



The Simalungun Script in the Development of Cultural Heritage and Local Wisdom Learning Plans

Ramlan Damanik^{1*}, Warisman Sinaga², Herlina³, Asriaty R. Purba⁴, Jekmen Sinulingga⁵

¹²³⁴⁵Prodi Sastra Batak, Universitas Sumatera Utara, Sumatera Utara, Indonesia

*E-mail : ramlan1@usu.ac.id

ABSTRACT

The Simalungun script is one of the intangible cultural heritages of the Simalungun Batak community, possessing significant historical, linguistic, and symbolic value. However, modern developments and the dominance of the Latin alphabet have led to a significant decline in its usage. This article aims to examine the role of the Simalungun script in cultural heritage development through a community-based preservation and revitalization approach. Utilizing Laurajane Smith's (2006) theory of heritage preservation and an ecolinguistic perspective, this study analyzes strategies for strengthening the Simalungun script through education, digitalization, and integration into creative media. The research employs a descriptive method with a qualitative approach. The findings reveal that the Simalungun script can serve as a contextual and educational tool for cultural transformation and identity formation among younger generations. School involvement programs, the development of local curriculum, and the implementation of technology-based initiatives using the script have proven effective in raising awareness and enhancing cultural literacy skills. The study also identifies that the Simalungun script consists of 19 *ina ni surat* (main letters): a, ha/ka, ba, pa, na, wa, ga, ja, da, ra, ma, ta, sa, ya, nga, la, nya, i, and u. These characters are typically curved and angular, and are written from left to right on media such as tree bark, bamboo, or bone. Additionally, eight *anak ni surat* (derived letters) are recognized: *haluan*, *haboritan*, *hatalingan*, *sihorlu*, *hamisaran*, *hatulungan*, *hajoringan*, and *panongon*. Therefore, preserving the Simalungun script is not merely an act of conservation, but a dynamic strategy for the development of cultural heritage that is adaptive to the times.

Keywords: Simalungun script, cultural heritage, local wisdom, lessom plan

Aksara Simalungun Dalam Pengembangan Warisan Budaya dan Rencana Pembelajaran Muatan Lokal

ABSTRAK

Aksara Simalungun merupakan salah satu warisan budaya takbenda masyarakat Batak Simalungun yang memiliki nilai historis, linguistik, dan simbolik tinggi. Namun demikian, perkembangan modern dan dominasi aksara Latin menyebabkan penurunan signifikan dalam penggunaan aksara Simalungun. Artikel ini bertujuan untuk mengkaji peran aksara Simalungun dalam pengembangan warisan budaya melalui pendekatan pelestarian dan revitalisasi berbasis komunitas. Melalui teori pelestarian budaya dan pendekatan ekolinguistik, dianalisis strategi penguatan aksara Simalungun melalui pendidikan, digitalisasi, dan integrasi dalam media kreatif. Metode yang digunakan dalam penelitian ini adalah metode deskriptif dengan pendekatan kualitatif. Hasil kajian menunjukkan bahwa aksara Simalungun dapat dijadikan alat transformasi budaya yang kontekstual dan edukatif dalam membentuk identitas kultural generasi muda. Program pelibatan sekolah, penyusunan kurikulum lokal, serta pengembangan teknologi berbasis aksara lokal terbukti efektif dalam meningkatkan kesadaran dan keterampilan literasi budaya. Hasil penelitian ini ditemukan bahwa aksara Simalungun mempunyai 19 *ina ni surat* atau induk surat antara lain: a, ha/ka, ba, pa, na, wa, ga, ja, da, ra, ma, ta, sa, ya, nga, la, nya, i, dan u. Induk surat bentuknya melengkung dan bersegi dan teknik penulisannya dimulai dari arah kiri ke kanan. Lazimnya ketika itu media penulisannya dari kulit kayu, bambu, tulang. Di samping *ina ni surat* dijumpai juga 8 buah *anak ni surat* atau anak surat antara lain *haluan*, *haboritan*, *hatalingan*, *sihorlu*, *hamisaran*, *hatulungan*, *hajoringan*, dan *panongon*. Oleh karena itu, pelestarian aksara Simalungun bukan hanya bentuk konservasi, tetapi juga strategi dinamis dalam pengembangan warisan budaya yang adaptif terhadap zaman.

Kata Kunci: aksara Simalungun, warisan budaya, pembelajaran muatan lokal

Submitted
31/05/2025

Accepted
4/06/2025

Published
4/06/2025

Citation	Damanik, R., Sinaga, W., Herlina, H., Purba, A. R., & Sinulingga, J. (2025). The Simalungun Script in the Development of Cultural Heritage and Local Wisdom Learning Plans. <i>Jurnal Pembelajaran Bahasa dan Sastra, Volume 4, Nomor 3, Mei 2025</i> , 382-391. DOI: https://doi.org/10.55909/jpbs.v4i3.745
----------	---

Publisher
Raja Zulkarnain Education Foundation



INTRODUCTION

North Sumatra Province is renowned as one of the regions in Indonesia that is rich in ethnic and cultural diversity. Among the ethnic groups inhabiting this region, the Batak tribe is one of the most prominent and has a very diverse cultural heritage. The Batak ethnic group itself is not homogeneous but instead consists of several sub-ethnic groups, each with unique and distinct cultural characteristics. These sub-ethnic groups include the Angkola-Mandailing Batak, Pakpak-Dairi Batak, Toba Batak, Karo Batak, and Simalungun Batak. Each sub-ethnic group has a strong cultural identity that is passed down from generation to generation, encompassing customs, kinship systems, traditional ceremonies, and other artistic and cultural expressions.

The customs of each sub-ethnic group serve as guidelines for the social life of the community. In addition, various traditional ceremonies carried out by each Batak group have deep philosophical meanings, which not only serve as rituals but also as a form of representation of the moral and spiritual values of their society. Regional dance and song arts are also important mediums for expressing cultural identity, often performed in traditional celebrations and religious events.

No less important, each Batak sub-ethnic group has a distinct traditional language and script, which are integral parts of their cultural identity. Local scripts, such as the Batak script, including those used by the Simalungun people, are a literary heritage that shows the level of civilization and intellectualism of the Batak ancestors. The existence of this script is clear evidence that the Batak culture has a written communication system that has developed over a long period (Nasoichah, 2015).

Each Batak sub-ethnic group in North Sumatra possesses a unique cultural wealth, one aspect of which is reflected in the variety of languages and scripts they use. The language owned by each sub-ethnic group serves not only as a means of

communication but also as a reflection of cultural values, local knowledge, and social systems that are passed down from generation to generation. The presence of script in this language system indicates that these regional languages have a high degree of cultural significance, as stated by Rahayu (2020). In other words, language and script are symbols of the intellectuality and cultural identity of each Batak sub-ethnic community, such as the Toba Batak, Simalungun, Karo, Pakpak-Dairi, and Angkola-Mandailing.

One important form of written communication used by people in the past was regional script. This script developed according to the characteristics of each region in Indonesia and became part of the traditional literacy system. Almost all regional scripts in Indonesia have roots in the Pallawa script, which originated from South India. In addition, other scripts originate from different writing traditions, such as the Jawi, Pegon, and Bilangbilang scripts, which are rooted in the Arabic alphabet, as well as the Nagari script from North India. According to Kozok (in Collins, 2009), both the Pallawa and Nagari scripts are derived from the Brahmi script, the parent of almost all scripts in South and Southeast Asia.

Specifically, for the archipelago region, the term "Nusantara script" refers to scripts that developed in Indonesia and the Philippines. In the Philippines, most regional scripts are derived from the Kawi script, also known as the Old Javanese script. This confirms that the traditional Nusantara script system has a long and complex history that is an important part of Asia's cultural heritage.

The script is one of the most important achievements in human civilization, serving as a means of communication that not only conveys information but also acts as a medium for recording and passing on knowledge. With the existence of script, humans can understand the world around them without having to experience certain events directly. Moreover, the script allows the current generation to know about past events that occurred

hundreds or even thousands of years ago. Therefore, script has an essential historical function in maintaining the continuity of knowledge and culture.

One example of a traditional script that has high historical and cultural value is the Simalungun script. This script was used by the Batak Simalungun people in the past for various purposes, such as writing traditional documents, recording traditional medicine and calendars, and compiling ancient manuscripts. According to Kozok (2009), the Simalungun script began to gain recognition and widespread use in the 18th century. However, since the 20th century, the use of this script has begun to experience a drastic decline, coinciding with the development of the Latin alphabet and changes in the modern education system. To prevent the Simalungun script from disappearing over time, concrete preservation efforts are necessary. One of them is by incorporating the Simalungun script into local content subjects in schools in the Simalungun Regency. With this step, the younger generation can get to know, understand, and appreciate the cultural heritage of their ancestors. This effort is also in line with the mandate of Law No. 5 of 2017 concerning the Advancement of Culture, particularly in the context of strengthening national identity and preserving Indonesia's rich cultural heritage. Revitalization of regional scripts, such as the Simalungun script, is a crucial aspect of advancing national culture.

METHOD

This research was conducted using a descriptive qualitative approach, which focuses on exploring phenomena in depth through non-numerical data obtained from various reference sources. This approach aims to provide a contextual and comprehensive understanding of the object of study. As explained by Hasan (2002), a qualitative descriptive approach produces an

understanding based on a paradigm framework and strategies that are applied interpretively, not to test hypotheses statistically, but to describe social or cultural realities as they are.

The main object analyzed in this study is the Simalungun script, which is examined in terms of morphology, communicative function, and symbolic and cultural values. The focus of the study is on how the script represents the cultural identity of the Batak Simalungun community and the problems encountered in efforts to preserve it as an intangible cultural heritage. The data collection techniques employed include three primary methods: literature study, reading technique, and recording technique. A literature study is conducted to collect information from books, scientific articles, and relevant documents regarding the Simalungun script. The reading technique involves directly observing related linguistic forms, while the recording technique is used to record important information during the observation and data analysis process. This strategy enables researchers to compile a comprehensive picture of the role and dynamics of the Simalungun script within its cultural context.

In practice, this study also emphasizes literature review as the main method to obtain in-depth secondary data. The sources used include academic journals, scientific works, and other libraries that directly discuss the topic of local script revitalization and cultural preservation. The data obtained are analyzed descriptively to examine the actual conditions, problems, and possible strategic solutions in the development of the Simalungun script as part of the national cultural heritage.

Terminologically, "scripture" in the Great Dictionary of the Indonesian Language is defined as a visual symbol in the form of scratches that represent human speech and are used in various media, such as paper, wood, cloth, stone, and trees. The word "script" comes from Sanskrit, which is



a combination of the prefix "a-," meaning "not," and "kara," meaning "destroyed," so etymologically, it means "indestructible" or "eternal." This reflects the primary function of the script as a means to record, preserve, and convey knowledge across generations.

In the Indonesian Encyclopedia, scripts are classified into four main categories, namely:

1. Pictographic, such as Egyptian hieroglyphics and ancient Chinese script that resemble concrete images;
2. Ideographic, namely symbols that represent abstract ideas, as found in the development of modern Chinese script;
3. Syllabic, which represents syllables, for example, Pallawa, Javanese, Devanagari, Arabic, Hiragana, and Katakana scripts;
4. Phonetic, which represents sounds in a language, for example, Latin, Greek, Cyrillic, and German scripts.

Furthermore, cultural heritage, as stated by Davidson (1991:2), is the result of past cultural works that include both physical (tangible) and non-physical (intangible) elements, including spiritual values and cultural expressions that form the identity of a group or nation. Therefore, preserving the Simalungun script as part of the intangible cultural heritage is crucial in maintaining historical continuity, fostering collective identity, and enriching the nation's intellectual wealth.

RESULTS

1. History of Script in Indonesia

The history of script in Indonesia reveals that most traditional writing systems in the archipelago have experienced significant influence from the Pallava script, originating from South India. This assimilation process involved adaptation to the local cultural context, resulting in distinctive script forms in various regions of the Indonesian archipelago. Early archaeological evidence of the script's existence can be traced through the discovery of several stone inscriptions, including seven yupas or stone pillars inscribed in Sanskrit,

found in Muara Kaman, East Kalimantan. These indicate the early use of the writing system in Indonesia.

According to Kozok (2009, as cited in Collins, 2009), almost all traditional scripts in Indonesia can be traced back to the Pallawa script, while several other scripts, such as Jawi, Pegon, and Bilangbilang, are derived from the Arabic alphabet. On the other hand, the Nagari script, which developed in North India, also contributed to the formation of several local scripts. Both the Pallava and Nagari scripts are derived from the Brahmi script, which is considered the primary source for almost all scripts in South and Southeast Asia.

In the context of the archipelago, the term "Aksara Nusantara" is used to refer to the script system that developed in Indonesia and the Philippines. Traditional scripts in the Philippines are generally adaptations of Aksara Kawi (Old Javanese script), which shows the historical and cultural links between Indonesia and other Southeast Asian regions.

In general, Nusantara scripts can be classified into five main groups, namely:

1. Hanacaraka script, which includes Javanese, Sundanese, and Balinese scripts. Kawi script as the earliest form is used in Javanese, Madurese, Sundanese, and Balinese manuscripts, and is the ancestor of the three scripts.
2. Ka-Ga-Nga script, used in the southern region of Sumatra, including Bengkulu (Rejang, Lembak, Serawai, Pasemah), Kerinci, and Lampung. These scripts share similarities and are spread across a fairly wide area, including Jambi, South Sumatra, and Bengkulu.
3. Batak script includes variants among Batak sub-ethnic groups such as Angkola-Mandailing, Toba, Simalungun, Pakpak-Dairi, and Karo. The Batak script has simpler characteristics compared to the Javanese script, with additional

uniqueness in the form of nasal letters, such as /mba/ and /nda/, especially in the Karo variant.

4. Sulawesi script, consisting of Bugis, Makassar, and Bima scripts. Although they have two different names, structurally, the Old Makassar and Bugis scripts have strong similarities. The Bugis script itself developed with the addition of four letters that enriched its phonetic system.
5. Philippine script, including the scripts used by the Bisaya, Tagalog, Tagbanuwa, and Mangyan communities. This group shows a similar writing system and indicates a strong influence from the Southeast Asian script system, especially from the Nusantara.

2. Digitization of Simalungun Script Manuscripts

The digitization of Simalungun script manuscripts is a strategic effort to preserve the intangible cultural heritage that is increasingly threatened by the flow of modernization. As a form of documentation of traditional literacy culture, manuscripts written in the Simalungun script, such as the Mustapha laklak, contain local knowledge, belief systems, traditional healing practices, and social values of the Batak Simalungun community. However, original media such as bark, bamboo, or bones used as writing media are highly susceptible to natural damage and aging factors. Therefore, digitization is an important solution to expand access, protect content, and provide a database that can be accessed across generations. According to Grenoble and Whaley (2006), digitization in the context of cultural preservation does not only include scanning artifacts and manuscripts, but also includes the process of metadata, transliteration, and content enrichment in multimedia form. In the case of the Simalungun script, this means converting ancient documents

into high-resolution digital form, accompanied by transliteration into Latin script, linguistic annotation, and contextual explanations. This activity allows the public, academics, and educational institutions to access ancient manuscripts online without damaging the original physical sources.

In addition, digitization allows the creation of online platforms (websites, applications, e-libraries) that can be used as a means of education and cultural promotion. As suggested by UNESCO (2017), integrating cultural heritage into a digital system can serve as a bridge between the younger generation and their ancestral culture. For example, Simalungun script manuscripts can be packaged in the form of interactive e-books, script-based educational games, or documentary videos explaining the contents of the library. This will enhance cultural literacy while increasing the appeal of heritage that has previously been less popular among digital natives.

Digitization also enhances documentation in both archival and academic contexts. By standardizing digital formats (such as PDF/A, XML-TEI for manuscript texts, or JPEG2000 for high-resolution images), digitized results can be stored sustainably in national and international repositories, including Indonesia OneSearch (Perpusnas) and the Digital Library of the Commons. This process can also encourage further philological, linguistic, and cultural research on the Simalungun script, as well as open up possibilities for international collaboration in the field of documentation and revitalization of local scripts.

However, digitizing manuscripts is not without challenges, including limited human resources who understand both digital technology and the characteristics of traditional manuscripts, lack of budget, and weak digital infrastructure in the areas of origin of the cultural community. Therefore, collaboration between local governments, universities, indigenous communities, and archival



institutions is essential to ensure the sustainability and long-term benefits of this digitization project.

Thus, the digitization of Simalungun script manuscripts is a progressive step that not only saves cultural heritage from extinction but also strengthens the cultural identity of the Simalungun people amid an increasingly digitalized world. This is a technology-based preservation effort that makes the heritage of the past remain relevant in the present and the future.

The Simalungun script is an ancient writing system with deep historical roots, closely integrated with the cultural identity of the Simalungun people. The existence of this script is believed to be an important part of the intangible cultural heritage that requires continuous preservation. Based on historical records, one of the oldest kingdoms in the East Sumatra region was the Parpadan Na Bolag Kingdom, which is estimated to have existed around the 5th century. During that period, the existence of a literacy tradition based on the Simalungun script was identified through various written literary relics, as stated by Juandaha Purba Dasuha.

The structure of the Simalungun script is divided into two main components, namely "ina ni surat," or parent letters, and "anak ni surat," or additional letters. Parent letters function to represent syllables with inherent vowels /a/, while child letters act as diacritics that modify the phonetic pronunciation of parent letters. Diacritics, in this context, are additional phonetic symbols placed above, below, or beside letters to change their sound. In this script system, there are 19 basic letters, traditionally called *sappuluh siah* letters, as well as eight diacritical forms or sub-letters that enrich the phonological system of the Simalungun script.

The modern form of the Simalungun script is often found in the Simalungun *pustaha*, which are traditional manuscripts written on tree bark by the Simalungun people. These *pustaha* not only function as documentation media, but also as a

medium for transmitting local knowledge. The contents include a variety of information, ranging from traditional medicine, magical formulas and recipes, calendar systems, to customary rules used in religious practices and rituals by the Simalungun *datu* (traditional priest). Thus, *pustaha* is an important source that reflects the intellectual and spiritual wealth of the Simalungun people that has been passed down from generation to generation. In the literacy tradition of the Simalungun people, the term *pustaha laklak* refers to ancient manuscripts written on natural media, specifically tree bark. These *Mustaphas* are also generally known as Simalungun *Mustaphas*, which serve as a means of recording knowledge, spiritual practices, and various local traditions. The writing media used generally comes from the bark of the *alim* tree (*Aquilaria* sp.), which has a flexible and durable texture. The term "lack" in the Simalungun language itself means "bark," referring to the primary material used in the manuscript. Physically, the *Mustapha lack* is arranged in a layered folding format, which allows the contents of the manuscript to be read sequentially and stored in a compact form. This structure reflects a traditional writing system that is adaptive to local environmental and cultural conditions while also being an important part of the intellectual documentation system of the Batak people, especially the Simalungun sub-ethnic group.



Figure 1
Batak Laklak

a	ha/ka	ba	pa	na
ᮘ	ᮙ	ᮚ	ᮛ	ᮜ
wa	ga	ja	da	ra
ᮝ	ᮞ	ᮟ	ᮠ	ᮡ
ma	ta	sa	ya	nga
ᮢ	ᮣ	ᮤ	ᮥ	ᮦ
la	nya	i	u	
ᮧ	ᮨ	ᮩ	᮪	

Figure 2

Ina ni Surat (Sinaga, 2024)

a, ha, ka, ba, pa, na, wa, ga, ja, da, ra, ma, ta, sa, ya, nga, la, nya, i, u

The Simalungun script has distinctive visual and structural characteristics, especially in the basic letter components known as *ina ni surat* or parent letters. The graphic form of these letters is generally curved and angular and is written from left to right by the reading direction of the modern writing system. In this script system, there are no separators between words or paragraphs, allowing the entire text to be written continuously without spatial breaks. Additionally, the Simalungun script does not employ punctuation marks such as periods, commas, or other symbols commonly used in the Latin script system. All letters also do not recognize capitalization because each character has a uniform form without uppercase or lowercase variants.

Phonologically, all *ina ni surat* are consonants that inherently end with the vowel /a/, making them basic syllable units. To produce sounds other than /a/, this script uses additional components called *anak ni surat* or child letters. There are eight types of child letters, which function as phonetic diacritics. These components are placed on or around the parent letters and serve to change the vowels or add other phonetic elements, such as nasals, stops, or back and front vowels, thus allowing for variations in pronunciation in writing the Simalungun script.

Table
Eight Children of Ni Surat

No.	Name	Syombol	Function	Syombol	Note
1	<i>Haluan</i>	= the shape is two short lines	Changing the /a/ sound in the main letter to /i/	The position of the child letter is to the right of the parent letter (in the position of an open syllable or a syllable ending with the vowel phoneme /a/)	b becomes bi Ba becomes bi



Table
Eight Children of Ni Surat

No.	Name	Syombol	Function	Syombol	Note
2	<i>Haboritan</i>	> The shape is like an arrow tip	Changing the sound /a/ to the sound /u/	The position of the child's letter is on the right or left side of the parent's letter.	b becomes b [^] Ba becomes bu
3	<i>Hatalingan</i>	- the shape is a short connecting line	Changing the sound /a/ to the sound /e/	Placed to the left of the main letter	b becomes b [^] Ba becomes be
4	<i>Sihorlu</i>	X cross shape	Changing the sound /a/ to the sound /o/	Placed to the right of the main letter	b becomes bo Ba becomes bo
5	<i>Hamisaran</i>	- the shape is a short connecting line	Makes a ng sound	Placed to the right of the parent letter	b becomes b [^] Ba becomes bang
6	<i>Hatulungan</i>	-- form two short lines in a row	Changing the sound /a/ to the sound /ou/	Placed on the top right of the main letter.	b becomes b—
7	<i>Hajoringan</i>	= the form of two overlapping short lines	Adding the /h/ sound	Placed to the right of the parent letter	B becomes b= Ba becomes bah
8	<i>Panongon</i>	- short line shape	Turn off the /a/ sound	Placed at the end of the parent letter	Adb- Adaba becomes adab

3. Involvement of Simalungun Script in Local Content Curriculum

In the broader context of education, the Simalungun script has the potential to be included in the local content curriculum as part of the development of cultural heritage. This local content subject applies to all levels of education, especially in the Simalungun cultural area. For this purpose, it is necessary to compile a Simalungun script module per level of education.

DISCUSSION

Local script learning at certain levels of education is frequently reported in various scientific articles published in online journals. Among the local scripts are:

- 1) Mulyadi, D. (2021). Pembelajaran Aksara Lokal melalui Pendekatan Digital di Sekolah Dasar. *Jurnal Pendidikan Bahasa dan Sastra*, 21(2), 135–148. <https://doi.org/10.17977/um018v21i22021p135>
- 2) Rahayu, R. (2020). Pelaksanaan Mulok Bahasa Lampung dalam Upaya Pelestarian Bahasa Daerah di Kabupaten Lampung Selatan. *Jurnal Kelasa*, 15(1), 46–63.
- 3) Sinaga, W. (2024). Pengenalan Aksara Batak Simalungun bagi siswa Sekolah Dasar Negeri 091311 Pargampualan Kecamatan Panombea Panei Kabupaten Simalungun. *Jurnal Pendidikan Tambusai*, 8(2), 31287–31300.

CONCLUSION

Indonesia is renowned as a country rich in ethnic and cultural diversity, including its rich written language heritage. One example is the Simalungun script, the traditional writing system of the Batak Simalungun people. Based on philological studies, this script was previously written on natural media such as tree bark, bamboo, and bone and stored in the form of folded manuscripts. The Simalungun script recognizes two main types of letters: "ina ni surat" (parent letters), totaling 19, and "anak ni surat" (sub-letters), totaling 8. The parent letters

are also known as sappuluh siah letters, including: a, ha, ka, ba, pa, na, wa, ga, ja, da, ra, ma, ta, sa, ya, nga, la, nya, i, and u. Meanwhile, the eight sub-letters include Hamisaran, Hatalingan, Panongonan, Hajoringan, Haluan, Hatulungan, Sihorlu, and Haboritan.

As a source of local knowledge, the Simalungun script holds significant value in tracing the history, culture, and development of the Batak Simalungun civilization. Therefore, a systematic effort is needed to excavate, digitize, and preserve ancient manuscripts that are almost extinct so that they remain alive as part of the intellectual and cultural heritage of the Indonesian nation.

REFERENCES

- Austin, P. K., & Sallabank, J. (2011). *The Cambridge Handbook of Endangered Languages*. Cambridge University Press.
- Collins, J. T. (2009). Bahasa dan masyarakat: Perspektif sosiolinguistik Indonesia. *Masyarakat Linguistik Indonesia*.
- Davidson, G., & McConville, C. (1991). *A Heritage Handbook*. St. Leonard, NSW: Allen & Unwin.
- Grenoble, L. A., & Whaley, L. J. (2006). *Saving Languages: An Introduction to Language Revitalization*. Cambridge University Press.
- Hasan, M. T. (2002). *Metodologi Penelitian Kualitatif*. Malang: Lembaga Penelitian Universitas Malang.
- Kozok, U. (2009). *Surat Batak: Sejarah Perkembangan Tulisan Batak*. Jakarta: Gramedia.
- Kristina, D., & Setyarini, S. (2020). Revitalisasi Bahasa Daerah melalui Teknologi Digital. *Jurnal Penelitian Humaniora*, 21(1), 57–70. <https://doi.org/10.23917/humaniora.v21i1.9162>



- Mulyadi, D. (2021). Pembelajaran Aksara Lkal melalui Pendekatan Digital di Sekolah dasar. *Jurnal Pendidikan Bahasa dan Sastra*, 21(2), 135–148. <https://doi.org/10.17977/um018v21i22021p135>
- Musgrave, S. (2014). Language Documentation and Education for Endangered Languages. *Language and Education*, 28(3), 289–298. <https://doi.org/10.1080/09500782.2013.808074>
- Nasoichah, C. (2015). Faktor yang Mempengaruhi Perbedaan Bentuk Aksara Batak pada Pustaka Laklak Bambu di Mandailing Natal. *Forum Arkeologi*, 28(3), 145–154.
- Purba, D., J. (2006). *Perekat Identitas Sosial Budaya*. Medan: Koran SIB.
- Rahayu, R. (2020). Pelaksanaan Mulok Bahasa Lampung dalam Upaya Pelestarian Bahasa Daerah di Kabupaten Lampung Selatan. *Jurnal Kelasa*, 15(1), 46–63.
- Sinaga, W. (2024). Pengenalan Aksara Batak Simalungun bagi Siswa Sekolah Dasar Negeri 091311 Pargampualan Kecamatan Panombean Panei Kabupaten Simalungun. *Jurnal Pendidikan Tambusai*, 8(2), 31287–31300.
- Smith, L. (2006). *Uses of heritage*. London: Routledge.
- UNESCO. (2017). *Safeguarding intangible cultural heritage in education*. Paris: UNESCO Publishing.