

David Kamholz <kamholz@berkeley.edu>

University of California, Berkeley

Yeresiam: A tonal Austronesian language of the Bird's Neck

1 Background

- Yeresiam (ISO 639-3 *ire*, also known as Iresim) is an Austronesian language (SHWNG subgroup) spoken by a few hundred people on the Bird's Neck of New Guinea
- Three distinct geographical, ecological, and linguistic areas of settlement (see map):
 - Sima: coastal village c. 25 km west of Nabire in southern Cenderawasih Bay, intermarriage and bilingualism with Yaur (*jau*, Austronesian, also tonal)
 - Erega: several inland villages around the Yamor Lakes, intermarriage and bilingualism with local Kamoro dialect (*kgg*, Kamoro-Asmat family); occasional contact with Ekagi (*ekg*) in the Paniai Lakes family
 - Rurumo/Kiruru: coastal village on the interior extreme of Etna Bay, intermarriage and bilingualism with Semimi (*etz*) and Mer (*mnu*) in the Mairasi family
 - original Yeresiam homeland is probably Erega
 - some Waropens in the area east of Nabire claim Yeresiam ancestry, but no longer speak the language¹
- Little previous work; current work based on brief survey in 2010 (with Harald Hammarström) and several weeks of fieldwork in 2011²

*This work was supported by an Individual Graduate Scholarship from the Endangered Languages Documentation Programme ('Documentation of Moor, an Austronesian language of Cenderawasih Bay, Indonesia', 2010–13).

¹Possibly confirmed by an 1897 Dutch map, where the coastline approximately from present-day Nabire to Makimi is labeled JERIVIAM. (Nationaal Archief, Den Haag, MIKO Ministerie van Koloniën, nummer toegang 4.MIKO, inventarisnummer 1529. Kaart van Nederlandsch Nieuw-Guinea en omliggende eilanden. Uitgave van het Topografisch Bureau, Batavia. Fotolitho. 1897.)

²The earliest linguistic data that I have found is the numerals from 1–20 in Fabritius (1855:212, as Irisam). Anceaux (1961) contains a few grammatical notes and the suggestion that the language is tonal. Smits and Voorhoeve (1992a,b) and Peckham (1991) contain word lists (neither very accurate). Kijne (c1930–70) also collected a word list, which I have not yet had a chance to examine in detail. My data was collected in elicitation sessions with Herman Marariampi (from Erega and Rurumo) and Hengki Akubar (from Sima). I am very grateful to both of them for their time and effort.

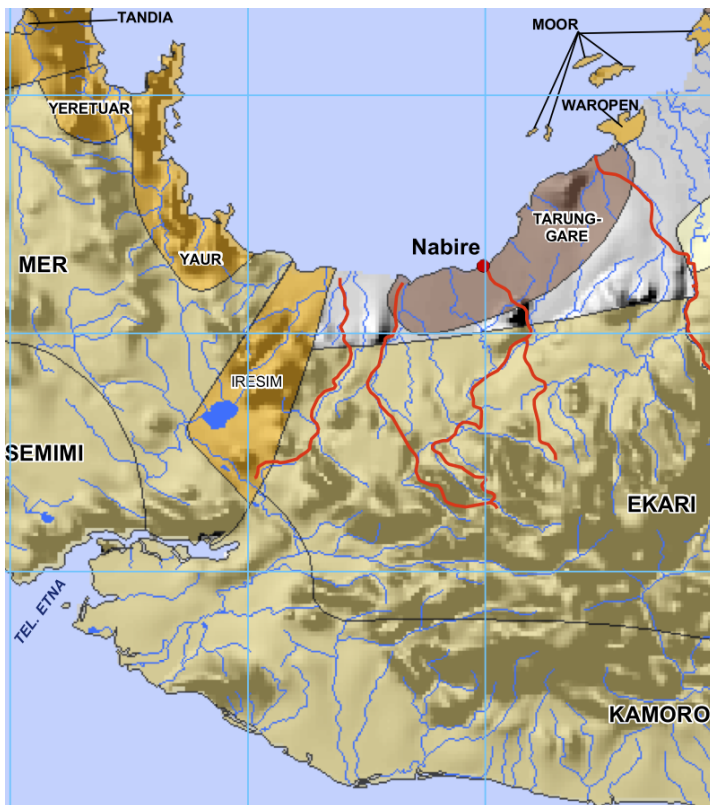


Figure 1: Map of the Bird's Neck showing the location of Yeresiam (= Iresim). Yeresiam's territory extends further south than shown, reaching the edge of Etna Bay. (Map courtesy SIL Papua.)

2 Phonology

2.1 Phoneme inventory

- Five vowels *a, e, i, o, u*
- Consonants:

	<i>labial</i>	<i>dental</i>	<i>alveolar</i>	<i>postalveolar</i>	<i>velar</i>	<i>glottal</i>
<i>stop</i>	p b	t d			k g	
<i>fricative</i>	β	s				h
<i>nasal</i>	m		n			
<i>tap</i>			r			
<i>glide (hardened)</i>				d ^j ~d ₃	g ^w	

- Orthography: *gw* = [g^w], *j* = [d^j~d₃], *v* = [β], *r* = [r], *ng* = [ŋ]

2.2 Phonological processes

- *h* → *s* /C₋: *nè=k-hariría* (1EX.PL=AGR-watch) → *nèksariría* ‘we (excl.) watch’
 - *h* + *h* → *s*: *ì=h-hariría* (3PL=AGR-watch) → *ìsariría* ‘they watch’
 - cannot be stated as *s* → *h*, because *s* and *h* contrast initially and intervocalically: *ásisìa* ‘bandicoot’ vs. *àhìa* ‘write’
- *r* → *d* /N₋: *rá* ‘go’ → *à=n-dá* (2PL=AGR-go) ‘you (pl.) go’
- Nasal place assimilation to following consonant: *à=m-kadí* (2PL=AGR-wait) → *àngkadí* ‘you (pl.) wait’
- Intervocalic glides are inserted after high vowels at certain morpheme boundaries (details uncertain): *dáìì* ‘father’ + *òó* ‘VOC’ → *dáììj òó*

2.3 Syllable structure

- Initial CC clusters:
 - homorganic nasal + stop or *s*: *mbáviiivè* ‘bird sp.’, *ndáau* ‘slanted’, *ngkàke* ‘afraid’, *nsóore* ‘hold’
 - voiceless stop + *r*: *krádia* ‘flesh’, *préege* ‘house edge’
 - *k* + labial stop and *k* + nasal: *kpúri* ‘jump’, *kbáhe* ‘rise’, *kmànanó* ‘sway’, *knáàme* ‘float’
- Medial clusters:
 - in roots, generally find only homorganic nasal + stop/*s*, and stop + *r*: *àànde* ‘mother’s brother’, *áingkuùpi* ‘wood container’, *ápreei* ‘boil’, *bábraù* ‘land’, *kànrá* ‘blade’
 - other clusters arise at morpheme boundaries: *húraak-vè* ‘book’, *hár-haarú* ‘snagged’
- In isolation words always end in a vowel; within sentences they can end in a single consonant

2.4 Tone

- Two tones: H and L
- TBU is the mora: each vowel can have its own tone
- Orthography: H = acute, L = grave; unmarked vowels have the same tone as the next marked vowel to the left, so *díìjanà* ‘fish’ = *díìjána*
- Most common tonal patterns:
 - H throughout: *áaka* ‘bite’
 - H switching to L at some point: *áakà* ‘four’, *áàka* ‘small sago rib’
 - L switching to H in the final syllable: *àká* ‘ball sago’
- However, many other tonal patterns are possible
 - table on the following page illustrates attested tonal patterns in words up to three syllables long
 - more common patterns appear above partial horizontal rules, less common patterns below

σ	H	<i>bú</i> ‘blister’, <i>gwái</i> ‘duck sp.’, <i>rói</i> ‘song’ <i>áau</i> ‘betel lime’, <i>róoi</i> ‘night’	
	HL	<i>gwáà</i> ‘canoe’, <i>ái</i> ‘tree’	
	LH	<i>òó</i> ‘VOC’	
	L	<i>bà</i> ‘still’	
$\sigma\sigma$	H-H	<i>róhe</i> ‘nit’, <i>ória</i> ‘broth’, <i>báohe</i> ‘turtle flipper’ <i>háaru</i> ‘coral’, <i>péerei</i> ‘bed’	
	H-L	<i>búnè</i> ‘bamboo stem’, <i>krádìa</i> ‘flesh’ <i>áakà</i> ‘four’, <i>búumbùì</i> ‘bottle’	
	L-H	<i>àká</i> ‘ball sago’, <i>diorí</i> ‘top shell’, <i>dìarúa</i> ‘sago spoon’	
	H-HL	<i>dáii</i> ‘father’, <i>bábraù</i> ‘land’, <i>káonià</i> ‘small sago midrib’ <i>máanaà</i> ‘bird’, <i>ráanià</i> ‘sheet (of paper)’	
	HL-L	<i>ààka</i> ‘medium sago midrib’, <i>kàèpa</i> ‘sago chopsticks’, <i>ráania</i> ‘leaf’	
	HL-H	<i>áihá</i> ‘above’, <i>áòró</i> ‘catfish sp.’	
	HL-LH	<i>mèènéé</i> ‘there is/are’, <i>múàkoó</i> ‘why?’	
	H-LH	<i>mígwàí</i> ‘duck sp.’	
	LH-L	<i>nùusi</i> ‘great-grandparent’, <i>gwòókà</i> ‘crow sp.’	
	L-LH	<i>hìngkéé</i> ‘how many?’	
	$\sigma\sigma\sigma$	H-H-H	<i>kájake</i> ‘bad’, <i>húmbiai</i> ‘loose’ <i>páriaii</i> ‘thunder’, <i>bároope</i> ‘finger’, <i>kóorihe</i> ‘three’
		H-H-L	<i>jávutù</i> ‘flint’, <i>bábugà</i> ‘elbow’, <i>ádiakà</i> ‘shellfish sp.’ <i>háraakvè</i> ‘book’, <i>pémaanua</i> ‘slow’, <i>dújanà</i> ‘fish’, <i>húuhugà</i> ‘breast’
		H-L-L	<i>háàaku</i> ‘cigarette’, <i>nájòore</i> ‘horn’, <i>bóokàni</i> ‘axe’
L-L-H		<i>bàhabé</i> ‘fast’, <i>nàkunía</i> ‘knife’, <i>hìbiabi</i> ‘bent’, <i>kàkaokúa</i> ‘sickness’	
H-H-HL		<i>káurieraà</i> ‘k.o. arrow’, <i>kábagweà</i> ‘squash sp.’ <i>róniijaà</i> ‘gecko sp.’, <i>áraadià</i> ‘smoking platform’	
H-HL-L		<i>háneèra</i> ‘mosquito’, <i>káruàra</i> ‘friend’, <i>áraàhia</i> ‘day’ <i>gwáapiàte</i> ‘freshwater eel’	
H-L-H		<i>mónihá</i> ‘all’, <i>rúmùhúa</i> ‘house post’	
H-L-HL		<i>móhàdàá</i> ‘oven’, <i>òvàéè</i> ‘duck sp.’	
L-L-LH		<i>mémimvúá</i> ‘feature’, <i>mòkeraá</i> ‘what?’, <i>kàimiau</i> ‘swan sp.’	
H-HL-H		<i>máheèbá</i> ‘firefly cluster’	
H-L-LH		<i>móhòràú</i> ‘colored sky’	
L-L-L		<i>kàpuhe</i> ‘ancestor’, <i>jàrimoi</i> ‘agarwood tree’	
HL-H-L		<i>ùdíoodì</i> ‘bird sp.’	

2.5 Vowel length

- Vowels can be short or long
- Never more than one long vowel per word, except when last two syllables are H-HL, as in *máanaà* ‘bird’
- Length is not distinguished in diphthongs, with one exception: in final H tone syllables, there is a contrast if the diphthong ends in a high vowel: *rói* ‘song’ versus *róoi* ‘night’
- Long vowels are not found in final syllables with level tone: *náà* ‘dog’ but ***náa*
 - underlying length contrast is still present: *nóo vè* (hear NEG) versus *pú vè* (go_home NEG), in isolation *nó* and *pú*

2.6 Alternations with =tâ

- When the definite clitic =tâ is added to a noun, several alternations emerge, usually involving insertion of *a* or final vowel deletion
- These generally have the conspiracy of making the syllable preceding -tâ long
- There are also tonal alternations, apparently regular but not yet well understood

citation form	suffixed form	gloss
bú	búà=ta	‘blister’
pí	píi=tà	‘sago palm’
nú	núùg=tà	‘village’
áau	áu=tà	‘betel lime’
ái	ái=tà	‘tree’
áiì	áiì=tà	‘mother’
náà	náa=tà	‘dog’
hàngkú	hángkuà=ta	‘person’
áàra	áar=tà	‘fence’
máanaà	máanaà=ta	‘bird’
dìarúa	díaruà=ta	‘sago spoon’

- Not all nouns participate in the conspiracy:

citation form	suffixed form	gloss
búnè	búnà=ta	‘bamboo stem’
áahanà	áahanà=ta	‘name’
váèèma	váèèma=ta	‘fish sp.’

3 Verbal morphology

3.1 Free pronouns

	SG	DU	TR	PL
1EX	né	nókruuke	kóngkoome	néeke
1IN		nónduume	kókooke	néeme
2	àné	únduume	kúngkoome	áneeme
3	ìní	úruuhi	kúkoorihe	íiilhi

3.2 Clitic pronouns

	SG	DU	TR	PL
1EX	ne=	no=	ko=	ne=
1IN		no=	ko=	ne=
2	a=	u=	ku=	a=
3	i=	u=	ku=	i=

- Clitic pronouns mark clausal subjects and inalienable possessors
- Obligatory in first and second person
- Do not co-occur with full NP subjects: *dáì ría* (father go) ‘father left’, **dáì i=ría*
- Do not appear on serialized verbs: *né=kéek bóhe* (1SG=inform open) ‘I explained thoroughly’
- Third person forms are animate only

3.3 Agreement prefixes

- With vowel-initial verbs:

	SG	NSG
1EX	j-	m-
1IN		k-
2	gu- (g-)	mu- (m-)
3	di- (d-)	hi- (h-)

- Parenthesized forms are found when verb begins with *i* or *u*

- With consonant-initial verbs:

	SG	NSG
1EX	∅-	m- (ma-)
1IN		k- (ka-)
2	∅-	m- (mua-)
3	∅-	h- (ha-)

- Parenthesized forms are found with monosyllabic verbs and verbs starting with a cluster: *nó* ‘hear’ → *ì=ha-nó*, *kbáhe* ‘rise’ → *í=ha-kbahe*

3.4 Agreement infixes and consonant mutation

- Many consonant-initial verbs also have an agreement infix inserted after the onset: <u> in second person and <i> in 3SG
- Some *k*-initial verbs mutate initial consonant to *t* in 3SG
- Consonant-initial verbs whose first vowel is *i* or *u* do not take infixes, but may still undergo mutation
- Illustration of possible consonant-initial verb paradigms:

gloss	root	1SG	2SG	3SG
‘wait’	kàdí	nè=kadí	à=kadí	ì=kadí
‘measure’	kàkó	nè=kakó	à=k<u>akó	ì=t<i>akó
‘burn’	kúuna	né=kuuna	á=kuuna	í=tuuna
‘inform’	kéeke	né=keeke	á=k<u>eeke	í=t<i>eeke
‘answer’	króomi	né=kroomi	á=kr<u>oomi	í=kr<i>oomi

3.5 Aspect prefixes

- Completive *ra* (*ja* in 3SG)
- Progressive *kóo* (*tóo* in 3SG), from *kó* ‘sit’
- Aspect prefixes precede agreement prefixes:
 - *àná* ‘eat’ → *nè=ra-k-aná* ‘we (excl.) have eaten’, *né=koo-k-ana* ‘we (excl.) are eating’
- Clauses with inanimate pronominal subjects apparently require an aspect marker:
 - *bábarà* ‘disappear’ → *já-babarà* ‘it has disappeared’, *rá-h-bábarà* ‘they have disappeared’, *háraakvè* (*já-*)*bábarà* ‘the book (has) disappeared’, but **bábarà* ‘it disappeared’

3.6 Agreement summary

- *à=rà-ng-k<ú>o* ‘you (pl.) have sat’
 - *à=*: 2SG or 2PL
 - *rà=*: not 3SG
 - *ng-* (from *m-*): 1EX.NSG or 2.NSG
 - <u>: second person

4 Lexicon

- 1700-word lexicon of Yeresiam, as well as Moor, Yaur, and Umar lexicons, accessible online at <http://lexifier.lautgesetz.com>

5 Historical phonology

- **q, *h* > \emptyset : PMP *qabaRa > *áari* ‘carry on shoulder’, PMP *qapuR > *áau* ‘betel lime’, PMP *daRaQ > *rárà* ‘blood’, PMP *dahun > *ráània* ‘leaf’, PMP *duha > *rúuh-i* ‘two’
- **p* > *p* ~ \emptyset : PMP *punti > *píiti* ‘banana’; PMP *qapuR > *áau* ‘betel lime’
- **b* > *b* ~ \emptyset : PMP *buku > *bí-gùà* ‘knot’, PMP *baRa > *bà-kí* ‘arm’; PMP *batu > *áaku* ‘stone’, PMP *tebuh > *kóou* ‘sugarcane’, PMP *buaq > *ú* ‘fruit’, PMP *bulan > *úura* ‘moon’
- **k* > \emptyset : PMP *kaen > *áni* ‘eat’, PMP *kahiw > *ái* ‘wood’, PMP *kutu > *úuku* ‘louse’, PMP *manuk > *mánaà* ‘bird’
- **t* (> **s*) > *h* / *_i*: PMP *t<in>aqi > *híná* ‘belly’
- **t, *d* > *t* / *n_*: PMP *punti > *píiti* ‘banana’, PCEMP *kandoRa > *átòora* ‘cuscus’
- **t* > *k* elsewhere: PMP *epat > *ákà* ‘four’, PMP *batu > *áaku* ‘stone’, PMP *qatep > *áka-raanià* ‘roof’, PMP *qiteluR > *ákoore* ‘egg’, PMP *tasik > *káhia* ‘salt’, PCEMP *todan > *kó* ‘sit’, PMP *telen > *kóori* ‘swallow’, PMP *telu > *kóori-he* ‘three’, PMP *tebuh > *kóou* ‘sugarcane’, PMP *m-atay > *máàke* ‘die’, *ma-taqut > *ngkák-e* ‘afraid’, PMP *kutu > *úuku* ‘louse’
- **j, *s* > *h*: PMP *ngajan > *áahanà* ‘name’, PMP *tasik > *káhia* ‘salt’, PMP *nusa > *núuha* ‘island’, PMP *susu > *húuhu-gùà* ‘breast’
- **z* > *j*: PMP *zalan > *jáàra* ‘path’
- **d* > *r*: PMP *dahun > *ráània* ‘leaf’, PMP *danum > *ráaramà* ‘water’, PMP *duha > *rúuh-i* ‘two’, PMP *daRaQ > *rárà* ‘blood’
- **l* > *r*: PMP *lakaw > *rá* ‘go’, PMP *lima > *rîma* ‘five’, PMP *bulan > *úura* ‘moon’, PMP *telen > *kóori* ‘swallow’, PMP *telu > *kóori-he* ‘three’, PMP *qiteluR > *ákoore* ‘egg’, PMP *zalan > *jáàra* ‘path’
- **R* > *r*: PMP *Rumaq > *rúma* ‘ceremonial house’, PMP *qabaRa > *áari* ‘carry on shoulder’, PMP *waRej > *gwáari* ‘rope’, PMP *daRaQ > *rárà* ‘blood’, PMP *qiteluR > *ákoore* ‘egg’
- **w* > *gw*: PMP *wangka > *gwáà* ‘canoe’, PMP *waRej > *gwáari* ‘rope’
- final consonant loss: PMP *qapuR > *áau* ‘betel lime’, PMP *qiteluR > *ákoore* ‘egg’, PMP *zalan > *jáàra* ‘path’, PMP *waRej > *gwáari* ‘rope’, PMP *niuR > *núu* ‘coconut’, PMP *bulan > *úura* ‘moon’
- penultimate **e* > *o*: PMP *qiteluR > *ákoore* ‘egg’, PMP *telen > *kóori* ‘swallow’, PMP *tebuh > *kóou* ‘sugarcane’

6 References

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