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Squib

Austronesian Lexemes in Basa Latala of Borneo: A Punan Sajau Song Language

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In recent work based on a 130-item wordlist, Lansing et al. claim that Basa Latala, a Punan Sajau song language of Borneo, is not an Austronesian language. In this squib, we argue that there is no linguistic basis for this claim. Many Basa Latala words have clear Austronesian and Borneo cognates and show evidence of Austronesian cognate morphology.

Keywords: Basa Latala; Punan Sajau; Punan Batu; Punan; Languages of Borneo; Song Languages; Lost Tribes

1. THE CLAIM: BASA LATALA DOES NOT HAVE AN AUSTRONESIAN LEXICON. In a recent *New York Times* article reporting a new genetic study to be published in *Cell*, the linguistic claims of Lansing et al.'s (2022) article in *Evolutionary Human Sciences* were repeated, as if they were fact. The 2022 article was entitled "Deep ancestry of collapsing networks of nomadic hunter-gatherers in Borneo." In it, a hunter-gatherer group labeled Punan Batu, speaking Punan Sajau, claimed to "preserve a song language that is unrelated to other languages of Borneo." The song language, called Basa Latala, was represented in that article by 130 words (or phrases) from the Swadesh 207 wordlist. Based on automated wordlist comparisons between this list of 130 items and a range of Austronesian and Austroasiatic languages, the same authors concluded that Basa Latala is "equally remote from both the Austronesian and Austroasiatic language families," with "the only words of Austronesian origin detected so far ... the result of intraspeaker transfer from the daily language of Punan Sajau into Latala."

^{1.} The New York Times article (Borrell 2023) appeared on September 19, 2023, in the Science section. It was written by Brendan Borrell, with photographs by Joshua Irwandi, and was entitled "A vanishing nomadic clan, with a songlike language all their own." There was no audio file included, and no linguists were cited in the article.

There is some indication that Lansing et al. (2022) did not elicit or transcribe Punan Sajau or Basa Latala with great care.² And there are other indications that the items in their Swadesh lists were entered via an automatic translation program or some other inexact method, rather than careful selection by speakers and linguists familiar with the languages in question.³ Finally, we, as linguists, cannot check their transcriptions of Basa Latala, because the song recordings have not been made publicly available, and because the method by which they arrived at translations of the songs has not been described. These important matters aside, it is still possible to demonstrate that many of the forms transcribed as Basa Latala have Austronesian and, in some cases, clear Borneo cognates. Sometimes, a word or word root is not in Lansing et al.'s list of Punan Sajau but exists in a closely related Punan language.⁴ Other times, the word or word root is synonymous with the target form, overlaps in meaning, or is a paraphrase, as might be expected in song language, where poetic license, metonymy, and text-to-tune matching may result in a nonstandard usage.

The simple purpose of this squib is to highlight cases where an Austronesian etymology of a Basa Latala word or phrase is clear and to, thereby, debunk the claim that Basa Latala is not a derivative of an Austronesian language.

Before turning to this demonstration, it should be emphasized that Lansing et al. (2022) draw conclusions from the linguistic data entirely on the basis of negative evidence. In their view, the null hypothesis for the Basa Latala lexicon is that it represents an older spoken language that predates the arrival of Austronesian-speaking (and possibly Austroasiatic-speaking) populations. In their own words, "... for the Punan Batu, Latala functions as a *Kunstsprache*, a language that was once spoken but is now used exclusively for poetic expression, similar to Homeric Greek, Latin or Old Javanese. The retention of Latala by the Punan Batu is most parsimoniously explained as an ancient cultural inheritance, further evidence for their distinct demographic history." While this is one of many hypotheses, studies of other ritual languages of Borneo might lead one to consider an alternative null hypothesis, namely that Basa Latala has at least three components: words from Punan languages and other related languages, sometimes slightly altered; Malay words, also

For example, Punan Sajau 'dog' is transcribed as *ahnu*, though Smith (2017) and others show [ahu] < *asu; Basa Latala 'wife' is transcribed as *tso∂in*, though no other words in Basa Latala contain [ts], and no Punan language is reported as having this sound initially.

^{3.} For example, item 8 that (deictic pronoun) is translated as Indonesian bahwa 'that, lest' (relative marker); item 86, guts (body part) is translated as Indonesian keberanian 'courage', instead of a body part term meaning 'entrails', or other internal organs; item 88 back (body part) is translated as Indonesian kembali 'to return, to go back'; and item 159, earth (soil, land), is translated as Punan Sajau duniajuga, which appears to be the phrase dunia juga 'dunia also' (as in 'we say dunia also') where dunia is the Malay term for 'earth, world, kingdom' from Arabic dunia, and juga means 'also' in Malay. In some cases, there could be a misunderstanding. Basa Latal dariasal is the form given for 'they' (third-person plural pronoun), though it looks like a transcription of the common Indonesian phrase dari asal 'from the origin' (where asal is an Arabic loan).

^{4.} The most extensive and detailed classification of Borneo languages to date is by Smith (2017). There, a Punan (P.) subgroup is recognized. See (1) below.

sometimes altered; and some special words reserved for ritual languages. The absence of any reference to this earlier literature in Lansing et al. (2022) leads us to offer a brief summary here.

Several comprehensive summaries of Austronesian ritual languages have appeared in the past few decades, including Fox (2005) and Blust (2013: chapter 3, especially 3.5). One overarching feature of many of these languages is canonical parallelism, where words, phrases, and lines must be paired for a composition to be defined as poetry, ritual language, or elevated speech (Fox 1988, 2005; Blust 2013:149-50). This is relevant to our analysis below, as, in some cases, two related words with similar reference are combined in Basa Latala. For example. Basa Latala *uwei marai*, glossed as 'rope' in Lansing et al. (2022), appears to be a compound of *uwei* meaning 'rattan' and *marai* referring to a specific type of rattan. Another overarching feature of Austronesian ritual languages is the divergence found in the lexicon. Lexical sources for three ritual languages of Borneo are given special mention in Fox (2005): the Sangiang language of the Ngaju Dayak; the ritual register of Dusun; and the ritual or chanted language of the Timugon Murut. In a nineteenth-century grammar of Ngaju Dayak, words of a ritual language now known as Sangiang are described as falling into one of three categories: (i) ordinary as well as slightly altered Dayak words, (ii) Malay words, also slightly altered, and (iii) special words, whose meaning and form were confined exclusively to use in the "spirit language" (Hardeland 1858:4-5). A similar categorization is offered by Evans (1923) in his account of the Dusun ritual register, where the lexicon is found to consist of: (i) ordinary Dusun words; (ii) special but easily recognizable forms of ordinary words—poetic forms—derived from ordinary Dusun; (iii) words not usually current in the village ... but found in other villages, near or far away; (iv) loan words from Malay; and (v) words used, as far as is known only in the "sacred language," for which derivations are not obtainable (Evans 1923:495-96). The ritual language of Timugon Murut is similar. A priestess uses a poetic style based on everyday language, and the response of her assistant is chanted in a somewhat opaque ritual language. The opacity of this "reply" language is due to several factors: In a small number of cases, the ritual substitute is a synonym from the everyday language; for numerals, a numeral X is replaced with X+1; for many ritual terms, the replacement word is a cognate word known from another dialect of Murut or another Borneo language; and finally, some substitute words have no obvious etymologies (Prentice 1971:133–35). In sum, in northern Borneo ritual languages, the largest number of lexical terms that are not from ordinary speech derive "from other dialects on the island" (Fox 2005:90). The linguistic evidence to date, then, suggests a distinct null hypothesis from the one adopted by Lansing et al. (2022): words of Basa Latala are likely to be drawn from Punan Sajau, other Punan languages, other Borneo languages, and major contact languages, including Malay. The results of our preliminary investigation of the Basa Latala wordlist detailed below are consistent with this hypothesis.

2. THE FACTS: THERE ARE MANY AUSTRONESIAN LEXEMES IN

BASA LATALA. The methodology of this squib is quite simple. Since Lansing et al. (2022) state that "the only words of Austronesian origin detected so far appear to be the result of intraspeaker transfer from the daily language of Punan Sajau into Latala," in any case where Latala and Punan Sajau words for the same meaning are distinct (Columns J and K in Lansing et al.'s [2022] spreadsheet, attached as the appendix of this squib), an Austronesian etymology has been investigated for each Basa Latala word, starting with comparisons to Punan Sajau itself, and the most closely related Punan languages, and, from there, moving to other Central Sarawak languages spoken in the same area of Borneo and finally to Iban and Malay due to their contact influence within Sarawak (Smith 2017:262), and, for Malay, across Borneo more widely (cf. Smith [2021:147] on Malay loans in Hliboi).

(1) Family tree for languages of Borneo, with focus on Punan (Smith 2017:111–12, 364–65, 390)

A. Western Austronesian

Greater North Borneo

Basap-Greater Barito Linkage

Other Western Indonesian (outside of Borneo)

B. Greater North Borneo

North Borneo

Central Sarawak

Kayanic

Land Dayak

Malayic

C. Central Sarawak

Melanau

Punan

Kajang

Müller-Schwaner

D. Punan languages: Punan Bah, Punan Aput, Punan

Lisum, Punan Sajau, Punan Tubu

Beketan, Ukit, Buket, Sru Dayak (extinct)

Internal relationships of the Austronesian languages of Borneo are based on Smith (2017) (Sm), with features of the family tree relevant for this study illustrated in (1): a Western Austronesian group of Austronesian languages with three divisions shown in (1A); within Greater North Borneo, five recognized subgroups, including Central Sarawak as in (1B); within Central Sarawak, four well-defined subgroups, including Punan (1C); and within Punan, at least eight distinct extant languages (or dialects), with some evidence of mutual intelligibility (Smith 2017:111–12).

Before looking for Austronesian cognates, there were two handicaps to overcome. A first handicap was the seemingly amateur quality of the Basa Latala and Basa Sajau phonetic transcriptions offered by Lansing et al. (2022). In

interpreting the transcriptions of Basa Latala, we have done our best. Since IPA symbols are used, we assume that [j] writes the voiced palatal approximant, while [1] writes the voiced palatal plosive. Six symbols or clusters occur only once in the Basa Latala list and not at all in the Punan Sajau list, and for this reason, they might be suspect: [dn] in dungahadn 'belly', which we interpret as a pre-stopped /n/; [f] in sefatun 'bad' which is phonemic in Punan Tuvu', and which we interpret as /f/ (from *-p- or *-b-); [ŋj] in *ŋjanin* 'father', which we interpret as a /ŋj/ cluster; [ts] in tso?in 'wife', which we interpret as (affricated) /s/; [t:] in pawuket:ilu 'to see', which we interpret as a phonetically long [t:]; and [v] in *pulivet* 'to fly', which is phonemic in Punan Bah, Punan Aput, Beketan, and Ukit, and which we interpret as /v/ (from *-b-). With vowel quality, decisions were somewhat more difficult for several reasons. First, Basa Latala is transcribed with six vowel symbols: i u e o a ε , but $\langle \varepsilon \rangle$ is only found in final syllables followed by a nasal consonant. We interpreted this as a nasalized allophone of another vowel and assumed a basic /i u e o a/ five-vowel system. Second, across Punan languages, there are many vocalic differences in cognate forms, as shown, in part, by the regular reflexes of PMP vowels in table 1 from Smith (2017:113), and the farther one moves from the Punan subgroup, the more divergent vocalic reflexes can be. Third, since the cognate forms we are presenting can be inherited or borrowed, regular sound correspondences are not required. Faced with all of these issues, we put forward matches with nonmatching vowel quality only when matching vowel qualities are predicted by the regular reflexes in table 1.

A second handicap in this work involves the word status of the Basa Latala forms provided in Lansing et al. (2022). There are two reasons to suspect that many of the forms transcribed are not words but whole phrases. In most languages, high-frequency forms like negation and high-frequency verbs with meanings like DO, GO, and SEE are relatively short (Haspelmath 2008). In contrast, the word for 'not' in Basa Latala is transcribed as *taumenditawena* (six or seven syllables), while the verb 'to see' is written as *pawuket:ilu* (five syllables). Another reason to suspect that something is amiss is that, within

PMP	Punan Tubu	Punan Bah	Punan Aput	Beketan	Ukit
*-a	oh	o	o	o	ə
*-aC	a	a; eə̞ / _ŋ, k	a	a	a
*-aCVC	a; ə / _Ca	a; e,o / _Ca	a	a	a
*-u	uh	u	u	u	u
*-uC	u	u; uə̯ / _ŋ,k	u	u	u
*uCVC	u	u	u	u	u
*-i	ih	i	i	i	i
*-iC	i	i; ią / _ŋ,k	i	i	i
*-iCVC	i	i	i	i	i
*-əC	o; e / u,iC_	o; e / u,iC_	o; e / uC_	o; e / uC_	ə
*-2CVC	2. 0. Ø / #	e. 0	a. o	a. o	а

TABLE 1. REFLEXES OF PMP VOWEL PHONEMES IN PUNAN.

Austronesian languages, most nominal and verbal bases are disyllabic (Blust 2007). Yet, of the thirty Basa Latala verbs listed, only two appear to be disyllabic: lago 'to live' and nyata ahom 'to die', where nyata is, apparently, the verb and ahom is a noun glossed elsewhere as 'earth' and as 'forest'. At the same time, of the same thirty verbs, thirteen begin with the syllable /pa/. Since pa- (variant pe-) is a well-attested verbal prefix (or part of a circumfix) in the Austronesian languages of Borneo, a Basa Latala form like paliho 'to float' should be considered as possibly morphologically complex, /pa-liho/, with liho> 'float', 'floating', the object of comparison. In order to facilitate identification of morpheme-internal structure, a first pass through this data focused on Basa Latala words with four syllables or less. Longer Basa Latala words (e.g., taumenditawena 'not') were hypothesized to be words or phrases with more than two morphemes, possibly requiring a fuller study of Basa Latala grammar to analyze (see below).

Though Lansing et al. (2022) state that "the only words of Austronesian origin detected so far appear to be the result of intraspeaker transfer from the daily language of Punan Sajau into Latala," there is only one word in their list that clearly falls into this category, and possibly two others, as shown in table 2. (In table 2 and table 3, words are in alphabetical order by English gloss.) The Basa Latala word for 'wing', *ilat*, is the same as the word in Punan Sajau. Apart from this pair, there are no terms that are identical in the two languages in the word-lists offered in Lansing et al. (2022). The Basa Latala word for 'fire', *apoioron*, however, contains the Punan Sajau word for fire as a first element; in this case, the second element appears to be adverbal, and the word from the original song may be misparsed. Another case of identity between Basa Latala and the every-day Punan Sajau language is found in the term for 'where': in this case, the Basa Latala term looks like a variant of Punan Tuvu' *an pai*, with a preceding particle, while the Punan Sajau term has *apai* followed by *deh* (cf. Beketan *deya* 'where').

TABLE 2. IDENTICAL BASA LATALA AND PUNAN SAJAU TERMS FROM LANSING ET AL. (2022).

Gloss	Basa Latala	Punan Sajau	Data source	Notes $(Sm = Smith 2017)$
FIRE	apoi/oroŋ	apoi	Lansing et al.	Seputan, Aoheng <i>oron</i> 'downriver' (Sm:519)
WHERE	han/apai	apai/deh	Lansing et al.	Punan Tuvu' <i>an pai</i> ; Punan Bah p <i>ai</i> ; Beketan <i>deya</i> (Sm:515)
WING	ilat	ilat	Lansing et al.	proto-Punan *ilat (Sm:515)

^{5.} There is no indication that Lansing et al. (2022) considered morphological complexity in their automated wordlist comparison of Bata Latala with other languages. Alignment of the left edge of, for example, Basa Latala hanapai with Punan Sajau apai deh, or even Punan Tuvu' an pai 'where' would likely fail to establish cognacy unless morpheme structure was introduced.

Since Lansing et al. (2022) admit that direct borrowings from Punan Sajau are found in Basa Latala but claim they are exceptional in being *the only terms* with clear Austronesian etymologies, Sajau and Latti terms from Guerreiro (2015) were also compared to the Basa Latala wordlist, looking for matches. No other identical terms were found.

The next step was to compare seemingly obvious Austronesian terms in Basa Latala with languages closely related to Punan Sajau or in contact with Punan Sajau. In table 3, proposed Austronesian cognates for Basa Latala words are listed. The glosses in the first column, along with Basa Latala forms in the second column, are from Lansing et al. (2022). Words from other Borneo languages are from Smith (2017) (Sm), Smith (2018), The Austronesian Comparative Dictionary (Blust and Trussell, ongoing) (ACD), Guerreiro (2015) for Sajau/ Latti, Scott (1956) for Iban, Lobel (2016) (NBS) for others, and Puri (2001) for Bulungngan. Proto-forms for Borneo subgroups are from Smith (2017) (Sm), and all other proto-forms and data from Austronesian languages are from The Austronesian Comparative Dictionary (Blust and Trussell, ongoing) (ACD). In the proto-form column, reconstructions in parentheses are those for suggested loan sources. In the notes column of table 3, there are comparanda from Malay, Iban, and Kayanic as potential contact languages: Malay loans are widespread in Borneo, and Iban and Kayan migrations into historically Punan territory may have influenced Proto-Punan as well (Smith 2017; Soriente 2020). Also in the notes column are remarks on sound change, possible morphological structure, and semantic shifts (indicated by >>) or poetic usage. Slashes in Basa Latala words are introduced to indicate that only part of the word, as transcribed by Lansing et al. (2022), has a clear Austronesian cognate for the given gloss. Hyphens in Basa Latala words are introduced to indicate that the entire word, as transcribed by Lansing et al. (2022), has clear Austronesian cognate forms, but that the word appears to be multi-morphemic, with a recognizable common Austronesian prefix, infix, or suffix, while a plus symbol indicates the same, but where the word is a suspected compound.

In considering the data in table 3, it is important to remember what is at issue: Lansing et al. (2022) are suggesting that Basa Latala is the descendant of an ancient non-Austronesian language, while our comparisons are meant to show that many Basa Latala words are either directly inherited Austronesian terms (e.g., BL *anit* 'bark' < PMP *qanit) or borrowed words from other Austronesian languages that the Punan were in contact with (e.g., BL *aku* 'I', likely borrowed from Malay *aku* in light of proto-Punan *jək/*hək [Smith 2017:501]).

^{6.} Abbreviations in table 3 and elsewhere are: A, adjective; ACD, Austronesian Comparative Dictionary; BL, Basa Latala; CMP, Central Malayo-Polynesian; KAY, Kayanic; MRP, Merap; MS, Müller–Schwaner; N, noun; n, noun; PAN, proto-Austronesian; pGNB, proto-Greater North Borneo; pKAY, proto-Kayanic; pKEN, proto-Kenyah; pLD, proto-Land Dayak; PMP, proto-Malayo-Polynesian; pMÜL, Proto-Müller–Schwaner; pPUN, proto-Punan; PUB, Punan Beketan; PUD, Punan Derian; PUT, Punan Tubu'; pWIn, proto-Western Indonesian; PWMP, proto-Western-Malayo-Polynesian; RKP, Puri (2001); Sm, Smith (2017); wrt, with respect to.

TABLE 3. BASA LATALA WORDS WITH COGNATE ROOTS IN BORNEO AND IN OTHER AUSTRONESIAN LANGUAGES.

Gloss	Basa Latala	Other Borneo	Proto-forms	Notes
ANIMAL	taŋ+oi	Sanggau <i>taŋ</i> , Hliboi Bidayuh <i>natakŋ</i> (loans from Malay)	(PMP *bataŋ 'body')	BL taŋ from Malay binataŋ.
	oi	Punan Bah <i>oi</i> , Sekapan <i>ui</i>	pPUN *lahaut	BL N+N compound.
BARK (OF TREE)	anit tia	Punan Lisum anit kiow, Buket anit 'bark'	PMP *qanit 'animal skin' pPUN *anit 'skin'	BL <i>tia</i> may be a variant of Punan <i>kiow</i> , <i>kiəw</i> 'tree' with BL t#k → t#t
BIRD	kanoi	Punan Bah, <i>eñaw</i> , Buket <i>koñu</i> 'eagle'	pGNB *kəniw pPUN *koñiw 'eagle'	BL broadening EAGLE >> BIRD
CLOUD	balin/awan ⁷	Iban, Kendayan, Mualang <i>awan</i> 'cloud'	(PWMP *hawan 'atmosphere; space between earth and sky')	This Malayic loan appears to be widespread in Borneo: cf. Dalat, Ribun, Sanggau, Kapuas, Bakumpai awan 'cloud'
COLD	da/diŋin	Kendayan diŋin	(PMP *dinin 'cold')	From Malay dinin
DAY, SUN	bo+hajaŋ		(PWMP *siaŋ 'daylight, morning, sunshine')	From Malay, Iban <i>sian</i> 'daylight' For <i>bo</i> , cf. Iban <i>bol</i> 'period, season, time'
DOG	ipoen	Long Naah, Data Dian, Busang ipən 'tooth'; Long Naah ipən aso? 'canine' (aso? 'dog')	PMP *ipen, pKAY *ipen 'tooth'	Likely KAY loan. In KAY (and Kenyan) term for 'canine (tooth)' is compound TOOTH-DOG. BL metonymy: TOOTH- DOG >> DOG
EARTH, FOREST (see also SKY)	ahom	Hovongan dahəm, Kereho dahom 'deep'	PMP *dalem 'insides; area within; inner part; between, below, under, deep' pMÜL *dahom 'deep'	Wrt initial *d-loss, cf. Iban variants dalam, alam, where the second is used for 'inside (the heart)'. BL metonymy: DEEP IN THE FARTH, DEEP IN THE FOREST >> EARTH, FOREST
FAT (n)	to/maluŋ	Long Nah, Busang maduŋ 'fat', Modang mədoṣŋ 'fat (n)'	pKAY *aduŋ 'fat (n)', *maduŋ 'fat'	Likely KAY loan. Within Punan, d/l common, e.g., Punan Bah dopo, Punan Aput lopo 'fathom'.

^{7.} The Basa Latala word also bears a strong resemblance to Punan Sajau *lijnawa* 'cloud'. This latter word has no obvious etymology, although the form appears similar to reflexes of PMP *nihawa 'breath, life force, breath soul [...]' (ACD). At least one other language of northern Borneo also shows a possible cognate of *lijnawa* unrelated to this PMP etymon: Nabaay *lisawo* 'cloud' (where PMP *a>o/_#) (Lobel 2016:95). Clearly, more work is necessary to establish either of these possible correspondences.

Gloss FEATHER	Basa Latala ti/bulun	Other Borneo Punan Tuvu', Punan Lisum, Buket bulun 'body hair'; Kayan bulu- n 'feathers, scales of fish, body hair'	Proto-forms PMP *bulu 'body hair; fur; feather' pPUN *bulu-n 'body hair'	Notes Cf. also Malay bulu 'body hair; plumage; bristles; hairy, wooly or feathery covering on animals'
FRUIT	puhun	Punan Lisum, Punan Aput, Buket <i>pun</i> 'log; stump'	PMP *puqun 'base of a tree'	Cf. also Malay pohon 'stem or trunk of tree; beginning of anything; tree'. BL metonymy BASE OF TREE (WHERE FRUIT FALLS) >> FRUIT
HEAD	uhaŋ	Punan Aput <i>uhoŋ</i> , Punan Bah <i>uaŋ</i> 'horn'	PAN *uRen pPUN *uhən pKAY *uhan 'horn'	Cf. also pKAY *kahuŋ 'head'. BL metonymy HORN >> HEAD
HEART, NECK	jurip-an	Punan Lisum, Punan Aput <i>urip</i> 'alive'	PMP *qudip 'life, alive'	BL with -an, locative, meaning something like 'seat of life', wrt heartbeat and neck (carotid artery) pulse.
HEAVY	ma-lalo	Kayan <i>lalaw</i> 'more than, exceed', Ngaju Dayak <i>lalaw</i> 'exceed, too', Iban <i>laloh</i> 'more than sufficient'	(PMP *lalu 'more, even more; surplus'; PWMP *lalaw 'exceed, surpass, go beyond')	Kayanic or Iban loan. BL with <i>ma</i> - (cf. PMP, pPUN *ma- STATIVE)
I	aku	Kendayan, Keninjal, Mualang <i>aku</i>	(PAN *aku 1sg.nom)	From Malay (or Malayic) aku
KNEE	duguŋ+mulu	Benyadu <i>abak</i> tukukŋ (abak 'head')	PAN *du(ŋ)kuŋ 'bend, curve'	Could also be borrowed: cf. Iban dungkong 'the bulge of forehead or back of head', with reference to bulge of kneecap.
	mulu < bulu		pPUN *bulu? 'bamboo'	Cf. Malay, Iban buloh 'bamboo; anything tubular, resembling bamboo'.
LEAF	itun	Ngorek, Balui Liko Kayan, Busang, Balui Liko Kayan <i>itun</i> (Smith 2018)		Kayanic loan.
(TO) LIVE	lago		PWMP *lagu 'way, manner; melody'	In many languages of Borneo, reflexes of this term mean 'song'.
LOUSE	ulu-n/tuli	Dalat, Kanowit <i>uləw</i> , E. Penan, W. Penan <i>ulun</i> , Vo <i>ulu</i> 'head'	PMP *qulu-n 'head', pKEN *ulu-n 'head'	BL is literally 'seed/ egg on head' and mirrors possessive constructions of some
	tuli	E. Penan, W. Penan <i>tulin</i> 'seed'; Kaser, Benuaq <i>toli</i> 'egg'	PMP *qateluR 'egg'	CMP languages, e.g., Soboyo <i>asu-n tuma</i> 'flea on a dog'.
MANY	nu/luwai	Punan Bah oa; Kereho lua?	PMP *lebiq 'excess, surplus'	Cf. also Maanyan wahay; Iban lebih 'more, extra'

Gloss	Basa Latala	Other Borneo	Proto-forms	Notes
MOON	mid/uran	Punan Bah <i>bulan</i> , Punan Lisum <i>bulan</i>	PMP *bulan pPUN *bulan	P. Lisum shows retroflex []] which could explain BL <r>. For initial *b > Ø, cf. Dusun Witu <i>ulan</i>; Gaai, Kelai <i>uluan</i>. BL <mid> may be cognate with Badung <i>amat</i> 'full moon' <</mid></r>
MOTHER	ipun/bua	Punan Tuvu', Punan Bah <i>ipun</i> 'aunt'	pPUN *ipu-i 'aunt'	pKEN *(bulan) kamət. Cf. also Iban <i>ibu</i> 'aunt; term of address for women of mother's generation'.
OLD	t-uny-akan	Punan Tuvu', Punan Bah, Ukit, Buket <i>tokan</i> 'old (person)'	pPUN *tokan	
ROAD	am-ewan	Kayan awaŋ open up (as a window); make a space; opening; clear away undergrowth; Iban awan 'air', Idaan Begak awan 'outside'	PWMP *awaŋ, *hawan both meant 'space between earth and sky', and both are continued with meanings referring to clearing of undergrowth.	BL compound EARTH/ FOREST + CLEAR, referring to clearing of underbrush.
	am < ahom	see EARTH, FOREST		
ROOT	pakud+arun arun	Punan Tuvu' pakat, Bulusu bakod Balui Liko, Busang talun 'secondary jungle'	PMP *wakat 'mangrove root' pKAY, pKEN *pakat 'roots' PMP *talun 'fallow land; secondary forest'; pLD *tarun 'secondary forest'	BL may be a compound or phrase referring to roots in secondary forest. Wrt arun, cf. also Iban talun 'turn up soil, dig, till'.
ROPE	uwei marai marai	Punan Lisum <i>uey</i> , Punan Aput <i>wey</i> 'rattan' PUT, PUB, PUD <i>birat</i> ; MRP	PAN *quay 'rattan' PWMP *away 'rattan variety' pPUN *uay 'rattan'	BL appears to be a compound or phrase referring to a specific type of rattan; rattan cane was often used for cordage. This could also be a case of semantic parallelism (see text).
		mberae 'beerai palm (k.o. rattan)' [RKP:121]		(see text).
RIVER, WATER	lujuŋ	Ukit alun 'estuary', Buket alun 'estuary, downriver'	pWIn *əluŋ 'river mouth, estuary' pPUN *aluŋ 'estuary'	BL metonymy river MOUTH >> RIVER, RIVER WATER >> WATER
SEA	bowi	Iban buih 'a swirl in the water caused by movement below'	PMP *bui 'to swing' (back and forth movement)	Loan from Iban. PMP reflexes include Sundanese buih 'to shift (as the wind); (of water) to boil, turn over, seethe'

Gloss	Basa Latala	Other Borneo	Proto-forms	Notes
SKY (for ahom, see EARTH)	ahom +nukasa	Hovongan dahom, Kereho dahom 'deep'	PMP *dalem 'insides; area within; inner part; between, below, under, deep' pMÜL *dahom 'deep'	BL compound, where nukasa is loan, from Malay angkasa 'space, sky, atmosphere' (itself from Sanskrit ākāśa, 'sky, space'). BL is literally 'inside sky, deep in the sky'
SNAKE	p-am-agoŋ	Punan Lisum (kəlimut) bakuŋ 'yellow/black snake' Boiga dendrophila; Sekapan paguə, Kejaman (ñipah) paguəŋ, Lahanan (ñipah) paguŋ 'yellow/black snake'	a Bornean 8 innovation	For BL -am-, cf. PMP *-um- actor voice.
STAR	<i>karapitu </i> karap+bitu/	pPUN *bətu?ən 'star'	PMP *kerap 'shine, sparkle, twinkle' PMP *bituqen 'star'	BL appears to be a compound meaning 'shining star'. We assume voice assimilation in /pb/ > pp > p(:).
STICK	paluk	Mualang palo ₂ ? 'hit with a stick' Iban palu? 'hit, beat, strike' (with stick or mallet); Seberuang palo? 'hammer'	(PMP *palu 'to hit with a hard instrument')	Loan from Malay or Malayic. Cf. Malay palu 'hitting hard with a rigid weapon'. BL metonymy HIT WITH STICK >> STICK
WE	pali-kaban	Iban <i>kaban</i> 'relation; friend, kinsman; group'; Seberuang <i>kaban</i> 'friend'	PWMP *kaban 'companion, member of a group; friend'	BL could be inherited or Malayic loan.
	pali	Kayan <i>pala</i> - prefix of mutual or reciprocal action'; Kelabit <i>pere</i> - reflexive prefix	*paRi- 'reciprocal', in PWMP *paRi- amax 'relationship of father and children'	Distribution of Borneo forms suggest that prefix may be reconstructable to pGNB.
WIDE	lihi+dai dai	Punun Aput lehi? 'wide' Sanggau dai? 'big'; Jangkang dais 'big, wide'	PAn *Raya 'big, large'	BL A+A compound and/or a case of semantic parallelism (see text).
WIFE	tso?in	Punan Lisum son, suen 'spouse', Buket son 'spouse'	PAN *qasawa 'spouse: husband, wife' pPUN *sawan 'spouse'	BL [ts] is interpreted as an allophone of /s/

^{8.} This Borneo word could be an old (in situ) Mon-Khmer/Katuic loan, like others suggested in Blevins and Kaufman (2023). Compare Bru *pharki.:ŋ* 'poisonous snake having a triangular-shaped body with alternating black and yellow rings' and Katu *bakɔ:ŋ* 'snake' from SEAlang's (n.d.) *Mon Khmer Etymological Dictionary*.

Gloss WOMAN	Basa Latala lalaŋ-in	Other Borneo Lahanan lərah, Ukit doro, Septuan dora 'unmarried girl'; Maanyan daraŋ- an 'wife'	Proto-forms PMP *daRa, *de- daRa 'maiden, virgin, unmarried girl' pLD *da:yuŋ 'woman'	Notes Cf. also Malay dara 'girl, maiden'.
YOU SG.	каји-ŋ	Bekati <i>kayou</i> , Sebop <i>ka?u?</i> [ACD]; Melanau (Sarikei) <i>kaw-ən</i> [ACD], Kendayan <i>ka.u</i>	PMP *kahu 'you sg.'	Cf. Malay <i>kau</i> . Could be inherited, or a Malay/Malayic loan

As mentioned earlier, longer Basa Latala words were hypothesized to be words or phrases with more than two morphemes, possibly requiring a fuller study of Basa Latala grammar to analyze. To take just a single example, Lansing et al. (2022) record *taumenditawena* as the word for 'not' or negation. In this case, the short sentences and grammatical sketch of Lebbo' in Guerreiro (2015) were most useful. In that work, we find the verb *tau* 'know' (p. 164, 15a); the negative *menda* 'no, not' (p. 166); and the negative imperative *na*' 'don't' (p. 166). With this information, it is possible to make an initial rough parse of <taumenditawena> as in (2).

(2) Possible morphological structure of Basa Latala <taumenditawena> 'not' tau menda tau (e)na' know not know not 'don't know, don't know'

However, at present, grammatical work on Punan Sajau is scarce, so we leave the longer Basa Latala words for future study.

Even without taking into account the claimed words of more than four syllables, there is ample evidence, as detailed by over thirty-seven meanings (and many more individual morphemes) analyzed in table 3, that Basa Latala has, to a great extent, an Austronesian lexicon. That a range of dialects or languages might be represented in songs that have passed from group to group and generation to generation is not surprising, nor is it surprising to find use of poetic language, for example, calling the pulsing heart or neck 'the seat of life' or using a term meaning 'way, manner' to refer to a way of living. More significantly, Basa Latala appears to show the same kinds of lexical divergence as other ritual languages of Borneo, as summarized in section 1. There appears to be use of canonical parallelism, where words with similar meanings are paired, as in: tan+oi 'animal'; uwei marai 'rope' and lihi+dai 'wide'. Words in Basa Latala are sometimes drawn from Punan Sajau (table 1), but more often, they are cognate with words in other languages of Borneo (column 3 of table 3) or loans from Malay, Iban, or Kayanic (last column of table 3)—all languages with which they have had significant contact. In the context of Borneo ritual languages, this is the null hypothesis, and with further detailed study, more Austronesian cognates of Basa Latala words are likely to be discovered. Finally, even in words where we

do not propose etymologies, clear Austronesian prefixes are in evidence. For example, adjectival/stative ma- < *ma- appears to be present not only in Basa Latala *malalo* 'heavy', for which we propose a source in table 3, but also in *masirum* 'smell', *manilut* 'sleep', and *matukei* 'fight'. In Basa Latala verbs, verbal/causative pa- < *pa- appears to be present in ten words: *palipuh* 'to eat'; *pawuket:ilu* 'to see'; *parakopan* 'to know'; *papapo* 'to kill'; *patabo* 'to dig'; *paraija* 'to walk'; *pahuti* 'to give'; *parerit* 'to rub'; *paluwai* 'to say'; *paliho* 'to float'. Both of these observations suggest that Austronesian word-formation processes are in use in the creation of Basa Latala words.

3. CONCLUDING REMARKS. In sum, there is, as of yet, no evidence that Basa Latala is anything other than a derivative of the Austronesian languages of Borneo. It may have some archaic Austronesian features, and for this reason and many others, it is worthy of further study. But the claims that it represents an ancient non-Austronesian language have no linguistic support and should be retracted.

Furthermore, it should be recognized that the original presentation of the linguistic findings in Lansing et al. (2022) is misleading. In particular, the phylogenetic visualizations presented position Basa Latala and Sangiang, the Ngaju Dayak ritual language, as independent branches coordinate to the Austronesian and Austroasiatic language families. However, the position of these two languages in the tree is not based *on any positive evidence*. Basque, Lotha Naga, Nahuatl, Qenya, and Sindarin would likely be positioned similarly. By "locating" Basa Latala in a phylogenetic tree, the naive reader can be misled into thinking that the data suggests a particular history for the language, though this is not the case. The positioning of Sangiang and its claimed non-Austronesian status is especially troubling, as it seems to ignore substantial scholarship tracing the Austronesian origins of its lexicon (Hardeland 1858, 1859; Schärer 1963). Despite this earlier work, the authors boldly state that Sangiang, like Latala, is "isolated from Austronesian . . . and displays minimal sharing with Ngaju Dayak," its parent language. 11 In

^{9.} The authors clearly view their figure as an evidence-based phylogeny: "Figure 5a shows the phylogenetic relationships between these languages, estimated using an optimized linguistic distance ..." (Lansing et al. 2022).

^{10.} Basque is considered an isolate; Lotha Naga is Sino-Tibetan; Nahuatl is Uto-Aztecan; and Qenya and Sindarin are two constructed Elvish languages created by J. R. R. Tolkien.

^{11.} Lansing et al. (2022) hypothesize, again only on the basis of negative evidence, that the Sangiang vocabulary for which they have no cognates must be inherited from the earliest settlers of Borneo, noting that: "In all six cases where Sangiang has an Austronesian cognate, Ngaju Dayak does as well, which supports the hypothesis that any Austronesian vocabulary in Sangiang may be the result of contamination from Ngaju Dayak (or possibly from Malay via Ngaju Dayak)." However, as Schärer (1966) observed, many words that formed part of the everyday Ngaju language in the mid-nineteenth century had become ritual words a century later. Instead of "contamination" of some imagined non-Austronesian precursor, a more plausible scenario supported by Schärer's study is that the ritual language is formed, primarily, by archaic synonyms, euphemisms, and poetic forms both within the common spoken language and from neighboring languages.

the field of Austronesian linguistics, where so much is known about the history and development of hundreds of languages, where extensive lexical resources exist, where one can access The Austronesian Comparative Dictionary with a few keystrokes, and where living scholars have extensive expertise on one or more languages of Borneo, ¹² there is no excuse for this kind of misleading and sloppy scholarship. While one might attribute it to ignorance, in this particular case, it seems that the rush to claim contact with an ancient people, a unique tribe, an unknown human group, has led Lansing and his colleagues to skip over the most important first step of any comparative linguistic work: an accurate and linguistically informed description of each of the languages to be compared, in this case Basa Latala and Punan Sajau.

Unfortunately, we are not in a position to make more progress on the description of the Basa Latala song language at present. As far as we know, recordings of Basa Latala are not in the public domain. At the same time, it is our understanding from looking at one recently advertised event on October 14, 2023 (see https://leakeyfoundation.org/bell_kaye/, accessed October 13, 2023) that, as part of a fund-raising event called "The Punan Batu Survival Project," exclusive access is granted to listen to the Punan Batu song language. In order to facilitate further scientific study of Basa Latala, we urge our colleagues who hold recordings of this language to allow more general access to them so that the language, culture, and origins of the Punan Batu may be better understood. We would also hope that further linguistic studies of Basa Latala and Punan Sajau take into account the many excellent descriptive and historical studies of the languages of Borneo, including the few we have been able to highlight here.

APPENDIX

COLUMNS B, C, J, AND K OF ORIGINAL SPREADSHEET FROM LANSING ET AL. (2022).

English	Indonesian	Basa Latala	Punan Sajau
I	saya	aku	ha?
you (singular)	engkau	kajuŋ	ko?
he	dia	kaniku	di?
we	kami	palikaban	kai
you (plural)	Anda (jamak)	pajituke	kam
they	mereka	dariasal	do?
this	ini	ada	nini
that	bahwa	same	isi
here	sini	nuririn	ani no

^{12.} For recent bibliographies and summaries of Borneo research, see Blust and Smith (2014) and Lobel (2016).

English	Indonesian	Basa Latala	Punan Sajau
there	sana	tulaŋin	asi
who	siapa	•	ih he
what	apa	nukunam	noh
where	dimana	hanapai	apaideh
when	kapan	daret	tohohai
how	bagaimana		nokodi
not	tidak	taumenditawena	ahjen
all	semua	tokanipasarata	guŋkoh
many	banyak	nuluwai	awat
some	beberapa		piroh
few	sedikit	sakuluwaika	sidik
other	lain	umen	ajen
one	satu	pajengorin	gilem
two	dua	labo	dua
three	tiga		tolu
four	empat		apat
five	lima		limo
big	besar	kurabam	ajok
long	panjang		lasun
wide	lebar	lihidai	labur
thick	tebal		makapan
heavy	berat	malalo	mahat
small	kecil	muidio	aluh
short	pendek		ihok
narrow	sempit		kepit
thin	tipis		mipis
woman	wanita	lalanin	oroh
man (adult	pria (pria	lalaŋin manalata	Ololi
male)	dewasa)		
man (human being)	manusia (manusia)	kilorhim	
child	anak	bajaŋ	anak
wife	isteri	tso?in	awan
husband	Suami	sopeinihu	awan
mother	ibu	ipunbua	iduk
father	ayah	ŋjanin	akim
animal	hewan	taŋoi	okun
fish	ikan	karem	basu
bird	burung	kanoi	Jahni
dog	anjing	ipoen	ahnu
louse	kutu	uluntuli	gutu
snake	ular	pamagon	asai
worm	cacing	pumarin	kaweh
tree	pohon	kakuman	po?un
forest	hutan	ahom	kajuwan
stick	tongkat	paruk	ragas
fruit	buah	puhun	bu?ah
seed	benih	asoi	kobek
leaf	daun	itun	da?un
root	akar	pakudarun	oka
	kulit kayu	anit tia	UKA
bark (of a tre:)	· ·		hugal-
flower	bunga	bulajan	busak

English	Indonesian	Basa Latala	Punan Sajau
grass	rumput	enatin teu	rumput
rope	tali	uwei marai	tali
skin	kulit	anit	kulit
meat	daging		punuŋ
blood	darah	ulihaŋ	hadah
bone	tulang	palius	katolaŋ
fat (noun)	lemak	tomaluŋ	anat
egg	telur	tebuŋan	atalu
horn	tanduk		duku
tail	ekor	bualata	okoi
feather	bulu	tibulun	bulu
hair	rambut	tebundu	bulu
head	kepala	uhaŋ	uto
ear	telinga	panumau	tuniŋ
eye	mata	tilut	mato
nose	hidung		uruŋ
mouth	mulut		murut
tooth	gigi	taruhuŋ	jipεn
tongue (organ)	lidah (organ)	·	jala
fingernail	kuku	dilim	?ilun
foot	kaki	gumalaŋ	takε
leg	kaki	Č ,	
knee	lutut	duguŋmulu	luhuŋ
hand	tangan	ţiçin	kusu
wing	sayap	ilat	ilat
belly	perut	dungahadn	tora?
guts	keberanian	38	batukan
neck	leher	juripan	luhu
back	kembali	panunen	lapet
breast	payudara	L-13-9	ota
heart	jantung	juripan	liŋgu?an
liver	hati	inoila	ati
to drink	minum	tasetlikuŋ	iup
to eat	makan	palipuh	kaman
to bite	menggigit	nugilem	maŋuat
to suck	mengisap	nagnem	maniro
to spit	meludah		rulja
to vomit	muntah		mənoŋap
to blow	meniup		mənusu
to breathe	bernapas	taliliwai	basibo
to laugh	tertawa	taiiiwai	amuфaŋ
to see	melihat	pawuket:ilu	
to hear	mendengar	nuranai	malaŋ
			narano Iratilan
to know	tahu	parakopan	kati?en
to think	berpikir	maginum	bapikir
to smell	mencium	masirum	manason
to fear	takut	sinoinei	nahu?ut
to sleep	tidur	manilut	maturui
to live	hidup	lago	
to die	mati	nata ahom	makaho
to kill	membunuh	papapo	maŋaho

English	Indonesian	Basa Latala	Punan Sajau
to fight	bertarung	matukei	baruril
to hunt	berburu	jajukalu	maŋahuŋ
to hit	memukul	nogonim	maŋaho
to cut	memotong		mamupon
to split	membagi	nabeaŋ	mahata
to stab	menusuk	raritibulun	məŋunu
to scratch	menggaruk		maŋaŋo
to dig	menggali	patabo	maŋali
to swim	berenang	•	ηalaηοί
to fly	terbang	pulivet	manulip
to walk	berjalan	paraija	makajap
to come	datang	jatugilo	lama
to lie (as in a bed)	berbaring (seperti di tempat tidur)	J	meri
to sit	duduk		muru
to stand	berdiri		manakariŋ
to turn (intransitive)	mengubah (intransitif)		manulan
to fall	terjatuh	lakaliŋ	ba?ai
to give	memberi	pahuti	anaka
to hold	memegang	nuperan	maŋoni
to squeeze	memeras		maŋopi
to rub	menggosok	parerit	məŋaha
to wash	mencuci		batabas
to wipe	menghapus		bobos
to pull	menarik		badasat
to push	mendorong		basuduŋ
to throw	melempar		maŋoniŋ
to tie	mengikat		gukuŋ
to sew	menjahit		baçamat
to count	menghitung		batijap
to say	berkata	paluwai	alo?i
to sing	menyanyikan	itolok	manira
to play	bermain	detolo	galu
to float	mengapung	paliho	
to flow	mengalir	•	moman
to freeze	membekukan		baku
to swell	membengkak		babam
sun	matahari	bohajaŋ	matanalu
moon	bulan	miduran	bulan
star	bintang	karapitu	bitaŋ
water	air	lujuŋ	danum
rain	hujan	binok	usan
river	sungai	lujuŋ	uŋi
lake	danau	• •	bukuŋ
sea	laut	bowi	laut
salt	garam	bahuresisiŋ	sio
stone	batu	pinapir	batu
sand	pasir	- *	bara
dust	debu		ahu
earth	tanah	ahom	duniajuga
			, ,

English cloud	Indonesian awan	Basa Latala balinawan	Punan Sajau lipawa
fog	kabut	Danjiawan	balahun
sky	langit	ahomnukasa	lanit
wind	angin	mailuŋan	alum
snow	salju	manuijan	aiuiii
ice	es		εs
smoke	asap	kakatoilalasuŋ	lalap
fire	api	apoioron	apoi
ash	Abu	apololog	ahu
to burn	membakar	basule	irap
road	jalan	amewan	makajap
mountain	gunung	mapajeda	dugun
red	merah	шарајеца	da?an
green	hijau		hitau
vellow	kuning		kunin
white	putih		mahuna
black	hitam		matuni
night	malam	salianam	malam
	hari	bohajan	alu
day year	tahun	Donajaij	tahun
warm	panas		
cold	dingin	dadiŋin	maçaŋo
full	penuh	dadiijiii	mararom panu
new	baru	diriŋko	uha
old	tua	tupakan	ulia
good	haik	tujiakan	
bad	buruk	sefatun	mana
rotten	busuk	seiaiun	moŋo
dirty	kotor		maram guros
straight	lurus		maluno
round	bulat		bulat
sharp (as a	tajam (seperti	pamadu?u	manalin
knife)	pisau)	-	
dull (as a knife)	tumpul (seperti pisau)	etoijanu	majel
smooth	halus		saliun
wet	basah		masa?ut
dry	kering		malapo
correct	benar	nalapu?uŋ	banar
near	dekat	lisubiŋko	dakiŋ
far	jauh	tolaŋɛn	masu
right	kanan		ta?u
left	kiri		kiri

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