

**Title: Linguistic Strata and Phonological Evolution: A Comparative Study of Loloan Malay (Bali) and Standard Malay/Indonesian**

**Abstract:**

This paper investigates the phonological system and historical strata of Loloan Malay (often referred to as *Base Loloan*), a unique Malayic isolect spoken by a minority Muslim community in Negara, West Bali. Originating from 17th-century migration waves of Buginese and Pontianak Malay speakers, Loloan Malay has evolved within a complex multilingual environment, influenced by Balinese and Arabic, while maintaining a distinct identity from standard Bahasa Indonesia.

Based on extensive fieldwork conducted in 2023 involving over 4,300 lexical items, this study employs the “Historical Strata Analysis”—a methodology traditionally rooted in Chinese dialectology—to examine the synchronic variations and diachronic layers of Loloan Malay. The research focuses on several key phonological phenomena:

1. **Vowel System and the /a/ vs. /ə/ Distinction:** Unlike standard Indonesian, Loloan Malay is identified as an /ə/-dialect, showing closer affinities with Peninsular Malaysian and Pontianak varieties. The study reveals a more extensive distribution of mid-vowels /e/ and /o/ compared to standard varieties, suggesting the retention of archaic forms or the result of specific analogical leveling.
2. **The /r/ Split and Colonial Contact:** The paper provides a novel explanation for the divergence of the rhotic phoneme /r/. It argues that the dental trill [r] in Loloan and Indonesian reflects Dutch linguistic influence, whereas the alveolar approximant [ɹ] in Malaysian Malay reflects English contact. This highlights how external linguistic contact can bifurcate inherited phonemes into distinct historical strata.
3. **Phonological Rule Strata:** Moving beyond simple phoneme comparison, the author proposes the concept of “Phonological Rule Strata.” By analyzing the treatment of loan-phonemes like /f/ and the development of the glottal fricative /h/ and final stop /-k/, the paper demonstrates that different dialects operate under different “rule layers” (e.g., substitution vs. integration). For instance, Loloan Malay preserves a stage where /f/ is systematically replaced by /p/, representing an earlier rule stratum compared to the stabilized /f/ in standard Indonesian.

The findings suggest that Loloan Malay serves as a “living fossil” that records the natural progression of Malayic sound changes that have since stabilized

or ceased in the standard languages. By applying the Historical Strata framework to an Austronesian context, this study not only enriches our understanding of Malayic dialectology and contact linguistics but also offers a cross-cultural methodological contribution to the field of historical linguistics.

**Keywords:** Loloan Malay, Historical Strata, Phonology, Contact Linguistics, Bali, Malayic Dialectology

Table 1: Vowel Phoneme System of Loloan Malay

Position	Front	Central	Back
High	i		u
Mid	e	ə	o
Low		a	

**Examples and Comparisons:**

Vowel	Loloan Example	IPA	Standard Indonesian	IPA	Meaning
i	<i>ruti</i>	[ruti]	<i>roti</i>	[roti]	Bread
e	<i>pute</i>	[pute]	<i>putih</i>	[putih]	White
a	<i>tau</i>	[tau]	<i>tahu</i>	[tahu]	To know
ə	<i>base</i>	[basə]	<i>bahasa</i>	[bahasa]	Language
u	<i>mude</i>	[mudə]	<i>muda</i>	[muda]	Young
o	<i>loros</i>	[loros]	<i>lurus</i>	[lurus]	Straight

Table 2: Consonant Phonemes of Loloan Malay

Manner of Articulation	Bilabial	Labiodental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Nasal	m		n		ɲ (ny)	ŋ (ng)	
Plosive (Voiceless)	p		t		c	k	
Plosive (Voiced)	b		d		ɟ (j)	g	
Fricative (Voiceless)		f	s	ʃ (sy)		x (kh)	h
Fricative (Voiced)		v	z				
Trill			r				
Lateral			l				
Approximant	w				j (y)		

Table 3: Phonological Strata of the Phoneme /r/

Phonological Stratum	Approximant [ɹ]	Weak Trill [r] (tap $\leq$ 1)	Strong Trill [r] (trill $\geq$ 1)
Stratum Classification	Early Stratum	Intermediate Stratum	Late Stratum
Regional Distribution	Malaysia (Colloquial)	Malaysia, Brunei	Indonesia, Singapore
Example (Person)	<i>orang</i> [oɹang]	<i>orang</i> [orang]	<i>orang</i> [orang]
External Influence	English Contact	Transition Period	Dutch Contact

Table 4: Realization of Foreign Phoneme /f/ across Varieties

Standard Malay (MY)	Standard Indonesian (ID)	Loloan Malay	Correspondence	Meaning
<i>fikiran</i>	<i>pikiran</i>	<i>pikiran</i>	f > p > p	Thought
<i>salah faham</i>	<i>salah paham</i>	<i>paham</i>	f > p > p	Misunderstanding
<i>filem</i>	<i>film</i>	<i>pelem</i>	f > f > p	Film/Movie
<i>maaf</i>	<i>maaf</i>	<i>maap</i>	f > f > p	Sorry/Forgive
<i>nafas</i>	<i>nafas</i>	<i>napas</i>	f > f > p	Breath
<i>profesional</i>	<i>profesional</i>	<i>propesional</i>	f > f > p	Professional

Table 5: Correspondence of Diphthongs and Monophthongs

Standard Indonesian /ai/	Loloan Malay /ae/	Loloan Malay /e/	Meaning
<i>cair</i>	<i>caer</i>	-	Liquid / Melt
<i>baik</i>	<i>baek</i>	-	Good / Kind
<i>sungai</i>	-	<i>sunge</i>	River
<i>pakai</i>	-	<i>pake / pakek</i>	Use / Wear
<i>kedelai</i>	-	<i>kedele</i>	Soybean
<i>sampai</i>	-	<i>sampe</i>	Until / Arrive

## Selected References

### I. Methodology: Historical Strata Analysis

1. **Chen, Z. M.** (2007). The definition of linguistic strata and methods of identification. In Ting Pang-hsin (Ed.), *Historical Strata and Dialect Research* (pp. 135-165). Shanghai Education Press.
2. **Chen, Z. M.** (2008). *Research on the Phonological History of Chinese Dialects and the Historical Strata Analysis Method*. Zhonghua Book Company.
3. **Ting, P. H.** (Ed.). (2007). *Historical Strata and Dialect Research*. Shanghai Education Press.
4. **Pan, W. Y.** (2009). Goals and content of historical strata analysis. In Ting Pang-hsin (Ed.), *Historical Strata and Dialect Research* (pp. 22-35). Shanghai Education Press.
5. **Wang, F. T.** (1999). *The Evolution and Strata of Chinese Dialect Phonology*. Yuwen Press.
6. **Shi, J. G.** (2015). *Historical Linguistics: Dialect Comparison and Strata*. Contemporary Social Sciences Press.

### II. Malay/Indonesian History & Phonology

1. **Kong, Y. Z.** (1991). *The History of the Development of the Indonesian Language*. Peking University Press.
2. **Teeuw, A.** (1959). The history of the Malay language. *Bijdragen tot de Taal-, Land- en Volkenkunde*.
3. **Asmah Haji Omar.** (2019). *Phonological Reconstruction of Parent Malay (Rekonstruksi Fonologi Bahasa Melayu Induk)*. Dewan Bahasa dan Pustaka (DBP).
4. **Collins, J. T.** (1998). *Malay, World Language: A Short History*. Dewan Bahasa dan Pustaka.
5. **Lapoliwa, H.** (1981). *A Generative Approach to the Phonology of Bahasa Indonesia*. Pacific Linguistics.
6. **Sneddon, J. N.** (2003). *The Indonesian Language: Its History and Role in Modern Society*. UNSW Press.
7. **Adelaar, K. A.** (2005). The Austronesian languages of Asia and Madagascar: A historical perspective. In *The Austronesian Languages of Asia and Madagascar*. Routledge.
8. **Bernd Nothofer.** (1995). The history of Jakarta Malay. *Oceanic Linguistics*.

### III. Language Contact & Evolution Theory

1. **Chen, B. Y.** (2006). Historical comparative linguistics from the perspective of language contact. *Journal of Peking University (Philosophy and Social Sciences)*.

2. **Wu, A. Q.** (2004). The influence of language contact on language evolution. *Ethno-Linguistics (Minzu Yuwen)*.
3. **Winford, D.** (2002). *An Introduction to Contact Linguistics*. Blackwell.
4. **Thomason, S. G., & Kaufman, T.** (1988). *Language Contact, Creolization, and Genetic Linguistics*. University of California Press.
5. **Weinreich, U.** (1963). *Languages in Contact*. Mouton.
6. **Sapir, E.** (1921). *Language: An Introduction to the Study of Speech*. Harcourt, Brace. (Chinese Trans. by Lu Zhuoyuan, Commercial Press).

#### IV. Early Malay Documents & Historical Evidence

1. **Kong, Y. Z.** (1992). The Malacca-Chinese Vocabulary (*Manlajia Guo Yiyu*). *Southeast Asian Studies*.
2. **Yang, L.** (1549). *The Malacca-Chinese Vocabulary (Manlajia Guo Yiyu)*. (Original Ming Dynasty Manuscript).
3. **Coedes, G.** (2014). *Malay Inscriptions of the Srivijaya Kingdom (Prasasti berbahasa Melayu Kerajaan Srivijaya)*. Komunitas Bambu.
4. **Marsden, W.** (1812). *A Grammar of the Malayan Language*. London.
5. **Bowrey, T.** (1701). *A Dictionary English and Malayo, Malayo and English*. London.
6. **Crawford, J.** (1852). *A Grammar and Dictionary of the Malay Language*. Smith, Elder, and Co.

#### V. Comparative Linguistics & General Theory

1. **Cen, Q. X.** (1981). *Lectures on Historical Comparative Linguistics*. Hubei People's Press.
2. **Meillet, A.** (1925). *The Comparative Method in Historical Linguistics*. (Chinese Trans. by Cen Qixiang, World Publishing Corporation, 2008).
3. **Wu, A. Q.** (2006). *Diachronic Linguistics*. Shanghai Education Press.
4. **Hale, M.** (2007). *Historical Linguistics: Theory and Method*. Blackwell.