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Reconstruction of Proto Central of Pahang River Phoneme

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ABSTRACT

This study reconstructed the proto-phoneme of consonants for a subdialect in the central basin of the Pahang River. The length of this river is 459 kilometres, and the area in the centre part of the river was selected to perform comparative linguistics observations. Five research sites were selected for this study purpose, namely Kuala Tembeling (KT), Lada (LDA), Jeransang (JRG), Kedondong (DDG), and Bukit Nikmat (BMT), based on their distinctive phonological characteristics. The research sites were visited twice to ensure the authenticity of the gathered data. The data were screened to extract cognate words using Crowley's framework. Crowley's sound correspondence set (SCS) was employed to evaluate and extract proto-phonemes. After the phonemes were retrieved, the reconstructed proto-phoneme of Adelaar was used as a point of comparison. The findings revealed that Proto-Centre Pahang river (PCPr) has 18 ancient consonant phonemes (*p, *b, *t, *d, *k, *g, *m, *n, *ɲ, *ŋ, *l, *s, *ɣ, *h, *c, *ɟ, *w, and *j). The distribution of these consonants is diverse and depends on the consonant type. A vocalic feature of PCPr, such as vowels and diphthongs, should be the subject of future discussion to arrive at definitive conclusions regarding phonological changes between PCPr and Proto-Malayic (PM).

Keywords: Consonants, distribution, phoneme, Proto-Centre Pahang River, reconstruction

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INTRODUCTION

The Pahang River stretches for approximately 459 kilometres and is the longest river in Peninsular Malaysia. This river flows from the centre of the Peninsular to the East Coast region. The river connects several villages, including Jerantut, Temerloh, Maran, Bera,

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and Pekan. This present study focused on Jerantut due to its historical significance. The following five research sites were selected to conduct the investigation: Kuala Tembeling (KT), Lada (LDA), Jeransang (JRG), Kedondong (DDG), and Bukit Nikmat (BMT).

Studies by Linehan (1928a, 1928b, 1930, 1936, 1951) documented the establishment of the Malay population in these areas thousands of years ago. Unlike many other rural areas, its population appear to be fractional due to frequent calamities known as massive flood. As this disaster occurred once every 100 years or less, the locals were forced to relocate to other safe settlements. Most of the residents are composed of elderly people who live mostly alone. This study documents the phonological characteristics found in these research sites.

Problem Statement and Research Objective

Pahang is frequently referred to as a state with only a single dialect. For example, Omar (1977) used political labelling to classify Pahang as a whole as a variant of the southern group, including Malacca, Johor, Selangor, and Perak. This assertion contradicts her 38-year writing (Omar, 2015a) that clearly states that the Pahang dialect has its phonological pattern. This notion is supported by findings that Pahang is influenced by other dialects, such as Kelantan and Terengganu (Hussein, 1973). Several studies, such as Omar (2015a), applied district orientation classification. Despite her contribution to illustrating the spread of dialect in the state of Pahang, Collins (1989, 1999), on the other hand, rejected this method upon adhering to Jalaluddin et al. (2017) and Hamzah et al. (2014) due to the similar concept of political labelling.

Omar (1977), Hussein (1973), and Karim and Ibrahim (1977) divided Pahang into groups based on their phonetic distinctions. However, these studies were impressionistic (Jalaluddin et al., 2017) as they relied on isolated phonological findings and dismissed the comparative linguistics approach. The comparison of interdialectal or subdialect illustrates the linguistic properties in the area. According to Karim and Ibrahim (1977), Kelantan and Terengganu dialects influenced Ulu Tembeling. Due to limited prior studies in the field of linguistics to prove the interval relationship upstream of the Pahang River, Hasrah et al. (2014) identified the pattern of its changes with an ancient language called the Proto Malayik (PM).

Although past studies have significantly impacted the basic framework of phonological properties for several areas in Pahang, only a handful of studies have adopted the comparative linguistics approach in an area where phonological variances exist (Zaidi & Aman, 2019). Only a handful of studies in Pahang River had deployed the comparative linguistics method. The dialect varieties spoken by the natives along the Pahang River can change their linguistic form gradually depending on the river groove, as described by Hussein

(1973), suggesting in-depth investigation using the comparative linguistics method in the central area of the Pahang River. Hence, this study examined the characteristics of the language in the Jerantut district, as well as the reconstruction of Proto-Centre Pahang River (PCPr) phonemes.

LITERATURE REVIEW

The diversity of the dialect in Pahang has enabled scholars from various fields to delve deeper into it from their respective perspectives. The discussion in this literature review revolves around three issues: the phonological aspect of the dialect of Pahang Malay, the dialect classification based on the phonology approach, and the classification of Pahang Malay dialect evidence based on comparative linguistics studies. The phonological discussion of the Pahang Malay dialect was initiated by Sturrock (1912), Karim and Ibrahim (1977), Omar (1977, 2015a), Collins (1983a, 1983b), and Idris (1989).

Sturrock (1912) initially discovered the gem of the Pahang dialect characteristics. He collected some lexical believed to stem from the central area of Pahang and discussed his findings from a phonological standpoint. However, the discussion on the Pahang dialect was limited, as his focus was on the Kelantan dialect. He described that the features in the Pahang dialect resembled the written form of the Malay language. After a 65-year interval, Karim and Ibrahim (1977) discussed a phonological aspect of the Ulu Tembeling dialect. The study concentrated on the non-Malay language system and unveiled new findings about the phonological system of the dialect used by the Malays in that region. Based on the phonological data, the study arrived at an unexpected conclusion that the Malay dialect spoken by the people in Ulu Tembeling significantly differed from the Malay dialect spoken on the West Coast. They found that the Ulu Tembeling dialect spoken by the Malays shared a characteristic of the Kelantan and Terengganu dialects.

Omar (1977) gave a comprehensive presentation on the phonological characteristics of a few regions of Peninsular Malaysia dialects based on her supervisee data. Pahang, she reasoned, belonged to the south group, which included Malacca, Johor, and other states. She classified these regions into their respective group. However, this perspective was reprimanded by Collins (1989, 1999) as these dialects were labelled based on the names of the states. Despite being criticised by some scholars, the perspective painted a picture of the forms of Pahang dialect phonology.

Collins (1983a, 1983b) addressed the issue in his two articles. He developed a deeper discussion about the phonological forms of Malay people in the Pahang River. However, his wide spectrum of discussion led to his comparative linguistics methods being questionable. Initially, he explained his findings from the phono logical standpoint and later based on historical context. Such a comparative study was somewhat perplexing due to the mixed methods used. He demonstrated that Pahangites, as a whole, did not speak

a single dialect. In his two papers, for instance, he concluded that Temerloh had a significant distinction with other remote areas, despite their close distance. This case could also occur in other parts of the Pahang River, as Hussien (1973) claimed that Pahang had experienced gradual changes in phonological features.

Omar (2015a) is one of the few experts researching all Malay dialects, including the Bruneian Malay dialect characteristics. However, the discussion of her findings did not differ significantly from that of her studies in 1977. She was more concerned with the form of regional dialect this time. It was observed from her division of subdialects of Pahang as Pekan, Raub, Benta, Kuala Lipis, Temerloh, and Hulu Tembeling (or Ulu Tembeling). However, her statement was intriguing as she considered Pekan as the main subdialect of Pahang or the standard dialect of Pahang, based on historical factors that hoist Pekan as the centre of royal government. This region may have been the site of an old settlement. Collins (1999) supports this viewpoint, stating that an old human settlement most likely began near a coast or a river. On the other hand, her writing is overly simple and descriptive about certain regions in Pahang. Her study of Pahang dialects substantially contributes to the knowledge foundation that indicates "what the dialects are like," as stated by Collins (1989, p. 238).

Apart from Collins (1983a, 1983b) and Asmah Omar (2015a), Idris (1989) also discussed her phonological findings, especially in Kampung Sertang, downstream of the Pahang River. Since Kampung Sertang is not far from Temerloh, the study was an extension of Collins' study (1983a, 1983b). Most of the phonological characteristics of this region, the Sertang variant, seemed to share with the regions that Collins reported. Her writing, similar to Asmah Omar's, is straightforward and descriptive.

Turning to the second issue, scholars have discussed the relationships among Pahang dialects using phonological findings. A study by Hussein (1973) is the most notable, however. Referring to phonological evidence, his classification of the Pahang dialect concludes that Pahang does not belong to any northern or southern group. It contradicted the statement put forward by Omar (1977). It is due to the high level of dialect mingling from other regions. He attempted to categorise certain Pahang regions as having a significant relationship with other regions. Some regions are linked to Johor and Malacca. Some Pahang regions reflected the phonological characteristic of Perak. Most of the East Coast of Pahang heavily shares with the Terengganu dialect. Some regions have Kelantan characteristics (Karim & Ibrahim, 1977). He briefly discussed a phonological feature of the Pahang River by stating, "...as we go up the river, we see a very gradual change of the pronoun awɔʔ 'you' to aoʔ, and finally, ɔʔ," implying a non-regional variety of phonological systems. The study briefly summarised the Pahang dialect.

The third issue is more closely related to the specific theme of this study and serves

as evidence of the comparative linguistics aspect. According to Hasrah et al. (2011, 2014), the dialect spread in the Jelai River and Lipis River indicated human movement from upstream to downstream. It can be seen in the evidence of kinship, which displays that the influence of Tanjung Bungor variants is diminishing when compared to other variants. According to Linehan (1936), the likelihood of the old society in this area moving from upstream to downstream is very likely. The gradual changes in the dialect occurred in stages beginning in the upstream area (Che Kob & Hasrah, 2009; Hasrah et al., 2011, 2014). This notion is similar to that stated earlier by Hussein. The Pahang River has the biggest type of phonological differences among those settlements. Hasrah et al. (2013) claimed that the locality of certain parts of the Pahang River spoke differently depending on how fast the river flowed. It is indeed a good impression. However, this study concluded that each remote area along this river has its way of pronouncing words.

Hasrah et al. (2013) assessed the historical linguistics of the Tembeling River region (or Ulu Tembeling). Their historical linguistics study was limited to four localities' innovation and retention features: Mat Daling, Bantal, Gusai, and Pagi. They found that the dialect of Hulu Tembeling [-nasal] accommodated the last consonant of a word, replaced by a certain plosive consonant in the same place of articulation of the omitted nasal sound. "Certain plosive consonant" refers to the alignment of /-m/ → [-p], /n/ → [-t], and /-ŋ/ → [-k] consistently at the end of the word. The study revealed that not all characteristics of the Terengganu dialect were present in the Ulu Tembeling dialect. According to Omar (2015a), the most notable phonological characteristic of the Terengganu dialect is the /n/ → [-ŋ] change, but this was not observed in the Ulu Tembeling dialect.

The findings of the Pahang dialect phonological characteristic reported in Sturrock (1912), Karim and Ibrahim (1977), Omar (1977, 2015a), Collins (1983a, 1983b), and Idris (1989) facilitated in providing a fundamental overview of the dialectal phenomena in Pahang, although some of the discussions are district-based. Some scholars provided a general overview of the expansion of the Malay dialect in Malaysia based on phonological data (see Hussein, 1973; Karim & Ibrahim, 1977). The comparative linguistics approach is more relevant and suitable for discussing a language's history and changes. This particular approach was deployed by Che Kob and Hasrah (2009) and Hasrah et al. (2011, 2014) to assess the upstream of the Pahang River. Hasrah et al. (2011, 2014) examined the dispersion of phonological differences in depth of that area, whereby the distribution gradually travelled down to the river's channel downhill. The same phenomenon occurred in the middle of the Pahang River. Based on prior research, this present employed the comparative linguistics approach to extract the proto form of phoneme and lexical of the centre of the Pahang River.

METHODOLOGY

This study deployed the qualitative and *huluan* approach prescribed by Asmah Omar (2015b). The *huluan*, if understood literally, would bring a more erroneous interpretation than Omar's (2015b). The *huluan* proposed by Omar reflects the very beginning of a study (both *huluan* and *hiliran* definitions remarked by her). Hence, this study is fundamental to identifying the characteristic of central Pahang River variants.

The informant-based data involved 427 glossary words. Upon discussing informants, various scholars have opined different perspectives on the selection of gender, organ speech conditions, age, and native, among others. Some scholars were more inclined to women informants because of their original form of self-preserved (Ayatrohaedi, 1979; Che Kob, 2015). Ortin (in Boberg et al., 2018) and Chambers and Peter (2004) asserted that men are more suitable to be informants due to several more vernacular nature factors. However, Omar (2015b) emphasised that researchers should always be aware of local culture and taboos.

This present study discovered that, in addition to gender issues in dialectology, other factors (e.g., age and native/non-native person) were influential and should be considered. As a result, the following three critical factors were weighed while selecting the informants for this study: NFS or native, *fitrah* (able-bodied), and *sihat* (healthy), as emphasised in Zaidi et al. (2021). These three factors were deployed to determine the best informants for data collection. Hence, most of the visited locations involved an elderly man whose native articulation organ was still in good condition.

The interview commenced with a simple conversation. The purpose of this study and participation procedures were explained to be informants. As soon as the informants understood and agreed to participate in this study, the interviewer began asking them the names of things or abstract words, to which they responded in their native language. The interviewer recorded the interviewees' pronunciation using the International Phonetic Alphabet (IPA). This procedure continued until 427 words were collected in transliterated IPA form.

Next, the gathered data were analysed using Crowley's (1997) framework. The framework was applied to extract proto-phonemes. First, non-cognate words were discarded. The remaining cognates were arranged in Sound Correspondence Set (SCS). After that, a principle was applied to extract proto-phoneme from the cognates.

The SCS refers to a platform that extracts the proto-form of the phoneme. It is a linguistics workstation that can extract ancient phonemes and lexicons. The SCS draws out ancient phonemes and lexical, which facilitates researchers rebuilding an inventory of PCPr. However, after going through the criticism levelled by Gell-Mann and Ruhlen (2011), this study avoided reconstructing the forms of words onomatopoeia, loans, and coincidental words (in terms of pronunciation). For example, the word "road" is *jalan* in Malay, while *jalan* in Finnish has the same structure but a different meaning. Hence, only cognate words were used in the reconstruction

process. Table 1 lists several instances of the reconstructed *laɣi "run" by using SCS.

Table 2 shows the process of extracting proto phoneme *b. It presents the distribution of the/ sound for all five locations. As observed, the three types of distribution of /b/ are: the first two denote initial distribution, while the rest signifies distribution of /b/ in the medial position.

The studied locations had a distribution of the /b/ sound in initial and medial positions. It signifies a strong presence of the /b/ sound in PCPr and is eligible for reconstruction. It is where *b is found in most areas (initial and medial), thus the minimum problem for /b/ to be reconstructed. Therefore, the *b sound in PCPr is listed as an extracted proto phoneme, as displayed in Table 3.

Table 1
Examples of sound correspondence set[1]

	Va		**Vb**		**Vc**		**Vd**		**Ve**		**Vf**		**Vg**		**Vh**		*****
/	l	:	l	:	l	:	l	:	l	:	l	:	l	:	l	/	*l
/	a	:	a	:	a	:	a	:	a	:	a	:	a	:	a	/	*a
/	ɣ	:	ɣ	:	ɣ	:	r	:	r	:	ɣ	:	ɣ	:	ɣ	/	*ɣ
/	i	:	i	:	i	:	i	:	i	:	i	:	i	:	i	/	*i

V= Variant

[1] The Asterisk sign refers to a proto symbol. For example, if an analysis has evidenced that /l/ is a reflex from the proto form, it is labelled as proto /l/ or *l. The same process applies to the second correspondent of the/a/ sound. The analysis then incorporated these resources into its logical order. As a result, the lexical proto discovered is *laɣi for the word "run."

Table 2
*Distribution of *b in PCPr*

MP	**PCPr**	**Glos**	**Differential modulation**
*bukit	*bukit	*hill*	KT, LDA, JRG, DDG, BMT; bukeʔ
*bəsaɣ	*bəsa	*big*	KT, LDA, DDG; bəsɔ JRG, BMT; beso
*libar	*liba	*width*	KT; lɛbɔ LDA, DDG; lebɔ JRG, BMT; lebo
*rambut	*ɣambut	*hair*	KT; LDA, JRG, BMT; ɣamboʔ DDG; ɣambɔʔ
*tumbuh	*tumbuh	*grow*	KT, LDA, BMT; *tumboh JRG, DDG; ∅
*təbəl	*təbə	*thick*	KT; tebaᵊ LDA; təbɛj JRG, DDG, BMT; təbɛ

Table 3
Overview of /b/ sound distribution and its extracted form

Variant	**b-**	**-b-**	**-b**	**Extracted**
KT	b-	-b-	-	
LDA	b-	-b-	-	
DDG	b-	-b-	-	*b
JRG	b-	-b-	-	
BMT	b-	-b-	-	

The process has some criteria before a candidate is declared as a "Majority Win" (Campbell, 2013). It cannot be determined arbitrarily. Tight principles and criteria guide this excavation process. For example, the first row of the /l/ sound in Table 1 clearly is a win situation due to the absence of another candidate. As for the fourth row, some candidates (e.g., ɣ; r) take the proto form in synchronic construction. Only the majority is eligible to be reconstructed in this case. Crowley (1997) outlined the following criteria to identify proto phoneme:

1. The shape of ancient language changes should be an acceptable sense. In such a case, the decision must be based on solid evidence.
2. All changes should be minimised to the greatest extent possible.
3. A balanced ancient phoneme inventory is required for the reconstruction process.
4. A sound cannot be reconstructed in its proto form until it is absolutely eligible.

The listed criteria are only relevant for PCPr proto-phoneme reconstruction. Data from Adelaar (1992) were used in this study for comparison. This study excluded classification elements. Dialect classification will be discussed in a future study.

FINDINGS

Notably, 18 reconstructed types of ancient phonemes were observed based on the field research conducted in five locations (KT, LDA, JRG, DDG, and BMT). These 18 proto phonemes of PCPr included *p, *b, *t, *d, *k, *g, *m, *n, *ɲ *ŋ, *l, *s, *ɣ, *h, *c, *ɟ, *w, and *j. Based on the premise stated prior, these consonants were extracted using SCS. Adelaar's (1992) data were used as a comparison medium in a future discussion.

The PCPr successfully recorded a voiceless bilabial plosive /p/ with dispersion in all segments; initial, medial, and final. No element of innovation was observed for this sound. As a result, the /p/ sound in the PCPr variant was reconstructed as *p, which is a direct reflex from the MP. Despite the fact that LDA has NULL in Table 4, the alternate evidence verified the existence of /p/ on the final position.

There are a few types of modulation for words in this region. For instance, the word *thigh* is pronounced as [pəhə] for all variants except LDA. As tabulated in Table

Table 4
Proto /p/ distribution

MP	PCPr	Glos	Differential modulation
*paha(ʔ)	*pəhə	*thigh*	KT, JRG, DDG, BMT; pəhə LDA; pəhəʷ
*pipi(?)	*pipi	*cheek*	KT, JRG, DDG, BMT; pipi LDA; pipij
*nipis	*nipis	*thin*	KT, LDA, JRG, BMT; nipeh DDG; tipeh
*api	*api	*fire*	KT, JRG, DDG, BMT; api LDA; apij
*hatəp	*atap	*roof*	KT, LDA, JRG, DDG, BMT; ataʔ
*asəp	*asap	*smoke*	KT, JRG, BMT; asaʔ LDA; ∅ DDG; asɑʔ

2, this region has its own pronounces, such as [pəhəʷ]. Similarly, the word *cheek* in KT, JRG, DDG, and BMT is [pipi], but in LDA, it is pronounced as [pipij]. A pattern of semi-vowel insertion is noted at the final position of the open-ended word. The word *fire* reflects the same thing as when LDA is pronounced as [apij]. It was kept in mind while assessing the next issues. The following table provides an example of *p distribution in the PCPr variant.

Situations for voiced bilabial plosives /b/ in Table 3 differ from the /p/ sound in PCPr. It is most obvious in the distribution of /b/ for variants in PCPr, which exist only on the initial and medial positions. There is no evidence that /b/ exists in the last position for the 427 tested words. Phonetic acoustic studies by Shahidi et al. (2012) showed that the Malay language system does not have such sound in the final position. It is consistent with the MP and, possibly, a few other Malay dialects.

Table 5 lists a few groups of words with different pronunciations. In Table 5, JRG and BMT share the same phonological characteristics for the following words: *big*, *width*, and *thick*, which differ from the rest. It included DDG, but it is less visible than the other two. More samples are presented in Table 5.

The distribution of voiceless alveolar plosives /t/, as listed in Table 4, is found in all word segments. It is portrayed by synchronic discovery, as shown in Table 6. However, the situation in the final position differs slightly from the /p/ sound when the final /t/ sound is pronounced as [ʔ] at the PCPr variation level. For example, PCPr *bukit in KT, LDA, JRG, DDG, and BMT is pronounced as bukeʔ; displaying that the [ʔ] sound simply behaves as an allophone for phoneme /t/. Due to the ability of the relatively restricted [ʔ] sound to change the original meaning, the reconstructed phonemes will be *t solely.

At this point, one may conclude that LDA has a different system, such as how LDA reacts to the word *drift* as PCPr *aɲut. In LDA, it is pronounced as [aɲəʔ]—an abnormal sound change. It is because LDA tends to naturalise the [u] sound, whereas BMT weakens from [u] to [ɔ]. The final [ʔ] sound is an allophone of *t and consistently appears for all other variations. Back to the salt mines, there variation of o; ə; ɔ in combination with C_C indicates that LDA most likely has its type of group, whereas

Table 5
Proto /b/ distribution

MP	PCPr	Glos	Differential modulation
*bukit	*bukit	*hill*	KT, LDA, JRG, DDG, BMT; bukeʔ
*bəsaɣ	*bəsa	*big*	KT, LDA, DDG; bəsɔ JRG, BMT; beso
*libar	*liba	*width*	KT; lɛbɔ LDA, DDG; lebɔ JRG, BMT; lebo
*rambut	*ɣambut	*hair*	KT; LDA, JRG, BMT; ɣamboʔ DDG; ɣambɔʔ
*tumbuh	*tumbuh	*grow*	KT, LDA, BMT; *tumboh JRG, DDG; ∅
*təbəl	*təbə	*thick*	KT; tebaᵊ LDA; təbɛj JRG, DDG, BMT; təbɛ

BMT is in another group. Further discussion depicts if BMT also has its group.

The PCPr revealed voiced plosive alveolar /d/ in two-syllable word positions. The /d/ sound is fixed in the initial and medial positions. The MP has the same /d/ distribution characteristic. It indicates that the PCPr shares a feature and enables /d/ to be reconstructed as *d. To enumerate, PCPr *d reflexes to *d in MP.

The sound of /d/ in PCPr is distinguished by several vocal differences in its prefix and suffix. It can be observed for the combination of /-udo-/ for the word *duduk* in Table 5. The /d/ functions as a "middle person". Some variants are released as /-do-/, while others are released as /-dɔ-/. The LDA, a variant of /-dɔ-/, exhibits similar consistency. Referring to the word *live*s in Table 7, LDA pronounces [idɔʔ]. Hence, does LDA affect the presence of /u/ that precedes /d/, or does /u/precede /d/ and affect the vocal proceeding /d/? The uniqueness noted in LDA is discussed later. See Table 7 for other distributions.

The PCPr /k/ in Table 6 displays inconsistency of distribution when /k/, the voiceless plosive, behaves like a voiced plosive, especially in the final position. For PCPr *p and *t, these two proto phonemes can be found in all three positions: initial, medial, and final. However, the situation of /k/ in the final position does not state existence due to the multiple allophones or chained allophones in the final syllables (Peterson & Harary, 1960, p. 157). For example, the word *kakak* or "sister" of the PCPr variants is pronounced in LDA as kakɔʔ and BMT as akoʔ. After deep analysis, allophones [ɔ] and [o] are representative of phonemes /a/, while [ʔ] sounds allophone to /k/.

Table 6
Proto /t/ distribution

MP	PCPr	Glos	Differential modulation
*tumit	*tumit	*heel*	KT, LDA, JRG, DDG, BMT; tumeʔ
*tuhãʔ	*tuwə	*old*	KT, LDA, JRG, DDG, BMT; tuwə
*hatəp	*atap	*roof*	KT, LDA, JRG, DDG, BMT; ataʔ
*bukit	*bukit	*hill*	KT, LDA, JRG, DDG, BMT; bukeʔ
*hañut	*aɲut	*drift*	KT, JRG, DDG; aɲoʔ LDA; aɲəʔ BMT; aŋɔʔ

Table 7
Proto /d/ distribution

MP	PCPr	Glos	Differential modulation
*darah	*daɣah	*blood*	KT, LDA, JRG, DDG, BMT; daɣəh
*dahi	*daj	*forehead*	KT, BMT; dai LDA, JRG, DDG; daj
*duduk	*duduk	*sit*	KT, JRG, DDG, BMT; dudoʔ LDA; dudɔʔ
*lidah	*lidah	*tongue*	KT, DDG; lidah LDA, JRG, BMT; lidoh
*m/udaʔ	*mudə	*young*	KT, LDA, JRG, DDG, BMT; mudə
*hidup	*idup	*live*	KT, JRG, DDG, BMT; idop LDA; idɔʔ

Another example of similar data is noted for gloss *awak* or "you". Three PCPr variants in LDA, JRG, and BMT displayed different modulations; a.ɔʔ; awoʔ; and ăoʔ, respectively. The study removed the initial part as ɔʔ; oʔ; and oʔ to unleash /-k/. From here, multiple allophones can be identified by making [ʔ] as a marker that it is a phoneme representation of /-k/. As for ɔ; o; and o sounds, they represent /-a/. These results indicate that /k/ has a high probability of being reconstructed from antecedent MP as a PCPr *k. Table 8 lists the distribution of *k in PCPr and its variants.

The PCPr variants retained the /g/ sound in most of their speech. This phoneme has limited distribution, such as initial and medial positions (Table 7). However, the limitations of the /g/ sound in the final position can be guessed based on two patterns of the last voiced plosives in the same spot earlier. Most of the time, the /g/ sound exists as a glottal stop [ʔ] at the final position. However, these conditions are confined to words absorbed from foreign languages, such as English and Arabic. Instances of this scenario are listed in Table 9.

Although MP *m exists in all positions, it does not occur in PCPr (Table 8). The distribution of PCPr *m is limited to two places: initial and medial segments. The PCPr variant drops the /m/ sound in the final position. For instance, LDA, JRG, DDG, and BMT variants constitute *six* as [nã]. This pattern is similar to other words, such as *chicken* [aja], *salt* [gaɣa], as well as *black* as ita; itaᵊ; and itã. Examples of the initial and medial distributions are listed in Table 10.

Table 8
Proto /k/ distribution

MP	PCPr	Glos	Differential modulation
*kA-iri	*kiɣi	*left*	KT, LDA, JRG, DDG, BMT; kiɣi
*kayuʔ	*kajuh	*paddle*	KT, LDA, JRG, DDG, BMT; kajoh
*kəriŋ	*kəriŋ	*dry*	KT, LDA, JRG, BMT; kəɣɛ DDG; kəɣe
*akar	*aka	*root*	KT, DDG; akɑ LDA, BMT; akɔ JRG; ako
*bukit	*bukit	*hill*	KT, LDA, JRG, DDG, BMT; bukeʔ
*kaki	*kaki	*leg*	KT; kakij LDA, JRG, DDG, BMT; kaki

Table 9
Proto /g/ distribution

MP	PCPr	Glos	Differential modulation
*gigi	*gigi	*teeth*	KT *gigij LDA, JRG, DDG, BMT; gigi
*gusuk	*gusuk	*rub*	KT, LDA; gɔsɔʔ JRG, DDG, BMT; goso?
*daguʔ	*dagu	*chin*	KT, LDA, DDG, BMT; dagu JRG; daguʔ
*gigit	*gigit	*bite*	KT, JRG, DDG, BMT; gigeʔ LDA; gigeʔ
*dagiŋ	*dagi	*meat*	KT, LDA, JRG, DDG, BMT; dagɛ
*pergi	*pegi	*go*	KT; ∅ LDA, JRG, DDG, BMT; pəgi

The PCPr reconstructed /n/ as *n based on synchrony evidence. Nonetheless, the existence of the /n/ sound in the final position is insufficient and cannot be proven due to a consistent pattern of absence (Table 9). Referring to our previous interaction with PCPr *m, this sinking nasal phenomenon in the final position is identical. Examples of the NULL distribution in the final position are *hutan* "forest" [uta], *hujan* "rain" [uɟa], and *ikan* "fish" [ika]. Although PCPr *n was rebuilt, as previously stated, PCPr variants lack /n/ representative in the final position. The distribution of PCPr *n in the initial and medial positions is tabulated in Table 11.

The final segment of words for the /n/ sound in LDA is an abnormal sound change. It is rare to the most known dialect in Pahang, as Crowley (1997) stated, "… they do not obviously fit into any of the categories…." (p. 55), MP's final /n/ sound is gliding [j] (see LDA in Table 10). This pattern is consistent, and the origin of this characteristic was sought. More data are presented in Table 12 to display this unique change.

Two examples in Table 11 demonstrate the presence of /ɲ/ at the PCPr variant level in the initial and medial positions. Given the Malay and its non-consonant clustered system at the final position, it is reasonable

Table 10
Proto /m/ distribution

MP	PCPr	Glos	Differential modulation
*mata	*matə	*eye*	KT, LDA, JRG, DDG; matə BMT; mato
*malu	*malu	*shy*	KT, JRG, DDG, BMT; malu LDA; maluw
*m/udaʔ	*muda	*young*	KT, LDA, JRG, DDG, BMT; mudə
*ləmək	*ləmak	*fat*	KT, LDA, JRG, DDG, BMT; ləməʔ
*hAmpədu	*əmpədu	*bile*	KT, LDA, JRG, DDG, BMT; əmpədu
*səmpit	*səmpit	*narrow*	KT, LDA, JRG, DDG; səmpeʔ BMT; ∅
*limaʔ	*limə	*five*	KT; ∅, LDA, JRG, DDG, BMT; limə

Table 11
Proto /n/ distribution

MP	PCPr	Glos	Differential modulation
*ənəm	*na	*six*	KT; ∅ LDA, JRG, DDG, BMT; nã
*naik	*naik	*ride*[2]	KT; ∅ LDA, JRG, DDG, BMT; naeʔ
*nipis	*nipis	*thin*	KT, LDA, JRG, BMT; nipɛh DDG; ∅
*dindiŋ	*dindi	*wall*	KT; ∅ LDA, JRG, DDG, BMT; dindɛ
*bini	*bini	*wife*	KT, JRG, BMT; bini LDA; binij DDG; ∅
*paŋɟaŋ	*paŋɟa	*long*	KT; panɟam LDA, JRG, DDG, BMT; panɟã

[2] This word [naik] has multiple meanings, and sometimes it overlaps. Notably, [naik] is a verb, such as "*John drove a car to a workplace*". Drove shares the same meaning with [naik]. For example, "*The amount of people not understanding linguistics is increasing*". Increasing here reflects the word [naik].

to conclude that the existence of sound /ɲ/ in that area is highly unlikely. However, MP *ɲ reflexes direct to PCPr *ɲ despite the absence of /ɲ/ in the final segment.

LDA and JRG have their way, which is dissimilar from /ɲ/ but refers to the [ɔ] sound that precedes /ɲ/. The different modulation types indicate that these two regions have altered the phonological aspect from its origin. From directionality, these changes have encountered many innovations, from [a] to [ɔ]. BMT also changed from [a] to [o]. The changes in sound only happen in the final syllable (Hasrah et al., 2014). For example, the JRG and BMT variants do not change [a] to any kind of back vowel from its first syllable for the word *mosquitoes*.

The MP has no instances for /ŋ/ on the initial position. However, the PCPr in Table 12 displays /ŋ/ distribution across all segments except the final position. Most of the [ŋ] sound in Malay words exists in the final position, but it is dropped mostly in the PCPr variant. It is interesting because there are already two examples ([m] & [n]) of nasal sounds eliminated at the final position. Some examples of [ŋ] sound eliminated in PCPr at the final position are *belakang* "back" [blaka], *bintang* "star" [binta], and *hidung* "nose" [idu]. Despite that, PCPr did reconstruct *ŋ from MP descended. More distribution options are listed in Table 14.

The DDG highlights something unusual when other variants NULL-ed final /n/, where [ŋ] abnormally appears in the DDG

Table 12
Consistency of [j] at final segment representing /n/ in LDA

MP	PCPr	Glos	LDA
*kanan	*kana	*right (direction)*	kanaj
*lap-an	*lapa	*eight*	lapaj
*ma/ka	*maka	*eat*	makaj
*əsaʔ ambil-an	*smila	*nine*	səmbilaj
*turun	*tuɣu	*step down*	tuɣuj

Table 13
Proto /ɲ/ distribution

MP	PCPr	Glos	Differential modulation
*ɲamuk	*ɲamuk	*mosquitoes*	KT, JRG, BMT; ɲamoʔ DDG; ɲamɔʔ LDA; ∅
*kuɲah	*kuɲah	*chew*	KT, DDG; kuɲah LDA, JRG; kuɲɔh, BMT; kuɲoh

Table 14
Proto /ŋ/ distribution

MP	PCPr	Glos	Differential modulation
∅	*ŋilu	*grate*	KT; ∅ LDA, JRG, DDG, BMT; ŋilu
*aŋin	*aŋi	*wind*	KT; aŋem LDA; aŋen JRG; aŋɛ DDG; aŋiŋ BMT; aŋe
*bəŋkak	*bəŋkak	*swollen*	KT ∅, LDA BMT; bəŋkəʔ JRG bəŋkoʔ DDG; bəŋkaʔ

variant. This feature reflects the Terengganu type when the/n/ sound on the final segment is occasionally replaced by [ŋ] (Table 13). Is DDG a distinct type of group? The answer is no. The data shows no consistent pattern of the final segment [n] becoming [ŋ] sound. Table 15 lists examples of the inconsistency of [n]→ [ŋ] in the final segment.

Fricative sounds, such as /s/ and /h/, were recorded in Adelaar's study, and usually, they are distributed across the segments. Table 14 lists instances of PCPr /s/. This fricative sound exists in the first two places, but no data can support its existence at the final position in all variants of PCPr. Most of the /s/ at the end of a word are usually replaced by the [h] sound. It is difficult to convince if [h] is a phoneme or representative of /s/. Allophone is clarified to address this matter. The easiest way to determine the [h] sound is that either this sound complements /s/ or arbitrarily appears.

Based on the analysis, the [h] sound is close to the allophone of the/s/ sound, mainly because the [h] sound complements /s/ only in the final position. In addition, [h] does not bring any new meaning. So, [h] is classified as allophone to /s/. This case is not too far from the unvoiced plosive soft palate /k/ issue for the same position. At this point, PCPr *s is reconstructed from MP. Table 16 tabulates more examples for *s distribution.

Is [h] predestination stuck as an allophone, such as the [ʔ] sound, at the end of a word? Referring to the analysed data, [h] sound does exist in PCPr (Table 15). It is a phoneme but only limited to two places: medial and final. The Malay language does have /h/ sound on the initial, but the PCPr variant removed the /h/ sound and enabled

Table 15
Inconsistency of final [ŋ]

MP	PCPr	Glos	DDG
*a(bw)an	*awa	*cloud*	awaᵊ
*bulan	*bula	*moon*	bulaᵊ
*dahan	*daha	*branch*	dahɛ
*huɟan	*uɟa	*rain*	udʒaᵊ
*hutan	*uta	*forest*	utɛ
*ikan	*ika	*fish*	ikɛ

Table 16
Proto /s/ distribution

MP	PCPr	Glos	Differential modulation
*sakit	*sakit	*sick*	KT, LDA, JRG, DDG, BMT; sakiʔ
*səmpit	*səmpit	*narrow*	KT, LDA, JRG, DDG; səmpeʔ BMT; ∅
*siku	*siku	*elbow*	KT, LDA; sikuw JRG, DDG, BMT; siku
*asəp	*asap	*smoke*	KT, JRG, BMT; asaʔ DDG; asɑʔ LDA; ∅
*basah	*basah	*wet*	KT; basah LDA; basɔh JRG, DDG, BMT; basoh
*bəsar	*bəsa	*big*	KT, LDA, DDG; bəsɔ JRG, BMT; bəso

the vowel to become the head of the word. This characteristic is known as apheresis (Crowley, 1997). This phenomenon is consistent across all data. Since /h/ can distinguish itself as a phoneme, the PCPr rebuilt /h/ as *h from its antecedent, MP. The rest of the data and the distribution of /h/is presented in Table 17.

The MP *r phenomenon is appealing in certain ways. The data showed that MP *r (Table 16) exists as /ɣ/ in PCPr. Except for the last position, the sound remains consistent across all segments. In the PCPr version, the /ɣ/ sound appears consistently on the initial and medial positions. Notably, MP *r is innovated to PCPr *ɣ on this basis. As a result, MP *r has vanished totally in this protolanguage and its variation. Table 18 shows the distributions of MP *r and PCPr *ɣ.

Most northern hemisphere dialects tend to remove the final /l/, which is no exception for PCPr variations. In that posture, the lateral sound always seems to be NULL. This pattern is observed in the reconstructed lexical of PCPr, such as *tebal* "thick" [təba], *jual* "sell" [ɟua], and *tumpul* "dull" [tumpu] (Table 17). The data indicated that the final /l/ sound appears as /k/ for *ambil* "take" [ambik]. However, it is an irregular form due to the presence of the ambient words *ambil* and *ambik*. Adelaar (1992) noted the same for the words *kecik* and *kecil* (both refer to "small"). Due to data limitations, /l/ on the final position cannot be consistently proven. The two other positions showed that /l/ is PCPr *l. Refer to Table 19 for the distribution of *l.

Voiceless palatal plosive /c/ was observed in MP, and it is not impossible

Table 17
Proto /h/ distribution

MP	PCPr	Glos	Differential modulation
*paha	*pəhə	*thigh*	KT, JRG, DDG, BMT; pəhə LDA; pehe^{w}
*dahan	*daha	*branch*	LDA; dahã JRG, BMT; daha^{ə} DDG; dahɛ KT; ∅
*basah	*basah	*wet*	KT; basah LDA; basɔh JRG, DDG, BMT; basoh
*guruh	*guɣuh	*thunder*	KT, DDG, BMT; guɣɔh LDA; ∅ JRG; guɣoh
*bArisih	*bəɣsih	*clean*	KT, DDG; bəɣsɛh LDA; bəɣseh JRG, BMT; bəse/ih

Table 18
Proto /ɣ/ distribution

MP	PCPr	Glos	Differential modulation
*rambut	*ɣambut	*hair*	KT, LDA, JRG, BMT; ɣambɔʔ DDG; ɣambəʔ
∅	*ɣaɟi	*diligent*	KT; ɣaɟeŋ LDA; ɣaɟen JRG, BMT; ɣaɟɛ DDG; ɣaɟe
∅	*ɣaha	*jaw*	KT; gahaŋ LDA, DDG, BMT; ɣaha JRG; ∅
*arus	*aɣəh	*flow*	KT; ∅ LDA, BMT; aɣəh JRG; aɣuh DDG; aɣoh
*bərat	*bəɣat	*heavy*	KT, LDA, JRG, BMT; bəɣaʔ DDG; bəɣeʔ
*bArisih	*bəɣsih	*clean*	KT, DDG; bəɣsɛh LDA; bəɣseh JRG, BMT; bəse/ih

for its descendants to have this sound. It is further supported by the PCPr *c distribution in initial and medial positions (Table 18). However, this sound is missing in the word-final segments as MP, although it is a voiceless plosive, such as /p/. This behaviour reflects PCPr *-t, but *t is apocope-d and *-c is non-existent in the first place (Table 20 for distribution information).

Voiced palatal plosive of the /ɟ/ sound situation resembles PCPr *c, but its distribution is limited to the initial and medial positions. These two sounds are a relic of an earlier version of the ancient form, MP. Although there are a few vowel differences, all variants have this sound. Hence, PCPr /ɟ/ is reconstructed as *ɟ. Instances of PCPr *ɟ distribution are displayed in Table 21.

Regrettably, MP does not have a matching example of the/ sound on the initial position of a word. The PCPr has evidence that /w/ exists on the first position of words, such as [wa] “grandmother” (see

Table 19
Proto /l/ distribution

MP	PCPr	Glos	Differential modulation
*lari	*laɣi	*run*	KT, LDA, JRG, DDG, BMT; laɣi
*lihər	*lihi	*neck*	KT, LDA, JRG, DDG, BMT; lehɛ
*ləmək	*ləmək	*fat*	KT, LDA, DDG, BMT; ləmɔʔ JRG; ləmoʔ
*bəli	*bəli	*buy*	KT, LDA, DDG, JRG, BMT; bəli
*kali	*gali	*dig*	KT, LDA, JRG, DDG, BMT; gali
*bAlakaŋ	*blaka	*back (body)*	KT; blakaŋ LDA, JRG, DDG; blakã BMT; blakɑ

Table 20
Proto /c/ distribution

MP	PCPr	Glos	Differential modulation
*caciŋ	*caci	*worm*	KT; caceŋ LDA, JRG; cace DDG, BMT; cacɛ
*cucuʔ	*cucu	*grandson*	KT, JRG, DDG, BMT; cucu LDA; cucuw
*kəcil	*kəcik	*small*	KT, JRG, DDG, BMT; kəciʔ LDA; kəcɛ
∅	*kucə	*cat*	KT; kuceŋ LDA; kucɛ JRG, BMT; kuce DDG: kucɛⁿ
∅	*kəci	*urinate*	KT, BMT; kəcɛ LDA; kəncɛ JRG; kəce DDG; kənei

Table 21
Proto /ɟ/ distribution

MP	PCPr	Glos	Differential modulation
*ɟahət	*ɟahat	*bad*	KT; ɟahat LDA, JRG, BMT; ɟahaʔ DDG; ɟeheʔ
*ɟari	*ɟaɣi	*finger*	KT, LDA, DDG, BMT; ɟaɣi, JRG; ɟaɹi
*ɟatuh	*ɟaɣi	*fall (v)*	KT, LDA, JRG, DDG, BMT; ɟatoh
*huɟan	*uɟa	*rain*	KT, LDA; uɟan JRG; uɟa DDG; uɟaʰ BMT; uɟʰ
*paŋɟaŋ	*panɟa	*long*	KT; panɟam LDA, JRG, DDG, BMT; panɟa
*taɟəm	*taɟa	*sharp (adv)*	KT, LDA; taɟã JRG, BMT; taɟa DDG; taɟam

Table 20). The word is commonly used by people living along the East Coast, including Terengganu and Kelantan. Table 22 shows some examples of the dissemination of /w/.

Based on the prior discussion on the /h/ sound, /h/ is not all alone in its distribution range. Both /h/ and /j/ are among the inner-in-the-way to all phonemes discussed. It is because; these two phonemes are only distributed in the medial and final positions. The /j/ sound is not present in the initial position based on the inventory data. It indicates that /h/ and /j/ are among the most distinct phonemes. Table 23 lists several examples.

Table 22
Proto /w/ distribution

MP	PCPr	Glos	Differential modulation
ø	*wa	*grandmother*	KT; wan LDA; wæ̃ JRG, BMT; weʔ DDG; waᵊ
*a(bw)an	*awa	*cloud (sky)*	KT, LDA, JRG; awan DDG, BMT; awaᵊ
*sawaʔ	*sawə	*phyton*	KT, LDA, JRG, DDG, BMT; sawə

Table 23
Proto /j/ distribution

MP	PCPr	Glos	Differential modulation
*kajuʔ	*kaju	*paddle (v)*	KT, LDA, JRG, DDG, BMT; kaju
ø	*aja	*chicken*	KT, LDA, JRG, DDG, BMT; aja
*air	*aj	*water*	KT, LDA, DDG; aj JRG; aᵊ BMT; ae
*akiʔ	*akij	*grandfather*	KT; ø LDA, JRG, BMT; akij DDG; aki

DISCUSSION

Notably, PCPr has 18 consonants consisting of plosive, fricative, nasal, affricative, lateral, and semi-vowel (*p, *b, *t, *d, *k, *g, *m, *n, *ɲ, *ŋ, *l, *s, *ɣ, *h, *c, *ɟ, *w, and *j). Although all 18 consonants were reconstructed, not all worked in all word segments. Some words merely served as phonemes in the initial and medial positions, while some were present in the medial and final positions.

This discussion goes over each PCPR variant one by one, starting with the plosive sound. All plosive variants from the MP are present in PCPR variants, except for [ʔ] sound. For bilabial plosive, voiceless /p/, /t/, /k/, and voiced plosive /b/, /d/, and /g/ were all reconstructed as PCPr variations but with a different distribution principle. Voiceless /p/, /t/, and /k/ are recorded in the initial and middle of the word, as well as an allophone (glottal plosive [ʔ]) in the closed syllable-final segment.

A similar scenario applies to/b/, /d/, and /g/. These consonants are distributed across segments, except closed end-segment. It is the nature of the Malay language, which does not have a voiced plosive sound in the final position of the closed syllable. Two possibilities may occur if the final position

contains the sounds /b/, /d/, and /g/. First, it transforms to a glottal stop as an allophone [ʔ], and second, it originates from a foreign word derived from English and Arabic languages.

The nasal sound of the PCPr variety starts to diverge significantly. First, the nasal /m/ sound exists consistently in two positions, at the initial and middle of the word, but dropped in the final position (except for the KT variant). At the end of the segment, KT "converts" the /ŋ/ sound to the /m/ sound, which is unusual for the rest of the variants. This dialect is typically spoken by those from the East Coast, particularly in southern Thailand. However, such a distribution is inconsistent. Some data show KT drops /m/ totally, while some transform nasal velar to /m/ sound. It is, however, inconsistent based on those two sets of differences.

Nasal /n/ in PCPr variants behaves the same as in PCPr /m/ variants, except for LDA. While the KT variant has the variation of /ŋ/ → [m]#, the LDA has n# → [j]# that deviates from transformation constraints in a similar articulation. This variation can only be found in the final position of the closed word. It has yet to be recorded in any Pahang dialect. Most likely, "a glide phenomenon" may occur in the final position that replaces /n/ with [j]. It is, in fact, not uncommon.

The DDG, within the same context, has its unique characteristics. It is notable when the /n/ sound in the final position is taken out from its ancestor, MP. Clearly, this reflects a similar feature as other PCPr variants, except for LDA. What distinguishes DDG from its variants is its minor sound features that follow the front vowel [a], e.g., [udʒaᵊ], [awaᵊ], dan [bulaᵊ]. This feature, however, is inconsistent because some features lack minor sound features, such as [utɛ], [ikɛ], and [dahɛ]. The three possibilities are listed below in light of DDG:

1. The transition of consonant /n/ in the final position to a single vowel sound and its gradual evolvement to create a minor sound in that position or,
2. the /n/ consonant is gradually losing its nasal appearance as it becomes a minor sound, thus leading to a direct absolute abortion or,
3. sporadic.

Referring to the concept of directionality (Campbell, 2013), the second notion is more plausible in the stance of this study. If the first hypothesis is selected, there is room for uneconomical transformation as the minor sound may be a nasal element occurring as an allophone. If it goes from "exist" to nothing and then reappears in a minor form, it reflects the inverse of the concept of directionality.

The second hypothesis, pertaining to the gradual transition from nasal consonants to minor sounds and then to total abortion, appears more plausible. Based on directionality, the transformation from nasal to minor forms, among others, is completely dropped more logically rational when compared to the hypothesis of "exist" to "disappear" and back to be a minor sound. There is a logical explanation for that. It differs from sporadic assumption because it can refer to something that occurs randomly but cannot be traced back to a specific cause.

It is determined by the level of influence within or outside the DDG area. That would be logic.

The fricative /s/ sound appears at the initial and medial positions of the word. However, it differs from /h/, which appears in the middle and end positions of the word. The fricative consonant /ɣ/ reflects another story. It is a phoneme that descends from MP *r and evolves into /ɣ/. The distribution of /ɣ/ is limited to two positions (initial and medial), whereas MP *r can be found in all word segments. These three fricative consonants have their characteristics.

The remaining consonants of the PCPr variant are /c/, /ɟ/, /w/, and /j/. The distributions are parallel in the initial and middle positions of the word for affricate consonants, while the semi-vowel consonants of /w/ and /j/ are only distributed in the middle position of the word, except /j/ that, is distributed in the middle and last segments. Details about /j/ are inconsistent and demand in-depth investigation not because it is unique but illogical based on the distribution of /-n/ to [-j] in all Malay dialects.

As for the reconstructed proto-language, PCPr has encountered a few changes based on multiple phonemes eliminated for certain positions from the MP form. It is ascribed to internal and external influences. Internal influence stems from the community's population that lives deep in a remote area. External influence is due to the population of the immigrant community that migrated from the Tembeling River. Based on their phonological evidence, they are believed to have migrated from Kelantan and Terengganu (Karim & Ibrahim, 1977).

Nevertheless, not many aspects can be discussed because this observation also requires a geographical viewpoint. Cross-field approaches can help unveil the phenomenon of language along the Pahang River. There are a few gaps in this writing and would benefit from further research work, including cross-field evaluation to extend and further conclude the findings of this present study collectively, as listed in the following:

1. More methodological work is needed to emphasise the phonological relationship between a variant of PCPr (including a classification of this proto-language) and its ancestor. More studies could explore a phenomenon feature of the last syllables as differential modulation always occurs in that certain position.
2. More data should be collected from multiple locations to enhance the findings. A group with interesting phonological characteristic(s) might have been overlooked. Some villages in this district accommodate an aboriginal group called Jakun. Hence, circumspect is highly required.
3. Local settlement in a river locality could be the main reason for the gradual changes noted in the Jerantut dialect. Perhaps, further research work may employ Geographical Information System (GIS) to decide if there is a second rationale.

CONCLUSION

This study reconstructed the proto phoneme of consonants for a subdialect in the central basin of the Pahang River by employing the comparative linguistics approach. For this study purpose, five areas were selected (KT, LDA, JRG, DDG, dan BMT). The findings revealed that the PCPr had 18 ancient consonant phonemes. The distribution of all these consonants is diverse and depends on the type of consonant. A vocalic feature of PCPr, such as vowels and diphthongs, should be the subject of additional discussion to reach definitive conclusions about the phonological changes between PCPr and PM.

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