

The Universal Nature of the Qur'an's Phonetics

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Abstract:

This study compares the phonetic rules of the Muslim's holy book, the Qur'an, to the phonetic rules of the English language in an effort to prove that the Qur'an's phonetic rules cannot be linked entirely to the holy Qur'an, nor the Arabic tongue; but rather they date back to the time the human tongue was created to function. The Qur'an's phonetic rules were discussed in detail under the subject known as "Tajwid" (pronounced "Tajweed") but were not compared to the natural speech mechanism in other languages. In doing so, this study demonstrates the common features in the phonetic environment of some Arabic and English speech sounds when they co-exist in a connected speech pattern. Based on the several examples this study illustrates, the author suggests that the differences between the Qur'an's phonetic rules and our innate speech mechanism are only some melodic touches that help differentiate reciting the Qur'an from other sorts of Arabic literature.

Keywords: Arabic phonetics, phonetics of the qur'an, tajwid

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Introduction

In proving the innate and universal features of the Qur'an's phonetics, this paper will not explain manners or points of articulation, nor functions of the speech organs, as these aspects have already been fully researched. Because the Qur'an's phonetic rules have always been regarded as a difficult subject to learn and apply, this paper provides a new approach to the Qur'an's phonetic rules and invites speakers of other languages, who are interested in the subject, to look into their own languages and verify the universal nature of the Qur'an's phonetics by making similar comparison and see if they reach the same conclusion.

Discussion

An example of the public sources that connect the Tajwid rules to the Qur'an's recitation is the Encyclopedia Britannica (n.d.). It identifies the Qur'an and mentions its phonetics under the article on Impact of Qur'an in the Arabic Literature. It says that "the Qur'an is primarily an oral phenomenon, something to be recited and intoned (the latter involving a highly elaborated skill known as tajwid)." The Oxford Dictionary of Islam (n.d.) also identifies the phonetics of the Qur'an under the subject "Tajwid" as "the Art of Quran recitation. Also known as qiraah (reading, recitation)."

In order to prove whether the above statements are "true or false", this paper discusses the phonetic environment of four types of speech sounds when they co-exist in connected speech. These are:

- 1) Sounds that use adjacent points of articulation: the Arabic sources describe these sounds as "الحرفان المتقاربان". Letters /l/, /r/, the corresponding letters to /ل/ and /ر/ are good examples.
- 2) Sounds that use the same parts of our speech organs but differ in the manner they are articulated: the Arabic sources describe them as "الحرفان المتجانسان". Letters /d/ and /t/, the corresponding letters to /ت/ and /د/ serve as good examples.
- 3) Identical speech sounds: described in the Arabic sources as "الحرفان المتمثلان".
- 4) Independent speech sounds: described in the Arabic sources as "الحرفان المتباعدان". Letters /n/ and /h/, the corresponding letters to /هـ/ and /ن/ will be used as examples.

1) Sounds with adjacent points of articulation / In Arabic "Al-mutaqariban":

When one says: *already, all right, ball room* or *بل ربي، بل ربيكم*, s/he phonetically says: *arready, arright, baurroom*. *ب ربي، ب ربيكم* where the /l/ sound is involuntarily dropped from the pronunciation in both languages and the two sounds are pronounced with a single tongue motion as double /r/ in the middle in exactly the same speech pattern. This pattern takes place innately because the /l/ sound's pronunciation is not complete as the tongue moves up to pronounce it, but goes down pronouncing double /r/ instead. If we try to utter physically each letter (l and r) in the above examples by moving our tongues twice, one for each letter, our tongues will flutter and fail to speak correctly. Therefore, our innate nature interferes in no time and drops the /l/ sound without distorting the message.

The Arabic phonetic sources used in this study describe dropping the /l/ sound in the above examples and similar phonetic environments as "إدغام متقاربتين", (Assimilation of sounds that use adjacent places of articulation). This assimilation takes place innately without any conscious effort on our part no matter what language we speak.

In the above examples, the two sounds (l and r) co-existed with no vowel in between. If they co-exist in a vowel's environment, the /l/ sound will not disappear in both languages in exactly the same speech pattern. This action takes place because the vowel's existence between the two sounds allows for a tiny period of time that gives a chance to the tongue to move smoothly between them in a manner permitting each letter to be comfortably pronounced and clearly heard. Therefore, if one says *naturally removed* or *قولٌ رَبِّي حق*, the /l/ and /r/ sounds will be uttered clearly with a separate tongue motion for each in both languages.

2) Homorganic speech sounds /In Arabic "Al-mutajanisan":

The Arabic and English phonetic sources used in this study agree on the identification of the homorganic speech sounds in that they use same parts of our speech organs. Murray (1995, p.105) says that "Any two sounds (not just nasals and stops) occur next to one another and share the same place of articulation, they are said to be **homorganic**." In identifying the same sounds, Chalker & Weiner (1994, p.189) write: "**Homorganic**: Phonetics of two or more speech sounds: articulated in the same place. English /p/, /b/, and /m/ are **homorganic**, all three being bilabial sounds. Similarly, /t/, /d/, and /n/ are **homorganic**, since they are all alveolar." These sources grouped together speech sounds that use the same place of articulation, but differ in the manner they are articulated. This is also how the homorganic speech sounds are described in the Arabic sources. al-Hamad (1986, p.396) and al-Jarmi (2001, p.21) describe the homorganic speech sounds as sounds that use the same place of articulation but differ in the manner they are articulated.

Both languages classify sounds /t/ and /d/, the corresponding letter to /ت/ and /د/; and letters /b/ and /m/, the corresponding letters to /ب/ and /م/ as homorganic speech sounds. When one says *submarine*, s/he co-articulates the /b/ and /m/ in the middle with a single lips' occlusion. Similarly, when one says *يا بني اركب معنا*, s/he also articulates the /ب/ and /م/ in the middle with a single lips' occlusion. The Arabic phonetic sources used in this study describe this speech pattern as *إدغام متجانسين*, (Assimilation of homorganic speech sounds). This Arabic phonetic rule does not introduce a new speech pattern to our innate tongues. The same assimilative tendency exists in the English language and it is described by Abercrombie (1967, p.142) as *nasal plosion* which, he says, "takes place when a stop is immediately followed by a homorganic nasal (that is, a nasal made by the same articulators as the stop is). It is easy to observe, at the transition from the [b] of submarine to the [m] that no movement of the two lips, the articulators, takes place". Letters /t/ & /d/ the corresponding letter to /ت/ and /د/ are also classified as homorganic speech sounds in both languages. When one says: *a hot day*, and *أجيبث دعوتكما*, or *not dizzy*, and *صامث دهرأ*, s/he phonetically drops the /t/ sound and pronounces an additional /d/ in the middle without prior intention in the same speech pattern in both languages.

When the /d/ precedes the /t/ as in *hard times*, *قيدٌ تبين الرشد*, *Mac and Tom* or *لقيدٌ تقطع*, we raise our tongues to pronounce the /d/ sound in the middle, but our tongues fail us and go down, against our wishes, pronouncing an additional /t/ sound instead, forcing us to utter the two different sounds with a single tongue motion as two t's in the middle in a timely manner.

In explaining the above speech pattern, Laver (1994, p.359-360) uses a phrase like *good times* to explain the tongue's physical behaviour when uttering this phrase. He says that "in this example, both stops involved are incomplete, in that the [d] lacks an audible explosion, both

auditorily and articulatorily, and that the [t^h] lacks an onset phase, since the tongue tip/blade is already in a position of alveolar closure. The two stops here are **homorganic**– that is; they are made at the same place of articulation.” About the same speech pattern, Kenyon (1940, p.53) says that this type of speech pattern exists when a voiceless + voiced, such as “td” co-exist, and the opposite where voiced + voiceless such as “dt” co-exist “there will be one closure and one release instead of two closures and two releases in which only one of the sound will be heard.” Torres, (2001, p.21) speaks about this type of assimilation and describes it as “Voicing assimilation”. He gives an example of which as in “sit down”.

In Arabic, this speech pattern is described in Tajwid sources such as Al-Ḥamad (1986, p.396) and al-Jarmi (2001, p.20) as assimilation of homorganic speech sounds (إدغام متجانسين). This can be taken as an indication that the Qur'an phonetic rules do not introduce a new pattern to our speech mechanism as our speech organs apply this rule innately without any vocal intervention on our part, no matter what language we speak.

Table 1 illustrates the identical speech pattern where one of two co-existing homorganic sounds will be assimilated naturally in connected speech.

Table 1 Assimilation of homorganic speech sounds co-existing with no vowel in between

English examples	Arabic examples
Bent <u>t</u> ie, sent <u>t</u> orn, Kent <u>t</u> old that. Pronounced: ben <u>t</u> ie, sent <u>t</u> orn, Kent <u>t</u> old that	"قامت <u>ط</u> البة ، بغت <u>ط</u> ائفة ، دعت <u>ط</u> ويلاً Pronounced "قام <u>ط</u> البة ، بغ <u>ط</u> ائفة ، دع <u>ط</u> ويلاً"
Blunt <u>t</u> eam, light <u>t</u> ooth, salt <u>t</u> ear Pronounced: Blunt <u>t</u> eam, lit <u>t</u> ooth and salt <u>t</u> ears	ضغ <u>ط</u> م ، بس <u>ط</u> يدي ، فر <u>ط</u> ، أم <u>ط</u> اللثام Pronounced: ضغ <u>ط</u> م ، بس <u>ط</u> يدي فر <u>ط</u> ، أم <u>ط</u> اللثام
Note the remaining sound of the aspirated / <u>t</u> ^h / after being assimilated.	Note the remaining sound of the letter / ط / after being assimilated
"Knock the ear <u>th</u> <u>th</u> is time once". Pronounced: "Knock the ear' <u>th</u> is time once". "Bene <u>ath</u> <u>th</u> e roof" pronounced: "Benea' <u>th</u> e roof"	لم أ <u>ر</u> ث <u>ذ</u> ياب ، يله <u>ث</u> ذلك ، لا تنك <u>ث</u> ذات يوم Pronounced: لم أ <u>ر</u> <u>ذ</u> ياب ، يله <u>ث</u> ذلك ، لا تنك <u>ث</u> ذات يوم

3. Identical speech sounds /In Arabic Al-mutamathilan:

In English, the identical speech sounds co-exist in the form of a same letter, such as the two t's in a *smart* teller and a *cat* tail. They may also co-exist as digraphs, such as the /f/ sounds in a *graph* face, a *tough* film or a *cough* fhenomena

When one says a *smart* teller or a *cat* tail and إذا طلعت تزاور or فيما ربحت تجارتهم one stressed /t/ in the middle – that is pronounced with a single tongue motion and takes place unintentionally – is uttered and clearly heard in both languages. Similarly, when one says an *annual* lease or a *formal* leaque and لم يجعل لكم or قل لهم s/he naturally and unintentionally pronounces one stressed /l/ in the middle with a single tongue motion in both languages. If phrases such as a *lab* boy or انهب بكتابي are uttered, the /b/ sounds in the middle will be co-articulated at the same time with a single lips' occlusion in both languages. When the identical

sounds include a diagraph such as the /sh/ in *crush sugar*, they will also be pronounced with a single tongue's motion as the two /ش/ sounds in *عش شبايك تقياً* in exactly the same speech pattern.

The pattern illustrated above is a phonetic rule described in the Qur'an's phonetics as *إدغام متماتلّين* (assimilation of identical speech sounds). We do nothing to apply the rule as it takes place innately without prior intention or any physical effort on our part. If the two identical sounds are nasals, such as the two /m/ in *لهم مغفرة*, or the two /n/ in *من نذير*, the Tajwid adds a melodic touch. The reader speaks naturally but elongate his /her nasal sound a little.

4) Independent speech sounds/ In Arabic "Al-mutaba'edan":

The Arabic phonetic sources used in this study describe this type of speech sounds as those sounds that use distant parts of the speech organs. Examples are sounds /n/ and /h/; and /n/ and /a/ when they co-exist in all phonetic environments.

Table 2 demonstrates the identical speech pattern and clear pronunciation of two independent sounds when they co-exist in a connected speech:

Table 2 The identical pattern of independent speech sounds co-existing with no vowel in between

English examples	Arabic examples
Enhance, <u>inh</u> aul, <u>inh</u> ale, man <u>h</u> ole, Man <u>h</u> attan, ten <u>h</u> abits, seven <u>h</u> ats.	منهم، منهل، أنهار، إن هو، كن هادئا، من هفواتك
An <u>a</u> pple, an <u>a</u> rgument, an <u>a</u> mbition, an <u>a</u> lmond, an <u>a</u> ccent, in <u>u</u> ttering, an <u>u</u> mbrella.	“منأى، أن أقيموا، من آمن، من إذا

All the Arabic phonetic sources describe the above blue underlined speech sounds as *الحرمان المتباعدان* (al-mutaba'edan). When they co-exist in any context, no assimilation will take place. The Arabic phonetic sources refer to this rule as "الإظهار", meaning "manifestation" or "clear pronunciation". It also takes place innately with no physical intervention on our part in both languages.

Table 3 illustrates the clear utterance of the /n/ sound if it is followed by vowels o, i, and e, when they resemble a hamza-like pronunciation.

Table 3 The identical pattern of independent speech sounds co-existing in a vowel environment

English examples	Arabic xamples
In old days. An <u>o</u> range, an <u>o</u> bstacle, an <u>o</u> pponent.	إن أولئك، أن أودي، كن أمة
An <u>e</u> lephant, an <u>e</u> lement, an <u>i</u> ndemnity, an <u>i</u> magination	أن إئت، من إطعام، كن إماما

Assimilation - الإدغام

All Arabic sources dealing with the Qur'an's phonetics speak about two patterns of assimilation. Al-Ḥamad (1986, p. 395), al-Jarmi (2001, p.20) and al-Ṭawil (2000, p. 133-136) divide the assimilation into two types; *إدغام كامل* (a complete assimilation) and *إدغام ناقص* (an incomplete assimilation). The English phonetic sources also agree with that and divide the assimilation into complete and incomplete assimilation. Abercrombie (1967, p.137) writes "It is useful to distinguish complete assimilation from incomplete or partial assimilation; these latter also entail an economy of effort in the movements of the organs of speech, but to a lesser

degree". On the same subject, Kenyon (1940, p.71-72) writes: "All assimilation is based on the tendency of the organic positions for one sound to become the same in part or entirely as the organic positions for a neighbouring sound."

The English phonetic sources explain why we naturally assimilate. Below are some examples:

- Boggs (1927, p.21) says that "Forces causing assimilation are anticipation, inertia, and economy of movement."
- Abercrombie (1967, p.135) writes: "The result of assimilation is to reduce the number, or the extent, of the movements and adjustments which the speech-producing organs have to perform in the transition from one word to the next."
- Bauer...[et al.] (1980, p.155) say that "Assimilation can be viewed as a process which facilitates the pronunciation of a word or phrase by making adjacent sounds as similar as possible without distorting the message. It is one manifestation of the principle of least effort. This means that assimilation can be seen as a minimization of movements of the organs of speech."

The Arabic phonetics sources fully agree with the above justification in that assimilation makes it easy to pronounce any co-existing speech sounds that use the same or adjacent parts of the speech organs. Among those Arabic phonetic sources are Al-Ṭawil (2000, p. 131), al-Jarari (1981, p. 55), and al-Jarmi (2001, p.20).

The /L/ allophones in the name of Allah / In Arabic "Lamul-Jalalah":

The Qur'an's phonetic sources say that the /l/ sound in the name of the almighty God "Allah" has two vocal variations:

- 1) Lamul-Jalalah can be pronounced with the mouth open wide and the tongue assuming a spoon-like shape, as in *يقولُ اللهُ* or *أَنْ يَشَاءَ اللهُ*.
- 2) It can also be pronounced with a mouth not open wide and in a neutral tongue motion as in: *بِسْمِ اللهُ*

In the course of proving the universal nature of the Qur'an's phonetics, one may ask whether the vocal variations of Lamul-Jalalah exist in other languages; or it is entirely confined to the Qur'an's phonetics?

The answer to the above questions can be found in some English phonetic sources. They refer to the /l/ vocalic variation as the "L allophones" and divide its vocal variations into "Dark L" and "Clear L". The difference between them can be felt in the pronunciation of the letter /l/ in *land* compared to its sound in *large*, where the mouth is open wider and the tongue is taking a different shape. The Encyclopaedia for Kids, K. (n.d.), describes the two types of the /l/ sound as follows:

English has the **alveolar** lateral [l], which in many accents has two **allophones**. One, found before vowels (as in *lady* or *fly*), is called clear [l], pronounced with a neutral position of the body of the tongue. The other variant, so-called dark [l] (found before consonants or word-finally as in *bold* or *tell*), is pronounced with the tongue assuming a spoon-like shape (n.d.)

Roach (2009, p.13 & 17) also speaks about two vocal variations for the /l/ sound; “clear l” as in *lily* and “dark l” as in *help* and *hill*. Knowles (1987, p.77) writes that RP and Southern English have a clear [l] as in *leap* and *glue* and a dark [l] as in *will* or *ball*. Abercrombie (1967, p. 63) agrees with Knowles in that the pronunciation of people from the south of England has the two types of /l/ and gave the two /l/'s in *little* as examples, where the first /l/ is often described as a clear l, and the second as a dark l. In his description to the *dark l* and *clear l*, Abercrombie makes a special reference to *Lam uljalalah*. He says that “The Arabic language contains a number of pharyngalized segments. The l in the middle of the word *Allah* 'God' is an example of one of these”.

This study suggests that our tongues assume the same spoon-like position if the “Dark /l/” is uttered when one says “يقول الله”. In the Qur'an's phonetics, this /l/ vocal variation is described as “لام مفخمة” (*lam mufakhama*). The “clear /l/” described above in *lily* and *leap* is similar to the one mentioned in the Qur'an's phonetics as “لام مُرَقَّقَة” (*lam muraqaqah*), when one says *بِسْمِ اللَّهِ*. Our speech organs do nothing to modify the tongue's behaviour when both types of /l/ are pronounced as explained.

Qalqala

The Qalqala (القَلْقَلَة) is a speech pattern discussed in the Qur'an's phonetics. It is also discussed in the English phonetic sources and described as “Plosion”. Roach (1991, p.17) writes: “a plosive is a consonant articulated with the following characteristics:

- One articulator is moved against another, or two articulators are moved against each other, so as to form a stricture that allows no air to escape from the vocal tract. The stricture is, then, total.
- After this stricture has been formed and air has been compressed behind it, it is released, that air is allowed to escape.
- If the air behind the stricture is still under pressure when the plosive is released, it is probable that the escape of air will produce noise loud enough to be heard. This noise is called plosion.

The Oxford English Dictionary (1991, p.1056) also named it “Plosion” and described it as “the eruption of breath involved in uttering a plosive. Hence 'plosional a., of or pertaining to plosion.”

Al-Ḥamad (1986, p.302) and Uthman (1987, p.115) divide the physical process of producing the plosive sounds into three stages in exactly the same manner described above by Roach in that the plosive sound's production goes through 3 stages; 1) a complete stricture; 2) voice's release; and 3) a sound following the release of the compressed air. What the Tajwid rules add to this natural plosion is a stronger puff of air to be exhaled when the plosive sound is uttered if not followed by a vowel or if it coincides with a pause in our connected speech pattern.

Rules of the /N/ sound. In Arabic “Ahkam a-noon a-sakinah” أحكام النون الساكنة:

The Qur'an's phonetic sources discuss four situations for the /n/ sound when it is not followed by a vowel:

- A. It can be converted into another sound «إقلاب النون الساكنة».
- B. It can be assimilated «إدغام النون الساكنة».

- C. It can be concealed «إخفاء النون الساكنة».
- D. It can be pronounced clearly «اظهار النون».

A. Conversion. In Arabic "Al-iqlab":

This conversion takes place when the /n/ sound is followed by /b/. The conversion will take place naturally no matter what language we speak. When one reads "Unbelievable", the word is phonetically articulated "U**mb**elievable". When «أُنْبِيُونِي» is read, «أُمْبِيُونِي» is uttered instead. In the Qur'an's phonetics, this speech pattern is described as conversion of the /n/ sound into /m/ الإقلاب (Iqlab), إقلاب النون الساكنة إلى ميم. Pavlik, (1959, p.11) gives an example of this conversion in a phrase like "on board" and describes this speech pattern as "Auditory Assimilation". On the same topic, Fromkin & Rodman (1993, p.232) write "Another rule that occurs in the world's languages changes the place of articulation of nasal consonants to place of articulation of a following consonant. Thus, [n] will become [m] before 'p' or /b?".

This Qur'an's phonetic rule of *Iqlab* does not change our natural speech mechanism or introduce a new speech pattern. It only adds a musical touch. This can be achieved if the reader sings it by elongating his/her nasal sound a little to say "U...nbelievable" and «أ..نْبِيُونِي». Our innate tongues take care of the physical manner of conversion but the reader beautifies his / her reciting by adding a little music. This is why the author of this paper suggests that the difference between Tajwid and our innate speech mechanism is not more than some melodic touches.

B. Assimilation. In Arabic "Al-idgham":

An example of assimilating the /n/ sound in a neighbouring consonants is clearly heard when it is followed by /m/. Abercrombie (1967. p.136), Bauer ... [et al.], (1980, p.154) and Wells (2006) say that when "ten minutes" is uttered the /n/ will change to /m/ and will be uttered "tem minutes". The same speech pattern takes place in Arabic. When we say: مِنْ مَحِيصٍ or مِنْ مَالٍ there is a tendency to raise the tongue to pronounce the /n/ sound, but the tongue fails to rise in such cases and the lips get naturally blocked-up to pronounce /m/ instead with a nasal sound heard for a tiny period in between. The tongue failure to rise in such cases is a Qur'an phonetic rule described as: "إِدْغَامُ النُّونِ السَّاكِنَةِ فِي الْمِيمِ", (Assimilation of the /n/ sound in a following /m/). The assimilation takes place without any forcible intervention on our part.

Table 4 Conversion of /n/ to /m/ sound when they co-exist with no vowels in between

English examples	Arabic examples
Envi <u>nm</u> ent, govern <u>nm</u> ent, ten <u>nm</u> inutes Pronounced:	مِنْ مَحِيصٍ ، مِنْ مَالٍ ، إِنْ مَلَكْتَ ، كُنْ مُطِيعًا Pronounced:
Envi <u>m</u> ent, govern <u>m</u> ent, te <u>mm</u> inutes	مِنْ مَحِيصٍ ، مِنْ مَالٍ ، إِمْلَكْتَ ، كُنْ مُطِيعًا

In reciting the Qur'an, the reader adds a tuneful touch to his/her natural, unintended assimilative pattern. This can be achieved by blocking the lips a little longer when uttering the /m/ sound in the Arabic phrases mentioned in the above examples and in other similar speech environment.

C. Concealment. In Arabic "Al-ikhfa'a":

C.1: /n/ followed by /k/:

When one says *إنكر* or *Incur* the tongue naturally fails to touch the /n/ point of articulation (at the alveolar ridge), but the /n/ nasal feature is produced smoothly in no time before the /k/ sound is uttered at the velar position in both languages.

The International Phonetic Alphabet (IPA) describes this /n/ speech pattern as a “*velar nasal*”. Clark (2007, p. 88) and Kenyon (1940, p. 97) indicate that the symbol in the IPA that represents this sound is ⟨ŋ⟩. In the Qur'an's phonetics, this speech pattern is described as *concealment* of the /n/ sound in a following /k/, (إخفاء النون الساكنة في الكاف). What the Qur'an's phonetics add to this natural change of sound is only some music. When reading the Qur'an, the reader should add a melodic touch to her/his natural concealment pattern by elongating the nasal sound a little to say: *إن...نكر* - *I...ncur*.

C.2. The /n/ sound followed by ‘th’ as in “anthem”:

When we says *ten things* - *Anthem* *الأنثيين* - *من ثمره*, our speech organs pronounce the nasal sound + ‘th’ in exactly the same speech pattern in both languages. The Arabic phonetic sources describe this pattern as *إخفاء النون الساكنة في الثاء* (concealment of the /n/ sound in a following “th” as in *thump*). This change of sounds is also a phonetic pattern that exists in the English language. Bauer...[et al.] (1980, p.154) refer to this change of the /n/ sound and give examples of which as in *anthem*, *enthuse*, and *tenth*. T. W. Hill (1821) as cited by Abercrombie (1967, p.113) refers to the same change of the /n/ sound as in *anthem* and describes it as *dental nasal*; and Pavlik (1959, p.14) describes it as “*Dental assimilation*”. The Tajwid does not introduce a new speech pattern. It only adds some music to this natural speech pattern. The reader should elongate her/his nasal sound a little to add to their reading a tuneful touch that beautifies her/his reciting pattern.

C.3. Other concealment examples:

The concealment of the /n/ sound in which the /n/ is only present by its nasal feature but not the tongue motion also takes place when it precedes sounds j, z, g as in “strange”, t as in ‘tell’ and ‘tie’, sh as in ‘shine’, th as in ‘this’; ‘thin’; and ‘thy’, s as in ‘salt’ and ‘sell’, d as in ‘dill’ and ‘dull’ and f as “famous” and “pharmacy”, examples of which are shown in table 5.

Table 5 Similarity of the /n/ concealment pattern in a following consonant

English examples	Arabic examples
Faint, grant, broken toes, stolen toys	كنتم، منتهى، أن تقولوا، إن تسألوا .
Injection, sponge, strange.	ينجي، منجم، من جاء، عن جنب
Mandate, brand, , Indonesia, brain damage	مندوب، عندنا، من دساها، إن دامت
It was eaten there. It was broken that day	من ذا الذي، منذر، أنذرهم، إن ذللتهم
Green zoo, enzymes, bronze, Tanzania.	أنزل، تنزيل، كنز، من زكاها.
Insane, consent, fence, pence, urban sand	إنسان، إن سألتهم، منسأته، كن سويًا .
Sunshine, insured, French, mansion, Intention, in shelter.	أنشروه، أنشط، من شاء، من شر
African sun, urban soil, frozen sardine	أنصتوا، من صلصال، كن صبورا
Indulge, in darkness, broken dummy.	من ضل، منضدة، إن ضاع .
American tie, Asian tar, Urban tunnel.	من طيب، إن طال، كن طيعا

Strengthen <u>th</u> yself, the food eaten <u>th</u> s far.	إن ظلم ، أن ظلوا ، من ظمأ
<u>I</u> nfinity, <u>con</u> ference, urban <u>ph</u> armacy.	أنفسكم ، منفعة ، من فيها

In the above examples, the /n/ sound is present only by its nasal feature but no tongue motion was made to touch the /n/ point of articulation in both languages. The Qur'an's phonetics add some music to this natural speech pattern. In reciting the Qur'an, the reader needs to elongate her/his nasal sound a little when reading the blue underlined Arabic sounds in the above examples and in any similar phonetic environment.

C.4: Concealment of the /m/ sound:

Table 6 illustrates the similarity of the speech pattern in Arabic and English when the /m/ sounds precedes /b/ with no vowel in between. It is easy to feel during the transition from the [m] to the [b] in both languages that no movement of the two lips takes place.

Table 6 Assimilation of the /m/ sound in a following /b/

English examples	Arabic examples
Com <u>b</u> ine, em <u>b</u> ody, cuc <u>u</u> mber, emb <u>e</u> zzle. Call hi <u>m</u> by tomorrow, a da <u>m</u> barrier	أم به جنة، ترميهم بحجارة، هم يارزون، كلبهم يأسط نراعيه

The Qur'an's phonetic sources used in this study say that the above /m/ speech pattern is an application to the phonetic rule of *concealment* الإخفاء (*Al-ikhfa'a*). According to the Arabic sources, the /m, م / sound is said to be concealed, not assimilated, because it is still represented in part by its nasal sound. When we block our lips to pronounce the /m/ sound, the voice released produces a /b/ sound in both languages with a nasal sound smoothly uttered in between.

Tamkeen elongation. In Arabic "Mad al-tamkeen":

In the Qur'an's phonetics, this is the type of vowel's stress and short elongation found in words and phrases such as "الأميين"، "النبيين"، "الذي يوعدون". When uttering words such as *kidney year*, *messy yield*, this study suggests that the pronunciation of the two vowels in the middle is made in the same speech pattern described in the Qur'an's phonetic sources as *Tamkeen Elongation* (مد التمكين).

Imala (slanting or inclination).

Imala is a widespread accent in the Arabic language. It exists in the Qur'an in one position in the word مجريها (Hood, 41). One may ask whether this speech pattern exists in other languages. This study suggests that the vowel following the /r/ sound in مجريها is similar to the one described by Roach (2009, p. 28) as a *hesitation sound*. He gives examples of which in words like *bird*, *fern*, and *purse* and says that it is the one used in most English accents as a hesitation sound (written 'er'). This study also suggests that the vowel sound in words like *rain*, *rail* or *rays* is slanted in the same speech pattern as that the word مجريها demonstrates.

Conclusion and recommendations

It remains to be discussed those letters that have no corresponding sounds in the English language. This study suggests that should they have existed in the English or any other

language, they most likely have been pronounced in exactly the same speech pattern whenever the vowels' environment is identical.

Elongation is also a subject that was discussed in all Arabic phonetic sources in detail. This study suggests that all elongations are not connected to the way we pronounce the speech sounds from a physical point of view, but rather to musical scale rules as the elongation does not change the physical behaviour of the articulators, it only adds some music to the way the sounds are produced.

The comparison can continue to include more aspects of the Qur'an's phonetic rules that apply to the English language, but still all public sources attribute those phonetic rules entirely to the Arabic language, and more specifically to the recitation of the holy Qur'an. This study suggests that, based on the analysis presented, the Qur'an's phonetic rules are not connected to the Arabic tongue, but rather, it is the way the human tongue was created to function.

The writer of this study invites speakers of other languages, who are interested in the subject, to look into their own languages and make similar comparison in order to verify the universal nature of the Qur'an phonetics.

Note: The definitions and citations used in this paper were gathered from reliable phonetic sources on the internet, in addition to Arabic and English phonetic references available at the USA Library of Congress. More references on the subject can be found at the Library of Congress online catalogue at <https://catalog.loc.gov/>.

About the Author:

Amina Amer is an independent researcher with a special interest in the Arabic phonetics. Her interest in the Qur'an's phonetics stemmed from her desire to help some non-Arabic speaking friends and family members understand the Qur'an's phonetic rules, who advised her to conduct her research in a scientific manner that can help any individual interested in the subject.

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