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PHONOLOGICAL RULES OF MALAY KEPULAUAN LOCAL LANGUAGE IN BATAM ISLAND

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Abstract

A local language may disappear due to some factors. Modernity and melting pot are able to shift the local language. Malay Kepulauan is the local language of Batam island, and it tends to be left. It needs to be documented. This qualitative research gathered information of Malay Kepulauan from the locals. The aim was to reveal the process of its articulation. The data were taken from some *Kampong Tua*: Nongsa, Sanggau, Tanjung Uma, Telok Air, and Tanjung Riau. Observational method included semi-structured interview and record. The data in term of sounds were transcribed phonetically to capture the process of deletion and insertion. The result of this research was that Malay experienced synchronic dissimilation, aphaeresis deletion, syncope deletion, apocope deletion, epenthesis insertion, neutralization, and metathesis. The phonemic environment of phonological rules is /b/, /p/, /t/, /d/, /k/, /ʔ/, /m/, /n/, /ʀ/, /z/, /ɟ/, /h/, /j/. /w/, and /l/. The vocalic sounds involved the alteration; /ʊ - o/ and /e - ɪ/. The benefit of having assimilation, dissimilation, deletion, insertion, neutralization, and metathesis in pronouncing is resulting in smoother, more effortless, and more economical transition from one to another sound. However, phonological rules phenomena in Malay Kepulauan do not change the meaning of the words lexically.

Key words: *kampong tua*, Malay Kepulauan, phonological rules

A. INTRODUCTION

Indonesia has more than 600 different languages called mother tongue bounded by Indonesians. Mother tongue refers not only to the language which one learns from one's mother but also the speaker's dominant and home language which is called native language (Ambalegin & Suryani, 2018). Mother tongue will be one's habitual language if it is used frequently in family and society (Ambalegin & Suryani, 2018). Malay is one of the mother tongues in Indonesia. The number of it in Indonesia is more than in Malaysia, Singapore, or in Brunei.

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Riau is the centre of Malay literary work and culture archipelago mother tongues such as in Indonesia, Malaysia, Singapore, Brunei Darussalam, part of Thailand, and part of Philippines (Dahlan, 2015). Riau Malay was developed from this province which is the core of other Malay uttered along the eastern coastal area of Sumatera and coastal area of Kalimantan, Bengkulu, Kepulauan Riau, Jambi, Kepulauan Bangka Belitung, Sumatra Selatan, and Negara in Bali.

Batam island is located in Riau Kepulauan. There are some *kampung tua* which are located in coastal areas in Batam, and the Malay use Malay for their daily interaction (Ambalegin & Arianto, 2020). The function of Malay is not only as a communication tool, but Malay is a mother tongue, a proud, an identity, a connectivity, and a cultural support (Ambalegin & Arianto, 2020). Ambalegin & Arianto, (2020) highlighted that Malay in *kampong tua* in Batam island has some characteristics in pronouncing the spelling. Closing syllable sounds ended with <b> or <d> pronounce as /p/ or /t/ such as in *sebab* [se.bʌp], *sabtu* [sʌp.tu], *wujud* [wʊ.ɟot], and *sujud* [sʊ.ɟot] (Ambalegin & Arianto, 2020). The non-rhoticity by dropping the r-coda occurs in Malay pronunciation such as *telur* [tə.lo] (Ambalegin & Arianto, 2020).

Malay in some *kampung tua* in Batam Island has some phenomena in term of phonological rule. One of the phenomena in Malay is to omit sound /h/ as a coda. The position of letter <h> as a glottal sound will be omitted when pronouncing by the Malay. It is classified as deletion in term of apocopation (Lass, 2000). The Malay will not pronounce <h> as sound /h/ if it is positioned at the end of the final syllable sound such as /lʊ.ʁʌ/ in *lurah*. It is one of the interesting language phenomena that occurs in Malay. And it is needed to be investigated which is a local knowledge in term of linguistics. Then, it is important to investigate the occurrence of phonological rules of Malay Kepulauan in Batam Island.

This study identified the process of Malay phonology produced by the local Malay in Batam. Phonological process made by the natives in their pronunciation is insertion and deletion which is the way to pronounce differently of particular sounds in different phonemes to simplify the pronunciation of a language (Yule, 2017; Finegan, 2015; Leung & Brice, 2012; Kreidler, 2004). Malay phonological system does not show the inconsistency of pronunciation. However, it is the unique or characteristic ways of speaking. This variation is identified by geographical location and social status. The sounds of words then are modified in pronunciation, and this phenomenon is known as phonological rules.

Phonological rules are the way to pronounce differently of particular sound in different phoneme (Kreidler, 1993; Finegan, 2015; Yule, 2017). Similarly, Hayes (2009) stated that a phonological rule is as generalization about the distinct ways in which a particular sound can be pronounced in distinct neighbouring phonemes. And phonological rule is also one of the native-like speech criteria. Lass (2000) divided that phonological rules are classified into assimilation, dissimilation, deletion, neutralization, insertion, and metathesis. Due to the appearance of phenomena of phonological rules, this research captures the classification of phonological rules types and the phonemic environments of phonological rules appeared to Malay in Batam Island.

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Phonological rule is the study of the way to produce sounds which relate to each other in different contexts, and to the grammar and lexicon of a language, and the main task (Chomsky & Halle, 1991). It is to provide a phonetic representation for each word on the basis of its phonological representation in the lexicon and the syntactic configuration in which it occurs at structure surface. Overall, the rules of phonology can change the value of individual features, change the position of whole phonemes, and can delete features and add features. Finegan (2015 p. 142) mentioned phonological rules may be ordered with respect to one another, with first applicable rule applying to the underlying form and subsequent rules applying in turn to successive derived forms until the last applicable rule produces a surface form.

Types of phonological rules were formulated by Lass (2000). He classified phonological rules into some types, namely assimilation, dissimilation, deletion, insertion, and neutralization. These types are altering the pronunciation of the words that may occur in all languages.

1. Assimilation

Assimilation is a segment becomes identical to another. It occurs when a phoneme alters to produce another more like or even the same as the neighbouring phoneme. “That page” /ðæt.peɪdʒ/ becomes /ðæp.peɪdʒ/. Based on the position of the phoneme, assimilation is divided into regressive assimilation, progressive assimilation, and reciprocal assimilation.

a. Regressive Assimilation

Regressive assimilation processes when the final phoneme of the preceding word or syllable becomes similar to or the same as the initial phoneme of the following word or syllables (Lass, 2000), “That page” /ðæ**t**.peɪdʒ/ becomes /ðæp.peɪdʒ/; the final phoneme of the first word is influenced by the initial phoneme of the second word so both become the same.

b. Progressive Assimilation

Progressive assimilation is the reverse of regressive assimilation (Lass, 2000). It processes when the initial phoneme of the second word or syllable becomes similar to, or the same as the final phoneme of the preceding word or syllable, example: “kill him” /kɪl.**h**ɪm/ to /kɪl.lɪm/

c. Reciprocal Assimilation

Reciprocal assimilation is produced if there is a mutual influence between the two phonemes (Lass, 2000). The final phonemes of the preceding words or syllable and the initial phonemes of the following words or syllable are influencing each other so that it leads them to alter into a new sound, example: “get you” /get.**j**u:/ to /ge.ʧu:/.

2. Dissimilation

A phoneme avoids taking the feature of the neighbouring phonemes. It is the process of deleting or altering a sound due to difficult repetition of the sound within a word. The essence of dissimilation is to avoid lending the future of the preceding and following phonemes by omitting the awkward one, example: “surprise” /sə**r.**’praiz/ into /səp.’raiz/.

3. Deletion

Deletion is also known as elision. It is the joining of a phoneme with another. Deletion is the process of eliding a sound or syllable of a word, example: “potato” /pə**.**’teɪ.təʊ/ into /p’teɪ.təʊ/. Lass (2000) classified deletion into more specific conventional terminology. There is aphaeresis, syncope, apocope, and haplology.

a. Aphaeresis

Aphaeresis is when the loss of phoneme occurs in the beginning of a word (initial deletion), example: “I am” /aɪ.**æ**m/ into /aɪm/. Morphologically, it is written as I’m. This terminology includes the contracted form in English.

b. Syncope

Syncopation is the term often made use of the loss of vowels, yet consonants are occasionally also included for this discussion by some writers, example: “dictionary” /’dik.ʃ**ə̲.**n**e.**rɪ/ modified as /’dik.ʃnrɪ/.

The loss of phonemes is affected by first the weak status of a vowel which occurs after voiceless stop consonants, /p/, /t/, and /k/. The following words are often pronounced without the weak vowel schwa, example: “potato” /p’teɪ.t**ə̲**ʊ/, and “tomato” /t’meɪ.t**ə̲**ʊ/.

Second, the phoneme can be deleted when a weak vowel occurs before the syllabic consonants, /l/, /m/, /n/ and occasionally /r/, example: “seven” /’se.v**ə**n/ to /’sevn/, in which the schwa before /n/ is deleted.

Third deletion is a process which occurs due to the complex consonant clusters. Most of the native speakers drop one or more phonemes from the cluster patterns; example: “clothes” /’klʊo**ð**z/ into /’klʊoz/. “text” /’teks**t**/ and “texts” /’teks**ts**/ are both often pronounced /’teks/ by eliding /t/ and /ts/ respectively.

c. Apocope

Apocopation is eliding the final phoneme of a word (Lass, 2000). The final phoneme of a word is elided when they are stop alveolar consonant, /t/, /d/ and that are immediately linked by a word with a consonants in the initial phoneme, example: “last week” /la:s.wi:k/ black and white /blæk.ən.wait/. /h/ for “*darah*“ /dʌ.ʀʌ/, does not appear to be involved with any other distribution.

d. Haplology

Haplology is eliding of the phoneme, in which the second of the two identical or similar syllables is dropped such as “library” /’laɪ.bre.rɪ/ pronounced as /’laɪ.brɪ/

4. Insertion

Insertion is when an extra phoneme is inserted between two other phonemes. The phoneme is inserted to join two phonemes with distant place and manner of articulation, such as in “prince”, /t/ is added between /n/ and /s/ into /’prɪnts/. Sometimes a consonant cluster may be made easier to pronounce by inserting a vowel, thereby simplifying the cluster (Finegan, 2015). Based on the position of the phoneme, insertion is classified into prothesis, epenthesis, and paragoge.

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a. Prothesis

Prothesis is a process in the development of a language by which a phoneme or syllable is prefixed to a word to facilitate pronunciation, for example in Latin "*scala*" gives "*escala*" by Spanish.

b. Epenthesis

Epenthesis is the insertion of a sound or letter into a word, example: "start" /'stɑːʳt/ being realized as /'s**ə.**tɑːʳt/ or "grow" /'grəʊ/ into /g**ə.**rəʊ/.

c. Paragoge

Paragoge is an addition of a sound or a syllable to the end of a word, for example -st in "amongst", -t in "against", "whilst", and "tyrant" (Ng, 2013)

5. Neutralization and Archiphoneme

The pair of voiced and voiceless segments with respect to this distribution suggests a basic structural principle; the distribution of /p/ and /b/ in *sebab* /sə.bʌp/, /k/ and /ʔ/ in *teguk* /tə.goʔ/, and /ʊ/ and /o/ in *sujud* /sʊ.ɟot/ seem controlled in a manner replicated for other similar pair. Neutralization is a situation like the voiced or voiceless distribution that can be given structural coherence if they are analysed, not as defective distribution but as suspensions contrast due to structural principles of the languages.

Archiphoneme is the sum of the properties in common to two phonemes, and it appears in the position(s) of neutralization. For example, the difference between [b] and [p] is neutralized in word-final position in *sebab* /sə.bʌp/.

6. Metathesis

Metathesis reorders sounds within words, then making them easier to pronounce such as in "cavalry" /'kæ**vl.**ri/ to /'kæ**l.və.**ri/, and "prescription" /p**ri.**'skrip.ʃn/ to /p**ər**'skrip.ʃn/ (Finegan, 2015). Metathesis or transposition of segments is much less common than deletion or epenthesis, but occurs with some frequency as a historical change, and is occasionally found as an MP process. It interchanges of /p/ and /s/, /ps/ to /sp/, /m/ and /n/ such as "enmity" to "enmity". The case of all lexeme-specific is in "phoneme", "phenomenon", "amenity", and "amaenia".

Alhasnawi & Flayih (2012) mentioned metathesis as an alternation in the normal sequence of any units starting from sounds, syllables, words, or other units. In other words, phonemes, morphemes, words, and sometimes larger units of grammar are affected, this keeps pace with the fact that speech errors through which, to Roach (2012), it is possible to discover the control of speech production in the brain not be considered as a slip of the tongue, but the brain itself does show a disordering of units in the string, omission of unit, or replacement of a unit.

Metathesis is occurred when the order of sounds and the syllable boundary is inconveniently made; it causes a group of sounds to be placed where it is easier for the speakers. Metathesis gives a better syllable structure safeguard unity and harmony of sound system in replacing unusual groups by common groups which have become unpronounceable in substituting simple types for them and avoids useless articulatory effects. Khassawneh et al. (2018) contended that metathesis becomes regular only when it serves a specific structural purpose usually that of

converting phonologically or perceptually marked structures into more acceptable one.

There are some studies discussing the phonological rules. Misnadin (2011) discussed the phonological rules which are applicable to Madurese. Amri et al., (2013) discussed the types of phonological changes in Padang area dialect of Minangkabaunese used in Kuranji sub-dialect. Aprillianti, (2018) discussed the phonological rules of Tamil language vocabulary which is pronounced in Bahasa Indonesia. Ambalegin (2022) discussed the phonological rules process in English produced by the characters whose accent of isiXhosa involved while speaking English in the Black Panther movie. Heni & Subiyanto (2022) discussed the phonological rules produced by Japanese native speaker while singing English songs. Utami & Putra, (2022) discussed the phonological process of English consonant sounds produced by Balinese EFL students who speak an idiosyncratic native language. Siame et al. (2023) discussed the phonological rules of English words when they are pronounced in Lungu, Mambwe, and Namwanga (LuMaNa) languages. The LuMaNa are Bantu languages that are spoken along the corridors of the Northern and Muchinga Provinces in Zambia.

B. RESEARCH METHOD

This descriptive qualitative research applied the competence in observation method and participatory technique (Sudaryanto, 2015) in collecting the data. And the researcher designed the adaptation of an identity method and referential identity technique (Sudaryanto, 2015) in analysing the data. The data was taken by interviewing, noting, and recording the Malay in each kampong tua to get the data related to words or phrases where phonological rules occurred within as well as phonetic transcription of Malay Kepulauan in Batam Island. Then, data were respectively listed to be analysed with the proposed formulation. The data taken was based on five different kampong tua represented south, north, west, east, and centre namely, Kampong Tua Nongsa, Sanggau, Tanjung Uma, Telok Air, and Tanjung Riau. The five senior Malay from each kampung tua chosen randomly was interviewed related to Malay history, Malay pronunciation, and the respondents' backgrounds. While they were giving the information, the researcher recorded it.

Having collected the data in term of Malay phonetic transcription, the data was analysed by coding the speech sounds. The sounds classified by phonological rules were phonetically transcribed in IPA. The written words represented by letter graphemes and the phonetic transcription represented by phonetic symbols were compared to identify the process of alteration of speech sound into assimilation, dissimilation, deletion, neutralization, insertion, or metathesis. Finally, the altered speech sounds were analysed to answer the first research questions.

The sound experienced of the alteration was classified based on the manner of articulation. There were five manners of articulation in Malay Kepulauan; plosive or stop, nasal, fricative, liquid, approximant, and trill. Then, the sound alteration was mapped to investigate the phonemic environments of phonological rules of Malay Kepulauan in Batam Island.

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C. RESULT AND DISCUSSION

1) Research Finding

1. Phonological rules phenomena in Malay do not change the meaning of the words lexically.
2. Malay experiences some of the phonological rules' phenomena in term of.
   a. synchronic dissimilation
   b. aphaeresis deletion
   c. syncope deletion
   d. apocope deletion
   e. epenthesis insertion
   f. neutralization and archiphoneme
3. The most significant change to Malay
   a. Semi vocalic insertion between <u> and another vowel and <i> and another vowel.
   b. Semi vocalic insertion by replacing <i> and <u> positioned in the final syllable after vowel.
   c. <r> deletion in the end of the consonant-closed syllable by <r>.
   d. <r> deletion in the end of the prefix *ter-* after the verb.
   e. <h> deletion in the end of the consonant-closed syllable by <h>.
   f. <h> deletion in the initial after vocal which syllable positions in the beginning of the word.
   g. <i> and <u> are the vowels experienced the change in term of neutralization. the vowels are neutralized by changing <ɪ> into [e] in the final position of and <u> into [o] between consonants in the final consonant-closed syllable.
   h. [ʔ] insertion by replacing <k> positioned in the consonant-closed syllable by <k> in the final syllable.
   i. There is an alteration process from voiced to voiceless sound. /b/ to /p/ and /d/ to /t/ are the bilabial and alveolar sound, and they change as a neighbouring sound because of the same place and manner.
   j. There is also alteration process between alveolar sound /z/ to palatal sound /ʝ/ as /z/ in not familiar sound in Malay.
   k. There is a vowel insertion between double consonants to pronounce easily.
4. The phonemic environment of phonological rules is /b/, /p/, /t/, /d/, /k/, /ʔ/, /m/, /n/, /ʀ/, /z/, /ʝ/, /h/, /j/. /w/, /l/.
5. The vocalic sounds involved the alteration in /a-ə/, /ʊ-o/, /ɪ-e/
6. The place of articulation of phonological rules is bilabial, alveolar, palatal, velar, uvular, and glottal.
7. The manner of articulation of phonological rules is plosive, nasal, trill, fricative, approximant, and lateral approximant.
8. The process of phonological rules modifies sound in order to similarize to some their neighbouring sounds.

2) Discussion

1. Synchronic Dissimilation

There is a dissimilation process in which the sound position exchanges. Synchronic dissimilation is applied to this sound exchange. It is because the combination sound of /p/ and /ʀ/ as a consonant cluster is not familiar in Malay. To synchronize, the Malay dissimilates the sound by exchanging /ʀ/ after vowel /ə/. The vowels also experienced the change from [e] into [ə]. Then the syllable [pʀə] exchanges to [pəʀ]. Obied (2016) agreed that this type of rule is often seen among people speaking a language that is not their native language where the sound contrasts may be difficult so the rule is applied for ease of production and perception.

Table 1 Synchronic Dissimilation

No	word	Phonetically transcript	Speech produced	Phoneme dissimilation	Exchange
1	*presiden*	/pʀə.sɪ.den/	/pəʀ.sɪ.den/	ʀ and ə	ə and ʀ

2. Aphaeresis Deletion

All words are pronounced by deleting the initial syllable sound or consonant sounds. /h/, the transparent-sound like, is deleted in the initial position. Some words with two-syllable sound have a deletion process to the first syllable sound. Some phrases have a few different positions of deletion. The phrases *tidak ada*, *mamak bungsu*, *mamak tengah*, and *mamak sulung* are pronounced by deleting the first syllable sound of each word. Meanwhile in the phrase of *kepala batu*, the deletion process occurs only the first syllable of the first word *kepala*. However, these pronunciation processes experience the eliding of initial sounds.

In contrast, (Lass, 2000) mentioned the aphaeresis deletion occurs for the unseparated two words in which the first syllable of the second word is elided and will construct new contraction forms or clitics that mostly appear in English such as I'm. you're, or we'd. Malay does not have the process of construction. There is a process of first syllable sound deletion in one of Bahasa Indonesia words such as *enggak* /gʌʔ/ (Ambalegin, 2022).

Table 2 Aphaeresis Deletion

No	Words	Phonetically transcript	Speech produced	Phoneme deletion
1	*tidak ada*	/tɪ.dʌʔ.ʌ.də/	dʌʔ.də	/tɪ/
2	*kepala batu*	/kə.pʌ.lə.bʌ.tʊ/	/pʌ.lə bʌ.tʊ/	/kə/
3	*sudah*	/sʊ.dʌ/	/dʌh/	/sʊ/
4	*hendak*	/ən.dʌʔ/	/dʌʔ/	/ən/
5	*saja*	/sʌ.ʄə/	/ʄə/	/sʌ/
6	*dekat*	/də.kʌt/	/kʌd/	/də/
7	*itu*	/ɪ.tʊ/	/tu/	/ɪ/
8	*ini*	/ɪ.nɪ/	/ni/	/ɪ/
9	*mamak bungsu*	/mʌ.mʌʔ.bʊŋ.sʊ/	/mʌʔ.sʊ/	/mʌ/ and /bʊŋ/

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10	*mamak tengah*	/mʌ.mʌʔ. tə.ŋʌ/	/mʌʔ.ŋʌ/	/mʌ/ and /tə/
11	*mamak sulung*	/mʌ.mʌʔ. sʊ.loŋ/	/mʌʔ.loŋ/	/mʌ/ and /sʊ/
12	*atok*	/ʌ.toʔ/	/toʔ/	/ʌ/
13	*anak*	/ʌ.nʌʔ/	/nʌʔ/	/ʌ/
14	hitam	/hɪ.tʌm/	/ɪ.tʌm/	/h/
15	hutan	/hʊ.tʌn/	/ʊ.tʌn/	/h/
16	hari	/hʌ.ʀɪ/	/ʌ.ʀɪ/	/h/

3. Syncope Deletion

There are some words pronounced by deleting the internal sound or the middle-phoneme. It happens because the weak vowel sound or complex consonant cluster or syllable (Ambalegin, 2022). One of the characteristics in Malay is /ʀ/ sounded silent. The Malay will elide /ʀ/ in the end of each consonant-closed syllable when it is positioned in the middle and final in the words such as *kerja*, *telur*, etc but not in the initial such as *rusak*, *rumah*, etc. There are prefixes *ter-* and *ber-* in Malay followed by verbs, noun, and adjective. The /ʀ/ is dropped in the word. In Malay, /ʀ/ is not really existed when pronounced.

Sertifikat is a borrowing word and has four syllables. Words in Malay have generally less than four syllables sound. The Malay pronounces simply the four-syllable sound word. Based on the place of articulation, the positions are at alveolar, uvular, alveolar, labiodental, velar, and alveolar. Then, to make the movement of the tongue easy, the alveolar sound in the third position is elided; alveolar, uvular, labiodental, velar, and alveolar.

This process happens to the words which have more than two syllables such as *kelelawar* [kə.lʌ.wʌr] or *pelihara* [pɪ.ʲʌ.rʌ] (Ambalegin, 2022). Bailey (2020) mentioned the life-cycle of [g] deletion from [ŋg] to [ŋ] such as in singer [sɪŋ.gəʳ] to [sɪ.ŋəʳ]. in line with (Hadi et al., 2012), the deletion of [ɲ] in *nye* as in *besarnya* [bɛ.sʌʔ.ɲə] becomes [bɛ.sʌʔ.e] that occurs in Kaur language.

Table 3 Syncope Deletion

No	Words	Phonetically transcript	Speech produced	Phoneme deletion
1	*kerja*	/kəʀ.jə/	/kə.jə/	/ʀ/
2	*termenung*	/təʀ.mə.noŋ/	/tə.mə.noŋ/	/ʀ/
3	*berdua*	/bəʀ.dʊ.ʷə/	/bə.dʊ.ʷə/	/ʀ/
4	*sertifikat*	/səʀ.tɪ.fɪ.kʌt/	/səʀ.fɪ.kʌt/, /sə.fɪ.kʌt/	/ʀ/ and /tɪ/

4. Apocope Deletion

In Malay, the final /ʀ/ and /h/ will be elided or deleted as a specific characteristic of Malay pronunciation experiencing phonological rule. The omission of these sounds will not give an effect to another adjacent sounds such as in *rumah tongkat* between [h] and [t] or *kabar baik* between [r] and [b]. Agreed by Diani & Azwandi (2021), the deletion of [h] in the end of the words also occurs to Bahasa Indonesia. And the deletion of [r] in the

end of the words occurs to British English pronunciation (Ambalegin & Handayani, 2023).

Table 4 Apocope Deletion

No	Words	Phonetically transcript	Speech produced	Phoneme deletion
1	*tidur*	tɪ.duʀ	/tɪ.do/	/ʀ/
2	*telur*	tə.luʀ	/tə.lo/	/ʀ/
3	*patah*	pʌ.tʌh	/pʌ.ta/	/ʀ/
4	*darah*	dʌ.ʀʌh	/dʌ.ʀa/	/h/
5	*rumah tongkat*	ʀʊ.mʌh.tɒŋ.kʌd	/ʀʊ.mʌ.tɒŋ.kʌd/	/h/

5. Epenthesis Insertion

Pelajar is a noun. *ajar* is a base word added by prefix *pe*-. A verb added to prefix *pe*- will form a noun such as *pelari* (*pe* + *lari*), *penyanyi* (*pe* + *nyanyi*), etc. There is an insertion /l/ to form *pelajar* between prefix *pe* and verb *ajar*. /l/ is inserted due to the joining of two vowels /ə/ and /ʌ/. The organization of the position of articulation is arranged orderly; bilabial /pə/, alveolar /lʌ/, and palatal /ɟʌ/ by inserting /l/.

Film is a borrowing word. There is a joining-consonant sound in this word. In Malay, there is no joining-consonant sound /l/ and /m/ in one line sound. Then /ə/ is inserted between /l/ and /m/ to pronounce easily. Siame et al. (2023) investigated that LuMaNa languages inserted vowel to break up the consonant cluster for English as borrowing words such as clerk into *kalaaliki* and clinic into *kiliniki* as Bantu native phonology does not allow consonant cluster.

Table 5 Epenthesis Insertion

No	Words	Speech produced	Insertion
1	*pelajar*	/pə.lʌ.ɟa/	/l/
2	*film*	/fɪ.ləm/	/ə/

6. Neutralization and Archiphoneme

In this phenomenon, there is neither deletion nor insertion. The sound would be neutralized by converting one sound to the other sound. It happens when two closely related phonemes which are contrast are found to be non-contrastive. There are some rules in term of neutralization which depends on the language itself.

The voiced and voiceless stop sounds can be converted to be neutralized when they are in the same place and manner of articulation such as the bilabial stop [b] and [p], alveolar stop [d] and [t], velar stop [g] and [k]. Hawkins (1984) stated that the voiceless consonants [p, t, k, f, s] contrast with their voiced counterparts [b, d, g, v, z] in all positions of the syllable.

The meet between [n] and [p] will experience neutralization, in which [n] and [p] have different manner and place of articulation. Then [n]

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is labialized into [m] as [m] is as the same place as [p] which is labial. Thus, [n] + [p] become [m] + [p].

The closing syllable ended by <k> will pronounce as glottal stop [ʔ]. Due to the [k] as stop on velar, the coda [k] will give the stuck and tense sensation at the back of the mouth. To avoid this condition, by letting the air flow freely, the back of the tongue remains opened, and the glottal stop is chosen to neutralize [k], and to continue another sound will be easy. Finally, where only the voiceless sounds occur. The rule of phonology to simplify the pronunciation.

There are a few phonemes which have similar-like sounds. When these sounds are produced by eliding the original sounds, the meaning does not change. The original sounds are mostly the fricative such as [z], [f], and [v]. The similar-like sounds of these fricatives are the stops such as [p] and [ɟ]. The change occurs in *izin* /ɪ.ɟɪn/ *zaman* /ɟʌ.mʌn/, or *dikafani* /dɪ.kʌ.pʌ.nɪ/. It happens because the Malay are not used to producing fricatives influenced by Bahasa Indonesia. Different from (Muslich, 2018), this change includes in assimilation.

The change of vowel sound also occurs in Malay. The contrast vowel sounds [u] and [o] and [i] and [e]. The change of [u] to [o] happens when their position in the last closing syllable such as in *tumpul* [tʊm.pol], kasut [kʌ.sod], *pun* [pon], *telur* [tə.lo]. However, this change happens to *rusak* [ʀo.sʌʔ] as <u> is in the first syllable. Meanwhile, the change of [i] to [e] happens when their position in the first syllable such as *kisah* [ke.sʌ], *sibuk* [se.boʔ] , *ribut* [ʀe.bot]. This change also happens to the last syllable such as in *fanatik* [fʌ.nʌ.teʔ]. Malay Loloan in Bali and Malay dialect Pematang Selunak Indragiri Hulu in Riau have the same rule for this change (Suparwa et al., 2015; Yuliandari et al., 2015).

Interestingly, the coda schwa will be produced if the letter is <a> in the open syllable sound. The Malay will not pronounce if there is a consonant sound after letter <a>. It can be seen from the words *darah* [dʌʀa] and *dara* [dʌʀə]. The sentence *anak dara berdarah* is pronounced as /nʌʔ dʌ.ʀə bə.dʌ.ʀa/ in Malay in Batam.

Table 6 Neutralization and Archiphoneme

No	Words	Phonetically transcript	Speech produced	Phoneme neutralized
1	*tak*	/tʌk/	/tʌʔ/	/k/-/ʔ/
2	*teguk*	/tə.gʊk/	/tə.goʔ/	/ʊ/-/o/
3	*sebab*	/sə.bʌb/	/sə.bʌp/	/b/-/p/
4	*kelapa*	/kə.lʌ.pa/	/kə.lʌ.pə/	/a/-/ə/
5	*buaya*	/bʊ.^{w}ʌ.ja/	/bʊ.^{w}ʌ.jə/	/a/-/ə/
6	*telur*	/tə.lʊr/	/tə.lo/	/lʊr/ - /lo/
7	*janggut*	/ɟʌŋ.gʊt/	/ɟʌŋ.god/	/ʊt/-/od/
8	*deg-degan*	/dəg-də.gʌn/	/dək-də.kʌn/	/g/-/k/
9	*tekad*	/te.kʌd/	/te.kʌt/	/d/-/t/
10	*tanpa*	/tʌn.pa/	/tʌm.pə/	/np/-/mp/
11	*lompat*	/lɒm.pʌt/	/lɒn.cʌt/	/mp/-/nc/

No	Words	Phonetically transcript	Speech produced	Phoneme neutralized
12	*izin*	/ɪ.zɪn/	/ɪ.ʄɪn/	/z/- /ʄ/
13	*pompa*	/pɒm.pa/	/kɒm.pə/	/p/-/k/
14	*tanya*	/tʌ.ɲa/	/nʌ.ɲə/	/t/-/n/
15	*tengok*	/te.ŋɒk/	/ne.ŋɒʔ/	/t/-/n/
16	*ketua*	/kə.tu.^{w}a/	/tə.tʊ.^{w}ə/	/k/-/t/
17	*belajar*	/bər.ʌ.ʄʌr/	/bə.lʌ.ʄʌ/	/r/-/l/
18	*cungkil*	/cʊŋ.kɪl/	/coŋ.kel/	/u/-/o/, /i/-/e/
19	*rusak*	/ʀʊ.sʌk/	/ʀo.sʌʔ/	/u/-/o/
20	*kisah*	/kɪ.sʌh/	/ke.sʌ/	/ɪ/-/e/
21	*sibuk*	/sɪ.bʊk/	/se.boʔ/	/ɪ/-/e/

7. Semivowel Insertion

Semivowel is produced by experiencing the phonological rule. Besides letters <w> and <y> are pronounced as [w] and [j], semivowel is produced by the combination of two vowels. Besides letters <w> and <y> pronounced as /w/ and /j/, there are a few double vowels pronounced with semivowel sound; [ia], [iu], [ai], [au], [ui], [ua]. /j/ is pronounced between letters [i] and [a], [i] and [u], and [a] and [i]. /w/ is pronounced between letters [a] and [u], [u] and [i], and [u] and [a]. Letter <y> is not pronounced as /i/ in words and <w> is not pronounced as /ʊ/ in words. This phenomenon shows that semivowel will help join the two vowel sounds to pronounce smoothly (Hancock, 2003).

Table 7 Semivowel Insertion

No	Words	Phonetically transcript	Speech produced	Semivowel
1	*Biaya*	/bi.a.ja/	/bɪ.^{j}ʌ.jə/	/i/-/j/
2	*Hiu*	/hi.u/	/ɪ.^{j}u/, /ju/	/i/-/j/
3	*Buih*	/bu.ih/	/bʊ.^{w}e/	/u/-/w/
4	*Tualah*	/tu.a.lʌh/	/tʊ.^{w}ʌ.la/	/u/-/w/

D. CONCLUSION AND SUGGESTION

Historically, the basic form of Indonesian is from Malay. There is no any significantly different between Indonesian and Malay in term of spelling and pronunciation structurally. Malay has 6 vowels, 12 diphthongs forming semivowels, and 23 consonants. In producing the consonants sounds, there is essentially a one-to-one relationship between spelling and pronunciation. Then, the phenomena phonological rules also happen in Malay. In fact, these phenomena do not change the meaning of the words lexically.

Assimilation, dissimilation, deletion, insertion, neutralization, and metathesis occur in Malay in order to similarize to some their neighbouring sounds from voiced to voiceless sound, from vowel to semivowel, from gapped-airflow sound to free-airflow sound, and from many-syllable sound to a few-

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syllable sound. These alterations resulted in smoother, more effortless and more economical transition from one to another sound.

REFERENCES

Alhasnawi, S., & Flayih, R. (2012). Metathesis in English and Arabic: A comparative study. *{□□□□□□□□□□ □□□□□□ □□□□}*. https://www.researchgate.net/publication/320692446_Metathesis_in_English_and_Arabic_A_Comparative_Study

Ambalegin, A. (2022). Nonnative be like native speakers: the phonological processes of characters' English pronunciation in Black Panther movie. *Journal of Applied Studies in Language*, *6*(1), 15–25. https://doi.org/https://doi.org/10.31940/jasl.v6i1.337

Ambalegin, A., & Arianto, T. (2020). Segmental phonemic system of Riau Malay subdialect Kepulauan as local knowledge in Batam. *EduLite: Journal of English Education*, *5*(1), 159–175. https://doi.org/DOI: http://dx.doi.org/10.30659/e.5.1.159-175

Ambalegin, A., & Handayani, N. D. (2023). The sound shifting of British English accent: A phonological analysis. *IdeBahasa*, *5*(2), 219–227. https://doi.org/DOI: https://doi.org/10.37296/idebahasa.v5i2.139

Ambalegin, A., & Suryani, M. S. (2018). Mother tongue affecting the English vowel pronunciation of Batak Toba adults. *AICLL The 1st Annual International Conference on Language and Literature*, 66–80. https://doi.org/10.18502/kss.v3i4.1920

Amri, S. H., Refnaldi, R., & Rosa, R. N. (2013). Phonological changes of Minangkabaunese language found in Padang area dialect used in Kuranji. *Journal of English Language and Literature*, *2*(1), 245–255. https://doi.org/DOI : https://doi.org/10.24036/ell.v2i1.2415

Aprillianti, L. (2018). Phonological rules on Tamil language absorption into Bahasa Indonesia (Study of transformational generative phonology). *ETERNAL (English Teaching Journal)*, *9*(2), 109–127. https://doi.org/DOI: https://doi.org/10.26877/eternal.v9i2.2985

Bailey, G. (2020). Insertion and deletion in Northern English (ng): Innovation in the life cycle of phonological processes. *Journal of Linguistics*, *57*(3), 465–497. https://doi.org/DOI:10.1017/S0022226720000365

Chomsky, N., & Halle, M. (1991). *The sound pattern of English*. The MIT Press.

Diani, I., & Azwandi, A. (2021). Phonological change processes of English and Indonesian Language. *JOALL (Journal of Applied Linguistics and Literature)*, *6*(1), 133–148. https://doi.org/10.33369/joall.v6i1.13642

Finegan, E. (2015). *Language; Its structure and use* (7th ed.). Cengage Learning.

Hadi, W., Pastika, I. W., Suparwa, I. N., & Putra, A. A. P. (2012). Phonology of Kaur language in generative theory. *Journal of Linguistics, 6*(1). https://ojs.unud.ac.id/index.php/eol/article/view/13893

Hancock, M. (2003). *English pronunciation in use: Self-study and classroom use*. Cambridge University Press.

Hawkins, P. (1984). *Introduction Phonology*. Routledge Publishers.

Hayes, B. (2009). *Introductory phonology* (1st ed.). Blackwell Publishiing.

Heni, A. N., & Subiyanto, A. (2022). Phonological processes of English words pronounced by Japanese found in Hey Say Jump! songs. *Madah: Jurnal Bahasa Dan Sastra*, *13*(2), 131—142. https://doi.org/http://dx.doi.org/10.31503/madah.v13i2.421

Khassawneh, R. M. S., Al-Momani, I. M., & Malkawi, N. A. (2018). Metathesis in Arabic: A comparative study. *International Journal on Studies in English Language and Literature (IJSELL)*, *6*(5), 19–25. https://doi.org/DOI: http://dx.doi.org/10.20431/2347-3134.0605003

Kreidler, C. W. (1993). *The pronunciation of English; A course book in Phonology* (5th ed.). Blackwell Publishers.

Kreidler, C. W. (2004). *The pronunciation of English* (second edi). Blackwell Publishiing.

Lass, R. (2000). *Phonology: an introduction to basic concepts*. Cambridge University Press.

Leung, C. B., & Brice, A. E. (2012). An Analysis of phonological processes involved in spoken English of Hong Kong Primary Pre-service teachers. *Language Testing in Asia*, *2*(2), 1–14. https://doi.org/https://doi.org/10.1186/2229-0443-2-2-42

Misnadin, M. (2011). An observation towards some phonological rules and processes in Madurese. *Prosodi Iurnal Ilmu Bahasa Dan Sastra*, *5*(2). https://doi.org/https://doi.org/10.21107/prosodi.v5i2.70

Muslich, M. (2018). *Fonologi bahasa Indonesia* (8th ed.). Bumi Aksara.

Obied, I. M. (2016). Phonological Rules. *Journal of University of Babylon*, *24*(1), 168–176. https://www.iasj.net/iasj/article/108203

Roach, P. (2012). *English phonetics and phonology; A practical course* (4th ed.). Cambridge University Press.

Siame, P., Amoakohene, B., & Kapau, H. M. (2023). Phonological processes governing Borrowing from English to Lungu, Mambwe, and Namwanga languages. *Daengku: Journal of Humanities and Social Sciences Innovation*, *3*(5), 821–830. https://doi.org/https://doi.org/10.35877/454RI.daengku1765

Sudaryanto, S. (2015). *Metode dan aneka teknik analisis bahasa*. Duta Wacana University Press.

Suparwa, I. N., Putra, A. A. P., & Malini, N. L. N. S. (2015). Dinamika fonologis bahasa Melayu Bali. *SEMINAR NASIONAL RISET INOVATIF II*, 513–520. https://undiksha.ac.id/seminar-nasional-riset-inovatif-senari-5-seminar-nasional-pengabdian-kepada-masyarakat-senadimas-2/

Utami, N. P. C. P., & Putra, I. P. K. C. (2022). The analysis of phonological process on the English consonant sounds of Balinese EFL students' pronunciation. *E-Structural (English Studies on Translation, Culture, Literature, and Linguistics)*, *5*(2), 148–158. https://doi.org/DOI : 10.33633/es.v5i02.7452

Yule, G. (2017). *The study of language* (sixth). Cambridge University Press.

Yuliandari, D. Y., Auzar, A., & Hakim, N. (2015). Fonem segmental bahasa Melayu Riau dialek Pematang Selunak Indragiri Hulu. *Jurnal Mahasiswa Online*, *2*(2). https://jom.unri.ac.id/index.php/JOMFKIP/article/view/6047

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