

Lontaraq: Script Its History, Development, And Spread

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ABSTRACT

This article aims to reconstruct the origin, development, and spread of the Lontaraq script, the only script still in use among those once employed in South Sulawesi. It applies a qualitative historical approach with a philological reading of the sources: scholarly theories on the script's origin (Holle, Kern, Mills, Noorduyn, Fachruddin, Mukhlis) are compared with one another and tested against manuscripts and inscribed objects, namely La Galigo, Lontaraq Kutika, Lontaraq bilang, Sérang texts, a Gowa lontaraq fragment, and a Bugis amulet from South Africa; the old and new letter forms are compared, and the locations and uses of Lontaraq manuscripts are traced to follow its dissemination. The study finds that Lontaraq derives from the Indian Brahmi script through Kawi and reached the Bugis via Sumatran scripts rather than directly from Java. A reference to palm-leaf writing dated 977 AD suggests that the script existed by about the 10th century, well before the oldest surviving manuscripts (17th century) and the 16th-century figure Daeng Pamatte, who the evidence indicates did not invent it. The script grew from 18 to 23 letters after the introduction of paper, and prenasalized letters appear mainly in printed rather than manuscript sources. Bugis migration, motivated by the values of siriq na pessé, carried the script beyond South and West Sulawesi to Ende, Sumbawa, and Bima, where additional characters were added to suit local languages.

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1. Introduction

Lontaraq is the traditional script of the Bugis, an ethnic group indigenous to South Sulawesi, Indonesia, and it has also been used to write Makassar, Mandar, and other languages of the region. It is a syllabic script of the Brahmi family, written from left to right, in which each consonant carries an inherent vowel /a/ that is changed by diacritical marks. The ancient form had 18 letters, and after the introduction of paper the script expanded to 23 letters. The oldest surviving manuscripts date from the 17th century, but a reference to palm-leaf writing dated 977 AD (Sung dynasty) suggests that the script was already in use by about the 10th century, long before Islam reached South Sulawesi.

The script was used for far more than record-keeping. Lontaraq manuscripts include La Galigo, the epic that served as the sacred text of the Bugis before Islam; Lontaraq Kutika, a guide to astrology, weather forecasting, and the timing of voyages and farming; Lontaraq bilang, a chronicle of royal and social events; and texts on agriculture, medicine, navigation, law, and Islamic teachings. The importance of studying its history follows from this. Lontaraq is the only script that has survived among those once used in South Sulawesi (the others being jangang-jangang, bilang-bilang, and Sérang), and the La Galigo copy made by Colliq Pujié was recognized by UNESCO as Memory of the World in 2011. Yet scholars give different accounts of where and when the script originated, and the routes by which it spread beyond South Sulawesi are scattered across many studies. This article therefore reconstructs the origin, development, and dissemination of the Lontaraq script by comparing these accounts with evidence from manuscripts and other sources.

The Bugis are concentrated in South Sulawesi, a province of about 9.07 million inhabitants in the 2020 population census (Badan Pusat Statistik [BPS], 2020). The 2010 population census recorded 6.36 million Bugis in Indonesia, or 2.69 percent of the national population (BPS, 2010). Nonetheless, nearly half of the Bugis populace migrated to various locales in Indonesia as well as several nations overseas, notably Malaysia and Singapore. For more details, refer to the map below.



Figure 1. Map of South Sulawesi Province and the regencies inhabited by the Bugis

Sources: <https://www.pinhome.id/blog/peta-sulawesi-selatan/>

The Bugis ethnic group inhabits several regencies in South Sulawesi, including Maros, Pangkajene-Kepulauan, Barru, Sidenreng-Rappang, Pinrang, Wajo, Soppeng, Bone, Sinjai, Bulukumba, and Luwu regencies, in addition to a city named Pare-Pare. Reflective of their ancestral subsistence as hunter-gatherers, the Bugis people are renowned for their proclivity to become impromptu migrants and relocate to diverse regions either within Indonesia or abroad. They engaged in sailing, trading between islands, or agriculture, both in their native villages and in places they voluntarily resettled. The aspiration to ameliorate their livelihood impelled them to become expatriates as well.

The aforementioned inclination is inseparable from a pair of Bugis life concept known as *siriq na pessé*. *Siriq*, on one facet, embodies a notion that prioritizes shame, self-respect, and dignity above all else, deeming it the most crucial and supreme among cultural values. It is the essence of *siriq* that motivates the Bugis to embody resilience, valor, and decorum, as they believe that one's personal character quality correlates with the level of *siriq* one possesses.

The concept of *pessé*, on the other hand, is perceived as the complementary aspect of *siriq*. It represents an awareness of the suffering and hardship experienced by others, prompting a compassionate response towards a family or community member, or even any individual facing adversity. This spontaneous empathy incites a moral obligation to extend aid and support whenever witnessing distress and injustice. Nevertheless, such benevolent actions may sometimes be misconstrued as unwarranted intervention in others' affairs.

The cultural amalgamation of *siriq na pessé* embodies universal values such as integrity, bravery, and steadfastness. The Bugis people are renowned for their gallantry, fearlessness, and mental fortitude that enable them to confront peril with resolve in order to uphold their *siriq* and *pessé*. As migrants, the Bugis encountered diverse cultures and ethnic groups and adeptly assimilated, mingled, and integrated with them, fostering a sense of protection and security among the communities they settled in overseas. The Bugis demonstrate willingness to provide assistance, whether moral, financial, or physical, in addressing the challenges encountered by the new communities they encounter abroad.

The Bugis regard their new settlement as a secondary homeland, subordinate only to their native land, their birthplace in the village, as it is their new abode that furnishes their sustenance, a place to earn a livelihood, and a terrain where they risk their lives to subsist. Therefore, Bugis communities frequently engage in conflicts to aid the monarchs and their people overseas in preserving or upholding their sovereignty, as evidenced in various historical accounts of Bugis communities abroad.

The Bugis populace seldom returns to their homeland as underachievers, as it would be deemed a disgrace or a failure to uphold their *siriq*, a failure to elevate their honor and dignity, both individually and collectively. Those who have not achieved success would instead establish a community, akin to those found in Bugis villages, either in Indonesia or overseas, such as in Malaysia, Singapore, and Brunei.

Bugis migrants carry along their culture and civilization abroad, which they adapt and amalgamate with the new culture they encounter overseas, eventually reintegrating the acculturated culture upon deciding to return home.

This perspective on life and method of cultural assimilation epitomize the characteristics of Bugis culture as an open, cosmopolitan, and inclusive culture, transcending religious, ethnic, and geographical boundaries. This attribute is what renders the traditional Bugis governmental system akin to democracy, which according to Abidin (1999, p. 142), is the sole traditional form of governance globally that eschews coercion and conquest. The traditional governance structure was founded on a consensus-based social contract, described by Abidin as the oldest social and political compact in existence. In the traditional Bugis governance system, kingship is not hereditary, and a monarch would be deposed through force if found to breach the agreed-upon contract recited during the coronation ceremony. There exist traditional councils whose role mirrors that of the People's Representative Council in democratic nations, resorting to voting in instances where consensus is elusive during deliberations.

Consequently, citizens' rights are safeguarded by the state, fostering equilibrium in social relations, balancing the rights of the monarch and the populace, harmonizing individual interests with the public good, and ensuring gender relations in society are justly regulated without bias.

These values and traditions bear directly on the history of the Lontaraq script in two ways. First, *siriq na pessé* and the migratory ethos they sustain help explain how the script travelled: Bugis migrants carried their texts and scribal practice with them, which is examined in Section 7. Second, the values and the consensual political tradition are themselves recorded in Lontaraq texts, for example in *élong* (short poems) and *pappaseng* (counsel handed down by elders). The same open and egalitarian outlook also helps explain why women, notably *Colliq Pujié*, were prominent among Bugis scribes and copyists (Section 4.2).

1.1 Literature Review

Scripts serve as symbols that epitomize the phonetic structure of a language, culture, and civilization. The inception or discovery of a script commenced as an endeavor to record and preserve human ideations or concepts stemming from the phonetic elements of spoken language. Script functions as a writing system employed by a given community for communication purposes. Theoretically, a script embodies a visual medium of human communication that is formally adopted, signifying the sounds of spoken language through visual and timeless symbols, thereby constituting a written system for verbal language (Gelb, 1952; Sampson, 1985; Coulmas, 1999; Adinda et al., 2023; Akhmar et al., 2023). A written language is proficient in symbolizing or transcribing all languages globally. For instance, English, Spanish, and Dutch can be rendered in any script type other than Latin.

A script is indicative of a society's progression. The advent of a script mirrors the evolution of the local civilization. This phenomenon is a salient characteristic of any society utilizing a script. The introduction of a writing system, namely a script, underscores the advancement of the host society relative to a society devoid of such a system. Presently, there are approximately 158-200 script types or written languages worldwide, a minute figure compared to the roughly 6,909 spoken languages employed in over 242 countries globally (Coulmas, 1999; Nettle and Romaine, 2000: 21; SIL, 2001; Akhmar et al., 2023; Adinda et al., 2021).

It is often posited that scripts known universally have originated from a process of borrowing or adoption. Initially, all script variants stemmed from pictographic characters (pictograph or hieroglyph), which subsequently evolved into cuneiform, further progressing into syllabic forms, and eventually transforming into phonemic scripts. Each script engendered diverse writing systems contingent upon the societies that borrowed and adapted them. Consequently, despite sharing a common Phoenician origin, Arabic and Latin scripts exhibit strikingly dissimilar external appearances today. Similarly, multiple syllabic scripts in India emerged from a shared Semitic progenitor.

All extant writing systems are influenced by antecedent systems (whether directly or indirectly, genealogically, or typologically), as well as geographically, despite geographical distances. The evolution of literacy and the utilization of written language transpire through a process of adoption from one society to another. A society lacking a writing system would acquire one from another society, adapting and customizing the script in accordance with the recipient's spoken language and local culture. Fischer (2002, p. 4-6) posited that all extant script forms have arisen from recurrent borrowing

and adaptation processes, yielding a plethora of script types that have been and are currently in use globally. Many contemporary scripts worldwide can be categorized into four primary types, namely Latin, Indian, Arabic, and Chinese scripts.

In accordance with Fischer, Gelb (1952: 212-220) also posited that all forms of script worldwide stem from a process of borrowing or adaptation, as expounded in the theory of "monogenesis of writing." A well-established concept in grammatology asserts that all scripts across the globe originated from a common source, namely pictographs. Moreover, as detailed by Fisher (2002) in the theory of "factors occurring in the process of borrowing writing," an adaptation of the borrowed script to fit the language and cultural context of the recipient community indeed took place. However, Gelb (1952), in the realm of "writing and civilization," suggested that borrowed scripts often managed to retain their original characteristics.

The inception and progression of scripts across various regions worldwide are intricately linked to the dynamics between people and their surroundings. The concept of formulating a script initially stemmed from the encounter with a preexisting writing system. This acquired knowledge or inspiration catalyzed the genesis of a new script through either borrowing or assimilation, which was then subject to subsequent refinement. The freshly minted script underwent modifications to align with the linguistic and cultural milieu of the receiving community.

Studies on the emergence and diffusion of scripts in various parts of the world demonstrate that despite adaptations to local conditions, a new script tends to preserve the identity of its original culture or civilization, as evident in the scripts commonly used globally. The Latin script prevalent in most Western nations and former European colonies signifies the influence of Western culture. Similarly, in regions influenced by Islam, the Arabic script continues to be utilized as a reflection of Islamic heritage. Despite being borrowed by neighboring countries such as Korea, Japan, and Vietnam, Chinese characters still maintain their association with Chinese civilization. The Indian script adopted in various Southeast Asian locales still exhibits discernible Hindu or Buddhist influences (Young, 2012, p. 20-21).

In the Indonesian context, Hardiati (2002, p. 2-3) categorizes scripts based on the predominant influences of three major foreign civilizations: Indian, Arabic, and Latin. The scripts borrowed from foreign cultures underwent a process of adaptation to suit regional languages and cultures in Indonesia. Scripts such as Pallawa, Kawi, Sundanese, Balinese, Batak, Kerinci, and Lontaraq were borrowed from Indian civilization, while Jawi, Pegon, Wolio, and Serang scripts originated from Arabia. Overall, these scripts emerged as a result of interactions with and the diffusion of foreign cultural influences in Indonesia.

Grammatology, a linguistic study that scientifically examines written language, serves to explore the further development of scripts. Various scripts in Indonesia exhibit differences in graphemes, which are the smallest meaningful units in a writing system. Analysis is conducted to determine the extent to which alphabet modifications differentiate from the parent script due to character adjustments. Viewing this phenomenon through the lens of the relationship between script and civilization reveals that all scripts retain the symbolic characteristics of their original culture, even as the appearance of the alphabet changes. The emergence of grapheme variations in different scripts, including Lontaraq, has led to this writing system being identified by its users as their unique script or the "invention" of that specific region.

In the context of South Sulawesi, the creation of the script itself represents an achievement, but the true significance lies in its utilization. There are few regions where script usage is as widespread as in South Sulawesi. The tradition of writing not only thrived in major centers of power but also extended to remote areas and a broader segment of society. The introduction and dissemination of scripts, particularly Lontaraq, in South Sulawesi have been ongoing for a remarkably long period.

The Lontaraq script has been extensively and continuously employed as the writing system in South Sulawesi, serving as a prominent representation of the region's people. The utilization of this script has given rise to numerous written manuscripts. Presently, the Lontaraq script stands out for its prevalence in society, while other scripts have faded into obscurity. However, a unique aspect is that South Sulawesi does not rely solely on one script. In addition to the Lontaraq script, several other scripts such as jangang-jangang, bilang-bilang, serang, and Latin scripts are also in use. Notably, more than one of these writing systems have been and continue to be employed in society today.

Referring back to the aforementioned theory, the Lontaraq script, based on the typology of its letters, is believed to have been derived from Indian civilization. Chronologically, its "invention" predates the embrace of Islam by the people of South Sulawesi.

2. Methodology

This study uses a qualitative historical method with a philological approach, following the four stages of historical research: heuristics (collecting sources), source criticism, interpretation, and historiography. It is therefore not a systematic literature review. Published studies serve both as secondary interpretations and, where they reproduce a manuscript or object, as the means of access to it.

The primary sources are Lontaraq and Sérang texts and related objects, consulted in the following forms: (1) the 12-volume copy of La Galigo made by Colliq Pujié in the mid-19th century, held at Leiden University Libraries under code NBG Boeg 188 and consulted through the library's digital collection; (2) Lontaraq Kutika and Lontaraq bilang manuscripts, consulted as published reproductions, which appear as figures in this article; (3) a Sérang text from the personal collection of one of the authors; (4) a fragment of a Gowa lontaraq manuscript that mentions Daeng Pamatte; (5) the Bongaya treaty letters (1667), referred to through the secondary literature; and (6) an amulet belonging to Noriman (Tuan Skapie), a Bugis descendant exiled to South Africa (1717–1806), as published by Laffan (2017). Oral testimony comes from an interview with Andi Zubaedah in Bone in January 1999. The secondary sources are scholarly studies of the origin and development of the script (Noorduyn, Kern, Holle, Mills, Fachruddin, and Mukhlis, among others).

The analysis proceeded through four comparisons. First, the competing theories on the origin of the script were compared with one another and with the letter forms found in the manuscripts, to judge which account is better supported. Second, the old 18-letter forms (the palm-leaf tradition of La Galigo and the Skapie amulet) were compared with the new 23-letter forms (paper manuscripts and printed sources) to identify what changed, such as the letter Sa and the prenasalized letters, and when. Third, Lontaraq was compared with the jangang-jangang script, for example in the Bongaya treaty letters, to establish how the two relate and in which contexts each was used. Fourth, evidence on where Lontaraq manuscripts were produced, kept, and used (South Sulawesi, Ende, Sumbawa, Bima, and libraries and museums abroad) was set against the history of Bugis migration to reconstruct the routes and chronology of dissemination. Claims that rest on a single source or on later tradition, such as the attribution of the script to Daeng Pamatte, were checked against other sources and treated as unproven where no corroboration was found.

3. Results and Discussion

4.1 Texts Contained in the Lontaraq Manuscript

The predominant characteristic of the Bugis community is their inclination towards migration, a tendency to explore new horizons and enhance their livelihood rather than remaining stagnant in their place of origin. Throughout their migrations, they have assimilated and amalgamated their indigenous culture with foreign cultures encountered during their travels, resulting in the discovery and evolution of scripts.

Four distinct scripts have been utilized in South Sulawesi, namely:

- 1). The Bugis scripts, encompassing both ancient and modern lontaraq,
- 2). The Makassarese script known as Jangang-Jangang,
- 3). The Bilang-Bilang Script, devised by Retna Kencana Colliq Pujie (who replicated the 12 volumes of the La Galigo manuscript housed in Leiden) as a clandestine code reminiscent of Arabic numerals,
- 4). The Serang Script, Arabic characters adapted for the Bugis language, adopted by the Bugis community following their embracement of Islam. The Serang Script bears resemblance to the Jawi Script, with the inclusion of diacritical marks setting them apart.

The latter three scripts have become obsolete and are no longer in use, leaving the Lontaraq Script as the sole surviving script that endures to this day.

As depicted in the aforementioned map, South Sulawesi is inhabited by diverse ethnic groups, with the Bugis, Makassar, Toraja, and Mandar being among the largest communities. However, the Mandar community predominantly resides in the West Sulawesi Province, having separated from the South Sulawesi Province. Each of these ethnic groups, along with several minor tribes in South Sulawesi, possesses their distinct language, leading to a language barrier among them.

When documenting their history and culture, the choice of script predominantly hinges on the circumstances and context. The Bugis, Makassar, Mandar, and other minor ethnic groups primarily employ the lontaraq script, except for the

Toraja community, which lacks a scriptural tradition and instead relies on oral transmission of their heritage across generations. Conversely, the Makassarese occasionally utilize the jangang-jangang script in certain texts, which once coexisted with the lontaraq script but gradually faded into obscurity, leaving the lontaraq script as the sole survivor.

Following the advent of Islam in South Sulawesi, the Sérang (Arabic) script began to be employed for textual purposes, particularly among ethnic groups that had embraced Islam. At times, texts were entirely penned in the Sérang script. Subsequently, both the lontaraq and Sérang scripts were utilized, particularly for documenting Islamic teachings that encompass numerous Arabic phonetic nuances, presenting challenges in adaptation to their native syllabic language and characters. The manuscripts inscribed in lontaraq encompass a diverse array of topics including agriculture, medicine, navigation, astrology and divination, religion, Islamic laws, Islamic philosophy, monotheism, romance, diaries, and literature, among others.

One of the renowned texts inscribed in the lontaraq script is the La Galigo, believed to have originated concurrently with the lontaraq script itself. Initially transmitted orally and recited in public, the text was eventually transcribed onto palm leaves once the Bugis community familiarized themselves with a writing system. Subsequently, with the introduction of paper by the Chinese and Western influences in South Sulawesi, the text was transcribed onto paper.

The La Galigo manuscript spans thousands of pages and encompasses a complex narrative interwoven with multifaceted characters. Kern (1931:1) deemed it the longest literary work globally, surpassing the Indian epics Mahabharata and Ramayana, as well as the Greek poems of Homer. In terms of length, the La Galigo manuscript comprises approximately 300,000 lines, surpassing the Mahabharata's epic length ranging between 160,000-200,000 lines. Consequently, Sirtjo Koolhoft positions La Galigo in a distinctive position within Indonesia and globally (1995: 1).

One of the notable collections of La Galigo includes the 12 volumes housed in the Leiden University Library, hand-copied by Colliq Pujié in the mid-19th century. When B.F. Mathess, a Dutch evangelist serving the Dutch Colonials in South Sulawesi, requested the proprietors of La Galigo manuscripts to surrender their copies, they declined. Consequently, Mathess enlisted the assistance of Colliq Pujié to replicate the 12 volumes now preserved in the Leiden University Library under code number NBG Boeg 188. An excerpt from the La Galigo manuscript is displayed below.

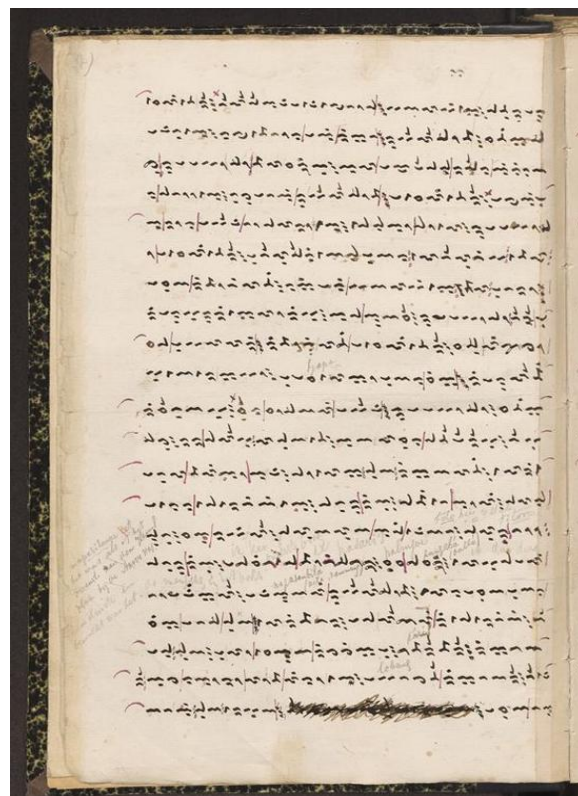


Figure 2. Excerpt from the La Galigo manuscript, hand-copied by Colliq Pujié (Leiden University Libraries, NBG Boeg 188)

Sources: <https://digitalcollections.universiteitleiden.nl/view/item/29355#page/10/mode/1up>

The La Galigo manuscript serves as a sacred literary work, serving as the holy scripture of the Bugis prior to the advent of Islam. Despite the widespread embrace of Islam among the Bugis populace, a minority still adhere to the ancient belief system known as the To ri Olo religion (religion of the ancients), remnants of which persist in certain regions to this day. These vestiges of the old beliefs are preserved in areas such as Wajo and Sidenreng-Rappang regencies, referred to as To Lotang. Adherents of To Lotang regard the La Galigo manuscript as sacred, only opening and reciting it during specific ceremonies and rituals.

Before the introduction of paper in the archipelago, the contents of La Galigo were inscribed on palm leaves utilizing the ancient lontaraq script. Due to the limited space on palm leaves, only key formulas were transcribed, serving as memory aids for the reciters during public performances. The gaps between the formulas were filled in by the reciters during the rendition. The recitation could span multiple nights for a single episode, contingent upon the reciter's memorization skills. However, with the introduction of paper in Indonesia, La Galigo was transcribed in its entirety according to the storyline, retaining the traditional writing style akin to that on palm leaves. The manuscript of La Galigo was not intended for reading but for recitation or chanting in public. The public recitation process is known as massureq, with the reciter referred to as passureq. When presented publicly, the entire text of La Galigo is recited in its entirety, with the choice of episode contingent upon the ongoing ceremonies and rituals.

In contrast to the To Lotang adherents who conduct sacred rites related to La Galigo, the Muslim Bugis community now perceive these ceremonies as secular rather than sacred rituals. Such ceremonies are conducted, for instance, during weddings, childbirth ceremonies, and other occasions. Nevertheless, remnants of the sacred La Galigo recitation ceremonies persist in remote regions, such as during rice planting ceremonies, where the maddoja biné ceremony entails staying up all night in anticipation of the upcoming rice planting, with the recitation of the La Galigo episode featuring Sangiang Serriq.

In addition to La Galigo, another manuscript known as Lontaraq Kutika contains weather forecasts, astrology, precognition, as well as guidance for sailors, farmers, and the general public for various undertakings and activities.

The Lontaraq Kutika manuscript primarily comprises symbols and signs, as illustrated in the image above. The interpretation of these symbols is conducted by individuals well-versed in the text's contents, following a traditional process known as makkanré guru, involving learning from a pallontaraq (lontaraq expert) proficient in deciphering the formulaic signs within the text. The reading of Lontaraq Kutika was conducted in preparation for maritime ventures, agricultural activities, marriages, trade, matchmaking, and other endeavors. Lontaraq Kutika has been transmitted across generations and remains in use to this day.



Figure 3. Lontaraq Kutika manuscript with its symbols and signs

Sources: https://upload.wikimedia.org/wikipedia/commons/d/d2/Kutika_manuscript_1.jpg

Another notable lontaraq manuscript is the lontaraq bilang, a form of traditional historiography among the Bugis and Makassarese communities, acclaimed by history experts for meeting modern historical writing standards with its precise data. Lontaraq bilang, translating to "a book of numbers," encompasses records of dates, months, and years of events, royal and societal diaries, accounts of familial and social events, natural phenomena, births, marriages, and more.

The Lontaraq bilang documents events related to the monarchy, societal incidents, and natural phenomena witnessed by the general population. A distinctive feature of lontaraq bilang is the practice of leaving dates blank when no significant events occurred on that particular day. Conversely, if multiple events occurred on a given day, these numerous occurrences would be meticulously recorded, sometimes extending to the margins of the paper, while the date with no events would remain unmarked. This methodology underscores the traditional Bugis intellectual tradition, placing emphasis on the systematic listing of dates followed by the inclusion of significant events that transpired on those dates, as exemplified in the following instance depicting a rainfall event.

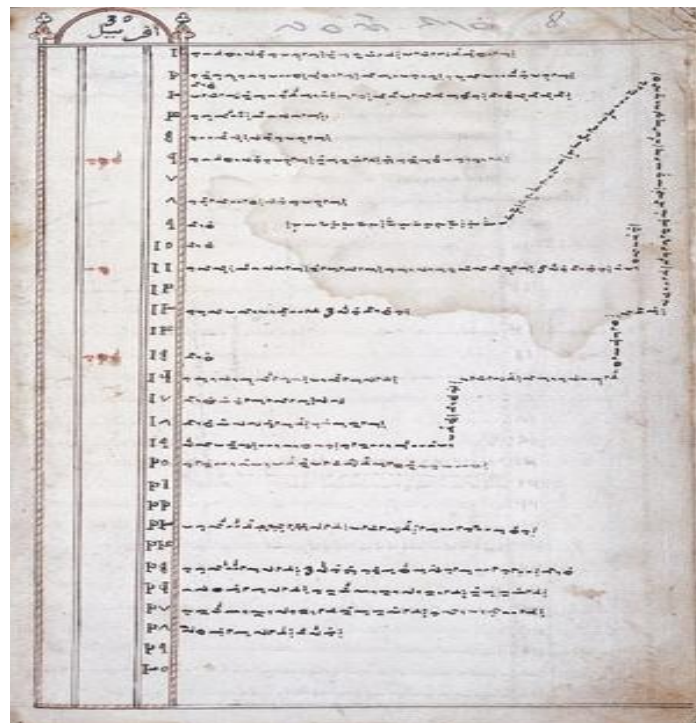


Figure 4. Lontaraq bilang entry recording a rainfall event

Sources: https://www.wikiwand.com/id/Aksara_Lontara

Apart from the Lontaraq Bilang, numerous Islamic texts, primarily inscribed in Arabic script for Quranic propositions or the Prophet's hadith, utilize the Sérang script for elucidating Islamic interpretations and teachings. The distinguishing factor between the Jawi script and Sérang script lies in the inclusion of diacritics in the Sérang script, occasionally combined with the lontaraq script as depicted in the example below.

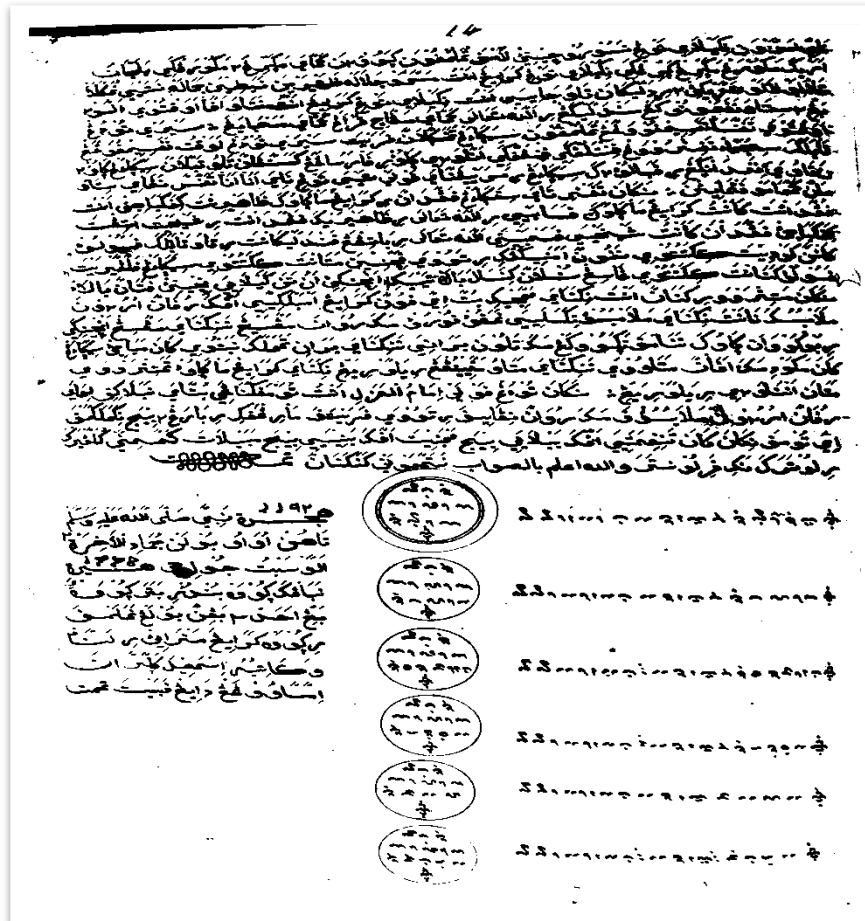


Figure 5. Sérang text combined with Lontaraq script

3.2 History and Characteristics of the Lontaraq Scripts

As delineated previously, the governance system embraced by the Bugis community mirrors a democratic structure, marked by the absence of discriminatory practices in the allocation of rights and responsibilities within society, be it in the public domain or within households, encompassing politics, economics, culture, and other social interactions. Consequently, the authors and readers of Bugis literature, as well as individuals from various ethnic backgrounds in South Sulawesi, are not confined to specific cohorts or genders. Those possessing literacy skills, irrespective of gender or social standing, ranging from the common folk to the aristocracy, are encouraged to actively participate.

During his expeditions to the hinterlands of South Sulawesi, Dr. Benjamin Fredrick Matthes observed that the majority of scribes, copyists, and writers he encountered were predominantly women. Notably, among them was "Retna Kencana Colliq Pujie Arung Pancana Toa," whom Matthes lauded as a woman of exceptional intellect and immense assistance during his tenure in South Sulawesi. Owing to Colliq Pujie's proficiency in literary pursuits and writing, she emerged as a pivotal resource for various European researchers, including Ida Preiffer from Austria, A. Lighvoed, and Matthes.

One of Colliq Pujie's monumental works is her meticulous transcription of the 12 volumes of the La Galigo manuscript, currently housed in the Leiden University Library. Previously, the episodes of La Galigo were dispersed across various locations and held in private collections. Owning a single episode of La Galigo was considered a rare privilege. When the owners of these manuscripts refused to relinquish them, Matthes enlisted Colliq Pujie to transcribe them. She meticulously organized the episodes into 12 volumes, complete with a detailed table of contents and a comprehensive summary of the narrative. Colliq Pujie's transcription of the twelve volumes of the La Galigo manuscript is now recognized as the longest literary work globally, surpassing even the Mahabharata and Ramayana. According to Kern, this collection represents only one third of the total number of La Galigo manuscripts.

All of Colliq Pujié's works, whether authored by her or by European scholars drawing from her primary sources, are now preserved in various museums and libraries in Leiden and other parts of the world. Despite her significant contributions, she endured a period of exile marked by extreme poverty and hardship. Her activism against Dutch colonial rule led to her exile in Makassar for a decade, during which she was separated from her family and lived in a meager dwelling that, as noted by Matthes, was even smaller than a typical Dutch pigsty.

Thanks to Colliq Pujié's meticulous transcription of the 12 volumes of the La Galigo manuscript, UNESCO recognized it as a Memory of the World in 2011, acknowledging it as the longest literary work globally.

The terms "manuscript" and "text" in the realm of philological studies carry distinct connotations. A manuscript serves as a receptacle for inscribing letters that convey thoughts and various facets of a nation's cultural heritage, making the object itself the primary subject of examination. On the other hand, the text refers to the messages encapsulated within the manuscript, thereby directing attention to the contents within. For instance, the original texts of the Koran or the Bible were penned centuries ago upon their revelation, yet these manuscripts have since been reproduced on diverse types of paper, rendering them contemporary vessels that harbor ancient wisdom.

Presently, the world's most ancient Lontaraq manuscripts trace back to the 17th century. Within the Bugis culture, Lontaraq embodies not only the concept of script but also carries additional layers of significance, namely:

- 1) Lontaraq as script,
- 2) Lontaraq as history,
- 3) Lontaraq as science.

The interpretation of these three nuances hinges on contextual pairing. When the term "lontaraq" precedes the name of a kingdom, it denotes 'history', as exemplified by "lontaraq Wajo" signifying the historical narrative of the Wajo Kingdom, "lontaraq Bone" representing the historical account of the Bone Kingdom, and "lontaraq Soppeng" encapsulating the history of the Soppeng Kingdom, and so forth. Conversely, when "lontaraq" precedes a domain of traditional knowledge, it embodies 'science', such as "lontaraq allaong rumang" denoting the science of agriculture, "lontaraq kutika" representing the science of astrology, "lontaraq allopi-loping" encapsulating the science of navigation, and "lontaraq abbalu-balukeng" embodying the science of commerce or mercantilism, among others.

As for literary texts, the nomenclature adheres to the Bugis literary genre. The Bugis literary genre comprises 4 categories, namely:

1. Sureq, a type of sacred Bugis literary work, such as Sureq Galigo, recounting the tale of La Galigo, Sureq Makkelluqna Nabitta detailing the story of the Prophet shaved, and others.
2. Toloq, narrating true events from history but fictionalizing the narrative, for instance Toloqna Petta Malampeqe Gemmeqna, chronicling the history of the Long-haired King. The Long-haired King refers to Arung Palakka, the King of Bone, who vowed not to cut his hair as long as the people of Bone were under Gowa colonial rule. Toloq Rumpaqna Bone, recounting the War of Bone.
3. Élong, a poetic song typically composed of three lines; the first line usually consists of 8 syllables, the second line 7 syllables, and the third line 6 syllables.
4. Pau-Pau ri Kadong, signifying a tale approved with nods, containing a purely fictional story narrated in prose style.

South Sulawesi has been minimally influenced by Hinduism and Buddhism. If any influence exists, it is primarily reflected in terms or names integrated into Bugis stories or sagas while retaining the original and distinctive narrative essence. Consequently, statues scripted with lontaraq are seldom found in South Sulawesi, except in recent times, particularly in urban areas following the trend of sculptural tradition development in the archipelago.

Initially inscribed on Palmyra palm leaves, Lontaraq transitioned to paper after the introduction of paper imported from Europe and China. The term "Lontaraq" originates from Sanskrit, specifically "lontar leaf," adapted to conform to the phonetic system and characteristics of the Bugis language, which lacks consonants. Consequently, "lontar" evolved into "lontaraq." According to Revi Soekatno, "lontar" is a Javanese metathesis of "rontal," meaning "tal leaf." The term "tal" is borrowed from the Sanskrit word "tala," denoting the siwalan tree (<https://id.quora.com/Apakah-nama-pohon-lontar-siwalan-berasal-dari-metatesis-istilah-Jawa-rontal>).

Similarly, the Bugis language employs the term "rontal," known as "raung taq," meaning "tal leaf," which subsequently undergoes metathesis akin to Javanese, transforming into "lontaraq" as a unique script for composing Bugis texts, distinct from other manuscripts in the archipelago. The texts inscribed on palm leaves resemble cassette tapes, read from left to right while rotating the palm leaves akin to a cassette tape, as illustrated below.



Figure 6. Lontaraq text on palm leaf (lontar) in rolled form

Sources: https://www.wikiwand.com/id/Aksara_Lontara

The Lontaraq script originates from the Indian Brahmi script through the Kawi script. It is syllabic in nature, written from left to right, similar to other Brahmi scripts. Each consonant in the script represents a syllable with the vowel /a/ automatically attached to it, which can be altered by using specific diacritics.

Initially, the ancient Lontaraq script comprised only 18 letters. Over time, it evolved into the new Lontaraq script with 23 letters following the introduction of additional characters, particularly after the introduction of paper.

The utilization of the Lontaraq script in South Sulawesi is dependent on the language spoken by the script's user. The language featured in a manuscript is determined by various factors such as the manuscript's content, origin, owner's language, and the region where the manuscript originated.

In literary works, a sophisticated language is employed, replete with symbols that may be incomprehensible to the general populace. Manuscripts focusing on science, history, and religion typically use standard regional languages with profound significance. Particularly in the interpretation of sacred texts, such as the Al-Quran, the original Arabic text is utilized, while the interpretation or explanation is conveyed in a common regional language for better understanding.

The evolution of language as a facet of human culture is a continuous process. Each language possesses unique characteristics that must be reflected when transcribed, aligning the characters and traits of the language with the corresponding symbols in writing.

When these languages are transcribed, there must be a harmonization between the form of inscription and the writing utensils utilized. In the historical context of ancient script in Mesopotamia, for instance, the symbols were denoted as Cuneiform, script crafted from clay, fashioned akin to nails (Coulmas, 1989); undoubtedly, this form proved more convenient when juxtaposed with other contemporaneous forms.

Similarly, the lontaraq manuscript constitutes a medium for inscription, akin to a stylus made of bamboo, rod, or iron, possessing a rounded, pointed structure for writing on palm fronds. Subsequently, the imprints on the palm fronds are darkened using ink specially concocted by the scribe, some derived from black ink of squids, while others from powdered charcoal.

Each individual in this realm embodies a fundamental structural essence. Noorduyn asserts that the fundamental configuration of the Bugis/Lontaraq script consists of a repetition of four "characters," namely: 1) circumflex (t), 2) its inverse (m), 3) dots (.), and 4) vertical lines (/) (1992:26). The circumflex and its inverse, when combined, give rise to the letter Sa (s), serving as the cornerstone for designating the Mattulada quadrilateral.

What Noorduyn expounded is corroborated by the testimony of Andi Zubaedah [One of the author's sources interviewed in January 1999 in Bone.], who, during childhood, observed his aunt named Petta Lolo Andi Kesturi inscribing on palm fronds. Two types of writing implements were employed for inscribing on palm fronds, one elongated nib facilitating extended lines, and the other rounded for creating dots.

Per Noorduyn, the resemblance between the characters of the Bugis/Makassar alphabets is discernible in the fundamental structure of the Kawi characters. This basic framework is syllabic, where each consonant is succeeded by a vowel a, and for articulating a different vowel sound, a corresponding symbol is utilized, with the i symbol positioned above, the symbol before the consonant signifying é sharp, following the consonant o, the curved sign above representing e schwa, and the symbol beneath indicating u (1992:15).

Hence, as per Noorduyn (1992:27), the characters of the Bugis alphabets are derived from the Kawi characters. Two distinct elements, albeit reconcilable, are identified: 1) simplification of the character structure of ancient scripts (Sumatera and Javanese), and 2) a robust framework in employing a repetition of identical "characters". From these elements, Noorduyn posited a hypothesis: transitioning from simplification to utmost simplicity (oversimplification), subsequently integrating unique components that set it apart from the archaic script form (Pallawa).

Especially concerning the jangang-jangang script, its application is solely confined to Makassar manuscripts. Even within the Bongaya treaty letters, the jangang-jangang characters persist, whereas the utilization of the lontaraq script is widespread across the regions in South Sulawesi, extending to Ende, Sumbawa, and Bima.

The term jangang-jangang originates from the Makassar language, denoting birds. The reason behind this nomenclature remains unknown, perhaps due to its circular shape and wing-like extensions resembling a bird. This association might stem from the symbolic significance of birds as messengers in traditional South Sulawesi communities, aligning these characters with avian forms representing a medium of human communication, akin to the tradition of mammunuq-mana in Bugis or a'jangang-jangang in Makassar during pre-marriage ceremonies.

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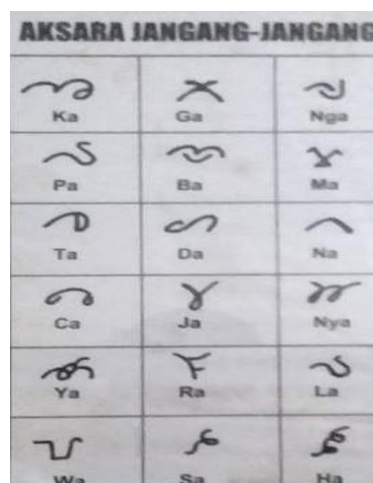


Figure 7. Jangang-Jangang script

The term jangang-jangang originates from the Makassar language, denoting birds. The reason behind this nomenclature remains unknown, perhaps due to its circular shape and wing-like extensions resembling a bird. This association might stem from the symbolic significance of birds as messengers in traditional South Sulawesi communities, aligning these characters with avian forms representing a medium of human communication, akin to the tradition of mammunuq-manuq in Bugis or a'jangang-jangang in Makassar during pre-marriage ceremonies. Manuq/jangang, etymologically signifying "chicken", pertains to a plurality denoted as mammanuq-manuq/ajjangang-jangang, which denotes a group of chickens. This concept embodies the essence of a messenger dispatched by an individual to the domicile of a woman with the purpose of ascertaining her possession of a specific item. The messenger is tasked with the responsibility of discerning whether the woman is in possession of said item and further evaluating her inclination towards accepting the individual who dispatched him.

In terms of configuration and fundamental writing components, the jangang-jangang script bears closer resemblance to the Kawi script. Through meticulous analyses conducted by Fachruddin, a correlation between Sumatran letters and Bugis letters, as well as between Makassar letters and Kawi letters, has been established.

Huruf	India	Kamboja	Kawi	Makassar	Bugis	Sumatra
ka	𑀓	𑀓𑀔	𑀓	𑀓	𑀓	𑀓
ga	𑀕	𑀕𑀔	𑀕	𑀕	𑀕	𑀕
nga	𑀗	𑀗𑀔	𑀗	𑀗	𑀗	𑀗
ca	𑀙	𑀙𑀔	𑀙	𑀙	𑀙	𑀙
ja	𑀛	𑀛𑀔	𑀛	𑀛	𑀛	𑀛
nya	𑀝	𑀝𑀔	𑀝	𑀝	𑀝	𑀝
ta	𑀟	𑀟𑀔	𑀟	𑀟	𑀟	𑀟
da	𑀡	𑀡𑀔	𑀡	𑀡	𑀡	𑀡
na	𑀣	𑀣𑀔	𑀣	𑀣	𑀣	𑀣
pa	𑀥	𑀥𑀔	𑀥	𑀥	𑀥	𑀥
ba	𑀧	𑀧𑀔	𑀧	𑀧	𑀧	𑀧
ma	𑀩	𑀩𑀔	𑀩	𑀩	𑀩	𑀩
ya	𑀫	𑀫𑀔	𑀫	𑀫	𑀫	𑀫
ra	𑀭	𑀭𑀔	𑀭	𑀭	𑀭	𑀭
la	𑀯	𑀯𑀔	𑀯	𑀯	𑀯	𑀯
wa	𑀱	𑀱𑀔	𑀱	𑀱	𑀱	𑀱
sa	𑀳	𑀳𑀔	𑀳	𑀳	𑀳	𑀳
ha	𑀵	𑀵𑀔	𑀵	𑀵	𑀵	𑀵

Figure 8. Comparison of scripts in Southeast Asia

Cultural interactions give rise to transformation. This evolution does not occur abruptly but transpires through an extensive developmental process. The transmission of Kawi letters to Nusantara letters can be elucidated through a diagrammatic representation. The assimilation process unfolds gradually, culminating in the present form. The lontaraq letters exemplify the script's evolutionary progression, showcasing genetic relationships with various Southeast Asian characters, as demonstrated diachronically by Kern through Bugis letter examples.

Perkembangan	Huruf	
	Ka	Na
India Abad ke-3 SM	+	↓
Kutai Abad ke-5 M	✚	↗
Kutai ke-10 M	-	-
Kawi Lama ke-8 M	ᮘ	-
Kawi Abad 8-10 M	-	ᮙ
Kawi Baru 10-13 M	ᮘ/ᮙ	-
Lampung/Batak	ᮘ	-
Batak	-	ᮙ
Filiphina	ᮘ	ᮙ
Bugis	ᮘ	ᮙ

Figure 9. Development of Kawi into Nusantara scripts, including Bugis letters (after Kern)

Generally, scholars studying scripts in South Sulawesi assert that the jangang-jangang and lontaraq scripts originate from Kawi, albeit with varying arguments. Holle categorizes the lontaraq script as novel, contrasting it with the antiquity of the jangang-jangang script. According to him, the Lontaraq script markedly diverges from the Indian script, with only the vowel indicators positioned in front, behind, above, and below displaying semblances to the Indian script. Conversely, the old Lontaraq script exhibits resemblance solely in the Ga, Pa, Ma, and La characters.

In contrast, H. Kern identifies several parallels between the Lontaraq script and the Sumatran script, positing a shared ancestry. Mills contends that the antiquated lontaraq script, referred to as hurup-jangan, aligns more closely with the Kawi script, while the rectangular lontaraq script, considered modern, bears greater resemblance to the Rejang (Sumatera) script.

Fachruddin posits that the rectangular characters, linked to the Sumatran script, were crafted during Srivijaya's zenith (7th-10th century AD), suggesting that the lontaraq script predates the jasag-jangang script, contrary to Mills' viewpoint. These two scripts coexisted, evident in the Bongaya Agreement (1667) and extending into the 20th century, where the jangang-jangang letters were utilized in the Makassar language. Hence, Fachruddin concludes that the lontaraq letter is a Bugis script, while the jasag-jangang letter is a Makassar script.

Fachruddin's assertion appears substantiated, as no Bugis manuscripts scribed in jasag-jangang characters have been unearthed to date. Conversely, the lontaraq script features prominently in Bugis texts, corroborated by the abundance of baikg-jangang scripts microfilmed in the National Archives in the early 20th century, all inscribed in the Makassar language.

Subsequently, the Bugis script gained prevalence in South Sulawesi, supplanting the Makassar script, attributed by Fachruddin to Arung Palakka's influence. However, Mukhlis challenges this notion, attributing the waning utilization of jasag-jangang letters post-17th century to historical vicissitudes, marked by a power shift from the maritime-centric Gowa to the agrarian Bugis (Bone) kingdom.

Despite Gowa's ascendancy as a maritime power center, one would expect these letters to govern communication and social interactions extensively, yet no evidence suggests widespread use in South Sulawesi. Even the characters in Ende, Sumbawa, and Bima exhibit a genetic resemblance to lontaraq, incorporating additional characters to suit the linguistic nuances. Consequently, experts assert that the baikg-jangang letter is a Makassar script derived from Kawi, while the lontaraq letter is a Bugis script inherited from Kawi via Sumatra.

Within a Gowa lontaraq manuscript, a fragment references the following phrase.

"Iapa anné karaéng uru appareq rapang bicara, timu-timu ri bunduka, sabannaraqna minne karaénga nikana Daeng Pamatte. Ia sabannaraq, ia tu mailalang, ia tomme Daeng Pamatteq ampareki lontaraq Mangkasaraka".

Meaning:

"He was the karaeng (king) who pioneered the establishment of comparative laws and war regulations. The king's harbourmaster, known as Daeng Pamatte, held multiple roles as the syahbandar, the king's confidant, and the first creator of the Makassar lontaraq."

This statement clarifies that Daeng Pamatte was the pioneer of "Gowa history" rather than the originator of the lontaraq script. Contrary to popular belief among the Makassar people, Daeng Pamatte did not invent the Lontaraq letters but rather documented the history of Gowa. There is a lack of concrete evidence to support the claim that Daeng Pamatte created or modified the Lontaraq letters, as there are no existing documents or records about him in Indonesia or abroad. Despite living in the 16th century when Makassar had interactions with the Western world, Daeng Pamatte remains an obscure figure, even in Western historical accounts.

Some speculate that Daeng Pamatte may have adapted or reformed the Lontaraq letters, but there is no evidence to suggest the original form of these letters before his alleged modifications. According to Noorduyn, individual modifications or reforms to writing systems are uncommon in history, except for extraordinary cases like King Sejong's creation of Hangul script in 1446 or the writing reforms by Qin and Li Sun around 200 BC. Given that Daeng Pamatte's alleged modifications occurred in the 16th century, it is considerably late in the development of Bugis writing, which had a long evolutionary history before his time. The oldest written evidence, La Galigo, estimated to have been penned between the 7th and 14th centuries, predates Daeng Pamatte's era, raising questions about the origin and evolution of the Lontaraq script.

Kern's research reveals ancient references to writing materials made from palm leaves in a scroll-like form, dating back to 977 AD during the Sung dynasty in China. While these references do not explicitly mention Lontaraq letters, the descriptions of the script's material and layout resemble the characteristics of the Lontaraq script in South Sulawesi. This suggests that Lontaraq script may have existed as early as the 10th century, as indicated by Prof. DR. Fachruddin's analysis in 1983. The presence of Lontaraq manuscripts in various libraries and museums both within Indonesia and internationally further supports the antiquity and widespread usage of this script.

Texts inscribed on palm leaves, preserved in institutions such as the Trovemuzeum Amsterdam, Jakarta National Library, Jakarta National Archives, and La Galigo Museum Makassar, predominantly utilize the Bugis language. Additionally, Lontaraq manuscripts written on paper are found in museums and libraries worldwide, including the Netherlands, Leiden, Trovemuzeum Amsterdam, Deventer, National Library, Jakarta National Museum and Archives, La Galigo Museum, Hasanuddin University in Makassar (Indonesia), Library of Congress and Harvard University (America), and various locations in France, Germany, Australia, Malaysia, and Singapore.

3.3 Aksara Lontaraq Kuno

3.3.1. Ancient Lontaraq Script

Prior to the introduction of Islam in South Sulawesi, the inhabitants already adhered to a religion rooted in their ancient beliefs. Their worldview consisted of three realms: Botiq Langiq, the celestial kingdom where the gods resided under the leadership of Patotoqé, the highest authority determining fate; Buriq Liung/Pérétiwi, the aquatic realm also inhabited by deities; and Alé Kawaq, the terrestrial realm where humans dwelled. The union between a celestial god and an aquatic goddess gave rise to humanity in the earthly realm, a belief system meticulously outlined in the La Galigo manuscript, the sacred text of the Bugis people before their conversion to Islam.

The La Galigo manuscripts utilize the ancient lontaraq language and scripts, some of which are still depicted in the form of dots, comprising a total of 18 characters as illustrated below:

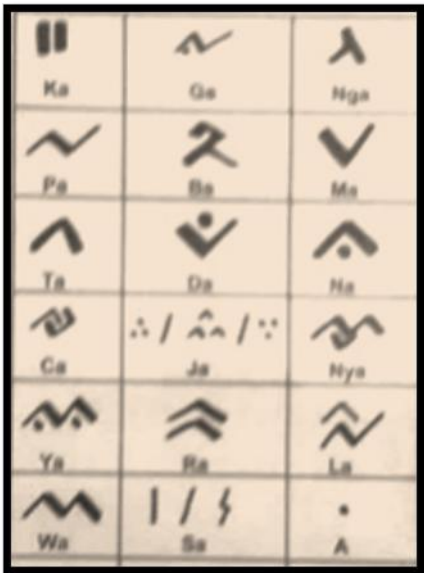


Figure 10. Old Lontaraq/Galigo Script

The absence of the letter 'H' is notable, and the letter 'Sa' exhibits three distinct variations: a vertical line, a slanted line to the right, and a shape resembling an inverted 'Z'.

Here is a comparison between old and new Lontaraq scripts.

Latin	Daun Lontar	Kertas
Ka	⌋	⌋
Ga	⌋	⌋
Nga	⌋	⌋
Ngag	⌋	⌋
Ca	⌋	⌋
Ja	⌋ / ⌋ / ⌋	⌋
Nya	⌋	⌋
Nca	⌋	⌋
Ta	⌋	⌋
Da	⌋	⌋
Na	⌋	⌋
Nra	⌋	⌋
Pa	⌋	⌋
Ba	⌋	⌋
Ma	⌋	⌋
Mpa	⌋	⌋
Ya	⌋	⌋
Ra	⌋	⌋
La	⌋	⌋
Wa	⌋	⌋
Sa	⌋ / ⌋	⌋
A	⌋	⌋
Ha	⌋	⌋

Figure 11. Comparison of old and new Lontaraq scripts

It reveals significant transformations and additions, with characters such as Ja, Pa, La, Sa, and A undergoing modifications, while new prenasalized letters like Ngka, Mpa, Nca, and Nra have been introduced.

The depiction of the letter 'Sa' as a rhombic quadrilateral, as suggested by Mattulada, differs from the traditional form observed in ancient Lontaraq writings. Mattulada's interpretation of the characters' significance in Bugis cosmology, specifically the concept of *sulapaq eppaq wola suji* representing the cardinal directions, with "north" positioned at the top,

"west" on the right, "east" on the left, and "south" at the bottom. This is why the lontaraq letters are referred to as *sulapaq eppaq* characters. However, the concept has been met with skepticism by experts.



Figure 12. The letter Sa as a rhombic quadrilateral (*sulapaq eppaq*) according to Mattulada

Contrary to Mattulada's theory, the 'Sa' character resembling a diamond shape is a recent addition to Lontaraq script and not reflective of the original palm leaf inscriptions. This discrepancy is evidenced by an amulet discovered in South Africa, belonging to a Bugis slave from Cirebon who preserved the tradition of Lontaraq script on paper, demonstrating the evolution of the script over time. This artifact, detailed in the article "From Javanese Court to African Grave: How Noriman Became Tuan Skapie, 1717-1806" by Michael Laffan in *The Journal of Indian Ocean World Studies* (2017), sheds light on the enduring legacy of ancient Bugis writing practices.

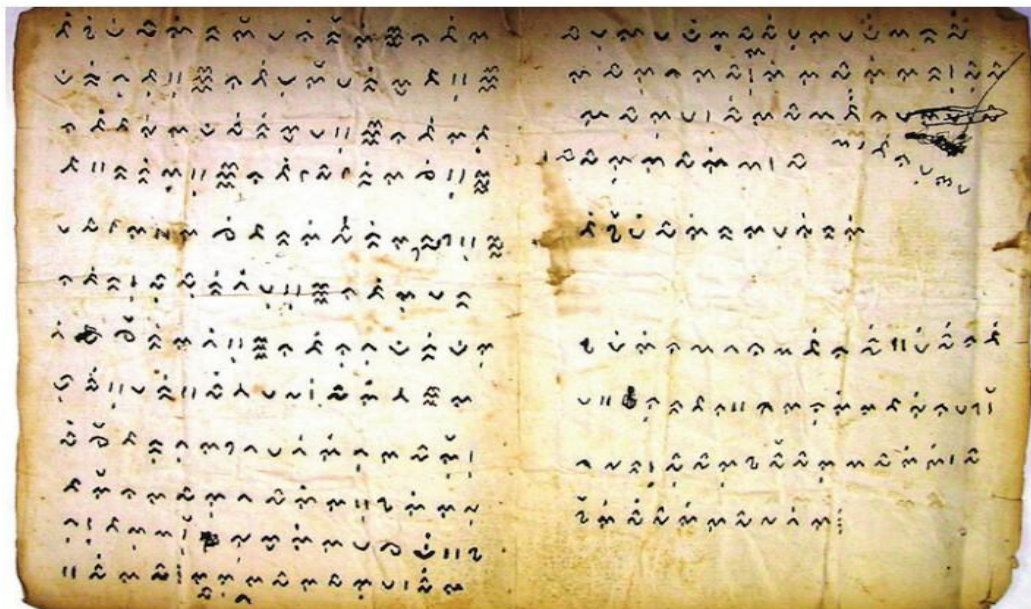


Figure 13. Amulet of Noriman (Tuan Skapie), South Africa, written in old Lontaraq (Laffan, 2017)

Sources: <https://jiows.mcgill.ca/article/view/19>

In this manuscript, the absence of the letter H, commonly found in contemporary lontaraq manuscripts, is notable.

Mr. Skapie represents the 4th or 5th generation of Bugis individuals who migrated to Cirebon, subsequently facing exile to South Africa where they were enslaved. Unfamiliar with the letter Sa *sulapaq eppaq*, a new addition to the lontaraq script, he lacks awareness of its presence. It is crucial to observe the distinctive character preceding the letter sa, resembling an inverted z, and to correctly transcribe "Bismillahi" in its original Arabic form, incorporating the letter H. Notably, the sixth line of the letter Sa maintains an upright position in the fourth letter, emphasizing the significance of Prophet.

3.3.2. The Emergence of the New Lontaraq Script

In the course of societal evolution, the essence of written communication, including lontaraq script, has evolved to meet the escalating demands for effective information dissemination. Post the advent of paper, lontaraq script underwent a series of transformations, as depicted in the accompanying illustration.

The lontaraq characters are predominantly syllabic in nature, devoid of consonants except for the prenasalized letters Ngka, Nra, Nca, and Mpa. These consonants align with the structural nuances of the regional languages in South Sulawesi, thereby reflecting syllabic adaptations like 'Nur' transforming into 'Nureq', 'tractor' into 'tarattoroq', and 'berkah [Ind.]' into 'barakkaq'.

For further information, the latest Lontaraq characters can be observed in the illustration below, comprising a total of 23 distinct symbols.

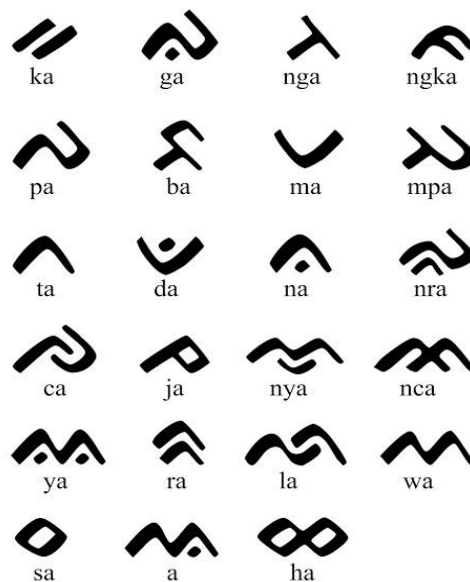


Figure 14. New Lontaraq Script

Sources: <https://attoriolong.com/2016/08/panduan-menulis-aksara-lontara/>

To modulate the phonetic nuances, diacritical marks are introduced, such as a dot atop for the 'i' sound, a dot below for the 'u' sound, a symbol to the left for the 'é' sound, a marker to the right for the 'o' sound, and an accent above for the 'schwa' sound.



Figure 15. Diacritical marks (*anaq sureq*) and parent letters (*indoq sureq*)

The consonantal characters are referred to as 'indoq sureq' (parent letters), while the diacritical marks are denoted as 'anaq sureq' (child letters), symbolizing the harmonious relationship between the two in forming the complete script.

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

Figure 16. Prenasalized letters (Ngka, Mpa, Nra, Nca) in printed sources compared with the La Galigo manuscript

Scholars argue that the incorporation of additional prenasalization in Ngka, Mpa, Nra, Nca can be attributed to the scholarly influence of Dr. Benjamin Frederick Mathess during the printing of lontaraq letters. However, historical evidence reveals that even before Mathess's time, foreign researchers had already imprinted lontaraq characters with prenasalized characters, underscoring the longstanding tradition of such linguistic nuances.

Interestingly, these prenasalized characters are predominantly observed in printed materials, whereas ancient manuscripts like La Galigo, inscribed on both palm leaves and paper, tend to eschew such modifications. This adherence to the original form of the script, as evidenced in the Colliq Pujié hand copy of the 12 volumes of La Galigo housed at KITLV, Leiden University, Netherlands, underscores a commitment to preserving the sanctity and authenticity of this ancient script.

Huruf	Raffles 1817	Crawford 1820	Thomson 1832	Seelieb 1854	Matthes 1858	Matthes 1875
Ka	ᮊ	ᮊ	ᮊ	ᮊ	ᮊ	ᮊ
Ga	ᮋ	ᮋ	ᮋ	ᮋ	ᮋ	ᮋ
Nga	ᮌ	ᮌ	ᮌ	ᮌ	ᮌ	ᮌ
Ngak	ᮍ	ᮍ	ᮍ	ᮍ	ᮍ	ᮍ
Ca	ᮎ	ᮎ	ᮎ	ᮎ	ᮎ	ᮎ
Ja	ᮏ	ᮏ	ᮏ	ᮏ	ᮏ	ᮏ
Nya	ᮐ	ᮐ	ᮐ	ᮐ	ᮐ	ᮐ
Nca	ᮑ	ᮑ	ᮑ	ᮑ	ᮑ	ᮑ
Ta	ᮒ	ᮒ	ᮒ	ᮒ	ᮒ	ᮒ
Da	ᮓ	ᮓ	ᮓ	ᮓ	ᮓ	ᮓ
Na	ᮔ	ᮔ	ᮔ	ᮔ	ᮔ	ᮔ
Nra	ᮕ	ᮕ	ᮕ	ᮕ	ᮕ	ᮕ
Pa	ᮖ	ᮖ	ᮖ	ᮖ	ᮖ	ᮖ
Ba	ᮗ	ᮗ	ᮗ	ᮗ	ᮗ	ᮗ
Ma	ᮘ	ᮘ	ᮘ	ᮘ	ᮘ	ᮘ
Mpa	ᮙ	ᮙ	ᮙ	ᮙ	ᮙ	ᮙ
Ya	ᮚ	ᮚ	ᮚ	ᮚ	ᮚ	ᮚ
Ra	ᮛ	ᮛ	ᮛ	ᮛ	ᮛ	ᮛ
La	ᮜ	ᮜ	ᮜ	ᮜ	ᮜ	ᮜ
Wa	ᮝ	ᮝ	ᮝ	ᮝ	ᮝ	ᮝ
Sa	ᮞ	ᮞ	ᮞ	ᮞ	ᮞ	ᮞ
A	ᮟ	ᮟ	ᮟ	ᮟ	ᮟ	ᮟ
Ha	ᮠ	ᮠ	ᮠ	ᮠ	ᮠ	ᮠ

Figure 17. Luwuq variant of the Lontaraq script with additional characters

3.3.3. The Dissemination of the Lontaraq Script in Eastern Indonesia

As delineated earlier, the Bugis community displays a penchant for nomadism, carrying their rich culture and civilization as they traverse different lands, engaging in a cultural exchange wherever they go. This inclination towards embracing novelty and integrating it into their own customs is evident in their adoption of the Lontaraq script, believed by scholars to have originated from Kawi. Interestingly, this adoption did not occur directly from Java but rather through Sumatra, resulting in a structural resemblance despite variations in symbol representation and phonetics.

Similarly, when Bugis individuals depart from their native land, they carry with them their entire cultural heritage, including the Lontaraq script. Consequently, there exist several adaptations of the Lontaraq script, considered by experts to have evolved as the Bugis populace migrated.

In regions like South Sulawesi and West Sulawesi, nearly all ethnic groups express their language and culture through the utilization of the Lontaraq script, albeit with variations that align with their respective languages.

This phenomenon is observable in the spread of the Lontaraq script across South Sulawesi, Luwu, West Sulawesi, Bima, Sumbawa, and Ende. For instance, in Makassar, the Lontaraq script adheres to the linguistic structure of the Makassar language, omitting the character 'e pepet' and exclusively utilizing 'é taling'. Despite the absence of certain sounds like initial gemination (e.g., Ngka: mangkasaraq, Nra angnganré), these linguistic nuances are not reflected in the Makassar language, in contrast to the traditional Bugis script.

Distinct variations can be observed in the Lontaraq script of Luwuq, characterized by alterations and additional characters not present in the original script. Noteworthy additions include geminated forms like Nta, Nda, Nja, Nna, Ssa, tta, mma, alongside modifications such as Ngka, Ba, and Sa, deviating from the conventional Lontaraq script.

Figure 18. Scripts derived from Lontaraq in Eastern Indonesia: Bima (Mbojo), Sumbawa (Satera Jontal), and Ende (Lota)

A map of Indonesia with four research sites highlighted by yellow circles. Lines connect these circles to their respective labels: Bima Mbojo (in the northwest), Bugis Lontara (in the north-central region), Satera Jontal (in the west of the main island), and Lota Ende (in the east). Below the labels are symbols representing the ethnic groups: wavy lines for Bugis, diamonds for Satera, and zig-zags for Lota. The map also shows the Indonesian archipelago and surrounding waters.

Sources: <https://writingtradition.blogspot.com/2017/01/aksara-lontara-dan-aksara-aksara-nusa.html>

The Mbojo script alphabet commences with A Ba Ca, resembling the alphabetical arrangement of Latin letters. Notable resemblances between the Lontaraq and Mbojo scripts include A, Ba, Ca, Da, Ga, Ya, Ja, Ka, Ma, Na, Pa, Ra, Sa, a, Wa, Nga, Mpa, while distinctions lie in the form of the letter Ya, resembling 'x', and nasal or geminated characters like Mba, Nca, Nda, Nga, Ngga, Nta, each featuring unique shapes compared to their Lontaraq counterparts. The diacritics maintain consistency with the Lontaraq script. Please refer to the table below for a detailed comparison.

AKSARA MBOJO

HURUF DASAR

					
A	BA	CA	DA	FA	GA
					
HA	JA	KA	LA	MA	NA
					
PA	RA	SA	TA	WA	YA

HURUF SENGAU

						
MBA	NCA	NDA	NGA	NGGA	NTA	MPA

KA KI KÙ KE KO K' K

Sistem menulis pengakhiran huruf di atas, beraturan pada bentuk pengakhiran huruf pada: M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.

Contoh: Mbojo, Nca, Nda, Nga, Ngga, Nta, Mpa.

Mbojo Nca Nda Nga Ngga Nta Mpa

Figure 20. Mbojo script on a street sign in Bima

Sources: <https://aksaradinusantara.com/fonta/bima.font>

BENTUK AKSARA BIMA PER SUKU KATA

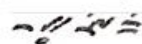
A		I		U		E		O	
BA		BI		BU		BE		BO	
CA		CI		CU		CE		CO	
DA		DI		DU		DE		DO	
FA		FI		FU		FE		FO	
GA		GI		GU		GE		GO	
HA		HI		HU		HE		HO	
JA		JI		JU		JE		JO	
KA		KI		KU		KE		KO	
LA		LI		LU		LE		LO	
MA		MI		MU		ME		MO	
NA		NI		NU		NE		NO	
PA		PI		PU		PE		PO	
RA		RI		RU		RE		RO	
SA		SI		SU		SE		SO	
TA		TI		TU		TE		TO	
WA		WI		WU		WE		WO	
YA		YI		YU		YE		YO	

CONTOH DALAM KALIMAT



Bahasa Bima:
Niat

Bahasa
Indonesia:
Niat



Bahasa Bima:
Takbir

Bahasa
Indonesia:
**Takbiratul
ihram**



Bahasa Bima:
Roko

Bahasa
Indonesia:
Rukuk



Bahasa Bima:
Sujud

Bahasa
Indonesia:
Sujud



Bahasa Bima:
Kidi mantiri

Bahasa
Indonesia:
Berdiri tegak

Figure 21. Sumbawa script (Satera Jontal)

Sources: <https://majalah.tempo.co/read/selingan/146779/mengharap-mbojo-di-plang-jalan>

Differentiated from the Bima script, the Sumbawa script, more commonly referred to as Satera Jontal, arranges its alphabet following the lontaraq letters, commencing with Ka, Ga, Nga, and so forth.

The characters deviating from the Lontaraq script include Ba, with the 2nd and 3rd characters being Ja, the second variant being Ra, and the 2nd variant of the letter A, while the 3rd variant of the letter A resembles that of the A in the La Galigo script. Additionally, there are several supplementary letters such as Kha, Sya, Fa, Qa, Dza, and Za. The diacritical marks mirror those of the Lontaraq script.

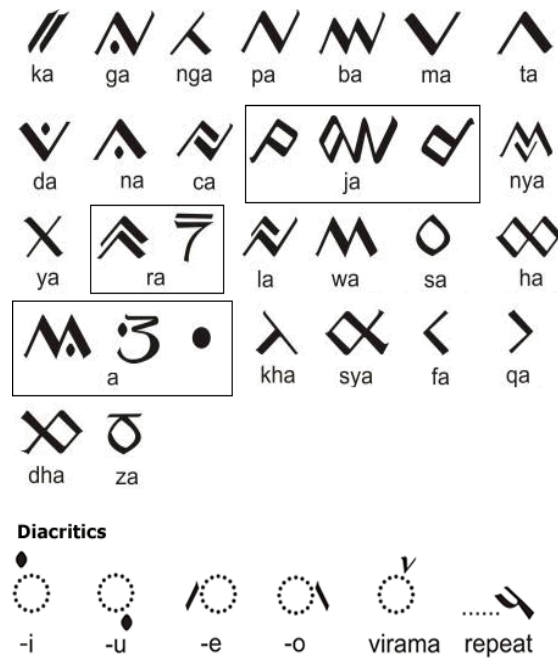


Figure 22. Ende script (Lota)

Sources: <https://aksaratube.blogspot.com/2018/01/aksara-samawa.html>

On the other hand, the Ende script, commonly known as the Lota script, shares similarities with the Bima script in terms of alphabetical order, starting with A, Ba, Bha, Ca, albeit with its own distinctive features.

The Lota script includes letters that differ from the Lontaraq script, such as Bha, Ca, Fa, Ga, Ha, Nya, and the second variant of the letter Ya. However, the Sa letter remains identical to the ancient Lontaraq script utilized in the La Galigo script. Furthermore, additional letters in the Lota script consist of Bha, Dha, Gha, Mba, Nda, Ngga, Rha, and Za.



Figure 22. Lota script of Ende, Flores

Sources: <http://kebudayaan.kemdikbud.go.id/bpnbbali/mengenal-aksara-lota-dari-kabupaten-ende/>

3.3.4 8. Development and Preservation of Lontaraq Script

The preservation and advancement of the Lontaraq script have been ongoing endeavors carried out by both individuals and institutions. These initiatives reflect the community's enthusiasm for revitalizing the Lontaraq script as a cultural heritage of the Bugis people over time.

Dr. Yusring Sanusi, a lecturer at the Faculty of Cultural Sciences at Hasanuddin University, recounted various efforts in this regard. In 1985, Taufik Sakuma, a Japanese language lecturer at Hasanuddin University and the Japanese Consulate General in Makassar, endeavored to produce the Lontaraq letters using a typewriter.

In 1990, at the Language Center in Ujung Pandang, Mrs. Astuti Hendrato from Jakarta collaborated with Monotype Typography in England to create the Lontaraq script using a LASERCOMP machine, a photo-set machine. This machine, located at Makassar State University (IKIP Ujung Pandang), facilitated the publication of manuscripts in both Lontaraq and Arabic scripts.

The year 1991 saw USI/IBM, under the guidance of former Chancellor of Hasanuddin University and Governor of South Sulawesi, Prof. Dr. Ahmad Amiruddin, embark on computerization efforts with scanners to preserve Lontaraq manuscripts. This technological advancement allowed for the digitization of manuscripts, making publication more accessible. The creation of image files on computers enabled the utilization of different typefaces, such as the TrueType Font compatible with Windows, for writing characters.

Individual efforts by Barbara Friberg also played a significant role in the development of the Lontaraq script. Despite facing challenges in obtaining computer fonts from Monotype Typography in England due to high licensing fees, collaborative efforts in Singapore aimed to create a Lontaraq font compatible with various computer systems and word processing programs.

In 1994, Barbara Friberg continued her pursuit by using the FONTMONGER program to develop the Lontar21 TrueType font, known as Lontar21.ttf. This font, with a file size of 28 KB, was unveiled at the Makassar Golden Hotel in October 1995.

https://www.researchgate.net/publication/343683740_TEKNOLOGI_AKSARA_LONTARA_DI_ERA_INFORMASI_TEKNOLOGI_40

Subsequent efforts in 1995 by Andi Mallarangeng and Jim Henry resulted in the creation of volume one of the Lontaraq font named BugisA. Despite being the first Indonesian script registered in Unicode, its widespread adoption was yet to be formalized.

In 2015, Dr. Yusring Sanusi modified the Lontaraq letters by incorporating additional consonants and numbering them to align with the Bugis-Makasar language conventions. However, these modifications had not gained widespread acceptance.

Fast forward to 2020, the South Sulawesi Provincial Government, in collaboration with Lontaraq script activists and the media, organized an International Lontaraq Script Seminar and Festival. This event brought together experts in the field from Indonesia and various countries, resulting in recommendations for annualizing the seminar and enacting regulations to introduce Lontaraq teaching in schools.

Additionally, in 2020, the Lontaraq Nusantara Aksara Foundation, in partnership with the Indonesian Internet Domain Name Manager (PANDI), initiated efforts to promote the Lontaraq script among millennials through a website competition. The competition aimed to showcase both the original Lontaraq script from manuscripts in South Sulawesi and West Sulawesi, as well as new creations by scholars like Dr. Yusring Sanusi.

The Department of Regional Literature at Hasanuddin University actively imparts knowledge of the Lontaraq script through teaching and research activities. Furthermore, the Lontaraq script has been endorsed by the National Standardization Agency (BSN) and registered in The Unicode with ISO 1592: Bugi, 367 under the name buginese.

Looking ahead, the focus now shifts towards gaining international recognition for the Lontaraq script, including acknowledgment from the Internet Corporation for Assigned Names and Numbers (ICANN) in America. This recognition would elevate the status of the Lontaraq script to a global level, placing it on par with other world scripts.

4. Conclusion

Various lontaraq characters and their utilization in diverse texts, as evidenced in numerous manuscripts in South Sulawesi and their dissemination across regions in Eastern Indonesia, illustrate the Bugis people's remarkable capacity to assimilate and adapt external cultural influences. Whether through direct encounters with foreign cultures or through migration, the Bugis demonstrated their intellectual acumen by incorporating and localizing external elements into their own cultural tapestry. This is exemplified by the invention of the lontaraq script as a means to chronicle their history, culture, and civilization across different epochs, from the pre-Islamic to post-Islamic periods, while also assimilating influences from various linguistic and cultural traditions within the archipelago and beyond.

However, the Bugis did not merely adopt and adapt external cultures like the literacy culture embodied by the lontaraq script; they also carried their own heritage when venturing abroad, disseminating it in distant lands. Consequently, the lontaraq script extended its reach beyond South Sulawesi and West Sulawesi, making its mark in places like Bima, Sumbawa, and Ende. The manuscripts, serving as reflections of societal responses to evolving dynamics, are now safeguarded in numerous libraries and museums worldwide, attracting a limited audience of scholars and enthusiasts, including a new generation in South Sulawesi intrigued by the region's literary heritage.

Recognizing the dwindling comprehension of these intricate scripts, concerted efforts have emerged to preserve the lontaraq script through contemporary technological means. Notably, a cultural renaissance movement centered on the lontaraq script has emerged at the La Galigo Study Center, Hasanuddin University, featuring diverse initiatives. These include educational programs led by lontaraq scholars at Hasanuddin University and Makassar State University, a transformative student internship system at traditional masters' villages in lieu of conventional fieldwork, and initiatives aimed at revitalizing endangered cultural practices through mentorship, competitions, and teacher training programs in local communities. Moreover, non-formal cultural institutions focusing on lontaraq education have emerged in various locales, such as the Bugis School in Bone, Wajo, and Soppeng, and the Cultural School in Luwu, among others.

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