



## Phonological Addition and Deletion of Loan Words Used in Indonesian

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### Abstrak

*Studi ini mengeksplorasi transformasi fonologis yang terjadi ketika kata-kata asing, khususnya bahasa Inggris, diadopsi ke dalam bahasa Indonesia. Dengan menggunakan metode deskriptif, penelitian ini secara sistematis mengkaji bagaimana kata-kata tersebut mengalami perubahan dan bagaimana fonem-fonemnya diubah selama proses adopsi. Pendekatan linguistik yang dikombinasikan dengan analisis deskriptif sederhana memungkinkan penelitian ini menganalisis berbagai kata serapan untuk mengungkap pola-pola dalam adaptasi fonologisnya. Hasil penelitian menunjukkan bahwa proses adopsi sering kali melibatkan penambahan, penghapusan, atau pemertahanan fonem tertentu. Beberapa fonem tetap konsisten, mempertahankan bunyi aslinya, sementara yang lain ditambahkan atau dihilangkan agar sesuai dengan aturan fonologi dan norma linguistik bahasa Indonesia. Secara khusus, penelitian ini mengidentifikasi dan merumuskan sekitar enam belas pola penambahan dan penghapusan fonologis yang secara rutin terjadi selama proses ini. Pola-pola ini menyoroti sifat sistematis dari adaptasi bahasa, menunjukkan bagaimana struktur linguistik mengakomodasi kata serapan agar sesuai dengan kerangka fonologis dan fonetik bahasa sasaran. Penelitian ini memberikan wawasan berharga tentang interaksi dinamis antarbahasa, khususnya bagaimana struktur fonologis dimodifikasi untuk memastikan kompatibilitas dan kemudahan penggunaan dalam lingkungan linguistik baru. Temuan ini memberikan pemahaman mendasar tentang mekanisme adopsi kata, memperkaya studi linguistik tentang kata serapan dan dampaknya terhadap evolusi bahasa, khususnya dalam bahasa Indonesia. Rumusan pola-pola yang dihasilkan menawarkan perspektif terstruktur untuk penelitian lebih lanjut tentang adaptasi fonologis dan pengaruh lintas bahasa.*

**Kata-kata Kunci:** Adopsi; Kata Serapan; Fonem; Penggantian.

### Abstract

This study explores the phonological transformations that occur when foreign words, particularly English, are adopted into Indonesian. Employing a descriptive method, the research systematically examines how these words undergo changes and how their phonemes are altered during the adoption process. Using a linguistic approach combined with simple descriptive analysis, the study successfully analyzed a variety of borrowed words to uncover patterns in their phonological adaptation. The findings reveal that the adoption process often involves phonological addition, deletion, or retention of specific phonemes. Some phonemes remain constant, preserving their original sound, while others are either added or omitted to align with Indonesian phonological rules and linguistic norms.

Notably, the study identifies and formulates about sixteen distinct patterns of phonological addition and deletion that regularly occur during this process. These patterns highlight the systematic nature of language adaptation, demonstrating how linguistic structures accommodate borrowed words to fit the phonological and phonetic framework of the target language. This research contributes valuable insights into the dynamic interaction between languages, particularly the way phonological structures are modified to ensure compatibility and ease of use in a new linguistic environment. These findings provide a foundational understanding of word adoption mechanics, enriching linguistic studies on loanwords and their impact on language evolution, particularly in Indonesian. The established formulas offer a structured perspective for further research in phonological adaptation and cross-linguistic influence.

**Keywords:** Adoption; Loan Word; Phoneme; Replacement.

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## INTRODUCTION

It happens to every language in the world that in its history of development it is unavoidable to adopt some words from other languages (foreign stock), since it is a logical consequence of unavoidable interaction with other nations. It is a logical consequence of cultural contact among nations in the world. This statement is supported by the following comment: *“Di dalam pertumbuhan dan perkembangan alamiah bahasa nasional, kontak budaya antar bangsa mengakibatkan pula kontak bahasanya sehingga pengaruh bahasa lain masuk ke dalam bahasa nasional.”*<sup>1</sup>

Indonesian is one of the languages that cannot get rid of above phenomenon. In its history of development Indonesian has been adopting many words from some foreign languages such as: Portugues, Duchth, Arabic, and English. This statement is strengthened by the following comment: *“Bahasa melayu sejak awal masehi, ibarat bunga karang menyerap banyak unsur bahasa asing yang membuat bahasa itu lebih lengkap dan lebih kaya. Dapatlah dicatat beribu-ribu kata yang berasal dari bahasa sanskerta, Jawa kuno, Portugis, Belanda, Jawa modern, Sunda, Minang dan dewasa ini khususnya bahasa Inggris.”*<sup>2</sup>

From this quotation we also know that the term foreign languages in this discussion covers not only languages from other countries but also regional languages in Indonesia. In addition, on May 20<sup>th</sup>, 1995 in a formal ceremony for the national discipline, President Soeharto stimulated and ordered the people of Indonesia to speak and write in standart

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<sup>1</sup> Siti Ayang Aelia, “Analisis Penggunaan Unsur Serapan dan Istilah Asing dalam Opini Surat Kabar Serambi Indonesia,” *Literatur: Jurnal Bahasa dan Sastra* 2, no. 2 (2020): 79–93, <https://journal.iainlhokseumawe.ac.id/index.php/literatur/article/view/1429>.

<sup>2</sup> Herianah, “Penyimpangan Gramatikal dalam Berita Surat Kabar Tribun Timur, Fajar (Makassar), dan Republika (Jakarta),” *Multilingual* 12, no. 1 (2013): 26–35, [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://download.garuda.kemdikbud.go.id/article.php?article=1079162&val=16277&title=PENYIMPANGAN GRAMATIKAL DALAM BERITA SURAT KABAR TRIBUN TIMUR FAJAR MAKASSAR DAN REPUBLIKA JAKARTA](chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://download.garuda.kemdikbud.go.id/article.php?article=1079162&val=16277&title=PENYIMPANGAN%20GRAMATIKAL%20DALAM%20BERITA%20SURAT%20KABAR%20TRIBUN%20TIMUR%20FAJAR%20MAKASSAR%20DAN%20REPUBLIKA%20JAKARTA).

Indonesian (*Bahasa Indonesia yang baik dan benar*). “Oleh karena itu, pada tanggal 20 Mei 1995, dalam rangka pencanangan disiplin nasional Presiden Soeharto menyerukan agar seluruh lapisan masyarakat menggunakan bahasa Indonesia yang baik dan benar. Seruan itu tentulah didasarkan pada kenyataan yang cukup memprihatinkan. Betapa tidak setiap saat masyarakat kita disuguhi bahasa asing yang digunakan pada papan nama yang terpampang di took-toko, kompleks perumahan, kantor-kantor, dan iklan-iklan. Padahal, kata dan atau istilah asing itu dapat diganti atau ada padanannya di dalam bahasa Indonesia.”<sup>3</sup>

The president’s initiative above is assumed to be motivated by the actual fact in society where the use of foreign words (nonstandard ones) has been in a terrible condition. Such foreign words could be found somewhere in public facilities (places) such as shopping centers, housing complexes, government and non-government buildings, advertisements, government and nongovernment companies. The example of such foreign words as Sarinah supermarket, Makassar Mall, Matahari Shopping Center, Miami Restaurant, Kentucky Fried Chicken, Bandung Hill Side, Bekasi international industrial estate, and many others. This condition is also complained by the Minister of education and culture, Wardiman Djoyonegoro in his comment as follows, “*Sejalan dengan laju kegiatan oembangunan di segala bidang, pemanfaatan bahasa asing terutama bahasa inggris memang diperlukan ... akan tetapi sebagaimana diamanatkan dalam GBHN 1993 kita tidak perlu menggunakan kata dan istilah asing yang kandungan konsepnya dapat diungkapkan dalam bahasa Indonesia. Dengan perkataan lain, kita harus menghindari penggunaan kata dan istilah asing yang sudah ada padanannya dalam bahasa Indonesia. Namun kenyataan menunjukkan bahwa pemakaian bahasa asing itu terutama di tempat-tempat umum seperti pada nama-nama badan usaha, kawasan pemukiman dan gedung-gedung megah, telah melewati batas-batas kewajaran.*”<sup>4</sup>

So, beside his complaint about the impropotional use of foreign words in the society, the minister also expects the people of Indonesia to avoid using foreign words that already

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<sup>3</sup> Silvia, “Pengaruh Metode Speed Reading terhadap Keterampilan Membaca pada Mata Pelajaran Bahasa Indonesia Siswa Kelas III SD Negeri 023898 Binjai” (Universitas Muhammadiyah Sumatera Utara, 2023), [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://repository.umsu.ac.id/jspui/bitstream/123456789/22172/1/SKRIPSI SILVIA 1902090145 PGSD.pdf](chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://repository.umsu.ac.id/jspui/bitstream/123456789/22172/1/SKRIPSI%20SILVIA%201902090145%20PGSD.pdf).

<sup>4</sup> Aldi Ariansyah dan Linggar Caesar, “Pengaruh Kompetensi Bahasa Inggris terhadap Produktivitas,” *JISMA: Journal of Information Systems and Management* 3, no. 2 (2024): 87–89, <https://jisma.org/index.php/jisma/article/view/965>.

have equivalents in Indonesian. This is appeal from the government that is formally stated in the Guideline of State Policy.

Based on the above phenomenon, it seems that the urgent task we need to do is to evaluate the development of Indonesian, after 69 years the Youth Solemn Oath (*sumpah Pemuda*). As minister Wardiman Djoyonegoro says, “*Wajarlah apabila dalam masa enam puluh tujuh tahun setelah diikrarkannya Sumpah Pemuda 1928, kita merasa perlu meninjau balik pertumbuhan Bahasa Indonesia dalam kedudukannya sebagai bahasa persatuan dan bahasa kebangsaan.*”<sup>5</sup>

Also from the above quotation, it is clear that foreign word adoption may only cover the words that have no equivalents in Indonesian. So that the adoption should be selective, meaning that not all foreign words can freely be used in Indonesian discourse. The main function of the adopted words is to make the word inventory of Indonesian more complete. It represents the concepts of thought that are not available in Indonesian. So, foreign word adoption is fundamentally very important for Indonesian speakers.

It is important to note here that some formal decisions have been established by the government to support the socialization of Indonesian and the disciplinary of foreign word used. The decisions are as follows: 1) instruction number 344 1021 SJ. March 16<sup>th</sup>, 1995, by the Minister of Domestic Affairs to the governors, mayors, and regents all over Indonesia, about the disciplinary of the use of foreign words; 2) instruction number I/U/1992, by the Minister of Education and Culture, about the improvement of effort in socializing Indonesian; 3) instruction number 20, Oktober 28<sup>th</sup>, 1991 by Minister of Domestic Affairs, about the socialization of Indonesian. All of these decisions are principally intended to maintain and support the position of Indonesian as the national, state, and unifying language, and to enable its on going development today in the future.

The disciplinary of foreign word use as mentioned in the first instruction above is sign of serious attention paid by the government to the use of foreign words in Indonesian discourse. This means that the people of many not use insert foreign words freely when they speak Indonesian.

Regarding the importance of adopting foreign words, it is essential to consider the following quotation from Moeliono, who provides the following comment, “*Pengembangan kosakata diperlukan untuk memungkinkan pengungkapan konsep dan gagasan perikehidupan modern. Cakrawala social budaya yang melampaui batas perikehidupan*

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<sup>5</sup> I Nyoman Temon Astawa, “Bahasa Indonesia sebagai Alat Pemersatu Bangsa,” *Dharma Sastra* 2, no. 1 (2022): 72–82, <https://ojs.uhnsugriwa.ac.id/index.php/DS/article/view/940>.

*yang tertutup menimbulkan adanya kata, istilah dan ungkapan baru dalam Bahasa Indonesia ... dua aspek patut mendapat perhatian masing-masing sumber leksikal yang baru bagi upaya pengembangan bahasa dan prosedur pembentukan bagi unsur leksikal tersebut.”<sup>6</sup>*

*Other comments, “Sebagaimana yang dialami bahasa lain di muka bumi, bahasa Indonesia harus menggunakan kata asing bagi gagasan yang selama ini belum di kenal di dalam kebudayaan, dan tidak ada padanan yang tepat bagi kata itu di dalam khsanah bahasanya. Dalam keadaan demikian, kata-kata asing tadi tunduk pada kaidah Bahasa Indonesia sehingga serapannya merupakan bentuk yang telah mengalami penyesuaian (adaptasi).”<sup>7</sup>*

From the two quotations above we can make conclusions as follows: 1) foreign word adoption is absolutely needed in the modernization era, 2) adopted words are absolutely needed in order to express life concepts that are unavailable in Indonesia, 3) the adopted words should be suited to or be adapted with the system in Indonesian (selling and pronunciation systems), 4) one important thing to consider is the procedure of reconstructing the foreign words to be adopted.

Procedure of reconstructing the adopted foreign words as mentioned above is not less important than the adopted words themselves, since Indonesian as the adopting language has its own system and the words adopted from any foreign languages should follow this system. In other words, any words adopted from any foreign languages should be adapted with the system in Indonesian.

The idea of choosing this topic “phonological addition and deletion of loan words used in Indonesian” was firstly inspired by the fact of interference made by native speakers of Indonesian in speaking English. They usually replace the English phonemes that are unavaible in Indonesian with Indonesian phonemes that nearly have the same sounds as them, e.g: phoneme  $\theta$ / is replaced by phoneme /t/; phoneme /ð/ is replaced by phoneme /e/ and so on. From the observation, it is proved that this phenomenon formally occurs in words adoption; the word theory /  $\theta$ i ðri/ become teori; the word system /sist ðm/ become sistem. From this, the writer is interested to know much more how far the phonological changes occur in word adoption.

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<sup>6</sup> Anton M. Moeliono, *Pengembangan dan Pembinaan Bahasa Indonesia* (Jakarta: Djambatan, 1985), 115.

<sup>7</sup> Dendy Sugono, *Pengindonesiaan Kata dan Ungkapan Asing*, Edisi 2. (Jakarta: Departemen Pendidikan Nasional, 2003).

This research aims to examine words adopted from foreign languages, primarily English, from a linguistic perspective. The primary focus is on the phonological additions and deletions that occur when these foreign words are integrated into Indonesian. The study seeks to address two key questions: how do phonological additions and deletions take place in foreign words, particularly English, that are adopted into Indonesian? Moreover, what are the specific positions of these phonological additions and deletions within the adopted words? By concentrating on foreign words, with a primary emphasis on English loanwords, this research highlights the processes involved in their adaptation into the Indonesian language. The primary objective is to provide a comprehensive description of the patterns and mechanisms underlying the phonological changes, shedding light on how these transformations contribute to the integration of loanwords into the linguistic framework of Indonesian.

The findings of this study are expected to serve several purposes. First, they aim to provide a valuable source of information about the phonological additions and deletions involved in the adoption of foreign words, primarily English, into Indonesian as loanwords. Second, the results are intended to contribute to the future planning and development of the Indonesian language, supporting its growth and adaptation in an increasingly globalized linguistic landscape. Finally, the study is anticipated to offer essential scientific input in the field of linguistics, particularly for those with a specific interest in phonology and the dynamics of adopted words.

## **RESEARCH METHODS**

This chapter discusses the method of research, sources of data, population and sample, procedures for collecting data, and techniques of data analysis. The research employs a descriptive method, aiming to provide a detailed explanation of the phonological changes in foreign words—primarily English words—that have been adopted into Indonesian. This method allows for the systematic analysis of the transformations occurring during the borrowing process.<sup>8</sup>

The source of data for this research includes dictionaries, daily newspapers, weekly magazines, and textbooks. These sources were chosen because they provide a diverse and reliable collection of adopted words used in Indonesian discourse. The population of this

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<sup>8</sup> M.R. Yusri, “Analisis Kontrasif Pembentukan Komposita Nomina (Verba+Nomina) dalam Bahasa Jerman dan Bahasa Indonesia,” in *Proceeding of Kolita*, vol. 16 (Jakarta, 2018), Pusat Kajian Bahasa dan Budaya Universitas Katolik Indonesia Atmajaya.

research comprises all foreign words that have been formally adopted into Indonesian and are actively used in communication. Meanwhile, the sample consists of one to four adopted words for each type of phonological change identified, ensuring a representative and focused analysis.<sup>9</sup>

The procedure for collecting data involved direct observation of the aforementioned resources, such as dictionaries, newspapers, magazines, and textbooks. Through this approach, relevant examples of adopted words were systematically identified and recorded for analysis.

The techniques of data analysis were carried out in several steps. First, the adopted words collected from the data sources were juxtaposed with their original counterparts in the source languages, primarily English. These words were then classified based on the specific phonological changes they exhibit. For each phonological change, one to three representative examples were selected. Second, the researcher prepared a list of English and Indonesian phonemes, which was used to compare the phonemes in both languages. This included identifying patterns of phoneme positions to pinpoint where the phonological changes occur in the adopted words. Finally, the researcher utilized dictionaries to verify changes in phonetic symbols of English words before and after being adopted into Indonesian. English dictionaries incorporating the International Phonetic Alphabet (IPA) were used for accuracy, while the Indonesian references included the *Kamus Besar Bahasa Indonesia*.

This comprehensive methodology ensures a thorough investigation of the phonological transformations in adopted words, contributing valuable insights into the process of linguistic borrowing.

## REVIEW OF RELATED LITERATURE

This chapter discusses two main topics: related literature on loan words and related literature on phonology. The first topic explores definitions of loan words, ways of adoption, types of loan words, requirements for word adoption, and the conceptual framework, which are detailed in the following paragraphs.

Loan words are defined in various ways by linguists. Leonard Bloomfield describes a loan word as “a word borrowed from one language to another.”<sup>10</sup> H. Kridalaksana elaborates that the term *loan* refers to borrowing or a borrowed item, while *loan word* means

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<sup>9</sup> Misdawati, “Analisis Kontrastif dalam Pembelajaran Bahasa,” *Ajamy: Jurnal Bahasa dan Sastra Arab* 8, no. 1 (2019): 53–66, <https://journal.umgo.ac.id/index.php/AJamiy/article/view/333>.

<sup>10</sup> Leonard Bloomfield, *Language*, Edisi 13. (London: Allen & Unwin, 1935), 449.

“a word borrowed from one language into another.”<sup>11</sup> Similarly, A.M. Moeliono explains that words absorbed from foreign languages into Indonesian are referred to as *kata pungutan* or borrowed words.<sup>12</sup> David Crystal defines borrowing as “the process of introducing a word from one language or dialect into another,” noting that borrowed vocabulary is often referred to as loan words.<sup>13</sup> Based on these definitions, a loan word can be understood as a word adopted from one language into another, and the terms *loan word* and *borrowing* are used interchangeably.

The adoption of loan words occurs through two primary methods: direct adoption and indirect adoption. Direct adoption involves the direct borrowing of words through reciprocal contact between speech communities. As Wreen, cited in Wehantouw, explains, “in the event of direct borrowings, there is direct contact between the language communities involved.”<sup>14</sup> Examples of direct borrowing into Indonesian include words from Portuguese, such as *cadeira* (chair) becoming *kadeira*, and *camara* (room) becoming *kamara*; from Chinese, such as *ku lie* (coolie) becoming *kuli* and *kong si* (company) becoming *kongsi*; and from Arabic, such as *makhluk* (creature) and *maaf* (pardon). English also contributed directly borrowed words like *jel* (jail), *alarm*, *veto*, and *kurikulum* (curriculum). Direct borrowing typically occurs through business interactions, migration, or temporary visits.

Indirect adoption, on the other hand, involves the use of a mediator in the borrowing process. As Wehantouw states, “the mediator borrows an item from a certain language, but in time this item may be borrowed by another language from the mediator.”<sup>15</sup> For example, the word *tobacco* evolved through various languages into forms such as *tabak*, *tabako*, *tembako*, and *tembakau*. Indirect adoption often occurs through channels like mass media, education, and the transfer of science and technology, making it a dominant method of borrowing in contemporary and future contexts.

Loan words in Indonesian can be categorized into two types: loan translation and loan adaptation. Loan translation involves adopting foreign words through their translated meaning. For instance, English terms such as *supermarket* are translated into *pasar swalayan*, *developer* into *pengembang*, and *city hall* into *balai kota*. In contrast, loan

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<sup>11</sup> Harimurti Kridalaksana, *Pembentukan Kata dalam Bahasa Indonesia* (Jakarta: Gramedia, 1983), 449.

<sup>12</sup> Moeliono, *Pengembangan dan Pembinaan Bahasa Indonesia*, 118.

<sup>13</sup> David Crystal, *The Cambridge Encyclopedia of Language* (Cambridge, U.K: Cambridge University Press, 1987), 330.

<sup>14</sup> Francis Katamba, *English Words* (New York: Taylor & Francis e-Library, 2005).

<sup>15</sup> Nurul Azizah et al., “An Analysis of English Borrowing Words In the Indonesian Caption Field of Media Instagram,” *LAELTS: Linguistics and English Language Teaching Studies* 3, no. 2 (2022): 51–69, <https://ejournal.unwmataram.ac.id/index.php/laelts/article/view/1414>.



adaptation involves modifying the spelling and pronunciation of foreign words to suit the adopting language while maintaining their meaning. Examples include *import* becoming *impor*, *express* becoming *ekspres*, and *negative* becoming *negatif*. This process may appear arbitrary, as noted by A. Sidik, with some adaptations following spelling conventions and others following pronunciation.<sup>16</sup>

The adoption of foreign words into Indonesian is guided by specific criteria. These include euphemism, where the borrowed word is more polite or refined than its native equivalent (e.g., *disentri* instead of *berak darah*), and practicality, where the borrowed word is easier to use or understand (e.g., *reboisasi* instead of *penghutan kembali*). Masnur Muslich highlights additional considerations, such as prioritizing internationally recognized English terms, ensuring words are practical and contextually appropriate, and preferring singular forms unless pluralization is necessary.<sup>17</sup> For example, terms like *mengorganisasi* are preferred over *mengorganisir*, and *menganalisis* is used instead of *menganalisa*.

The conceptual framework of this research begins with input, which focuses on English words that have been adopted into Indonesian. These adopted words serve as the primary material for analysis. The next stage is the procedure of analysis, which involves several systematic steps. First, English phonemes are juxtaposed with their corresponding Indonesian phonemes, accompanied by relevant examples. This process aims to highlight the differences and similarities between the two phoneme systems. Second, the changes in phonemes resulting from the adoption process are identified. Third, the specific positions where these phonological changes occur are analyzed and documented. Finally, comments are provided to offer insights and further explanations about the observed phonological changes. The final stage produces the output, which takes the form of a detailed analysis. This analysis outlines the patterns of phonological changes and identifies the positions where these changes take place, providing a comprehensive understanding of the phonological adaptations occurring during the borrowing process.

## FINDINGS AND DISCUSSION

The findings and the discussion of the research are as follows:

### Addition

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<sup>16</sup> Prasuri Kuswarini, "Unsur Serapan Asing pada Judul-judul Berita di Harian Kompas," *Jurnal Ilmu Budaya* 3, no. 2 (2015): 1–15, <http://journal.unhas.ac.id/index.php/jib/article/view/2424>.

<sup>17</sup> Muriel Saviilep-Troike, *Introduction Second Language Acquisition* (Cambridge: Cambridge University Press, 2012).

This subsection presents an analysis of foreign words that undergo the addition of certain phonemes after being adopted into Indonesian. The phonemes inserted into these adopted words will be discussed and exemplified in the following sections.

#### *Addition of phoneme /a/*

Aniline /'ænilin/ → Anilina

Axiom /æksiəm/ → Aksioma

Chloride /'klɔraɪd/ → Klorida

Chrysalid /'krisəlɪd/ → Krisalida

Clause /kloːz/ → Klausua

Cusp /kʌsp/ → Kuspa

Dialectics /dai'diɛktiks/ → Dialektika (addition and deletion)

Dynamics /dai'næmiks/ → Dinamika (addition and deletion)

Electronics /ilek'troniks/ → Elektronika (addition and deletion)

Fact /fækt/ → Fakta

Firm /fɜːm/ → Firma

Glucose /'gluːkəʊs/ → Glukosa

Harp /ha:p/ → Harpa (from old German harfa)

Legend /'ledʒənd/ → Legenda

Lens /lenz/ → Lensa

Logic /'lɒdʒɪk/ → Logika

Mathematics /mæθə'mætiks/ → Matematika (addition and deletion)

Mass /mæs, ma:s/ → Massa

Norm /nɔ:m/ → Norma

Oxide /'ɒksaɪd/ → Oksida

Plasm /'plæzəm/ → Plasma

Prism /'prɪzəm/ → Prisma (addition and deletion)

Sketch /sketʃ/ → Sketsa

Systematic /'sɪstɪ'mætiks/ → Sistematika (addition and deletion)

#### **Comment**

Some of the words discussed above exhibit both addition and deletion processes during their adaptation. Specifically, the phoneme /s/ is deleted from these words, and subsequently, the phoneme /a/ is added. Additionally, in some cases, the phoneme /a/ is inserted into suffixes such as /aid/ or /id/, which are represented in writing as “ide” or “id.” Furthermore, it is observed that the phoneme /a/ is often inserted exclusively at the final

position of the adopted words, indicating a consistent pattern in phonological adaptation during the borrowing process.

***Addition of phoneme /e/***

Alarm /ɔ:l:m/ → alarem/alarm

Amylase /'æmi'leiz/ → Amilasee

Capitalism /'kæpit 'lizəm/ → Kapitalisme (addition plus deletion)

Etalage /'itɔ'lidʒ/ → Etalase

Episode /'episəud/ → Episode

Expressionism /ik'spreʃə'nizəm/ → Ekspresionisme (addition and deletion)

Intern /in'tɜ:n/ → Intern

Lactose /lækteiz/ → Laktase

Percentage /pə'sentidʒ/ → Persentase

Period /'piəriəd/ → Periodee

Phase /feiz/ → Fasee

Phrase /freiz/ → Frasee

Patriotism /pætriətizəm/ → Patriotismee (addition and deletion)

Terrorism /terə'rizəm/ → Terorismee (addition and deletion)

Sarcasm /sa:kæzəm/ → Sarkasmee (addition and deletion)

Pleonasm /pli:ə'næzəm/ → Pleonasme (addition and deletion)

Rhythm /riðəm/ → Ritmee (addition and deletion)

**Comment**

In some of the words analyzed above, the phoneme /e/ is added to suffixes such as /idʒ/ (represented as “age”) and /izəm/ or /zəm/ (represented as “ism” or “sm”). Additionally, the suffix /izəm/ undergoes a deletion process, where the sound /ə/ is removed. The analysis also reveals that the phoneme /e/ is often inserted in the final position of words or between two consonants (C-C) in the last syllable, reflecting a consistent phonological pattern in the adaptation process.

***Addition of phoneme /o/***

Blank /blænk/ → blanko (from old French)

Risk /risk/ → Risiko (from Italian via French)

Here, phoneme /o/ is inserted in the back position of the adopted words.

***Addition of phoneme /i/***

Ambivalence /æmbivələns/ → Ambivalensii

Baggage /bægidʒ/ → Bagasii

Consequence /'kɒnsɪkwɛns/ → Konsekuensi

Garage /gæra:dʒ/ Gagasin

Risk /rɪsk/ → Resiko

### **Comment**

In some of the words analyzed above, the phoneme /i/ is added to the suffix /əns/ (represented as “ence”). The analysis further indicates that the phoneme /i/ is consistently inserted either at the final position of the word or between two consonants (C-C), highlighting a specific pattern in its placement during the adaptation process.

### **Addition of phoneme /d/**

General /dʒənərəl/ → Jenderal

### **Comment**

Only one word exemplifies this phenomenon, where the phoneme /d/ is inserted. In this case, the phoneme /d/ is specifically inserted in the middle position, occurring between a consonant and a vowel (C-V). This unique placement highlights a distinct phonological adaptation pattern in the borrowing process.

### **Addition of phoneme /s/**

Activity /æk'tɪvɪti/ Aktivitas

Authority /:ɔrɪti/Otoritas

Capacity /kə'pæsɪti/Kapasitas

Community /kə'mju:nɪti/Komunitas

Complexity /kəm'pleksɪti/Kompleksitas

Creativity /kri:etɪvɪti/Kreativitas

Facility /fæ'sɪlɪti/Fasilitas

Identity /aɪ:dentɪti/Identitas

Intensity /ɪn'tensɪti/Intensitas

### **Comment**

The phoneme /s/ in the example above is positioned at the final position, inserted into the suffix /ɪti/ (represented by “ity”). Only one word has been provided as an example to illustrate this phenomenon. Additionally, all of these phonemes are inserted in the initial position. The analysis reveals that six phonemes—/a/, /i/, /e/, /o/, /d/, and /s/—can potentially be inserted into adopted words. Some of the examples provided demonstrate instances of both phonological addition and deletion. Notably, several of the additional phonemes are inserted specifically within the suffix area. This observation highlights the systematic nature of phonological adjustments in the process of word adoption.

## Deletion

This subsection presents an analysis of foreign words in which certain phonemes or sounds are deleted after being adopted into Indonesian. The specific sounds that are deleted from these foreign words will be outlined as follows:

### *Deletion of sound /b/*

Bomb /bomb/ → Bom

## Comment

In this case, the sound /b/ is deleted from the final position of the foreign word. The word presented above is the only example the researcher was able to find. It is possible that other examples, which may follow a similar pattern, were not included in this analysis.

### *Deletion of sound /d/and/ə/*

Dividend /'dividend/ → Dividen

Stand /stænd/ → Stan

Standar /stændəd/ → Standar

Sadism /sədizəm/ → Sadisme (deletion and addition)

Sarcasm /sa:kæzəm/ → Sarkasme (deletion and addition)

Rhythm /riðəm/ → Ritme/ritma (deletion and addition)

Prism /prizəm/ → Prisma (deletion and addition)

## Comment

In this case, the sounds /d/ and /ə/ are deleted from both the middle and final positions of the foreign words. The sound /ə/ is specifically deleted from the middle position, although it remains in the final or last syllable of the adopted words. It is important to note that the sound /ə/ is frequently found as part of the suffix /izəm/ or /zəm/ (represented as “isme”) in these words.

### *Deletion of sound /l/*

Anticlinal /ænti'klainl/ → Antiklin

Cataclinal /'kætə'klainl/ → Kataklin

Economical /'i:k 'nomikl/ → Ekonomis

Optimistical /'opti'mistikl/ → Optimistik

Practical /'præktikl/ → Praktis

## Comment

In this case, the phoneme /l/ (which appears as the suffix /l/ or /əl/, represented by “al”) is deleted from the final position of the foreign words.

### *Deletion of sound /n/*

Academician /ə'kædə'miʃən/ → Akademisi

Commission /kə'miʃən/ → Komisi

Obsession /əb'seʃən/ → Obsesi

Observation /'ɒbzə'veiʃən/ → Observasi

Supervision /Su:pə'viʃən/ → Supervisi

Insurance /i'ʃuərəns/ → Asuransi

### **Comment**

In this case, the sound /n/ is deleted from both the middle and final positions of the foreign words. This deletion occurs as part of the suffix /ən/, which is represented by “ion” or “ian” in the adopted words.

### ***Deletion of sound /s/***

Dialectics /dai'lɒktiks/ → Dialektika

Dynamics /dai'næmiks/ → Dinamika

Linguistics /Lin'gwistiks/ → Linguistik

Statistics /Stətistik/ → Statistik

### **Comment**

In this case, the phoneme /s/ is deleted from the final position of the foreign words. In some of the words mentioned above, the position of the phoneme /s/ in the foreign words is replaced by the phoneme /a/. However, this should not be considered a simple replacement phenomenon; rather, it is a combination of deletion and addition.

### ***Deletion of sound /t/***

Abstract /æbstrəkt/ → Abstrak

Accountant /ə'kauntənt/ → Akuntan

Agent /eidjənt/ → Agen

Argument /a:gjumənt/ → Argumen

Concept /kɒnsəpt/ → Konsep

Dependent /di'pendənt/ → Dependensi

Dominant /dominənt/ → Dominan

Extremist /ik'strɪmɪst/ → Ekstrimis

Object /'ɒbdʒɪkt/ → Obyek

Product /'prɒdʌkt/ → Produk

Context /kɒntekst/ → Konteks

### Comment

In this case, the phoneme /t/ is deleted from the final position of the foreign words. In some of the words mentioned above, the phoneme /t/ is part of the suffix /nt/ (represented as “ent” and “ant”) and the suffix /ist/ (represented as “ist”).

#### *Deletion of sound /i/*

Complementary /'kəmpli'mentəri/ → Komplementer

Primary /'praɪməri/ → Primer

Secondary /'sekəndəri/ → Sekunder

### Comment

In this case, the phoneme /i/ is part of the suffix /ri/ (represented as “ary”) and is deleted from the final position of the foreign words.

#### *Deletion of sound /ik/*

Hieroglyphic /haiərə'glifik/ → Hieroglif

### Comment

The word presented above is the only example the researcher could find. It is possible that other words are not included in this analysis. In this case, the sound /ik/ is deleted from the final position of the foreign word, where it appears as part of the suffix, represented by “ic.”

#### *Deletion of sound /əs/ (represented by ous)*

Amorphous /ə'mɔ:fəs/ → Amorf

Anatropous /ə'nætrəpəs/ → Anatrop

Heterophyllous /hetərəu'filəs/ → Heterofil

Polysemous /pə'lisəməs/ → Polisem

Synchronous /sɪnkronəs/ → Sinkron

### Comment

In this case, the sound /s/ is deleted from the final position (last syllable) of the foreign words. The analysis of phonological deletion presented above reveals that nine phonemes—/b/, /d/, /l/, /u/, /s/, /t/, /i/, /ik/, /əs/, and /ə/—are susceptible to deletion from foreign words. These phonemes are exclusively deleted from the final position or the last syllable of the foreign words. Additionally, some of the words used as examples in the previous subsection undergo both deletion and addition. Notably, some of the deleted phonemes are part of derivational suffixes, with two of them specifically being suffixes.

## Positions of Phonological Addition

The positions of phonological addition of any additional phonemes, consonants or vowels in the adoption words will be identified here, by taking into use the same patterns as used in identifying the positions of phonological replacement above.

Phoneme /a/ # -- (Aniline/'ænilin/ → Anilina)

(Chloride/'kloraid/ → Klorida) (From Greek)

(Clause/klɔ:z/ → Klausa)

Phoneme /i/ # -- (Ambivalence/æmbivələns/ → Amblivalensi)

(Baggage/bægidʒ/ → Bagasi)

C – C (Risk/risk/ → Resiko)

Phoneme /e/ # -- (Amylase/'æmi'leiz/ → Amilase)

(Capitalism/'kæpitəlizəm/ → Kapitalisme)

(Etalage/'itəlidʒ/ → Etalase)

C – C (Alarm/'dla:m/ → Alarem/alarm)

(Intern/in'tɜ:n/ → Interen/intern)

Phoneme /o/ # -- (Blank/'blænk/ → Blanko) → (From French “blanc”)

(Risk/risk/ → Risiko)

### Comment

The presentation above demonstrates that the phonological addition of the phoneme /a/ occurs only in the final position of the word. The phoneme /i/ can be inserted in both the middle and final positions, while the phoneme /e/ is also inserted in these two positions. Lastly, the phoneme /o/ is added exclusively in the final position. The discussion will continue by identifying the positions of phonological addition for consonant phonemes.

Phoneme /s/ C – V (General/'dʒenerəl/ → General)

(Activity/æktiviti/ → Aktivitas)

(Authority/ɔ:θɔriti/ → Otoritas)

(Capacity/kə'pæsiti/ → Kapasitas)

### Comment

The presentation above shows that phonological addition involves only six phonemes: four vowels (a, i, e, o) and two consonants (d, s). The phoneme /d/ is inserted exclusively in the middle position, while the phoneme /s/ is inserted only in the final position. One of the additional phonemes is inserted solely in the middle position, while some are inserted in the final position, and others are inserted in both the middle and final positions. Therefore, phonological addition occurs in both the middle and final positions.



## Positions of Phonological Deletion

The positions of phonological deletion for certain phonemes, including combinations of phonemes in adopted words, will be identified using the same patterns applied in determining the positions of phonological replacement and addition discussed above.

Phoneme /ð/ C – C (Sadism/səˈdɪzəm/ → Sadisme)

(Sarcasm/sɑ:kæzəm/ → Sarkasme)

(Rhythm /rɪðəm/ → Ritma)

(Prism/prɪzəm/ → Prisma)

Phoneme /i/ # -- (Complementary/'kɒmplɪ'mentəri/ → Komplementer)

(Secondary/səkəndəri/ → Sekunder)

(Primary/'praɪməri/ → Primer)

Phoneme /b/ # -- (Bomb/bɒm/ → Bom)

Phoneme /l/ # -- (Economical/'i:kə'nɒmɪkl/ → Ekonomis)

(Optimistical/'ɒptɪ'mɪstɪkl/ → Optimistis)

(Practical/'præktɪkl/ → Praktis)

Phoneme /n/ # -- (Obsession/əb'seʃən/ → Obsesi)

(Commission/kə'mɪʃən/ → Komisi)

(Insurance/in'ʃʊərəns/ → Asuransi)

Phoneme /s/ # -- (Dialectics/dai'ə'lektɪks/ → Dialektika)

(Dynamics/dai,næmɪks/ → Dinamika)

(Statistics/stətɪstɪks/ → Statistik)

Phoneme /t/ # -- (Abstract/æbstrækt/ → Abstrak)

(Agent/eɪdʒənt/ → Agen)

(Object/ɒbdʒɪkt/ Obyek)

(Product/'prɒdʌkt/ → Produk)

(Context/konteks/ → Konteks)

Sound /ɪk/ # -- (Hieroglyphic/haiərə'glɪfɪk/ → Hierolif)

Sound /əs/ # -- (Amorphous/ə'mɔ:fəs/ → Amorf)

(Polysemous/pə'lisəməs/ → Polisem)

(Synchronous/sɪŋkrənəs/ → Sinkron)

## Comment

The presentation above demonstrates that phonological deletion involves a total of nine phonemes, which include two single vowels, five single consonants, and two suffixes. Specifically, the phonemes /i/, /b/, /l/, /n/, /s/, /t/, /ɪk/, and /əs/ are deleted from the back

position, while the phoneme /ð/ is deleted from the middle position. Out of the nine deleted sounds, eight are removed from the back position, one is deleted from the middle position, and none are deleted from the initial position. In terms of phoneme types, two are vowels, five are consonants, and two are combinations of phonemes (suffixes). Therefore, phonological deletion occurs primarily in the middle and back positions.

### **General Comments**

Before drawing conclusions, it is essential to highlight several key findings from the data analysis presented in the previous section. While many English phonemes undergo phonological changes such as addition, deletion, and replacement, some phonemes remain constant throughout the word adoption process. Specifically, the five vowel phonemes in Indonesian can replace twenty-two English phonemes, including single vowels and some diphthongs. Among these twenty-two phonemes, eighteen undergo phonological replacement, while four remain constant. Phonological addition involves six phonemes, and phonological deletion covers nine phonemes.<sup>18</sup> However, it is important to note that the actual number of phonemes involved in these processes may be higher, as some phonemes undergoing the same phenomenon might not be included in this study.

The positions where phonological replacement occurs for consonant phonemes are more limited compared to vowel phonemes. Among the nine consonants undergoing phonological replacement, only one appears in all positions—initial, middle, and back. On the other hand, all vowel phonemes undergoing phonological replacement occur in all positions, with three distinct middle positions being fully represented. As for phonological addition, it takes place in both middle and back positions, with two phonemes occurring in the middle position and four in the back position. Phonological deletion, however, is more restricted in terms of its position, occurring only in middle and back positions. Of the nine deleted phonemes, one occurs in the middle position (still within the last/back syllable), while the remaining eight appear in the back position.<sup>19</sup>

Finally, the occurrence of phonological reemergence is the most limited, as it only takes place in the initial position. Furthermore, the changes in the points and manners of articulation for both English vowel and consonant phonemes follow the changes in the

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<sup>18</sup> M.D. Juliawan, “An Analysis Of Phonemic and Graphemic Changes of English Loanwords in Bahasa Indonesia Appearing in Magazine Entitled ‘Chip,’” *International Journal of Language and Literature* 1, no. 1 (2017): 53–64, <https://ejournal.undiksha.ac.id/index.php/IJLL/article/view/9618>.

<sup>19</sup> Irma Diani, “Phonological Change Processes of English and Indonesian,” *JOALL: Journal of Applied Linguistics and Literature* 6, no. 1 (2021): 133–148, <https://ejournal.unib.ac.id/joall/article/view/13642>.

phonemes themselves during the word adoption process. Consonant phonemes, in particular, maintain their points and manners of articulation as they undergo word adoption, and their articulation remains constant throughout this process.<sup>20</sup>

## CONCLUSIONS

In the process of adopting words from foreign languages, particularly English, into Indonesian, some phonemes in the adopted words undergo phonological changes, while others remain constant. These phonological changes can be categorized into four groups: phonological replacement, phonological addition, phonological deletion, and phonological reemerging. This study specifically focuses on phonological addition and deletion, excluding phonological replacement and reemerging from the analysis. The changes observed in the adopted words illustrate the dynamic nature of language as foreign phonemes are adapted into the phonological system of Indonesian.

The study revealed that a total of fifteen phonemes, both vowels and consonants, undergo phonological addition and deletion during the word adoption process. Phonological addition refers to the insertion of extra sounds into the adopted words, while phonological deletion refers to the omission of certain sounds from the foreign words. These changes are primarily observed in both vowels and consonants as they adapt to Indonesian phonological patterns. The presence of phonological addition and deletion highlights the flexibility and transformation of foreign words when integrated into the Indonesian language.

Regarding the positions of these phonological changes, it was found that phonological addition occurs in the middle and back positions of the adopted words. This means that added phonemes are inserted into the syllables located toward the middle and end of the word. On the other hand, phonological deletion also takes place in the middle and back positions. However, it is important to note that deletion in the middle position is relatively rare. This suggests that phonological deletion tends to occur more frequently in the final syllables of the adopted words, reflecting the specific phonotactic constraints of Indonesian.

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<sup>20</sup> Anida Susanti dan Purnama Rika Perdana, "Phonological Aspect on First Language Acquisition," in *AICIEL: Proceeding of Annual International Conference on Islamic Education and Language*, vol. 2 (Banten: Fakultas Tarbiyah dan Keguruan UIN Sultan Maulana Hasanudin, 2023), 906–913, Fakultas Tarbiyah dan Keguruan UIN Sultan Maulana Hasanudin.

## SUGGESTIONS

As a follow-up to this research, several important suggestions are offered for consideration. First, this study is intended as a preliminary effort for more comprehensive future research on phonology and adopted words, particularly for those with a keen interest in this field. Second, the results of this research can provide valuable input for the Pusat Pembinaan dan Pengembangan Bahasa Indonesia and for those aiming to write and publish works on adopted words (loanwords), which are increasingly relevant today. Finally, given the disproportionate use of foreign words in Indonesian society, it is recommended that Indonesians avoid using foreign terms that already have suitable equivalents in the national language, demonstrating respect for and promoting the use of Bahasa Indonesia.

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