

External Influences on the Languages in Vernacular Settlements: Characteristics of the Indian Influenced Palawa-Derived Script in Bima, West Nusa Tenggara, Indonesia

Churmatin Nasoichah¹, Abu Muslim¹, I Gusti Made Suarbhawa¹, Wahyu Rizky Andhifani¹, Luh Suwita Utami¹, I Wayan Sumerata¹, Dewi Ratna Muchlisa Mandyara², I Nyoman Rema¹, Lisdha Meyanti, Ni Kadek Sri Sumiartini

National Research and Innovation Agency¹, Samparaja Museum²

Email: curma.oke@gmail.com

Received	Accepted	Published
10.12.2024	25.04.2025	31.05.2025

<https://doi.org/10.61275/ISVSej-2025-12-03-05>

Abstract

The Palawa script that had entered the Indonesian archipelago in the 10th Century AD has undergone many developments and has given rise to several forms of derived scripts. Evidence of the use of these scripts has been found in several areas, one of which is in Bima, West Nusa Tenggara, Indonesia. In Bima, two Palawa derived scripts have been found: the Javanese script and the Bima/Mbojo script. Although the two are not in a single form of paleographic scripts, both are important evidence of the development of culture that once existed in Bima. This research examines the characteristics of the ancient Javanese script and the Bima/Mbojo script based on the written sources found in Bima, West Nusa Tenggara, Indonesia.

It employs qualitative exploratory methods adapted to the exploratory nature of the research. Data is gathered through a survey of written sources in the old Javanese script and the Bima/Mbojo script and interviews of the local communities.

It concludes that the characteristics of the ancient Javanese script on the Wadu Tunti Inscription and the Wadu Pa'a Inscription in the Bima Regency, Indonesia are conceptually similar to the ancient Javanese script. However, they have several differences in the writing styles. It is hypothesized that the Wadu Tunti Inscription has been written in a later period compared to the Wadu Pa'a Inscription. The characteristics of the Bima/Mbojo script have similarities with the Lontara script too. The differences occur in the forms of the Bima/Mbojo script, such as the appearance of sukun signs or dead letters and tasydid signs or double or repeated letters.

Keywords: Characteristics; Ancient Javanese script; Bima/Mbojo script; Inscriptions, Palawa-Derived Script, Bima, West Nusa Tenggara.

Introduction

The Indonesian archipelago has a long and varied history of cultural development, starting with the migration of people from the mainland Asia thousands of years ago. From the beginning of the 10th century AD until dozens of centuries later, the influence of foreign cultures continued to influence the development of culture in the archipelago. Many note that the arrival of foreign traders from India, Arabia, China and other countries have brought various cultural influences and this has left artefactual evidence in several places in the archipelago (Chakravarty Surajeet et al. 2019; Cobo-Reyes et al. 2020; He, Veronesi, and Engel 2016, 2018; Keates 2002; Pulickal and Chakravarty 2022). One artefactual evidence that is often found in the archipelago is the influence of Indian culture such as temple buildings, statues, and inscriptions, etc.

Indian culture coming into the archipelago has not been immediately absorbed by the local communities (Chakravarty et al. 2016). Research on epigraphy, ancient literature, and various archaeological excavations, reveal more information about the cultural patterns of the archipelago that have been influenced. According to Poesponegoro Notosusanto (1993), Indian cultural influence has resulted in the enrichment of Indonesian culture, whose essence has been adopted, resulting in the Indian culture no longer being dominant within the cultural framework of the Archipelago as a whole. This shows that the Indonesians were active in absorbing this culture. It can be proven in one way by the emergence of local scripts in the archipelago which are derivatives of the Palawa script, India.

The Palawa script entered the archipelago at the beginning of 10th AD and then, in its development, has given rise to several derivative forms of script such as the old Javanese, old Sumatran, old Sundanese and old Balinese (Amna 2018; Arisandi 2022a, 2022b; Damayanti and Suadi 2007; Giri 2017; Sarkar 2013; Teh Gallop 2016; Zakharyin 2013). The emergence of various forms of ancient script shows the result of the acculturation of the script from India in each region. In the later decades, these ancient scripts have increasingly developed with the emergence of various Indonesian scripts including the following.

- a. Batak (Mandailing, Toba, Simalungun, Karo, and Pakpak),
- b. Uluan (Ulu, Incung, Rejang, Serawai, Lampung, Komering),
- c. Sundanese,
- d. Javanese,
- e. Balinese,
- f. Jejawan, and
- g. Lontara.

It is noteworthy that the Indonesian scripts are increasingly diverse with various names adapted to the areas where they have developed. Dialectal differences in language are the main reason for the emergence of the new variants in the naming of the Indonesian script. In several areas, evidence has been found of the use of the Palawa-derived script, one of which is in Bima, West Nusa Tenggara. Bima is a district and city on the island of Sumbawa, the largest island in the West Nusa Tenggara Province, Indonesia. In the Bima City and Regency, several remains of written sources have been found to be written in the Palawa-derived script.

The existence of Palawa-derived script with Hindu-Buddhist influences in Bima has been marked by the discovery of the Wadu Tunti inscription located in Padende Village (Doro Village, Donggo District, Bima Regency). It has been found carved on a large rock on the edge of a ravine surrounded by the mountain peaks. Indeed, it has been written in the ancient Javanese script and language (Atmodjo 1994:2). Apart from the Wadu Tunti Inscription, Hinduization on Sumbawa is also marked by the Batu Pahat Site (Wadu Paa) located on the West coast of the Bima Bay.

Based on the research results, it is estimated that Hindu-Buddhist influence entered Sumbawa around the 10-11th century AD. This has been marked by the discovery of a number of artefacts such as the reliefs of Agastya, Ganesha and Buddha in the niche of the coral cave. A number of other artefacts have also been found at the site (Fadillah 1990:28). Evidence of

Hindu-Buddhist influence is also proven by the mention of place names on Sumbawain the ancient Nagarakertagama manuscript during the Majapahit period as follows:

Canto 72 third line (Pigeaud 1960:56):

tusniñ āḍigūṇa wira susatya

nityasāḍipatinīṇ bala mandon

nañ digantara manāma riñ ḍompo

bhraṣṭa denira sēk anañlwañ i ḍatru

Translation (Muljana 1979:310):

descendants of clever and loyal people

always held the rank of hero

once conquered the dompo country

all tenacious in overcoming the enemy

The weakening of Majapahit power in the 15th century AD meant that Bima was no longer part of Hindu/Buddhist culture like in Java and Bali. The lack of Hindu/Buddhist influence means that local traditions still play an active role in the belief and government systems of the Bima people. The use of old Javanese script is no longer found in this area. There was a dark period until finally the influence of Islam gradually came and affected the region.

In the 17th century AD the Islamic Kingdom in Makasar, South Sulawesi began its invasion of the Bima region. In the Daily Lontara Book of the Kingdom of Gowa-Tallo in 1618, it was stated that the Gowa War Commander landed 9 war fleets on the north coast of Bima. In the end, after several years of invasion of Bima, the Gowa Kingdom from Makasar succeeded in conquering the Kingdoms of Bima, Sumbawa, Dompu, Pekat, Sanggar, Tambora and Utan (Fadillah 1990:31–33). With the conquest of several areas by the Gowa Kingdom, Islamization began. Evidence of the influence of the Gowa Kingdom in Bima is marked by various artefactual remains with an Islamic style, including the use of Lontara script in writing ancient manuscripts. In contrast to other Islamic kingdoms in the archipelago which generally use the Pegon Arabic script as their written language, the Gowa Kingdom actually used the Lontara script as a means of communication. The Lontara script is also a Palawa-derived script that developed rapidly in the Makasar region, South Sulawesi.

Various cultural influences from outside have given Bimavarious forms of artefactual remains, especially in the use of script. There are at least two known forms of Palawa-derived script that were once used in the region, namely the Old Javanese and the Lontara (or what people in Bima call the Bima/Mbojo script). Even though these two scripts aren't part of a series of paleographic script developments, such as the ancient Javanese becoming modern Javanese or the ancient Balinese becoming modern Balinese, these two forms of script are important evidence of the cultural development that once existed in Bima.

Based on the background mentioned above, the research problem is: what are the characteristics of the ancient Javanese script and the Lontara script (Bima/Mbojo) based on written sources found in Bima, West Nusa Tenggara, Indonesia?

The purpose of this study is to provide knowledge for the people of Bima and other communities regarding the use of ancient Javanese script and Bima/Mbojo script in Bima, West Nusa Tenggara, Indonesia so that they can understand the roots of their cultural identity through ownership of scripts. This study is useful as a means of reflection on diversity or cultural diversity based on the form of its script.

Theoretical Framework

Script is a graphic sign system used by people to communicate. It represents speech; certain types of graphic sign systems. The Palawa script is one that originated in South India, precisely during the Palawa Dynasty (approximately the 3rd to 5th centuries AD). It is a derivative of the Brahmi script consisting of a series of consonant symbols as basic letters and diacritical marks as punctuation marks. Apart from that, each consonant also has a letter pair in some writings (Ager,2023). Later, it gradually developed in Southeast Asia, especially in the

archipelago. The Palawa-derivative script is one that developed in the archipelago which is paleographically no longer exactly the same as the Palawa script.

Holle (1877) describes the forms of Palawa-derivative script that had developed in Southeast Asia. Following are several derived from Palawa, including ones from the Majapahit period.

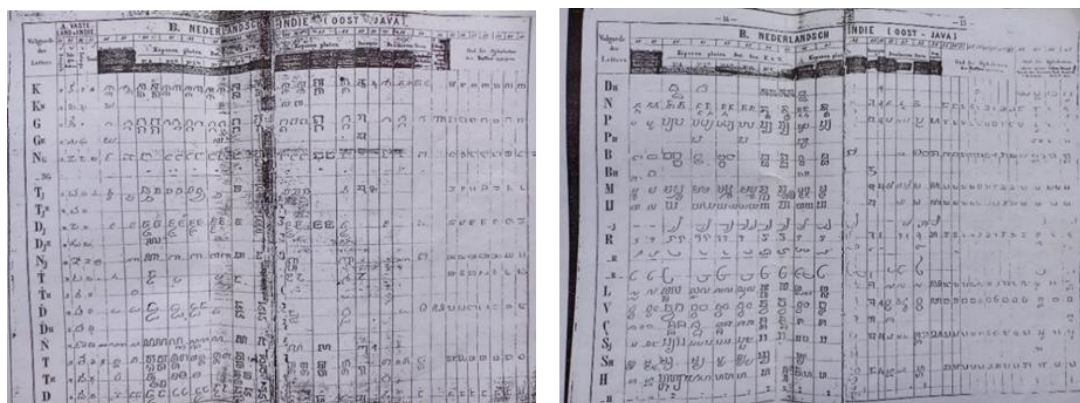


Fig. 1: Table of the Palawa Script Alphabet and its Derivatives

Source: Holle, 1877:3, 4, 14, 15

In a later period, these Palawa-derived scripts have been developed in several regions of the archipelago, including the Lontara script in Bugis, South Sulawesi. In Bugis, at least 4 types have been used, namely Lontara, Jenish-jangang, Bilang-bilang, and Arabic Serang. Lontara, when put in the frame of Bugis culture, has two meanings, namely:

- 1) lontara as history and science,
- 2) lontara as writing.

The word lontara comes from the Bugis language which consists of two words, namely raung which means leaf, and taq which means palm leaf, so raung taq means palm leaf. It's called that because it was originally written on the palm leaves (Rahman 2014).

The Lontara script has then experienced another name as the sulapaq eppaq wola suji script, which means rhombic quadrilateral because its shape resembles a rhombus. This term has been first popularized by Mattulada in his dissertation La Toa (Koolhof 2007; Macknight and Caldwell 2001; Mattulada 1985; Sila 2015; Tuflih and Mayong 2022). However, according to an informant's testimony, when he was a child, the Lontara script and quadrangles have been completely unknown; this script is better known as hurupuq pallawa (Palawa script). It is often written on palm leaves. Pallawa in the Bugis language can mean barrier, but it can also mean the Palawa script from India (Rahman, 2014).

Traditionally, the Lontara script is used to write several languages spoken in South Sulawesi. Ancient manuscripts with the Lontara script are most commonly found in the Bugis, Makasar and Mandar languages. The Toraja people who also live in South Sulawesi don't use the Lontara script because the Toraja literary tradition relies on oral transmission without any script. The slightly modified Lontara script is also used in several languages outside South Sulawesi whose region has had Bugis-Makassar influence, such as the Bima language on Sumbawa and the Ende language on Flores. The paleographic Lontara script is as follows:

Induk Suréq (Induk Surat)	Induk suréq bersama anak suréq (Induk surat bersama anak surat)					
☞ = ka	☞ = ki	☞ = ku	☞ = ke	☞ = ko	☞ = ké	
☞ = ga	☞ = gi	☞ = gu	☞ = ge	☞ = go	☞ = gé	
☞ = nga	☞ = ngi	☞ = ngu	☞ = nge	☞ = ngo	☞ = ngé	
☞ = ngka	☞ = ngki	☞ = ngku	☞ = ngke	☞ = ngko	☞ = ngké	
☞ = pa	☞ = pi	☞ = pu	☞ = pe	☞ = po	☞ = pé	
☞ = ba	☞ = bi	☞ = bu	☞ = be	☞ = bo	☞ = bé	
☞ = ma	☞ = mi	☞ = mu	☞ = me	☞ = mo	☞ = mé	
☞ = mpa	☞ = mpi	☞ = mpu	☞ = mpe	☞ = mpo	☞ = mpé	
☞ = ta	☞ = ti	☞ = tu	☞ = te	☞ = to	☞ = té	
☞ = da	☞ = di	☞ = du	☞ = de	☞ = do	☞ = dé	
☞ = na	☞ = ni	☞ = nu	☞ = ne	☞ = no	☞ = né	
☞ = nra	☞ = nri	☞ = nru	☞ = nre	☞ = nro	☞ = nré	
☞ = ca	☞ = ci	☞ = cu	☞ = ce	☞ = co	☞ = cé	
☞ = ja	☞ = ji	☞ = ju	☞ = je	☞ = jo	☞ = jé	
☞ = nya	☞ = nyi	☞ = nyu	☞ = nye	☞ = nyo	☞ = nyé	
☞ = nca	☞ = nci	☞ = ncu	☞ = nce	☞ = nco	☞ = ncé	
☞ = ya	☞ = yi	☞ = yu	☞ = ye	☞ = yo	☞ = yé	
☞ = ra	☞ = ri	☞ = ru	☞ = re	☞ = ro	☞ = ré	
☞ = la	☞ = li	☞ = lu	☞ = le	☞ = lo	☞ = lé	
☞ = wa	☞ = wi	☞ = wu	☞ = we	☞ = wo	☞ = wé	
☞ = sa	☞ = si	☞ = su	☞ = se	☞ = so	☞ = sé	
☞ = a	☞ = i	☞ = u	☞ = e	☞ = o	☞ = é	
☞ = ha	☞ = hi	☞ = hu	☞ = he	☞ = ho	☞ = hé	

Fig. 2: Palaeography of the Lontara Script

Source: Rahman, 2014

Review of Literature

Research has hardly been conducted into the use of characteristics of ancient Javanese script and Bima/Mbojo script in Bima, West Nusa Tenggara, Indonesia. However, there is some research related to the discovery of an inscription in ancient Javanese script, namely the Wadu Tunti Inscription located in Padende Village (Doro Village, Donggo District, Bima Regency). The inscription was found carved on a large rock on the edge of a cliff and surrounded by mountain peaks. The inscription has been written using ancient Javanese script and language (Atmodjo 1994:2). In addition, research has also been conducted at the Batu Pahat Site (Wadu Paa) located on the West coast of Bima Bay. Based on the results of the study, it is estimated that Hindu-Buddhist influences had entered the Sumbawa Island around the 10th-11th century AD. This is indicated by the discovery of a number of artifacts such as reliefs of Agastya, Ganesha, and Buddha in the niche of a coral cave. A number of other artifacts have also been found at the site (Fadillah 1990:28).

As said, research related to the use of Bima/Mbojo script has never been conducted, what exists is research in the form of Lontara manuscripts which are Bugis-Makasara manuscripts and also their history. In conclusion it is argued that Lontara, to a certain extent, provides us adequate information about the coming of Islam to Cikoang (Sila 2015:39). The history and dynamics of the development of the Lontara script in South Sulawesi are also explained by another researcher in a separate paper, which discusses the meaning of writing and several symbols and the creator of the Lontara script (Rahman 2014). Research on the Lontara manuscript is also explained in other studies that link it to the history of Islam and the I La Galigo manuscript in the context of the Gowa and Tallo Kingdoms (Abidin, 1971:161–62).

Research Method

The focus of this research is written sources in Old Javanese script and Lontara script (Bima/Mbojo) in Bima City and Regency, West Nusa Tenggara, Indonesia. The matter of interest in this research is related to the paleographic form of the ancient Javanese script and the Lontara script (Bima/Mbojo) found in the region. This research uses an inductive reasoning model, which is also adapted to the exploratory nature of research. The analysis and interpretation use a descriptive-analytical model which is based on data found in the field during the research. In order to answer the problems raised, several stages were followed. These stages are as follows.

Data collection: Data collection in the field was carried out in two ways: surveys and interviews. The description of the technique is as follows:

1. **Survey:** This survey research is carried out in several villages in Bima City/Regency and Dompu Regency to look for the existence of written sources in Old Javanese script and Bima/Mbojo script. The selection of the two districts was based on literature which had some information on the existence of written sources in the two districts, namely Bima and Dompu. These written sources are in the form of inscriptions, ancient manuscripts, or other supporting documents. The data regarding the survey locations was obtained from previous research, literature studies, and short interviews with local residents. Apart from the local communities as informants, several communities are directly involved in the survey activities. Through this survey, location maps, distribution, descriptions, drawings and photos are obtained which are later used as supporting data for interpretation.
2. **Interviews:** The targets of the interviews were local communities, traditional leaders, cultural observers, and families of royal descendants in the city/regency of Bima and Dompu, West Nusa Tenggara. The data related to this research include stories passed down through generations, kinship relationships, and historical events. Through these interviews new locations are discovered, especially those related to the existence of inscriptions and ancient manuscripts in Old Javanese script and Bima/Mbojo script which are later added to the repertoire of interpretation.

Analysis and Synthesis:

The data collected during the research, both from the surveys and the interviews, are then analyzed and synthesized. Analysis of archaeological data which includes inscriptions, ancient manuscripts, ancient documents and other archaeological evidence undergo comparative analysis to produce a general picture of the condition of the data in the past. The steps are as follows:

1. The data that has been collected is then classified based on the types of characters, both consonant characters and diacritical marks.
2. These characters are compared with the standard form of the ancient Javanese script (especially during the Majapahit period) and the Lontara Bugis-Makassar script in general, to see whether they have any differences or whether they have any similar forms.

With regard to the aspects of the depiction of the Bima society, the analysis is carried out by combining the results of the analysis of the characters with the language used and the context in which the written sources were found. Through this analysis, a general picture of Bima society in the past are obtained to identify the human supporters who used the archaeological objects.

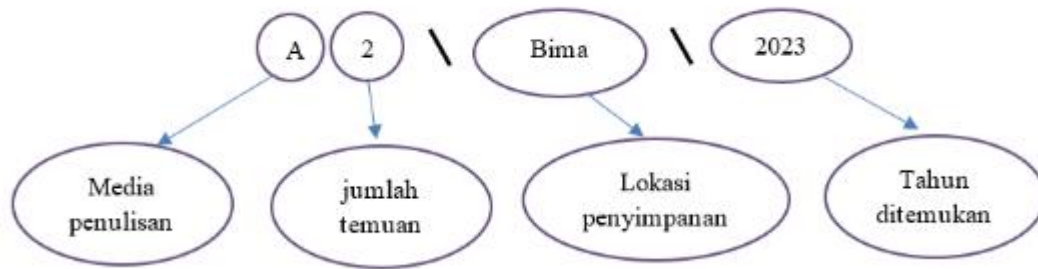
Interpretation: The results of the field data analysis is then used to answer the problems that arise. Theory is used as a link between field data. One thing that needs to be noted is that the interpretation in this case is not something that is stable and final, but can change along with the development of new data or analytical tools. Several problems that haven't been solved in this research or new problems that have arisen are explained so that future research can be pursued.

Finding

The research related to the characteristics of ancient Javanese script and Bima/Mbojo script which is the focus of the research is related to archaeological objects that use ancient Javanese script and Bima/Mbojo script which are found in a number of locations, especially in Bima City, Bima Regency, and Dompu Regency, West Nusa Tenggara Province, Indonesia. From the results of the research carried out, several written sources were obtained which consist of two types of writing media, namely stone media called inscriptions (code A) and European paper media called ancient manuscripts (code B). Regarding coding, researchers used several codes when collecting data based on the writing medium. The code assignment is as follows:

- Code A for stone media
- Code B for paper media

Regarding coding, researchers also use a code format to make the analysis easier. The code format is as follows:



Based on the research results, it is understood that there are a number of written sources found on stone and paper media. Generally, ancient Javanese script is written on paper using Bima/Mbojo script. The written sources are as follows:

Written Sources Using Old Javanese Script

Sources written using ancient Javanese script were found in two locations, namely the Wadu Tunti Site and the Wadu Pa'a Site.

1. Wadu Tunti Inscription

The Wadu Tunti inscription is in the location of Padende Hamlet, Bumi Pajo Village or according to (Atmodjo 1994) called Doro Village, Donggo District, Bima Regency, precisely at 08°26'42.3" South Latitude 118°31'59.3" East Longitude with a height of 648 meters above the sea level. When mentioned later, this inscription was given the name A1/bima/2023. The inscription, which is still in-situ, has been written on andesite stone with a natural stone formation measuring 232 x 165 cm, while the inscription area measures 73 cm long and 35 cm high. This inscription was written using ancient Javanese script and language with a total of 9 lines (the first line is missing). On the left side, there is a relief image of 4 clowns (a teacher giving advice to his students, one other student carrying a stick and one student holding a jar) and below it is a picture of a dog. This Wadu Tunti inscription has previously been read by (Atmodjo 1994) as follows:

*ri wruhani ...
nira saṅlumiwat
ta wani winidhi sahilaṅṅā...
taṅi bhalanṅ geni ḍuputan lani balutani
nilan pinini mahilaṅ ṅa nira saṅ ṅāji sapalu yiki
bā hanipuh-apa ri saḍatēn ā ri sapalu
paṅluṅa piḍu ri kasa
... sira saṅ ṅaṅatura
... ruwa ṅ nira saṅṅāji
... sapalu*

Its translation is as follows:

beware...
he (they) who passes through this place
dare to be determined (chosen) to disappear...
...throws fire, fells the sky
disappeared he is, disappear he does saṅ ṅāji this sapalu
...he destroys when he arrives in sapalu
disappear into space?
... he will arrange (deliver)
... his friend (follower) saṅ ṅāji
... sapalu

There are differences in the results of the translation carried out by Atmojo and the research team. The results of the transfer of characters are as follows:

*tamwā ri wrahanam
 ḍāri sam luminwat
 ta wanidhi nidhi sahilamṇā
 taṇi nilam gini buputan lawāni i putani
 nilam dhinilaṁ mahilaṁ dhi nira sam ṇāji sam palu yini
 niha ni suhapa ri sabatāni ri sapalu
 sam _subu ri kasa sira sam ṇanaturasu
 ruwaṁ nira sam ṇāji
 sapalu*



Fig. 3: Wadu Tunti inscription

Source: Prehistoric and Historical Archeology BRIN, 2023

2. Wadu Pa'a Inscription

The Wadu Pa'a inscription is in Sowa Hamlet, Kananta Village, Soromandi District, Bima Regency with coordinates 08°21'57.7" South Latitude 118°41'14.9" East Longitude and at an altitude of 54 meters above sea level. When mentioned later, it has been given the name A2/bima/2023. It is still in-situ, and has been written in a niche in the wall of the Wadu Pa'a 2 Site area. This is located right on the edge of the Teluk Bima Beach. In the writing area, it is 181 cm long and 24 cm high with a character size of around 7 x 5 cm. This inscription is written lengthwise with 2 lines, but it is very much worn-out. Some of the reliefs depicted in the niche wall area include images of Ganesha, phallus and Buddha, which indicate the existence of the Shiva Buddhist sect. The environment around the site area looks barren with lots of weeds, several coconut trees and other large trees.

Wall/Panel 1

Wall/Panel 2

..... śakā

Wall/Panel 3





Fig. 4: Wadu Pa'a inscription

Source: Prehistoric and Historical Archeology BRIN: 2023

Written Sources Use Bima/Mbojo Script

Sources written using the Bima/Mbojo script have been found in a number of places, including the Samparaja Museum and private collections.

Samparaja Museum Collection

The Samparaja Museum located in Bima City, has several collections of ancient manuscripts, some of which are written using the Bima script, including:

1. Kokidi ro Kahoso kai Sambeya manuscript

This ancient manuscript has the code MSB/F 1.71 and is also usually called the Prayer manuscript. In later mentions, it has been named B1/samparaja/2023. It's a collection from the Samparaja Museum which is still well-maintained to this day. It has been written in book form with European paper and an additional cover made of hard paper. The original one is partly worn-out and many of the edges are porous. It measures 22 cm high, 17.5 cm wide and 0.9 cm thick. It has been written using black and red ink, and has an average number of 2-12 lines. In fact, it has 24 pages with the book reading from right to left. It has been written in Arabic,

Malay Arabic and Bima scripts use Arabic, Malay and Bima languages. There is a mention of the year 1294 Hijriyah or 20 July 1877 AD. The name of the author Guru Lebe Sape, and Idris, has started with *kalimatullah*. There is a *watermark* depicting a crown above a circle with a lion holding a sword in the circle that says *Concordia Resparvae Crescunt*. This text contains guidance on the pillars of prayer, namely the pillars of *qalbi*, *qauli*, and *fi'li*.



Fig. 5: Kokidi ro Kahoso kai Sambeya manuscript

Source: Prehistoric and Historical Archeology BRIN, 2023

2. Manuscript of the Two Tales

This ancient manuscript has the MSB/F code B.006. In later mentions, it has been named B2/samparaja/2023. It's a collection from the Samparaja Museum which is still well-preserved to this day. It has been written in book form with European paper and an additional cover (laminated) made of Japanese paper (harder and thicker). It's partly worn-out and many of the characters are faded. It measures 23 cm high, 18 cm wide and 0.8 cm thick. It has been

written using black ink and has an average number of 13 lines, with the book reading from right to left. It has 6 pages in Bima script, the next 3 pages are blank, and on the pages 10-11, it is written using Malay Arabic script. There's a new page with 34 pages of new writing. It was written using Malay and Bima Arabic script and uses the Bima language. There is a mention of the year 1321 Hijriyah or 1904 AD. This manuscript contains 2 saga stories and signs of the end times.



Fig. 6: Manuscript of the Two Tales

Source: Prehistoric and Historical Archeology BRIN, 2023

3. Bedil Manuscript

This manuscript has the code 2.2. In later mentions, it has been named B3/samparaja/2023. It is a collection from the Samparaja Museum which is still well-preserved to this day. It has been written on a sheet of European paper. It's partly worn-out and the edges are porous. It measures 20.8 cm high, 30.9 cm wide and 0.01 cm thick. It is written in black ink, has 7 lines, and on the reverse, there are 9 lines with a closing image and a scribble on the 5th line. There is a picture of a rifle in the middle with 7 lines on the right and when the paper's turned, there's 1 line of writing. It has been written using Malay Arabic script and Bima script and uses the Arabic, Malay and Bimalanguages. It doesn't contain any mention of any year.

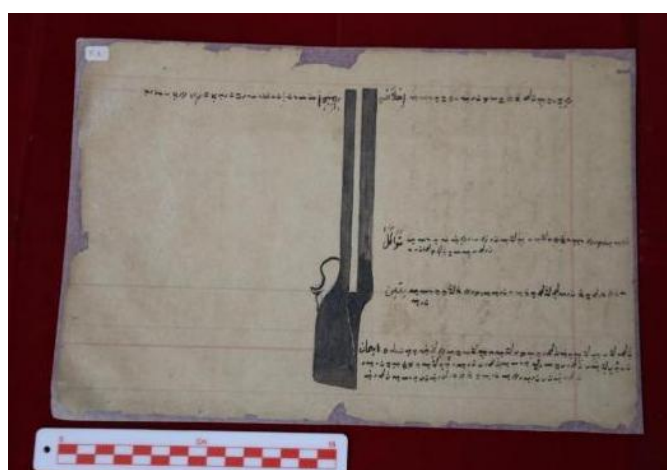


Fig. 7: Bedil Manuscript

Source: Prehistoric and Historical Archeology BRIN, 2023

4. Drug Manuscripts and Shooting Requirements

This manuscript has the code 9.4. In later mentions, it has been named B4/samparaja/2023. It is a collection from the Samparaja Museum which is still well-preserved to this day. It has been written on a sheet of European paper. It is still good though with some creases. It measures 19.8 cm high, 20.5 cm wide and 0.01 cm thick. It has been written using

black ink, has 3 folds, with fold 1 having 6 blank lines, 21 lines written, fold 2 having 10 lines and fold 5 being blank. It was written using the Bima script and uses the Bima language. It doesn't contain any mention of any year. It has a watermark depicting the maid of dord (a woman wearing a hat sitting on a fence holding a javelin and a lion with its back to her). It says Pro Patria and W & Co. It contains notes on knowledge regarding medicine for shooting, its requirements, as well as rescue efforts in emergencies and if there is an epidemic.



Fig. 8: Drug Manuscripts and Shooting Requirements
Source: Prehistoric and Historical Archeology BRIN, 2023

5. Genealogical Manuscripts

This manuscript has the code 5.9. In later mentions, it has been named B5/samparaja/2023. It is a collection from the Samparaja Museum which is still well-maintained to this day. It has been written on a sheet of European paper. It is still in good condition. It measures 20.6 cm high, 33.5 cm wide and 0.01 cm thick. It has been written using black ink, written from left to right and rotated. It has 9 lines with pencil outlines, and when rotated, there are 8 lines of writing. It was written using the Bima script, Malay Arabic and Latin and uses the Bima language. It doesn't contain any mention of any year. It contains a family tree (in the circle) and the reverse contains a translation of the Bima alphabet into Latin.

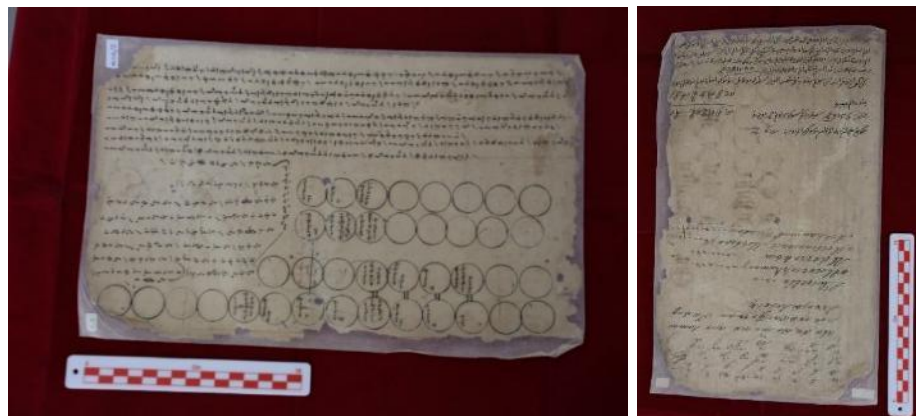


Fig. 9: Genealogical Manuscripts
Source: Prehistoric and Historical Archeology BRIN, 2023

Personal Collection of Mr Abdul Wahid

1. Religious Manuscripts

This manuscript is from Mr. Abdul Wahid's personal collection and is still well-preserved to this day. In later mentions, it has been named B6/abdul wahid/2023. It has been written on book sheets using European paper. It is in good condition with a few tears at the

edges. It measures 14.3 cm high, 10.3 cm wide and 1.7 cm thick. The right side of it is written in red ink, and the left side in black ink. The way to read the script is from the right (like the Koran) but the reading of the script is from left to right. It was written using the Bima script and uses the Bima language. It doesn't contain any mention of any year.



Fig. 10: Religious Manuscripts

Source: Prehistoric and Historical Archeology BRIN, 2023

Discussion

Based on the results of research on a number of inscriptions and ancient manuscripts, it is understood that several forms of script are used, namely the ancient Javanese (in writing inscriptions) and the Bima/Mbojo script (in writing ancient manuscripts).





Characteristics of Old Javanese Script








The use of ancient Javanese script found on the Sumbawa Island, especially in the Bima region, has only been found in two locations, namely Padende Hamlet, in the form of the Wadu Tunti Inscription and Kananta Village in the form of the Wadu Paa Inscription. Of the two inscriptions, the characteristics of the characters are as follows:

Table 1: Ancient Javanese Script Forms Based on Inscriptions

Source: Author

No.	Latin	Wadu Tunti Inscription (A1/bima/2023)	Wadu Pa'a Inscription (A2/bima/2023)
1.	A	-	-
2.	I	ꦲ	-
3.	ha	ꦲꦲ	-
4.	ka	ꦲꦏ	ꦲꦏ
5.	na	ꦲꦏ	-
6.	na	ꦲꦏ	-
7.	na	-	ꦲꦏ
8.	ra	ꦲꦏ	-
9.	ta	ꦲꦏ	-
10.	ba	ꦲꦏ	-
11.	bha	-	-
12.	va/wa	ꦲꦏ	ꦲꦏ

13.	ma		-
14.	la		
15.	pa		
16.	pha	-	-
17.	sa		-
18.	sa	-	-
19.	ša	-	
20.	da	-	
21.	da		-
22.	dha		
23.	ga		-
24.	ja		
25.	va		
26.	ca	-	-
27.	ā		
28.	i		
29.	u		
30.	o	-	-
31.	ê	-	-
32.	e	-	
33.	m (anuswara)		
34.	(repa)		
35.	h (wisaraa)		
36.	tanda mati		

Based on the table above, it is understood that the two inscriptions have different characteristics of their character. Though conceptually they are both ancient Javanese scripts, they have differences in writing style. For example, in the Wadu Tunti Inscription, the script *ra*  has a very different form from the script *ra*  which is usually used in writing ancient Javanese script. Likewise, the shape of the script *na*  is different from the script *na*  in the ancient Javanese script. However, most of the characters in the Wadu Tunti Inscription can be categorized as ancient Javanese script. Based on the characteristics of the script, it is possible that the Wadu Tunti inscription was written at a younger time than the Wadu Pa'a inscription. Although not much of the Wadu Pa'a inscription can be read, you can see several indications of the use of ancient Javanese script such as the forms *ka* , *pa* , *ja* , and several other forms of script.

Characteristics of The Bima/Mbojo Script

The Bima or Mbojo script is a development of the Lontara script originating from Bugis, South Sulawesi. This reason is also supported by the existence of written sources found using the Bima language. The naming of the characters is adapted to the language being used. However, paleographically, it is not very different from the Lontara. Based on the research results, it's known that several characteristics of the Bima/Mbojo script are based on written sources in the form of ancient manuscripts, as follows:

Table 2: Bima/Mbojo Script Based on Manuscripts Found
Source: Author

LAFAL LATIN	FONT MBOJO	B1/Sampa raja/2023	B2/Sampa raja/2023	B3/Sampa raja/2023	B4/Sampa raja/2023	B5/Sampa raja/2023	B6/abdul wahid/2023
a	a						
i	Ai						
u	Au						
e	E						
o	Ao						
ba	B						
ca	c						
da	D						
fa	F						
ga	G						
ha	H						
ja	J						
ka	K						
la	L						
ma	M						
na	n						
pa	p						
ra	R						
sa	S						
ta	t						
wa	W						

ya	Y	✕	✕	✕	✕	✕	✕
mba	B	𐌒	𐌒	𐌒	𐌒	𐌒	𐌒
nca	C	𐌒	𐌒	-	𐌒	𐌒	𐌒
nda	D	𐌒	𐌒	𐌒	𐌒	𐌒	𐌒
nga	N	𐌒	𐌒	-	𐌒	𐌒	𐌒
ngga	G	𐌒	𐌒	𐌒	𐌒	𐌒	𐌒
nta	T	𐌒	𐌒	𐌒	𐌒	𐌒	𐌒
mpa	P	𐌒	𐌒	𐌒	𐌒	𐌒	𐌒

Based on the table above, one can see several forms of the Bima/Mbojo script found in a number of ancient manuscripts which are generally written on paper with ink. From the table above, it can be concluded that the characteristics of these 6 ancient manuscripts have many similarities with the form of the Bima/Mbojo script generally known to the Bima community. The differences only occur in the writing style of each individual/writer in writing their writing with ink.

The Bima/Mbojo script comes from Bugis or Makassar, known as the Lontara. However, there are several differences between the Bima/Mbojo script and the Lontara. It is seen in the Figure 11 below.



Fig 11: Comparison of Lontara Bugis, Makassar and Bima Scripts
Source: Author

Looking closely at the image of the characters above, one can see a comparison of the three in terms of the number of characters. The Lontara Bugis script consists of 23 characters, the Lontara Makassar one consists of 19 characters, and the Bima/Mbojo one consists of 29/26 characters, of which there are 3 characters that have the same shape but different sounds, namely the script *b* (read *ba* and *mba*), *d* (read *da* and *nda*), and *g* (read *ga* and *ngga*). Apart from the difference in the overall number, there is something interesting about the three characters presented, namely, the 15 characters whose writing and pronunciation are exactly the same. The degree of similarity between the Bugis Lontara, Makassar Lontara and Bima/Mbojo scripts is classified in the script equivalent table as follows:

Table 3: Comparison of Lontara Bugis-Makassar script and Bima/Mbojo script
Source: Author

Tabel Perbandingan Kesamaan Aksara	Aksara Lontara Makassar	Aksara Bima	Aksara Lontara Bugis	Keterangan
1	ㄸ	ㄸ	ㄸ	Ka
2	ㄹ	ㄹ	ㄹ	Ga
3	ㄺ	ㄺ	ㄺ	Nga
4	ㄻ	ㄻ	ㄻ	Pa
5	ㄼ	ㄼ	ㄼ	Ba
6	ㄽ	ㄽ	ㄽ	Ma
7	ㄾ	ㄾ	ㄾ	Ta
8	ㄿ	ㄿ	ㄿ	Da
9	ㅀ	ㅀ	ㅀ	Na
10	ㅁ	ㅁ	ㅁ	Ca
11	ㅂ	ㅂ	ㅂ	Ja
12	ㅃ	ㅃ	ㅃ	Ra
13	ㅅ	ㅅ	ㅅ	Wa
14	ㅇ	ㅇ	ㅇ	Sa
15	ㅈ	ㅈ	ㅈ	A

However, the 15 is not a small number in identifying and seeing the similarity in the structure of these three types of characters, which can also indirectly show their relationship to one another. Apart from that, if one examines it more carefully, it turns out that there is still one type of scriptwritten the same but is read differently, namely the *ha* script, which is read *ya* in the Bugis Lontara and Makassar Lontara scripts, and is read *ha* in the Bima/Mbojo script. Meanwhile, there are several characters that are not found in the Bugis-Makassar Lontara script but are found in the Bima/Mbojo one, namely the *ta* script (pronounced: *nta*), and there are Bugis Lontara scripts that are not found in the Bima/Mbojo script and even Makassar Lontara, namely *ka* (read: *ngka*), *pa* (read: *mpa*), *ra* (read: *nra*), *ca* (read: *nca*).

Furthermore, there is a special configuration found in the manuscripts that use the Bima/Mbojo script in their writing in the form of *sukun* signs (consonant letters) which are sometimes placed at the top, sometimes placed below the script, and *tasydid* signs (double script) which indicate repetition. These markers are not found at all in the Lontara Bugis or Lontara Makassar scripts, but in reading, they're always adapted to the context in which the words are written, for example *ebeb* (configuration of the letter *ba* with the marker *e* telling which can be read *be'be'* (meaning: flowing), or *bembe* (meaning: goat). Apart from that, it's also important to look carefully and pay special attention to the position of the letters *mba*, *nda*, not as an integral part whose writing is exactly the same as the letters *ba*, *da*, and *ga*. Thus, academically, it is necessary to review the calculations. The number of Bima/Mbojo scripts that already exists is 29 scripts.

Conclusion

Based on the analysis above, it can be concluded that the characteristics of the ancient Javanese script found in the Wadu Tunti Inscription and the Wadu Pa'a Inscription in Bima Regency, Indonesia when compared with the Holle table (Holle,1877) are conceptually the same as the ancient Javanese script in general. However, they have several differences in the

forms and writing styles. Based on these script characteristics, it is possible that the Wadu Tunti Inscription has been written at an earlier time than the Wadu Pa'a Inscription. Meanwhile, the characteristics of the Bima/Mbojo script presented in the Table 2 has many similarities with the Lontara script presented in the Table 3. The differences occur in the addition of several forms of the Bima/Mbojo script, for example in the appearance of the sukun sign (consonant letter) and the tasydid sign (double or repeated letters).

Acknowledgements

We would like to thank the Samparaja Museum, the Bima City Culture Service, and the Bima Regency Culture Service for the permission granted in order for us to access this data. We would also like to thank Mr. Munawar and Mr. Abdul Wahid for their cooperation in providing information regarding research data sources.

References

- Abidin, A Z. (1971) "Notes on The Lontara' As Historical Sources." Southeast Asia Program Publications at Cornell University, New York: Cornell University Press:
- Ager, S. (2023) "No Title." *Omniglot The Online Encyclopedia of Writing Systems & Languages*. Retrieved (<https://omniglot.com/index.htm>).
- Amna, S. (2018) "Identifying Pragmatic Failures in Dialogue Scripts of Efl Learners." *Journal Of Language Education and Development* 1(1):41–49. doi: <https://doi.org/10.52060/jled.v1i1.71>.
- Arisandi, I. B. (2022a) "Penyebaran Ajaran Islam Melalui Tradisi Tulis: Refleksi Bentuk Wawacan Dalam Naskah Sunda Islami." *Jurnal Masyarakat Dan Budaya* 24(2):1-10.
- Arisandi, I. B. (2022b) "Spreading of Islamic Teachings Through Written Traditions: Reflection of Wawacan Form in Sundanese Islamic Manuscripts." *Jurnal Masyarakat Dan Budaya* 24(2):11-21.
- Atmodjo, S K. (1994) "Beberapa Temuan Prasasti Baru Di Indonesia." *Berkala Arkeologi* 14(2):1–5.
- Chakravarty S., Fonseca, M A., Ghosh, S., Kumar, P. & Marjit, S. (2019) "Religious Fragmentation, Social Identity and Other-Regarding Preferences: Evidence from an Artefactual Field Experiment in India." *Journal of Behavioral and Experimental Economics* 8:1–10. doi: doi.org/10.1016/j.socrec.2019.101451.
- Chakravarty, S., Fonseca, M A., Ghosh, S., Kumar, P. & Marjit, S. (2016) "Religious Fragmentation, Social Identity and Cooperation: Evidence from an Artefactual Field Experiment in India." *European Economic Review* 90:265–79. doi: doi.org/10.1016/j.eurocorev.2015.12.006.
- Cobo-Reyes, R., Dominguez, J.J., García-Quero, F., Grosskopf, B., Lacomba, J.A., Lagos, F., Xiao Liu, T. & Pearce, G. (2020) "The Development of Social Preferences." *Journal of Economic Behavior and Organization* 179:653–66.
- Damayanti, N. & Suadi, H. (2007) "Ragam Dan Unsur Spiritualitas Pada Ilustrasi Naskah Nusantara 1800-1900-An." *Journal of Visual Art and Design* 1(1). doi: doi.org/10.5614/itbj.vad.2007.1.1.6.
- Fadillah, M A. (1990) "Sumbawa: Islamisasi, Makasarisasi, Dan Subordinasi." *Berkala Arkeologi* 11(1):27–47.
- Giri, I. M. A. (2017) "Pelestarian Bahasa, Aksara, Dan Sastra Bali Melalui Pengoptimalan Tripusat Pendidikan." *Purwadita: Jurnal Agama Dan Budaya* 1(1):27–32.
- He, P., Veronesi, M. & Engel, S. (2016) "Consistency of Risk Preference Measures and the Role of Ambiguity: An Artefactual Field Experiment from China." *SSRN Electronic Journal*. 18(10), 23-45
- He, P., Veronesi, M., & Engel, S. (2018) "Consistency of Risk Preference Measures: An Artefactual Field Experiment from Rural China." *Journal of Development Studies* 54(11):1955–73. doi: doi.org/10.1080/00220388.2017.1336542.
- Holle, K. F. (1877) *Tabel van Oud En Nieuw Indische Alfabetten*. Buttenzorg (Jawa): Gelithogr en Gedrukt door C. Lang.

- Keates, S. G. (2002) "The Movius Line: Fact or Fiction?" *Bulletin of the Indo-Pacific Prehistory Association* 22.
- Koolhof, S. (2007) "Sureq, Lontaraq, Toloq: Manuskrip Dan Ragam Sastra Bugis." *Sari (ATMA)* 25(7):171–86.
- Macknight, C. C. & Caldwell, I. A. (2001) "Variation in Bugis Manuscripts." *Archipel* 61(1):139–54. doi: doi.org/10.3406/arch.2001.3616.
- Mattulada. (1985) *Latoa: Satu Lukisan Analitis Terhadap Antropologi Politik Orang Bugis*. Yogyakarta: Gadjah Mada University Press.
- Muljana, S. (1979) *Nagarakretagama Dan Tafsir Sejarahnya*. Jakarta: Bhratara Karya Aksara.
- Pigeaud, T G. Th. (1960) *Java in The 14TH Century Nagara-Kertagama Volume I*. Netherlands: The Netherlands Institute For International Cultural Relations.
- Poesponegoro, M D, & Notosusanto, N. (1993) *Sejarah Nasional Indonesia II*. Jakarta: Balai Pustaka.
- Pulickal, A., & Chakravarty, S. (2022) "Subject Confusion and Task Non-Completion: Methodological Insights from an Artefactual Field Experiment in India." *SSRN Electronic Journal* 1–48. doi: doi.org/10.2139/ssrn.4010959.
- Rahman, N. (2014) "Sejarah Dan Dinamika Perkembangan Huruf Lontaraq Di Sulawesi Selatan." in *International Workshop on Endangered Scripts of Island Southeast Asia*, Tokyo University of Foreign Studies.
- Sarkar, H. B. (2013) "South-India in Old Javanese and Sanskrit Inscriptions." *Bijdragen Tot de Taal-, Land- En Volkenkunde / Journal of the Humanities and Social Sciences of Southeast Asia* 125(2):193–206. doi: doi.org/10.1163/22134379-90002843.
- Sila, M. A. (2015) "The Lontara': The Bugis-Makassar Manuscripts and Their Histories." Pp. 25–39 in *Maudu': A Way of Union with God*. Canberra, Australia: ANU Press.
- Teh Gallop, A. (2016) "The Early Use of Seals in the Malay World." *Bulletin de l'Ecole Française d'Extrême-Orient* 102(1):125–63. doi: doi.org/10.3406/befeo.2016.6233.
- Tuflih, M. A., & Mayong. (2022) "Relasi Antara Aksara Bima Dan Aksara Bugis-Makassar." *Neologia: Jurnal Bahasa Dan Sastra Indonesia* 3(2):102–8. doi: doi.org/10.59562/neologia.v3i2.39791.
- Zakharyin, B. (2013) "Sanskrit and Paṇini Influence on Languages and Literatures of Ancient Java and Burma." *Lingua Posnaniensis* 55(2):151–58.