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# **PATTERNS OF ACOUSTICAL STUDIES ON THE QURAN: A FIFTEEN-YEAR EMPIRICAL RESEARCH (2000-2015)**

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## **ABSTRACT**

*The inimitability of the Quran has been regarded by Muslim as a vindication of the prophethood of Muhammad. The conventions of its miraculous nature are divided into few dimensions including scientific miracle, mathematical, legal, revealing the Ghaybiyyat (unseen world) and acoustical elements. While each elements has its general emblem and characteristic, acoustic miracle of the Quran has its own insignia. It was known with different terminology, such as phonology of the Quran, phonetic miracle and rhythm of al-Quran. Exploring the acoustical nature of the Quran, scholars of the 21st century have advancing various methods and researches in analysing its miraculous nature. Thus, the present study aims to analyse studies conducted on the acoustical elements in the Quran from 2000 to 2015. The*

researcher, in this study, employed Systematic Literature Review (SLR) as its main methodological tool with the adaptation of PRISMA technique. The result shows that there are three major patterns in the study of acoustical element of the Quran, which could be concluded as: (1) the study on phonetic element in the Quran that was embedded in its pronunciation, specific phonic characteristic and structural wording, (2) analysis on the organisation, repetition and rhyme at the end of verses and (3) the exploration on interrelation between the meaning of the Quran and its phonetic element. Indeed, this study is a prolegomenon in which would clear the path for further exploration in interdisciplinary or interdisciplinary studies.

**Key words:** Acoustical, patterns, phonology, Quranic rhythm, rhetoric

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## 1. INTRODUCTION

Reviews Critical analysis in the Quranic studies has been applied since the Umayyad period (Azmi, 2017). Scholars have approached the Quran through various methods (Nizah, Jamal, Ahmad, & Ibrahim, 2017). One of the spectrum, explored by the scholars is examination on the acoustical elements of the Quran. There is no precise definition for the acoustic studies initiated by the Islamic scholars. On the contrary, there are a variety of Arabic terminologies that are used to show the phenomenon of the acoustics such as *i'jaz musiqiy* (الإعجاز الموسيقي) (Araz Ramadan, 1982), *i'jaz 'iqo'iy* (الإعجاز الإيقاعي), and *i'jaz sawtiy* (الإعجاز الصوتي) (Abd al-Hamid al-Hindawi, 2004). These diversity in the terminologies show the diversity of disciplines raised by scholars and researchers related to acoustic miracles of the Quran.

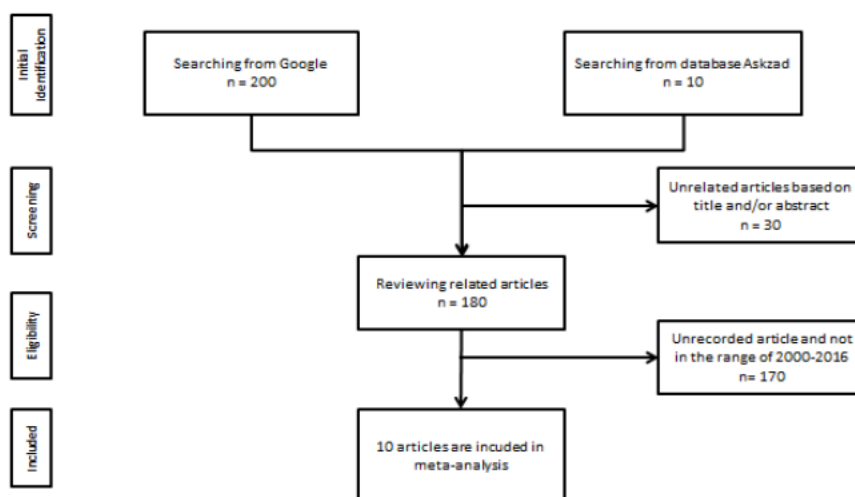
The scope of the debate by Muslim scholars and researchers related to this miracle is infinite. There are some Islamic scholars who focus at the *ahkam tajweed* (rule of recitation) ('Athayat' Abd al-Khaliq and Nahid Ahmad Hafiz, 1974; Al-Jayus, 2006; Al-Rafi'i, 1973; Araz Ramadan, 1982). In Arabic, acoustic miracle is debated in the science of *balaghah* (eloquence), *Nazm al-Quran*, *al-Bayaan* such as the study of *al-Rumani*, *al-Khattabi*, *al-Baqillani* and *Ibn al-Athir*. Meanwhile, some of them are also debating the acoustic miracle through the *qiraat* (art of reciting Quran) research, such as the studies of *tarannum*, and *maqamaat* for example the book written by Christina Nelson, *The Art of Reciting the Qur'an* (Nelson, 2002). Acoustic miracle is also investigated through the psychological effect of reciting Quran, such as the preliminary study by *Imam al-Khattabiy* (date died 388H) in his book *Bayan Ijaz al-Qur'an (al-Khattabi, nd)*, *Sayyed Qutb* in *Fanniy Fi Taswir Al-Quran* (1959), and also *al-Jayus* in *Al-Ta'bir al-Qurani wa al-Dilalah al-Nafsiyah* (2006) .

In the 20th century, the debate on acoustical aspect of the Quran is growing. It covers features of the science of recitation, *balaghah*, *Qiraat* and *tarannum* and its' impact in the spiritual aspect. Among the scholars of the 20th century is *al-Rafi'i* and *Sayyed Qutb*. (Majid Najjar & Sayyid Ali, 2009). Their study focused on the aspects of *balaghah* and phonetics. For example, *Al-Rafi'i* divides acoustic miracles into three aspects; the letters and sounds, words and letters, and sentences and words. While *Sayyed Qutb* divided it only into two; the selection of words and reconstruction as well as the rhyme and musical aspects of the Quran.

The study of acoustic aspects of the Quran continues to attract the attention of researchers in the early 21st century. But the pattern of research in this area is less highlighted. Therefore, this study will formulate patterns of studies that produce by scholars at the beginning of the 21st century through specific methods applied in this present study.

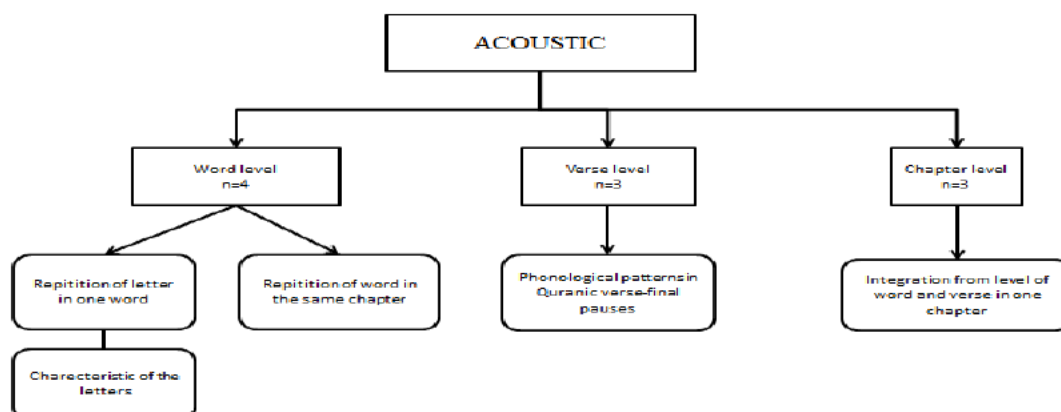
## 2. METHODOLOGY

This study uses the principle of Systematic Literature Review (SLR) proposed by the Collaboration Cochrane reviewers (Armstrong and Waters 2007; Ghafar et al. 2016). Articles are searched using Askzad.com and google.com.uk. These search engines are used due to the limited database for articles in Arabic. The search process begins with the selection of keywords. There are four key words, namely, 'the acoustic element in the Quran', 'phonology of the Quran,' 'القرآن موسيقي' and 'القرآن فونولوجيا'. The principle of this SLR is to assist in getting a number of studies in the literature that meets the objectives of the study. The review period specified is concentrated at the beginning of the 21st century, namely from 2000 to 2016. The Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA) are adapted in this study. It involves four steps as shown in the diagram below:



**Diagram 1** The Use of PRISMA technique in SLR

## 3. RESULTS



**Diagram 2** Patterns of Acoustics Miracles Researches

This study found that there are three patterns of the study acoustic miracles namely, (1) the study of the word either phonetics or letter repetition, (2) the research related to the reconstruction of the final word of each sentence, and (3) the study the combination of letters and words discussed in a selected verse. The findings of this study are depicted in Figure 2 below.

#### 4. DISCUSSION

In the first pattern, there are four studies that focus on the aspects of words, phonetic repetition as well as the nature of the letters in a word. It also focuses on the construction of the structure of a word consisting of several letters, arrangement, and word repetitions in a verse in the Quran. The following table details each study that is related to the pattern of this study.

**Table 1** Acoustic Research in the word level

Researchers	Titles	Research objective	Main Findings
Abd Al-Jawwad, 2014	<i>Al-Munasabah Baina al-Sawt wa al-Ma'na fi al-Quran Al-Karim</i> (Correlation Between Phonology and Its Meaning in The Quran)	To investigate the repetition of the sound in the verb <i>rub'a'i mudho'af</i> (the four fold verbs), and the repetition of selected words that have similar meanings.	Repeating the letters and the selection of the word gives additional meaning to the word.
Abd Sami' Khamis, 2012	<i>Dilalah Bunyah Sifat al-Huruf 'ala Al-Ma'na</i> (Semantic Meaning in Arabic Letter's Characteristic.)	To investigate the nature of the letter and its relation with the introduction of the chapter, words, sentence and the whole chapter.	The letters at the beginning of the chapters are called <i>hijaiyyah</i> (arabic alphabet) letters, and most of the letters in verses begin with the letters that are soft as 'soft' words are used to aptly convey meanings.
Kamal Ahmad & Raid al-Dayah, 2012	<i>Jamaliyat al-Musiqi fi Nas al-Quran</i> (Aesthetics Of Music in The Quranic Text)	To investigate the area that heavily influence to the music of the Quran.	The area that heavily influence to the music of the Quran is a number of word and will from the aspect of <i>tamathul</i> (uniformity), <i>taqarrub</i> (affinity), <i>tajannus</i> ( or <i>tawazun</i> . Each additional lines, rhymes and length will strengthen the meaning of the verse.
Daffah Balqasam, 2009	<i>Namazij min al-I'jaz al-Sawti fi al-Quran al-Karim - Dirasah Dilaliah.</i> (the Examples of Acoustic Miracle in The Quran – A Random Study)	To investigate the two scope of acoustic miracle which is the nature of the letter, and the omission of sentences or words from the normal Arabic ways ( <i>al-'udul as-sawti</i> ), the repeated sound of music and the repetition of the letter (ت, ر, ك, م, ن, ه), and the types of reconstruction of the Quran.	The Quran uses sounds that make things more clearly illustrated.

Based on Table 1, these studies focused on the phonetic aspects of letters, the characteristic of the letters, as well as repetitions in words, paragraphs or chapters. In the Arabic language, the letters play an important role in conveying the meanings of the sentence and describing the situation that is being told by the verse or by a whole chapter. The use of a word in a sentence provide the elements of music and meaning that is consistent with what is to be served. Whereas, in the words, researchers focus on the repetition of the word in a chapter, or a selection of words that have similar meaning, but is used in different places. In modern linguistics, the study of words in words was rejected by Ferdinand de Saussure. He opposed the idea of a connection between the word and the intended meaning (Noth, 1990). But the Arabic language has its own uniqueness, where each letter has its own unique character which will help clarify the meaning of a word.

In the second pattern, there are three studies related to the *fawasil al-quran* (phonological patterns in Quranic verse-final pauses). The following table details each study that is related to the pattern of this study.

**Table 2** Acoustic research in the sentence level

Researchers	Titles	Research Objective	Main Findings
Aqeel Abd Zuhrah, 2013	<i>Al-Tanasub al-Sawti wa al-Ma'na fi Ri'ayah al-Fasilah al-Quraniyyah bi al-Taqdim wa al-Ta'khir</i> (Phono-Semantic Relationship in Final-pauses in Quran Through Anastrophe)	To investigate the relation of Quranic verses final-pauses with its meaning, and the level of the relationship between them.	In <i>ri'ayah Fasilah</i> there is an element of beauty in the Quran, one of the reasons the <i>taqdim</i> and <i>ta'khir</i> the word is its meaning, as well as to celebrate the beauty of sound.
Muhammad Ramadhan, 2009	<i>Dilalah al-Aswat fi Fawasil Ayat Juz 'Amma - Dirasah Tahliliah</i>  (Study Of Phonetic in Final Pauses in Juzu' Amma – An Analytical Study)	To investigate the quranic verse-final pauses specialize in <i>Juzu' Amma</i> (final part of the Quran).	The largest repetition of the letters of the <i>makkiyah</i> verses in <i>Juzu' Amma</i> is the nature of the letter <i>Alif</i> , due to the suitability of the letter 'Alif in explaining the stories about Last Days, Heaven, and Hell. Adding and memorizing several letters is done to reflect certain musical verses.
(Husain, 2005)	<i>Al-Tikrar fi Al-Fasilah Al-Quraniyyah: Al-Juz Al-Akhir min Al-Quran Al-Karim Namuzajan</i>  (Repetition of The Final Pauses in Juzu' Amma)	To investigate the repeated final pauses in <i>Juzu' Amma</i> and its relation to meaning.	The repetition of this final reconstruction gives meaning related to the topics to be presented in the chapter.

The final rhyme of every sentence becomes the focus of the study at this stage. There are two studies that have the same variables, which is the last section in the Quran on *Juzu' Amma*. This is because most chapters have a similar reconstruction. The most repeated letters in this section is the letter *aliph*. This is consistent with the themes brought by the *Juzu' Amma* such as like preaching to Allah, strengthening Islam as the religion of truth, proving doomsday, hell and heaven, debating with the infidels with reasonable arguments, as well as revelations about the creation.

In the chapter, there are three articles that combine two levels of letter and word in the selected verses in the Quran. The following table details each study that is related to the pattern of this study.

**Table 3** Acoustic research in the verse level

Researcher	Titles	Research Content	Main Findings
Abd al-Fattah Syaqrani, 2014	<i>Dirasah Sowtiyah Sorfiyah Tarkibiyah lisurah al-Takwir</i>  ( A study of phonetic, and synthetic morphology in surah <i>al-Takwir</i> )	To investigate the phonetic element on this chapter and how it give more explanation to the meaning.	Phonetic elements found in this chapter provide effective explanation of the meaning, the language of the Quran used in this chapter is unique, and it makes the meaning clearer, it can be seen through the repetition of certain letters in various words.
Jalilah Salih, 2012	<i>Al-Tanasub al-Iqa' fi Surah al-'Alaq</i> (Rhythmic proportionality in surah <i>al-'Alaq</i> )	To investigate the influence factor that build this chapter from the meaning of the letter, selection of words and repetition of words and letters.	Selection of the right words to make this chapter and brings a unique interpretation of its own, it also gives a different sound character, repeated letters and words are also meaningful in itself, the reconstruction of playing also coincides with the theme of this chapter.
Hadi Sa'dun Hanun, 2010	<i>Al-Taswir al-Sawti fi Surah al-Zalزالah</i> (Phonetic Meaning in <i>Surah al-Zalزالah</i> )	To investigate the impact of sound on the meaning, from the aspect of the final rhyme and repetition of some letters and words.	Repeating the letter <i>aleph</i> as the final letter on the verse resulting in the surah being explained further, the displacement of <i>alif</i> to <i>mim</i> and next to <i>ha'</i> , is suitable with the story to be explained,

This final pattern, combines the matters discussed in the word and verse level of the surah *al-Alaq*, *Al-Zalزالah* and *At-Takwir*. The composition of the letters, words and sentences in all three of these chapters vary according to the themes presented each chapter. These verses are chosen because they have their own language. Surah *al-Zalزالah*, and *Surah al-Takwir*, which shared the same theme which centers around the chaos during Judgment Day keeps on repeating sounds that gives the element of shocking, and fearness. For example, in surah *al-Zalزالah* letters *lam*, *alif* and *Zai* are repeated as all three describe the shock that would occur on the day of Judgment.

## 5. CONCLUSIONS

Based on the findings that have been discussed, it can be concluded that there are three main patterns of the study of Quranic acoustic miracles at the beginning of the 21st century. It has been proved in ten studies. The first pattern in these studies focuses on the word, whether repetition of phonetic aspects as well as the nature of the letters, and its repetition in a word. The second relates to the pattern of the rhyme of the words at the end of each verse. The last pattern of these studies focuses on a combination of letters and words discussed in a selected chapter. Therefore, this article paves the way for further research either in basic or applied research in the exploration of the acoustic miracles in the Quran. The research can be done either in one discipline or even a variety of other disciplines, such as engineering sound, security of ICT systems, therapy modern medicine, psychology and human others.

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