

Arabic Script of Written Malay: Innovative Transformations towards a Less Complex Reading Process

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ABSTRACT

A lot of efforts have been made by the Malaysian government to address today's lack of usage of the Arabic alphabet for writing the Malay language (i.e., *Jawi*) and making it popular among Malaysians. Many J-QAF (*Jawi, Qur'an, Arab dan Fardhu 'Ain*) teachers have been recruited to at least get Muslim primary school children today to learn *Jawi* formally. Nevertheless, this 700-year-old script continues to be marginalised by the population and is currently only perceived as a national heritage that is only used by the "more conservative" Malays in religious discourse. Thus, an effort to understand the root cause of why *Jawi* continues to be marginalised by the majority of Malaysians was conducted (Salehuddin, 2012) and by assessing the cognitive complexity of *Jawi*, especially in reading the script, Salehuddin (2012) carefully lists factors that lead to the complexity in reading this derived Arabic script. Following the assessment on the cognitive complexity of *Jawi*, the current paper puts forward some innovative solutions that can be introduced to *Jawi* to help reduce the cognitive complexity faced by its readers in the reading process. It is hoped that with an innovative transformation in the features of *Jawi*, this script will slowly regain its popularity and will ultimately be widely used in the Malay Archipelago.

Keywords: Arabic script, cognitive complexity, *Jawi*, national heritage, psycholinguistics

INTRODUCTION

The Arabic alphabet for writing the Malay language (henceforth, *Jawi*), was used as the standard script for the Malay written discourse in the Malay Archipelago since the year 1303. The script continued to be widely used in the Malay Archipelago in

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the administrative, cultural, and trade affairs among the aristocrats and administrators till the end of the Second World War, when the Roman Alphabet (*Rumi*) gained its preponderance over Jawi. Since then, Jawi slowly ceased to be the standard script of the Malay language.

In contrast to Arabic which has 29 phonemes in its system, the Malay language has 35 phonemes altogether. Because of this, the Jawi alphabet consists of 35 letters, excluding two letters of the Arabic alphabet that are actually a replication of the existing letters in the Arabic alphabet. These two letters are 1) “لا”, a letter that results from a combination of the letter “ل” and “ا”, and 2) “ة”, a letter that is pronounced either as a /t/ or a /h/, depending on its context. Five of the additional letters are original Malay phonemes (i.e., ح (/p/), ك (/g/), ف (/p/), غ (/ŋ/), and چ (/tʃ/)) they do not exist

in Arabic. One letter (i.e., ز (/v/)), although was not originally Malay, has become a part of the Malay phonological system as a result of borrowing from English. Although there are differences between the original Arabic letters and the six (non-native Arabic) letters of Jawi, the six letters are still considered as deriving from the Arabic script. This is because these letters share some features with the original Arabic letters in terms of their forms. According to Abulhab (2008), because of the similarity in their forms, such scripts could still be considered as a “derived Arabic script” (p. 182). For example, the letter چ (/tʃ/) has a close resemblance with the letters ج (/dʒ/), ح (/ħ/), and خ (/x/). Such close resemblance makes Jawi a derived version of the Arabic script (Table 1).

Jawi today is described as being increasingly marginalised by the majority

TABLE 1
The Malay and Arabic phonemes and their manifestations in the Arabic scripts

Malay and Arabic phonemes, and how they are written in Jawi				
/a/ → “ا”	/b/ → “ب”	/t/ → “ت”, “ة”	/dʒ/ → “ج”	/d/ → “د”
/r/ → “ر”	/z/ → “ز”	/s/ → “س”	/ʃ/ → “ش”	/k/ → “ك”
/l/ → “ل”, “لا”	/m/ → “م”	/n/ → “ن”	/h/ → “ه”, “ة”	/w/ → “و”
/j/ → “ي”	/ʔ/ → “ء”			
Malay phonemes borrowed from Arabic				
/θ/ → “ث”	/ħ/ → “ح”	/x/ → “خ”	/ð/ → “ذ”	/sʔ/ → “ص”
/dʔ/ → “ض”	/tʔ/ → “ظ”	/ðʔ/ → “ظ”	/ʕ/ → “ع”	/y/ → “غ”
/f/ → “ف”	/q/ → “ق”			
Malay phonemes that are non-existence in Arabic, and how they are written in Jawi				
/g/ → “ك”	/ŋ/ → “غ”	/p/ → “ق”	/ŋ/ → “ن”	/tʃ/ → “چ”
Malay phonemes borrowed from English				
/v/ → “و”				

of Malaysians, despite the fact that Malaysia is a country that has Malay as its largest ethnic group (*Utusan Malaysia*, January, 2011). Various efforts have been made by the Malaysian government to address the decline in the use of Jawi among Malaysians and at the same time, to promote the use of Jawi to Malaysians from all walks of life. In addition, the Ministry of Information, Communication and Culture has made various collaborative efforts with the Ministry of Education to revive the popularity of Jawi via mass media as well as through the teaching of Jawi in schools. The Education Ministry, through the J-QAF (*Jawi, Qur'an, Arab dan Fardhu 'Ain*) programme in primary schools, has recruited J-QAF teachers to at least get Muslim primary school children today to learn Jawi formally. However, despite the multi-million ringgit effort, Jawi continues to be marginalised in what used to be known as “Tanah Melayu” (literally “Land of the Malays”). Even in a state with prominent religious schools like Terengganu, it was reported by the State Education Department that the level of competence in reading Jawi among students enrolling in such schools has continued to decline despite their outstanding academic excellence (*Utusan Malaysia*, February 18, 2012). Such a phenomenon has become a growing concern among both academics and Malay nationalists; and the government’s tireless efforts in ensuring that Jawi is continually used by the people of Malaysia will probably be in vain if the people choose to continue to regard Jawi merely as a “cultural heritage”

that is used only in the Islamic discourse and by the “more conservative” individuals.

One possible reason that could lead to the decline in the use of Jawi is the fact that Malay language users have a choice of scripts that they can choose from: a choice between Jawi - the Arabic script for the written Malay, - and *Rumi* - the Roman script for the written Malay (Salehuddin, 2012). Nonetheless, why is Jawi the less favoured script between the two – even among the native speakers of Malay? One way to understand why Jawi happens to be the less favoured script for the written Malay is by assessing the cognitive complexity of Jawi, especially in the process of reading the script (Salehuddin, 2012).

THE COMPLEXITY OF READING JAWI

The complexity of a cognitive process refers to “the number of interacting variables that must be represented in parallel to implement the process” (Halford, Wilson & Phillip, 1998, p. 805). Hence, a person is said to be processing a complex task if he or she has to process a number of variables that interact with each other at the same time. According to Halford *et al.* (1998, p. 806), “the more interacting variables to be processed in parallel, the higher the demand”. For example, in a study on the acquisition of Malay numeral classifiers, Salehuddin and Winskel (2009, 2011, 2012) found that children acquire numeral classifiers *butir* and *ketul* at a later stage in comparison to other numeral classifiers (e.g., *keping* and *batang*), both in their production and their

comprehension. This is because “*butir*” and “*ketul*” are cognitively more complex in comparison to “*keping*” and “*batang*”. With this in mind, this paper aims to propose innovative ways to reduce the cognitive complexity of Jawi. However, before this could be done, a review on the cognitive complexity of Jawi based on analysis by Salehuddin (2012) was conducted.

According to Salehuddin (2012), Jawi is cognitively complex from two perspectives: 1) its physical properties, and 2) its linguistic properties. The physical properties of Jawi can be discussed in terms of the reading orientation, the forms of the letters and the presentation of each of the letters of Jawi. The linguistic properties of Jawi, on the other hand, can be discussed in terms of the morphology of Jawi and *Rumi*, and the phonology of Arabic and Malay systems.

Salehuddin (2012) argues that reading Jawi is cognitively complex, especially for those who are trained to read *Rumi* (reading from left to right) prior to reading Jawi (reading from right to left). In Malaysia, in order to be literate, children are more commonly taught to read Malay in *Rumi* rather than to read Malay in Jawi because of the fact that the former is currently the standard script of Malay. Hence, the accessibility of *Rumi* to the general public is unquestionable. For this reason, Malaysian readers are generally conditioned to read from left to right. Through practice (or what the behaviourists coin as “repetitions”), this left-to-right reading orientation which later develops as *saccade* (Rayner, Pollatsek, Ashby, & Clifton, 2012) becomes a habit.

According to the behaviourist theory, altering a behaviour that is already established as a habit is difficult because an established habit may interfere the process of altering the habit (James, 1980). Therefore, to get someone who is already conditioned to read *Rumi* (i.e. from left to right) to read Jawi (from right to left) is a real challenge. This is because the new learning (i.e., reading from right to left) may from time to time be the subject of “interference” from an already established habit (i.e., reading from left to right) (c.f., Conner, 1996). Such interference may make reading Jawi less automatic, and hence, make the process of reading Jawi a complex process.

The forms of the letters that closely resemble one and the other also make Jawi a more challenging script to read. Some of the letters are different only in terms of the number of dots and also the positioning of the dots around the letters. For example, the letters that represent the phonemes /b/, /t/, and /θ/ look similar from one another except for the fact that the letter representing the phoneme /b/ has one dot; /t/ has two, whereas /θ/ has three (i.e., “ب”, “ت”, and “ث” respectively). The position of the dot in the letter that represents the phoneme /b/ takes place beneath the body of the letter, whereas those in /t/ and /θ/ take place above the body of the letter.

Another feature that makes Jawi more complex than *Rumi* is its presentation (Salehuddin, 2012). Unlike *Rumi*, Jawi, like the Arabic script, is written in cursive, with “ligatures” joining one letter with another (Elbehri & Everatt, 2006, p. 276). Although

the letters are joined only at the intra-word level (i.e., with spaces between each word), the letters are “context-sensitive” (Korsheed, 2002, p. 33). In other words, a majority of the letters in Jawi exist in four forms. For example, the letter representing the phoneme /ŋ/ is written in the form of “غ” when it appears in isolation; yet, the same letter is written in the form of 1) “غ” when it is positioned at the beginning of a word; 2) “غ” when it is positioned in the middle of a word; and 3) “غ” when it is positioned at the end of a word. Six of the letters occur in two forms. These letters cannot be preceded by a letter, despite the fact that they can be preceded by a letter.

One letter (“ا”) cannot be joined with a letter after it, despite the fact that it can be joined with any letter before it. There is only one letter in Jawi that exists in only one form in all contexts and this letter (“ء”) represents the voiceless glottal plosive /ʔ/. As a result, the process of identifying letters in the process of reading Jawi actually “demands considerable cognitive attention” (Abu-Rabia, 2002, p. 300) on the part of its readers. This is because readers do not only need to know how ع, غ, and غ are different from each other, but they also need to know how these different letters are connected to one another at the intra-word level (e.g., غغغغ) (see Table 2).

TABLE 2
The manner Arabic letters are joined to each other and how some letters bearing different phonemes appear to be similar with one another

/m/ → م, مم	/n/ → ن, نن	/h/ → ه, ههه	/ŋ/ → ن, نين	/j/ → ي, يبي
/dʒ/ → ج, ججج	/h/ → ح, ححح	/x/ → خ, خخخ	/tʃ/ → چ, چچچ	
/b/ → ب, ببب	/t/ → ت, تتت		/θ/ → ث, ثثث	
/ʕ/ → ع, ععع	/ɣ/ → غ, غغغ		/ŋ/ → غ, غغغ	
/f/ → ف, ففف	/q/ → ق, ققق		/p/ → ط, ططط	
/s/ → س, سسس		/ʃ/ → ش, ششش		
/sʕ/ → ص, صصص		/dʕ/ → ض, ضضض		
/tʕ/ → ط, ططط		/θʕ/ → ظ, ظظظ		
/k/ → ك, ككك		/g/ → ك, ككك		
/w/ → و, ووو		/v/ → و, ووو		
/d/ → د, ددد		/ð/ → ذ, ذذذ		
/r/ → ر, ررر		/z/ → ز, ززز		
/a/ → ا, ابا		/l/ → ل, لال		
<p>Note: Except for the letter “ا”, the letters in the last four rows appear in two conditions; 1) in isolation, and 2) following a letter. The letter “ب” is positioned before the letters “و”, “ز”, “ن”, “ر”, and “ز” (e.g., وبو, and after the letter “ا”, (e.g., ابا) to show how the 7 letters can be connected to other letters but not to themselves.</p>				

Where the linguistic properties of Jawi are concerned, Salehuddin (2012) argues that since Jawi is a derived Arabic script, discussing how the morphological and phonological properties of Jawi lead to the complexity in reading the script will be made easier by comparing the linguistic properties of Arabic, from which Jawi is based on, with the system of Malay.

The morphological system of Arabic and that of Malay are different. The Arabic morphological system is a “root-based” system (Abu Rabia, 2002, p. 300), which is formed through a combination of consonants that represent the basic meaning of a particular word (Abu Rabia *et al.*, 2003). To illustrate this, “كاتب”, and “كتاب” are examples of words derived from the base form “كتب” (i.e., /ktb/), which semantically refers to “writing”. According to Abu-Ssaydeh (2012), there are more than twenty derived words from “كتب”. These derived versions are manifested by accompanying the base form of the word “كتب” with the vowel sounds at various places within and/or around the word. For example, the vowels /ɑ:/ and /i:/ are placed at different positions within the word “كتب” to get to its derived meanings which are “a book” (كتاب /kitɑ:bun/) and “author” (كاتب /kɑ:tibun/). It can clearly be seen here that the words “a book” and “author” both derive from one base form (“write”) and semantically, these words are closely related to the base form through various semantic processes. Malay, on the other hand, is not a “root-based morphology” language. Unlike Arabic, its root words consist of a

combination of consonants and vowels. This means, words that have the same consonants are unlikely to be related to one another. For example, the words “para”, “pari”, “paru”, “pura”, “puri”, and “puru” share the same consonants (i.e., “pr”) but are not related to one another; hence, the vowels that accompany them do not play similar roles as those in Arabic. As a result, even if these words are written in Jawi (as in پارو, پارې, پارا, فورا, فوري, and فورو), the meaning of each word is not related to one another because they are not derived from the “root” “فر”.

With regard to the phonological systems of Arabic and Malay, despite the fact that there are quite a number of phonemes borrowed into Malay from Arabic (e.g., /s/ and /ð/), the differences between the two sound systems are still significant. Where the vowel system is concerned, Arabic has 6 vowels – 3 long vowels and 3 short vowels. The three long vowels are /ɑ:/, /i:/, and /u:/ that are manifested in Arabic as “ا”, “ي”, and “و” respectively, whereas the three short vowels are /a/, /i/, and /u/ that are either not manifested in Arabic (in advanced Arabic texts) or are manifested as “َ”, “ِ”, and “ُ”, respectively. Where Malay is concerned, there are altogether 10 vowel phonemes (i.e., /a/, /i/, /ɪ/, /e/, /ɛ/, /ə/, /u/, /ʊ/, /o/, and /ɔ/) and none of them is a long vowel. These vowels, if they were to be written in Jawi, are usually manifested in either one of these three forms (i.e., “ا”, “ي”, or “و”), or not at all (see Table 3). From the Contrastive Analysis perspective, such a phenomenon is regarded as a *divergent phenomenon*, in which, one symbol is used to represent more

TABLE 3
The Arabic Vowels and the Malay phonemes they represent
(Adapted from Salehuddin, 2012)

Arabic letters	Vowels
“ا”	/a/
“ي”	/i/, /ɪ/, /e/, /ɛ/, /ə/,
“و”	/u/, /ʊ/, /o/, and /ɔ/
Ø (no symbol)	/a/, /i/, /ɪ/, /e/, /ɛ/, /ə/, /u/, /ʊ/, /o/, and /ɔ/

than one phoneme. According to Gass and Selinker (2008), the divergent phenomenon is marked with a “Level 5” degree of difficulty – the highest degree of difficulty for the learning of a language.

According to Salehuddin (2012), confusion also takes place in consonants. It is known that Malay loans the voiceless uvula plosive /q/ from the Arabic sound system so that the sound can be used in the loaned Arabic words such as “Qur’an” and “Qari”. Based on the transliteration of the Arabic alphabets and the sounds they each represent (e.g., Pedersen, 2008), the letter “ق” represents the voiceless uvula plosive /q/, whereas the letter “ء” represents the voiceless glottal plosive /ʔ/. However, the manifestation of the voiceless glottal plosive /ʔ/, a phoneme that is inherent in the Malay language that appears in words like “mak” (mother) and “adik” (younger sibling) takes place in the form of the letter “ق” and not “ء” in Jawi. Such a phenomenon causes confusion among those learning Jawi because of the mismatch between the letter they see and the sound they should produce. It would be unlikely for a Malay novice reader to read “اديق” correctly despite the fact that the word “adik” is one of the frequently occurring word in the Malay

speech community (and that “adik” may be the term he uses to address himself). Instead of reading “اديق” as [adɪʔ] because of the spelling, a novice reader is more likely to read the word as [adɪq] and will pronounce the voiceless glottal plosive with great difficulty since the phoneme only occurs in the Arabic loaned words. It is not known why the letter “ق” is used to spell a Malay word in Jawi when the phoneme /q/ is not a part of the original Malay sound system (see Table 1).

As discussed earlier, the Arabic sound system is not entirely similar with the Malay sound system (Ismail Dahaman, 1991). Problem, hence, arises when Jawi is used as the script to write Malay (see Table 4).

As illustrated in Table 4, the Malay vowels are manifested in a variety of ways in Jawi because of the mismatch between the number of vowels in Malay and those in Arabic. For example, the low front vowel /a/ is manifested in *Rumi* in the form of the letter “a” regardless of the number of syllables the word has. However in Jawi, in a two-syllable word such as “ajar” (i.e., /adʒar/), the low front vowel phoneme is only manifested in the form of the letter “ا” in the first syllable and is not manifested at all in the second syllable, resulting in

TABLE 4
The Malay vowels and their manifestations in the Arabic script (Adapted from Salehuddin, in 2012)

Malay Phoneme	Jawi / Arabic Letter	Example
/a/	“ا”	“ <i>ajar</i> ” (i.e., /adʒar/ as in “اجر”), “ <i>papaya</i> (i.e., /papaja/) as in “ڤاڤايا”
	∅	“ <i>rak</i> ” (i.e., /raʔ/ as in “رق”); “ <i>ajar</i> ” (i.e., /adʒar/ as in “اجر”)
/ɛ/	“ي”	“ <i>teh</i> ” (i.e., /tɛh/ as in “تيه”)
	∅	“ <i>van</i> ” (i.e., /vɛn/ as in “ون”)
	“اي”	“ <i>enak</i> ” (i.e., /ɛnaʔ/ as in “اينق”)
/ə/	“ي”	“ <i>pelekat</i> ” (i.e., /pələkat/ as in “ڤليكت”)
	∅	“ <i>pelan</i> ” (i.e., /pəlan / as in “ڤلن”)
/e/	“ي”	“ <i>serong</i> ” (i.e., /seroŋ/ as in “سيروغ”)
/i/	“ي”	“ <i>kirim</i> ” (i.e., /kirim/ as in “كيريڤ”)
	“اي”	“ <i>ini</i> ” (i.e., /ini/ as in “اين”)
/ɪ/	∅	“ <i>ini</i> ” (i.e., /ini/ as in “اين”)
/o/	“و”	“ <i>roda</i> ” (i.e., /roda/ as in “رود”)
	∅	“ <i>hormat</i> ” (i.e., /hormat/ as in “حرمته”)
/ɔ/	“و”	“ <i>pokok</i> ” (i.e., /pɔkɔk/ as in “ڤوكوك”)
/ʊ/	“و”	“ <i>rumpu</i> ” (i.e., /rumpu/ as in “رومڤوت”)
/u/	“و”	“ <i>buku</i> ” (i.e., /buku/ as in “بوكو”)
	“او”	“ <i>unta</i> ” (i.e., /unta/ as in “اونتا”)

the spelling “اجر”. The same vowel is not manifested in one-syllable words such as “*rak*” (i.e., /raʔ/); hence, the spelling “رق”. Nonetheless, the vowel is manifested in the form of the letter “ا” in all the syllables of three-syllable words like “*papaya*” (i.e., /papaja/), resulting in the spelling “ڤاڤايا”.

As a result of the haphazard mismatch between the letters and the phonemes each of the letters represents, there appears to be quite a number of homographs in Jawi. To illustrate this, the word that is spelled as “بوروغ” may be read as “*burung*” /buruŋ/ (bird) or “*borong*” /boroŋ/ (“wholesale”); whereas, the word that is spelled in Jawi as “بوكو” may be read as “*koko*” /koko/ (“cocoa”) or “*kuku*” /kuku/ (nail). For readers to know which meaning

the homographs are referring to, they will have to read beyond the word level to know the context the word occurs. For example, readers will only know that the word “بوكو” refers to ‘nails’ only after they have read the sentence “بوكو ساي فاته” (i.e., “*kuku saya patah*” or “my nail breaks”); they will only know that “بوكو” refers to ‘cocoa’ only after they have read the sentence “بوكو ساي فانس” (i.e., “*koko saya panas*” or “my cocoa is hot”). According to Salehuddin (2012), if reading one letter in Jawi is already a struggle for novice readers, to have to read a complete sentence in Jawi in order to decipher the meaning of one word is a more challenging task for them.

Apart from having to deal with the problem that arises in homographic words

as demonstrated above, readers of Jawi also face problems in reading Malay in Arabic script when the word happens to be borrowed words from Arabic (Salehuddin, 2012). For example, readers would not know whether Arabic loan words that end with “ة” such as “رحمة” have to be read as /rahmah/ or /rahmat/. This is because in Malay, “Rahmah” usually refers to the name of a female individual, whereas “Rahmat” refers to “God’s Mercy”. For one to read “*Berikan saya Rahmah*” (“Give me the lady whose name is Rahmah”) when it should mean “*Berikan saya Rahmat*” (“Give me God’s Mercy”); the result could be disastrous, especially to listeners who are oblivious to the context the sentence is being uttered. In addition to this, a person who has to write Arabic loan words in Jawi would not be able to know which form of spelling they should use. This is because Arabic words such as the one that carries the meaning “the memorisation of the Qur’an” can be written either as “حافلن” (hafalan) or “حفظن” (hafazan) in Jawi. Two forms of spelling for the same meaning, according to Salehuddin (2012), will surely cause confusion on the readers, not only when they are asked to read the words, but also when they are asked to spell the words.

As a result of the physical and the linguistic properties of Jawi, as well as the mismatch between the letters that are used to represent the Malay speech sounds mentioned above, those who can read the Holy Quran (which is written in the Arabic script) well will still have problems reading Malay in Jawi (which is also in the

Arabic script). Hence, it can be concluded that reading Malay in the Arabic script, as proposed by Salehuddin (2012), is indeed a complex process due to its high degree of cognitive complexity.

POSSIBLE INNOVATIVE TRANSFORMATIONS IN JAWI

Based on the arguments put forward by Salehuddin (2012) above, it could be argued that Jawi is marginalised by speakers of Malay due to the high degree of cognitive complexity required in reading the script. Hence, by reducing the degree of complexity of Jawi, it is hoped that Jawi will not only be revived, but it will also be a popular script for Malay just like it used to be in its heyday. However, how can the degree of complexity of Jawi be reduced?

In the attempt to reduce the degree of complexity of Jawi, it is important to ensure that the physical properties of the Arabic letters are not compromised. This is because it is these features that make Jawi a derived version of the Arabic scripts. What can be manipulated, though, is the spelling system of Jawi that has clearly caused confusion among readers.

As mentioned earlier, there are phonemes in Malay that are manifested in the Arabic letters and there are those that are not manifested at all, depending on the context. These types of inconsistencies in the spelling system of Jawi have been shown to have caused a lot of confusions among readers, especially the novice ones. Thus, one possible way to reduce the complexity in reading Jawi is by making the spelling

system of Jawi more systematic.

The Jawi spelling can be made more systematic via three ways: 1) by abiding the Arabic-Roman transliteration rules (e.g., /ʔ/ is systematically manifested as “ء”); 2) by manifesting all Malay vowel sounds using one of the Arabic vowel letters (i.e., “ا”, “ي”, or “و”); and 3) by using diacritics to accompany the vowel letters.

Abiding to the Arabic-Roman transliteration rules in the writing of Malay in Jawi will help to minimise the confusion on how to pronounce the letters in certain Malay words. For example, “pokok” (tree) is currently spelled as “ڤوكوك”; yet, the word has always been pronounced as [pokoʔ] and never as [pokoq]. By abiding to the Arabic-Roman transliteration rules in the Jawi spelling system (e.g., by spelling the word “pokok” as “ڤوكوء”), readers will no longer need to decide whether to pronounce the letter “ڤ” as /ʔ/ or /q/ as they would have in “ڤوكوك”. This can help reduce the existing complexity in reading Jawi and hence, make Jawi an easier script to read in the future.

Manifesting all the Malay vowel sounds using one of the Arabic vowel letters (i.e., “ا”, “ي”, or “و”) can also help minimise confusion among readers on how the vowels in a particular word should be manifested. For example, vowels are rarely manifested in the monosyllabic words of the current Jawi spelling system. Hence, readers who come across the word “بن” will have difficulty to decide whether the word refers to “bin” (i.e., “son of”) or “ban” (i.e., “English bun”). In this case, readers will have to read further to find out the context where the word occurs

before they can decide which word “بن” refers to. Hence, reading Jawi with all the Malay vowel sounds manifested (such as “بين” and “بان”) can help reduce the complexity of reading the script.

Similarly, the use of diacritics to accompany the vowel letters in the proposed Jawi spelling is necessary because there are only 3 vowel letters in the Arabic script that can be used in place of 10 vowel sounds of Malay. This is because, based on the current Jawi spelling shown in Table 3, one letter (e.g., “ي”) may be manifested in the form of 5 vowels. The use of diacritics can help to reduce the level of difficulty from a Level 5 degree of difficulty (i.e., “divergent phenomenon”) to a Level 0 degree of difficulty (i.e., “one-to-one match”).

Fig.1 presents a summary of ten (10) possible transformations that could take place in the Jawi spelling system. To further illustrate this, while “ajar” (i.e., /adʒar/) is spelled as “اڤر” in the current Jawi spelling system, the proposed spelling for “ajar” will not only be in the form of “اڤر” but also with the presence of relevant diacritics (i.e., َ) on top of “اڤر”. “Pin” (i.e., /pin/), on the other hand, should not only be spelled as “ڤين”, but the word should also be spelled with the presence of relevant diacritics, (i.e., ِ) beneath “ين” to assist reading, especially in disambiguating /pin/ from /pen/. These two words are spelled as “ڤين” in the current Jawi spelling system. Hence, wherever is necessary, a combination of all the three ways mentioned above can be adopted to make the reading of Jawi a less complex reading process.

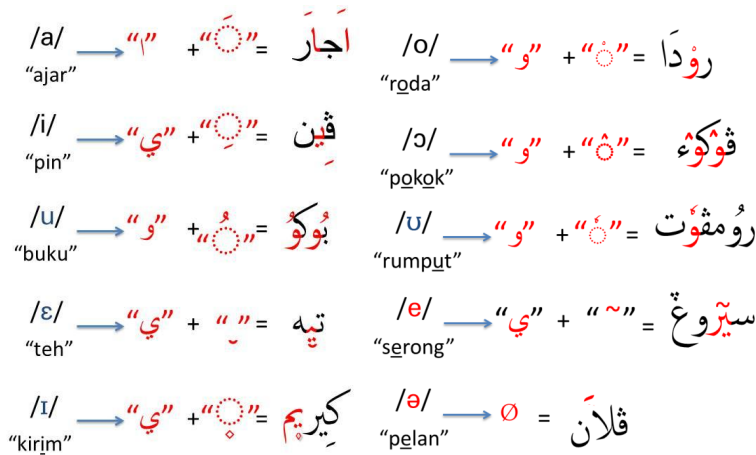


Fig.1: Possible innovative transformations in the Jawi spelling system

With an innovative transformation in the spelling system, problems that surface as a result of homographs could perhaps be resolved. If currently the spelling “بوروغ” could either mean “burung” or “borong” in Malay, the presence of diacritic to disambiguate the homograph could help readers in making the process of reading Jawi less complex (Fig.2).

“burung” “borong”(بوروغ)
 بُورُوعْ بُورُوعْ

Fig. 2: Disambiguating “بوروغ” homograph via diacritics

DISCUSSION AND CONCLUSION

The proposed change in the spelling system of Jawi may be perceived as drastic and radical among those who wish to preserve the originality of the derived Arabic script.

However, if no action is taken to reduce the complexity in the process of reading (and writing) Jawi, this Arabic script of Malay will continue to be marginalised. Nevertheless, future experimental research needs to be conducted to investigate whether or not the proposed change in the spelling system of Jawi will help in reducing the complexity in the process of reading (and writing) the script.

If we were to look at the history of how the Holy Qur’an was written, we may appreciate such a move to transform the spelling system of Jawi. The Holy Qur’an was initially memorised, recited and therefore preserved based on memorisation by Muslims during the Prophet Muhammad’s (may peace be upon him) time. This means the Holy Qur’an was only written later for recitations and eventually, diacritics were added to the Arabic scripts in the Qur’an to ensure accuracy in reciting the words of The Almighty.

Jawi has evolved many times; it has

evolved from the spelling system found on the Terengganu Inscribed Stone to the “*Sistem Ejaan Za’ba*”; and from the “*Sistem Ejaan Za’ba*” to the 1986 “*Pedoman Ejaan Jawi Yang Disempurnakan*”. Nonetheless, another transformation in the spelling system of Jawi that is more systematic is seen as necessary so as to revive and popularise the writing system of Malay in the Malay Archipelago. It is hoped that in doing so, the writing system will cease to be known “merely as a heritage” as it is now perceived.

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