

Batak Toba Script, Preserving Its Authenticity in Globalization Stream

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ABSTRACT

This paper exposes the existence of Batak Toba's ancient script and the shift of its authenticity values during the rapid development of technology. The analysis adapts cultural and historical approaches to be exposed qualitatively by observing several transcripts virtually. Technology is viewed from two perspectives: a media that brings this ancient heritage back to be part of modern culture; and the means that lead this ancient writing to lose its authenticity. Several former documents from field and library research are compared, especially the use of several computer software, which has been developed to enable users to write in Batak Toba script through transliteration. The result reveals that efforts to conserve this cultural heritage should be accompanied by careful linguistic assistance so that the script and its writing convention would be maintained.

Keywords: Indigenous culture, Batak Toba, script, conservation

Introduction

Written language takes an important role in cultural existence as the main source of history traces which give information about the existing tribes in the whole continents. Batak Toba tribe exists with its cultural substances, including traditions, customs, and language. In this study, the main concern is to build up a new realization from what has been done in preserving the indigenous heritage of Batak Toba script. Batak is the third biggest tribe in Indonesia according to the Central Bureau of Statistics (BPS) in 2010, with the major distribution in North Sumatera, Indonesia. Based on the tribal deployment from time to time, the Bataks are classified as follows: Batak Toba tribe covers Samosir island, Toba Holbung, Humbang and Silindung (North Tapanuli Region); Batak Simalungun covers the eastern part of Lake Toba; Batak Angkola-Mandailing lives in southern part; Batak Jau or Batak Pesisir lives in west side coast; Batak Pakpak lives in the north-west highland; and Batak Karo covers the northern high land (Malau, 1994).

Each of the Batak tribes has its structure in written and spoken language, even though there are similarities and differences in accent, pronunciation, lexis, and alphabet characters. In this study, the writer focuses on the authenticity of the Batak scripts viewed from some former research and its recent development in which several efforts have been done to lift its existence amid rapid change in technology, society, and culture.

The existence of the Batak script nowadays is assumed as an antique among fashionable stuff since its use is regarded unnecessary and less significant in academic skills. In some regions in North Sumatera, practitioners in culture and anthropology attempt to bring up the script by naming streets and government buildings in this writing. These efforts have given a slight significance in its progress toward acceptance in society, despite practitioners' admiration for cultural values. However, studies on Batak script have shown great interest in the last decade, mainly in philology for collecting original manuscripts, computer science for developing computer-based applications for scriptwriting and transliteration, and linguistic studies which deal a lot with the writing systems and varieties among sub-classes of Batak tribes.

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Material and Methods

Undoubtedly, studies on culture require multidisciplinary knowledge about the subject of the research to come up with the right conclusions about the problems. One may perceive a substantial matter but lack the other. About this study, the knowledge about the writing system ought to be accompanied by the historical approach about the writing itself, especially it has passed a series of chronological processes in which acculturation could not be eluded and eventually scraped the early conception. Pickering viewed history as both topic and tool, how cultures become precious resources from our past, and by these historical experiences, a human could represent conceptual thinking for his future (Pickering, 2008). This frame of mind would be set out as the methodological basis to consider: to what extent the former and present research influenced the authenticity of the Batak Toba script. Through the stages in library research and thorough observation, the output was expected to represent a qualitative description of the problem.

Due to the scarcity of original manuscripts, this study counted on some virtual displays of several ancient manuscripts provided by the British Library in digital collections. Another important piece of historical literature is the four Gospels from Holy Bible, translated by Van der Tuuk which is rich in the lexicon. From this early period, the study moves to the present research focusing on the use of technology to bring forth the ancient scripts to be part of global writings. Here, the observation to some computer software engaged linguistic examination to scrutinize the symbols (consistency and deviations) and the writing system, especially the one which carried transliteration process.

Results and Discussion




It is necessary to figure out that plenty of manuscripts of Batak scripts is preserved now in some museums in Europe: für Völkerkunde Museum in Berlin, Tropenmuseum Amsterdam, National Museum van Wereldculturen, and Lindenmuseum in Stuttgart, Germany (Papenhuyzen, 2010). British Library exhibits several collections digitally by giving the visitors access to enlarge the image with high resolution to get the details of the writing and the medium it is written on. Meanwhile, several collections kept in Indonesia are found in Jakarta National Library. These manuscripts were mostly written on folded tree bark (*traditionally called Pustaka Laklak*) and bamboo skin that support high resistance over the weather to keep it from fading (Teygeler, 1993). Some recommended samples are provided by the British Library website, which provides manuscripts in high-resolution images for detailed observation. Therefore, the script used in this paper is incomparable with its original figure due to the absence of the original literature containing Batak writings.


The script


Among researchers in Batak script, Uli Kozok is considered as one of the most remarkable and contributive with his detailed work on the investigation of parchments containing Batak ancient scripts. As a philologist, researcher, author, and explorer, this German linguist has dedicated his life investigating what is termed as *Habatahon*, the cultural substances in Batak tribes. His contribution in compiling data from Batak land regions to the local government as well as the Indonesian government must be appreciated especially in preserving the local cultural heritage. Regarding his study, he exposed some variants of Batak Toba writing he found from several works, including Tuuk's convention (1971) that was published in Amsterdam, German's Zending (comparing Angkola – Mandailing letter 'ma' and 'a' from Toba), and Landsdrukkerij's version (some curved shapes turned into straight shapes) (Kozok, 2009).

Another important work on the Batak Toba script was written by Tuuk, *Tobasche Spraakunst* (1867), *A Grammar of Toba-Batak* (Tuuk, 1867) translated by Miss Jeune Scott-Kemball and was published in 1971. Nineteen symbols are pronounced in syllabic form, called as *ina ni surat* and six diacritical signs, which is called *anak ni surat*. The following font is retrieved from <https://ulikozok.com/aksara-batak/eula/>. Some characters are different from Tuuk's characters.

Table 1: Ina ni Surat from Van der Tuuk's *a Grammar of Toba-Batak*

No.	Form	Name	Sound and transcription
1		a	/a/
2	h	ha	/ha/
3		ma	/ma/
4	n	na	/na/
5	r	ra	/ra/
6	t	ta	/ta/
7	s	sa	/sa/
8	p	pa	/pa/
9	l	la	/la/
10	g	ga	/ga/
11	j	dja	/Zα/ less sibilant;
12	D	da	/d/
13	<	nga	/Nα/
14	B	ba	/βα/
15	W	wa	/ωα/
16	Y	ya	/φα/
17		nija	/θ/ ινχλυδεδ ιν τηε αλπηαβετ, βυτ νοτ υσεδ ιν πραχτιχε.
18	I	I	the vowel /i/ when it is a separate syllable.
19	U	u	the vowel /u/ when it is a separate syllable.

Based on the writer's previous research focusing on the position of vowels in Batak Toba script, the main characteristic of Batak writing is that Batak alphabet system is known as syllabic form. Three vowel letters stand independently, **a** /a/, **l**/i/ and **U**/u/; while others are consonants, which depend on the vowel proceeds it, that is vowel /a/ (Lubis, 2005). This research was done through the interview (with Ompu Monang Napitupulu, Batak Toba native and activist) and library research. From the research, it was found that Batak Toba script, which was used in old manuscripts consist of sixteen characters, the syllables that stand independently. This referred to Malau in which the early research denoted the following points: (1) the absence of syllable **w** /wa/, /θα/, and **y**  /ja/ since these syllables are hardly found in Toba dialect. (2) The absence of syllable /ka/. Instead, syllable **h** /ha/ is used to replace /ka/. (3) There are other syllables such as /ca/, /fa/, /qa/, /va/ and /xa/ which do not exist in Batak Toba, hence do not have their symbols (Malau, 1994). In addition, writing system is not apart from sound system since the writing remains silent unless someone utters it. Therefore, the italicized brackets refer to the phoneme expressed through the alphabet characters.

Besides the absence of several symbols, there are also differences in character shapes despite the similarity found in some manuscripts. Letter /a/ is written as **a** based on Kozok's font, and 

According to Tuuk's symbols. Nababan used this symbol which is close with Malau used in his book (Nababan, 1981). Several assumptions might be taken from this case: whether the copied letters derived from manuscripts written in the outer part of Toba region; availability of original manuscripts in good condition; supporting technology to digitize these ancient manuscripts for further research. It is obliged to view the original piece of the manuscript to see the authentic script with consideration that the manuscripts can be assured from the Toba region.



Figure 1. Letter /a/ retrieved from *Pustaha* [[http://www.bl.uk/manuscripts/Viewer.aspx?ref=add_ms_11546_f001r.](http://www.bl.uk/manuscripts/Viewer.aspx?ref=add_ms_11546_f001r)]

Writing system

Based on the writings adapted from the *Pustaha* (the original manuscripts containing black magic, witch crafting practice, astrology and medical prescriptions), some diacritical signs which change the vowel sound /a/ are found, namely *anak ni surat*. These signs are termed as follow: (1) *haluaan*, a circle on the right side of *ina ni surat* to change /a/ into /i/; (2) *haborotan*, a sign (>) written on lower right of *induk surat* to change /a/ into /u/; (3) *hatadingan*, a short line on the upper left of the *ina ni surat* to change /a/ into /e/; (4) *sikora*, a cross on the right side of *ina ni surat*, to change /a/ into /o/; (5) *hamisaran*, a short line on the upper right of *ina ni surat*, which adds /N/ ending to the syllable; (6) *pangolat*, an oblique line on the right side *ina ni surat* to cancel the /a/ sound, hence leaves the consonant (stop or continuant) (Lubis, 2005).

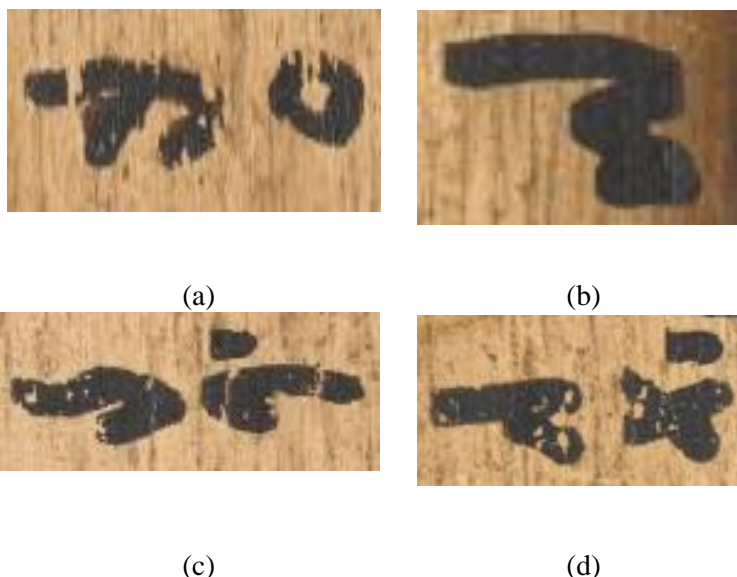


Figure 2. (a) /ha/ converted to /hi/; (b) /ga/ converted to /gu/; (c) *a-le*, /la/ converted to /le/; (d) /da/ converted to /do/ (http://www.bl.uk/manuscripts/Viewer.aspx?ref=add_ms_4726_f005r)

The scripting process would combine the *ina ni surat* (main characters) with *anak ni surat* (diacritical signs) depending on the syllable division. The combination of more than one diacritical signs

might occur as in *engkel* /εκ∇κελ/ (laugh), consist of two syllables eng – kel. Since letter ‘e’ does not have its symbol, then letter ‘a’ is used by adding the diacritical sign *hatadingan* on it **ae**, and to add the nasal /N/, diacritical sign *hamisaran* is added, /εN/. For closed syllable –kel, symbol **h** is used to replace /ka/ and *hatadingan* is put to form /κε/ **ke**. Then symbol **l** /λα/ is given *pangolat* to cancel the vowel /a/, **l** /λ/. This complexity is followed by placing the vowel sign /ε/ *hatadingan* into the second consonant sign **klE**. Thus, the word *engkel* is written as **ae^ klE**. This is the system adopted from the manuscripts and should be taken carefully for someone who wants to learn it.

In splitting the syllables, a non-native might make mistakes due to his linguistic competence toward the language. For example, in the word *marina* (the state of having a mother), it must be written as **mr** **l n** /μαρ-ι-να/, not **m r i n** /μα-ρι-να/. This refers to the base form *ina* (woman), the two syllables *i-na* is written as **l n**.

Efforts in preservation

To maintain the authenticity of this ancient writing, several research involving various approaches were conducted, including social, cultural, educational, and technological approaches. Teygeler observed several manuscripts materials used by *datu* (spiritual leader) for writing, for instance the bark matter taken from *Aquilaria* tree and the ingredients from which the ink was made to scribe on the tree bark (Teygeler, 1993). Direct observation to the place where this writing originated shows that there is an effort of revitalization to preserve this ancient heritage (Kamariotou et al., 2021). However, commercial purposes, especially tourist attractions and souvenir production, might influence this effort. In one side, local Batak Toba residents inherit this writing to the coming generations by reproducing the scripts using the precursory medium. On the other hand, its exoticism has a special attraction that turns it to have economic value. The scripts can be found on the souvenirs and merchandise on which the craftsmen write, with before the financial income. When the process of transcribing is ruled out, it might result in misleading transcription.

From a social perspective, the preservation of traditions and cultures ought to involve layers of practitioners, including local authorities, government, academicians or researchers, and activists to figure out possible actions of securing our ancestor’s focal point. One of the biggest achievements was held in a conference, dated on June 17, 1988, resulting in an agreement to nationalize Batak writing as depicted in the following points: a) The writing itself is called *Surat Pustaka*; (b) There are 29 signs as main characters, collected from the six sub-classes of Batak tribes; (c) There are 9 diacritical signs to modify vowel sounds, add nasal sound and cancel any vowels; (d) punctuations; (e) numbers (Malau, 1994). Regarding the authenticity of Batak Toba script (in which some of the syllables do not exist in Toba dialect), there should be clear evidence that the character shapes have passed stages of evaluation thoroughly by Batak Toba linguists, supported by enhancement through existing technology. Interesting research on how computer engineering adopted ancient scripts through manuscripts recognition system was proposed (Pasaribu & Hasugian, 2016) and would be a satisfying approach as the maintainer, to be the reference basis of determining the original shapes of the scripts.

Another effort was to engage this writing in the curriculum to be adopted by the local school in North Sumatera as an extracurricular subject. Unfortunately, this was not prolonged and replaced by other subjects that were considered more updated.

With hindsight, academicians’ attempts in the conservation of this writing have reached a vast development in the last decades. The spread of the original manuscripts in some European and American museums and libraries is one constraint when there is no access provided for observation, and even though it is on display, visitors would not be permitted to touch. A big opportunity emerged when technology in digitalization has taken roles in archiving ancient documents

(such as parchments and old manuscripts). This is a breakthrough for research in philology, sociolinguistics and other social studies in documentation and data collection. The notion of conservation and promotion through digital museums is developed through virtual exhibition (Kamariotou et al., 2021) as what has been done by British Library, which provides access for observation of manuscripts. This is considered a very thoughtful contribution to the academic research. The concept of virtual museum proves to be very significant despite the virtual displays of the manuscripts, as the major source of data in research. This also can be used to compare the original writing from the existing writing used nowadays.

Another attempt of conservation is the development of transliteration machines, which convert the Latin writing into Batak script and vice versa. At the same time, the development of computer font creators gives chance for scholars to introduce the existence of Batak Toba writing. These digital products have been developed in the last decade for both Windows-based and android-based applications. There are at least six android-based transliteration applications including font providers that convert latin writing to Batak Toba script: *Aksara Batak* by *JhoIntegrity*, *Aksara Batak* by *Bang Kutu Gondrong*, *Belajar Aksara Batak Toba – Mato* by *YCL Project*, *Batak Keyboard Plugin* by *Honso*, *Aksara* by *Kampoeng Stoedio*, and *Easy Typing Batak Keyboard Fonts and Themes* by *Dev Inc Keyboard*. These great works prove that there are still significant attention by scholars to preserve the existence of Batak Toba original script. Some bloggers also provide links for transliteration machines to convert Latin to Batak Toba writing, including *Transtoba2: online Transliteration* by Uli Kozok, *Keyboard Batak Toba Unicode for Windows v.1*, and a Facebook group, *Hata Batak Toba*.

Apart from personal aims by the developers, it is necessary to review the output of their works linguistically for the sake of the writing authenticity to such an extent that users would get comprehension and avoid misleading output, especially the users who have no background knowledge on Batak Toba writing system.

Having conducted several trials from the applications and font or keyboard providers, the writer comes to the conclusion that some applications have set up the procedures properly with high accuracy in their output. However, some applications experience faults in their output, especially positioning diacritical signs in closed syllables and syllable divisions. In closed syllable cases, diacritical signs for vowel canceller were supposed to come after the diacritical signs of vowel modifier of the first syllable (as shown in 3.b). In Batak Toba font keyboard applications, it is suggested that illustrations on how the keyboard work be accompanied as the manual for the users, as well as notes on how the syllabic writing of Batak Toba should be written, accordingly to the syllable division and word-formation by using the main characters and diacritical signs. One thing to consider is to provide external links on the main page of these applications, which direct the users to another webpage that gives historical and educational background linguistically on Batak Toba script. To avoid deviations from the results of these applications, linguistic assistance should be accompanied and noticed by the developers and users that the authenticity of the writing and its linguistic conventions are well-conserved.

Conclusion

The existence of Batak Toba writing is evidence of a high-civilized cultural tribe, as other tribes in Indonesia are. The challenge of preserving this endangered writing stems from the lack of consciousness that Batak Toba script is a historic property to be inherited to the coming generations. Through the rapid development of technology, we could strive to trace the existence of ancient manuscripts containing Batak Toba scripts, conduct digital rejuvenation and bring them back among society through digital engineering and socializing, from regionally upto globally, as it was found in application providers. Complexity in word formation through a combination of main characters and diacritical signs should be maintained. Therefore, it is suggested that application developers provide linguistic background on the Batak Toba writing system as the basic learning before users apply them, or at least supply a trusted link that provides the writing

convention. It is expected that these efforts would turn the applications more educative and informative as well, and eventually maintain its authenticity in the rapid change of technology.

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