

When Punctuation Marks are not so 'Punctual': Translating *al-waqf* Marks at the Prosodic-Orthographic Interface

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Abstract

In this paper I argue for a consistent equivalent punctuating pattern for translating *al-waqf* marks (pause marks) in the Holy Qur'an, based on the prosodic features of pauses as the Holy Qur'an is originally oral not written. The aim of this study is to examine how it is prosody that is rendered when translating *al-waqf* marks. I suggest that without the aid of a speech recognition tool, punctuation marks would be used inaccurately in conveying the meaning into English. This is done through scrutinising a parallel corpus of seven translations of the Holy Qur'an provided in the Qur'anic Corpus (Dukes, 2017), together with a speech analysis of the pauses at *al-waqf* marks using Praat Version 6.0.32 (Paul Boersma and David Weenink, 2017). The results of the study shed light on some linguistic aspects of the translation of phrase junctures in the Holy Qur'an. These insights are of importance both to the field of linguistics, in general, and to translation studies, in particular.

Keywords: Translation, punctuation, speech recognition, prosodic features, sentence boundary

1. Introduction

Relating the prosodic features of the *waqf*-(pause) marks in the Holy Qur'an to the punctuation system in the English translation, is a newly trodden area. This is mainly based on a speech recognition analysis that relies heavily on pause detection and pitch height (Gaskell and Mirkovic, 2017). The Qur'anic script does not contain any commas, full-stops or exclamation marks in the general sense. The Qur'anic discourse is mainly oral, rather than written. All orthographic symbols in the script are means of rendering the prosodic features into the written text. In this paper, I propose that translating *al-waqf* (pause) marks should not only depend on the written script, but rely mainly on recognizing the prosodic features of each *waqf*-mark. Pause duration in seconds as well as pitch

height at and after pauses (baseline and topline) are crucial in determining which punctuation mark is to be used when translating into English – possibly other languages too. In this, I further illustrate that the ad hoc replacing *al-waqf* marks with ordinary punctuation marks in the English translation may not be adequate. I argue that when translating *al-waqf* marks, it is prosody that is rendered. So, I suggest that without the aid of a speech recognition tool, punctuation marks would be used inaccurately in conveying the meaning into English. The punctuating system 'in the spoken texts must be treated with caution' (Biber et al. 20018, p.10), as it reflects both prosody and meaning.

Four major *waqf* marks are scrutinised in the present study: **م** (compulsory pause), **لا** (not permissible to pause), **صلی** (pause is allowed; continuation is preferred), **قلی** (continuation is allowed; pause is preferred). Table 1 summarizes these four marks.

Table 1: Some Pause Marks in the Holy Qur'an (Dukes, 2017)

Pause Mark	Pause Type	Description
م	Compulsory	It is compulsory to pause
لا	Not permissible	It is not permissible to pause
صلی	Continuation preferred	To pause is allowed, although to continue is preferred
قلی	Pause preferred	To continue is allowed, although to pause is preferred

A quick reference is made to the non-frequent pause mark **س**, which means a light pause, usually not at phrase or clause junctures.

The study is, thus, an attempt to answer the following questions:

1. What are the equivalents suggested by the seven translators for *al-waqf* marks in the Holy Qur'an?
2. How consistent these equivalents are used, by the same translator, for the same *waqf* mark, in different verses??

3. How are punctuation marks related to the prosodic features of each waqf mark?
4. What insights can be inferred for a better translation of al-waqf marks in the Holy Qur'an?

The paper is structured as follows: § 2 is a theoretical background that paves the way to understanding the relationship between *al-waqf* marks as prosodic symbols, and their orthographic representation as punctuation marks. In § 3, the research method is elaborated with its two phases of analysis: the corpus-based part that relies on the Qur'anic Corpus parallel tool, in comparing al-waqf marks in the seven translations of the Holy Qur'an; and the acoustic-based part that relies on analyzing the recorded collected verses using the speech analyser software Praat Version 6.0.32. The analysis of data in § 4 provides a discussion of the findings and results of the study. Concluding remarks are suggested in § 5.

2. Background

Previous accounts have formulated both direct (e.g., Chafe, 1988; Sappok, 2011) and indirect correspondences (e.g., Primus, 2007; Kalbertodt et al., 2015) between punctuation and prosody. In his seminal work, 'Punctuation and the prosody of written language', Wallace Chafe (1988, p. 397) holds a comparison between what he calls *punctuation unit* and *intonation unit*. Three major difficulties he postulated for relating intonation units to punctuation units: (1) writer's lack of skill in punctuating, (2) varying styles of punctuation, and (3) punctuation that is determined by factors other than prosody. Sappok (2011) proposes that intonation directly drives punctuation and, thus, the use of comma and full stop would mark intonational phrasing, especially the length of pauses between units. The full stop is associated with a longer pause, the comma with a shorter one.

Recent work has been devoted to mingling speech analysis software and Natural Language Processing, with punctuation marks. In a study conducted on the relationship between discourse boundaries and pauses, Yang (2011) investigated durational patterns in spontaneous conversation with a view to see how these prosodic elements can serve as boundary-marking predictors across different types of speech corpora. The average time duration for phrase boundaries that was found in the analysed corpus was as follows:

Major Boundary: 0.461908

Minor Boundary: 0.354539

Non-Boundary: 0.277070

Igras and Ziolkó (2016) conducted a pioneer study in investigating acoustic correlates of punctuation in spoken Polish with a view to an automatic insertion of punctuation marks.

These results are in line with Bodenbender (2003) who argues that punctuation is a linguistic system that not only represents some of the phonetic sentence structure but also syntactic as well as semantic sentence structures. The experiment conducted for this study involved three male and three female native speakers of Canadian English reading aloud a set of 20 sentences with parenthetical and non-parenthetical phrases. These sentences were analyzed with respect to acoustic characteristics due to differences in punctuation as well as due to differences between parenthetical and non-parenthetical phrases.

Christensen et al. (2001) are concerned with automatically punctuating the output of a broadcast news speech recogniser. They present a statistical finite state model that combines prosodic, linguistic

and punctuation class feature. Experimental results are presented using the Hub-4 Broadcast News corpus.

The results of Yang (2011), together with Bodenbender (2003) and Christensen et al. (2001), will serve as the backcloth against which the acoustic features of al-*waqf*-(pause) marks in the Holy Qur'an are rendered into suggested punctuation marks in the English translation.

3. Method

The analysis is divided into two sections using two different tools. The first section is examined using the Qur'anic Corpus parallel tool (Dukes 2017). A semi-automatic corpus analysis is employed in this study by depicting the punctuation equivalent for *waqf*-(pause) marks used in the parallel corpora of the seven translations under investigation, namely: *Sahih International (SI)*, *Picthall (P)*, *Yusuf Ali (YA)*, *Shakir (Sh)*, *M. Sarwar (S)*, *M. Khan (Kh)*, and *Arberry (Arb)*. A panoramic view is given for the punctuational equivalent provided by each translator for each *waqf*-(pause) mark.

The second part is to record and filter the authorized recitations of the collected verses, using the audio section in the Qur'anic Corpus. The recordings are analyzed using Praat, Version 6.0.32 (Paul Boersma and David Weenink, 2017), digitized at 1600 Hz. Two phonetic measures are observed: time duration at junctures, and pitch level at and after al-*waqf*-(pause) mark (baseline pitch and topline pitch). By this, according to the different manifestations of the specific prosodic features of each pause mark, punctuation marks would be suggested.

4. Results and Discussion

4.1 Translations of al-waqf marks

This section is devoted to analyzing translations of some *waqf* (pause) marks in the parallel corpus of the Holy Qur'an provided by Qur'anic corpus (Dukes, 2017). A semi-automatic analysis of the verses that contain the waqf-(pause) marks under scrutiny reveals that there is no consistency among translators so as to rendering al-waqf (pause) marks into English.

Examining al-waqf-(pause) mark **⤵** (= it is compulsory to pause) in the seven translations, it is noticed that only Sahih International keeps the punctuation mark (.) *full-stop* in verses: (2:212) , (6:20), (6:36), (11:20), (29:26) and (36:76). Pichall uses the full-stop except in (29:26), where he uses comma (,). Yusuf Ali uses a full-stop in (2:212) and (6:20), a colon (:) in (6:36) and (29:26), and an exclamation mark (!) in (11:20). Shakir uses a comma (,) in (2:212) and (29:26), and a semi-colon (;) in (6:20), (6:36), (11:20), and (36:76). Sarwar put a comma as an equivalent to the waqf-(pause) mark **⤵** in (2:212) and (6:20); a full-stop for (6:36), (11:20) and (36:76). In (29: 26), Sarwar put no punctuation mark for **⤵**, and rendered the two sentences into a compound English sentence.

زَيْنَ الَّذِينَ كَفَرُوا الْحَيَاةَ الدُّنْيَا وَيَسْخَرُونَ مِنَ الَّذِينَ آمَنُوا وَالَّذِينَ
اتَّقَوْا فَوْقَهُمْ يَوْمَ الْقِيَامَةِ ۗ وَاللَّهُ يَرْزُقُ مَنْ يَشَاءُ بِغَيْرِ حِسَابٍ

2:212

Sahih International: Beautified for those who disbelieve is the life of this world, and they ridicule those who believe. But those who fear Allah are above them on the Day of Resurrection. And Allah gives provision to whom He wills without account.

Pickthall: Beautified is the life of the world for those who disbelieve; they make a jest of the believers. But those who keep their duty to Allah will be above them on the Day of Resurrection. Allah giveth without stint to whom He will.

Yusuf Ali: The life of this world is alluring to those who reject faith, and they scoff at those who believe. But the righteous will be above them on the Day of Resurrection; for Allah bestows His abundance without measure on whom He will.

Shakir: The life of this world is made to seem fair to those who disbelieve, and they mock those who believe, and those who guard (against evil) shall be above them on the day of resurrection; and Allah gives means of subsistence to whom he pleases without measure.

Muhammad Sarwar: The worldly life is made to seem attractive to the disbelievers who scoff at the faithful, but the pious, in the life hereafter, will have a position far above them. God grants sustenance (without account) to anyone He wants.

Mohsin Khan: Beautified is the life of this world for those who disbelieve, and they mock at those who believe. But those who obey Allah's Orders and keep away from what He has forbidden, will be above them on the Day of Resurrection. And Allah gives (of His Bounty, Blessings, Favours, Honours, etc. on the Day of Resurrection) to whom He wills without limit.

Arberry: Decked out fair to the unbelievers is the present life, and they deride the believers; but those who were godfearing shall be above them on the Resurrection Day;

and God provides whomsoever He will without reckoning.

﴿ إِنَّمَا يَسْتَجِيبُ الَّذِينَ يَسْمَعُونَ وَالْمَوْتَىٰ يَبْعَثُهُمُ اللَّهُ ثُمَّ إِلَيْهِ يُرْجَعُونَ ﴾ (6:36)

Sahih International: Only those who hear will respond. But the dead - Allah will resurrect them; then to Him they will be returned.

Pickthall: Only those can accept who hear. As for the dead, Allah will raise them up; then unto Him they will be returned.

Yusuf Ali: Those who listen (in truth), be sure, will accept: as to the dead, Allah will raise them up; then will they be turned unto Him.

Shakir: Only those accept who listen; and (as to) the dead, Allah will raise them, then to Him they shall be returned.

Muhammad Sarwar: Only those who have understanding will accept your faith. (Those who have no understanding) are like the dead whom God will resurrect and to Him will all return.

Mohsin Khan: It is only those who listen (to the Message of Prophet Muhammad SAW), will respond (benefit from it), but as for the dead (disbelievers), Allah will raise them up, then to Him they will be returned (for their recompense).

Arberry: Answer only will those who hear; as for the dead, God will raise them up, then unto Him they will be returned.

أُولَئِكَ لَمْ يَكُونُوا مُعْجِزِينَ فِي الْأَرْضِ وَمَا كَانَ لَهُمْ مِنْ دُونِ اللَّهِ مِنْ
أَوْلِيَاءَ يَضَاعَفُ لَهُمُ الْعَذَابُ مَا كَانُوا يَسْتَطِيعُونَ السَّمْعَ وَمَا كَانُوا
يُبْصِرُونَ (11:20)

Sahih International: Those were not causing failure [to Allah] on earth, nor did they have besides Allah any protectors. For them the punishment will be multiplied. They were not able to hear, nor did they see.

Pickthall: Such will not escape in the earth, nor have they any protecting friends beside Allah. For them the torment will be double. They could not bear to hear, and they used not to see.

Yusuf Ali: They will in no wise frustrate (His design) on earth, nor have they protectors besides Allah! Their penalty will be doubled! They lost the power to hear, and they did not see!

Shakir: These shall not escape in the earth, nor shall they have any guardians besides Allah; the punishment shall be doubled for them, they could not bear to hear and they did not see.

Muhammad Sarwar: Such people will never weaken God's (power) on earth nor will they find any guardian besides God. Their punishment will be doubled and they will not be able to hear or see.

Mohsin Khan: By no means will they escape (from Allah's Torment) on earth, nor have they protectors besides Allah! Their torment will be doubled! They could not bear to hear (the preachers of the truth) and they used not to see (the truth because of their severe aversin, inspite of the fact that they had the sense of hearing and sight).

Arberry: they are unable to frustrate Him on earth and they have no protectors, apart from God. For them the chastisement shall be doubled; they could not hear, neither did they see.

﴿فَأَمَّنَ لَهُ لُوطٌ وَقَالَ إِنِّي مُهَاجِرٌ إِلَىٰ رَبِّي إِنَّهُ هُوَ الْعَزِيزُ الْحَكِيمُ﴾ (29:26)

Sahih International: And Lot believed him. [Abraham] said, "Indeed, I will emigrate to [the service of] my Lord. Indeed, He is the Exalted in Might, the Wise."

Pickthall: And Lot believed him, and said: Lo! I am a fugitive unto my Lord. Lo! He, only He, is the Mighty, the Wise.

Yusuf Ali: But Lut had faith in Him: He said: "I will leave home for the sake of my Lord: for He is Exalted in Might, and Wise."

Shakir: And Lut believed in Him, and he said: I am fleeing to my Lord, surely He is the Mighty, the Wise.

Muhammad Sarwar: Only Lot believed in (Abraham) and said, "I seek refuge in my Lord, for He is Majestic and All-wise".

Mohsin Khan: So Lout (Lot) believed in him [Ibrahim's (Abraham) Message of Islamic Monotheism]. He [Ibrahim (Abraham)] said: "I will emigrate for the sake of my Lord. Verily, He is the All-Mighty, the All-Wise."

Arberry: But Lot believed him; and he said, 'I will flee to my Lord; He is the All-mighty, the All-wise.'

﴿فَلَا يَحْزَنُكَ قَوْلُهُمْ إِنَّا نَعْلَمُ مَا يُسِرُّونَ وَمَا يُعْلِنُونَ﴾ (36:76)

Sahih International: So let not their speech grieve you. Indeed, We know what they conceal and what they declare.

Pickthall: So let not their speech grieve thee (O Muhammad). Lo! We know what they conceal and what proclaim.

Yusuf Ali: Let not their speech, then, grieve thee. Verily We know what they hide as well as what they disclose.

Shakir: Therefore let not their speech grieve you; surely We know what they do in secret and what they do openly.

Muhammad Sarwar: Muhammad, let not their words annoy you. We certainly know whatever they conceal or reveal.

Mohsin Khan: So let not their speech, then, grieve you (O Muhammad SAW). Verily, We know what they conceal and what they reveal.

Arberry: So do not let their saying grieve thee; assuredly We know what they keep secret and what they publish.

Table (2) provides a summary of the different attempts by the seven translators to render al-waqf-(pause) mark **ﻻ**, which means pause is compulsory, into English, in different verses.

Table 2: Translations of ﻻ in Sample Verses of the Holy Qur'an (Dukes, 2017)

	ﻻ in (2:212)	ﻻ in (6:20)	ﻻ in (6:36)	ﻻ in (11:20)	ﻻ in (29:26)	ﻻ in (36:76)
<i>SI</i>
<i>P</i>	,	.
<i>YA</i>	.	.	:	!	:	.
<i>Sh</i>	,	;	;	;	,	;
<i>S</i>	,	,	.	.	none	.
<i>Kh</i>	.	skipped	,	!	.	.
<i>Arb</i>	;	.	;	.	;	;

The blurred vision of translating *al-waqf* marks is exemplified in translating verses (2:146) and (6:20). The first part of these verses is verbally the same; however, the waqf-(pause) mark is different. In (2:146), the pause mark **صلی** which means 'continuation is preferred' occurs, whereas in (6:20), the pause mark **م** which means 'pause is compulsory' is put. This, in turn, necessitates a change in the punctuation marks used for translating both verses into English. *Sahih International*, *Picthall* and *Mohsin Khan* use a full-stop for both *waqf*-marks. *Yusuf Ali* uses a semi-colon for the 'continuation is preferred' mark (**صلی**), and a full-stop for the compulsory pause mark 'م'. *Shakir*, on the other hand, uses a comma and a semi-colon, respectively. *Sarwar* uses the full-stop for (**صلی**), and the comma for (م); this contrasts with *Arberry* who uses the full-stop for (م), and the comma for (**صلی**).

الَّذِينَ آتَيْنَاهُمُ الْكِتَابَ يَعْرِفُونَهُ كَمَا يَعْرِفُونَ أَبْنَاءَهُمْ وَإِنَّ فَرِيقًا مِّنْهُمْ لَيَكْتُمُونَ الْحَقَّ
وَهُمْ يَعْلَمُونَ (2:146)

Sahih International: Those to whom We gave the Scripture know him as they know their own sons. But indeed, a party of them conceal the truth while they know [it].

Pickthall: Those unto whom We gave the Scripture recognise (this revelation) as they recognise their sons. But lo! a party of them knowingly conceal the truth.

Yusuf Ali: The people of the Book know this as they know their own sons; but some of them conceal the truth which they themselves know.

Shakir: Those whom We have given the Book recognize him as they recognize their sons, and

a party of them most surely conceal the truth while they know (it).

Muhammad Sarwar: Those to whom We have given the Book (Bible), know you (Muhammad) just as well as they know their sons. It is certain that some of them deliberately hide the truth.

Mohsin Khan: Those to whom We gave the Scripture (Jews and Christians) recognise him (Muhammad SAW or the Ka'bah at Makkah) as they recognise their sons. But verily, a party of them conceal the truth while they know it - [i.e. the qualities of Muhammad SAW which are written in the Taurat (Torah) and the Injeel (Gospel)].

Arberry: whom We have given the Book, and they recognize as they recognize their sons, even though there is a party of them conceal the truth and that wittingly.

الَّذِينَ آتَيْنَاهُمُ الْكِتَابَ يَعْرِفُونَهُ كَمَا يَعْرِفُونَ أَبْنَاءَهُمْ ۗ الَّذِينَ خَسِرُوا أَنفُسَهُمْ فَهُمْ لَا

يُؤْمِنُونَ (6:20)

Sahih International: Those to whom We gave the Scripture know him as they know their own sons. But indeed, a party of them conceal the truth while they know [it].

Pickthall: Those unto whom We gave the Scripture recognise (this revelation) as they recognise their sons. But lo! a party of them knowingly conceal the truth.

Yusuf Ali: The people of the Book know this as they know their own sons; but some of them conceal the truth which they themselves know.

Shakir: Those whom We have given the Book recognize him as they recognize their sons, and a party of them most surely conceal the truth while they know (it).

Muhammad Sarwar: Those to whom We have given the Book (Bible), know you (Muhammad) just as a well as they know their sons. It is certain that some of them deliberately hide the truth.

Mohsin Khan: Those to whom We gave the Scripture (Jews and Christians) recognise him (Muhammad SAW or the Ka'bah at Makkah) as they recognise their sons. But verily, a party of them conceal the truth while they know it - [i.e. the qualities of Muhammad SAW which are written in the Taurat (Torah) and the Injeel (Gospel)].

Arberry: whom We have given the Book, and they recognize as they recognize their sons, even though there is a party of them conceal the truth and that wittingly.

A comparison of the translations of two (صلة) marks (continuation preferred) in verse (2:7) and two (قلى) marks (pause preferred) in (3:4) reveals that there is no clear distinction of the function of both pause marks. Full-stops, commas and semicolons are used interchangeably in both verses. Moreover, both Yusuf Ali and Shakir skipped the whole first part of verse (3:4) that ends in (قلى).

خَتَمَ اللَّهُ عَلَىٰ قُلُوبِهِمْ وَعَلَىٰ سَمْعِهِمْ وَعَلَىٰ أَبْصَارِهِمْ غِشَاوَةٌ وَلَهُمْ عَذَابٌ عَظِيمٌ (2:7)

Sahih International: Allah has set a seal upon their hearts and upon their hearing, and over their vision is a veil. And for them is a great punishment.

Pickthall: Allah hath sealed their hearing and their hearts, and on their eyes there is a covering. Theirs will be an awful doom.

Yusuf Ali: Allah hath set a seal on their hearts and on their hearing, and on their eyes is a veil; great is the penalty they (incur).

Shakir: Allah has set a seal upon their hearts and upon their hearing and there is a covering over their eyes, and there is a great punishment for them.

Muhammad Sarwar: God has sealed their hearts and hearing and their vision is veiled; a great punishment awaits them.

Mohsin Khan: Allah has set a seal on their hearts and on their hearings, (i.e. they are closed from accepting Allah's Guidance), and on their eyes there is a covering. Theirs will be a great torment.

Arberry: God has set a seal on their hearts and on their hearing, and on their eyes is a covering, and there awaits them a mighty chastisement.

مِن قَبْلُ هُدًى لِّلنَّاسِ وَأَنْزَلَ الْفُرْقَانَ ۗ إِنَّ الَّذِينَ كَفَرُوا بِآيَاتِ اللَّهِ لَهُمْ عَذَابٌ شَدِيدٌ ۗ وَاللَّهُ عَزِيزٌ ذُو انتِقَامٍ (3:4)

Sahih International: Before, as guidance for the people. And He revealed the Qur'an. Indeed, those who disbelieve in the verses of Allah will have a severe punishment, and Allah is exalted in Might, the Owner of Retribution.

Pickthall: Aforetime, for a guidance to mankind; and hath revealed the Criterion (of right and wrong). Lo! those who disbelieve the revelations of Allah, theirs will be a heavy doom. Allah is Mighty, Able to Requite (the wrong).

Yusuf Ali: Then those who reject Faith in the Signs of Allah will suffer the severest penalty, and Allah is Exalted in Might, Lord of Retribution.

Shakir: Surely they who disbelieve in the communications of Allah they shall have a severe chastisement; and Allah is Mighty, the Lord of retribution.

Muhammad Sarwar: before as a guide for the people and now He has revealed the criteria of discerning right from wrong. Those who reject the revelations of God will face the most severe torment. God is Majestic and capable to revenge.

Mohsin Khan: Aforetime, as a guidance to mankind, And He sent down the criterion [of judgement between right and wrong (this Quran)]. Truly, those who disbelieve in the Ayat (proofs, evidences, verses, lessons, signs, revelations, etc.) of Allah, for them there is a severe torment; and Allah is All-Mighty, All-Able of Retribution.

Arberry: aforetime, as guidance to the people, and He sent down the Salvation. As for those who disbelieve in God's signs, for them awaits a terrible chastisement; God is All-mighty, Vengeful.

	صلی ۱ in (2:7)	صلی ۲ in 2:7)	قلی ۱ in (3:4)	قلی ۲ in (3:4)
SI	,	.	.	,
P	,	.	.	.
YA	,	,	skipped	,
Sh	none	,	skipped	;
S	none	;	.	.
Kh	,	.	.	;
Arb	,	,	.	;

*Table 3: Translations of **صلى** and **قل** in Verses (2:7) & (3:4) (Dukes, 2017)*

The pause mark **ﷻ**, which indicates that 'pause is not permissible', is not consistently rendered in the seven English translations. Sample translations are analysed for verses (2:159), (2:174), (6:51) and (16:101). Most translators used various punctuation marks for this *waqf*-mark. Sahih International used the dash (-) in all four verses; and Khan used commas (,) in all four verses. The five other translators were not consistent in using an equivalent for this pause mark. This is apparent in the following screenshots of the translations of the sample verses and in Table 4.

وَلَنْ تَرْضَىٰ عَنْكَ الْيَهُودُ وَلَا النَّصَارَىٰ حَتَّىٰ تَتَّبِعَ مِلَّتَهُمْ ۗ قُلْ إِنَّ هُدَىٰ اللَّهِ هُوَ الْهُدَىٰ ۗ وَلَئِن
 اتَّبَعْتَ أَهْوَاءَهُمْ بَعْدَ الَّذِي جَاءَكَ مِنَ الْعِلْمِ ۗ مَا لَكَ مِنَ اللَّهِ مِن وَلِيٍّ وَلَا نَصِيرٍ (2:120)

Sahih International: And never will the Jews or the Christians approve of you until you follow their religion. Say, "Indeed, the guidance of Allah is the [only] guidance." If you were to follow their desires after what has come to you of knowledge, you would have against Allah no protector or helper.

Pickthall: And the Jews will not be pleased with thee, nor will the Christians, till thou follow their creed. Say: Lo! the guidance of Allah (Himself) is Guidance. And if thou shouldst follow their desires after the knowledge which hath come unto thee, then wouldst thou have from Allah no protecting guardian nor helper.

Yusuf Ali: Never will the Jews or the Christians be satisfied with thee unless thou follow their form of religion. Say:

"The Guidance of Allah,-that is the (only) Guidance." Wert thou to follow their desires after the knowledge which hath reached thee, then wouldst thou find neither Protector nor helper against Allah.

Shakir: And the Jews will not be pleased with you, nor the Christians until you follow their religion. Say: Surely Allah's guidance, that is the (true) guidance. And if you follow their desires after the knowledge that has come to you, you shall have no guardian from Allah, nor any helper.

Muhammad Sarwar: The Jews and Christians will never be pleased with you unless you follow their faith. (Muhammad) tell them that the guidance of God is the only true guidance. If you follow their wishes after all the knowledge that has come to you, you will no longer have God as your guardian and helper."

Mohsin Khan: Never will the Jews nor the Christians be pleased with you (O Muhammad Peace be upon him) till you follow their religion. Say: "Verily, the Guidance of Allah (i.e. Islamic Monotheism) that is the (only) Guidance. And if you (O Muhammad Peace be upon him) were to follow their (Jews and Christians) desires after what you have received of Knowledge (i.e. the Quran), then you would have against Allah neither any Wali (protector or guardian) nor any helper.

Arberry: Never will the Jews be satisfied with thee, neither the Christians, not till thou followest their religion. Say: 'God's

guidance is the true guidance.' If thou followest their caprices, after the knowledge that has come to thee, thou shalt have against God neither protector nor helper.

إِنَّ الَّذِينَ يَكْتُمُونَ مَا أَنْزَلْنَا مِنَ الْبَيِّنَاتِ وَالْهُدَىٰ مِنْ بَعْدِ مَا بَيَّنَّاهُ لِلنَّاسِ فِي الْكِتَابِ ۗ أُولَٰئِكَ يَلْعَنُهُمُ اللَّهُ وَيَلْعَنُهُمُ اللَّاعِنُونَ (2:159)

Sahih International: Indeed, those who conceal what We sent down of clear proofs and guidance after We made it clear for the people in the Scripture - those are cursed by Allah and cursed by those who curse,

Pickthall: Lo! Those who hide the proofs and the guidance which We revealed, after We had made it clear to mankind in the Scripture: such are accursed of Allah and accursed of those who have the power to curse.

Yusuf Ali: Those who conceal the clear (Signs) We have sent down, and the Guidance, after We have made it clear for the people in the Book,-on them shall be Allah's curse, and the curse of those entitled to curse,-

Shakir: Surely those who conceal the clear proofs and the guidance that We revealed after We made it clear in the Book for men, these it is whom Allah shall curse, and those who curse shall curse them (too).

Muhammad Sarwar: Those who hide the authoritative proofs and the guidance that We have revealed, after it has been made clear for the People of the Book, will be condemned by God and those who have the right to condemn.

Mohsin Khan: Verily, those who conceal the clear proofs, evidences and the guidance, which We have sent down, after We have made it clear for the people in the Book, they are the ones cursed by Allah and cursed by the cursers.

Arberry: Those who conceal the clear signs and the guidance that We have sent down, after We have shown them clearly in the Book -- they shall be cursed by God and the cursers,

إِنَّ الَّذِينَ يَكْتُمُونَ مَا أَنْزَلَ اللَّهُ مِنَ الْكِتَابِ وَيَشْتَرُونَ بِهِ ثَمًّا قَلِيلًا ۖ أُولَٰئِكَ مَا يَأْكُلُونَ فِي بُطُونِهِمْ إِلَّا النَّارَ وَلَا يُكَلِّمُهُمُ اللَّهُ يَوْمَ الْقِيَامَةِ وَلَا يُزَكِّيهِمْ وَلَهُمْ عَذَابٌ أَلِيمٌ (2:174)

Sahih International: Indeed, they who conceal what Allah has sent down of the Book and exchange it for a small price - those consume not into their bellies except the Fire. And Allah will not speak to them on the Day of Resurrection, nor will He purify them. And they will have a painful punishment.

Pickthall: Lo! those who hide aught of the Scripture which Allah hath revealed and purchase a small gain therewith, they eat into their bellies nothing else than fire. Allah will not speak to them on the Day of Resurrection, nor will He make them grow. Theirs will be a painful doom.

Yusuf Ali: Those who conceal Allah's revelations in the Book, and purchase for them a miserable profit,- they swallow into themselves naught but Fire; Allah will not address them on the Day of Resurrection. Nor purify them: Grievous will be their penalty.

Shakir: Surely those who conceal any part of the Book that Allah has revealed and take for it a small price, they eat nothing but fire into their bellies, and Allah will not speak to them on the day of resurrection, nor will He purify them, and they shall have a painful chastisement.

Muhammad Sarwar: Those who receive some small gain by hiding the Books which God has revealed, have, in fact, filled up their stomachs with fire. God will not speak with them on the Day of Judgment, nor will He purify them; instead, they will face a painful torment.

Mohsin Khan: Verily, those who conceal what Allah has sent down of the Book, and purchase a small gain therewith (of worldly things), they eat into their bellies nothing but fire. Allah will not speak to them on the Day of Resurrection, nor purify them, and theirs will be a painful torment.

Arberry: Those who conceal what of the Book God has sent down on them, and sell it for a little price - they shall eat naught but the Fire in their bellies; God shall not speak to them on the Day of Resurrection neither purify them; there awaits them a painful chastisement.

وَأَنْذِرْ بِهِ الَّذِينَ يَخَافُونَ أَنْ يُحْشَرُوا إِلَىٰ رَبِّهِمْ لَيْسَ لَهُمْ مَن
دُونَهُ وَلَا شَفِيعٌ لَهُمْ يَتَّقُونَ (6:51)

Sahih International: And warn by the Qur'an those who fear that they will be gathered before their Lord - for them besides Him will be no protector and no intercessor - that they might become righteous.

Pickthall: Warn hereby those who fear (because they know) that they will be gathered unto their Lord, for whom there is no protecting ally nor intercessor beside Him, that they may ward off (evil).

Yusuf Ali: Give this warning to those in whose (hearts) is the fear that they will be brought (to judgment) before their Lord: except for Him they will have no protector nor intercessor: that they may guard (against evil).

Shakir: And warn with it those who fear that they shall be gathered to their Lord-- there is no guardian for them, nor any intercessor besides Him-- that they may guard (against evil).

Muhammad Sarwar: Preach the Quran to those who are concerned about the Day of Judgment at which time they will be brought before their Lord. Tell them that their only guardian and intercessor is God so that they may become pious.

Mohsin Khan: And warn therewith (the Quran) those who fear that they will be gathered before their Lord, when there will be neither a protector nor an intercessor for them besides Him, so that they may fear Allah and keep their duty to Him (by abstaining from committing sins and by doing all kinds of good deeds which He has ordained).

Arberry: And warn therewith those who fear they shall be mustered to their Lord; they have, apart from God, no protector and no intercessor; haply they will be godfearing.

وَإِذَا بَدَّلْنَا آيَةً مَكَانَ آيَةٍ وَاللَّهُ أَعْلَمُ بِمَا يُنزِّلُ قَالُوا إِنَّمَا أَنْتَ مُفْتَرٍ بَلْ أَكْثَرُهُمْ لَا يَعْلَمُونَ (16:101)

Sahih International: And when We substitute a verse in place of a verse - and Allah is most knowing of what He sends down - they say, "You, [O Muhammad], are but an inventor [of lies]." But most of them do not know.

Pickthall: And when We put a revelation in place of (another) revelation, - and Allah knoweth best what He revealeth - they say: Lo! thou art but inventing. Most of them know not.

Yusuf Ali: When We substitute one revelation for another,- and Allah knows best what He reveals (in stages),- they say, "Thou art but a forger": but most of them understand not.

Shakir: And when We change (one) communication for (another) communication, and Allah knows best what He reveals, they say: You are only a forger. Nay, most of them do not know.

Muhammad Sarwar: When God replaces one revelation with another, He knows best what to reveal. But they say, "(Muhammad), you have falsely invented it." Most people are ignorant.

Mohsin Khan: And when We change a Verse [of the Quran, i.e. cancel (abrogate) its order] in place of another, and Allah knows the best of what He sends down, they (the disbelievers) say: "You (O Muhammad SAW) are but a Muftari! (forger, liar)." Nay, but most of them know not.

Arberry: And when We exchange a verse in the place of another verse and God knows very well what He is sending down -- they say, "Thou art a mere forger!" Nay, but the most of them have no knowledge.

Table (4) surveys the equivalents provided by the seven translators to al-waqf-(pause) mark **ﻻ**, which denotes 'pause is forbidden'.

Table 4: Translations of ﻻ in Sample Verses of the Holy Qur'an (Dukes, 2017)

	ﻻ in (2:120)	ﻻ in (2:159)	ﻻ in (2:174)	ﻻ in (6:51)	ﻻ in (16:101)
SI	,	-	-	-	-
P	,	:	,	,	,-
YA	,	,-	,-	:	,-
Sh	,	,	,	-	,
S	,	,	skipped	.	,
Kh	,	,	,	,	,
Arb	,	--	-	;	None

Though (2:139) does not contain any *waqf*-mark, all seven translators disagreed among themselves in using different punctuation marks for sentence junctures. Full-stops, commas, semi-colons, colons, inverted commas and question marks are all used, but not in the same way.

قُلْ أَتُحَاجُّونَنَا فِي اللَّهِ وَهُوَ رَبُّنَا وَرَبُّكُمْ وَلَنَا أَعْمَالُنَا وَلَكُمْ أَعْمَالُكُمْ وَتَحْنُ لَهُ مُخْلِصُونَ (2:139)

Sahih International: Say, [O Muhammad], "Do you argue with us about Allah while He is our Lord and your Lord? For us are our deeds, and for you are your deeds. And we are sincere [in deed and intention] to Him."

Pickthall: Say (unto the People of the Scripture): Dispute ye with us concerning Allah when He is our Lord and your Lord? Ours are our works

and yours your works. We look to Him alone.

Yusuf Ali: Say: Will ye dispute with us about Allah, seeing that He is our Lord and your Lord; that we are responsible for our doings and ye for yours; and that We are sincere (in our faith) in Him?

Shakir: Say: Do you dispute with us about Allah, and He is our Lord and your Lord, and we shall have our deeds and you shall have your deeds, and we are sincere to Him.

Muhammad **Sarwar:** (Muhammad), ask the People of the Book, "Why should you argue with us about God, Who is our Lord as well as yours, when we are sincere in our belief in God?"

Mohsin Khan: Say (O Muhammad Peace be upon him to the Jews and Christians), "Dispute you with us about Allah while He is our Lord and your Lord? And we are to be rewarded for our deeds and you for your deeds. And we are sincere to Him in worship and obedience (i.e. we worship Him Alone and none else, and we obey His Orders)."

Arberry: Say: 'Would you then dispute with us concerning God, who is our Lord and your Lord? Our deeds belong to us, and to you belong your deeds; Him we serve sincerely.

One of the rarely used marks is the *waqf*-mark **س** which means a slight pause usually neither at phrase nor sentence boundaries. In (75:27) and

(83:14), all seven translators, except for *Sahih International* and *Shakir* who use a comma in (83:14), seem to overlook it and do not use a punctuation mark in its place.

كَلَّا بَلْ رَانَ عَلَىٰ قُلُوبِهِم مَّا كَانُوا يَكْسِبُونَ (14:83)

Sahih International: No! Rather, the stain has covered their hearts of that which they were earning.

Pickthall: Nay, but that which they have earned is rust upon their hearts.

Yusuf Ali: By no means! but on their hearts is the stain of the (ill) which they do!

Shakir: Nay! rather, what they used to do has become like rust upon their hearts.

Muhammad Sarwar: They will never have faith. In fact, their hearts are stained from their deeds.

Mohsin Khan: Nay! But on their hearts is the Ran (covering of sins and evil deeds) which they used to earn .

Arberry: No indeed; but that they were earning has rusted upon their hearts.

وَقِيلَ مَنْ رَاقٍ (75:27)

Sahih International: And it is said, "Who will cure [him]?"

Pickthall: And men say: Where is the wizard (who can save him now)?

Yusuf Ali: And there will be a cry, "Who is a magician (to restore him)?"

Shakir: And it is said: Who will be a magician?

Muhammad Sarwar: and the angels say, "Who will take away his soul,

Mohsin Khan: And it will be said: "Who can cure him and save him from death?"

Arberry: and it is said, 'Who is an enchanter?'

4.2 Speech Analysis of *al-waqf* Marks

Authorized recitations of each of the collected verses, in the audio section of the Qur'anic Corpus, were recorded and filtered of noise. The recordings are analyzed using Praat, Version 6.0.32 (Paul Boersma and David Weenink, 2018), digitized at 1600 Hz. Two phonetic measures are observed: time duration at junctures, and pitch level at and after pauses. Processing recited verses using speech analysis software, in this study, proved to be advantageous in detecting the prosodic features of each *waqf* (pause) mark under investigation. Specifically, these features are pause duration in milliseconds and pitch height (baseline at pauses and topline after pauses).

Figures (1) and (2) are sample screenshots of the prosodic features of the mandatory waqf-(pause) mark م. A zoomed-in segment of the two spectrographs of verses (26:29) and (11:20) reveal that this pause mark exhibits the highest measures. Longer time durations occur at pauses as well as high pitch level differences between baseline at pause and topline just after pause.

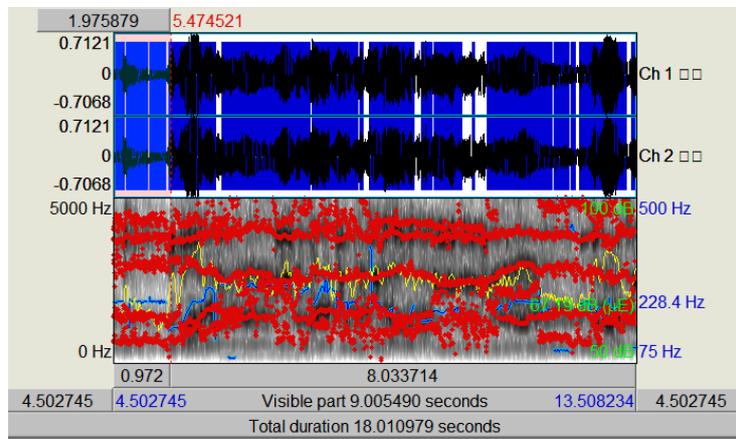


Figure (1) A spectrograph of verse (26:29) وَقَالَ إِنِّي مُهَاجِرٌ إِلَىٰ رَبِّي فَأَمِّنْ لَهُ لُوطٌ م إِنَّهُ هُوَ الْعَزِيزُ الْحَكِيمُ

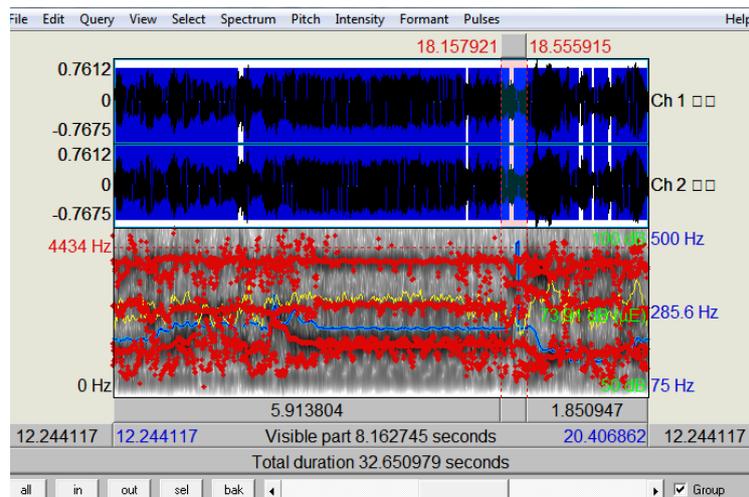
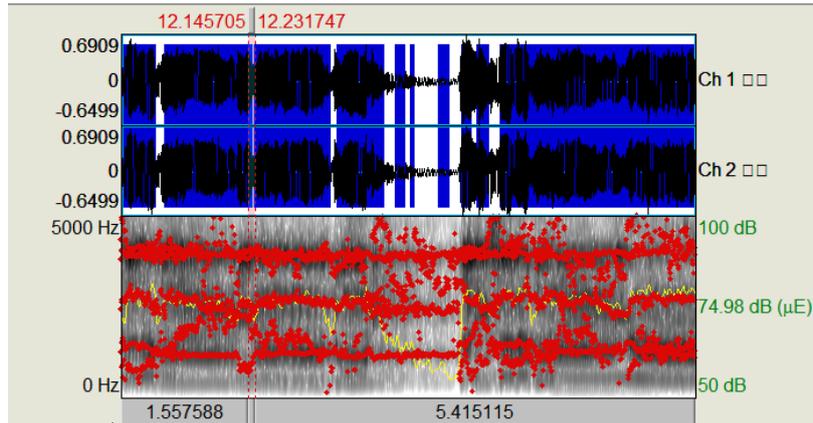


Figure (2) A spectrograph of verse (11:20) أُولَٰئِكَ لَمْ يَكُونُوا مُعْجِزِينَ فِي الْأَرْضِ وَمَا كَانُوا يَنْصُرُونَ كَانُوا يَضَاعَفُونَ لَهُمُ الْعَذَابُ مَا كَانُوا يَسْتَطِيعُونَ السَّمْعَ وَمَا كَانُوا يُبْصِرُونَ

Figure (3) is a sample screenshot of a zoomed-in segment of the acoustic features of al-waqf(pause) mark لا in verse (6:51). The pause duration is very short as compared to the mark م ; besides, the difference between baseline at pause mark and topline pitch levels immediately after pause mark is remarkably very low.



(6:51) وَأَنْذِرْ بِهِ الَّذِينَ يَخَافُونَ أَنْ يُحْشَرُوا إِلَىٰ رَبِّهِمْ لَا لِيَسْ لَهُمْ مِنْ دُونِهِ وَلِي وَلَا شَفِيعَ لَعَلَّهُمْ يَتَّقُونَ

Figure (3) A spectrograph of verse

Table (5) summarizes the prosodic features of both م that refers to compulsory pause, and لا that refers to impermissible pauses. The prosodic features under investigation, namely, pause duration in seconds, pitch baseline at al-waqf mark and topline after it, are significant in manifesting the distinctive features of both marks.

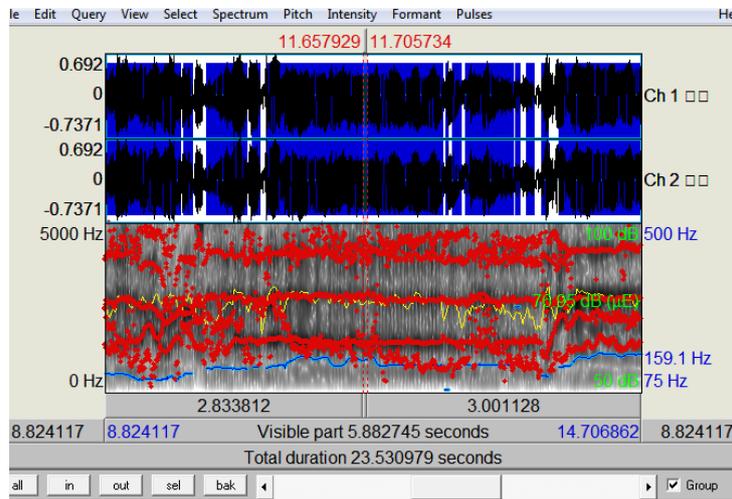
Table (5): Prosodic Features of م and لا

	م					لا				
	م in (2:21 2)	م in (6:2 0)	م in (6:3 6)	م in (11:2 0)	م in (29:26 0)	لا in (36:76 9)	لا in (2:174)	لا in (6:51)	لا in (16:101)	
Pause duration In seconds	0.45233 0.4567	0.4656	0.46637	0.4871	0.1306 0.1764	0.1586	0.1910	0.1446		
Pitch baseline at waqf mark in Hertz	2876 2776	3102	2998	3445	4321 4516	4510	4442	4339		

When Punctuation Marks are not so 'Punctual': Translating al-waqf Marks at the Prosodic-Orthographic Interface

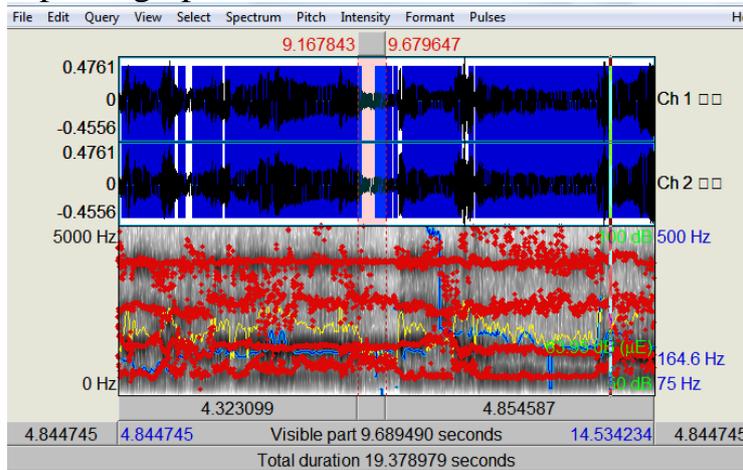
Pitch topline after waqf mark in Hertz	4657 4344	4562	4756	4434	4354 4388	4472	4356	4421
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Prosodic features play a role in solving punctuation translation problems. For instance, verses (2: 146) and (6: 20) that appeared to be controversial to translators so as to al-waqf marks (see 4.1 above), as they start similarly but contain two different pauses at clause juncture, seem to behave differently on the acoustic level. As shown in Figures (4) and (5),



(2:146) الَّذِينَ آتَيْنَاهُمُ الْكِتَابَ يَعْرِفُونَهُ كَمَا يَعْرِفُونَ أَبْنَاءَهُمْ صَلَّى وَإِنَّ فَرِيقًا مِنْهُمْ لَيَكْتُمُونَ الْحَقَّ وَهُمْ يَعْلَمُونَ

Figure (4) A spectrograph of verse



(6:20) الَّذِينَ آتَيْنَاهُمُ الْكِتَابَ يَعْرِفُونَهُ كَمَا يَعْرِفُونَ أَبْنَاءَهُمْ م الَّذِينَ خَسِرُوا أَنفُسَهُمْ فَهُمْ لَا يُؤْمِنُونَ

Figure (5) A spectrograph of verse

In Table (6), the distinctive prosodic qualities that are concomitant with both **صلے** and **قلے**, clarify the blurred vision found in the seven English translations discussed in 4.1. above. Resorting to prosodic features help differentiate the suggested punctuational element. Thus, the figures concomitant to **صلے** are likely to resemble those of a 'comma', whereas those related to **قلے** are more likely to be associated with a 'semi-colon'.

Table (6): Prosodic Features of **صلے and **قلے****

	صلے ١ in (2:7)	صلے ٢ in 2:7)	قلے ١ in (3:4)	قلے ٢ in (3:4)
Pause duration in seconds	0.2302	0.2177	0.3152	0.3923
Pitch baseline before waqf mark in Hertz	4198	4210	3798	3672
Pitch topline after waqf mark in Hertz	4085	4148	3914	3821

Table (7) illustrates the average prosodic features of *al-waqf*-(pause) marks that are calculated given the information above. The two prosodic marks that are scrutinized in this study prove to be significant. Pause duration at *al-waqf*-(pause) marks, as well as baseline pitch level at pauses and topline pitch level after them, shed light on the potential punctuation mark that should be used when translating into English. Both syntactic and semantic behaviour have an effect on punctuating, which is reflected orally in prosody. Stronger breaks in the flow of recitation are more likely to co-occur with **م** and **قلے** than shorter ones **صلے** and the shortest **لا**. The *waqf*-(pause) marks at stronger breaks also tend to be prosodically different from other ones.

Table (7): Average prosodic features of al-waqf marks and suggested corresponding punctuation mark

	م	قله	صلة	لا
Average Pause duration in seconds	0.46562	0.3517	0.2214	0.16024
Average Pitch baseline before waqf mark in Hertz	3039	3798	4058	4426
Average Pitch topline after waqf mark in Hertz	4550	3914	4132	4452
Suggested corresponding punctuation mark	Full stop	Semi-colon	Comma	None

Through this type of correspondence between each waqf-(pause) marks and its prosodic feature, a clear vision will envisage the translator for a better rendering of al-waqf-(pause) marks into English.

5. Conclusion

This paper is an attempt to investigate the acoustic prosodic features of al-waqf-(pause) marks in the Holy Qur'an as a tool for best selecting a suitable punctuation mark in the English translation. Beyond the scope of this study are the syntactic-semantic features that go along with punctuation marks in English. Acoustic observations reveal that *waqf*-(pause) marks at major phrase boundaries are both segmentally and prosodically distinct. They also differ with respect to the distribution of neighbouring pitch and pause duration. The four waqf-(pause) marks

under scrutiny are م (compulsory pause), ل (not permissible to pause), ص (pause is allowed; continuation is preferred), ق (continuation is allowed; pause is preferred).

Rendering al-waqf-(pause) marks into English in the seven translations investigated in this study revealed an inconsistency due to depending solely on the written scripture. Mainly oral in essence, the Holy Qur'an has its unique features that may be overlooked or lost in translation if the written text is only taken into consideration. The insights and implications of this study shed light on new aspects of translating oral texts in general and the Holy Qur'an, in particular.

Appendix: List of translations of the Qur'an in the parallel corpus

- *The Qur'an: Arabic Text with Corresponding English Meanings* (Sahih International) Almunatada Alislami, Abul Qasim Publishing House (1997).
- *The Meaning of the Glorious Koran* (Mohammed Marmaduke Pickthall) Reprinted by Plume (1997). First published 1930.
- *The Holy Qur'an: Translation and Commentary* (Yusuf Ali) Reprinted by Islamic Vision (2001). First published 1934.
- *The Holy Qur'an Translated* (M. H. Shakir) Published by Tahrike Tarsile Qur'an (1999).
- *The Noble Qur'an in the English Language* (Mohsin Khan) King Fahd Printing Complex, Madinah, Saudi Arabia (1996).
- *The Koran Interpreted: A Translation* (A. J. Arberry) Simon and Schuster (1996). First published 1955.

References

- Ahmad, S. (1999). *Introduction to Qur'anic Script*. London & New York: Routledge.
- Bodenbender, C. (2003). *The Punctuation and Intonation of Parentheticals*. MA Thesis, University of Victoria.
- Boersma, P., & Weenink, D. (2017, September 16). *PRAAT: Doing phonetics by computer* (Version 6.0.32) [Computer software]. Retrieved from <http://www.praat.org/>
- Biber, D., Johansson, S., Leech, G., Conrad, S. and Finegan, E. (2018) Longman Grammar of Spoken and Written English. Longman
- Chafe, W. (1988) Punctuation and the prosody of written language. *Written Communication*.
- Christensen, H., Gotoh, Y. and Renals, S. (2001) Punctuation Annotation using Statistical Prosody Models. In *Proceedings of the ISCA Workshop on Prosody in Speech Recognition and Understanding*. Pp35-40
- Dukes, K. (2017) *corpus.quran.com*
- Gaskell, G. and Mirkovic, J. (2017) *Speech Perception and Spoken Word Recognition*. London: Routledge.
- Kalbertodt, J., Primus B. and Schumacher, P. (2015) Punctuation, Prosody, and Discourse: Afterthought Vs. Right Dislocation. doi: 10.3389/fpsyg.2015.01803
- Igras, and Ziolkowski (2016) *Detection of Sentence Boundaries in Polish Based on Acoustic Cues*. Archives of Acoustics. Vol. 41, No. 2, pp. 233–243.
- Primus, B. (2007). The typological and historical variation of punctuation systems: Comma constraints. *Writ. Lang. Lit.* 10, 103–128. doi: 10.1075/wll.10.2.07pri
- Sappok, C. (2011). Das Deutsche Komma im Spiegel von Sprachdidaktik und Prosodieforschung. *Forschungslage – “Parsing vs. Phrasing” – Experimente*. Berlin; Münster: LIT.
- Yang, Li-ch. (2011) Tonal Variations in Mandarin: New Evidence from Spontaneous and Read Speech. Interspeech 2011, 12th Annual Conference of the International Speech Communication Association, Florence, Italy.