is not far since /i/ position is in high front and /ɪ/ position is lower high front.

The second datum is ‘success’ which is adapted into ‘*sukses*’. Spelling adaptation occurs twice. The first is consonant substitution which is experienced by double consonant of c in ‘*success*’ which ends up in consonant k. The second is double consonant reduction of s in ‘*success*’.

In phonetic adaptation, the word does not experience much change. It is transformed from /səkˈses/ into /suk.ses/. The change is seen when phoneme /ə/ is substituted with /e/. The tongue position shifts from upper mid and central to middle front position (see figure 2.2 for IPA vowel chart and figure 2.3 for English vowel chart, page 13).

3) VoicingChange

Voicing refers to vocal cords condition when the air from the lungs goes through the trachea to the larynx. It is divided into two conditions: voiced and voiceless. Voicing change classifies the shift of phoneme from voiced to voiceless. The following samples are showing the change from voiced to voiceless

Data 3

| English | Phonetic transcription | Indonesia n | Phonetic transcription |
|------------|------------------------|-------------|------------------------|
| Resolution | /ˌrez.əˈluː.ʃən/ | resolusi | /re.sə.lu.si/ |
| Positive | /ˈpɒz.ə.tɪv/ | positif | /pɔ.si.tif/ |

The first word is ‘resolution’ which is transformed into ‘*resolusi*’. In spelling adaptation, the word only undergoes last syllable substitution from –tion to –si. Meanwhile, the word also has phonetic adaptation. The first is voicing change in phoneme /z/ to /s/. Both of them are fricatives; /z/ belongs to voiced and /s/ is voiceless. Also, they are in the same place of articulation which is alveolar. Another substitution occurs in phoneme /ə/ which shifts into /ɔ/. Both of these phonemes come from vowel o. it is pronounced as /ə/ in English. It is located in upper mid and central of the

tongue. It shifts the position to upper low and back in phoneme /ɔ/.

The second datum is ‘positive’ which is changed to ‘*positif*’. In spelling adaptation, there is consonant substitution from v to f in the last syllable. Also, there is omission of vowel e in ‘positive’.

In phonetic adaptation, the change is similar to previous loanword in the change of phoneme /z/ to /s/. In the last syllable, there is another voicing change from phoneme /v/ to /f/. Both of them are labiodental fricatives; /v/ is voiced and /f/ is voiceless. There are two phoneme substitutions of vowel in this word. The first is the substitution of phoneme /ɒ/ into /ɔ/ which comes from vowel o. Phoneme /ɒ/ is located in low back of the tongue and phoneme /ɔ/ is located in upper low back. So, it shifts the height of tongue while pronouncing from /ɒ/ to /ɔ/. The second is substitution of phoneme /ə/ to /i/ in second syllable. The vowel chart position is shifted from upper mid and central to high front. The last is the change of vowel i which is pronounced as /ɪ/ in English and /i/ in Indonesian. The change is not far since /i/ position is in high front and /ɪ/ position is lower high front position (see figure 2.2 for IPA vowel chart and figure 2.3 for English vowel chart, page 13).

4) ConsonantSubstitution

Consonant substitution is the change of phoneme of consonant. Consonant substitution is included into phonological adaptation since it is interesting to find that vowel change phenomenon is not the only possible one to occur. The phoneme of consonant is totally changed from English to Indonesian. The following samples are showing this phenomenon.

Data 4

| English | Phonetic transcription | Indonesian | Phonetic transcription |
|----------|------------------------|------------|------------------------|
| ironic | /aɪˈrɒn.ɪk/ | ironis | /ɪrɔ.nis/ |
| standard | /ˈstæn.dəd/ | standar | /stɑnˈdɑr/ |
| tragic | /ˈtrædʒ.ɪk/ | tragis | /trɑ.gis/ |

The first datum is ‘ironic’ which is transformed into ‘*ironis*’. Spelling adaptation is seen in the alternation of consonant c to s. Phonetic adaptation is seen the change of voiceless velar stop /k/ into voiceless alveolar fricative /s/. In vowel, there is diphthong /aɪ/ which is altered into /i/. They come from vowel i. Diphthong /aɪ/ is in upper high position and shifts to high front. Next, there is substitution of phoneme /ɒ/ into /ɔ/ which comes from vowel o. In English vowel chart, phoneme /ɒ/ is located in low back. In Indonesian, it is located in upper low back. The last is phoneme substitution of /ɪ/ to /i/.

The second datum is ‘standard’ which is adapted into ‘*standar*’. Spelling adaptation is seen in the omission of alveolar stop d in the last syllable of ‘standard’. Phonetic adaptation is experienced twice. The first is diphthong /æ/ which is substituted into phoneme /ɑ/. These phonemes come from vowel a in first syllable. Diphthong /æ/ which is located in low front position is shifted to upper low back position. The second is phoneme substitution of /ə/ becomes /ɑ/, thus the part of the tongue is shifted from upper mid central to upper low back. Both of these phonemes come from vowel a, yet it

has different realization both in English and Indonesian. In 'standard', consonant *r* is a silent letter. However, it is pronounced in Indonesian 'standar'. Phonetically, the last syllable of 'standard' is a voiced alveolar stop /d/ and last syllable of 'standar' is voiced alveolar liquid /r/.

The third datum is 'tragic' which is adapted into 'tragis'. Obviously, spelling adaptation only happens in substitution of last consonant *c* which becomes *s*. In phonetic adaptation, diphthong /æ/ is transformed into phoneme /ʌ/. These phonemes come from vowel *a*. In English, the tongue position makes a diphthong /æ/ in low front. In Indonesian, it is in upper low back position which is represented by phoneme /ʌ/. Phoneme of consonant also changes from /dʒ/ as voiced palatal affricate to voiced velar stop /g/. The last change is voiceless velar stop /k/ into voiceless alveolar fricative /s/.

This study considers that Indonesian tends to do consonant substitution in the last syllable of English. English is able to pronounce manner of articulation stop in their last syllable, while Indonesian system is not able to do that. In order to overcome this constraint, Indonesian system applies consonant substitution which matches to their phonological behavior. Another method is Indonesian system will do deletion to unnecessary phoneme or do epenthesis to create new syllable.

5) Deletion Rule

Deletion rule is applied while there is certain phoneme which is omitted since it is fine if it is not pronounced in Indonesian. This is useful in complying adaptation process since there are many phonetic of English that can become silent phoneme after being adapted into Indonesian system. The sample below is representation of deletion rule data

Data 5

| English | Phonetic transcription | Indonesia | Phonetic transcription |
|------------|------------------------|-----------|------------------------|
| assumption | /ə'sʌmp.jən/ | asumsi | /ʌsum.si/ |

The only sample is 'assumption'. Spelling adaptation occurs in several ways. The first is double consonant reduction which consist of two same consonant, thus it is reduced into single consonant (assumption – *asumsi*). There is consonant deletion of *p* in second syllable since Indonesian system does not have phonetic behavior to pronounce stop in *p* in middle segment. The last is last syllable substitution from *-tion* to *-si*.

The phonetic adaptation is /ə'sʌmp.jən/ becomes /ʌsum.si/. Deletion is applied in this word when phoneme /p/ is omitted. So, phoneme /p/ is omitted either in spelling or phonetic adaptation. Also, this word includes last syllable substitution type which is represented by the change from /jən/ to /si/. There is also phoneme substitution from vowel *a* which is pronounced differently. In English, it appears as /ə/ and is located in upper mid central of the tongue. In Indonesian, it becomes /ʌ/ and shifts its location to upper low back of

the tongue. In other hand, there is vowel *u* in second syllable which is pronounced differently is English, yet it is pronounced the same in Indonesian. In English, it is /ʌ/ which is located in lower mid back of the tongue. In Indonesian, it becomes /u/ and shifts tongue location into high back.

6) Epenthesis

Vowel insertion or epenthesis is the opposition of deletion. This method is applied by inserting vowel in certain segment or syllable. Vowel is the nucleus of a rhyme. Its existence is counted as significance. Indonesian applied this either to follow spelling adaptation or to fill segment that needs vowel in phonetic adaptation.

Data 6

| English | Phonetic transcription | Indonesian | Phonetic transcription |
|------------|------------------------|------------|------------------------|
| Phase | /feɪz/ | fase | /fa.se/ |
| restaurant | /ˈres.trɒnt/ | restoran | /res.to.ran/ |
| apartment | /əˈpɑːt.mənt/ | apartemen | /ʌpɑr.tə.men/ |

Vowel insertion can be done in the last or middle of segment since it depends on which segment that lacks of rhyme. Epenthesis that is applied in the last segment of word is /feɪz/ which became /fa.se/. Vowel /e/ that ends /fa.se/ did not appear in English /feɪz/. Therefore, it can be said that Indonesian people do not have phonetic behavior of pronouncing voiced fricative /z/ in the last segment or syllable. This also caused Indonesian change /z/ to be voiceless fricative /s/ then just adding vowel /e/ to make new syllable. This can be seen that word 'phase' only has one syllable in English, and has two syllables in Indonesian.

Besides, there is different way of Indonesian adaptation in this word. Previously, adaptation is always found as the way Indonesian people pronounce loanwords by their spelling not phonetic transcription. In this case, spelling of 'phase' is initiated by consonants 'ph-', and has phonetic script as /f-/. However, it is found that Indonesian follows its phonetic script not the spelling as what has been found in previous analysis. In contrast, a phoneme right after that is following the spell of English. It can be looked at the change of diphthong /eɪ/ to be /ʌ/. Vowel /ʌ/ follows the spell of consonant *a*. The second word is 'restaurant' that is loaned to be 'restoran'. The first syllable remains the same since there is no any change. Right after that, it can be examined that there is /o/ epenthesis that built second syllable in 'restoran'. It caused the making of second syllable or rhyme in Indonesian. It is found interesting since the English word is syllabled res-tau-rant yet has different realization in its phonetic script. Indonesian seemed follow the syllable placement by making three syllables as well yet get thing done by inserting vowel instead of applying diphthong /au/. In the last syllable, Indonesian also omitted voiceless stop /t/. And also there is vowel substitution from /ɒ/ to /a/. Vowel /ɒ/ has function to rhyme second syllable of 'restaurant'.

7) Metathesis

Metathesis indicates to re-arranging a phoneme or syllable. In metathesis, there can be two forms to be concerned; original and re-arranged. In loanwords adaptation case, the original refers to English form and re-arranged refers to Indonesian form. The following samples are two of many metathesis occurred. This study takes -ism as the original form.

Data 7

| English | Phonetic transcription | Indonesia n | Phonetic transcription |
|-----------|------------------------|------------------|------------------------|
| mechanism | /ˈmek.ə.ni.zə m/ | <i>mekanisme</i> | /me.kə.nis.m ə/ |
| Optimism | /ˈɒp.ti.mi.zəm / | <i>optimisme</i> | /ɒp.ti.mis.mə / |

‘Mechanism’ and ‘optimism’ are adapted into ‘mekanisme’ and optimism. Spelling adaptation is caught at the change of ‘ch’ into k consonant and there is vowel insertion at last syllable after consonant m in word ‘mechanism’. In ‘optimism’, there is only vowel insertion which causes metathesis in the word.

In phonetic adaptation, two words above are included to local metathesis which means that re-arrangement comes from contiguous sounds within. In /ˈmek.ə.ni.zəm/, the last syllable sound is filled by /-zəm/ while the last syllable in Indonesian is replaced to be /-mə/. Going along with the process, it can be seen in insertion of vowel /ə/ after voiced nasal /m/ in the last syllable. Regarding to epenthesis of /ə/ and the comparison of both phonetic scripts, it leads the word looks like has been re-ordered. In Indonesian, the last syllable transforms to /-mə/ since phoneme /s/ is in one segment with previous syllable. This syllable replacement is considerably due to the inability of Indonesian people to make /-smə/ in one syllable. There is phoneme substitution from / ə/ to /a/ in second syllable. It shifts position from upper mid central of the tongue to upper low back. Summarizing these multiple process of adaptation, words such mechanism or optimism that are changed to *mekanisme* and *optimisme* include to metathesis.

Eventually, all elaborations above are examined based on 19 words as samples. The table below shows the summary of all loanwords that this study depicted in the analysis of phonological adaptation. Additionally, the information below the table shows the classifications of twelve columns.

There are three conclusions which can be taken. They are; which type is the most frequently occurred, what words that most changed a lot and what situation that Indonesian people take to adapt loanwords.

From 19 loanwords, vowel substitution takes part the most. This regards to English which has different phonetic realization. For instance, one vowel can have more than three phonetic representations. It can be looked at vowel u. It is pronounced /u:/ in phonetic script of ‘resolution’ /ˌrez.əˈluːʃ ə n/ while in word ‘success’ vowel u will be pronounced /səkˈses/. These various phonetic realizations are not owned by Indonesian phonology system since it has only five main vowels which are sounded identically with the letter. Trying to

adapt a complex phonetic script of English, Indonesian people prefer to make its own phonetic script which is based on spelling. They might think it is easier to transition English loanwords by the way words are written, not pronounced. Many phonemes of English do not exist in Indonesian. This leads to the occurring of vowel substitution becomes the most frequently to apply. Another type that is applied the most is deletion which occurred eleven times. Deletion is the act of omitting certain phoneme which does not exist in Indonesian phonology. Also, it could be that phoneme is not necessary to pronounce since the word already fulfills and matches in Indonesian phonology. Instead of doing substitution like vowel does, deletion is just another method of adaptation that can be used to adapt the inexistency of certain component.

Secondly, it is worth concerning on multiple process of loanwords adaptation. This conclusion is made to show that there is also word that underwent change a lot. The words are ‘ironic’ and ‘apartment’. Word ‘ironic’ is adapted into ‘ironis’ and word ‘apartment’ is adapted into ‘apartemen’. Word ‘ironis’ has vowel substitution, vowel transition, diphthong change, consonant substitution and deletion while word ‘apartemen’ has vowel substitution, vowel transition, deletion, epenthesis and consonant insertion. Multiple processes shows that the more different component found, the more possibility the word will have more adaptation. In previous conclusion, this study argued that deletion is another way of vowel substitution to prevent the inability to fulfill inexistency of certain phonemes. However, the word ‘ironis’ has both vowel substitution and deletion process. The difference of phonetic behavior in any languages slightly can be solved. Loanword adaptation in phonological level is the first step of establishing borrowing words to be owned by target language.

DISCUSSION

In section 4.1, this study has revealed and analyzed all research questions and elaborated in finding. The conclusion of each finding was taken based on the way Indonesian adapted and transitioned loanwords from English. The process of adaptation and transition is phenomena that cannot be avoided when language contact occurs. English has become donator of loanwords for many counties and one of them is Indonesian. In adaptation and transition, each language that borrows loanwords from English will have different method. This is because the linguistics system (phonology and morphology) is also different. In every thesis or any linguistics research which concerns on loanwords adaptation, they will have different aim. Even if the aim is the same yet it does not guarantee that the result will also be the same.

Loanwords adaptation always has interesting discussion to be found. In this case, there must be two or more languages involved. The speakers of these languages try to fit one to another. It is nature of human when they intend to make something new to be theirs, thus they will give effort to ‘enter’ these new things are match to them, automatically. This study agreed with

Katamba which said that words become assimilated and undistinguishable from indigenous English words (1994). However, Indonesian and English also have different linguistic system as well. This study tried to explore three main basic system of language in these two languages' contact. They are phonology and morphology. In finding difference in a slightly sameness of both languages, the main purpose is to show the range of adaptation process from English to Indonesian. This study also found the range also covered phonology and morphology, the analysis was completed with specific sound change from English phonetic script to Indonesian. Therefore, this study against Odlin's theory which argued when a language engages in massive borrowings, cross-linguistic influence might introduce changes to the syntax of recipient language, but will probably not affect the phonetic and phonology (1989). This disagreement is conducted by the finding in results which shows phonology and phonetic were also impacted by borrowing.

In phonology, this study found seven types of phonological adaptation. They are last syllable substitution, vowel substitution, epenthesis, deletion, etc. in these findings was found a tendency of how Indonesian native speakers reproduced loanwords in their method. The method refers to how phonetic script of English is changed to Indonesian's. It is divided into two: by adapting English spelling and English phonetic script. In this method, it is found that adapting by following English spelling appears more frequently rather than by following phonetic script. This is suitable with asserted theory by Major these loanwords might have sound that are not the same in the phonology system in recipient language, thus they will probably undergo adaptation or transmission to cause the lexical item to sound more native or less foreign (2001). However, Indonesian has its own variation of phonology adaptation method. Once, this study found the combination of phonology adaptation method in loanword '*fase*' (see 4.1.1.9). This finding has agreement with Major that sometimes the speaker will maintain some elements of the loanword phonology fully or partially adapted, and eventually these elements might be blended into phonology system of recipient language (2001).

Making correlation of language contact in loanwords adaptation and transition does not need hard thinking. Loanwords exist due to the process of borrowing from donator to recipient. Language contact which occurs through borrowing is caused by the mobilization of the speakers of certain language in spreading their language globally. The free language mobilization is quite influenced by stream of globalization. This cycle makes one language is easier to enter another circumstance in any shapes of media. English that has a role as international language is for sure having greatest chance to be top-rated as donator language. Being able to speak English becomes priority for foreign language learner since its status as *lingua franca* globally. This study put literature of language contact as the most important part of discussion since it is the main 'menu' in loanword adaptation case.

There is an essence of language contact in loanword adaptation case which can sum up to the main purpose of adaptation process. It is the achievement to satisfaction of recipient language speakers to fill all absence aspects from donator language system. This thesis agreed t Thomason and Kaufman idea that achievement of satisfaction refers to the condition when recipient language can alter and adapt by deceiving aspects from donator language that are not owned by recipient language (1988). The deceiving or adaptation method was delivered in chapter result (see 4.1). This study argues that adaptation and transition of foreign loanwords will be success if recipient language can achieve the level of satisfaction. Level of satisfaction depends on what aspect that recipient intend to achieve. As this thesis reveal, this study found three aspects that Indonesian has achieved; phonology and morphology.

Language contact has its appearance in each of these three levels. For instance is in morphology level on morphophonemic case. From the term, it is already a contact of a system between morphology and phonology. Morphology takes main role in the prefix and phonology takes main role in the sound of initial phoneme of stem. The contact of language also happened since the prefix belongs to Indonesian and initial phoneme of stem belongs to English. Additionally, this conclusion has intention to say that there is language contact cycle in one construction of loanword. The impact of affixation stem loanword became a proof that brings the phenomenon through its detail analysis. All stems in morphophonemic of this study were loanwords that their initial sound still applies English phonetic system. It is due to the requirement of this study to present contact from English.

CONCLUSION AND SUGGESTION

Conclusion

Based on the result data analysis and discussion in chapter four in the previous chapter, the following conclusions are attached in numbers;

- 1) Indonesian has twelve types of phonological adaptation referring to phonetic behavior difference. There are two ways they adapt phonetic behavior; by following spelling or following English phonetic script. However, the tendency is shown that Indonesian tends to pronounce by following spelling system or the way words are written. Besides, the affixation gives two impacts toward loanwords. They are derivational affix and morphophonemic phenomenon. Affixation is applied due to the need of Indonesian to enrich its variety of verb. Therefore, this intention also has morphophonemic impact toward prefix itself.
- 2) Based on the descriptive qualitative method practiced toward this study, there was found a conclusion that each target language that adapt donator language will get certain levels in linguistics basic system such as phonology and morphology.
- 3) The signature literature of language adaptation research is that knows the existence of language contact in English loanwords adaptation in Indonesian. This study argues that adaptation and transition of foreign

loanwords will be success if recipient language can achieve the level of satisfaction. Level of satisfaction depends on what aspect that recipient intend to achieve.

Suggestion

Based on the conclusions above, the following suggestions are offered. First, conducting historical linguistics research should use comparative method. It is due to the change of language before and after. Comparative method is the best way to reveal what detail in aspect that changed by showing both pertinent languages. A suggestion is also offered if historical linguistics is going to be worked. Seeing historical linguistics is like reviewing back to the sequence of development steps. The research is better done if analysis is following from the first step until finish depends on the aim. The last is the way to make research toward historical linguistics worked-well is to complete the analysis up to final step of development stage. Language can change through time. Therefore, the study of historical linguistics is best 'escape' to fulfill curiosity in language development research.

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