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AN ACOUSTIC ANALYSIS OF THE STRESS ON THE PARTICLE مَا /MAː/ IN QURANIC RECITATION BY NON-ARAB SPEAKERS

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Abstract

This study investigates the acoustic stress of the Arabic particle مَا /maː/ in the recitation of the Quran by non-Arabic speakers, focusing on its various grammatical functions. The study highlights the importance of prosody and *tajweed* in correctly reciting the Quran, emphasizing the nature of stress in conveying the intended meaning of the verses. While there is rich literature on the semantic and syntactic functions of particles in Arabic, phonetic analysis remains largely unexplored. This study uses a qualitative descriptive comparative method by comparing the pronunciation of non-Arab speakers with native speakers. This research aims to provide a deeper insight into the acoustic characteristics of the recitation of the Quran and positively contribute to learning Arabic and the Quran. The findings show that the stress of the particle مَا /maː/ in Surah `Abasa produces some differences between non-Arabic speakers and native speakers. The mismatch between the stress rule on the ما particle and its grammatical function is evidenced by acoustic values that differ from those of native speakers. While these stress differences do not change the meaning of the verse, they do affect the beauty of the Quranic language. The results of this study can also be a reference for further research in acoustic phonetics. In the end, this research is expected to foster a deeper appreciation of the rhythmic beauty of the Quran.

Keywords: *acoustic analysis*; *Quranic recitation*; *stress*; *particle Mā /maː/, Tajweed*

1. Introduction

The Quranic acoustic miracle is a unique beauty that cannot be replicated or found in any Arabic discourse (Al-HajEid, Jaber, Abu Jweid, & Ghanem, 2022). Every Muslim is commanded to strive to read the Quran as it was revealed through the Prophet Muhammad, who is the most eloquent in his recitation. Fluency in Quranic recitation requires not just accurate pronunciation of letters and *harakat* but also a deep understanding of *tajweed* in the verses being recited.

In reciting the Quran, a qari needs to distinguish between verses containing *kalam khabar* (informative) or *kalam inshā'* (imperative or rhetorical speech), as well as when to raise or lower the voice and which parts need to be emphasized (Abdunnashir, 2015). Another opinion suggests that a *qari* should understand the meaning of each word and style contained in the verse they are reciting, aligning their recitation with the correct application

of *mad*, *harakat*, stress, and intonation (Hasibuan, 2015). This indicates that the language of the Quran is rhythmic and has specific functions according to the context of each verse.

Prosody plays an important role and is closely related to *tajweed*. In Arabic, phonetic and phonological rules can be applied to the rules of Quranic recitation (Mohamed et al., 2021). Research on prosody in Arabic, especially in the context of Quranic recitation, has grown significantly in recent decades and has become a prominent area of study. Research topics related to Quranic prosody cover a wide range, from the smallest elements, such as phonemes at the lexical level, to the most complex elements, like intonation at the post-lexical level. Among studies on phonemes with non-Arabic speakers as participants are those concerning the phonemes /b/, /q/, and /f/, which reveal various characteristics of recitation production by the speakers (M. Ali et al., 2023; Fitria & Al Farisi, 2023; Maulani & Alwan, 2023). Additionally, there are studies on the duration of *mad* recitation (Moh. Masrukhi, 2019), as well as research on the pattern and prosodic structure of verses (Z. A. Ali, 2020; Arifuddin, 2018).

Akbar's (2024) recent research on the manifestation of stress, intonation, and pauses in Quranic recitation shows that stress and intonation are closely related. In some verses, prosodic elements such as particles are discussed as stressed parts, such as the question particle and negation particle. The researcher found a gap between the relationship between the manifestation of prosodic elements and acoustic measurements. Acoustic analysis is needed to understand how sound production is produced and to provide a clear picture of the characteristics of the Quranic recitation itself.

One area of phonetics that requires attention is stress. Stress is a key aspect that characterizes the Arabic language itself. In Quranic recitation, proper stress placement is crucial in maintaining the original meaning of the verses and is also a part of the phonetic beauty of the Quran. One form of stress in Arabic, specifically in Quranic recitation, is the stress on certain particles. In Arabic, particles are described by using linguistic features, such as status (free or bound), grammatical role, precedence, and semantic function (Kaye, 2001). The particle مَا, frequently found in the Quran, has various meanings depending on its grammatical function. The particle مَا belongs to the category of *ḥurūf* al-*maʿāni* (particles with meaning) and has two types: as an *ism* and as a *ḥurūf*. The particle مَا has several functions, including *mā mawṣūl*, *istifhām*, *syarṭ*, *zā'idah*, *maṣdar*, and *nafy* (Arsyad, 2019). The differences in types and functions naturally affect the intended meaning of a verse (Aulia, 2021).

Based on these various grammatical functions, it is essential for an Arabic learner to understand the meaning and function of the different مَا particles (Lubis, 2020). In addition, many studies have discussed the meaning of particles in Arabic, both semantically and syntactically, especially in the Quran (Hafeez, 2022). As for phonetic studies, the topic of particles has not been widely discussed. Therefore, this research is expected to enrich the existing study literature and complement previous relevant studies with a modern approach in the form of acoustic analysis. The objective of this study is to identify the acoustic stress of the particle مَا /maː/ in the recitation by non-Arabic speakers, viewed from the differences in its grammatical functions, and then compare it with native speakers to obtain more accurate research results. Ultimately, the findings of this study could have implications for Arabic language learning, particularly in the context of Quranic recitation, and contribute to the development of linguistic science.

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2. Literature Review

In language typology, Arabic is categorized as a stressed-timed language, while Indonesian is classified as a syllable-timed language (Dauer, 1983; Irawan & Dinakamarani, 2019). This typological difference between Arabic and Indonesian certainly affects how a language is produced. Moreover, the linguistic rules in Quranic recitation are distinct from those of general Arabic. Nevertheless, these Quranic recitation rules are definite and fixed.

Arabic, as the language of the Quran, is rich in vocabulary and diverse in style. One of the unique features of the Quran is that its verses contain various rhetorical styles that are full of meaning, both literal and figurative. One rhetorical feature in the Quran that shows this diversity is the particle مَا /maː/. The particle مَا /maː/ consists of one consonant /m/ and a long vowel /aː/. From the perspective of its pronunciation, the consonant /m/ is classified as an *ʻanfiyyah* (nasal) sound. Regarding the place of articulation, it falls under *ṣawamit syafataniyyah* (labial sounds). In terms of *ḥams* and *jahr*, it is classified as a *majhurah* sound (Muhammad Nur Sholihin, 2020). Based on these three types, the sound /m/ can be called a nasal bilabial voiced sound (*ʻanfy syafatany majhurah*).

Below is a visualization of research topics related to the Prosody of the Quran in the last ten years (2014-2024).

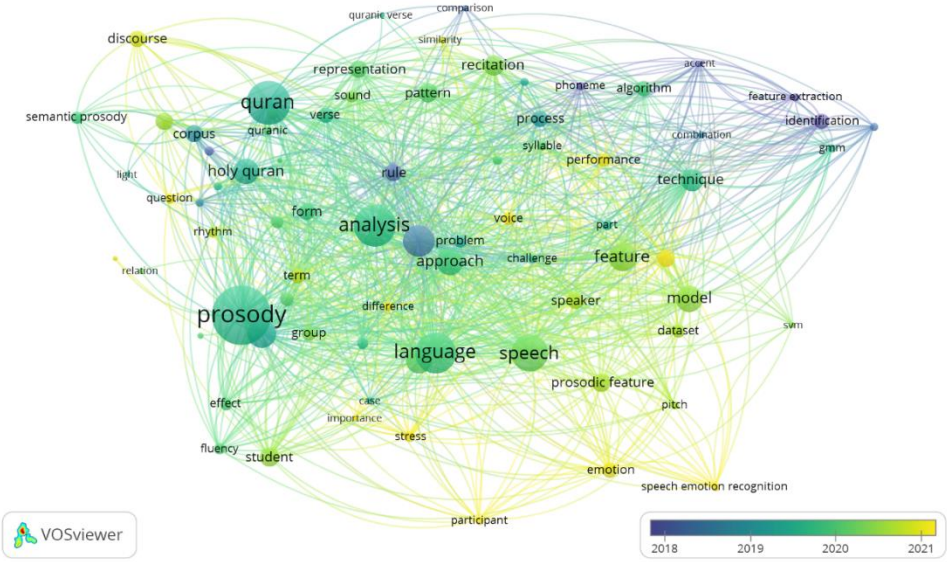

Figure 1. Visualization of Prosody of Quran Research Topics

Based on bibliometric analysis using the Publish or Perish (PoP) software, it was found that there have been studies relevant to the keywords *prosody*, *Quran, analysis,* and *stress* in the past ten years. Most of the research focuses on analyzing prosody and phonetics in Arabic in general, such as emphasizing on *tajweed* and intonation or rhythm in Quranic recitation. Intonation, which is part of prosody, can be categorized based on stress (Marlina, 2019). Intonation refers to the emphasis on one or more segments of a word or words in a sentence that stands out more than other segments or words, and one of its functions is to convey meaning (Akbar et al., 2024).

Furthermore, stress is closely related to rhythm. Stress occurs at the word level or according to context, while rhythm occurs at the phrase or sentence level (Al-HajEid et al., 2022). Although many studies have focused on the prosody of Arabic, particularly in Quranic

recitation, there is still limited research specifically on stress on certain particles, such as مَا /maː/ in Quranic recitation by non-Arabic speakers. Based on this background, the researcher sees the urgency for further study on the prosody of Quranic recitation, focusing on the acoustic analysis of stress on particles.

In some cases, the particle مَا may not directly alter the meaning of a verse. However, in particular verses, the presence of two or more particles مَا can have an effect, where an incorrect placement of stress could change the meaning due to its grammatical function. For example, in Surah Al-Bayyinnah, verse 4, there are two particles مَا. The first particle مَا needs to be stressed when recited because it functions as a *maṣdar* (verbal noun), while the second particle مَا should not be stressed because it functions as *ism mawṣūl* (relative noun). This shows that stress is important in determining the meaning (Jumahadi & Abu Bakar, 2022). Based on this, the researcher has chosen the particle مَا as the focus of this study due to its diverse meanings. Furthermore, this research focuses on the recitation of speakers in Indonesia as a relevant context for studying Arabic language education. The recitation that will be studied is from the *Ḥafṣ* an *Āṣim* narration. This is based on the fact that most Indonesians use this *qira'ah*. Additionally, the narrated *qira'ah* is known for its high level of mutawātir (authenticity) and correctness (Muqtad, 2023).

3. Research Method

This study uses a qualitative descriptive comparative method that combines two main approaches: descriptive analysis to describe the acoustic data obtained through the Praat software and comparative analysis using the Qualitative Comparative Analysis (QCA) method to compare the acoustic analysis results between non-Arab speakers and native speakers. The design of this study aims to provide a comprehensive description of the phenomenon by describing several variables related to stress in Quranic recitation. The QCA method will help analyze how the acoustic characteristics of non-Arab recitation are compared to those of native speakers.

The participants in this study consist of two Quran learners, one male (P1) and one female (P2), aged between 20-30 years. In addition, there is one native speaker (NS), the qari Syekh Ibrahim Al-Akhdar. This *qari* was chosen because he has an authenticated recitation and is often used as a reference in Quranic recitation with the *Ḥafṣ* an *Āṣim* transmission. The selection of participant characteristics uses purposive sampling, which means determining data sources based on specific criteria relevant to the research goals. The criteria are shown in the following table: (See Table 1.)

Category	Criteria
Age	P1: 22 years P2: 26 years
Experience in learning Tajweed	P1: less than 5 years P2: more than 5 years
Experience in learning Arabic	P1: less than 3 years P2: more than 3 years

Table 1. Participant Criteria

The criteria were set to produce more accurate and relevant data for the research needs. This study focuses on stress in the recitation of verses containing the particle مَا in

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Surah ʻAbasa, considering the grammatical function of the particle in verse. The type of مَا particle to be studied only functions as a noun. Based on the "Iʻrab Al-Quran al-Karim" book (Mahyuddīn, 1988), several verses from Surah `Abasa containing the مَا particle as a noun were identified. (See Table 2.)

Surah (Verse)	Verses	IPA	Type of مَا
`Abasa (3)	وَمَا يُدْرِيْكَ لَعَلَّهُ يَزَّكّٰٓى	/wa **ma**: judri:ka laʕallahu jazzakka:/	*Ism istifhām*
`Abasa (17)	قُتِلَ الْاِنْسَانُ مَآ اَكْفَرَهٗ	/qutilal l-ʔinsa:nu **ma**: ʔkfarahu/	*Ism ta`ajjub*
`Abasa (23)	كَلَّا لَمَّا يَقْضِ مَآ اَمَرَهٗ	/kalla: lamma: jaqdʕi **ma**: ʔmarahu/	*Ism mawṣūl*

Table 2. Categories of the مَا Particle Functioning as an *Ism* in Surah `Abasa

The first data set of this study consists of recitation recordings of a qari obtained from the YouTube channel of Syekh Ibrahim Al-Akhdar, and the second data set is from recitation recordings by non-Arab speakers. The researcher collected data by asking participants to read the entire Surah `Abasa. The goal was to ensure that the recitation produced by participants was natural and not influenced. The collected data was then analyzed using Praat software version 6.4.16. This software was selected because it can meet the needs of acoustic-phonetic research with high accuracy.

Data processing began by inputting the recording data into Praat. Then, the recordings were segmented to isolate the relevant verses. Each verse was segmented and annotated to extract only the required words and verses. These data were then processed, measured, and classified based on their prosodic features to display specific sound data. Acoustic analysis was conducted to provide more objective and measurable data. The acoustic analysis of the non-Arab speakers was then compared with the analysis of the native Arab speaker. This comparison will be used to identify and describe how the stress characteristics of the مَا particle are produced by non-Arab speakers.

4. Results and Discussion

In linguistic studies, stress refers to the emphasis or prominence placed on a specific syllable in a word or phrase within a sentence to produce a clearer sound compared to other syllables. Marlina (2019) explains that in a sentence, the strongest stress is marked by specific particles, such as question particles, negation particles, and prohibition particles. Sentence stress occurs when a speaker aims to emphasize or highlight a word deemed important or containing the main information.

The particle /ma:/ in Arabic is classified as a monosyllabic word with a long vowel at the end. In Arabic sentences, the particle /ma:/ serves various grammatical functions depending on the context and sentence structure. In some instances, the particle /ma:/ can be the main piece of information that explains the syntactic function of the sentence. The voice should rise on the particle مَا /ma:/ when indicating a question, exclamation, or negation (Ibrahim, 2011).

In this section, several acoustic parameters are used to clearly and measurably observe the sound characteristics produced by native and non-native speakers. The emphasis on words at the sentence level can be analyzed through the fundamental frequency, sound intensity, and duration, even though these three do not directly influence each other (De Jong & Zawaydeh, 1999). These three parameters are considered important

indicators to determine whether a word is stressed by analyzing the pitch, loudness, and duration of the sound.

4.1 Acoustic Analysis of the Stress in the Particle /maː/

The following results from the acoustic statistical analysis of the stress on the particle /maː/ from three verses of Surah `Abasa, generated by all participants using Praat software. The data presented are the average values of the three acoustic parameters segmented by word.

	NS			**P1**			**P2**		
Words	**Pitch (Hz)**	**Intensity (dB)**	**Duration (s)**	**Pitch (Hz)**	**Intensity (dB)**	**Duration (s)**	**Pitch (Hz)**	**Intensity (dB)**	**Duration (s)**
/wa/	163.35	77.14	0.27	120.53	**67.25**	0.19	182.95	66.96	0.41
/ma:/	175.32	**77.46**	**0.40**	136.13	66.78	**0.31**	**225.44**	**69.05**	**0.55**
/judri:ka/	201.58	76.64	1.16	**137.66**	65.54	0.92	210.98	68.81	1.45
/laʕallahu/	**223.68**	75.47	1.34	128.89	64.28	1.02	203.79	67.73	1.64
/jazzakka:/	198.79	73.12	1.58	117.80	61.47	1.11	168.76	64.89	2.03

Table 3. Acoustic Analysis of the Particle /maː/ in the Verse /wa maː judriːka laʕallahu jazzakkaː/

Table 3 shows the acoustic analysis of the verse /wa maː judriːka laʕallahu jazzakkaː/. The native speaker (NS) produced the particle /maː/ with higher stress compared than the previous word /wa/. In this verse, the particle /maː/ must be stressed to indicate its grammatical function as an interrogative particle (*ism istifhām*) (Mardiya, 2022). This is reflected in a frequency value in the particle /maː/, which is higher than the previous word. Both non-Arab speakers (P1 and P2) show similar patterns, with the frequency and duration of /maː/ being higher than the previous word /wa/. However, only P1 has the highest intensity value on the word /wa/, which decreases significantly for the following words, in contrast to NS and P2, which have the highest intensity on the particle /maː/, and then the value decreases significantly towards the end of the verse. The durations for all three speakers vary, with the longest duration being at the particle /maː/.

This aligns with the findings of Akbar et al. (2024) in Surah Yusuf: 25, which demonstrates that the stress manifestation in this verse is also found on the particle "مَا" /maː/, which in this verse functions as an interrogative or *istifhām* particle. The *uslub istifhām* is a form of the rhetorical style used as a medium for interaction and a method to provide a warning about the truth of something very important (Naili & Abunawas, 2021).

	NS			**P1**			**P2**		
Words	**Pitch (Hz)**	**Intensity (dB)**	**Duration (s)**	**Pitch (Hz)**	**Intensity (dB)**	**Duration (s)**	**Pitch (Hz)**	**Intensity (dB)**	**Duration (s)**
/qutilal/	209.34	74.83	1.00	121.35	64.38	0.77	213.28	69.09	1.15
/alʔinsaːnu**/**	**215.95**	74.98	1.77	117.37	62.74	**1.40**	**220.71**	**69.15**	**2.00**
/ma:/	212.14	**76.04**	**1.89**	**130.58**	**63.53**	1.07	208.91	67.54	1.66
/ʔkfarahu/	177.55	72.68	1.47	105.31	58.51	1.03	193.75	64.25	1.56

Table 4. Acoustic Analysis of the Particle /maː/ in the Verse /qutilal l-ʔinsaːnu maː ʔkfarahu/

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Table 4 shows the acoustic analysis of the verse /qutilaI l-ʔinsaːnu maː ʔkfarahu/. The native speaker produced the particle /maː/ with the highest intensity of 76.04 dB and the longest duration of 1.89 seconds. The particle /maː/frequency is 212.14 Hz, which is lower than the highest frequency of 215.95 Hz on the word /l-ʔinsaːnu/. However, the intensity and duration values for /maː/ are the highest compared to other words. For both non-Arab speakers, there is a difference. P1's frequency and intensity values for /maː/ are the highest, with 130.53 Hz and 63.53 dB, respectively. P2's highest frequency and intensity occur on the word /l-ʔinsaːnu/.

The most extended duration produced by both non-Arab speakers is on the word /l-ʔinsaːnu/. The NS and P1 have the highest intensity at the particle /maː/, which is higher than the previous two words, while P2 has a lower intensity at /maː/ compared to the previous word /alʔinsaːnu/. In this verse, the particle /maː/ functions as an expression of astonishment, deviating from its original function as an interrogative particle. This is in line with the acoustic data, showing that the native speaker produced the highest intensity at the particle /maː/ because it serves as an exclamatory particle (*ism ta`ajjub*), which requires stress to indicate its grammatical and syntactic function (Akşit, 2017).

	NS			**P1**			**P2**		
Words	**Pitch (Hz)**	**Intensity (dB)**	**Duration (s)**	**Pitch (Hz)**	**Intensity (dB)**	**Duration (s)**	**Pitch (Hz)**	**Intensity (dB)**	**Duration (s)**
/kallaː/	**234.90**	**76.91**	1.01	**140.50**	**66.86**	0.77	218.97	**69.96**	1.26
/lammaː**/**	203.09	75.84	1.56	128.08	64.00	1.05	**223.27**	69.36	1.77
/jaqdˤi/	201.33	75.88	0.81	116.75	63.19	0.74	217.25	68.80	1.04
/**ma**ː/	185.20	76.24	**2.02**	130.63	63.28	**1.20**	210.39	68.25	**1.82**
/ʔmarahu/	182.91	73.75	1.27	110.66	60.48	0.97	202.84	67.52	1.10

Table 5. Acoustic Analysis of the Particle /maː/ in the Verse /kallaː lammaː jaqdˤi maː ʔmarahu/

Table 5 shows the acoustic analysis of the verse /kallaː lammaː jaqdˤi maː ʔmarahu/. In this verse, the native speaker produced the highest frequency and intensity values at the first word /kallaː/, which gradually decreased toward the end of the verse. These acoustic values indicate that the NS emphasized the word /kallaː/ to highlight its function as a negation particle. In contrast, the frequency and intensity for the particle /maː/ in this verse were lower than those of the previous word /kallaː/, with a frequency of 185.20 Hz, intensity of 76.24 dB, and a duration of 2.02 seconds. The long duration is due to the rule of mad wajib muṭṭaṣil, which requires the elongation of the particle /maː/ by 3-5 harakat. The grammatical function of /maː/ here is as a relative pronoun (*ism mawṣūl*), and no emphasis is needed.

For the non-Arab speakers, P1's highest acoustic values are found in the first word /kallaː/, similar to the NS. However, P2 has the highest frequency at the second word, /lammaː/, and the highest intensity at the first word, /kallaː/. Despite these variations, the acoustic patterns for the particle /maː/ in both non-Arab speakers resemble those of the NS, though with lower values than the preceding words.

4.2 Comparison between Native Speakers and Non-Arab Speakers

The acoustic analysis of the stress on the particle مَا /ma:/ found in Surah `Abasa by two non-Arab speakers shows that most of the stress they produced was accurate and aligned with the stress placement by native speakers. This section will explain the most significant differences between the three analyzed verses. Here, we present spectrograms depicting the F0 contours of the native speakers and the two non-Arab speakers to show a more in-depth picture of the particle stress مَا /ma:/ produced.

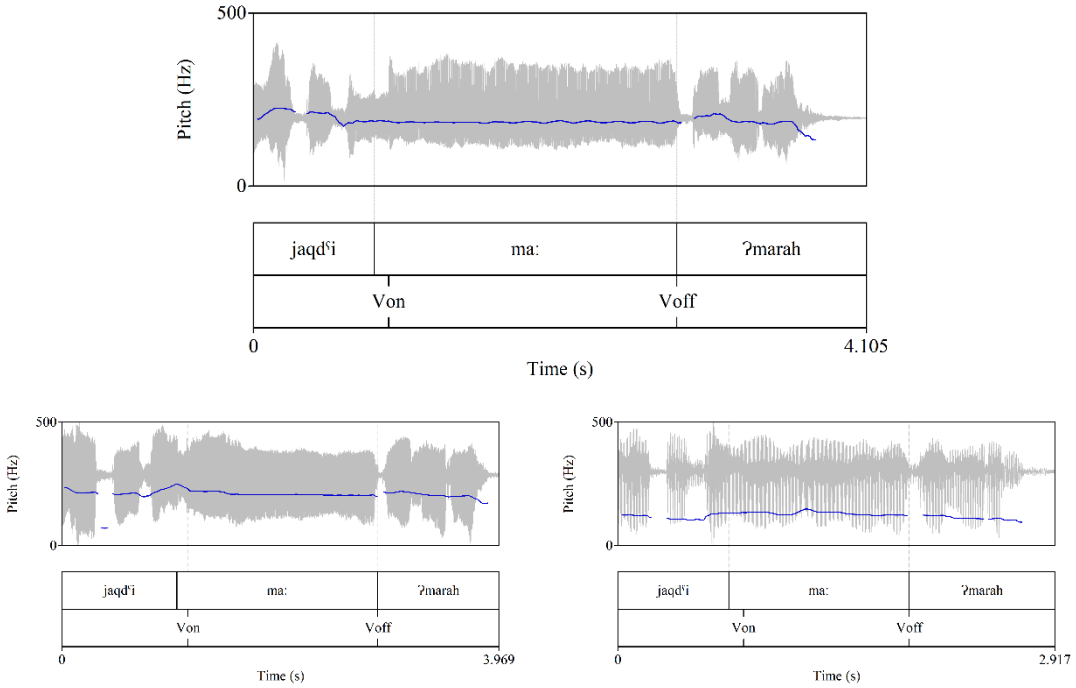

Figure 2. Visualization of Speech Waveform, Spectrogram and F0 Contour by NS, P1, and P2 Sequentially

On the first tier, the beginning and the end of the verse segmentation are by word. On the second tier, Von and Voff refer to the onset and offset of the initial stressed vowel [a:] in /ma:/. Based on the spectrogram, participants P1 and P2, there was a different contour F0 in placing the stress on the particle مَا /ma:/ in the verse /kalla: lamma: jaqdˤi ma: ʔmarah/. In this verse, the particle مَا /ma:/ functions as a connector and should not be stressed, whereas P1 placed stress on the particle مَا /ma:/ in this verse. In NS, the F0 contour of the word /jaqdˤi/ increases at the beginning and decreases at the end of the word, followed by the particle مَا /ma:/ which is read flat (not stressed). Meanwhile, the two non-Arabic speakers both show an increase in the F0 contour at the end of the word /jaqdˤi/ which is then followed by the particle مَا /ma:/. The visualization is relevant to the acoustic values described earlier, especially in P1, where the pitch and intensity values increase, indicating stress.

Further analysis shows that the intensity difference between the particle مَا /ma:/ and the preceding word for each informant is not very large. Meanwhile, the duration values show variability. All three informants produced a similar reading duration for the particle مَا /ma:/ and the preceding word, where the previous syllable had a faster duration compared to the particle مَا. However, overall, the duration produced by P1 was much faster compared to NS and P2. The results of the spectrogram analysis are relevant to the acoustic values previously described.

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The analysis results of the three verses show that native speakers show a more stable pronunciation with a higher and stronger pitch. Male non-Arabic speakers, on the other hand, tend to have a lower pitch and shorter pronunciation duration than native speakers. This shows that non-Arabic speakers do not consistently give appropriate emphasis like native speakers. Female non-Arabic speakers had a relatively higher pitch compared to both male and non-Arabic speakers, even though they produced relatively lower intensity values with shorter durations than native speakers.

Overall, these results show that the acoustic differences that exist between native and non-Arabic speakers reflect the internal and external background influences of each speaker. This indicates a phenomenon of language interference. However, in this study, it appears that non-Arab speakers have not placed stress on the particle مَا /maː/ according to its function in the verse. Despite this, the stress errors do not directly alter the intended meaning of the verse but rather diminish the characteristics and beauty of the Quranic language itself.

In spoken language, every utterance carries a specific meaning according to the speaker's intention and purpose. The voice and the grammatical structure used influence the conveying of meaning is influenced by, which impacts the interpretation (Kasmei, Nasyifa, Filah, & Lubis, 2023). This shows that voice, as an object of prosodic study, plays an important role in the delivery of an utterance's meaning. Similarly, in reading the Quran, a qari is expected to convey the meaning of the verses they recite (Yulianto, 2020).

The findings of this study have practical implications, serving as a benchmark for the prosodic characteristics of Quranic recitation by non-Arab speakers in Indonesia, particularly in the application of stress on the particle مَا /maː/. Theoretically, this study aligns with the view that phonetic rules can be applied in tajweed studies to be objective and measurable (Mohamed et al., 2021). Moreover, this research can contribute new knowledge to linguistic studies, especially in the study of Arabic language and Quranic studies, by examining the system of consonant and vowel sounds in Arabic, explaining their articulation points and methods, and considering phonological processes such as vowel shortening and elongation, duration of mad, stress, and intonation. Ultimately, the goal is to preserve the authenticity of Quranic recitation and to motivate learning and reciting the Quran as it was revealed to Prophet Muhammad.

5. Conclusion

Overall, the prosodic differences seen in native speakers and non-Arabic speakers in giving stress to the particle مَا /maː/ can be caused by the difference in mother tongue. This can be seen from the lower pitch and intensity values and shorter duration. In addition, the background in language learning and tajweed science can also affect how they master the prosody rules of Arabic and the Quran.

It was found that the accuracy of the placement of stress on the particle مَا /maː/ by non-Arab speakers, overall, was not accurate. The inaccuracy was found in the particle مَا /maː/ functioning as a connector (*mawṣūl*), particularly with male non-Arab speakers. Additionally, there were inconsistencies in the duration of the recitation. However, the difference in stress did not lead to any changes in vowels or consonants that would directly alter the meaning of the verse. The acoustic analysis showed that both male and female non-Arab speakers tend to place stress on every particle مَا /maː/, although this stress is not always emphasized contrastively. This is also influenced by the stress present on the preceding syllable.

The results of this study are expected to positively impact Arabic and Quranic language learners, encouraging them to continue studying the rules of Arabic by paying attention to various aspects of both disciplines. This analysis shows how important the mastery of prosody in Arabic is, especially for teachers and learners of the Quran, to continue to increase their attention to Arabic and the science of tajweed. However, to reach the level of mutawatir qira'at in Quranic recitation, it is necessary to study the science of qira'ah comprehensively to avoid mistakes that might alter the meaning (*laḥn jaliy*) or not (*laḥn khafiy*). Future research is about how particles or other prosodic units can be analyzed, such as the manifestation of shiddah and the right pause so as not to change the meaning of the verse, as well as other tajweed sciences.

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