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PREDICTING ENGLISH PRONUNCIATION DIFFICULTIES OF EASTERN SULAWESI NATIVES

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A B S T R A C T

Recent studies show growing interests in investigating the influence of native language (L1) to foreign language being learned (L2) as well as the L2 pronunciation errors. Yet, there are still few studies which explore how the contrastive analysis of L1 and L2 can be applied to predict the difficulties of L2 learners with specific L1 background, specifically in pronunciation. In present study, the phonemes inventory of two native languages in Eastern Sulawesi, Banggainese and Balantaknese (L1) were contrasted to English (L2). Applying qualitative method, the researchers firstly revealed the phonemes of Banggainese and Balantaknese through audio recording and additional documents representing the use of those languages and supported by the intuitive understanding of the researchers as L1 native speakers. After contrasting the L1 and L2, the findings suggested that for medium category, both Banggainese and Balantaknese will probably mispronounce voiced stop consonants in final L2 syllable or word as voiceless, L2 affricate consonants /tʃ/ and /dʒ/ as /c/, and /ɟ/, and particular L2 vowels with length marking as a single vowel with no length marking. Meanwhile, in difficult category, Banggainese and Balantaknese (L1) speakers are predicted struggling in producing L2 phoneme inventory which do not exist in L1 such as of fricatives consonants /f/, /v/, /θ/, /ð/, /z/, /ʃ/, /ʒ/, /h/, vowels /ɑ:/, /ʌ/, /ə/, and /ɜ:/, and diphthongs /əʊ/, /ɪə/, and /ʊə/. Further studies are recommended to develop special teaching method to improve the English pronunciation of Eastern Sulawesi natives, in this case Banggainese and Balantaknese students.

Keywords: *contrastive analysis, English, pronunciation difficulties, prediction*

INTRODUCTION

Instead of studying particular characteristics of language individually, a number of previous scholars argue that comparing two or more languages through contrastive analysis (CA) can provide better understanding that benefits practical purposes including second language learning. In CA, according to Krzeszowski [1], the mother tongue (L1) is compared systematically to the foreign language (L2) to describe similarities and differences while identifying which aspects consider difficult and might lead to interference. Interference as Johansson [2] illustrated occurs when mistakes in pronunciation, grammar, and other level of language are possibly made in the use of a foreign language due to the influence of mother tongue. As stated by Munro [3], the influence of L1 sound system on how the L2 pronunciation being learned is unquestionably. Johansson [2] explained the obvious effect of mother tongue in case of the foreign accent is often recognized as an American speaking Norwegian that sounds quite different from a Frenchman or German.

Through cross-language comparison, Firbas [4] as well as Johansson [2] emphasized the characteristics of each language is even more noticeable, thus it can result better description of each language. It is essential to build awareness of differences between L1 and L2 as Johansson [2] and Ammar et al [5] suggested so the L2 learner can identify the appropriate use of foreign language and contrast it to more familiar sounds of native language. Corresponding to this idea, Fries [6] emphasized that the most efficient learning materials does not only provide scientific description of language being learned, but also detailed comparison with native language of the learner.

Recommending contrastive analysis hypothesis (CAH), Lado [7] demonstrates how theoretical findings can be beneficial for practical aims by predicting and describing the patterns which possibly cause difficulty and those which do not. The assumption is the more similar L1 to L2, the easier the L1 speaker to learn L2. This principle agrees with the Second Language Linguistic Perception (L2LP) model proposed by Escudero [8], the perception is considered difficult if the L2 environment produces phonological differences that do not found in the L1. Focusing more on what James [9] called as microlinguistic aspects such as phonology, grammar, and lexis, the research question arises including what are the consonant phonemes in language X and Y? How do they differ in inventory, realization, and distribution? After describing and comparing the mother tongue (L1) and the foreign language (L2), the next steps Krzeszowski [1] proposed as mentioned in Johansson [2] are predicting points of difficulty and use the results in order to improve the teaching materials.

Recent studies indicate great interest in investigating the influence of mother tongue (L1) in foreign language (L2) (Listyani et al [10], Li [11], Islam & Akteruzzaman [12], Kim [13]), the perception of L1 speaker as L2 learner (Perwitasari [14], Kartushina & Frauenfelder [15]), and the most popular, pronunciation errors among various L1 backgrounds either as L2 learner or even teacher (Pratiwi & Indrayani [16], Febrianto [17], Maiza [18], Yusriati&Hasibuan [19], Rafael [20], Octaviana [21], Kalaldeh [22], Shak et al [23], Matthew [24]). However, still few studies explore how contrastive analysis hypothesis (CAH) suggest the prediction of the possible difficulties in the L2 pronunciation. Moreover, considering the L1 backgrounds, not many researchers examine Eastern Sulawesi native languages such as Banggainese and Balantaknese.

To fulfill the gap, the research team conducted a contrastive analysis hypothesis (CAH) – based study as proposed by Lado [7] to predict the English pronunciation difficulties of Eastern Sulawesi natives, in this case, Banggainese and Balantaknese speakers. The aim of the study is to reveal the sound system (phonemes) both in L1 and L2, contrast them, and suggest possible difficulties according to the principle of CAH theory, the more similar L1 to L2, the easier the L1 speaker to learn L2.

The findings are expected to be a recommendation that can be applied in developing English teaching materials, specifically for those who lives in Banggainese and Balantaknese speaking area in Eastern Sulawesi. In long-term goal, the enhancement of English teaching in Eastern Sulawesi will possibly improve the adequacy of human resources which Akbar et al [25] indicated as one of the issues in developing marine tourism potential in the Banggai area (Banggai Regency, Banggai Kepulauan Regency, and Banggai Laut Regency).

METHODS

Basically, the present investigation was a contrastive analysis hypothesis (CAH) – based study as proposed by Lado [7]. This study aimed at: 1) describing phonemes in Banggainese and Balantaknese as L1 and English as L2; 2) contrasting L1 to L2 to discover similarities and differences; and 3) formulating prediction of L2 pronunciation difficulties which possibly experienced by the Eastern Sulawesi natives, specifically those with Banggainese and Balantaknese L1 backgrounds. To achieve these objectives, the research team applied qualitative method.

In order to provide description of L1 phonemes, 500 words in total were collected from audio recording transcription and additional documents representing the use of those languages and supported by the intuitive understanding of the researchers as L1 native speakers. These L1 words were then extracted to examine specific L1 phonemes. Meanwhile, the description of English phonemes (L2) in this study referred to Collins and Mees [26] which adapted from Well [27].

After presenting both L1 and L2 phonemes with description, the researchers then contrasted these L1 and L2 phonemes to reveal similarities and differences. According to the principle of CAH theory, the more similar L1 to L2, the easier the L1 speaker to learn L2. This principle also agrees with the Second Language Linguistic Perception (L2LP) model proposed by Escudero [9], the perception is considered difficult if the L2 environment produces phonological differences that do not found in the L1. Hence, to suggest prediction of English pronunciation difficulties of the Eastern Sulawesi natives, specifically those with Banggainese and Balantaknese L1 backgrounds, the researchers formulated hypothesis as follows: 1) Easy refers to accurate pronunciation can be resulted due to identical phoneme inventories between L1 and L2 (L1=L2); 2) Medium refers to possibly inaccurate pronunciation due to similar substitute but different numbers of phoneme inventories (L2>L1); and 3) Difficult means possible struggles due to L2 phoneme inventory is not exist in L1 (L2≠L1).

FINDINGS

After collecting and analyzing the data, the researchers presented the results based on the objectives as follows: 1) describing phonemes in Banggainese and Balantaknese as L1 and English as L2; 2) contrasting L1 to L2 to discover similarities and differences; and 3) formulating prediction of L2 pronunciation difficulties which possibly experienced by the Eastern Sulawesi natives, specifically those with Banggainese and Balantaknese L1 backgrounds. To be more detailed, the following are more discussion about the findings.

The Native Language (L1) Phonemes

According to language mapping proposed by The Ministry of Education and Culture, there are 21 local languages in Central Sulawesi Province. In this study, we limited to two native languages in eastern area, Banggainese spoken by people in the islands (Banggai Kepulauan and Banggai Laut Regency) and Balantaknese spoken in mainland of Sulawesi

(Banggai Regency). Of all linguistics aspect, the researchers emphasized more on investigating the phonology and more specific to reveal the phonemes. The following are descriptions of each language phonemes.

1. Banggainese Phonemes

After collecting two hundreds of the Banggainese words through audio recording transcription and additional documents representing the use of those languages, the researchers then analyzed those words to extract the set of phonemes including consonants, vowels, and diphtongs supported by the intuitive understanding of the researchers as L1 native speakers. Based on the investigation, the researchers revealed that the Banggainese possesses 30 phonemes consisting of 13 consonants, 5 vowels, and 12 diphtongs. Each of the classification of Banggainese phonemes were presented in the following subtitle.

Banggainese Consonants

The results of analysis indicated that Banggainese has 13 cosonants including stop, fricatives, and sonorants. The findings also suggested that no affricate sounds are available. Look at the table below:

No	Sound Classification	Phonemes	Word Samples	Transcription
1.	Stop	/p/	potil popook susup	/potil/ /popo;k/ /susup/
2.		/b/	bose boboine	/bose/ /boboine/
3.		/t/	tobimo totuuk kukumbit	/tobimo/ /totu:k/ /kukumbit/
4.		/d/	doi dodoon	/doi/ /dodo:n/
5.		/k/	keete yaku biok	/ke;te/ /jaku/ /biok/
6.		/g/	anggayo tinggale	/aŋgajo/ /tiŋgale/
7.	Fricatives	/s/	sasa paisu kabus	/sasa/ /paisu/ /kabus/
8.	Sonorant	/m/	mulemo molumbit moinum	/mulemo/ /molumbit/ /moiɪnum/
9.		/n/	nia	/nia/

			buno tukon	/buno/ /tukon/
10.		/ŋ/	nggalau konggu badang	/ŋgalau/ /koŋgu/ /bada:ŋ/
11.		/l̩/	late molo babasal	/late/ /mo:lo/ /babasal/
12.		/w/	walia	/walia/
13.		/j/	yanila iyase	/janila/ /ijase/

As presented in the previous table, there are only 13 consonant phonemes found. Based on the sound classification, the Banggainese phonemes has complete set of stop sound including /p/, /b/, /t/, /k/, and /g/. However, as demonstrated in the table above, only stop voiceless sounds which are found in the end of syllable or word. Next, for fricatives, the available phoneme is only /s/. This fricative sound can be obtained in all position, initial, mid, or final. Also, Banggainese possesses sonorant sound consisting of /m/, /n/, /ŋ/, /l/, /w/, and /j/. Almost all of these sonorant sounds can occur in all positions either initial, mid, or final unless the phoneme /w/ and /j/. The table also implies that Banggainese does not have other sonorant sounds such as /ɳ/ and /r/ as in other languages.

Furthermore, it is obviously showed that no even single phoneme represented affricate sound in Banggainese. Exploring Indonesian words that closed (probably adapted) to Banggainese, researchers discovered that '*cerita*' /cəritɑ/ is pronounced as '*salita*' /sɑlitɑ/ and '*hujan*' /huɟɑn/ is pronounced as '*udan*' /udan. In this case, the affricate phoneme /c/ in Indonesia is perceived as /s/ and /ɟ/ is identified as /d/ in Banggainese. Yet, as many Banggainese people influenced by Bahasa Indonesia, the affricate phoneme /c/ can be pronounced accurately in the loanword like '*cingke*' /ciŋke/ which means clove.

Banggainese Vowels

Based on the analysis, the findings revealed that Banggainese possesses only five vowels as phonemes as follows:

No.	Sound Classification	Phonemes	Word Samples	Transcription
1.	High-front	/i/	iyase tinggale mongoli	/ijase/ /tiŋgaɭe/ /moŋoɭi/
2.	High-back	/u/	uange bunggul daku	/uaŋe/ /buŋguɭ/ /daku/
3.	Mid-front	/e/	teteba otunggule tendenge	/tetebɑ/ /otuŋguɭe/ /tendeŋe/
4.	Mid-back	/o/	ode odon molo	/ode/ /odoːn/ /moːlo/
5.	Low-front	/a/	anggayo sasa modoa	/aŋgɑjɔ/ /sasa/ /modoa/

As demonstrated in the table above, the vowel phonemes in Banggainese consisting of high-front /i/, high-back /u/, mid-high /e/, mid-back /o/, and low-front /a/. The table also indicates that these vowels can be found in all positions in Banggainese either in initial, mid, or final.

Banggainese Diphtongs

After analyzing hundreds of Banggainese words, the researchers identified 12 diphthong phonemes as in the following table:

No.	Phonemes	Word Samples	Transcriptions
1.	/ai/	bulakai	/bulakai/
2.	/au/	pau, taus	/pau/, /taus/
3.	/ae/	taepa	/taepa/
4.	/ia/	nia, mian	/nia/, /mian/
5.	/iu/	komiu	/komiu/
6.	/io/	biok, bitio	/biok/, /bitio/
7.	/ea/	deamo, teali	/deamo/, /teali/
8.	/oa/	dodoa, osoan	/dodoa/, /osoan/
9.	/oi/	bakoiti, moinum, doiya	/bɑkoɪti/, /moinum/, /doijɑ/
10.	/ou/	moute	/moute/
11.	/ua/	motuamo	/motuamo/
12.	/uo/	bituon	/bituon/

As presented in the table above, there are a dozen of different joined vowels consisting of /ai/, /au/, /ae/, /ia/, /iu/, /io/, /ea/, /oa/, /oi/, /ou/, /ua/, and /uo/. The numbers are even greater than single vowels or monophthongs. This finding suggested that one of the unique characteristics of Banggainese sound system is the inventory of diphthongs which are more commonly found in Banggainese words.

Balantaknese Phonemes

Besides Banggainese, researchers also identified the phonemes of the other native language in eastern Sulawesi called Balantaknese. Like Banggainese, the Balantaknese phonemes were extracted from exactly three hundred of words collected through audio recording transcription and additional documents representing the use of those languages. Supported by the intuitive understanding of the researchers as L1 native speakers, the present study discovered 37 phonemes including 17 consonants, 6 vowels, and 14 diphthongs. The following are more detailed discussion of each types of phonemes.

Balantaknese Consonants

After analyzing hundreds of words with the support of intuitive understanding of the researchers as L1 native speakers, the team identified 17 consonants in Balantaknese consisting of stop, affricate, fricatives, sonorant, and plosive. Consider the table below:

No	Sound Classification	Phonemes	Word Samples	Transcription
1.	Stop	/p/	panganon	/paŋanon/
2.		/b/	bingkele	/bɪŋkele/
3.		/t/	tamangku	/tamaŋku/
4.		/d/	dopi’	/dopɪʔ/
5.		/k/	kele’	/keleʔ/
6.		/g/	geges	/geges/
7.	Affricate	/ɟ/	anja	/anɟa/
8.	Fricatives	/s/	monsoani	/monsoanɪ/
9.	Sonorant	/m/	mamadak	/mamadak/
10.		/n/	bobuno’	/bobunoʔ/
11.		/ŋ/	nggolong	/ŋgoloŋ/
12.		/ɳ/	nya’a	/ɳaʔa/
13.		/l/	belaon	/belaon/
14.		/r/	rumakaat	/rumaka:t/
15.		/w/	wauonku	/wauonku/
16.		/j/	mandayang	/mandajaŋ/
17.	Plosive	/ʔ/	rae’anna	/raeʔana/

Unlike the Banggainese, the Balantaknese have four more consonants besides a complete set of stop sound /p/, /b/, /t/, /k/, and /g/, one fricatives /s/, and a group of sonorant sounds. The four other consonants are one affricate /ɟ/, two more sonorants /ɳ/ and /r/, and one plosive sound /ʔ/. The researchers were noticed sound [ɳ] and [r] in Banggainese. However, they are identified as allophone since they can be interchanged with /n/ and /l/ respectively and the meanings remain the same. It is different from Balantaknese, these phonemes /n/ and /ɳ/ as well as /l/ and /r/ are not interchangeable since each single phoneme conveys different meaning. Hence, these differences are recognized as special characteristics of Balantaknese.

Balantaknese Vowels

Besides consonants, the researchers also revealed the vowels inventory in Balantaknese. As mentioned previously, there are six vowels have been successfully identified as follows:

No.	Sound Classification	Phonemes	Word Samples	Transcription
1.	Low-front	/a/	ampalam	/ampalam/
2.	High-front lax	/ɪ/	maripi	/marɪpɪ/
3.	High-front tense	/i/	pimo	/pi:mɔ/
4.	High-back	/u/	susuruk	/susuruk/
5.	Mid-high	/e/	gareda	/gareda/
6.	Mid-back	/o/	koru’	/koruʔ/

The table above obviously shows that Balantaknese possesses six phonemes in vowels inventory. Besides low-front /a/, high-back /u/, mid-high /e/, and mid-back /o/, as in Banggainese, the researchers also identified two other phonemes which vary in length high-front tense /i/, and high-front lax /ɪ/. This length marking is not noticed as allophones as in Banggainese, instead different phonemes will impact different meaning if it is used interchangeably. Consider, the word sample ‘*pimo*’ that means *how much* if it pronounced with long /i/, and means *just go* if it pronounced with short /ɪ/. Thus, this case is also considered as another uniqueness of Balantaknese phonemes inventory.

Balantaknese Diphtongs

Not only consonants and vowels, the study also explored the other Balantaknese phonemes inventory called diphthongs. Based on transcription analysis, the researchers revealed 14 diphthongs, extra two phonemes compared to Banggainese. Look at the next table!

No	Phonemes	Word Samples	Transcription
1.	/ai/	babelai	/babelai/
2.	/au/	bau’	/bauʔ/
3.	/ia/	mian	/mian/
4.	/iu/	riuk	/riuk/
5.	/io/	pios	/pios/
6.	/ua/	sapuanna	/sapuana/
7.	/ui/	tobui	/tobui//
8.	/ue/	ampue’	/ampueʔ/
9.	/uo/	muntuong	/muntuoŋ/
10.	/ea/	meas	/meas/
11.	/eo/	leok	/leok/
12.	/oa/	baloa’	/baloaʔ/
13.	/oe/	koloet	/koloet/
14.	/ou/	boyou	/bojou/

As presented in the table above, the Balantaknese even possesses more different joined vowels known as diphthongs consisting of /ai/, /au/, /ia/, /iu/, /io/, /ua/, /ui/, /ue/, /uo/. /ea/, /eo/, /oa/, /oe/, and /ou/. These diphthongs inventory are different from the Banggainese which implies specific characteristics of the Balantaknese.

The English (L2) Phonemes

As foreign language or L2, in the present study, the description of English phonemes also significantly matters. Referring to Collins and Mees [26], the Received Pronunciation (British) English phonemes which adapted from Well [27] consist of 44 including 24 consonants, 13 vowels, and 7 diphthongs. The detailed of each of category is discussed in the following subtitle.

English Consonants

As mentioned previously, English possesses 24 consonants. Consider the following table!

No	Sound Classification	Phonemes	Word	Transcription
1.	Stop	/p/	paper	/peɪpər/
2.		/b/	bag	/bæg/
3.		/t/	tiger	/taɪgər/
4.		/d/	doll	/dɑl/
5.		/k/	cup	/kʌp/
6.		/g/	guide	/gaɪd/
7.	Affricate	/tʃ/	cheese	/tʃiːz/
8.		/dʒ/	jump	/dʒʌmp/
9.	Fricatives	/θ/	path	/pæθ/

10.		/ð/	there	/ðɛər/
11.		/f/	foot	/fʊt/
12.		/v/	vase	/veɪs/
13.		/s/	snake	/sneɪk/
14.		/z/	zero	/zɪroʊ/
15.		/ʃ/	sheep	/ʃiːp/
16.		/ʒ/	treasure	/trɛʒər/
17.		/h/	house	/haʊs/
18.	Sonorant	/m/	music	/mjuːzɪk/
19.		/n/	name	/neɪm/
20.		/ŋ/	king	/kɪŋ/
21.		/l/	love	/lʌv/
22.		/r/	rose	/roʊz/
23.		/w/	water	/wɔtər/
24.		/j/	yogurt	/joʊgərt/

English consonants as presented in the table above, consist of 6 stop sounds /p/, /b/, /t/, /d/, /k/,/g/, 2 affricate sounds /tʃ/,/ʤ/, 9 fricative sounds /f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, and /h/, also 7 sonorant sounds /m/, /n/,/ŋ/, /l/, /r/, /w/, and /j/. More various English consonants existed in the phonemes inventory makes it considered unique with its complexity. Also, English is not phonetic language, thus the orthography or spelling does not represent the transcription as in Indonesian or other native languages in Indonesia.

English Vowels

Besides consonants, English as other languages also possessed vowels. The number of vowels in English, specifically for received pronunciation or British English are 13. Here are the phonemes inventory of English vowels.

No.	Sound Classification	Phonemes	Word Samples	Transcription
1.	high-front lax	/ɪ/	swim	/swɪm/
2.	high-front tense	/iː/	tree	/triː/
3.	mid-front lax	/e/	bed	/bed/
4.	mid-front tense	/ɛː/	square	/skwɛː/
5.	low-front	/æ/	cat	/kæt/
6.	high-back lax	/ʊ/	cook	/kʊk/
7.	high-back tense	/uː/	shoe	/ʃuː/
8.	mid-back lax	/ɒ/	hot	/hɒt/
9.	mid-back tense	/ɔː/	thought	/θɔːt/
10.	low-back	/ɑː/	palm	/pɑːlm/
11.	low-central	/ʌ/	fun	/fʌn/
12.	mid-central lax	/ə/	banana	/bəˈnænə/
13.	mid-central tense	/ɜː/	girl	/gɜːl/

As presented in the previous table, the English vowels are considered complex. It consists of /ɪ/, /i/, /e/, /ɛː/, /æ/, /ʊ/, /uː/, /ɒ/, /ɔː/, /ɑː/, /Λ/, /ə/, and /ɜ/. The specific characteristics indicated

in English vowels are different lengths which vary each phoneme beside the orthography which do not represent the sounds.

English Diphthongs

The next phonemes inventory to describe in English subsection are diphthongs. As cited from Collins and Mees [26], the Received Pronunciation (British English) as adapted from Well [27] presents 7 diphthongs. Here are the English diphthongs inventory.

No.	Phonemes	Word Samples	Transcriptions
1.	/eɪ/	face	/feɪs/
2.	/aɪ/	price	/praɪs/
3.	/ɔɪ/	choice	/tʃɔɪs/
4.	/əʊ/	goat	/gəʊt/
5.	/aʊ/	mouth	/maʊθ/
6.	/ɪə/	near	/nɪə/
7.	/ʊə/	cure	/kjʊə/

As demonstrated in the previous table, the seven diphthongs of English are the results of conjoined pairs of various vowels such as /eɪ/, /aɪ/, /ɔɪ/, /əʊ/, /aʊ/, /ɪə/, and /ʊə/. These diphthongs become more distinctive with the pairs of particular vowels with schwa /ə/ which vary the Received Pronunciation (British English) from the General American accents.

Contrasting L1 to L2 Phonemes

After providing descriptions of the phonemes in each language, the researchers then contrasted the L1 to L2 phonemes. The discussion are divided into two parts, Banggainese (L1) and English (L2) and secondly Balantaknese (L1) English (L2). The following subsections are more detailed comparisons of each language.

1. Banggainese and English Phonemes

As mentioned previously, Banggainese possessed total 30 phonemes consisting of 13 consonants, 5 vowels, and 12 diphtongs. Meanwhile, English has total 44 phonemes including 24 consonants, 13 vowels, and 7 diphthongs as proposed by Collins and Mees [26] for the Received Pronunciation (British) English phonemes adapted from Well [27]. The significant differences on the numbers of phonemes inventory between L1 and L2 are obviously noticeable. Yet, to have more detailed descriptions, the researchers provided table of comparison as follows:

No	Sound Classification	Banggainese (L1) Phonemes	English (L2) Phonemes
1.	Stop	/p/ as in ‘pokana’ /pokana/	/p/ as in ‘paper’ /peɪpər/
2.		/b/ as in ‘bose’ /bose/	/b/ as in ‘bag’ /bæg/
3.		/t/ as in ‘tobimo’ /tobimo/	/t/ as in ‘tiger’ /taɪgər/
4.		/d/ as in ‘doi’ /doi/	/d/ as in ‘doll’ /dɒl/
5.		/k/ as in ‘keete’ /ke:te/	/k/ as in ‘cup’ /kʌp/
6.		/g/ as in ‘anggayo’ /aŋgajo/	/g/ as in ‘guide’ /gaɪd/

The table above indicates that both L1 and L2 are common with stop sounds. However, in L1, only voiceless stop consonants which can occur in the final of the syllable or words such as /susup/, /kukumbit/, and /biok/. It is different from L2 stop consonants which can be found either in initial, mid, or final such as /bænd/, /klʌb/, and /leg/. After comparing the stop sounds, researchers also contrasted affricate sounds as follows.

No	Sound Classification	Banggainese (L1) Phonemes	English (L2) Phonemes
1.	Affricate		/tʃ/ as in ‘cheese’ /tʃi:s/
2.			/dʒ/ as in ‘jump’ /dʒʌmp/

As shown in the previous table, there is no any affricate consonants found in Banggainese (L1). Meanwhile, in English (L2), there are two affricate consonants including /tʃ/ and /dʒ/. As mentioned previously, the inexistence of affricate sounds in Banggainese can be substituted to fricative /s/ or stop /d/. Yet, the Banggainese speaker can also pronounce Indonesian affricate consonant, /c/, as in the loanword ‘cingke’ /ciŋke/.

Beside affricate, the next consonants inventory contrasted between Banggainese (L1) and English (L2) are fricatives. Look at the table below.

No	Sound Classification	Banggainese (L1) Phonemes	English (L2) Phonemes
1.	Fricatives	/s/ as in ‘sasa’ /sasa/	/θ/ as in ‘path’ /pæθ/
2.			/ð/ as in ‘there’ /ðeə/
3.			/f/ as in ‘foot’ /fʊt/
4.			/v/ as in ‘vase’/veɪs/
5.			/s/ as in ‘snake’/sneɪk/
6.			/z/ as in ‘zero’ /ˈzɪərəʊ/
7.			/ʃ/ as in ‘sheep’ /ʃi:p/
8.			/ʒ/ as in ‘treasure’ /treʒər/
9.			/h/ as in ‘house’ /haʊs/

As presented in the table above, the Banggainese (L1) has only one fricative consonant /s/. It is significantly different from English (L2) inventory which possesses 9 fricatives including /f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, and /h/.

The last consonants inventory being contrasted between Banggainese (L1) and English (L2) is sonorant. Consider the following table.

No	Sound Classification	Banggainese (L1) Phonemes	English (L2) Phonemes
1.	Sonorant	/m/ as in ‘mulemo’ /mulemo/	/m/ as in ‘music /mjuːzɪk/
2.		/n/ as in ‘nia’ /nia/	/n/ as in ‘name’/neɪm/
3.		/ŋ/ as in ‘nggalau’ /ŋgalau/	/ŋ/ as in ‘king’ /kɪŋ/
4.		/l/ as in ‘late’ /late/	/l/ as in ‘love’ /lʌv/
5.			/r/ as in ‘rose’ /roʊz/
6.		/w/ as in ‘walia’ /walia/	/w/ as in ‘water’ /wɔːtə/
7.		/j/ as in ‘yanila’ /janila/	/j/ as in ‘yoghurt’ /joʊgərt/

The table indicated that only six sonorant consonants available in Banggainese (L1) consisting of /m/, /n/, /ŋ/, /l/, /w/, and /j/. Meanwhile, in English (L2), the inventory of sonorant consonants are these six plus /r/. As being discussed before, [r] sound in Banggainese includes in allophone of phoneme /l/ instead of one single phoneme since it is acceptable to pronounce the word ‘dirty’ /maŋgilit/ as well as /maŋgirit/. This difference does not affect the meaning. In other side, /r/ in English are single phoneme which vary from /l/. In this case, the phoneme /r/ in ‘rate’/reɪt/ and /l/ in ‘late’ /leɪt/ convey different meaning.

Besides consonants, the Banggainese (L1) and English (L2) vowels inventories were also being contrasted. Look at the table below!

No	Sound Classification	Banggainese (L1) Phonemes	Sound Classification	English (L2) Phonemes
1.	high-front	/i/ as in ‘iyase’ /ijase/	high-front lax	/ɪ/ as in ‘swim’ /swɪm/
2.	mid-front	/e/ as in ‘teteba’ /teteba/	high-front tense	/iː/ as in ‘tree’ /triː/
3.	high-back	/u/ as in ‘uange’ /uaŋe/	mid-front lax	/e/ as in ‘bed’ /bed/
4.	mid-back	/o/ as in ‘ode’ /ode/	mid-front tense	/ɛː/ as in ‘square’ /skwɛː/
5.	open-front	/a/ as in ‘angggayo’ /aŋgajo/	open mid-front	/æ/ as in ‘cat’ /kæt/
6.			high-back lax	/ʊ/ as in ‘cook’ /kʊk/
7.			high-back tense	/uː/ as in ‘shoe’ /ʃuː/
8.			mid-back lax	/ɒ/ as in ‘hot’ /hɒt/
9.			mid-back tense	/ɔː/ as in ‘thought’ /θɔːt/
10.			low-back	/ɑː/ as in ‘palm’ /pɑːlm/
11.			low-central	/ʌ/ as in ‘fun’ /fʌn/
12.			mid-central lax	/ə/ as in ‘banana’ /bəˈnænə/
13.			mid-central tense	/ɜː/ as in ‘girl’ /gɜːl/

As demonstrated in the table above, the vowels inventories of Banggainese (L1) phonemes only has 5 phonemes, it is fewer than English (L2) which possesses 13 phonemes. Moreover, the similar high-front vowel refers to a single phoneme /i/ in Banggainese while in English this is identified as two phonemes which vary in length marking the short /ɪ/

and the long /i:/. The difference of length marking in both English phonemes leads to different meaning. Consider these words '*bin*' /bɪn/ and '*bean*' /bi:n/. Unlike English, the length marking in pronouncing Banggainese words, specifically those which contains phoneme /i/ does not influence on significantly different meaning. The similar case also occurs in mid-front /e/ vs /e/-/ɛ:/, high-back /u/ vs /ʊ/-/u:/, and mid-back /o/ vs /ɒ/ -/ɔ:/ vowels inventories of L1 and L2. Also, due to significant difference in number of vowel inventories between Banggainese (L1) and English (L2), there are four more phonemes of L2 that does not exist in L1 such as /ɑ:/, /ʌ/, /ə/, and /ɜ:/.

The other phonemes inventories of Banggainese (L1) and English (L2) being contrasted are diphthongs. Consider the following table.

No	Banggainese (L1) Phonemes	English (L2) Phonemes
1.	/ai/ as in 'bulakai' /bulakai/	/eɪ/as in 'face' /feɪs/
2.	/au/ as in 'taus' /taus/	/aɪ/ as in 'price' /praɪs/
3.	/ae/ as in 'taepa' /taepa/	/ɔɪ/ as in 'choice' /tʃɔɪs/
4.	/ia/ as in 'nia' /nia/	/əʊ/ as in 'goat' /gəʊt/
5.	/iu/ as in 'komiu' /komiu/	/aʊ/ as in 'mouth' /maʊθ/
6.	/io/ as in 'biok' /biok/	/ɪə/ as in 'near' /nɪə/
7.	/ea/ as in 'teali' /teali/	/ʊə/ as in 'cure' /kjʊə/
8.	/oa/ as in 'osoan' /osoan/	
9.	/oi/ as in 'doiya' /doija/	
10.	/ou/ as in 'moute' /moute/	
11.	/ua/as in 'motuamo' /motuamo/	
12.	/uo/ as in 'bituon' /bituon/	

The diphthongs inventories of Banggainese (L1) and English (L2) presented in the table above illustrated the differences between these two languages. In this case, the L1 possesses 12 diphthongs including /ai/, /au/, /ae/, /ia/, /iu/, /io/, /ea/, /oa/, /oi/, /ou/, /ua/, and /uo/. Meanwhile, the L2 has fewer diphthongs than L1. There are only 7 diphthongs in English, specifically in Received Pronunciation (RP) or British English consisting of /eɪ/, /aɪ/, /ɔɪ/, /əʊ/, /aʊ/, /ɪə/, and /ʊə/. This comparison indicated four similar diphthong phonemes in L1 and L2 such as /ai/-/aɪ/, /ei/-/eɪ/, /oi/-/ɔɪ/, and /au/-/aʊ/.

2. Balantaknese and English Phonemes

As mentioned previously, Balantaknese possessed total 37 phonemes consisting of 17 consonants, 6 vowels, and 14 diphtongs. Meanwhile, English has total 44 phonemes including 24 consonants, 13 vowels, and 7 diphthongs as proposed by Collins and Mees [26] for the Received Pronunciation (British) English phonemes adapted from Well [27].

The significant differences on the numbers of phonemes inventory between L1 and L2 are obviously noticeable. Yet, to have more detailed descriptions, the researchers provided table of comparison as follows:

No	Sound Classification	Balantaknese (L1) Phonemes	English (L2) Phonemes
1.	Stop	/p/ as in ‘panganon’ /paŋanon/	/p/ as in ‘paper’ /peɪpər/
2.		/b/ as in ‘bingkele’ /bɪŋkele/	/b/ as in ‘bag’ /bæg/
3.		/t/ as in ‘tamangku’ /tamaŋku/	/t/ as in ‘tiger’ /taɪgər/
4.		/d/ as in ‘dopi’ /dopɪʔ/	/d/ as in ‘doll’ /dɒl/
5.		/k/ as in ‘kele’ /keleʔ/	/k/ as in ‘cup’ /kʌp/
6.		/g/ as in ‘geges’ /geges/	/g/ as in ‘guide’ /gaɪd/

The table above indicates that both L1 and L2 are common with stop sounds. However, in L1, only voiceless stop consonants which can occur in the final of the syllable or words such as /molo:p/, /borek/, and /sikut/. It is different from L2 stop consonants which can be found either in initial, mid, or final such as /bænd/, /klʌb/, and /leg/. After comparing the stop sounds, researchers also contrasted affricate sounds as follows.

No	Sound Classification	Balantaknese (L1) Phonemes	English (L2) Phonemes
1.	Affricate	/ɟ/ as in ‘anja’ /anɟa/	/tʃ/ as in ‘cheese’ /tʃi:s/
2.			/ʤ/ as in ‘jump’ /ʤʌmp/

As shown in the previous table, there is only one affricate consonants /ɟ/ found in Balantaknese (L1). Meanwhile, in English (L2), there are two affricate consonants including /tʃ/ and /ʤ/. Although the affricate phoneme /ɟ/ in L1 sounds similar to phoneme /ʤ/ in L2, these two consonants refer to two different phonetic alphabet symbol since they vary in way of pronunciation. Besides, Balantaknese does not possess affricate phoneme which equal to /tʃ/. Yet, the Balantaknese speaker can pronounce Indonesian affricate consonant, /c/, as in the loanword ‘cingke’ /ciŋke/.

Beside affricate, the next consonants inventory contrasted between Balantaknese (L1) and English (L2) are fricatives. Look at the table below.

No	Sound Classification	Banggainese (L1) Phonemes	English (L2) Phonemes
1.	Fricatives	/s/ as in ‘monsoani’ /monsoanɪ/	/θ/ as in ‘path’ /pæθ/
2.			/ð/ as in ‘there’ /ðeə/
3.			/f/ as in ‘foot’ /fʊt/
4.			/v/ as in ‘vase’/veɪs/
5.			/s/ as in ‘snake’/sneɪk/
6.			/z/ as in ‘zero’ /ˈzɪərəʊ/
7.			/ʃ/ as in ‘sheep’ /ʃi:p/
8.			/ʒ/ as in ‘treasure’ /treʒər/
9.			/h/ as in ‘house’ /haʊs/

As presented in the table above, the Balantaknese (L1) has only one fricative consonant /s/. It is significantly different from English (L2) inventory which possesses 9 fricatives including /f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, and /h/.

The last consonants inventory being contrasted between Banggainese (L1) and English (L2) is sonorant. Consider the following table.

No	Sound Classification	Banggainese (L1) Phonemes	English (L2) Phonemes
1.	Sonorant	/m/ as in 'mamadak' /mamadak/	/m/ as in 'music /mjuːzɪk/
2.		/n/ as in 'bobuno' /bobunoʔ/	/n/ as in 'name'/neɪm/
3.		/ŋ/ as in 'nggolong' /ŋgoloŋ/	/ŋ/ as in 'king' /kɪŋ/
4.		/ɳ/ as in 'nyaa' ɳaʔa/	
5.		/l/ as in 'belaon' /belaon/	/l/ as in 'love' /lʌv/
6.		/r/ as in 'rumakaat' /rumakaːt/	/r/ as in 'rose' /roʊz/
7.		/w/ as in 'wauonku' /wauonku/	/w/ as in 'water' /wɔːtə/
8.		/j/ as in 'mandayang' /mandajaŋ/	/j/ as in 'yoghurt' /joʊgərt/

The table indicated that there are eight sonorant consonants available in Balantaknese (L1) consisting of /m/, /n/, /ŋ/, /ɳ/, /l/, /r/, /w/, and /j/. Meanwhile, in English (L2), it shows that only seven phonemes are found in the inventory of sonorant consonants. In this case, the L2 does not possess phoneme /ɳ/ as in L1, meanwhile the remaining seven other consonants are commonly discovered both in L1 and L2.

Besides consonants, the Balantaknese (L1) and English (L2) vowels inventories were also being contrasted. Look at the table below!

No	Sound Classification	Balantaknese (L1) Phonemes	Sound Classification	English (L2) Phonemes
1.	high-front lax	/ɪ/ as in 'pimo' /pɪmo/	high-front lax	/ɪ/ as in 'swim' /swɪm/
2.	high-front tense	/iː/ as in 'piimo' /piːmo/	high-front tense	/iː/ as in 'tree' /triː/
3.	mid-front	/e/ as in 'gareda' /gareda/	mid-front lax	/e/ as in 'bed' /bed/
4.	high-back	/u/ as in 'susuruk' /susuruk/	mid-front tense	/ɛː/ as in 'square' /skwɛː/
5.	mid-back	/o/ as in 'koru' /koruʔ/	open mid-front	/æ/ as in 'cat' /kæt/
6.	open-front	/a/ as in 'ampalam' /ampalam/	high-back lax	/ʊ/ as in 'cook' /kʊk/
7.			high-back tense	/uː/ as in 'shoe' /ʃuː/
8.			mid-back lax	/ɒ/ as in 'hot' /hɒt/
9.			mid-back tense	/ɔː/ as in 'thought' /θɔːt/
10.			low-back	/ɑː/ as in 'palm' /pɑːlm/
11.			low-central	/ʌ/ as in 'fun' /fʌn/
12.			mid-central lax	/ə/ as in 'banana' /bəˈnænə/
13.			mid-central tense	/ɜː/ as in 'girl' /gɜːl/

As demonstrated in the table above, the vowels inventories of Balantaknese (L1) phonemes only has 6 phonemes, it is fewer than English (L2) which possesses 13 phonemes. Moreover, the high-front vowel refers two identical phonemes which vary in the length marking, the short /ɪ/ and the long /i:/. The difference of length marking both in Balantaknese (L1) and English (L2) high-front vowel phonemes leads to different meaning. Consider these L2 words '*bin*' /bɪn/ and '*bean*' /bi:n/ as well as L1 words '*pimo*' /pɪmo/ and '*piimo*' /pi:mo/. Yet, the other remaining vowels identified as similar mid-front, high-back, and mid-back refer to different inventories. In L1, these vowels indicate only single phoneme as in /e/, /u/, and /o/ unlike L2 vowels which possess a pair of vowels which are classified based on the length marking as in /e/-/ɛ:/, /ʊ/-/u:/, and /ɒ/ -/ɔ:/.
Also, due to significant difference in number of vowel inventories between Balantaknese (L1) and English (L2), there are four more phonemes of L2 that does not exist in L1 such as /ɑ:/, /ʌ/, /ə/, and /ɜ:/.

The other phonemes inventories of Balantaknese (L1) and English (L2) being contrasted are diphthongs. Consider the following table.

No	Balantaknese (L1) Phonemes	English (L2) Phonemes
1.	/ai/ as in 'babelai' /babelai/	/eɪ/as in 'face' /feɪs/
2.	/au/ as in 'bau' /bauʔ/	/aɪ/ as in 'price' /praɪs/
3.	/ia/ as in 'mian' /mian/	/ɔɪ/ as in 'choice' /tʃɔɪs/
4.	/iu/ as in 'riuk' /riuk/	/əʊ/ as in 'goat' /gəʊt/
5.	/io/ as in 'pios' /pios/	/aʊ/ as in 'mouth' /maʊθ/
6.	/ua/ as in 'sapuana' /sapuana/	/ɪə/ as in 'near' /nɪə/
7.	/ui/ as in 'tobui' /tobui/	/ʊə/ as in 'cure' /kjʊə/
8.	/ue/ as in 'ampue' /ampueʔ/	
9.	/uo/ as in 'muntuong' /muntuoŋ/	
10.	/ea/ as in 'meas' /meas/	
11.	/eo/as in 'leok' /leok/	
12.	/oa/ as in 'baloa' /baloaʔ/	
13.	/oe/ as in 'koloet' /koloet/	
14.	/ou/ as in 'boyou' /bojou/	

The diphthongs inventories of Balantaknese (L1) and English (L2) presented in the table above illustrated the differences between these two languages. In this case, the L1 possesses 14 diphthongs including /ai/, /au/,/ia/, /iu/, /io/, /ua/, /ui/, /ue/, /uo/, /ea/, /eo/, /oa/, /oe/, and /ou/. Meanwhile, the L2 has fewer diphthongs than L1. There are only 7 diphthongs in English, specifically in Received Pronunciation (RP) or British English consisting of /eɪ/, /aɪ/, /ɔɪ/, /əʊ/, /aʊ/, /ɪə/, and /ʊə/. This comparison indicated two similar diphthong phoneme inventories in L1 and L2 such as /ai/-/aɪ/ and /au/-/aʊ/.

Predicting English Pronunciation Difficulties

After contrasting the inventories of eastern Sulawesi native languages, Banggainese and Balantaknese as L1 to English as L2, the researchers suggested the prediction of English pronunciation difficulties of Banggainese and Balantaknese speakers as follows:

1. ***Banggainese as L1***

Based on the contrastive analysis in the previous discussion, the researchers discovered that the significant difference on number of phoneme inventories between Banggainese (L1) with total 30 phonemes and English (L2) with total 44 phonemes indicated possible difficulties of Banggainese as L1 speakers in pronouncing English (L2) words. Yet, examining carefully, the researchers revealed that L1 and L2 phoneme inventories presented similarities as well as differences in either in consonants, vowels, or diphthongs.

Based on the formula proposed by the researchers stated in the method previously, the prediction of English pronunciation difficulties was categorized into three: 1) easy; 2) medium, and 3) difficult based on specific criteria. For easy part, the researchers revealed that the stop consonants such as /p/, /b/, /t/, /d/, /k/, and /g/ are commonly found in both Banggainese (L1) and English (L2). Thus, these identical phoneme inventories will lead to accurate L2 pronunciation made by the L1 speakers. Not only stop, the fricative consonant /s/, and sonorant consonants such as /m/, /n/, /ŋ/, /l/, /w/, and /j/ in both L1 and L2 phoneme inventories are identical indicating that the L1 speakers will pronounce L2 easily.

In medium part, the researchers discovered several similar phonemes in Banggainese (L1) that may substitute English (L2). However, the L1 speakers will possibly have inaccurate pronunciation due to the different numbers of L1 and L2 phoneme inventories. In this case, the medium part is represented by vowels /ɪ/, /i/, /e/, /ɛ:/, /ʊ/, /u:/, /ɒ/, /ɔ:/ with specific length marking in L2 which may be substituted by /i/, /e/, /u/, and /o/ with no length marking in L1. Besides, the contrastive analysis also revealed that there are several diphthongs in L1 which are considered similar to L2 and probably be made as the substitutions of L2 phonemes as in ai/-/aɪ/, /ei/-/eɪ/, /oi/-/ɔɪ/, and /au/-/aʊ/.

Moreover, for the difficult part, the contrastive analysis demonstrated that several English (L2) phonemes are not found in Banggainese (L1) phonemes inventory.

Consequently, the L1 speakers will likely struggle in producing the exact L2 sounds. Several English phonemes which do not exist in Banggainese consist of affricate consonant fricatives /f/, /v/, /θ/, /ð/, /z/, /ʃ/, /ʒ/, /h/, vowels /ɑ:/, /ʌ/, /ə/, and /ɜ:/, and diphthongs /əʊ/, /ɪə/, and /ʊə/.

Beside the prediction proposed previously, the researchers also noted several exceptions. First, unlike English (L2), the stop voiced consonants /b/, /d/, /g/ in Banggainese (L1) are barely found in the final syllable or words. In this case, the L1 speakers will likely mispronounce L2 word 'dog' /dɒ**g**/ as /dɒ**k**/. Second, although affricate consonant does not exist in Banggainese (L1), the L1 speakers who have been familiar with Indonesian phoneme /c/, and /ɟ/ will probably use it to substitute L2 phonemes /tʃ/ and /dʒ/, so the difficulty of these two phonemes are considered medium. Last, the researchers hypothesized that the phoneme /r/ which include in allophone instead of phoneme in L1 will not affect the difficulty nor the accurateness of the L1 speakers in pronouncing L2 words which contain phoneme /r/.

2. Balantaknese as L1

Referring to the contrastive analysis results previously, it showed that there are significant difference on number of phoneme inventories between the Balantaknese (L1) with total 37 phonemes and English (L2) with total 44 phonemes. This finding suggested possible difficulties which are likely experienced by Balantaknese as L1 speakers in pronouncing English (L2) words. Yet, the prediction of the L2 pronunciation difficulties should be examined carefully by considering the specific similarities as well as differences L1 and L2 phoneme inventories.

Based on the formula proposed by the researchers stated in the method previously, the prediction of English pronunciation difficulties was categorized into three: 1) easy; 2) medium, and 3) difficult based on specific criteria. For easy part, the researchers revealed that the stop consonants such as /p/, /b/, /t/, /d/, /k/, and /g/ are commonly found in both Balantaknese (L1) and English (L2). Thus, these identical phoneme inventories will lead to accurate L2 pronunciation made by the L1 speakers. Not only stop, the fricative consonant /s/, sonorant consonants such as /m/, /n/, /ŋ/, /l/, /r/, /w/, and /j/, and vowels /ɪ/, /i/ in both L1 and L2 phoneme inventories are identical indicating that the L1 speakers will pronounce L2 easily.

In medium part, the researchers discovered several similar phonemes in Balantaknese (L1) that may substitute English (L2). However, the L1 speakers will possibly have inaccurate pronunciation due to the different numbers of L1 and L2 phoneme inventories. In this case, the medium part is represented by vowels /e/, /ɛ:/, /ʊ/, /u:/, /ɒ/, /ɔ:/ with specific length marking in L2 which may be substituted by /e/, /u/, and /o/ with no length marking in L1. Besides, the contrastive analysis also revealed that there are several diphthongs in L1 which are considered similar to L2 and probably be made as the substitutions of L2 phonemes as in consonant /ɟ/-/ʤ/, /ai/-/aɪ/, and /au/-/aʊ/.

Moreover, for the difficult part, the contrastive analysis demonstrated that several English (L2) phonemes are not found in Balantaknese (L1) phonemes inventory. Consequently, the L1 speakers will likely struggle in producing the exact L2 sounds. Several English phonemes which do not exist in Banggainese consist of fricatives consonants /f/, /v/, /θ/, /ð/, /z/, /ʃ/, /ʒ/, /h/, vowels /ɑ:/, /ʌ/, /ə/, and /ɜ:/, and diphthongs /əʊ/, /ɪə/, and /ʊə/.

Beside the prediction proposed previously, the researchers also noted several exceptions. First, unlike English (L2), the stop voiced consonants /b/, /d/, /g/ in Balantaknese (L1) are barely found in the final syllable or words. In this case, the L1 speakers will likely mispronounce L2 word ‘dog’ /dɒ**g**/ as /dɒ**k**/. Second, although affricate consonant /tʃ/ does not exist in Balantaknese (L1), the L1 speakers who have been familiar with Indonesian phoneme /c/ will probably use it to substitute L2 phonemes /tʃ/. Last, the researchers hypothesized that the diphthong phonemes /eɪ/ and /ɔɪ/ of L2 which are actually not found in L1 will not influence the difficulty of the L1 speakers in pronouncing L2 words which contain these phonemes since the L1 speakers may substitute it with Indonesian phonemes /ei/ and /oi/ as in ‘sein’ and ‘amboi’.

CONCLUSION

After providing the detailed descriptions of eastern Sulawesi native languages, Banggainese and Balantaknese (L1) and English (L2) respectively, contrasting both L1 and L2 phoneme inventories, the researchers suggested the prediction of L2 pronunciation difficulties of L1 speakers as follows. First, in medium category, both Banggainese and Balantaknese will probably mispronounce voiced stop consonants in final L2 syllable or word as voiceless, L2 affricate consonants /tʃ/ and /ʤ/ as /c/, and /ɟ/, and particular L2 vowels with length marking as a single vowel with no length marking. Meanwhile, in

difficult category, Banggainese and Balantaknese (L1) speakers are predicted struggling in producing L2 phoneme inventory which do not exist in L1 such as of fricatives consonants /f/, /v/, /θ/, /ð/, /z/, /ʃ/, /ʒ/, /h/, vowels /ɑ:/, /ʌ/, /ə/, and /ɜ:/, and diphthongs /əʊ/, /ɪə/, and /ʊə/.

This prediction of English pronunciation difficulties of eastern Sulawesi natives, specifically Banggainese and Balantaknese (L1) speakers was purely based on contrastive analysis hypothesis of L1 and L2 phoneme inventories. It needs further studies need to prove the real difficulties of the L2 learners, specifically to those who live in eastern Sulawesi. However, this preliminary study can be applied by the teachers, particularly in Banggainese and Balantaknese speaking-area who need consideration in preparing English pronunciation teaching materials based on the learners' L1 background.

REFERENCES

[1] Krzeszowski, T. P. (1995). *Early Contrastive Studies in England (15th -18th centuries).* Gdansk: Wydawnictwo Uniwersytetu Gdanskiego.

[2] Johansson, Stig. (2008). *Contrastive Analysis and Learner Language: A Corpus-based Approach.* Oslo: University of Oslo.

[3] Munro, Murray J. (2018). How Well Can We Predict Second Language Learners' Pronunciation Difficulties? *The CATESOL Journal 30.1, p.267.*

[4] Firbas, J. (1992). Functional Sentence Perspective in Written and Spoken Communication. Cambridge: Cambridge University Press.

[5] Ammar, Ahlem., Lightbown, Patsy., and Spada, Nina. (2010). Awareness of L1/L2 differences: Does It Matter? *Language Awareness Journal Vol.19.*

[6] Fries, Ch. C. (1945). Teaching and Learning English as a Foreign Language. Ann Arbor: University of Michigan Press.

[7] Lado, R. (1957). Linguistics Across Cultures: Applied linguistics for language teachers. Ann Arbor: University of Michigan Press.

[8] Escudero, Paola. (2005). *Linguistic Perception and Second language acquisition: Explaining the attainment of optimal phonological categorization*. PhD thesis, Utrecht University. [LOT dissertation series 113.]

[9] James, C. (1980). Contrastive Analysis. London: Longman.

[10] Listyani, Ardiyarso Kurniawan, Andrew T. Thren. (2024). The Influence of the Mother Tongue on English Pronunciation: A Case Study on Indonesian EFL Learners. *Journal of English Teaching, Universitas Kristen Indonesia.*

[11] Li, Feng. (2016). Contrastive Study between Pronunciation Chinese L1 and English L2 from the Perspective of Interference Based on Observations in Genuine Teaching Contexts. *English Language Teaching; Vol. 9, No. 10 published by Canadian Center of Science and Education.*

[12] Islam, Md. Rakibul and Akteruzzaman, Mohammad. (2016). L1 Interference on L2 Speech Sounds in an EFL Context: A Study on the English Speakers from the Southwestern Parts of Bangladesh. *Journal of Applied Linguistics and Language Research.*

[13] Kim, Ji Young. (2011). L1-L2 Phonetic Interference in the Production of Spanish Heritage Speakers in the US. *The Korean Journal of Hispanic Studies, 4, 1-28.*

[14] Perwitasari, Arum. (2018). Perception of English Vowels by Javanese and Sundanese Speakers: A Mouse-tracking Study. *Wacana Journal, Faculty of Humanities, University of Indonesia.*

[15] Kartushina, Natalia and Frauenfelder, Ulrich Hans. (2013). On the role of L1 speech production in L2 perception: Evidence from Spanish learners of French. *Interspeech Journal.*

[16] Pratiwi, Desy Riana and Indrayani, Lia Maulia. (2021). Pronunciation Error on English Diphthongs Made by EFL Students. *Jurnal Teknosastik Universitas Padjadjaran Vol. 19 (1).*

[17] Febrianto, Dedi. (2021). Analyzing Elementary English Teacher's Pronunciation Errors: Are We Intelligible? *Jurnal Pendidikan Al-Ishlah Vol.13, No.3.*

[18] Maiza, Mafsa. (2020). An Analysis of Students' Pronunciation Errors. *Journal of English Education and Literature Vol.1, No.1.*

[19] Yusriati and Hasibuan, Selamat Husni. (2019). The Analysis of English Pronunciation Errors by English Education Students of FKIP UMSU. *Journal of English Education and Teaching, Vol.3, No.2.*

[20] Rafael, Agnes Maria Diana. (2019). An Analysis on Pronunciation Errors Made by First Semester Students of English Departments STIKIP CBN. *Loquen English Studies Journal, Vol.12, No.1.*

[21] Octaviana, Dwi Warry. (2019). English Pronunciation Errors by Sundanese Speakers. *Journey: Journal of English Language and Pedagogy, Vol. 2, No.1.*

[22] Kalaldeh, Raya. (2016). English Pronunciation Errors by Jordanian University Students. *Arab World English Journal (AWE), Vol.7, No.2.*

[23] Shak, Priscilla., Lee, Chang Siw., and Stephen, Jeannet. (2016). Pronunciation Problems: A Case Study on English Pronunciation Errors of Low Proficient Students. *International Journal of Language Education and Applied Linguistics (IJLEAL).*

[24] Matthew, Ingrid B. (1997). *Errors in Pronunciation of Consonants by Indonesian, Gayo and Acehnese learners of English as a Foreign Language*. Master Thesis, Edith Cowan University.

[25] Akbar, Ruly Anggi., Priyambodo, Tri Kuntoro., Kusworo, Hendrie Adji., and Fandeli, Chafid. (2021). *Strategi Promosi Destinasi Wisata Secara Kolaborasi Berbasis Content Creation di Kawasan Banggai Sulawesi Tengah Indonesia.* Doctorate Dissertation, Gadjah Mada University.