



Linguistics

A Comparative Analysis of Lexical Variation of Verbs in Minangkabau and Banjar Languages: Historical Comparative Linguistic Study

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A B S T R A C T

The aim of this research is to analyze lexical variations of isolects in Banjar and Minangkabau languages and to calculate the relationship percentage of the two languages. The method used in this research is a comparative method with a qualitative and quantitative approach to find phonemic and lexical correspondences of the relative lexemes. The data consists of 115 action verbs (glosses) at four observation points of Minangkabau language and two observation points of Banjar language. The data was collected by using non-participation method through notetaking and recording techniques. The Lexicostatistic calculation method is used to calculate inter-language relationships. The results of the analysis show that there were 265 total lexemes of 241 etymons with: 9 cognate (exact-similar), 79 inheritance (minimal-pairs), and 182 different variations of lexemes (considered as borrowing and by chance). The result of the lexicostatistic calculation indicates that the two languages are related by 66.38% and is classified as languages in the same language based on 116 verbs analyzed.

INTRODUCTION

Lexeme, or in the common tongue is known as word, is one of the most important aspects of a language. There is no language in the world without words. In fact, one of the fundamental units of linguistic structure is the word (Eze & Eze, 2022). As the fundamental unit of the language words deal with changing and developing from time to time along with cultural and demographic development of its users (Afria, 2019). Each generation has a contribution to their respective language which leads to losing some existing words and acquiring new words along the way. Except in the lexicon, the changing in a language is almost unnoticeable (Winkler, 2015). Therefore, after thousands or hundreds of years of consecutive changes, a once singular proto language has been evolving into multiple modern languages in a language family with a list of distinguishing similarities and differences in the lexicon, e.g., Minangkabau and Banjar languages were two languages of the same root.

As two languages of the same root, Minangkabau and Banjar languages share the same set of words from the same proto language. Speakers from each language may or may not understand some words or phrases in the other language since both languages are descendants of the Nuclear-Malayic family (Hammarström et al., 2023). Minangkabau language is the native of Minangkabau people who reside in the middle-west of Sumatra: the land area of West Sumatra province, neighboring parts of North Sumatra, Riau, Jambi, and Bengkulu provinces (Amri et al., 2020) and in Malayan Peninsula, Malaysia: the areas of Malaka (Naning) and Negeri Sembilan (Reniwati et al., 2016). Banjar language on the

other hand is the native language of Banjar people who reside in South and Central Borneo provinces in Borneo Island and in Riau and Jambi provinces in Sumatra Island (Badan Pengembangan dan Pembinaan Bahasa, 2023).

The modern languages of Minangkabau and Banjar might not be fully understood by the speakers from the opposite languages because the two languages were separated around 3933—2727 AD (Suyata, 1999). Thus, the preliminary analysis of this research found that both languages share decent amount of similarities especially in the lexicon, e.g., lexemes for the meaning of 'to count' which appear as [hituan] in Minangkabau isolects and [hitun] in Banjar isolects.

Language and variation go together. When we talk about language, it cannot be separated with language varieties. Thus, the attention of this research is focused to identify lexical variation of the two languages from comparative linguistics perspective. This research limited its analysis into the comparative analysis of the lexical variation of verbs in Minangkabau and Banjar languages and to describe the relationship percentage of the two languages analyzed.

There are numerous studies which have analyzed lexical variation. Research entitled *Variasi Leksikal Bahasa Minangkabau di Nagari Tuo Pariangan* (Amri et al., 2020) defined a series of lexical variation of an isolect of Minangkabau language from 4 observation points (Jorong Guguk, Jorong Sikaladi, Jorong Pariangan, and Jorong Padang Panjang) in Nagari Tuo Pariangan of Tanah Datar Regency. The research analyzed a total of 991 words in Minangkabau language. The result of the analysis shows that there are 219 lexical variations.

In an article entitled *Lexical Variation in Igbo Language: A Comparative Study of Standard Igbo Language and Opi Dialect in Nsukka Local Government Area of Enugu State* (Eze & Eze, 2022) mainly focused on the comparative analysis of lexical items, conjunction, numbering, negative morphemes, and morphemes on perfective variations of the standard Igbo language and the Opi dialect in Nsuka area. The result of analysis shows a total of 139 lexical variations: 68 on lexical items, 7 on conjunction, 16 on numbering, 31 on negative morphemes, and 16 on morphemes on perfective.

Another research entitled *Perbandingan Variasi Bahasa Jawa di Kecamatan Tanjung Kabupaten Brebes dengan Kecamatan Losari Kabupaten Cirebon* (Budiawan & Mujawanah, 2019) describes language variation of Javanese language in the districts of Tanjung and Losari. The analysis shows that there are 12 phonological variations, 1 morphological variation, and 11 lexical variations in Tanjung District and 7 phonological variations, 1 morphological variation, and 19 lexical variations in Losari District. The results also show that there were 4 equations of phonological variations from the two observation points.

A 2018 article entitled *Hubungan Kekerabatan Bahasa Minangkabau Tapan dengan Bahasa Kerinci Sungai Penuh* (Rina & Mariati, 2018) studies the relationship between Tapan- Minangkabau Language and Sungai Penuh-Kerinci language by utilizing the Swadesh wordlist and cultural words from Minangkabau and Kerinci cultures. Based on the lexicostatistics calculation, it is found that the two languages are categorized as dialects of a language (92.16%).

METHODS

This research is historical comparative research with qualitative and quantitative approaches. Data of this research were of 127 action verbs in the isolects of Minangkabau language (hereafter is addressed as IM) and the isolects of Banjar language (hereafter is addressed as IB) which were depicted from 6 observation points.

The aim of this research is to explore and to increase our knowledge of Minangkabau and Banjar languages which focuses on lexical variations of verbs. The data were obtained through non-participational method with elicitation technique where the informants were presented with a series of pictures of people doing an activity/action that resemble certain verbs (127 verbs in total). The six observation points include 4 observation points of Minangkabau language: Pariangan (Tanah Datar Regency), Matur (Agam Regency), Kacang (Solok Regency), and Sicincin (Padang Pariaman Regency) and 2 observation points of Banjar language: Bram Itam Kiri (Tanjung Jabung Barat Regency) and Sungai Rambut (Tanjung

Jabung Timur Regency).

The data obtained were categorized following the Appeal Equalization Technique (HBS—*Hubung-Banding Menyamakan*) and the Differential Linking Technique (HBB—*Hubung-Banding Membedakan*) to separate gloss from the same root and the lexical variation into 1) pair of identical words; 2) pairs of words that phonemically correspondences; 3) pairs of words that are phonetically similar; and 4) pairs of words that differ by one phoneme.

The present research used lexicostatistics (Hymes, 1970; Klimov, 1967; Swadesh, 1955) to calculate the similarity percentage of the two languages. The lexicostatistic calculation method, although it relates to the comparative method and involves comparing the percentage of lexical cognates between languages, does not reconstruct proto-language (Hymes, 1960). The calculation is solely used to determine the similarity percentage of the two languages analyzed.

RESULTS AND DISCUSSION

Lexical Variation of the Isolects of Minangkabau and Banjar Languages

Lexical variation is language variation at the lexicon level. Lexical variation occurs when the lexemes used to realize the same meaning come from different etymons (Amri et al., 2020). The following is the lexical variation of 115 action verbs in IM and IB:

There are a total of 40 verbs which are derived from the same etymons in both languages. The verb ‘to abuse’ is presented by lexemes from the same etymons in both languages (IB: [najæ]; IM: [najɔ]~[tinajɔ]~[tanajɔ]). The similar situation is applicable to the following verbs: ‘to add’ (IB: [tambeh]; IM [tambah]~[tambuah]), ‘to break-up’ (IB: [putos]; IM: [putuyh]), ‘to breastfeed’ (IB: [susu]~[mæpusuwe]; IM: [susu]~[manusu]), ‘to brew’ (IB: [sæduh]; IM: [sadu]~[saduah]), ‘to call’ (IB: [hijæw]; IM: [imbaw]), ‘to count’ (IB: [hituŋ]; IM: [ituan]~[etoŋ]), ‘to do dishes’ (IB: [besuh]; IM: [basuah]), ‘to eat’ (IB & IM: [makan]), ‘to fart’ (IB: [kantut]; IM [kantuyɔ]), ‘to handfeed’ (IB: [suwæp]; IM: [suwoɔ]), ‘to fly’ (IB: [tærbæŋ]~[tærabæŋ]; IM: [tabaŋ]), ‘to take’ and ‘to pick’ (IB: [æmbil]; IM: [ambiaɔ]), ‘to hunt’ (IB & IM: [buru]), ‘to investigate’ (IB: [kæŋi]; IM: [kaŋi]), ‘to kill’ (IB: [bunuh]; IM: [bunuah]), ‘to lick’ (IB: [ŋilet]; IM: [ŋileɔ]), ‘to listen’ (IB: [dæŋær]~[dæŋer]; IM: [daŋa]), ‘to give massage’ (IB: [urut]; IM: [uruyɔ]), ‘to move’ (IB: [gæræk]; IM: [gariɔ]), ‘to point at’ (IB: [tunŋuk]; IM: [tunŋuaɔ]), ‘to read’ (IB: [beŋe]; IM: [baŋo]), ‘to receive’ (IB: [tærimæ]; IM: [tarimo]), ‘to rise (sun)’ (IB: [tærbit]; IM: [tabiɔ]), ‘to scratch’ (IB: [geruk]; IM: [garuyɔ]~[gawuyɔ]), ‘to set (sun)’ (IB: [bænem]; IM: [banam]), ‘to sit (kneel)’ (IB: [simpuh]; IM: [simpuah]), ‘to sit crossed-legs’ (IB: [silæ]; IM: [silo]~[selo]), ‘to spit’ (IB: [ludeh]; IM: [ludah]), ‘to spy on’ (IB: [intæy]; IM: [intay]), ‘to step down’ (IB & IM: [turun]), ‘to step up’ (IB: [næik]; IM: [naiaɔ]), ‘to stop’ (IB: [henti]; IM: [hanti]~[anti]), ‘to suck on’ (IB: [kulom]; IM: [kulum]), ‘to swing’ (IB & IM: [ajun]), ‘to take bath’ (IB & IM: [mandi]), ‘to throw up’ (IB & IM: [muntah]), ‘to walk’ (IB: [ŋælæn]; IM: [ŋalan]), ‘to wash up’ (IB: [bæsu]; IM: [basuah]), and ‘to write’ (IB: [tulis]; IM: [tulih]).

Aside from the 40 verbs above, there are series of verbs which presented by more than one etymon in expressing the same verbs. These series of verbs include:

1) 50 verbs which are presented by lexemes of two different etymons: ‘to argue’ (IB: [dæbæt]; IM: [ŋaran]), ‘to be awake’ (IB: [sæder]; IM: [ŋago]), ‘to bite’ (IB: [ukæŋ]; IM: [gigiɔ]), ‘to blow up’ (IB: [lætɔp] ~ IM: [latuyh]; and IB: [ŋælæk]), ‘to bug out’ (IB: [bulælæk] ~ IM: [bulalaɔ]; IB: [lutut]), ‘to burp’ (IB: [merige]; IM: [sindawo]~[ŋindawo]), ‘to chew’ (IB & IM: [kupah]; IM: [gatoɔ]), ‘to clean’ (IB: [besih] ~ IM: [barasiah]; IM: [sigeh]~[segeh]), ‘to come back’ (IB: [bulik] ~ IM: [baliaɔ]; IM: [pulaŋ]), ‘to cook’ (IB: [masak]~IM: [masaɔ], IM: [tanaɔ]), ‘to cry’ (IB: [taŋes]~[naŋes] ~ IM: [taŋih]~[naŋih]; IM: [ratoɔ]), ‘to dream’ (IB: [mimpi]; IM: [rasian]), ‘to erase’ (IB: [hæpos] ~ IM: [apuyh]; IM: [seka]~[sika]), ‘to fall (fruit)’ (IB: [gulin]; IM: [ŋatuah]),

‘to fall and stuck’ (IB: [səŋkut]; IM: [guraɟay]~[garaɟay]), ‘to fight’ (IB: [kælæhi]; IM: [ʃakaz]), ‘to float’ (IB: [timbul]; IM: [apuan]~[mapuan]), ‘to flow’ (IB: [ælir] ~ IM: [ilia]; IM: [lunɟua]), ‘to go’ (IB: [tulak]; IM: [pai]), ‘to hand-carry’ (IB: [ɟentinj]~[kentinj]; IM: [ɟinɟian]~[ɟenɟen]), ‘to hang’ (IB: [gəntun] ~ IM: [gantuan]; IM: [gajuyɔ]), ‘to jump’ (IB: [lunɟæt]; IM: [ambua]), ‘to kick’ (IB: [ninɟæk]; IM: [antam]~[hantam]), ‘to lap-carry’ (IB: [esuh]; IM: [paŋku] ~ [maŋku]), ‘to laugh’ (IB: [tæwæ]; IM: [galaz]), ‘to lay’ (IB: [guriŋ]; IM: [laloz]), ‘to lift’ (IB: [æŋkæt] ~ IM: [aŋkeɔ]; IM: [inɟeɔ], ‘to lit up’ (IB: [hidup] ~ IM: [iduyɔ]; IB: [nele] ~ IM: [naloz]), ‘to order’ (IB: [suroh] ~ IM: [suruah]; IM: [sirayo]~[sarayo]), ‘to persuade’ (IB: [buɟuk] ~ IM: [buɟuaɔ]; IM: [umbuaɔ]), ‘to pull’ (IB: [tærek]; IM: [ilo]~[elo]), ‘to punch’ (IB: [tumbuk] ~ IM: [tumbuɔ]; IM: [tinɟu]~[tenɟu]), ‘to push’ (IB: [durun]; IM: [tundo]), ‘to put down’ (IB: [lætæk] ~ IM: [lataɔ]; IB: [lætus]), ‘to release’ (IB: [læpæs] ~ IM: [lapeh]; IB: [mændæk]), ‘to remember’ (IB: [inɟæt]; IM: [kana]), ‘to reply verbally’ (IB: [səhut]; IM: [ɟaweɔ]), ‘to rub’ (IB: [ræbe]; IM: [rasoz]~[rosoz]), ‘to run’ (IB: [bukeh]; IM: [lari]), ‘to sit’ (IB: [duduk] ~ IM: [duduaɔ]; IM: [lapaɔ]), ‘to sleep’ (IB: [bariŋ]; IM: [laloz]), ‘to squad’ (IB: [dæŋkæk]; and IM: [ʃaŋkuan]~[ʃoŋkoan]), ‘to stand’ (IB: [diri]; IM: [tagaɔ]), ‘to stab’ (IB: [nuduk] ~ IM: [ʃuɟuaɔ]; IM: [tikam]), ‘to suck’ (IB: [hiɟut]; IM: [isoz]), ‘to swallow’ (IB: [tælæn]; IM: [lulua]), ‘to swim’ (IB: [nənaŋ] ~ IM: [ranaŋ]; IB: [kunuŋ]), ‘to take dump’ (IB: [behire]; IM: [ʃiriz]~[taʃiriz]), ‘to touch’ (IB: [səntuh]; IM: [paʃiz]), ‘to wake up’ (IB: [bənun guriŋ]; IM: [ɟago]), and ‘to wipe’ (IB: [læp]; IM: [kusuaɔ] ~ [gosoz]);

2) 20 verbs which are presented by lexemes of three different etymons: ‘to back-lift’ (IB: [kidun] & [kilek]; IM: [dukuan]), ‘to be slipped’ (IB: [dæŋser]~[tædæŋser]; IM: [tasialia] & [taɟilantaŋ]), ‘to build’ (IB: [bənun]; IM: [bueɔ] & [tagaɔ]~[batagaɔ]), ‘to change’ (IB: [gənti] ~ IM: [ganti]; IM: [tuka] & [rubah]), ‘to choke’ (IB: [sædæk] ~ IM: [sadaɔ]; IM: [ʃakiaɔ] & [kaʃaɔ]), ‘to dig’ (IB: [gæli] ~ IM: [kali]; IB: [tæbuk]; IM: [ʃukia]), ‘to finger-touch’ (IB: [ɟapey]; IM: [away], [gemay], & [rasoz]~[reseɔ]~[rosoz]), ‘to give’ (IB: [beri] ~ IM: [bari]; IB: [unjuk]; IM: [agiah]), ‘to hold’ (IB: [kæpæl]; IM: [pagan] & [paʃiz]), ‘to hug’ (IB: [ikup]; IM: [paluaɔ] & [paguyɔ]), ‘to kiss’ (IB: [ʃiom] ~ IM: [ʃium]; IM: [sun] & [abua]), ‘to meet’ (IB: [tæmu]~[tætæmu] ~ IM: [tamu]; IM: [soboɔ] & [suwo]), ‘to save’ (IB: [simpæn]; IM: [suruaɔ] & [andoɔ]), ‘to see’ (IB: [itih]; IM: [ʃaliaɔ] & [lijeɔ]), ‘to shoulder-carry’ (IB: [pikol] ~ IM: [pikua]; IB: [hæmbin]; IM: [sandaŋ]), ‘to sink’ (IB: [tæbænem] ~ IM: [tabanam]; IB: [tæŋgelæm]; IM: [karam]), ‘to squish (wet clothes)’ (IB: [pæræs]~[pilæs]~[milæs]; IM: [rameh] & [paʃiz]), ‘to steal’ (IB: [mælin] and [ʃuri]; IM: [ʃiloɔ]), ‘to throw’ (IB: [tæwæk]~[menæwæk]; IM: [bae] & [puŋkaŋ]), ‘to work’ (IB: [begewi]; IM: [karaɟo] & [bakureh]), and ‘to yell at’ (IB: [kuriæk]~[kuʃiæk] ~ IM: [hariaz]; IM: [kuay] & [sora]);

3) 5 verbs which are presented by lexemes of four different etymons: ‘to burn’ (IB: [benem] & [nalukut]; IM: [baka] & [paŋgan]), ‘to cut’ (IB: [tætæk]; IM: [potoan], [kareɔ], & [kuduan]), ‘to fall (person)’ (IB: [gugur]; IM: [ɟatuah], [balambin]~[balambim], & [dabuaɔ]), ‘to speak’ (IB: [buel] & [surah]; IM: [kato] & [keʃeɔ]), and ‘to take pee’ (IB: [bekameh]; IM: [kanʃian], [kaɟamban], & [karajia]);

4) and there is only one verb presented by lexemes of more than four different etymons: ‘to hit’ (IB: [pupuh]~[mupuh] & [pæŋkæŋ]; IM: [lakaɔ], [daboɔ], [tokoɔ], [tuɟa], [latuah], & [lankaŋ]) which is presented by lexemes of eight different etymons.

Of the 116 verbs analyzed, there are 9 exact-similar lexemes found in both languages which are categorized as *cognate* forms. *Cognate* is defined as words in two languages that share a similar form and meaning, and are believed to be descended from a common ancestor (Kroll & Stewart, 1994; Uzun, 2024). The list of exact-similar lexemes of verbs in IB and IM can be seen in Table 1.

Table 1.
List of Exact-Similar (Cognates) Lexemes of verbs in IB and IM

No.	Gloss	Lexemes
1.	to breastfeed	[susu]
2.	to chew*	[kupah]
3.	to eat	[makan]
4.	to hunt	[buru]
5.	to investigate	[kæḡi]
6.	to step down	[turun]
7.	to swing	[ayun]
8.	to take bath	[mandi]
9.	to throw up	[muntah]

*verb 'to chew' in IB and IM are presented by two lexemes (IB: [kupah] and IM: [kupah] and [gatoꝝ]). The word [kupah] is derived from the same etymon and is in cognate form.

Lexemes which are of the same roots/etymons but are not categorized as the cognate ones (slightly differ with minimal pairs) are categorized as *inheritance* forms. Inheritance is defined as the retention in languages possibly with some alteration in forms of some feature which were presented in their ancestor language (Trask, 2000). Of 241 etymons analyzed, there are 69 etymons appeared with minimal pairs (inheritance) presented into 152 lexemes in both languages (74 lexemes existed in IB and 79 existed in IM) presenting 68 meanings, as follow.

List of Minimal Pairs (Inheritance) of Verbs in IB & IM

IB: [najæ] ~ IM: [najo]~[tinajo]~[tanajo] 'to abuse'

IB: [tambah] ~ IM [tambah]~[tambuah] 'to add'

IB: [putos] ~ IM: [putuyh] 'to break up'

IB: [mærusuwe] ~ IM: ~[mapusu] 'to breastfeed'

IB: [sæduh] ~ IM: [sadu]~[saduah] 'to brew'

IB: [hijæw] ~ IM: [imbaw] 'to call'

IB: [hituŋ] ~ IM: [ituaŋ]~[etoŋ] 'to count'

IB: [besuh] ~ IM: [basuah] 'to do dishes'

IB: [makan] ~ IM: [makan] 'to eat'

IB: [kantut] ~ IM: [kantuyꝝ] 'to fart'

IB: [suwæp] ~ IM: [suwoꝝ] 'to hand-feed'

IB: [tærbæŋ]~[tærabæŋ] ~ IM: [tabaŋ] 'to fly'

IB: [æmbil] ~ IM: [ambiaꝝ] 'to grab'

IB: [buru] ~ IM: [buru] 'to hun'

IB: [kæḡi]; IM: [kaḡi] 'to investigate'

IB: [bunuh] ~ IM: [bunuah] 'to kill'

IB: [ḡilet] ~ IM: [ḡileꝝ] 'to lick'

IB: [dæŋær]~[deŋer] ~ IM: [daŋa] 'to listen'

IB: [urut] ~ IM: [uruyꝝ] 'to message'

IB: [gæræk] ~ IM: [gariꝝ] 'to move'

IB: [tunḡuk] ~ IM: [tunḡuaꝝ] 'to point at'

IB: [betʃe] ~ IM: [baʃo] 'to read'

IB: [tærimæ] ~ IM: [tarimo] 'to receive'

IB: [tærbīt] ~ IM: [tabiꝝ] 'to rise (sun)'

- IB: [geruk] ~ IM: [garuyɔ]~[gawuyɔ] ‘to scratch’
 IB: [bænem] ~ IM: [banam] ‘to sink’
 IB: [simpuh] ~ IM: [simpuah] ‘to sitt (knell)’
 IB: [silæ] ~ IM: [silo]~[selo] ‘to sit (crossed-legs)’
 IB: [ludeh] ~ IM: [ludah] ‘to spit’
 IB: [intəy] ~ IM: [intay] ‘to spy on’
 IB [turun] ~ IM: [turun] ‘to step down’
 IB: [næik] ~ IM: [naiɑɔ] ‘to step up’
 IB: [henti] ~ IM: [hanti]~[anti] ‘to stop’
 IB: [kulom] ~ IM: [kulum] ‘to suck’
 IB: [ajun] ~ IM: [ajun] ‘to swing’
 IB: [mandi] ~ IM: [mandi] ‘to take bath’
 IB: [muntah] ~ IM: [muntah] ‘to thow up’
 IB: [ɔælæn] ~ IM: [ɔalan] ‘to walk’
 IB: [bəsuh] ~ IM: [basuah] ‘to wash’
 IB: [tulis] ~ IM: [tulih] ‘to write’
 IB: [lætɔp] ~ IM: [latuyh] ‘to blow up’
 IB: [bulælæk] ~ IM: [bulalɑɔ] ‘to bug’
 IB: [besih] ~ IM: [barasiah] ‘to clean’
 IB: [bulik] ~ IM: [baliaɔ] ‘to come back’
 IB: [masak]~ IM: [masɑɔ] ‘to cook’
 IB: [taɲes]~[naɲes] ~ IM: [taɲih]~[naɲih] ‘to cry’
 IB: [hæpos] ~ IM: [apuyh] ‘to erase’
 IB: [æliɹ] ~ IM: [ilia] ‘to flow’
 IB: [gəntuɲ] ~ IM: [gantuaɲ] ‘to hang’
 IB: [æɲkæt] ~ IM: [aɲkeɔ] ‘to hold’
 IB: [hidup] ~ IM: [iduyɔ] ‘to lit up’
 IB: [ɲele] ~ IM: [ɲalo] ‘to lit up’
 IB: [suroh] ~ IM: [suruah] ‘to order’
 IB: [buɔuk] ~ IM: [buɔuaɔ] ‘to persuade’
 IB: [tumbuk] ~ IM: [tumbuɔ] ‘to punch’
 IB: [lætæk] ~ IM: [lataɔ] ‘to put’
 IB: [læpæs] ~ IM: [lapeh] ‘to release’
 IB: [duduk] ~ IM: [duduaɔ] ‘to sit’
 IB: [ɲuduk] ~ IM: [ɲuɲuaɔ] ‘to stab’
 IB: [nəɲaɲ] ~ IM: [ranaɲ] ‘to swim’
 IB: [gənti] ~ IM: [ganti] ‘to change’
 IB: [sædæk] ~ IM: [sadaɔ] ‘to choke’
 IB: [gæli] ~ IM: [kali] ‘to dig’
 IB: [beri] ~ IM: [bari] ‘to give’
 IB: [ɲiom] ~ IM: [ɲium] ‘to kiss’
 IB: [təmu]~[tætəmu] ~ IM: [tamu] ‘to meet’

IB: [pikol] ~ IM: [pikua] ‘to shoulder-carry’

IB: [tæbænem] ~ IM: [tabanam] ‘to sink’

IB: [kuriæk]~[kuʃiæk] ~ IM: [hariaɔ] ‘to yell’

Aside from the cognates and inheritances forms, there are lexemes that only appears on each language. These lexemes are either categorized as *borrowings* or *by-chances*. After the analysis, there are a total of 182 lexemes of 158 etymons that only found in each language distributed as follow:

1. 66 lexemes of 61 etymons are only found in IB: [dæbæt], [sæder], [ukæŋ], [ɕælæk], [lutut], [merige], [mimpi], [gulin], [sæŋkut], [kælæhi], [timbul], [tulak], [lunʃæt], [ninɕæk], [esuh], [tæwæ], [guriŋ], [tærek], [durun], [mændæk], [inæt], [sæhut], [ræbe], [bukeh], [bariŋ], [dæŋkæk], [diri], [hijut], [tælæn], [kupun], [behire], [səntuh], [bæjun guriŋ], [læp], [kidun], [kilek], [dæŋser]~[tædæŋser], [bæjun], [tæbuk], [ɕapey], [unjuk], [kæpəl], [ikup], [simpæn], [itih], [hæmbin], [tæŋgelæm], [pæræs]~[pilæs]~[milæs], [mælin], [ʃuri] [tæwæk]~[menæwæk], [begewi], [benem], [nalukut], [tætæk], [gugur], [buel], [surah], [bekameh], [pupuh]~[mupuh], and [pæŋkæŋ].
2. 116 lexemes of 97 etymons are only found in IM: [ʃaran], [ɕago], [gigiɔ], [sindawo]~[ʃindawo], [gatoʔ], [sigeh]~[segeh], [pulan], [tanaz], [ratoʔ], [rasian], [seka]~[sika], [ɕatuah]*, [guraɕay]~[garaɕay], [ʃakaz], [apuan]~[mapuan], [lunʃua], [pai], [ɕinɕian]~[ɕenɕen], [gajuyɔ], [ambua], [antam]~[hantam], [paŋku]~[maŋku], [galaz], [laloz], [inɕez], [sirayo]~[sarayo], [umbuaɔ], [ilo]~[elo], [tinɕu]~[tenɕu], [tundo], [kana], [ɕaweɔ], [rasoɔ]~[rosoɔ], [lari], [lapaɔ], [laloz], [ʃaŋkuan]~[ʃoŋkoan], [tagaz], [tikam], [isoɔ], [lulua], [ʃiriɔ]~[taʃiriɔ], [paʃiɔ]**, [ɕago], [kusuaɔ]~[gosoɔ], [dukuan], [tasialia], [taɕilantaŋ], [bueɔ], [tagaɔ]~[batagaɔ], [tuka], [rubah], [ʃakiaɔ], [kaʃaz], [ʃukia], [away], [gemay], [rasoɔ]~[reseɔ]~[rosoɔ], [agiah], [pagan], [sun], [abuah], [soboɔ], [suwo], [suruaɔ], [andoɔ], [ʃaliaɔ], [lijeɔ], [sandaŋ], [karam], [rameh], [ʃiloɔ], [bae], [puŋkaŋ], [karaɕo], [bakureh], [kuay], [sora], [baka], [paŋgan], [potoan], [kareɔ], [kuduan], [balambin]~[balambim], [dabuaɔ], [kato], [keʃez], [kanʃian], [kaɕamban], [karajia], [lakaɔ], [daboɔ], [tokoɔ], [tuɕa], [latuah], & [lankaŋ].

Lexicostatistics analysis

Lexicostatistics calculation, in the present research, is used to find out the similarity percentage of verbs of the two languages. The calculation is based on the lexical variation analysis above following the formula of:

$$C = \frac{\text{number of cognate words}}{\text{vocabularies being compared}} \times 100\%$$

Number of cognate words is the number of lexemes presenting the same meanings in two languages (homo-semantic cognate). Homo-semantic cognate is defined as words of the same origin and meaning (Blust & Chen, 2017; Dyen, 1962; Salahuddin, 2023). By this definition the number of homo-semantic cognate are the accumulation of the exact-similar words (cognate) and words with minimal pairs (inheritance): $9 + 68 = 77$ words. The number of vocabularies being compared in this analysis consist of 116 verbs (40 verbs are presented by single etymon for a single meaning; 50 verbs are presented by 2 etymons for a single meaning; 20 verbs are presented by 3 etymons for a single meaning; 5 verbs are presented by 4 etymons for a single meaning; and only 1 verb is presented by more than 4 etymons for a single meaning). Thus, following the description above, the lexicostatistic calculation of verbs in IB and IM is:

$$C = \frac{77}{116} \times 100\% = 66,38\%$$

The calculation above shows that the similarity of verbs in the isolects of Minangkabau language (IM) and the isolects of Banjar Language (IB) is 66,38%. The percentage of 37-80% on lexical variation is categorized as languages in from the same language family (Crowley & Bower, 2010) Therefore, the language status of Minangkabau and Banjar languages based on the verbs are two languages in the same family.

IV. CONCLUSION

This research analyzed a series of verbs (116 words) of the isolects of Minangkabau language and Banjar language on 6 observation points: Pariangan, Matur, Kacang, and Sicincin of Minangkabau language and Bram Itam Kiri and Sungai Rambut of Banjar language. The data was taken from 18 informants (3 of each observation points). The results of analysis indicate that: 1) of the 116 glosses, there are 241 etymons found in both languages; 2) 9 lexemes are found in both languages are of the same root/etymons and are categorized as exact-similar (cognates); 3) 69 lexemes with minimal pairs are presented by 152 lexemes (74 lexemes existed in IB and 79 existed in IM) indicate that those lexemes are of the same roots/etymons but have phonologically transformed. These lexemes are categorized as *inheritance*; 4) there are a total of 182 lexemes of 158 etymon which are only found in one language but not of other: 66 lexemes of 61 etymons are found in the isolects of Banjar language (IB) and 116 lexemes of 97 etymons are found in Minangkabau language. Those lexemes are categorized as *borrowing* or *by chance* which need further analysis; and 5) the lexicostatistics calculation indicates that the two languages analyzed are of the same family with the similarities of 66,38%.

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