

The L1 Influence on Phonological Aspects of Bahasa Indonesia Acquisition as L3 in BIPA Students: A Cross-Linguistic Influence Study

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ABSTRACT

Keywords:

Cross-Linguistic Influence, Third Language Acquisition, L1 Influence, Phonological Aspect, Bahasa Indonesia Acquisition.

This study aims to analyze the influence of L1 on the phonological aspect in the acquisition of BI as an L3 in BIPA students. This study uses a qualitative method to analyze the influence of L1 phonological aspects in the acquisition of BI as L3 in BIPA students. The subjects of this study were 18 BIPA students in BIPA at the Universitas Negeri Surabaya (Unesa) and UPN "Veteran" Jawa Timur. The subjects came from 3 countries, namely South Korea, Thailand, and Malaysia. There are three L1s in this study: Malay and Korean. The data collection was carried out using elicitation techniques and participant observation. This study shows that students with L1 Malay often change the pronunciation of vowels and consonants, such as pronouncing the sound [a] at the end of a word into [ə] or [o], replacing the sounds [t] and [d] at the end of a word with glottal sounds, and eliminating the sounds [r] and [l] at the end of a word. Meanwhile, students with L1 Korean have difficulty pronouncing the sound [r] and replace it with a [ɹ]. Korean students also add the sound [ə] after the sounds [s] and [r] at the end of a word. This study highlights the importance of pronunciation in teaching BI because this can hinder the mastery of proper phonology and have an impact on fluency and understanding of oral communication.

INTRODUCTION

In recent decades, the interest of foreign speakers in learning Bahasa Indonesia (BI) has increased. This is supported by the increasing number of countries organizing the Bahasa Indonesia bagi Penutur Asing (BIPA) 'Indonesian Language for Foreign Speakers Program. Based on data from Bakti BIPA, the number of BIPA programs increased in 2020, when 23 countries organized the program; in 2021, it rose to 38 countries; and in 2022, it further increased to 39 countries. These data show that BI is starting to be known and in demand by foreign speakers.

For BIPA students, BI is a third language (L3), and the study of L3 acquisition is indirectly used to analyze BI acquisition in BIPA students. L3 acquisition is related to the relation between L1 and L2 of BI acquisition, as L3 (Kholiq, 2017). L3 acquisition is a review of the phenomena of transfer, interference, avoidance of certain languages, borrowing certain words, and the loss of previous language skills that are not needed in acquiring L3 (Cenoz, 2001). These phenomena are analyzed more comprehensively so as to produce a proposition development and theory compared with the L2 acquisition.

L3 acquisition refers to mastering a language by learners who have previously acquired two or more languages (Cenoz, 2003). L3 is the language being acquired after someone has learned L2 (Hammarberg, 2018). If L3 is assumed to be the language being learned, the languages that have been mastered, other than L1, are called L2. However, in some cases, some people master L2 more than one language, so that it is written in the form L2n (Hammarberg, 2001). In L2 acquisition, the L2 acquirer only has one language source (L1), but in L3 acquisition, the language source can come from L1 or L2 (Alonso et al., 2020). This makes the study of L3 associated with the relationships that can occur in L3 acquisition, namely $L1 \leftrightarrow L3$, and can also occur between $L2 \leftrightarrow L3$.

L3 acquisition is oriented towards the relationship between L1 and L2 of the BI acquirer as L3 (Kholiq et al., 2024). In L2 acquisition, the L2 acquirer only has one language source (L1), but in L3 acquisition, the language source can come from L-1/L2 (Alonso et al., 2020). The principles above can be found in the thinking process of the L3 acquirer because there is interaction between languages in L3 acquisition. In Indonesia, L3 acquisition study in the context of BI as L3 can be said to be still limited (Kholiq & Luthfiyati, 2020). This is because L3 acquisition studies are not yet familiar in Indonesia. On average in Indonesia, in language acquisition studies and additional languages are still recognized, so that studies of L3 acquisition have not developed optimally, especially studies of L3 acquisition in the context of acquiring BI as L3.

Research on L3 acquisition is very rapid. This can be seen in the development of research on L3 acquisition related to linguistics, psychology, and pedagogy which is divided into several clusters of research on L3 acquisition, including (a) L3; (b) L3 phonology; (c) clil; (d) speaker of multilingual; (e) metalinguistic awareness; (f) heritage learners (Ding & Ding, 2021). These clusters provide an overview of the contribution of L3 acquisition studies in solving L3 learning problems. Research on L3 acquisition in the heritage learners cluster is related to the role of L1 in L3 acquisition. In addition, the language used in the family or also called the heritage language, also has a major influence (Csire & Laakso, 2014; Luan, 2024). Heritage language in the context of L3 acquisition is generally L1 (Csire & Laakso, 2014; Polinsky, 2015). Several studies on L3 acquisition have confirmed that L1 has a more dominant influence than L2 in L3 acquisition, such as the influence on L3 articulation, addition of L3 vocabulary, and mastery of L3 grammar (Wach, 2026; Hopp, 2018; Kholiq et al, 2024).

This research has a gap and novelty. This can be seen in the fact that there has not been much research on the influence of L1 in the acquisition of BI as L3. In the last few decades, the trend of L3 acquisition research has developed greatly abroad, especially in Europe and East Asia (Kholiq & Luthfiyati, 2020). However, research on L3 acquisition, especially in the case of L3 acquisition in Indonesia, is still limited.

From this, research on the influence of L1 in the acquisition of BI as L3 can focus on the linguistic aspects of the BI performance of BIPA students. In several studies, L1 plays a major role in the phonological aspect (Hammarberg, 2001). Therefore, this study aims to analyze the influence of L1 on the phonological aspect of the acquisition of BI as an L3 in BIPA students.

RESEARCH METHOD

This study uses a qualitative approach. The influence of L1 can be seen in the phonological aspects produced by BIPA students. In addition, the influence of L1 is also seen in the decisions of research subjects when experiencing difficulties in BI performance. This means that when BIPA students experience difficulties in using BI when communicating, this study analyzes the decision of BIPA students to transfer languages, whether to transfer to L1 or to L2.

The BIPA students came from various countries. In this study, the research subjects were at the BIPA 1 – BIPA 2 levels because the influence of their L1 is still strong, making it a critical stage for observing L3 production. This is based on the possibility that the subjects

still use L1 and L2 in acquiring BI. Details of the research subjects can be seen in Table 1 below.

Table 1. Subject of The Study

Nation	Language Backgrounds	N
Korean Selatan	L1: Korean	11
	L2: English	
	L3: Bahasa Indonesia	
Thailand	L1: Malay	4
	L2 ₁ : Thai	
	L2 ₂ : English	
Malaysia	L3: Bahasa Indonesia	3
	L1: Malay	
	L2: English	
	L3: Bahasa Indonesia	
Total		18

From the table, the subjects of this study were 18 BIPA students from BIPA Universitas Negeri Surabaya (Unesa) and UPN "Veteran" Jawa Timur. The subjects came from 3 countries, namely South Korea, Thailand, and Malaysia. When viewed from the language history, there are three L1s in this study: Malay and Korean. Therefore, the data in this study are the phonological forms of L1 that influence the pronunciation of the subjects in BI.

The collection of research data was carried out using elicitation/baiting techniques and participant observation. The elicitation technique was carried out by giving several questions to the research subjects in casual conversations. The bait given included questions that allowed the research subjects to have difficulty speaking BI so that the research subjects transferred to L1 or L2. In addition, elicitation was also carried out by asking the research subjects to make sentences spontaneously from several pictures that were presented, so that when the research subjects were unable to produce sentences in BI, transfer to L1 or L2 would occur. Participatory observation was carried out by involving the researcher in the communication process of the research subjects with other people, either with colleagues or with other BIPA teachers. Observations were conducted by observing the phonological features of the research subjects in speaking BI.

Data analysis involved several stages: data transcription, identification, classification, and analysis. Data transcription was conducted using phonetic transcription based on IPA phonetic writing. Initially, the subject's BI speech contained L1 phonological interference. Classification was carried out by grouping the data. An analysis was conducted by examining the data concerning contrastive linguistics theory.

RESULTS AND DISCUSSION

The Influence of L1 Malay on Phonological Aspects in the BI Acquisition as L3

This study aims to analyze the influence of L1 Malay on phonological aspects in the acquisition of BI as an L3 by BIPA students. Data obtained from BIPA students from Malaysia and Southern Thailand indicate a phonological phenomenon influenced by

their pronunciation habits in Malay. Students with L1 Malay tend to have difficulty in pronouncing several phonological sounds in BI caused by structural differences between Malay and BI.

Table 2. The Influence of L1 Malay on Phonological Aspects in the BI Acquisition as L3

L1 influence	Example
Changing the sound [a] at the end of a word to [ə] or [o]	[saja] → [sajo] / [sajə] [sama] → [samo] / [samə] [iya] → [iyə]
Glottalization of stop sounds [t], [d], [p] at the final word	[dəkat] → [dekaʔ] [lətUp] → [lətUpʔ] [murId] → [murIʔ]
Changing the fricative sound [s] at the final word to the sound [h]	[malas] → [malah]
Deleting [r] and [l] sounds at the final word	[kəjar] → [kəja] [pasal] → [pasa]

Students with L1 Malay often change the pronunciation of the sound [a] at the end of a word to [ə] or [o]. Data shows that BIPA students pronounce the word [saja] as [sajo] and [sama] as [samo] or [samə]. This shows the difference in the vowel system between Malay and BI. In Malay, the vowel [a] is often shorter and more closed, while BI uses a more open vowel.

The [t], [p], and [d] sounds at the final word are often changed to glottal sounds. For example, the word [dəkat] becomes [dekaʔ], [lətUp] becomes [lətUpʔ], and [murId] becomes [murIʔ]. This is due to the tendency in Malay, especially in certain dialects, to replace final consonants with glottal sounds or even eliminate them. The use of this glottal sound is influenced by the phonological pattern in Malay as L1. In addition, the subjects often replaced the [s] sound became the [h] sound. For example, the word [malas] becomes [malah]. This phenomenon shows that in Malay, the pronunciation of the consonant [s] at the end of a word tends to be weaker, often muffled or even lost, depending on the dialect and pronunciation situation. This has implications for students' difficulties in maintaining proper phonological pronunciation according to BI standards. The deletion [r] and [l] sounds were also found in the data of this study. Words, such as [kəjar], become [kəja], and [pasal] becomes [pasa]. In Malay, especially in some dialects, final consonants such as [r] and [l] tend to be often omitted or not pronounced clearly, resulting in phonological errors when BIPA students speak BI.

The influence of L1 Malay on phonology can be explained through the phenomenon of language transfer. Phonological interference occurs when language learners bring phonological elements from their first language into the language being learned. In this case, BIPA students who have L1 Malay tend to be influenced by L1 phonology into BI.

For example, the change of vowel [a] to [e] or [o] at the end of a word is a form of phonological interference.

The results indicate that the L1 influence on the phonological aspect in the BI acquisition as L3 occurs in the phonological interference of L1, in this study, Malay and Korean, in the pronunciation of L1 in BIPA students. In BIPA, students with L1 Malay, phonological interference in the sounds in the final position. The pronunciation of the sound [a], which changes to [e] or [o], and the replacement of the sounds [t] and [d] with glottal sounds show a strong influence of the phonological habits of the Malay language (Flege et al, 1997). In addition, the phenomenon of the removal of the sounds [r] and [l] also reflects the interference of the Malay language, which shows a different phonological structure from BI (Carey, 2002).

The Influence of L1 Korean on Phonological Aspects in the BI Acquisition as L3

Based on the results of research on BIPA students from South Korea, the subject's phonological pronunciation is influenced by the pronunciation pattern in Korean, which has significant differences from BI. This can be seen in Table 3.

Table 3. The Influence of L1 Korean on Phonological Aspects in the BI Acquisition as L3

L1 influence	Example
Adding the sound [ə] after the sound [s] at the end of a word	[harus] → [harusə] [gəlas] → [gəlasə]
Adding the sound [ə] after the sound [r] at the end of a word	[kasar] → [kasarə] [lebar] → [lebarə]
Difficulty in pronouncing the trill [r]	[rasa] → [ɿasa] [gətar] → [gətaɿ] [supra] → [suɿəpa], [supəɿa], & [supɿa]

Students with L1 Korean often add the vowel sound [ə] after the sounds [s] and [r]. This can be seen in the pronunciation of BI words that end in [s] or [r], such as [harus] becomes [harusə], [gəlas] becomes [gəlasə], [kasar] becomes [kasarə], and [lebar] becomes [lebarə]. In Korean, the pronunciation of consonants at the end of words is often followed by a clearer vowel, especially in the context of more formal or longer-structured vocabulary. This pattern is carried over into the pronunciation of BI, where Korean students tend to add the vowel [ə] after the final consonants [s] and [r].

One of the main challenges found in the pronunciation of BI by students with L1 Korean is the difficulty in producing the sound [r]. In Korean, the sound [r] is not pronounced with a clear trill like in BI, but a semi-trill [ɿ]. The word [rasa] is pronounced [ɿasa], the sound [gətar] becomes [gətaɿ], [supra] becomes [suɿəpa], [supəɿa], & [supɿa]. These variations in pronunciation indicate interference from L1 phonology. This can be caused by Koreans not having a vibrating [r] sound, like in BI. Instead, they use sounds that are close to the [r] sound or even eliminate the sound, following the phonological habits in Korean.

The influence of L1 Korean on the phonological pronunciation of BI is very significant, especially in the pronunciation of certain sounds that do not exist in Korean. The addition of the sound [e] after the sounds [s] and [r], as well as the difficulty in pronouncing the sound [r], are examples of the phenomenon of language transfer that show how phonological habits in students' first language affect their BI pronunciation. This shows the importance of teaching phonology that is sensitive to students' first language background, so that they can more easily overcome the phonological difficulties that arise in BI pronunciation.

Students with L1 Korean face difficulties in pronouncing the sound [r]. This is because there is no sound [r] in Korean, or the sound is very rarely used in Korean (Wrembel, 2015). Students tend to replace [r] with the sound [ɹ]. This difficulty also indicates that Korean BIPA students have not fully adapted the pronunciation of the phoneme [r] in BI. Languages that do not have certain phonemes will affect the pronunciation in the target language (Adelaar, 2017). In this case, [r] is a difficult phoneme for Korean speakers.

BIPA students, both with L1 Malay and Korean, show specific phonological transfer patterns according to the characteristics of L1 phonology. The influence of L1 on BI phonology shows that understanding the influence of L1 phonology can help in designing more appropriate and effective teaching strategies so that they can overcome the difficulties faced by students in producing certain sounds in BI. In addition, the adaptation of teaching materials to the L1 background of students also needs to be a focus for BIPA teachers in improving the phonological mastery of BIPA students.

The results have several implications in the context of teaching BI to BIPA students from diverse first language backgrounds, particularly those who speak Malay and Korean. First, this study emphasizes the importance of paying attention to the phenomenon of phonological transfer that occurs between L1 and L3 in the process of Indonesian language acquisition. This transfer can be a barrier to correct phonology mastery, which in turn can affect the fluency and accuracy of students' oral communication. Therefore, teaching Indonesian phonology requires teachers to be aware of the phonological interference coming from students' L1 and to try to overcome this difficulty with a more specific approach.

Second, this study shows that the phonological differences between Indonesian and students' first languages, be it Malay or Korean, require a more individual-based approach in teaching phonology. By understanding the difficulties faced by BIPA students based on their L1, teaching can be adjusted by providing more intensive practice on phonemes that are difficult for students. For example, teaching the pronunciation of the rolled [r] sound for Korean students, or strengthening the pronunciation of the sounds [a], [t], and [d] for Malay students. This approach will allow students to adapt more quickly to the rules of Indonesian phonology.

Furthermore, another implication of this study is the importance of metalinguistic awareness in the teaching process. Students need to be given a deeper understanding of the phonological differences between their L1 and Indonesian, especially in terms of consonant and vowel pronunciation. Educating students to be more aware of the phonological difficulties they face will help them identify pronunciation errors and reduce difficulties in producing certain sounds. This also shows the importance of

teaching strategies that emphasize active listening, where students can hear and distinguish phonemes in Indonesian through various appropriate listening exercises.

CONCLUSION

This study shows that students with L1 Malay often change the pronunciation of vowels and consonants, such as pronouncing the sound [a] at the end of a word into [ə] or [o], replacing the sounds [t] and [d] at the end of a word with glottal sounds, and eliminating the sounds [r] and [l] at the end of a word. Meanwhile, students with L1 Korean have difficulty pronouncing the sound [r] and replace it with a semi-trilled sound [ɾ]. In addition, Korean students also add the sound [e] after the sounds [s] and [r] at the end of a word. This phenomenon reflects a phonological transfer that affects the way of speaking in BI, which can hinder the accuracy of BI pronunciation as an L3. This study highlights the importance of pronunciation in teaching BI because this can hinder the mastery of proper phonology and have an impact on fluency and understanding of oral communication. The recommendations from this study are the use of active listening techniques and repetition to help students overcome phonological difficulties and the adjustment of materials based on students' L1 for more effective teaching.

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