Analysis of Arabic Phonological Errors in Javanese Speakers

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Abstract. This study clearly explains the common barriers that often arise in pronouncing the Arabic alphabet or hijaiyah letters in Central Java. In addition to pronunciation, the author has conducted several experiments to overcome this issue and obtain seven alternative approaches that can be used to improve the pronunciation of letters (makharij al-huruf). The authors’ efforts in collecting data in the field for four years used a qualitative descriptive approach which aimed to provide an overview through words and explanations, especially for Arabic language teachers and Quran teachers, especially in the Central Java regions, about the circumstances in the field that will be encountered so that they can prepare themselves sufficiently. Data were obtained by observation, in-depth interviews, and documentation afterward processed using triangulation. The Romanization method in writing the Arabic alphabet in this study is obtained from several sources, which tables the author will attach in the introduction. The results of this study reveal several barriers that are often occurred in the region of Central Java in pronouncing the Arabic alphabet, including the pronunciation of the letter ‘ayn [ʕ], which reads “ngain”, the sound (voice) “u” becomes “o” as in the word “yauma” [ˈuːma] becomes “yaoma”. It corresponds to the characteristics of letters such as the ihhaq letters. Barriers for adults in pronouncing the Arabic alphabet result from improper pronunciation habits from childhood to adulthood, so more effort is required to change it. In addition, the childhood period is the time for a sound adjustment from its characteristic: whether heavy, soft, flowing sound, stuck sound is also where the letters are produced. It is also included in this are the different pronunciations of similar letters, such as the different pronunciations of ‘ayn-alif [ʕaː], hā-hā [ʕaː], dzāl-zā [ʕaː]. This research was conducted in Central Java and several other regions in Indonesia with the expectation that the solutions obtained would solve current problems, especially those occurring in the research location. The results of this study may also be applied in other regions and even in other countries, certainly, with some adjustments.

Keywords: Arabic Alphabet · Central Java · Arabic · Phonology · The Quran

1 Introduction

The Arabic alphabet has unique characteristics both in writing and pronunciation. Some of them do not even exist in any alphabet in the countries of this world, such as the letter ى (dād). Arabic is the only country that has this pronunciation [1], so Arabic
is also known as *dād* (*lughatu ad-dād*) [1]. This unique pronunciation causes several barriers for non-natives to pronounce it correctly. In fact, it is important to be able to pronounce Arabic letters with proper and correct rules because it will affect the meaning, particularly when reciting the Quran.

The arrangement of Arabic letters that it is commonly known presently are not arranged according to easy to difficult concepts but use the alphabetical arrangement *alifbayy* (العابي), which is arranged based on the same script [2]. This arrangement does not follow the layout of the letters (makharij al-huruf) as arranged by al-Khalil [3], which starts from the throat cavity (*jauf*) to two lips (*syafatain*).

In contrast to Indonesians (and also people from other countries), for Arabs, the random order of the Arabic alphabet according to the place where the letters are produced is not a problem, even though they are new to this theory because Arabic letters have become something familiar to them.

There are at least two facts that motivate the author to conduct this research. First, is reciting the Quran properly and correctly according to the rules of *tajweed* knowledge is compulsory, as Imam Jazary said in his *syafatain* (rhymes) [4];

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والأخلاق بالتحويد حكم لأرْم
مَرْمُ مُحَوْدُ الْقُرآن آمِن
لِأَلْهَةَ بِإِلَيْتُ الْآزْرَى
وُفقِحًا مَنْهُ إِلَيْنا وَصَالًا
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“*And practicing tajweed is absolutely compulsory. Whoever intentionally does not practice tajweed when reciting the Quran, he gains sin. Because together with tajweed Allah sent down the Quran and the way to recite it. And together with the tajweed, the Quran and the way to recite it have reached us.*”

Second, the number of Muslim communities in Central Java is the majority, and this number will be extremely disappointing if the percentage of those who cannot recite the Quran correctly is relatively high [5] because Islam, the Quran, and Arabic are analogized as a body that is interconnected and mutually reinforcing, its part cannot be separated from one another [6] so that when people improve one of them, the remains cannot be abandoned. Therefore, the approach used in this study to discover and overcome the barriers that exist in the articulation or pronunciation of the Arabic alphabet in Central Java is to employ the Quran and Islam. Employing the Quran can bring someone closer to it by learning to read, memorize, recite, and practice it the Quran aims to make someone closer to it by learning how to read, memorize, recite, and practice the Quran. Meanwhile, employing Islam intends to provide explanations, motivations, and solutions to societal problems based on Islamic law.

The discussion regarding the pronunciation of the Arabic alphabet in Central Java is arranged so that Muslims can recite the Quran better, the ultimate goal of which is none other than to be closer to the Quran and to the One who sent down the Quran.
Table 1. Romanization system for the Arabic alphabet [7–9]

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<tr>
<th>Arabic</th>
<th>Roman</th>
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<tbody>
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</tbody>
</table>

In this writing, to correlate the reader’s perception from the start, the author will include a guide for writing the Arabic alphabet along with Roman writing taken from Beacher Wiggins and Britannica (Table 1).

2 Literature Review

Arabic is a language that is recommended to be learned by Muslims because their life guidebook was revealed in Arabic. Moreover, explanations for an adequate understanding of the book can be discovered in the works of Muslim scholars in Arabic.

The spread of Muslims in various parts of the world who have different languages from Arabic causes various problems. Simultaneously, Muslim experts and scientists in each country also present solutions to these problems, both solutions to barriers to learning Arabic: the condition of teachers and students, motivation, learning facilities, and providing methods to facilitate speakers whose does not speak Arabic (ghairu an-nathiqin) to recognize and pronounce Arabic letters by rearranging the letters of the Arabic alphabet with the concept of order (easy to difficult) [2].

The difference from the article that the author compiled is that it focuses more on analyzing Arabic letters, which are difficult for Javanese speakers to pronounce, their causes, and solutions.
3 Methodology

This research employed a qualitative descriptive approach, research used to describe phenomena, circumstances, social activities, community views, culture, and human beliefs individually or in groups.

Based on the source, the data in this study are divided into primary and secondary data [11]. The primary data were the words, utterances, and characteristics of the subjects related to the pronunciation of the Arabic alphabet. Primary data were obtained through monitoring, observation, and in-depth interviews. In contrast, secondary data were obtained through documents, books, photos, notes, and objects that are used as a complement to secondary data [12].

The data collection in this study used several methods, including observation, in-depth interviews, and documentation. Observation is conducted to learn about the environment, humans, and culture in a place that will be used as the research object. This method is employed when the observed correspondents are not too large [13], but within a short period, researchers have obtained sufficient data by completing observations from one place to another, especially in the Yogyakarta and Klaten areas.

An interview, according to Esterberg, is a meeting between two people to exchange information and ideas through question and answer so that the information can be determined on a particular topic [14]. The interviews were also conducted to explore in detail the barriers and problems frequently encountered in learning and pronouncing Arabic letters (makharij al-huruf) in Central Java to be recorded or documented. Furthermore, several learning barriers from other regions in Indonesia are also collected as a comparison. Data were collected through notes, activity documentation, photos, and videos, then analyzed by qualitative descriptive method. Furthermore, the data were processed using triangulation. Triangulation is a method of synthesizing data to its truthfulness by using other data collection methods [15].

4 Results and Discussion

4.1 Makhraj Pronunciation and Characteristics of Letters

One thing that characterizes the Arabic language is that the pronunciation of the letters must be from a predetermined place, recognized as the discipline of makharij al-huruf. Imam Ibnul Jazary, in his syafatain, mandzhumah al-muqaddimah [4], mentions that there are 17 places where letters are produced. If classified into main aspects, they will be divided into five: (1) Oral cavity (al-jauf) (2) Throat (al-halq) (3) Tongue (al-lisan) (4) Two lips (asy-syafatain) (5) Nose (al-khaisyum).

The unique pronunciation of Arabic letters occurs in Indonesia, one of the countries that have the most languages in the world; there are 723 [16] spread across Indonesian tribes and islands, causing the barriers in pronouncing Arabic letters also to be various. Central Java, for instance, the barrier that is frequently encountered in Central Java regions, including Jogja and Klaten (generally occurs among older people) has the difficulty in pronouncing the letter “‘ayn” [e]. Many of them pronounced letters produced at the middle part of the throat cavity (jauf) [17] by adding the sound “ng” so that it reads “ngain”. On the other hand, Jakarta had different case due to their dialect in everyday
conversation which frequently ends vowel sounds by adding an apostrophe (in English it is called a glottal T), such as the word “Ibu” becomes “Ibuk” (read: Ibu”), “pergi” becomes “pergik” (read: perg’i”) so that this habit is carried over as pronouncing Arabic letters. In fact, a vowel ending that is added with an apostrophe in Arabic will be read similarly to adding a new letter, *hanzah* [-], to a word that the result can change or eliminate the meaning of that word.

It has been less than ten years since the author concerned the world of learning and teaching Arabic letters in the Central Java region (several years in other regions such as Lombok, Jakarta, Bima, or sometimes the authors did not come to the location but merely met people coming from the region so that discussions and sharing of information take place) to find a pattern commonly occurred in society in reciting the Arabic alphabet/letters both from the side where the letters produced (*makhraj*) or their characteristic.

The results of this study found that several letters are difficult to pronounce because these letters do not exist in Javanese or Indonesian. Pronunciation difficulties are divided into two parts, namely difficulties in pronunciation according to the place where the place of letters is produced (*makharij al-huruf*) and difficulties in pronouncing them according to the characteristics of the letters attached. The following is an explanation of each of these parts:

4.1.1 Based on Place of Letter Production (*makharij al-huruf*)

1. َ(‘ayn)

The letter ‘ayn has a *makhraj* in the middle (*jauf*) throat [17]; the resulting sound sounds more stressed than the pronunciation of the letter alif, which has a *makhraj* in the lower throat cavity [17]. In Central Java, the pronunciation of this letter is especially ‘typical’. The stress at the start of the letter sound changes to the ‘ng’ sound. “Ayn” becomes “ngayn”. This case is generally found in people with the age range of 30 years and over. According to their confession, it happened due to habits they had committed since childhood, and eventually, it was carried over into adulthood, so it costs time to make changes.

2. ض*(d¯ad)*

The pronunciation of the *d¯ad* letter is more special than the other letters. The reason is that the letter *d¯ad* only possessed by Arabs; normally, no one can pronounce it better than the Arabs. In Indonesia, especially Central Java, the pronunciation of the letter *d¯ad* is often the same as the pronunciation of the letter *d¯al* [], which is the place where the letter is produced through the tip of the tongue, which is pressed above the upper front teeth. Regarding *d¯ad*, the place where the letters are produced is on the edge of the tongue on the side, which is stressed on the upper molars, either left, right, or both simultaneously [17].

3. ﺔَ (tā and lām)

In the case of the two letters, it is quite simple compared to the two previous cases. The sound and characteristics of the letters are not too difficult for most people in Indonesia to pronounce them. The problem is in the location where the letters are produced, which should be the position of the tip of the tongue at the base of the two upper incisors, but it is pronounced by driving out the tongue, the tip of the tongue coming out, passing
through the incisor border and the words are attached to the tip of the tongue with the
tip of the upper incisors. This case commonly occurs among children.

4. ح (hā)

The mispronunciation of the letter hā [ʕ] is that it is pronounced like pronouncing
the letter hā [ʕ].

5. ه (hā)

The last one is the letter hā. However, the problem in pronouncing this letter is only
in several conditions, such as when it takes the vowel of sukun at the end of a sentence;
for example, اللّاهُ مَا فِي السَّمَاوَاتِ is read as اللّاهُ مَا فِي السَّمَاوَاتِ and the letter hā in the middle of a word like in the
sentence “لِلَّالِهِ مَا فِي السَّمَاوَاتِ” is read imperfectly to become “لِلَّالِهِ مَا فِي السَّمَاوَاتِ”.

This mistake is fatal (as well as mistakes in the pronunciation of other letters of
makhraj) because it has an impact on changing the meaning of a word.

4.1.2 Based on Its Characteristics

Errors or imperfections in pronouncing the letter characteristics generally do not have a
fatal impact compared to errors in pronouncing makhraj al-letters. However, perfecting
the pronunciation of the characteristics of the letters tends to be more difficult than
learning where the letters are produced. These letters include:

1. ۆ (tsā and dzāl)

These two letters basically have the same place of letter production, namely, the tip
of the tongue meeting the tip of the upper incisors [17], and most people the writer has
encountered have no problems with this part except for a few. The mistake regarding the
characteristics is in the flow of breath that comes out when pronouncing the letter. The
case is that many of these two letters are pronounced without breathing/flowing the air,
so even though the makhraj is correct, the sound of the letter dzāl [ʕ] sounds similar to
dāl [ʕ].

2. ر (rā)

The letter rā has two characteristics, heavy and soft. In short, it will be read with
soft when rā has a vowel of kasrah and is read heavy when it has a vowel of fathah or
dhammah. Pronunciation of rā in a soft voice is easy for Central Javanese people; it will
be different when rā must be pronounced in a heavy voice. The sound is directed to the
upper jaw so that the sound that is produced sounds heavier.

3. ص (shad, dad, tha, dza)

The four letters above are included in the ithbaq letter group, which is in pronouncing
the letters, air will gather between the tongue and the palate [17]. The sound of the letters
will be directed towards the upper jaw to make the sound clear and heavy. Like the letter
rā, directing sound to the upper jaw is still relatively difficult for the people of Central
Java.
In regards to others beyond, although they seem small and trivial mistakes, they also
deserve attention, such as the pronunciation of “yauma” [르], which reads “yaoma”, or
the word “‘alaihim” [رفع] to “‘alaehim”. To overcome the problems mentioned, here are
some alternatives that can be accomplished:

1. Learn from the Quran

   The Quran is the mother of the Arabic language. He is a source of inspiration for
the birth of Arabic linguistics and literature [18]. It is the primary and the best reference
compared to the others, so learning Arabic will be better when using the Quran as a
learning tool.

2. Talaqqi

   In teaching the pronunciation of makharij al-huruf and its characteristics, the best
method is what has been passed down from generation to generation for several gener-
ations since the Prophet’s time until currently (although this method has started to be
left) is the talaqqi method, which the student meets face to face with teacher [19].

   The term “Talaqqi” originates from the word “laqiya” [لَاقيَة] which means to meet [19],
and in practice, it has five types, namely at-talqin, al-‘ard, al-sima’, riwayat al-huruf,
and ijazah mujarradah [19].

   The advantage of this method is that students can study directly with the teacher
one by one face to face, making it possible for students to follow the teacher’s example
better. It also simplifies the process for the teacher to rectify any incorrect pronunciation,
especially the position of the tongue, and the shape of lips, which generally influence
Arabic letters pronunciation. Another advantage is that the teacher improves not only
the pronunciation of his students but also the process of growing morals in them, which
is obtained through being together with students and teachers within a certain period.
Students live with their teachers [20], and from there, they will learn many things shared
through personal models. It is important because, in Islam, the urgency of morality within
a person is more important than knowledge itself [21]. ‘Abd al-Rahman al-Sulamy even
analogized knowledge without attitude to fire without firewood.

   The weakness of this method is that its implementation in educational institutions
may require both teachers and students to be more suitable, such as madrasah/Islamic
boarding schools where students and teachers generally live together in the same envi-
ronment so that student and teacher interaction can occur every day. Regarding general
students (not living in Islamic boarding schools), it is impossible to do this considering
several things, including; (1) Students have many other activities outside of school, help-
ing parents, etc. (2) The time that teachers have is limited (3) In some cases, parents do
not support their children to participate in learning (4) This method will only be effective
if, in any case, the number of students is not more than 15 [22]. These four reasons do
not give Arabic or Quran teachers many options instead of maximizing the limited time
(about three to five days a week with duration of around 15-2 hours) agreed upon among
the teachers, students, and parent/custodian.
3. Media

The media will be very helpful, considering the weakness of the talagqi method is that it requires teachers and students to spend time learning simultaneously. The media can be in the form of a video recording of the teacher pronouncing words or sentences in Arabic fluently and clearly, and it would be better for students to practice some verses of the Quran by playing back the video as a reminder and study material at home. This video can also be a solution for parents of students who want to participate in learning or want to teach their children but are confused about where to start.

It is important to note that the media may not be suitable for children of certain ages without wise parental supervision. Extensive research has already been conducted on this topic. Therefore, it is unnecessary to provide a detailed explanation here.

4. Cooperation between Teachers and Parents

Collaboration is a way of working that is more efficient in time, effort, and cost. This method can also create new breakthroughs to overcome a problem [23]. Therefore, the cooperation of teachers and parents is very important in education.

Parents play a significant role in children’s education if they want better results because they are the main foundation for children to gain their rights [24]. They have more time and a closer distance from their children, so it is possible to be the best way of education. Moreover, as discussed above, the time for learning to improve pronunciation (tahsin) is extremely limited. That is the reason parental assistance at home is required. Even if it is returned to the Islamic concept, parents have the biggest role and are obliged to assist in improving and developing children, including their education, because the education received by children from birth to adulthood is originally from the parents themselves [25]. In a hadith, the Prophet Muhammad sallallaahu ‘alaihi wa sallam said:

"No child is born but that he is upon natural instinct. His parents make him a Jew, a Magian and a Christian."

The alternative solutions that the authors convey above are not always successful. Several other factors can potentially hinder the learning process, including lack of child motivation, limited parental knowledge, educational background, environment, and culture. Here are some methods that can be employed to reduce this gap:

1. Introduce Children to the World Outside

Humans are competitive creatures. Competition has been a part of them ever since they were sperm. Introducing children to the world outside, such as involving them in competitions, can stimulate their motivation. Noticing that children of their age who can do things better than themselves will motivate children.
2. Give Challenges among them, Not Just at the regional level

In competitions between regions, commonly, not all children can participate because the children who join the competition are generally the selected ones who have more potential than their peers. If this continues, only certain children will participate in the competition, gradually triggering conflict because covetousness grows between them. It is very important to create a fair environment by holding a competition among the children.

3. Approach their Parents

Motivation is not only required by children but also by parents. Good motivation to continue to encourage their children, escort them to success in learning, as well as motivation for themselves so that they remain enthusiastic in learning to pronounce Arabic letters. Regular meetings with them can be an alternative.

The work factor might be a hindrance, but do not let it become a total hindrance. People willing to move together are still required, although the number is small. In the end, only to Allah do people surrender.

5 Conclusion

After conducting research on the pronunciation of the Arabic alphabet in Central Java, especially in the Jogja and Klaten regions, the pronunciation problems and several alternatives that can be implemented to overcome these problems, it can be concluded that: first, several Arabic alphabets are difficult for Javanese to pronounce because the Javanese language does not have these letters characteristics. Thus, assistance is required to improve pronunciation. The following letters can be summarized into the following evaluation Table 2.

Second, alternatives that can be accomplished to overcome the above problems, namely: (1) Learning from the Quran, (2) The *talaqqi* method, (3) Media, (4) Collaboration between teacher and parents, (5) Introduce children to the world outside, (6) Provide challenges between children, not just competition at the regional level (7) Approach their parents.
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<thead>
<tr>
<th>Arabic</th>
<th>Roman</th>
<th>Mistake</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>ع</td>
<td>‘ayn</td>
<td>Ngain</td>
<td>‘ayn, come out through the mid-throat</td>
</tr>
<tr>
<td>ض</td>
<td>dād</td>
<td>Pressing the tip of the tongue on the base of the two upper incisors so that it reads like da [d] The tongue comes out to pass the incisors It reads softly like hā [h] during sukun Pressing one or both edges of the tongue against the upper molar teeth.</td>
<td></td>
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<tr>
<td>ت</td>
<td>tā</td>
<td>The tongue comes out, passing through the incisors The tip of the tongue is at the base of the two upper incisors</td>
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<tr>
<td>ل</td>
<td>lām</td>
<td>The tongue comes out to pass through the incisors The ends of the two edges of the tongue reach the tip of the tongue against the gums of the upper teeth</td>
<td></td>
</tr>
<tr>
<td>ح</td>
<td>hā</td>
<td>It reads heavily like hā [h] It is read heavily; letters come out through the middle of the throat (al wasathu al-halaq)</td>
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<tr>
<td>ه</td>
<td>hā</td>
<td>It reads softly like hā [h] during sukun It is still read heavily; the letters come out through the base of the throat (al-aqsha al-halaq)</td>
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</tbody>
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(continued)
<table>
<thead>
<tr>
<th>Arabic</th>
<th>Roman</th>
<th>Mistakes</th>
<th>Correction</th>
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<tbody>
<tr>
<td>ث</td>
<td>thā/tsā</td>
<td>Does not flow air</td>
<td>Air flows</td>
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<tr>
<td>ذ</td>
<td>dḥā/dzāļ</td>
<td>Does not flow sound</td>
<td>Sound flows</td>
</tr>
<tr>
<td>ر</td>
<td>rā</td>
<td>Not reading heavy rā fatḥah and dhammāh, and too much in takrīr (moving the tip of the tongue)</td>
<td>The sound of rā fatḥah and dhammāh leads to the upper jaw so that it becomes heavy and is not over in takrīr.</td>
</tr>
<tr>
<td>ذ</td>
<td>zā</td>
<td>Not read heavy lḥbāq</td>
<td>Gathering of sound between the tongue and palate when pronouncing the letters.</td>
</tr>
<tr>
<td>ط</td>
<td>tā/ thā</td>
<td>Not read heavy lḥbāq</td>
<td>Gathering of sound between the tongue and palate when pronouncing the letters.</td>
</tr>
<tr>
<td>ض</td>
<td>dād</td>
<td>Not read heavy lḥbāq</td>
<td>Gathering of sound between the tongue and palate when pronouncing the letters.</td>
</tr>
<tr>
<td>ص</td>
<td>sād</td>
<td>Not read heavy lḥbāq</td>
<td>Gathering of sound between the tongue and palate when pronouncing the letters.</td>
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</table>
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Author Contributions. Recommendations from the results of this study aimed more specifically at experts, educators, or teachers of Arabic and the Quran to better teach how to pronounce Arabic letters to Muslim children and Muslims in general. Errors in pronouncing Arabic letters at the beginning of the learning period will affect the process of developing students’ abilities in Arabic pronunciation and reciting the Quran in the future. Thus, it is important for the teacher to be more ‘heartless’ and not permit students to continue to the next higher stage before truly mastering the early stages.

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