



Bilabial Articulation Pronunciation “B” (L1) and Syafatain Letters “Ba” (L2): Analysis of the pronunciation of the letter Ba in Surah Al-Fatihah

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Abstract:

This study aims to elaborate on the findings of the utterances of the bilabial letters B and Syafatain huruf Ba spoken by Indonesians as non-Arabic speakers in the context of differences in pronunciation between Arabic and Indonesian letters. The method used in this research is a qualitative approach using participant speakers. Three Indonesian participants recited Surah Al-Fatihah in the mosque environment. Data collection techniques are listening techniques using audio, observation, and interviews. Data analysis used is data reduction with raw data in the form of audio recordings and using a Praat Analysis Computer. This study obtained data on the characteristics and factors that influence the speech articulation of letters B and Ba spoken by Indonesians as non-Arabic speakers. Furthermore, this research has practical implications for the treasures of Arabic-Indonesian phonetic knowledge, also empirically as material for field-based learning studies.

Keywords:

Arabic; Bilabial; Phonetic; Syafatain

INTRODUCTION

Arabic linguistic context: To master Arabic properly and correctly, we must first be able to read Arabic letters and scripts first (Rahmatia et al., 2021), in the sense that the mastery of understanding the pronunciation of Arabic letters is one of the main supports. Especially for adherents of Islam who have the obligation to read the Qur'an, mastery of good pronunciation is mandatory to learn. As with other languages, Arabic and English are differentiated by their distinct linguistic systems, which result from their origins in different language families (Alsuhaimeh, 2022). English is a member of the Indo-European language family (Al-Shujairi et al., 2015), unlike Arabic, a Semitic language (Nofal, 2011). Not much different; this applies to Bahasa Indonesia.

In pronunciation, Arabic contain a rich and intricate consonant system. It is made up of 28 consonant phonemes and is renowned for its harsh and steady sound (Algethami, 2022). The pronunciation in question is divided into makharijul huruf categories, namely in the oral cavity (الجوف), throat (الحلق), tongue (اللسان), lips (الشفتين), and nasal cavity (الحنشوم).

Much research has been done on Arabic phonetics, including past research (Nathan, 2004), analyzing the sequencing of segments that are similar are claimed to be broken down into two syllables in Moroccan Arabic, followed by research in the last ten years, namely (Desca

Putri, 2020) researching the assessment carried out by children who cannot read the bilabial letters such as letters p, b, w, m, (Chang, 2013) Adult second language (L2) learners show systematic phonetic changes in their original language (L1) production beginning in the first weeks of L2 acquisition, (N. M. B. M. Noor et al., 2021) researched on the Realization of Sound Onset Time Consonants (VOT) of Indian-Muslim English Speakers in Malaysia, other studies namely (ASih et al., 2020) researching problems related to the low ability of students to pronounce letters, words, or sentences in Arabic, especially for novice students so that further mistakes do not occur which will hinder the learning process.

In conducting a literature review, researchers obtained gap research, namely the location of the analysis of changes in articulation between non-speakers and speakers; in this case, with a focus on studying Arabic letters, not much has been done. A search using Bibliometric analysis of similar research in one cluster supports this research gap so that researchers find an urgency about this research. In addition, knowledge of the articulation between Arabic letters spoken by non-speakers is important to study. In this case, the selection of surah Al-Fatihah as the focus of recitation is also based because Indonesia is predominantly Muslim.

As explained above, in terms of the phenomenon, most Indonesian people are Muslims. They learned how to read the Quran well when they were young. Most of them have learned to read the Qur'an well between 3-10 years (Yahya, n.d.). Among the responsibilities towards the Qur'an is studying and teaching it learning and teaching it (Palufi & Syahid, 2020). Even Indonesia is given enough attention in association with Islamic countries or large Muslim populations. These dynamics make it necessary to eradicate Al-Qur'an illiteracy. This activity is a da'wah activity that needs to be carried out by Muslims, especially those who claim to be a da'wah movement (Irfanudin et al., 2022).

This study focuses on the Syafatain letter, namely Ba or almost the same as the Bilabial letter, namely B. To obtain data that can be elaborated so that results are found on how the characteristics and factors that influence the articulation of letters are considered almost the same as letters spoken by non-Arabic speakers, namely Indonesians. Bilabial is articulation i.e. a sound made with two lips, the lips come together for the first sound (Yahya, n.d.). The concept of the character of the bilabial letter is explained in that the consonant [b] used is produced when the upper and lower lips are tightly closed so that the airflow is closed. Consonant [b] is also called an oral inhibitory consonant which is sounded by forming an 'obstacle' in the mouth

by the speech apparatus in the mouth. After a while, the airflow is released with or without sound, wherein the wrong pronunciation of the letter [b] indicates that the vertical dimension is too high and the anterior teeth are set too forward (Rohmah et al., n.d.).

METHOD

This study uses a qualitative approach by utilizing the condition of non-speakers, while in its implementation it uses Praat Voice Analysis. This effort aims to identify several things as follows: First, subjective norms: obtaining findings about Arabic phonetic knowledge, especially in the Syafatain category. Second, practical: reflecting the knowledge of speech abilities carried out by non-Arabic speakers.

Participant (Subject) Characteristics

The participants in this study were native speakers of Indonesian = non-Arabic speakers who live in Indonesia but are fluent in reading and reciting surah Alfatihah totaling 3 respondents; the characteristics of the participants are described in Table 1.

Characteristics	N
Age (Years old)	
17-23	1
24-30	1
>30	1
Experience as a Mosque Imam (Years)	
1-5	2
>5	1

Research Design

Data collection is accomplished utilizing documentation in the form of audio recordings, accompanied by interviews with respondents to obtain valid data and can help verify data from audio.

As for the data analysis, data reduction was carried out. The raw data was in the form of audio recordings. Then the recording is transcribed. To reduce bias, researchers involve research colleagues (Peer Debriefing) in analyzing data, intending to validate the accuracy of the research because it involves other interpretations that will avoid bias.

RESULT AND DISCUSSION

Characteristics of Non-Arabic Speakers Bilabial Articulation

The following shows Figure 1 and Figure 2 as an illustration of the phonetic review of Indonesian speakers pronouncing Indonesian in the word Budi.

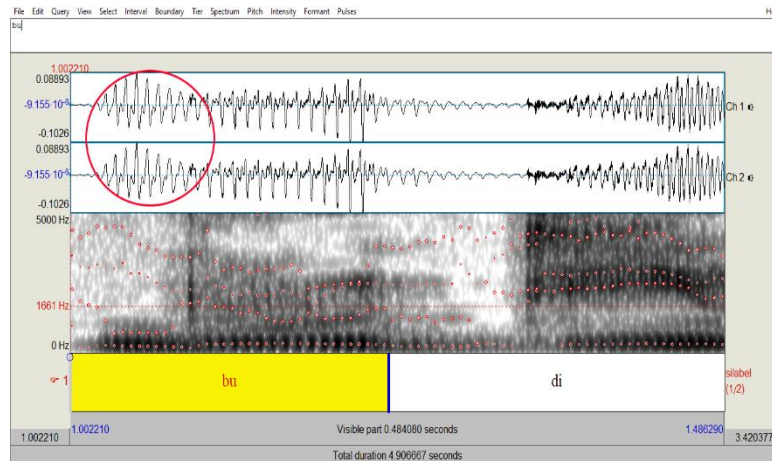


Figure 1. Visualization of Indonesian intonation

The part marked in Figure 1 shows that the pronunciation of "bu" in the word Budi produces transient sound waves of short duration and in the form of explosions marked by a formant point that rises significantly briefly.

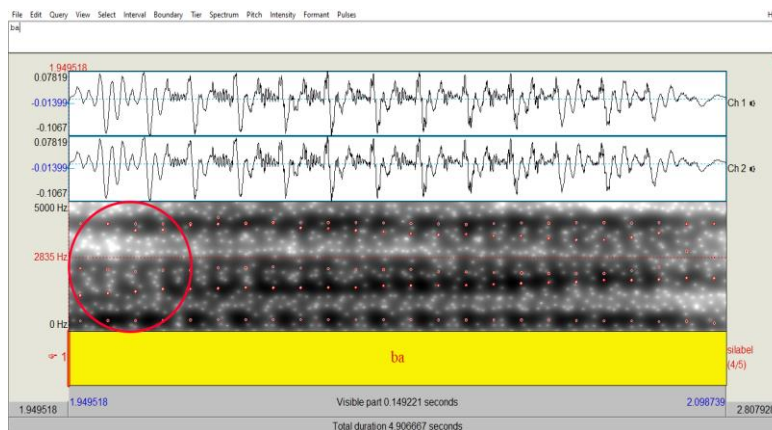


Figure 2. Visualization and annotation of sound waves with formant point from the pronunciation of "ba" in the word reading

In Figure 2 presented above, it is shown the pronunciation of "ba" in the word reading. Although the resulting spectrogram shows a very short burst at the beginning, the section marked in red shows the formant point where there is no significant spike and tends to be flat.

Characteristics of Syafatain Letter Ba Non-Arabic Speaker

The variety and distinctiveness of hijaiyah letters is one element that frequently causes pronunciation errors in Arabic language learners, particularly for letters that are challenging to pronounce, like ث, خ, ذ, ش, ص, ط, ظ, ع, غ, ق (Lathifah et al., 2017). The letter ب has 5

mutadhadah properties (الصفات المتضادة): First off, the letter ب is a member of the *Jahr* letter family, which in Arabic is called *al-I'lan wal izh-har*, or resonating loudly. Second, the letter is *syiddah*, which correlates to imply that because the makhraj is pressed firmly, the sound is preserved when the letter evaporates. *Syiddah* is a word that means strong. Third, the document contains the *Istifal* letter, which is also known as the humble or *al-inkhifadl* letter. When pronouncing the *Istifal*, the characters are made to sound low, thin, and light by spreading the tongue out to create a space between the palate and the tongue. Fourth, it has an open environment, or *Infitah*, which is the Arabic word for "open". The tongue does not adhere or move closer to the upper palate when saying the letter ب, preventing an enlarged or thick sound. Fifth, the letter ب has the feature of *Idzlaq*, which is pronounced in a light, smooth voice and more quickly because the pronunciation highlights the corners of the lips.. (Hidayat, 2022).

In the following, the researcher describes the characteristics referred to as the concept of this study in table 3.

Table 3. Categories of *Syafatain* in Surah Al-Fatihah

Makhraj Category	Analyzed letters	Words containing the letters analyzed
الشفتسن (lips)	ب	١. بسم
		٢. رب
		٣. نعيد
		٤. المغضوب

As an explanation of the phonetics or articulation of the respondents, the researcher presents reference speeches from native speakers as comparative material as shown in Figure 3.

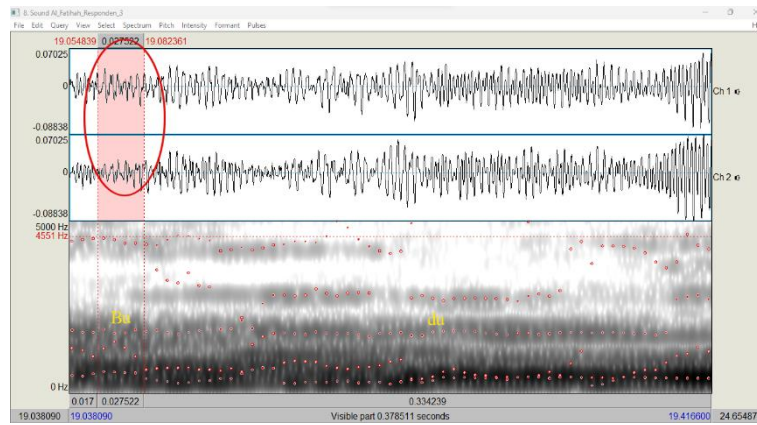


Figure 3. Visualization of sound waves with spectrograms and formant point from the pronunciation of the letter ب in the word نعبد by reference speakers

As an example, the reader can recognize how the letter sounds throughout the entire phrase by viewing to the speech annotation of the letters ب that have to be analyzed.

The letter is included in consonants that have popping sounds according to the classification of sound waves, which places it in the transient group. Explosive consonants are sounds that, when distinctly pronounced, produce powerful vocal organ resistance and cause air to become trapped behind the vocal organs either from the nose or the left and right sides of the mouth.

While the following is presented in Figure 4. is the pronunciation of the letter ب after segmentation

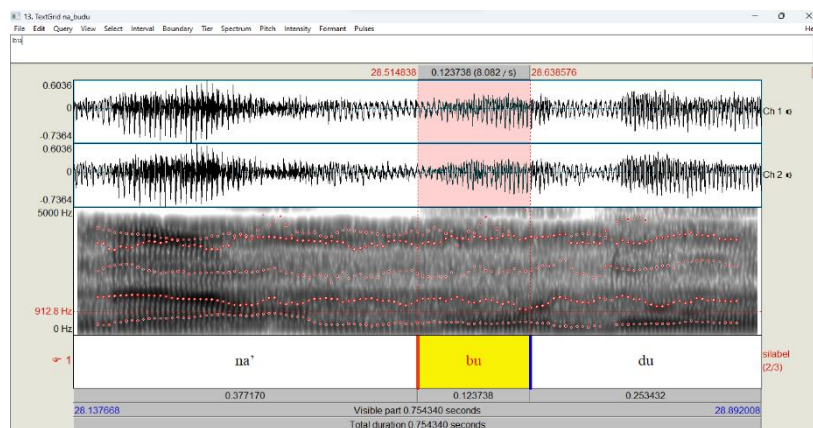


Figure 4. Visualization of sound waves with spectrograms and formant point from the pronunciation of the letter ب in the word نعبد by respondents

Figure 3 above demonstrates that respondent 1 made an error by changing the letter ب to the letter ء, despite the fact that the two letters have different points of articulation. In contrast to the letter ب, which is referred to as a glottal consonant, the letter ء is characterized as a bilabial consonant (Marlina, 2019). Although the letters ب and ء are both classified as transient sound wave types and characterized as popping sounds, respectively. There is a change at the formant point, but it doesn't appear to have much of an explosion. This pronunciation mistake affects the word's semantics, which is important to note because altering the sounds of the letters in a word can change how it is meant to be pronounced (Marlina, 2019). In contrast, errors in incorrect letter pronunciation can render the composition and features of spoken letters meaningless (Hidayat, 2022). As a reference for further descriptions, here are other annotations in other words

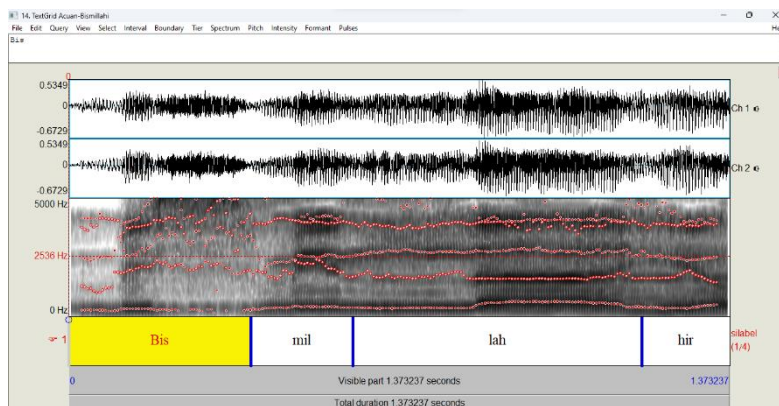


Figure 5. Visualization of visual annotations on the word بسم الله by native speakers

Figure 5 shows an annotation for the pronunciation of بسم الله by native speakers which contains the letter ب as the opening letter that is pronounced. Then the following presented in Figures 2 and 3 is the segmentation of the letter ب by native speakers and non-speakers.

The meaning of the spoken phrase is not altered by pronunciation that follows the point of articulation by omitting some letter characteristics, but it can change the composition and characteristics of the letters.

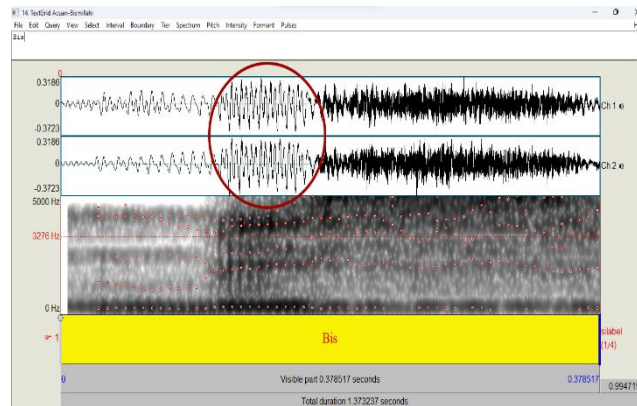


Figure 6. Visualization of sound waves with spectrograms and formant from the pronunciation of the letter ب in the word بسم by native speakers

Figure 6's red circled area illustrates the sound waves created during the letter's extremely rapid articulation. This corresponds to the characteristics of the letter ب which is included in the category of transient sounds whose functional characteristics have a pattern with a brief duration, making it challenging to detect regularity (Rois, 2022).

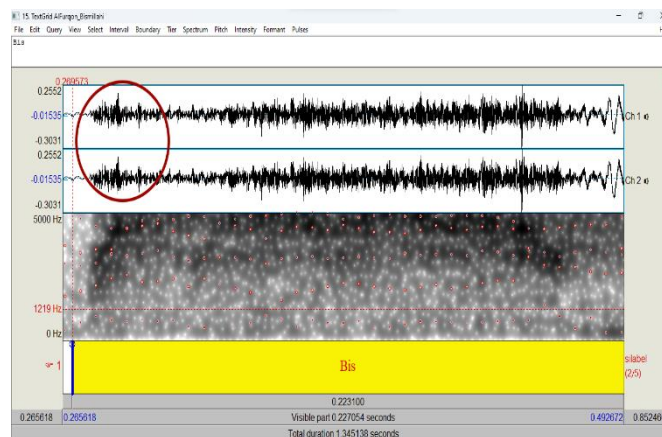


Figure 7. Visualization of sound waves with spectrograms and formant from the pronunciation of the letter ب in the word بسم by non-speakers

In contrast to the sound waves generated from the way the letter ب is pronounced by non-speakers in the word “نعبد”, Figure 7 above's red circled area illustrates the area where the character ب's sound waves are produced which looks very brief and has a significant pop. This is similar to the sound waves produced by a native speaker's pronunciation.

Factors for Changes in Bilabial and Syfatain Articulations in the Pronunciation of Non-Speakers

The letter ب is a consonant that belongs to the bilabial category when the articulation region is taken into consideration. When pronouncing bilabial consonants, the upper and lower lips are firmly closed. The air is then held between the two mouths while being blown out in a very exhaled manner (Marlina, 2019; Alwan & Maulani, 2023).

The difference in the pronunciation of the letters B and Ba is influenced by several things; when the first language habit helps to acquire a second language, the habit is known as positive transfer, and when the learner's first language interferes with their ability to acquire the second, it is known as negative transfer or, in most cases, interference. Interference can cause deviation from the target language norms due to learning Arabic (Yahya, n.d.). Linguistically, there is a regressive assimilation change, which occurs when the sound change is in the form of a changed sound that is in an earlier position (more to the left) than the sound that causes a change in the assimilation sound. Thus, the sound that precedes it matches the sound that follows it. Progressive assimilation changes are the opposite of regressive, namely changes in sound with the sound behind following the sound in front of it.

The difference between the speech of Indonesian and Arabic itself is that Indonesian vocabulary is, of course, pronounced with Indonesian phonemes. The Indonesian phonemes come out of the human speech organ. The human speech organ certainly has a peculiarity in pronouncing sounds so that there are phonemes that are pronounced under the influence of other phonemes. In addition, some phonemes influence other phonemes or, in other words, are said to be influences. Thus in producing phonemes, there is influence and influence (Ibrahim, 2013). Furthermore, with regard to language change externally, another connection is the existence of a language in another language environment in a multilingual society which is, of course, inseparable from the linkage of language with social and cultural aspects (sociolinguistic) (Haryono, 2011).

Because the intersection between Arabic and Indonesian (interference) is a mistake caused by carrying over the speech habits of the mother's language or dialect into the second language or dialect. This interference can occur in pronunciation, grammar, vocabulary, and even cultural meanings, both in speech and in writing, especially when someone learns a second language (Fitriana, 2020). It is concluded that language development is influenced by environmental conditions and situations.

Lack of mastery of the pronunciation of Arabic phonemes is also a factor in sound changes. Based on the results of the researcher's observations, it was found that in addition to several phonemes whose pronunciation was almost the same as the pronunciation in Indonesian phonemes, it was still found that respondents still experienced errors in pronunciation; this was precise because of the respondents' lack of knowledge of the pronunciation of Arabic phonemes in accordance with the rule. However, another respondent, namely respondent 2, validated this. The respondent's background with relatively good knowledge of makhrāj letters had an impact on good articulation as well.

There are at least two types of sound changes: first, Lenisi (lenition) is a sound change that consists of removing consonant clusters (cluster reduction); apocope (apocope); syncope (syncope); hapology (hapology); compression (compression); second, sound addition consisting of anaptyxis; epenthesis (epenthesis); prosthesis (prosthesis); metathesis (metathesis); fusion (fusion); separation (unpacking); vocal breaking (vowel breaking); assimilation (assimilation); dissimilation (dissimilation); unusual voice change (abnormal sound change) (Suparno, 2018; Fitriana, 2020).

Based on the finding data, the factors that influence the articulation of bilabial and syafatāin in the pronunciation of non-speakers are described in three categories, namely: first, Physiological Factors; reading is an activity that requires physical readiness and high concentration. If someone is in a state of Fatigue, it will most likely affect articulation; second, intellectual factors, background knowledge, or even education regarding phonological or pronunciation learning also influence changes in articulation; third, environmental factors, a person's environment with the spoken dialect also influences articulation.

CONCLUSION

Arabic and Indonesian (interference) are errors caused by carrying over the maternal tongue's or dialect's speech patterns into the second language's or dialect's. Therefore, mastery of understanding the pronunciation of Arabic letters is one of the main supports. In pronunciation, Arabic has a rich and complex consonant system. It consists of 28 consonant phonemes. divided into makhorijul letter categories, namely in the oral cavity (الجوف), throat

(الحلق), tongue (اللِّسان), lips (الشِّفتين), and nasal cavity (الحِشوم). In this study, as a focus on the intercession of the letters Ba and Bilabial letters B, the differences in the pronunciation of letters B and Ba are influenced by several things; when the first language habit really helps to acquire the second language, the habit is known as positive transfer, and when the learner's first language interferes with their ability to acquire the second, it is known as negative transfer or, in most cases, interference. This research has practical and empirical implications; namely in a practical review, this research becomes a new treasure and addition to the literature on phonetic studies between Arabic and Indonesian, then empirically, this research becomes a field-based theory for non-speaking Arabic learners, in this case, speakers of Bahasa Indonesia.

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