

Revitalization of ancient Indonesian characters and the maintenance efforts in past 10 years

Arif Hidayat¹

¹Universitas Nusa Mandiri, Jakarta, Indonesia

ABSTRACT

Background: This mixing of cultures will also create a cultural reproduction that has the potential for diversity. This culturally diverse country, of course, has a lot of characters from various regions and cultures.

Purpose: this research is expected to be a means to reopen the repertoire of the diversity of characters in Indonesia that has begun to be forgotten. In this study, the author will reveal a number of efforts to maintain the Indonesian script.

Design and methods: the research design were using the library research method. Sources of data used in this study are in the form of documents, books, journals, digital applications obtained through the internet network.

Results: The heritage of Indonesian characters is very diverse with the plurality of tribes in Indonesia. With the support of the development of information technology, the revitalization of Indonesian script culture is very possible to be popularized again.

Keywords: cultural diversity, language culture, Indonesian language character

Introduction

Culture as a result of human creation covers various aspects of people's lives (Rosana, 2017). All elements of society, from the smallest unit to the largest unit, will contribute to each other for the formation of culture. The formation of culture is obtained from the process of human interaction with nature, and humans with other humans.

For starters, humans acquire minimal culture through their interactions in the family. Family culture is the result of a combination of a number of original and local cultures (Panjaitan et al., 2014). This mixing of cultures will also create a cultural reproduction that has the potential for diversity. Family culture is the smallest cultural unit, but will contribute to larger regional zones such as tribes and countries.

One of the cultures born in society is the language system. Language as part of culture is a means of communication between individuals in a society. Language is a medium of conveying messages which is often the difference between one culture and another (Muchtar et al., 2016).

Language is then distinguished between spoken language and written language (Prihantini, 2015; Yanti et al., 2016). This very important function of language had to eventually be made into a single manuscript so that it could be learned and passed on. Through written language, messages can be more awake and last longer. Through writing, future generations can understand the cultural aspects of society in the past.

Through letters, messages are conveyed in various written media. The script of an area with other regions can be a feature of differences between regions or between cultures. With the diversity of existing cultures, the existing characters are also increasingly diverse. This culturally diverse country, of course, has a lot of characters from various regions and cultures.

With the development of information technology and globalization, the tendency of society, especially young Indonesians today, is to be more inclined to the culture that is coming and being mushroomed through the promotion of digital information media. The desire to explore foreign cultures results in the erosion of the desire to study one's own culture. This has also resulted in the condition of regional characters being increasingly forgotten. This causes many young Indonesians to no longer know or understand the script that was used and popularized by the ancestors of the Indonesian nation.

Previous research on Indonesian characters was carried out through a number of cultural habits through learning using folk song lyrics (Retnoningsih, 2019). The habituation emphasizes the manners of students in understanding cultural values. The other research is an empirical study of a number of Indonesian characters which have been translated into digital form (Cahyadi et al., 2016; Hidayat & Shofa, 2016; Rai, 2013).

Thus, this research is expected to be a means to reopen the repertoire of the diversity of characters in Indonesia that has begun to be forgotten. In this study, the author will reveal a number of efforts to maintain the Indonesian script.

Methods

In answering the research problem, a number of phenomena were collected using the library research method. Sources of data used in this study in the form of documents, books, journals, digital applications obtained through the internet network. Data collection is only in the form of documents, considering that the data needed are a number of track records of information related to cultural revitalization with a focus on ancient characters. A number of these documents are grouped and categorized for further general similarities to be found to formulate conclusions. The various documents that have been obtained are mutually tested for validity by using data source triangulation techniques.

Findings & Discussion

Indonesian Richness

Before becoming a sovereign country as it is today, Indonesia was still an archipelago consisting of several kingdoms. In those days, the people of the archipelago used several languages and writings or what used to be called letters to communicate.

Cultural diversity is also supported by the territory of the Unitary Republic of Indonesia which is separated from its territories. In other words, each resident who inhabits a different area will experience different geographical conditions. For example, starting from mountainous areas, coastal areas, forest edges, lowlands, rural areas, to urban areas.

This is also influenced by the level of civilization of each different ethnic group or society. But unfortunately the entry of foreign cultures into Indonesia through globalization has had an impact on today's young Indonesian generation who seem more interested in foreign cultures than their native culture. Foreign cultures that enter Indonesia should not be accepted by Indonesian young generation so that there is no phenomenon of love for foreign

cultures by Indonesian younger generation. At least there is cultural assimilation so that it can add to the richness and diversity of culture in Indonesia.

The use of the Nusantara script in the written tradition has been going on for thousands of years. During that time, various characters have been created considering that each ethnic group can develop its own writing tradition. The strength of the Nusantara writing tradition can be seen from the various stories about the existing writings. These stories illustrate the interest of the Indonesian people in the power of the written word.

The Archipelago script was written using inscriptions and scripts. Media written inscriptions are usually made of stone, wood, animal horns, certain metal plates. The writing is made with a chisel. While the script media uses palm leaves, palm leaves, coconut leaves, bamboo blades, bark, paper, and cloth. The writing on the manuscript was made with stationery in the form of a knife, pen, and ink.

Archipelago scripts are not static, but grow, develop, and become extinct with the passage of time. Many Nusantara scripts have become extinct and have been replaced with new ones. The intellectual activities and artistic abilities of the people of the archipelago that continue to live and develop are the cause.

Each region in the archipelago has a different character from other places. Some of them are still known today. Such as Javanese script and Sasak script. The characters are introduced some more through the inscriptions discussed in history lessons in school.

Currently, there are 12 regional scripts which are part of the richness of Indonesian literature and culture. The 12 local scripts are Javanese, Balinese, Old Sundanese, Bugis or Lontara, Rejang, Lampung, Karo, Pakpak, Simalungun, Toba, Mandailing, and Kerinci (Rencong or Incung) scripts.

Uniquely, although there are 428 regional languages in Papua, in reality there are hardly any local scripts to be found. An effort was made by compiling a script system with the Tobati language used by the people around Jayapura. The Center for Development and Protection, the Agency for Language Development and Guidance (BPPB) also launched the book Tobati Language Literacy System in 2016. The process of determining this script system involves speakers conveying symbols for something that is expressed in the Tobati language. Later, the spoken language was written in Latin letters. Preservation of Nusantara script is not enough just to stop there. Along with the development of the times, the scripts of the existing regional languages did not escape the touch of today's information technology advances.

Variety of Indonesian Scripts based on Demographics

- Pallava

The Pallava script (see figure 1) is the most frequently used script in several inscriptions in the archipelago. Such as the Mulawarman inscription in Kutai, East Kalimantan, and the Tarumanegara inscription in West Java. The Pallava script or commonly written Pallava comes from the Pallava Dynasty which once ruled in southern India between the 4th century to the 9th century AD.

- Java

Java script (see figure 2), which is still known by the Javanese people, is the Javanese script. This script uses the Abugida writing system, which is a writing system from left to right and represents a syllable with a vowel 'a'.

This script consists of 20 syllables and several Javanese sounds, punctuation marks, and numbers. The Javanese script and Balinese script are modern developments of the Kawi script, one of the derivatives of the Brahmi script that developed in Java. This script used to be more widely used to translate Sanskrit.

- Bali

The Balinese script is a script that is almost the same as the Javanese script. It's just that the Balinese script consists of 47 characters consisting of 18 consonants and 7 vowels, while the rest are absorptions from Sanskrit and Kawi. the letters in the Balinese script are divided according to their pronunciation which is often referred to as the literate citizen. This division is based on the rules of writing Sanskrit Panini

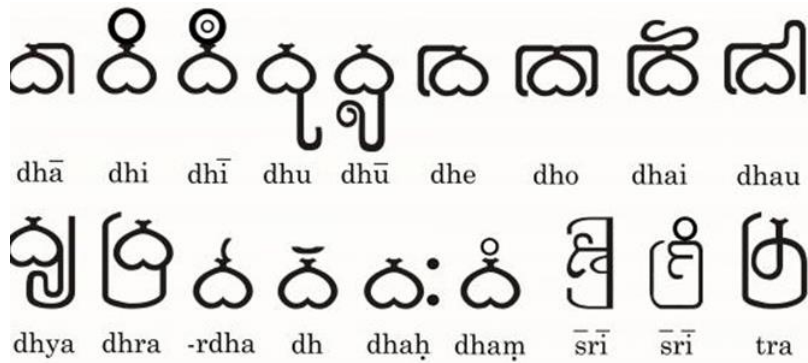


Figure 1 Example of using Punctuation and Letter Pairs in Pallava Script



Figure 2 Javanese Script



Figure 3 Balinese script



Figure 4 Kawi script (ancient Javanese)

- Kawi

Kawi characters or often written Kawi which means poet. Kawi script is a type of Brahmi script (see figure 4). Kawi script is often used around Java and Bali. Some inscriptions written in Kawi script have also been found as far back as the Philippines. In its development, the Kawi script is the ancestor of the scripts that exist in the archipelago.

- Sasak

As the name suggests, this script is often used by the Sasak people, Lombok. This script consists of 4 parts, namely Carakan, Swalalita, Partners, and Carakan. Almost the same as the Javanese script, the Sasak script also has 20 letters with the addition of murda script and numbers. See figure 5.

- Lontara

The script is often used by the Bugis-Makassar people. This script is more often used to write government and social regulations. Manuscripts are written on palm leaves using sticks or kalam made of coarse fibers. The lontara script consists of 23 consonants and has an inherent vowel 'a'. See figure 6.

In addition to the scripts mentioned above, there are many more scripts in various regions in Indonesia, such as the Lampung script and the Batak script. Currently, many children and youth in the area do not memorize and have difficulty writing characters that are part of the local culture.



Figure 5 Sasak script



Figure 6 lontara characters

Efforts to revitalize Indonesian Script

The script of an area is sought to be known by the community. Efforts that can be made are by providing learning in using characters.

The learning is given to students with various levels of difficulty that are adjusted to the development of the age of the students. One of them by providing a spelling system. One of them is the Balinese script which has the Purwadresta spelling which was then attempted by Schwartz (a researcher on spelling at the time) with an easier method of learning Balinese script. This Schwartz spelling prioritizes practical ease of use. This is evidenced by the adoption of the form of hangers and gempelan wreastra to write wianjana script (Rai, 2013).

In addition to learning that is done conventionally to students in the form of updating spelling. Otsu Binarization segmentation was also carried out. Otsu Binarization is an application that can detect ancient Javanese manuscripts by applying character recognition identification. Identification of character recognition is only carried out on a number of Javanese script data in digital form. Each character is identified as an image which is then understood through segmentation. The resulting segmentation is then given a name for each character (Putra & Muhimmah, 2020). This Otsu Binerization method really needs to be improved because a number of ancient manuscripts do not have good clarity so that the text segmentation process is hampered by characters that have high noise.

Previously, a method of recognizing Javanese characters has been developed using the Self Organizing Maps (SOM) application. The Self-organizing maps application uses an extraction zoning feature that optimizes the accuracy of the readability of characters. The level of readability of the characters is developed through an artificial neural network that replicates the developmental ability of the human brain to receive a number of image captures from the outside. SOM can be used after the training and recognition stages are carried out. Both are compulsory so that SOM can be used optimally. Even so, the accuracy results that can be done by the SOM application are only around 73.57% (Hidayat & Shofa, 2016).

In order to increase people's attention to ancient scripts, digitalization efforts are indeed felt to be able to adjust the needs of users, especially the Indonesian people. In addition to applications, websites and android are also used.

Preservation of characters by utilizing the website, namely by collecting scanned ancient manuscripts and categorizing them into 4 groups, including knowledge management systems (e-library & e-learning), e-tourism, e-business, and e-government. A number of these ancient

manuscripts can be viewed freely. For example, as has been done in ancient Sasak manuscripts.

The preservation of the Sasak script uses the display of images on a number of manuscripts using standard resolution. It is so that the images can be seen quite well. As for a number of manuscripts that are used as references in the preservation of the Sasak script, among others, folklore, wayang stories, history of Sasak, typical Sasak medicines, and religion (Tajuddin et al., 2017).

While the preservation of characters by using an android-based that is by using educational games. This educational game uses Balinese script (Cahyadi et al., 2016). Users play this game by matching the image of the same character within a certain time limit as in figure 7. In addition, the development of this game will be more difficult in the next stage, which is presented an image and a number of character choices. Users are required to enter a character image in the box provided to arrange the characters for the animal names presented (see figure 8).



Figure 7 game matching the image of Balinese characters on android

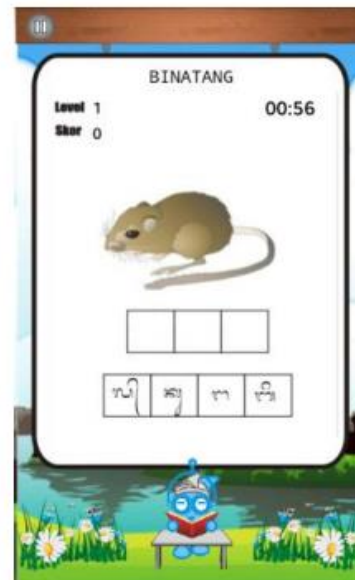


Figure 8 game compiling characters based on pictures

A number of revitalization efforts have been made, but of course, it is not enough to accommodate all Indonesian characters. Revitalization efforts require the synergy of the Indonesian people, both the government, the private sector, educational institutions, and the community itself.

Conclusion

The formation of culture is the result of the interaction process between humans and the environment as well as humans and other humans. The form of cultural reproduction also has an impact on the language system which is expected to be well disseminated as learning material and as a form of cultural heritage.

The heritage of Indonesian characters is very diverse with the plurality of tribes in Indonesia. With the support of the development of information technology, the revitalization of Indonesian script culture is very possible to be popularized again.

In the history of Indonesian literacy, script developed since the kingdom. A number of kingdoms use letters as a form of formal communication between the kingdom and the people and between the kingdom and other kingdoms. Kawi literacy is one of the dominant literacy used at that time.

However, the phenomenon of the revitalization of the Indonesian script is still local. Local in this case is because a number of studies that have translated ancient manuscripts into digital form are still in the script where the researchers live.

References

- Cahyadi, I. P. E. D., Sunarya, I. M. G., & Wirawan, I. M. A. (2016). Pengembangan Game Edukasi “Aksara Bali” Berbasis Android. *Kumpulan Artikel Mahasiswa Pendidikan Teknik Informatika*, 5(2).
- Hidayat, A., & Shofa, R. N. (2016). Self Organizing Maps (SOM) suatu metode untuk pengenalan aksara jawa. *Jurnal Siliwangi Seri Sains Dan Teknologi*, 2(1).
- Muchtar, K., Koswara, I., & Setiawan, A. (2016). Komunikasi antar budaya dalam perspektif antropologi. *Jurnal Manajemen Komunikasi*, 1(1).
- Panjaitan, A. P., Darmawan, A., Purba, I. R., Rachmad, Y., & Simanjuntak, R. (2014). *Korelasi Kebudayaan dan Pendidikan: Membangun Pendidikan Berbasis Budaya Lokal*. Yayasan Pustaka Obor Indonesia.
- Prihantini, A. (2015). *Master Bahasa Indonesia: Panduan Tata Bahasa Indonesia Terlengkap*. Bentang B First.
- Putra, A. S., & Muhimmah. (2020). Pendeteksian Huruf Jawa pada Naskah Menggunakan Binerisasi Otsu. *Automata*, 1(2).
- Rai, I. B. (2013). Perkembangan Pasang Aksara Bali dalam Upaya Pelestarian Budaya Bali. *Jurnal IKA*, 11(2), 16–26.
- Retnoningsih, D. A. (2019). Pembentukan Tata Krama Siswa Sekolah Dasar melalui revitalisasi pembiasaan tembang dolanan. *Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 8(2), 61–70.
- Rosana, E. (2017). Dinamisasi kebudayaan dalam realitas sosial. *Jurnal Studi Lintas Agama*, 12(1), 16–30.
- Tajuddin, M., Husain, & Jaya, N. N. (2017). Preservasi Naskah Kuno Sasak Lombok Berbasis Digital dan Website. *Jurnal Teknologi Ifnromasi Dan Ilmu Komputer*, 5(4), 445–454.
- Yanti, P. G., Zabadi, F., & Rahman, F. (2016). *Bahasa Indonesia: Konsep dasar dan penerapan*. Gramedia.