Mother tongue and its implication on second language learning: English phones production

Dewa Ayu Dyah Pertiwi Putri a
I Putu Permana Mahardika b

Abstract

The study aimed to investigate the implication of mother tongue on second language learning, particularly in phones production. Data of this research were in the form of utterance that produced by 9 English learners whose Balinese, Indonesian, or Japanese mother tongue. The data were collected through two kinds of method, which were interview method and observation method. In analyzing the data, the researcher used intralingual matching method. Based on the result, second language will be easier to learn if the language has the same features and systems as other language that has been mastered. Second language learners will encounter difficulty in producing certain phones of the second language if the phones do not exist in their mother tongue.

Keywords:
English; language acquisition device; language acquisition; mother tongue; phone production; second language learning; universal grammar theory;

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1 Introduction

Language acquisition is a process that takes place in a person’s brain, which is started since the person acquires his mother tongue (Clark & Clark, 1977; Dardjowidjojo, 2003; Chaer, 2019). The concept of language acquisition is differentiated from the concept of language learning. Language learning refers to mastering a language formally—requiring teacher—while language acquisition refers to language mastery that occurs naturally and informally since early childhood. The process and results of language acquisition depend on the maturity of human brain and speech organs (Trinowismanto, 2016; Dardjowidjojo, 2008). During the process of acquiring mother tongue, a child might acquire merely one language, known as Monolingual Acquisition, or might also acquire two languages simultaneously or sequentially, known as Bilingual Acquisition. A child might even acquire more than two languages, if he or she grows up in a multilingual environment (Schön et al., 2008; Ana & Macario, 2009).

In studies related to language acquisition, there are various theories, concepts and hypotheses that criticize and complement each other. One theory that still being discussed among linguists is the Universal Grammar Theory (Lidz et al., 2003; Roeper et al., 2001).

The Universal Grammar Theory was pioneered by Greenberg, and supported by Noam Chomsky and Roman Jakobson, even though the hypotheses they gave were not exactly the same (Dardjowidjojo, 2008). From the several hypotheses given, it is the Universal Grammar Theory by Noam Chomsky appeared to be the most prominent. Chomsky, who observed that children were able to master complex grammar in only 3-4 years, felt the existence of a natural device that was specifically formulated for the language acquisition process (Sudipa, 2009; Dardjowidjojo, 2008). This device is known as a Language Acquisition Device (LAD) (Ghazali, 2013; Dardjowidjojo, 2003; Chaer, 2019). According to Chomsky, LAD applies universally to all children in the world, as evidenced by the similarities in the process of language acquisition by children phonologically, syntactically, semantically, and even pragmatically (Dardjowidjojo, 2003; Harley, 2013). With the LAD in each children's brain, the children are described as entity filled with identical buttons and electrical cables. When a certain button is pressed, the lights connected to the button will light up (Dardjowidjojo, 2003). Pressing the button is likened to input from the environment. Therefore, if some inputs related to language A is given to the children, merely the system related to language A will be active in the children's brain (Ghazali, 2013; Dardjowidjojo, 2003; Chaer, 2019). However, various systems related to other languages still have the potential to be active, if input related to these languages is given to the children.

The fact that children in the world can acquire and master every language presented to them rise to the idea that language has universal properties (Chaer, 2019; Dardjowidjojo, 2003). Chomsky differentiates language into two kinds of universals, namely substantive universals and formal universals (Dardjowidjojo, 2003). Substantive universals include the elements that make up language, such as nouns, verbs and adjectives, while formal universals relate to the rules of how these substantive universals are arranged (Dardjowidjojo, 2003). According to Chomsky, although the external form of each language is different, the inner form of these languages is the same. LAD is believed to store universal mechanisms for all languages systems in the world. This device allows the process of language acquisition by children throughout the world to have a universal pattern. LAD has a mechanism for sorting, filtering and assessing the most efficient speech and rules to store (Dardjowidjojo, 2003). Thus, even though the utterances received by children from the environment are not always in good and correct syntactic order, the children are still able to understand the meaning and intent of these utterances (Dardjowidjojo, 2003). At the same time, LAD will analyse and store the syntactic order and semantic meaning of sentences as they should be, without the children realizing it. Apart from the mechanisms, LAD is also believed to contain a universal system capable of understanding human languages throughout the world. This means that every human being has the potential to use any language in the world, considering that these language systems have been available in LAD since birth. However, no one can use all the languages in the world equally, because they come from different environments (Hussein & Dawood, 2018).

With the LAD, humans have the potential to activate any language ability even with different rules, as long as the language system is stimulated by the environment. The researchers can observe positive evidence that supports this theory. For example, a child from a mixed English-Indonesian marriage is able to speak English and Indonesian equally because both languages have been well introduced to them by their environment since childhood. The next example is a child from a Chinese ethnicity who can speak English fluently because he was adopted and raised by European parents (Kpohoue, 2018). On the other hand, the child could not speak Chinese at all since Chinese was...
not introduced to him. These examples prove that humans are indeed equipped with a system with the same linguistic potential, but the output will vary based on the type of input received (Párraga et al., 2018).

Based on the explanation above, this research aimed to find out the implications of mother tongue system on second language learning, particularly in phones (sound) production (Chang, 2012; Osterhout et al., 2008). As it is said above, The Universal Grammar Theory is not merely accommodating implication in the term of grammar, but also phonological aspect (Murphy & de Larios, 2010; Paker & Karaağaç, 2015). This research examined the implication of mother tongue phones production on English phones production by English learners (people whose mother tongue other than English).

2 Materials and Methods

This study was designed with a descriptive qualitative approach to intensify space in explaining the causes and effects of the problems raised (Arikunto, 2006). The study used field methods which involved interview toward 3 children whose Balinese as their mother tongue, 3 children whose Indonesian Language as their mother tongue, and 3 children whose Japanese as their mother tongue. The 9 samples were confirmed English learners. The interview was used to examine their pronunciation of some English words. The English words given were formulated to represent all of English consonant phonemes, since this research merely focus on English consonant phones production.

The data in this study were phones produced by the samples while pronouncing English words. In collecting the data, this study used two types of methods, namely the Cakap Method (interview) and the Simak Method (observation) (Sudaryanto, 2015). The methods were supported by the Note Taking Technique (Sudaryanto, 2015). In analyzing the data, the Intralingual Matching Method was used because this study was intended to examine the cause effect of two linguistic aspects (Sudaryanto, 2015).

3 Results and Discussions

Based on the data, it was found that the samples whose Balinese as their mother tongue hardly pronounced [ə], [ð], [v], [f], and [∫]. They tended to substitute the phones with other phones. The [ə] was substituted with [t], the [ð] was substituted with [d], the [v] was substituted with [p] or [f], the [f] was substituted with [p], and the [∫] was substituted with [s]. The data could be seen as follows.

<table>
<thead>
<tr>
<th>No.</th>
<th>Words</th>
<th>Standard Pronunciation</th>
<th>Pronounced by Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thin</td>
<td>[ðɪn]</td>
<td>[tɪn]</td>
</tr>
<tr>
<td>2.</td>
<td>That</td>
<td>[ðæt]</td>
<td>[dæt]</td>
</tr>
<tr>
<td>3.</td>
<td>Veil</td>
<td>[veɪl]</td>
<td>[peɪl] or [feɪl]</td>
</tr>
<tr>
<td>4.</td>
<td>Fall</td>
<td>[fəːl]</td>
<td>[pəːl]</td>
</tr>
<tr>
<td>5.</td>
<td>She</td>
<td>[ʃi]</td>
<td>[si]</td>
</tr>
</tbody>
</table>

Meanwhile, the samples whose Indonesian Language as their mother tongue hardly pronounced [ə], [ð], and [v]. Most of English phones could be produced well by samples whose Indonesian language as mother tongue. Some phones might overlap other phones, even though the number was not high. The [ə] was substituted with [t], the [ð] was substituted with [d], and the [v] was substituted with [f]. The data could be seen as follows.
Table 2
Pronunciation by Samples whose Indonesian Language as Mother Tongue

<table>
<thead>
<tr>
<th>No.</th>
<th>Words</th>
<th>Standard Pronunciation</th>
<th>Pronounced by Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thin</td>
<td>[õɪn]</td>
<td>[tɪn]</td>
</tr>
<tr>
<td>2.</td>
<td>That</td>
<td>[ðæt]</td>
<td>[dæt]</td>
</tr>
<tr>
<td>3.</td>
<td>Veil</td>
<td>[veɪl]</td>
<td>[feɪl]</td>
</tr>
<tr>
<td>4.</td>
<td>She</td>
<td>[ʃi]</td>
<td>[ʃi]</td>
</tr>
</tbody>
</table>

Further, the samples whose Japanese as their mother tongue hardly pronounced [o], [0], [i], and [v]. The [o] was still substituted with [t], the [0] was substituted with [d], the [i] was substituted with [l], and [v] was substituted with [f]. The data could be seen as following.

Table 3
Pronunciation by Samples whose Japanese as Mother Tongue

<table>
<thead>
<tr>
<th>No.</th>
<th>Words</th>
<th>Standard Pronunciation</th>
<th>Pronounced by Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thin</td>
<td>[õɪn]</td>
<td>[tɪn]</td>
</tr>
<tr>
<td>2.</td>
<td>That</td>
<td>[ðæt]</td>
<td>[dæt]</td>
</tr>
<tr>
<td>3.</td>
<td>Veil</td>
<td>[veɪl]</td>
<td>[feɪl]</td>
</tr>
<tr>
<td>4.</td>
<td>Rock</td>
<td>[ɹɑk]</td>
<td>[lɑk]</td>
</tr>
</tbody>
</table>

Considering the results, LAD Theory indeed could ease the second language learning process, as long as the second language has the same features and systems as the mother tongue. However, Balinese, Indonesian, and Japanese have different features and systems from English. Therefore, the samples found difficulties in producing some sounds that did not exist in their mother tongue. The [o] and [0] phones are rarely found in Asian languages—Particularly Balinese, Indonesian, and Japanese (Pastika, 2005; Suparwa, 2006). On the other hand, [v] might exist in the term of alphabets, but in the term of phoneme, [v] was often found to overlap with [f]. [v] was substituted with [p] or [f] phones in Asian languages. Particularly for [i] which was pronounced into [l] by Japanese samples, it was not caused by the absent of [r] or [i] in Japanese language. However, Japanese people produce [r] slightly like [l]. Therefore, most of [r] phones would potentially be pronounced as [l] by Japanese people.

On the other hand, the samples did not find any difficulty in producing words from other languages that have similar features and systems. The samples whose Indonesian as mother tongue were found to understand Malay easily. Even, they produce Malay phones without any difficulty considering they never learning Malay or producing Malay phones before. The linguistic features and systems between Indonesian and Malay are indeed similar, although differences might still occur. For example, the final [a] in Indonesian is pronounced as [a] in Malay and the final [r] is often dropped in Malay. However, the differences did not cause the samples to experience confusion. The same situation happened when the samples whose Balinese as the mother tongue were requested to pronounce some phones from Javanese or when the samples whose Japanese as their mother tongue were requested to pronounce some phones from Korean (Jin & von Zedtwitz, 2008; Scharnhorst et al., 2006).

Therefore, Children who grow up with Bilingual Acquisition are indeed proven to have balanced language skills between one language and another (Ramos et al., 2018; Wilson, 1990). This really proves that every child in this world is born with the same language potential, but will choose and have a particular language based on stimulation from their environment. Thus, if a child has two languages as his first language, for example languages A and B, in which both languages have different systems, then that child will have very broad potential to master other languages which have similar systems to language A and language B.
4 Conclusion

Based on the problems and discussion above, it can be concluded that:

1) The features and systems of the mother tongue that have been activated in children’s LAD are essential to determine the success of second language learning.

2) A second language will be easier to learn if the language has the same features and systems as other languages that has been mastered.

3) Second language learners will encounter difficulty in producing certain phones of the second language if the phones do not exist in their mother tongue.

4) Children whose more than one language as his mother tongue and the languages differ in the term of systems, then the children will have broad potential to master many more languages which have similar systems to the mother tongues.

Conflict of interest statement
The authors declared that they have no competing interest.

Statement of authorship
The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

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