Transformation Tradition: Incorporating Technology and Local Culture in Sundanese Script

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Transformation Tradition: 
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Culture in Sundanese Script

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Abstract. The Sundanese script has a philosophy of life for the Sundanese people, this script is a system for writing Sundanese. The traditional writing system in Sundanese began in the 14th century to the 19th century. This article will discuss the role of digital technology in creating the Sundanese script, using ATUMICS method, ATUMICS is an acronym for Artifact, Technique, Utility, Material, Icon, Concept and Shape. The ATUMICS approach is carried out to review the transformation of tradition in the Sundanese script. The ancient Sundanese script and the modern Sundanese script will be compared with ATUMICS approach. the results of this study were to determine the change or transformation of tradition in the Sundanese script. Transforming tradition is a way to create a new product derived from traditions, with adjustments to the six elements contained in the ATUMICS theory. Transformation of tradition is an effort to maintain tradition in the modern era which is adjusted to the times.

Keywords: incorporating, technology, local culture, sundanesse script

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Introduction

The Sundanese script is the result of the initiative and creation of Sundanese people, which is contained in several texts. The shape of the letters follows the shape of the final Pallava letter. The political hegemony of the Mataram Islamic kingdom into the Sundanese region made the ancient Sundanese script replaced with Javanese Cacarakan script, hence it was known as Sundanese Carakan. The procedure for writing is adapted to the language used, namely Sundanese. Besides the ancient Sundanese letters in
addition to recording the ancient Sundanese language, this letter has also been used to write Arabic and Javanese (Cirebon) related to the spread of Islam in the Sundanese region (Baidillah et al.). In the Sundanese region, the letters that have ever developed are Ancient Sundanese, Javanese Sundanese or Carakan, Arabic Pegon and Latin (Maharsi). In addition to the current Latin letters in Sundanese, there is also the development of the Sundanese Script ka ga nga or also known as modern Sundanese Script or baku Sundanese Script or Unicode Sundanese Script. Anatomy of the Unicode Sundanese Script refers to the Old Sundanese letters with a slight adjustment to the form. According to Hole (1877), the Ancient Sundanese Script had the basic type of the Advanced Pallava script. These scripts have similarities with the Tibetan and Punjab script models (Baidillah et al.). The appearance of the Carakan Sundanese letters because of the politics of the kingdom of Mataram. Although the political influence of the Mataram kingdom ended in the Sunda region, the language and letters used by the Sundanese people at that time remained.

Javanese is used as the official language of government and Javanese letters are used in official letters which are adapted to the sounds in Sundanese to produce a Sundanese-Javanese combination called Javanese Carakan (Maharsi). According to Holle in a book titled Tabel van Oud en Nieuw Indische Alphabeten, it is said that the modern script of the Sundanese Tatars and is no more than about 1500 years old. From this statement, it can be interpreted that the ancient Sundanese script, the script used on these inscriptions is the result of the creativity or creation of the Sundanese mThe Sundanese script is an orthographic system created by the people of West Java that includes scripts and literacy systems for writing Sundanese (Mulyanto). The Sundanese script is a manifestation of Sundanese artefacts that contain many symbols and values. The Sundanese script is classified into a traditional script or known as Indigenous Script. In 1997 the Sundanese Script congress was held in Bandung to discuss Sundanese developments and culture including Sundanese letters, and at the congress, the naming of Sundanese letters became Sundanese characters without any mention of ancient and standard words. On May 26, 2006, at Padjadjaran University, a seminar on Standardization of Sundanese Script for Unicode was held. One aim is to review and determine the form and number of Sundanese characters to be included in the Unicode standard (Baidillah et al.).

The registration of Sundanese script to Unicode aims to have the use of a Sundanese script to have standards throughout the world, such as the Hangul Korean script, Arabic script in the Middle East region, Katagana Hiragana Japan. The standardization includes the form of letters including the degree of slope of the letters. So that many fonts will be produced as variations of the type of font used, whether serif, sans serif or decorative. The Sundanese script began to be reintroduced. A large number of Sundanese-language texts and Sundanese languages stored in libraries in several countries makes one of the reasons Sundanese script is registered with the Unicode organization. There are three important issues for artists and designers when they work with traditional goods, namely preserving, revitalizing, and transforming (Nugraha).
Methods

To preserve, revitalize and transform Sundanese script, the traditional transformation method is used. This method was proposed by Adhi Nugraha based on the results of his dissertation research at Aalto University in Finland. This method transforms tradition, this method is called the ATUMICS method. ATUMICS is an acronym for Artifact, Technique, Utility, Material, Icon, Concept and Shape. The ATUMICS method is a method that consists of basic elements attached to artifacts. While the Artifact itself is an object or center which becomes the object of transformation of tradition. The method results from the analysis of various artifact conceptions and product designs, as taught in most art and design schools and proposed by many design scholars (Nugraha). This method is used to see the comparison of the transformation of the tradition of the Sundanese script, how to changes that occur from the Old Sundanese Script with the Sundanese Unicode Script. The purpose of this method is to maintain tradition. The method can be seen in Figure 1 below.

![ATUMICS Methods Diagram](image)

Fig. 1 ATUMICS METHODS

Result and Discussion

The Sundanese script is divided into two namely Ancient Sundanese Script and Unicode Sundanese Script. The Ancient Sundanese script has a basic type of Advanced Pallava script, while the Unicode standard Sundanese script has the same form as the ancient Sundanese script with a slight simplification. The forms of the alphabet have beauty. Aesthetics or beauty is part of the Sundanese philosophy. The beauty for Sundanese people is that they rely on their ideas, activities and artefacts on the nature
around them. The beauty of Sundanese nature is a hipogram for the creation of art. But the artwork is always functional, in addition to the value of its direct beauty (Isnendes). The Sundanese script has a philosophy of life for the Sundanese people, it is based on cosmology found in the Sunda region, besides having a Sundanese script form it has meaning, one of the meanings contained in Sundanese script is aesthetics. Aesthetics also known beauty, in Sundanese society, the meanings aesthetics represented as sae, or endah. Beauty as an ontological reality in Sundanese culture is beauty which is visual (nonverbal) which is 'beautiful' (sae), with order (order) which is identical to beauty (Sunarya). In Sundanese culture, aesthetics is always associated with momentum or its existence in a particular time context in Indonesia. Sundanese aesthetics are based on the topographic form of the West Java region which has the contours of hills, mountains, villages or villages, forests, rivers and the sea. Forms beautiful contrast and color. Color is one of the aesthetic or beauty elements in visual culture (Jamaludin).

The development of technology made changes in the shape of the Sundanese script. The ancient Sundanese script is called Unicode Sundanese script. The standard Sundanese script is an adapted form of the ancient Sundanese script for contemporary Sundanese writing. The application of the ATUMICS concept can be seen below.

| Artefak | The Ancient Sundanese Script | The Modern Sundanese Script |
|---------|------------------------------|-----------------------------|
| Techniques | The procedure for manual writing with a simple tool. The visual variation depends on the writing style of the author | The procedure for writing using digital media in the form of digital letters. Visual variations can be adjusted according to the desires of the letter designer. |
| Utility | The Sundanese script as communication and information media. | The Sundanese script as communication and information media. |
| Material | Writing media and tools such as a stone, metal, leaf, paper, chisel, hammer, knife, pen, ink. | Media and writing tools use computers, with some supporting materials such as paper and digital media. |
| Icon | Symbols and meanings of the Sundanese script along with visual variations on the script | Symbols and meanings of the Sundanese script along with visual variations on the script |
| Concept | The embodiment of the Sundanese philosophy of life and expression in Sundanese aesthetics. | The embodiment of the Sundanese philosophy of life and expression in Sundanese aesthetics. |
| Shape | The letterforms, basic shapes, anatomy, grid system and letter systems | The letterforms, basic shapes, anatomy, grid system and letter systems |

Source: author

From the table above, it can be seen that the technique has changed. In the ancient Sundanese script, the media and stationery used still used simple equipment. Visual variation in letters depends on the writing style of the author. In the modern Sundanese
The procedure for writing uses digital techniques applied to conventional media, the letters are installed directly on the hardware.

**Fig. 2** Ancient Sundanese Script on the Lontar

![Ancient Sundanese Script on the Lontar](image1)

**Fig. 3** Sundanese Script on Keyboard
* (Nurwansah "Driver Keyboard")

![Sundanese Script on Keyboard](image2)

**Fig. 4** Sundanese Script Applied
* (Nurwansah "Font Aksara Sunda Unicode Versi 2013")

![Sundanese Script Applied](image3)
Figure 2 shows the writing on ejection media with a scalpel knife. Figure 3 shows the Sundanese script placed on the virtual keyboard to write Sundanese characters on conventional media. Figure 4 shows the results of typing on a computer. The shape which is an ancient Sundanese and standard Sundanese script form can be seen below.

\[
\begin{array}{ccc}
ka &=& ꜣ\\
ga &=& Ꜣ\\
nga &=& ꜛ\\
ca &=& ꜽ\\
ja &=& ꜝ\\
nya &=& ꜟ Ꜣ Ꜥ Ꜧ\\
ta &=& ꜔\\
da &=& ꜝ\\
na &=& ꜠\\
pa &=& ꜔\\
ba &=& ꜝ Ꜣ Ꜥ \phantom{\text{H}}\\
ma &=& ꜠\\
ya &=& ꜔\\
ra &=& ꜠\\
la &=& ꜠\\
wa &=& Ꜥ\\
sa &=& ꜠\\
ha &=& ꜠\\
\end{array}
\]

Fig. 5 Shape on Ancient Sundanese Script
(Baidillah et al.)

\[
\begin{array}{ccc}
ka &=& ꜜ\\
ga &=& Ꜣ\\
nga &=& ꜛ\\
ca &=& ꜽ\\
ja &=& ꜝ\\
nya &=& ꜜ Ꜣ Ꜥ Ꜧ\\
ta &=& ꜔\\
da &=& ꜝ\\
na &=& ꜠\\
pa &=& ꜔\\
ba &=& ꜝ Ꜣ Ꜥ \phantom{\text{H}}\\
ma &=& ꜠\\
ya &=& ꜔\\
ra &=& ꜠\\
la &=& ꜠\\
wa &=& Ꜥ\\
sa &=& ꜠\\
ha &=& ꜠\\
\end{array}
\]

Fig. 6 Shape on Modern Sundanese Script
(Baidillah et al.)

Figure 5 shows the symbol of the sounds of Cartagena from the ancient Sundanese script, while Figure 6 shows the symbols of the sounds of Cartagena from the standard Sundanese script. In the two pictures, it can be seen that the shape adjustment from the ancient Sundanese script became a simpler form. The material used in the ancient Sundanese script and the standard Sundanese script changed. According to Holle, the media used to write using scripts in the past were copper stones, palm leaves, palm
leaves, bamboo, daloewang, native cotton (boëh), Chinese and European paper. Whereas for now, the material used varies from various types of paper, digital media, ambient media and other media. In this article, changes occur in technique, material and shape.

**Conclusion**

The development of the Sundanese script today is inseparable from the efforts of experts and creative people in exploring and reviving the Sundanese script in the Sundanese community The Sundanese script is the work and initiative of the Sundanese people, which has been brought back at this time. The written tradition of writing in Sundanese society can be seen in the era of the Sunda and Galuh kingdoms that were discovered in the 8th century and continued until the 16th century. Krom (1915) argues that according to available evidence, the oldest Sundanese manuscripts date from the 14th century, and since then Sundanese manuscripts continued to be written and transcribed until the end of the 20th century (Ikram). Transforming tradition is a way to create a new product derived from traditions, with adjustments to the six elements contained in the ATUMICS theory. Transformation of tradition is an effort to maintain tradition in the modern era which is adjusted to the times.

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