

JOURNAL OF LANGUAGE AND LINGUISTIC STUDIES

ISSN: 1305-578X

Journal of Language and Linguistic Studies, 18(Special Issue 2), 1270-1288; 2022

Linguistic research on the Orang Asli Languages in peninsular Malaysia

Mohd Hilmi Hamzah ^{a 1} D, Hasliza Abdul Halim ^b D, Muhammad Hafiz Ummah Abu Bakar Bakri ^c D, Stefanie Pillai ^d D

^{a,b,c} Universiti Utara Malaysia, Malaysia ^d University of Malaya, Malaysia

APA Citation:

Hamzah, M.H., Halim, H.A., Bakri, M.H.U.A.B., & Pillai, S. (2022). Linguistic research on the Orang Asli Languages in peninsular Malaysia. *Journal of Language and Linguistic Studies, 18*(Special Issue 2), 1270-1288.

Submission Date:02/10/2021 Acceptance Date:30/12/2021

Abstract

The current paper aims to search and summarise the current literature on the linguistic aspect of the Orang Asli languages in Malaysia. Following the PRISMA Statement (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), a systematic review was conducted with a particular focus on three main groups of the Orang Asli in Peninsular Malaysia: (1) Negrito; (2) Senoi; and (3) Aboriginal Malay. Of 158 works found, 58 were excluded (irrelevant); 100 were relevant and included in the review. Works published between 2009 to 2019 were selected and categorised into journal articles (n = 51), books (n = 28), undergraduate/postgraduate theses (n = 8), conference proceedings (n = 8), and chapter in book (n = 5). Of these works, the Negrito is widely discussed (n = 94), followed by the Senoi (n = 90), and then the Aboriginal Malay (n = 76). The sub-areas of these linguistic studies include phonology, morphology, sociolinguistics, syntax, semantics, lexis, and grammar. With regard to language documentation, to date, only ten projects are found dealing with the digital repository of the Orang Asli languages. Further research on linguistics seems warranted for the preservation of these languages.

Keywords: Orang Asli languages; indigenous languages; endangered languages; language preservation; language maintenance

1. Introduction

Nearly 516 languages are on the brink of extinction around the world, including those in the Pacific (210 languages), the Americas (170 languages), Asia (78 languages), Africa (46 languages), and Europe (12 languages) (Eberhard, Simons, & Fennig, 2020). With more than 500 languages across the world being regarded as 'Nearly Extinct' (based on the UNESCO's Language Vitality and Endangerment framework), language preservation seems critical and requires urgent attention from all parties (Lewis & Simons, 2009).

In Malaysia, Omar (2014) estimates that there are well over 100 different languages. Later, Simons and Fennig (2018) claims that the number to be even as high as 136, which is inclusive of the aboriginal indigenous languages. More recently, Eberhard et al. (2020) states that, of the living

E-mail address: hilmihamzah@uum.edu.my

¹ Corresponding author.

languages in Malaysia, 112 are indigenous and 21 are non-indigenous. Figure 1 shows that, in terms of language vitality, 11 are institutional, 5 are developing, 9 are vigorous, 95 are in trouble, and 13 are dying (Eberhard et al., 2020).

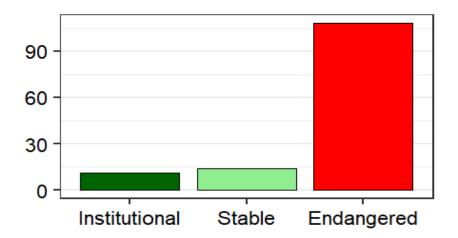


Figure 1. Profile of language vitality for Malaysia (source: Eberhard, Simons, & Fennig, 2020)

Malaysian indigenous languages are categorised into two distinctive groups, namely the Austronesian or Austroasiatic families. The former represents the major language group in Peninsular Malaysia, Sabah, Sarawak, and Labuan (roughly 80 languages). The latter embodies the minority language group in Peninsular Malaysia (approximately 20 languages) and belongs to the Orang Asli community (Omar, 2014).

The Malaysian Department of Development for Orang Asli (JAKOA) classifies the the Orang Asli community (Malay: 'Original People' or 'First People') in Peninsular Malaysia into three major groups, i.e., Negrito, Senoi, and Aboriginal Malay. Under each separate ethnic group, they are branched out to six indigenous languages, in which altogether, there are 18 Orang Asli languages in Peninsular Malaysia (Simons & Fennig, 2018), as shown in Table 1.

Table 1. The classification of the indigenous languages in Peninsular Malaysia (source: Simons & Fennig, 2018)

Classification	Language
Negrito	Kensiu
	Kintak
	Jahai
	Lanoh
	Mendriq
	Bateq
Senoi	Semai
	Temiar
	Jah Hut
	Chewong
	Mah Meri
	Semoq Beri
Aboriginal Malay	Temuan
	Semelai
	Jakun
	Orang Kanaq
	Orang Kuala
	Orang Seletar



Figure 2. Distribution of Orang Asli communities (source: Dentan, Endicott, Gomes, & Hooker, 1997)

JAKOA (2018a) reports that there are more than 170,000 inhabitants of Orang Asli communities in Peninsular Malaysia. Albeit being a tiny fraction - a mere 0.5 percent to be exact - as compared to the 32.38 million overall population of Malaysia (Department of Statistics Malaysia, 2019), there are in fact as many as 853 Orang Asli settlements scattered all around Peninsular Malaysia (JAKOA, 2018b). The distribution of language families in Peninsular Malaysia is shown in Figure 2.

Lah (2014) claims that, due to technological modernity, most of Orang Asli communities are exposed to changes that endanger their way of speaking and living. This incongruousness in literature leaves room for uncertainties in this matter and urges the need to look into the current trend of linguistic research with regard to the languages of Orang Asli communities in Malaysia.

Language studies dealing with Orang Asli communities are argued to be limited within Peninsular Malaysia (Hassan, Ghazali, & Omar, 2015). Examining the important language studies will ultimately facilitate in the reporting of the current language maintenance of the Orang Asli languages and spark further discussions revolving the endangerment of such languages. These arguments further attest why preserving indigenous languages matters.

Thus, the current study will be an attempt to gather past linguistic efforts and discussions behind the study of the Orang Asli languages and provide new insights to address the issue of language endangerment. This study will benefit various stakeholders, specifically towards policy makers, linguists, and educators. It is hoped that this study will assist the government in planning appropriate language policy and actions for the indigenous communities in Malaysia. Furthermore, given the demand of the Fourth Industrial Revolution (IR 4.0), development is essential among the Orang Asli population to keep up with current global trends and to raise the awareness of the needs of the indigenous population in Malaysia (Farooqui, 2015; Idrus, 2011). We also hope that the current study will fill the present literature gap by putting forward further linguistic research on the Orang Asli languages.

2. Methodology

We report this systematic literature review based on the procedures set in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher, Liberati, Tetzlaff & Altman, 2009). We followed closely the nine steps highlighted by the PRISMA checklist, as shown in Figure 3. The steps are as follows:

- 1. Formulating the objectives of the study
- 2. Building the framework of the study
- 3. Forming the standards for selection
- 4. Creating the strategy to search in the literature
- 5. Choosing relevant works
- 6. Writing codes for selected works
- 7. Examining the attribute of selected works
- 8. Synthesising the works according to the objectives of the study
- 9. Reporting findings

In developing the research question, we referred to the research question of the current study: To what extent have the efforts to integrate and preserve endangered indigenous languages in Peninsular Malaysia been undertaken by linguistic scholars?

The basis of the present study revolved around previous linguistic efforts in maintaining the indigenous languages in Malaysia. Hence, the conceptual framework involved past studies on key items such as 'Orang Asli' and 'indigenous language' limited to the context of Peninsular Malaysia. To be more specific, there were four main criteria used during the selection process:

- 1. Past work between 2009 to 2019 only
- 2. Only among the 18 Orang Asli languages listed in the study
- 3. Materials were either in Malay or English
- 4. Materials were in all forms (e.g., journal, thesis, book, website)

With regard to the search strategy, we took into consideration the two sets of data available, namely the Systematic Literature Review (SLR) data and the digital repository (DR) data. For the SLR data, the search sources included the World Wide Web/Internet (Google, Google Scholar, Academia.org, Science Direct, Open Access Journals), bibliographic database (Linguistic Bibliography Online [BRILL]), Repository eThesis (EThOS, OpenThesis), handsearching of specialist journals/books (UUM Sultanah Bahiyah Library), and also snowball sampling/chain referral sampling through Reference and Bibliography List. The search strategy and selection of studies are summarised in Table 2.

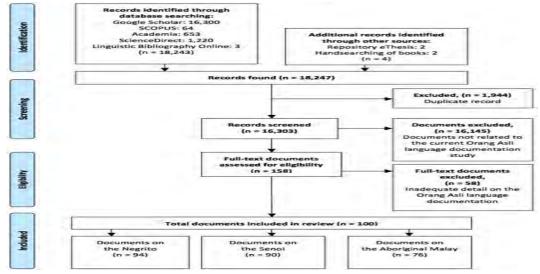


Figure 3. PRISMA Checklist

Table 2. Search strategy and selection of studies

Search Engine	Search String	Count
Google Scholar	Bahasa Orang Asli Malaysia OR Indigenous language Malaysia	158
	OR Kensiu OR Kintak OR Jahai OR Lanoh OR Mendriq OR	
	Bateq OR Semai OR Temiar	
	Bahasa Orang Asli Malaysia	15,500
	Indigenous language Malaysia	38,100
	Bahasa Orang Asli Malaysia AND Indigenous language	3,770
	Malaysia	
	Bahasa Orang Asli Malaysia OR Indigenous language Malaysia	16,300
SCOPUS	Bahasa Orang Asli Malaysia	2
	Indigenous language Malaysia	62
Academia.org	bahasa orang asli Malaysia	638
	Indigenous language Malaysia	653
Science Direct	bahasa orang asli Malaysia	34
	Indigenous language Malaysia	1,220
Linguistic	Bahasa Orang Asli Malaysia	3 (1 cannot be
Bibliography		accessed)
Online	Indigenous language Malaysia	3 (7 cannot be
		accessed)
EthOS	Orang Asli Malaysia	1 (6 are below 2009)
	Indigenous language Malaysia	1 (6 are below 2009)
OpenThesis	Bahasa Orang Asli Malaysia	0 (23 are irrelevant)
	Indigenous language Malaysia	0 (899 are irrelevant,
		below 2009)
Handsearch from	Bahasa Orang Asli	2 books
Sultanah Bahiyah		
Library UUM		

As for the DR data, we subscribed the Linguistics Society blog and found the online post via https://www.linguisticsociety.org/content/finding-archive-your-endangered-language-research. This search led to discovering DELAMAN, the Digital Endangered Languages and Music Archives Network (www.delaman.org). The links for each archive (members of the DELAMAN network) were fully provided. Thus, we manually went through each archive and filtered to fit the criteria for the current study. The criteria used for the DR data involved any past work on any previous years, only among the 18 Orang Asli languages listed in the current study, and could be either spoken or written data. Out of 15 listed archives, only ten archives were found to be relevant to the present study. Under the 'Resources' section of the DELAMAN website (http://www.delaman.org/resources/), we came across OLAC, Open Language Archives Community (http://www.language-archives.org), and this was also itemised in the list as it possessed relevancy. We noted the fact that the Endangered Languages Documentation Programme (ELDP) was archived and preserved on the digital online Endangered Language Archive (ELAR).

We assigned an acronym for each of the language group, i.e., 'N' for the Negrito, 'S' for the Senoi, and 'AM' for the Aboriginal Malay. The full list of codes for a language under each language group is shown in Table 3. As for the documents selected for review in this study, we assigned a number for easy reference (from 1 to 100). These numbers are shown in Table 4 (in the result section) and also in the reference list (first column).

AM6. Orang Seletar

The Negrito (N)	The Senoi (S)	The Aboriginal Malay (AM)
N1. Kensiu	S1. Semai	AM1. Temuan
N2. Kintaq	S2. Temiar	AM2. Semelai
N3. Jahai	S3. Jah Hut	AM3. Jakun
N4. Lanoh	S4. Chewong	AM4. Orang Kanaq
N5. Mendriq	S5. Mah Meri	AM5. Orang Kuala

S6. Semoq Beri

Table 3. The code of the language

3. Results

N6. Bateq

Figures 4 and 5 show the year and type of publication for the selected studies, respectively. As observed in Figure 4 below, there is generally a downward trend in the number of publication, particularly after the year 2011. Out of a sample of 100 studies, 2011 is seen as the year with the most number of publications (26 publications), followed by 2015 at 11 publications, with 2009, 2010, and 2012 sharing the same number of publications (10 publications). 2017 and 2019 were found to have the least number of publications (1 publication only). With regard to the type of publication (see Figure 5), journals contribute the highest number of publication (51 publications), followed by books (28 publications). Undergraduate dissertation and working paper contribute the least number of publications (1 publication each).

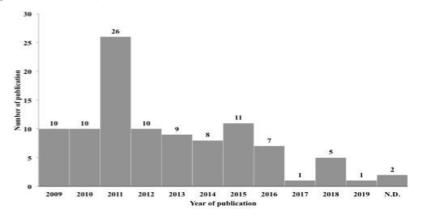


Figure 4. Year of publication for selected studies

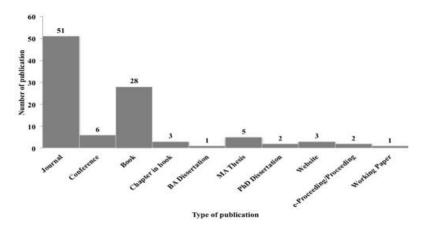


Figure 5. Publication type

The number of publications according to languages is illustrated in Figure 6 below. Out of the 100 studies, 94 studies are related to the Negrito family (N1-N6), 90 studies are concerned with the Senoi family (S1-S6), while the Aboriginal Malay is described in 76 studies (AM1-AM6). Bateq (N6), from the Negrito family, receives the highest number of coverage (24 studies). As for the Senoi family, Temiar (S2) is mentioned the most (20 studies). With regard to the Aboriginal Malay family, Temuan (AM1) is described the most (15 studies). A detailed evaluation of these studies in connection to the languages reviewed is provided in Table 4.

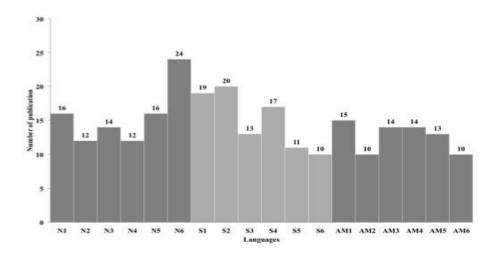


Figure 6. Publication according to languages (the code for each language is shown in Table 3)

Table 4. Evaluation of studies for each language (the code for each language is provided in Table 3, while the references are provided in the Appendix)

Author & Voor		-	THE N	EGRIT	O				THE	SENO	[THI	E ABOR	IGINAL 1	MALAY		Damaul
Author & Year	N1	N2	N3	N4	N5	N6	S1	S2	S3	S4	S5	S6	AM1	AM2	AM3	AM4	AM5	AM6	- Remarks
Adam, Yusop, & Makhtar									1										
(2018) Ahmad, Noor, & Sharif						1													
(2011)						٠													
Amiruddin & Othman		/				1		1	1				1	1	1		/	✓	
(2010)																			
Bedford (2009)	✓	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	✓	✓	
Benjamin (2011)																			Orang Asli in general
Benjamin (2012a)	/	/	/	/	/	1	/	· /	/	/	/	1	1	/	/	/	1	✓	
Benjamin (2012b)								1											
Benjamin (2012c) Benjamin (2013)								1											
Benjamin (2014)	,	,	,	,	,	/		•											
Benjamin (2016a)	•	•	•	•	•	•		1											
Benjamin (2016b)								•											Orang Asli in general
Burenhult (2011)			/																orang rum in general
Burenhult (2012)			/																
Burenhult & Majid (2011)			/																
Choy, Ariffin, & Pereira													1						
(2010)																			
Coluzzi (2017)											✓								
Dallos (2011)				1															
Dentan (2011)							1												
Dunn, Burenhult, Kruspe, Tufvesson, & Becker	1	1	1	1	1	1	/	1	1	1	1	1	1	✓	✓	1	1	✓	
(2011)																			
Dunn, Kruspe, &																			Orang Asli in general
Burenhult (2013)																			
Endicott (2011)						✓													
Endicott (2016)	✓	1	1	1	1	✓	1	1	1	✓	1	1	1	1	1	1	1	✓	
Enfield (2017)																			Orang Asli in general
Fatanah, Omar, & Daim						/													
(2012) Fix (2011)																			Orang Asli in general
Fui, Haron, Yusof,	/	/	/	/	/		1	/	/	/		/	/	1	1	/			Orang Asii iii generai
Baharuddin, Mustapha,	-	-	-	-	-		-	-	-	-		-		-	-	-			
Lee, Zaidi, Jamaludin, &																			
Mohtar (2015)																			
Ghani (2010)							✓												
Ghani (2015a)							1												
Ghani (2015b)	,						1												
Ghani & Lah (2015) Hajek (2010)	1																		Orang Asli in general
Hamid, Shaid, Yusop,																1			Orang Asii iii generai
Maros & Aman (2018)																-			
Hassan, Ghazali, & Omar	1	/	/	/				1											
(2015)																			
Howell (2011)										1									
Kamal & Lim (2019)								,							✓				
Kamarudin (2014)								1					,						
Karim & Hashim (2012) Krishnasamy (2013)													1						Orang Asli in general
Kruspe (2009a)										1									Orang Asii iii generai
Kruspe (2009b)										/									
Kruspe (2010)										/									
Kruspe (2011)										•	1								
Kruspe & Hajek (2009)										/									
Lah (2014)						/													
Lim (2010)												1							
Ma'alip (2014)										1									
Ma'alip & Seong (2016)										1									
Majzub & Rais (2011)						1													
Makhtar, Hamid, Ramli &								1											
Zailani (2018)																			
Makhtar, Soflee, Yusop &							1												
Laengkang (2018) Mohamad, Ahmad, &										1									
Razali (2016)										•									
Mokhtar (2011)						1					1								
Mustafa (2013)						•			1										
Nicholas, Engi, & Ping	1	1	1	1	1	1	1	1	1	1	1	1	1	1	/	1	1	✓	
(2010)																			
Peterson (2012)	1																		
Phillips (2011)							1												
Phillips (2013)	_					_	/				,							,	
Phua (2015)	1	/	/	/	1	✓	/	/	/	/	1	1	/	✓	/	1	1	✓	

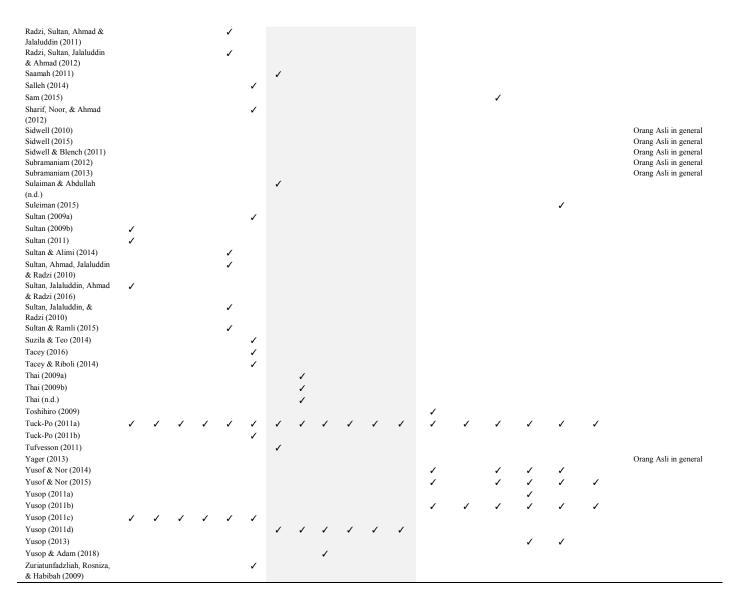


Table 5. Previous digital repository efforts (the code for each language is provided in Table 3)

			THE NE	GRITO					THE	SENOI			THE ABORIGINAL MALAY						
Digital repository & URL	N1	N2	N3	N4	N5	N6	S1	S2	S3	S4	S5	S6	AM 1	AM 2	AM 3	AM 4	AM 5	AM 6	
Open Language Archives Community (OLAC) http://www.language-archives.org/country/MY	1	1	1	1		1		1	1	1		1	1	1	1	1		1	
Dokumentation Bedrohter Sprachen (DoBeS) (Documentation of Endangered Languages) https://dobes.mpi.nl/	1	1	✓	1	1	1					1	1		1					
PHOIBLE Project http://phoible.org								1	1					✓					
Ethnologue http://ethnologue.com	1	1	✓	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
The World Atlas of Language Structures (WALS) http://wals.info			1				1	1			1			✓					
The Rosetta Project Digital Language Archive https://archive.org/browse.php?field=subject&medi atype=texts&collection=rosettaproject	1						1	1				1		1					
Endangered Languages Archive (ELAR) https://elar.soas.ac.uk/									1	1	1								
The Repository and Workspace for Austroasiatic Intangible Heritage (RWAAI) https://projekt.ht.lu.se/rwaai	1		1	1	1	1	1	1		1	1	1		1					
SIL International Language and Culture Archives https://www.sil.org/resources/language-culture- archives															1				
World Oral Literature Project http://www.oralliterature.org/								1											

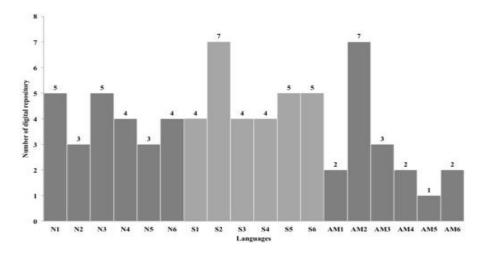


Figure 7. Digital repositories according to languages (the code for each language is provided in Table 3)

In addition, 10 digital repositories were also identified and classified based on the 18 different languages examined in the current study, as shown in Table 5 and illustrated in Figure 7 above. It can be observed in Table 5 that, out of 10 digital repositories, Ethnologue includes all languages in each language group. The other digital repositories that describe more than 10 languages include Open Language Archives Community (14 languages), and the Repository and Workspace for Austroasiatic Intangible Heritage (11 languages). The repositories that describe the least number of languages are SIL International Language and Culture Archives and World Oral Literature Project (1 language each).

Figure 7 above shows that all languages have been described in at least one digital repository. The language group that receives the highest coverage is the Senoi family (S1-S6) (29 times), followed by the Negrito family (N1-N6) (24 times), and then the Aboriginal Malay family (AM1-AM6) (17 times). Temiar (S2) from the Senoi family and Semelai (AM2) from the Aboriginal Malay family receive the highest coverage, i.e., 7 digital repositories each. As for the Negrito family, Kensiu (N1) and Jahai (N3) are described the most, i.e., 5 digital repositories each. The least described language is Orang Kuala (AM5) from the Aboriginal Malay family, i.e., 1 digital repository only.

4. Discussion and Conclusion

In this paper, we reported past linguistic studies and efforts in examining the indigenous languages in Malaysia. Our main aim was to assess the current development of linguistic studies in the Malaysian context, specifically the 18 sub-groups of indigenous communities in Malaysia. As mentioned in the United Nations Declaration on the Rights of Indigenous Peoples (Article 13), the indigenous communities are allowed to protect their heritage and tradition, including their languages. With most of the Malaysian indigenous languages currently being recognised as 'in trouble' and at risk of endangerment, the present study shall bring more awareness in preserving this national Orang Asli heritage for future studies within indigenous research. Future research should put an emphasis on this aspect so that one could better understand the linguistic outcomes of language endangerment and language loss.

The awareness in the current trends of linguistic research in Orang Asli languages will benefit various stakeholders, specifically towards policy makers, linguists, and educators. Firstly, it is hoped that this study will assist the government in planning appropriate language policy and actions for the indigenous community, particularly in Peninsular Malaysia. Hassan et al. (2015) remarked on the restricted number of studies pertaining to the vitality of indigenous languages in Malaysia, as most are done in Sabah and Sarawak (Ali, 2010; Coluzzi, 2010; Mohamed & Hashim, 2012). Thus, the present

study provides recent understanding on the current trends of the Orang Asli languages by bringing forward a systematic review of recent studies in this particular matter. In turn, researchers may benefit from the meta-analysis and develop relevant works within phonology, pragmatics and sociolinguistics, to name a few.

Based on the meta-analysis data of the Orang Asli linguistic research, the current study may benefit future studies on language vitality scales within the Orang Asli context in Peninsular Malaysia. Future research can focus on language vitality assessment tools, such as the Nine Factors by UNESCO, and the Expanded Graded Intergenerational Disruption Scale (EGIDS). Following Fishman (2001)'s notion of diglossia and bilingualism under the domain analysis, the current study can also encourage further discussion revolving around the Orang Asli bilingualism. Besides gaining awareness, this study may inspire and provide a spark for more inclusion of indigenous communities within future research on the Orang Asli languages.

On top of the essential boost in the field of linguistics, the current study can also assist educators of the Orang Asli students. As of 2018, JAKOA (2018c) recorded that there are well over 40,124 Orang Asli students within 1,287 schools in Malaysia. Putting the existing digital repositories for the Orang Asli languages in mind can provide some insights for teachers in designing classroom materials for these minority students. Having said that, we believe that our results will generate more experimental works in linguistics, plus ongoing efforts, in order to maintain the Orang Asli languages in the future.

Acknowledgement

This research was supported by the Ministry of Higher Education Malaysia (MoHE) through Fundamental Research Grant Scheme (FRGS/1/2019/SSI01/UUM/02/1 - RIMC UUM S/O Code: 14398). We would like to thank the Department of Orang Asli Development (JAKOA) for their generous assistance in our research.

References

- Adam, N. F. B. M., Yusop, M. S., & Makhtar, R. (2018). Bahasa Orang Asli Jahut: Penelitian aspek fonologi dan leksikal [The Orang Asli language of Jahut: An assessment of phonological and lexical aspects]. *International Journal of Education, Psychology and Counseling, 3*(11), 12–29.
- Ahmad, B. E., Noor, M. Y. M., & Sharif, T. I. S. T. (2011). Endangered language: Batek lexicon and loaned words. *European Journal of Social Sciences*, 26(2), 241–249.
- Amiruddin, M. H., & Othman, N. (2010). Meninjau keperluan pendidikan keusahawanan berdasarkan kepada perspektif belia Orang Asli di Selatan Malaysia [Needs analysis on entrepreneurial education from the perpective of Orang Asli in Southern Malaysia]. Paper presented at the Second World Congress on Teacher Education for Technical and Vocational Education and Training, Malaysia.
- Bedford, K. J. A. (2009). Gombak hospital, the Orang Asli hospital. Indonesia and the Malay World, *37*(107), 23–44.
- Benjamin, G. (2011). Egalitarianism and ranking in the Malay World. In Gibson, T. & Sillander, K. (Eds.). Anarchic solidarity: Autonomy, equality, and fellowship in Southeast Asia (pp. 170–201). New Haven: Yale University Southeast Asia Studies.
- Benjamin, G. (2012a). The Aslian languages of Malaysia and Thailand: An assessment. In McGill, S. & Austin, P. K. (Eds.). Language Documentation and Description (pp. 136–230). London: SOAS University of London.

- Benjamin, G. (2012b). The Temiar causative (and related features). *Mon-Khmer Studies*, 41, 32–45.
- Benjamin, G. (2012c). The peculiar history of the ethnonym 'Temiar'. SOJOURN: *Journal of social issues in Southeast Asia*, 27, 205–233.
- Benjamin, G. (2013). Why have the Peninsular "Negritos" remained distinct?. *Human Biology*, 85(1–3), 445–484.
- Benjamin, G. (2014). Aesthetic elements in Termiar grammar. In Williams, J. P. (Ed.). The aesthetics of grammar: Sound and meaning in the languages of Mainland Southeast Asia (pp. 36–60). Cambridge, UK: Cambridge University Press.
- Benjamin, G. (2016a). A new outline of Temiar grammar, Part 1. Retrieved November 13, 2020 from dx.doi.org/10.13140/RG.2.1.3944.0403.
- Benjamin, G. (2016b). Why you should study Aslian languages. Paper presented at the Second International Conference on Linguistics, Literature and Culture (ICLLIC2012), Penang, Malaysia.
- Burenhult, N. (2011). The coding of reciprocal events in Jahai. In Evans, N., Gaby, A., Levinson, S. C. & Majid, A. (Eds.). Reciprocals and semantic typology (pp. 163–176). Amsterdam: John Benjamins.
- Burenhult, N. (2012). The linguistic encoding of placement and removal events in Jahai. In Kopecka, A. & Narasimhan, B. (Eds.). Events of putting and taking: A crosslinguistic perspective (pp. 21–36). Amsterdam: John Benjamins.
- Burenhult, N. & Majid, A. (2011). Olfaction in Aslian ideology and language. *Senses and Society*, 6(1), 19–29.
- Choy, E. A., Ariffin, Z. C. M., & Pereira, J. J. (2010). Sosioekonomi masyarakat Orang Asli: Kajian kes di Hutan Simpan Bukit Lagong, Selangor, Malaysia [The socioeconomy of the Orang Asli community: A case study in the Bukit Lagong Forest Reserve, Selangor, Malaysia]. *Jurnal Melayu*, 5, 295–314.
- Coluzzi, P. (2017). The vitality of minority languages in Malaysia. *Oceanic Linguistics*, 56(1), 210–225
- Dallos, C. (2011). From equality to inequality: Social change among newly sedentary Lanoh huntergatherer traders of Peninsular Malaysia. Toronto: University of Toronto Press.
- Dentan, R. K. (2011). Childhood, familiarity, and social life among East Semai. In Gibson, T. & Sillander, K. (Eds.). Anarchic Solidarity: Autonomy, Equality, and Fellowship in Southeast Asia (pp. 88–118). New Haven: Yale University Southeast Asia Studies.
- Dunn, M., Burenhult, N., Kruspe, N., Tufvesson, S., & Becker, N. (2011). Aslian linguistic prehistory: A case study in computational phylogenetics. *Diachronica*, 28(3), 291–323.
- Dunn, M., Kruspe, N., & Burenhult, N. (2013). Time and place in the prehistory of the Aslian language family. *Human Biology*, 85, 383–399.
- Endicott, K. (2011). Cooperative autonomy: Social solidarity among the Batek of Malaysia. In Gibson, T. & Sillander, K. (Eds.). Anarchic solidarity: Autonomy, equality, and fellowship in Southeast Asia (pp. 62–87). New Haven: Yale University Southeast Asia Studies.
- Endicott, K. (2016). Malaysia's original people Past, present and future of the Orang Asli. Singapore: NUS Press.
- Enfield, N. J. (2017). Language in the Mainland Southeast Asia area. In Hickey, R. (Ed.), Part II Case Studies for Areal Linguistics (pp. 677–702). Cambridge, UK: Cambridge University Press.

- Fatanah, N. Z., Omar, M., & Daim, S. (2012). Lawad, Ye' Yo' and Tum Yap: The manifestation of forest in the lives of the Bateks in Taman Negara National Park. ASEAN Conference on Environment-Behaviour Studies. *Procedia Social and Behavioral Sciences*, 42, 190–197.
- Fix, A. (2011). Origin of genetic diversity among Malaysian Orang Asli: An alternative to the demic diffusion model. In Enfield, N. J. (Ed.). Dynamics of Human Diversity: The Case of Mainland Southeast Asia (pp. 277–291). Canberra: Pacific Linguistics.
- Fui, L. H., Haron, N., Yusof, N., Baharuddin, I. N., Mustapha, N. M., Lee, T. A., Zaidi, N. H., Jamaludin, F., & Mohtar, M. (2015). Documenting traditional forest-related knowledge of medicinal plants in Malaysia: A comprehensive approach. *Journal of Tropical Resources and Sustainable Science*, *3*, 77–85.
- Ghani, A. A. (2010). The Semang group of Orang Asli: Language and cultural endangerment. Paper presented at the International Conference on Minority and Majority: Language, Culture and Identity, Kuching, 23-24 November 2010. Retrieved 13 November 2020 from http://www.mymla.org/icmm2010papers
- Ghani, A. A. (2015a). Revitalising the indigenous Semai Orang Asli language in Malaysia. *Asia Pacific Journal of Advanced Business and Social Studies*, 1(1), 180–185.
- Ghani, A. A. (2015b). The teaching of indigenous Orang Asli language in Peninsular Malaysia. 3rd International Conference on Linguistics, Literature and Culture (ICLLIC 2014). *Procedia Social and Behavioral Sciences*, 208, 253–262.
- Ghani, A. A., & Lah, S. C. (2015). The Semang Kensiu Orang Asli of Lubuk Legong, Baling: Their language and cultural endangerment. 3rd International Conference on Linguistics, Literature and Culture (ICLLIC 2014). *Procedia Social and Behavioral Sciences*, 208, 21–30.
- Hajek, J. (2010). Aspiration in some varieties of Northern Aslian. Oceanic Linguistics, 49, 359–368.
- Hamid, S. A., Shaid, N. A. N., Yusop, M. S., Maros, M. & Aman, R. (2018). Fenomena sosiobudaya Orang Asli Kanaq dalam penguasaan Bahasa Melayu: Satu tinjauan awal [Sociocultural phenomena of Orang Asli Kanaq in the mastery of the Malay language: An initial study]. *Journal of Social Sciences and Humanities*, 15(5), 146–156.
- Hassan, R., Ghazali, K., & Omar, A. H. (2015). Vitality of the Orang Asli languages in Gerik, Perak. *Oceanic Linguistics*, *54*(2), 492–506.
- Howell, S. (2011). Sources of sociality in a cosmological frame: Chewong, Peninsular Malaysia. In Gibson, T. & Sillander, K. (Eds.). Anarchic Solidarity: Autonomy, Equality, and Fellowship in Southeast Asia (pp. 40–61). New Haven: Yale University Southeast Asia Studies.
- Kamal, S. F., & Lim, V. C. (2019). Forest reserve as an inclusive or exclusive space? Engaging Orang Asli as stakeholder in protected area management. *Journal of Tropical Forest Science*, 31(3), 278–285.
- Kamarudin, K. H. (2014). Kamus & Terjemahan Ringkas (Bahasa Temiar Bahasa Melayu) Deraf 2014 [Dictionary and Simple Translation (Temiar Malay) 2014 Draft]. Retrieved October 29, 2019 from https://www.academia.edu/5770537/DICTIONARY_KAMUS_BAHASA TEMIAR KE BAHASA MELAYU Deraf 2014
- Karim, H. A., & Hashim, A. H. (2012). The effect of a resettlement scheme on the social-cultural changes of the Temuan community. ASEAN Conference on Environment-Behaviour Studies. *Procedia Social and Behavioral Sciences*, 42, 362–373.
- Krishnasamy, D. S. (2013). Impak sosioekonomi program penempatan tersusun: Kajian kes masyarakat Orang Asli di parlimen Cameron Highlands [Socioeconomic impact of the structured

- resettlement programme: A case study of the Orang Asli community in the Cameron Highlands parliament]. Master thesis, Universiti Utara Malaysia, Malaysia.
- Kruspe, N. (2009a). Loanwords in Ceq Wong, an Austroasiatic language of Peninsular Malaysia. In Haspelmath, M. & Tadmor, U. (Eds.). Loanwords in the World's Languages: A Comparative Handbook of Lexical Borrowing (pp. 659–685). Berlin: Mouton de Gruyter.
- Kruspe, N. (2009b). Ceq Wong vocabulary. In Haspelmath M. & Tadmor U. (Eds.) World Loanword Database. Leipzig: Max Planck Institute for Evolutionary Anthropology. Retrieved 13 November, 2020 from https://wold.clld.org/vocabulary/26
- Kruspe, N. (2010). A Dictionary of Mah Meri, as Spoken at Bukit Bangkong. Honolulu: University of Hawai'i Press.
- Kruspe, N. (2011). Reciprocal constructions in Mah Meri. In Evans, N., Gaby, A., Levinson, S. C. & Majid, A. (Eds.). Reciprocals and Semantic Typology (pp. 149–162). Amsterdam: John Benjamins.
- Kruspe, N., & Hajek, J. (2009). Mah Meri. Illustrations of the IPA. *Journal of the International Phonetic Association*, 39, 241–248.
- Lah, S. C. (2014). Ethnic tourism: A case study of language and culture preservation of the Bateq indigenous group of Orang Asli in Peninsular Malaysia. SHS Web of Conferences, 12, 1–7.
- Lim, C. I. (2010). *The sociocultural significance of Semaq Beri food classification*. Master thesis, University of Malaya, Malaysia.
- Ma'alip, S. (2014). Pemilihan bahasa: Proses peralihan bahasa masyarakat Orang Asli Che Wong [Language choice: Language transfer process among the indigenous community of Che Wong]. *Jurnal Melayu*, 12(1), 32–43.
- Ma'alip, S. & Seong, T. K. (2016). Penggunaan Bahasa Orang Asli Che Wong di Kuala Gandah [The use of Orang Asli language of Che Wong in Kuala Gandah]. Geografia Online. *Malaysian Journal of Society and Space*, 12(11), 62–78.
- Majzub, R. M., & Rais, M. M. (2011). Perceptions of students and lecturers on the preservation of endangered languages. *Procedia Social and Behavioral Sciences*, 15, 1677–1683.
- Makhtar, R., Hamid, N. A., Ramli, N., & Zailani, S. A. (2018). Sikap dan persepsi masyarakat Semai terhadap bahasa Semai [Attitude and perception of the Semai community on Semai language]. Paper presented at the International Conference on Social Science and Humanities. Retrieved 13 November 2020 from http://conference.kuis.edu.my/pasak3/e-prosiding
- Makhtar, R., Soflee, N. S., Yusop, M. S., & Laengkang, A. G. (2018). Pengaruh dialek Kelantan dalam Bahasa Temiar: Satu analisis fonologi struktural [The influence of Kelantan dialect on Temiar language]. *International Journal of Education, Psychology and Counseling, 3*(11), 42–54.
- Mohamad, J. B., Ahmad, A. N., & Razali, J. R. (2016). Faktor-faktor keterancaman budaya material masyarakat Orang Asli Che Wong [Factors of the endangement of material cultures among the indigenous community of Che Wong]. *Journal of Education and Social Sciences*, 5(2), 307–317.
- Mokhtar, W. K. W. (2011). Kelestarian bahasa Orang Asli Bateq dan Mah Meri berdasarkan aspek fonologi dan leksikal [Language vitality of Bateq and Mah Meri from the phonological and lexical aspects]. Master thesis, Universiti Putra Malaysia, Malaysia.
- Mustafa, N. B. (2013). Tradisi dan kepercayaan Orang Asli Jah Jut di Kampung Penderas, Temerloh [Traditions and beliefs of Jah Hut in Kampung Penderas, Temerloh]. Bachelor's degree dissertation, Universiti Malaysia Sarawak, Malaysia.

- Nicholas, C., Engi, J., & Ping, T. Y. (2010). The Orang Asli and the UNDRIP From Rhetoric to Recognition. Subang Jaya, Malaysia: Center for Orang Asli Concerns.
- Peterson, M. M. (2012). Notes on Ten-edn (Tonga-Mos) and Kensiw borrowings. *Mon-Khmer studies*, 40, 19–35.
- Phillips, T. C. (2011). *Retention and reduction in reduplicants of Semai*. In Srichampa, S. & Sidwell, P. (Eds.). Austroasiatic Studies: Papers from ICAAL4 (pp. 178–197). Canberra: Pacific Linguistics.
- Phillips, T. C. (2013). *A brief phonology of Semai, Betau dialect*. Summer Institute of Linguistics, University of North Dakota. Retrieved 13 November 2020 from https://www.academia.edu/11299448/A_BRIEF_PHONOLOGY_OF_SEMAI_BETAU_DIALEC_T
- Phua, K. L. (2015). The health of Malaysia's "Orang Asli" peoples: A review of the scientific evidence on nutritional outcome, parasite infestations, and discussion on implications for clinical practice. *Malaysian Journal of Public Health Medicine*, 15(1), 83–90.
- Radzi, H., Sultan, F. M. M., Ahmad, Z., & Jalaluddin, N. H. (2011). Penggolongan kata bahasa Mendriq Negrito: Satu penelitian rintis [Word classification of Mendriq Negrito]. *Jurnal Linguistik*, 12, 134–154.
- Radzi, H., Sultan, F. M. M., Jalaluddin, N. H., & Ahmad, Z. (2012). Analisis bahasa komunikasi bangsa minoriti Negrito menerusi pengimbuhan dan peminjaman kata [Analysis of communication among Negrito through inflections and word loans]. *GEMA Online Journal of Language Studies*, 12(3), 885–901.
- Saamah, M. R. (2011). Alam dan budaya dalam bahasa kiasan Bahasa Semai [Nature and cultures in the metaphors of Semai language]. Research Seminar 2011 North Zone, IPG Campus Sultan Mizan, Besut, Terengganu, Malaysia. Retrieved 13 November 2020 from https://jpmipgmtaa.webs.com/Penulisan/Bahasa%20Kiasan%20Semai.pdf
- Salleh, A. A. H. (2014). The challenges of managing traditional knowledge related to medicinal plants among the Batek community in Kuala Koh, Gua Musang, Kelantan, Malaysia. *Journal of Social and Development Sciences*, 5(4), 275–283.
- Sam, S. A. M. (2015). Kajian amalan budaya Orang Asli suku kaum Jakun di Kampung Peta [A study on the cultures of Jakun in Kampung Peta]. Master thesis, Universiti Tun Hussein Onn Malaysia, Malaysia.
- Sharif, T. I. S. T., Noor, M. Y. M., & Ahmad, B. E. (2012). Ethical concerns in language documentation: a case study of the Tembeling River Batek Aslian. Paper presented at the Second International Conference on Social Science and Humanity.
- Sidwell, P. (2010). The Austroasiatic central riverine hypothesis. *Journal of Language Relationship, 4*, 117–134.
- Sidwell, P. (2015). Austroasiatic classification. In Jenny, M. & Sidwell, P. (Eds.). The Handbook of Austroasiatic Languages 1 (pp. 144–220). Leiden: Brill.
- Sidwell, P., & Blench, R. (2011). The Austroasiatic Urheimat: The southeastern riverine hypothesis. In Enfield, N. J. (Ed.). Dynamics of Human Diversity: The Case of Mainland Southeast Asia (pp. 315–343). Canberra: Pacific Linguistics.
- Subramaniam, Y. (2012). Orang Asli land rights by UNDRIP standards in Peninsular Malaysia: An evaluation and possible reform. PhD thesis, University of New South Wales, Australia.

- Subramaniam, Y. (2013). Affirmative action and the legal recognition of customary land rights in Peninsular Malaysia: The Orang Asli experience. *Australian Indigenous Law Review*, 17(1), 103–122.
- Sulaiman, A. & Abdullah, M. A. (n.d.). Kenali kami: Kajian terhadap gaya hidup masyarakat Orang Asli di laluan rentasan antara Tanah Rata, Cameron Highlands ke Kampung Lanai, Kuala Lipis, di Banjaran Titiwangsa, Pahang [Study on the Orang Asli lifestyle in the Titiwangsa Range, Pahang]. Paper presented at Za'ba Seminar on Malay World II, Malaysia.
- Suleiman, H. N. M. (2015). Struktur frasa Bahasa Orang Asli Duano [Phrasal structures of Duano]. PhD thesis, University of Malaya, Malaysia.
- Sultan, F. M. M. (2009a). Sintaksis frasa nama bahasa Kensiu [The syntax of Kensiu phrasal names]. *Jurnal Bahasa*, *9*, 155–172.
- Sultan, F. M. M. (2009b). Struktur sintaksis frasa nama bahasa Bateq [The syntactical structures of Bateq phrasal names]. *GEMA Online Journal of Language Studies*, 9(1), 47–61.
- Sultan, F. M. M. (2011). The syntactic structure of a noun phrase: Austroasiatic vs. Austronesia. *Pertanika Journal of Social Science and Humanities*, 19(1), 263–271.
- Sultan, F. M. M., & Alimi, K. F. (2014). Analisis deskriptif terhadap struktur frasa kerja bahasa Mendriq [Descriptive analysis of Mendriq phrasal verb structures]. *Jurnal Bahasa*, *14*(2), 169–191.
- Sultan, F. M. M., Ahmad, Z., Jalaluddin, N. H., & Radzi, H. (2010). Kata kerja transitif bahasa Mendriq: Kerangka program minimalis [Medriq transitive verbs: Minimalist framework]. *Jurnal Melayu*, 5, 409–423.
- Sultan, F. M. M., Jalaluddin, N. H., Ahmad, Z., & Radzi, H. (2016). The Kensiu noun phrase. Pertanika *Journal of Social Sciences & Humanities*, *24*(5), 81–94.
- Sultan, F. M. M., Jalaluddin, N. H., & Radzi, H. (2010). Sintaksis kata soal argumen bahasa Mendriq: Kerangka minimalis [The syntax of Mendriq argument words]. *Jurnal Bahasa*, *10*, 155–172.
- Sultan, F. M. M., & Ramli, M. R. (2015). Kata ganti nama dalam bahasa Mendriq [Pronouns in Mendriq]. *GEMA Online Journal of Language Studies*, 15(3), 67–82.
- Suzila, T. S. T. I, & Teo, K. S. (2014). *Exploring batek vowels*. In Recent Trends in Social and Behaviour Sciences Proceedings of the 2nd International Congress on Interdisciplinary Behavior and Social Sciences 2013, ICIBSoS 2013 (pp. 513–517). Taylor and Francis: Balkema.
- Tacey, I. (2016). *Batek transnational shamanism: Countering marginalization through weaving alliances with cosmic partners and global politicians*. In Endicott, K. (Ed.). Malaysia's 'Original People': Past, Present and Future of the Orang Asli (pp. 377–399). Singapore: National University of Singapore Press.
- Tacey, I., & Riboli, D. (2014). Violence, fear and anti-violence: The Batek of Peninsular Malaysia. *Journal of Aggression, Conflict and Peace Research*, 6(4), 203–215.
- Thai, Y. N. (2009a). Non-exhaustive syllabification in Temiar. *Journal of the Southeast Asian Linguistics Society*, 1, 267–282.
- Thai, Y. N. (2009b). *The status of surface vowels in Temiar: Evidence from a case study*. Paper presented at Research Seminar for Newly-Appointed Lecturers 2007, Faculty of Modern Languages and Communication, Universiti Putra Malaysia, Malaysia
- Thai, Y. N. (n.d.). *Online basic Temiar course*. Universiti Putra Malaysia, Faculty of Modern Languages and Communication. Retrieved November 13, 2020 from www.fbmk.upm.edu.my/ccms/courses/CLad18/

- Toshihiro, N. (2009). Living on the periphery: Development and Islamization of the Orang Asli. Subang Jaya, Malaysia: Center for Orang Asli Concerns.
- Tuck-Po, L. (2011a). A history of Orang Asli studies: Landmarks and generations. *Kajian Malaysia*, 29, 23–52.
- Tuck-Po, L. (2011b). The wild and the tame in protected areas management, Peninsular Malaysia. In Dove, M. R. (Eds.). Complicating Conservation in Southeast Asia: Beyond the Sacred Forest (pp. 37–61). Durham, NC: Duke University Press.
- Tufvesson, S. (2011). Analogy-making in the Semai sensory world. Senses and Society, 6(1), 86–95.
- Yager, J. (2013). Northern Aslian prehistory: Tracing the effects of contact. Master thesis, Lund University.
- Yusof, R. M., & Nor, N. H. M. (2014). Bahasa Orang Asli Melayu-Proto: Bahasa atau dialek Melayu? [Proto-Malay language: A language or a dialect?]. Paper preseted at Persidangan Kearifan Tempatan. Universiti Sains Malaysia, Penang, Malaysia.
- Yusof, R. M. & Nor, N, H. M. (2015). Ciri fonologi bahasa Orang Asli Melayu-Proto [Phonological aspects of Proto-Malay language]. *Pertanika Journals Mahawangsa*, *2*(2), 269–283.
- Yusop, M. S. (2011a). Ciri leksikal dialek Kanaq [Lexical characteristics of Kanaq language]. *Jurnal Linguistik*, 13, 1–21.
- Yusop, M. S. (2011b). Daftar kata bahasa Melayu–Melayu Proto (Jakun, Kanaq, Kuala, Seletar, Semelai, Temuan) [Malay–Proto Malay vocabulary]. Kuala Lumpur: Jabatan Kemajuan Orang Asli.
- Yusop, M. S. (2011c). Daftar kata bahasa Melayu–Negrito (Bateq, Jahai, Kensiu, Kentaq, Lanoh, Mendriq) [Malay–Negrito vocabulary]. Kuala Lumpur: Jabatan Kemajuan Orang Asli.
- Yusop, M. S. (2011d). Daftar kata bahasa Melayu–Senoi (Che Wong, Jahut, Mahmeri, Semai, Semoq Beri, Temiar) [Malay–Senoi vocabulary]. Kuala Lumpur: Jabatan Kemajuan Orang Asli.
- Yusop, M. S. (2013). Keterancaman bahasa orang asli Duano & Kanaq [Endangerment of Duano & Kanaq languages]. Serdang: Universiti Putra Malaysia Press.
- Yusop, M. S., & Adam, N. F. M. (2018). Sari Budaya & Bahasa Orang Asli Jahut [Jahut Cultures and Language]. Serdang: Penerbit Universiti Putra Malaysia.
- Zuriatunfadzliah, S., Rosniza, A. C. R., & Habibah, A. (2009). Cultural changes of Batek people in the situation of ecotourism in national park. *Journal of Social Sciences and Humanities*, 4(1), 159–169
- Ali, H. M. (23 November, 2010). The maintenance of Malaysia's minority languages. *Paper presented at the International Conference on Minority and Majority: Language, Culture, and Identity*. Sarawak, Malaysia. Retrieved from http://irep.iium.edu.my/9829/4/ICMMM2010_p27
- Coluzzi, P. (2010). Endangered languages in Borneo: A survey among the Iban and Murut (Lun Bawang) in Temburong, Brunei. *Oceanic Linguistics*, 49, 119–143.
- Dentan, R., Endicott, K., Gomes, A., & Hooker, M. (1997). *Malaysia and the Original People: A case study of the impact of development on Indigenous Peoples*. Boston: Allyn & Bacon.
- Department of Statistics Malaysia. (2019). *Current population estimates, Malaysia, 2018-2019*. Retrieved from https://www.dosm.gov.my/v1/index.php?r= column/cthemeByCat&cat=155&bul_id=aWJZRkJ4UEdKcUZpT2tVT090Snpydz09&menu_id=L 0pheU43NWJwRWVSZklWdzQ4TlhUUT09

- Eberhard, D., Simons, G., & Fennig, C. (Eds.). (2020). *Ethnologue: Languages of the world* (22nd ed.). Dallas, Texas: SIL International.
- Farooqui, J. (2015). Development and its diverse aspects. Singapore: Partridge Publishing.
- Fishman, J. A. (2001). Why is it so hard to save a threatened language? (A perspective on the cases that follow). In J. Fishman (Ed.), *Can threatened languages be saved?: Reversing language shift, revisited: A 21st century perspective* (pp. 1–22). Clevedon, UK: Multilingual Matters.
- Idrus, R. (2011). The discourse of protection and the Orang Asli in Malaysia. *Kajian Malaysia*, 29(1), 53–74.
- JAKOA. (2018a). *Demografi Orang Asli sehingga Mac 2018*. Retrieved from http://www.data.gov.my/data/ms_MY/dataset/demografi-orang-asli-mac2018/resource/ 76da87b1-a4b3-4865-ba63-e7a7f103b28d
- JAKOA. (2018b). *Senarai kampung Orang Asli sehingga April 2018*. Retrieved from http://www.data.gov.my/data/ms_MY/dataset/kampung-orang-asli-april-2018/resource/ d09a6ebf-e203-4b89-9f72-21b2c8647b9e
- JAKOA. (2018c). Bilangan pelajar mengikut peringkat persekolahan sehingga November 2018. Retrieved from http://www.data.gov.my/data/ms_MY/dataset/bilangan-pelajar-masyarakat-orang-asli-mengikut-peringkat-persekolahan-di-setiap-negeri/resource/563fee47-6d0e-42af-aa56-727c1dc10b6a
- Lewis, P., & Simons, G. (2009). Assessing endangerment: Expanding Fishman's GIDS. *Revue Roumaine de Linguistique*, 1–30.
- Mohamed, N., & Hashim, N. H. (2012). Language vitality of the Sihan community in Sarawak, Malaysia. *KEMANUSIAN: The Asian Journal of Humanities*, 19(1), 59–86.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G. (2009). *The PRISMA Group. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement*. BMJ. 2009;339:b2535. Retrieved February 28, 2020 from https://doi.org/10.1136/bmj.b2535
- Omar, A. (2014). Processing Malaysian indigenous languages: A focus on phonology and grammar. *Open Journal of Modern Linguistics*, 4(5), 728–738.
- Simons, G., & Fennig, C. (2018). *Ethnologue: languages of the world* (21st ed.). Dallas, Texas: SIL International.

AUTHOR BIODATA

Mohd Hilmi Hamzah is an Associate Professor at the School of Languages, Civilisation and Philosophy, Universiti Utara Malaysia. He received his PhD in Phonetics from the University of Melbourne, Australia in 2014. His research interests include Phonetics and Phonology, Applied Linguistics, and Teaching English as a Second Language.

Hasliza Abdul Halim is senior lecturer at the School of Languages, Civilisation and Philosophy, Universiti Utara Malaysia. She obtained her PhD in Linguistics from University of Canterbury, New Zealand. Her current research projects are Malaysian traditional oral performances, and also the sustainability of Orang Asli languages in Malaysia.

Muhammad Hafiz Ummah Abu Bakar Bakri is a Graduate Research Assistant and a master's degree student in Applied Linguistics at the School of Languages, Civilisation and Philosophy, Universiti Utara Malaysia. He is working on the language vitality of Batek, which is one of the endangered Orang Asli languages in Malaysia.

Stefanie Pillai is a Professor at the Faculty of Languages and Linguistics, Universiti Malaya (UM), and currently the Dean of the Social Advancement and Happiness Research Cluster at UM. Her main research interests include the phonology of varieties of English, specifically Malaysian English, language use in multilingual contexts, and language documentation and language revitalisation.