

## Revitalization Of Aksara Jawa as a Cultural Identity Through Contemporary Typography Design

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### KEYWORDS

Javanese script, typography, blackletter, cultural revitalization, experimental design.

### ABSTRACT

The design of *Aksara Jawa* in the blackletter style represents an exploration of typography that bridges local tradition with global aesthetics. By adapting key principles of blackletter, such as bold vertical strokes, contrasting thick-and-thin modulation, and diamond-shaped serifs, the *Aksara Jawa* undergoes a significant visual transformation. The results demonstrate a shift in character from curvilinear, fluid, and organic forms toward a more rigid, monumental, and Gothic expression. In terms of legibility, this adaptation presents challenges due to the condensed letter structure and narrowed counters; however, aesthetically, it introduces a new visual dialectic that enriches the field of typography. Beyond its function as a reading medium, this style also holds potential for application in contemporary graphic design, such as posters and book covers. Thus, the blackletter-inspired *Aksara Jawa* can be positioned not only as an experimental typographic design affirming cultural identity, but also as a contribution to the revitalization of *Aksara Jawa* as a cultural identity through contemporary typography design.

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## INTRODUCTION

Although the Javanese script (*Hanacaraka*) is a cultural heritage rich in meaning and full of history, the reality is that today the use of the script has become increasingly limited. In formal schools, especially at the elementary education level, the Javanese script is usually only briefly introduced as part of the local content (Gunawan et al., 2020). After that, there is rarely continuity of learning at the higher education level. This condition causes the Javanese script to be seen primarily as subject matter that "must be memorized" for the sake of grades, rather than as a living medium of communication or even as creative inspiration (Blaikie, 2021; Coles, 2015; Designity, 2025). As a result, for many students, Javanese characters seem rigid, difficult to understand, and less interesting to study further (Huot-Marchand et al., 2024).

In the midst of globalization and the dominance of Latin characters in various media, the Javanese script seems to be marginalized from the public space (GeJunJie & XiongXuan, 2025). In fact, with the development of modern graphic design and typography, there is a great opportunity to revive people's interest in Javanese characters (Možina et al., 2019; Romein et al., 2025; Widiarti et al., 2024). Typography is not only a matter of readability but also a visual

identity that can impart cultural meaning and aesthetic appeal. Through the exploration of contemporary typography forms—such as the combination of Javanese script with the Blackletter style—Javanese characters can appear in a new light that is fresher, more modern, and relevant to the younger generation.

This approach is not just a matter of style, but a revitalization strategy (Perdana, 2022; Reynolds, 2018; Riechers, 2019). By presenting the Javanese script in popular design mediums such as posters, packaging, logos, or digital media, people will come into contact with it more frequently (Jing, 2024; Lee, 2025; Monotype, 2025). This can arouse curiosity, open up space for appreciation, and maintain cultural continuity amidst modern life. In short, modern typography can be a bridge between tradition and trends, between local heritage and global expression.

“How can the design of Javanese script typography serve as a revitalization strategy that enriches the visual form while arousing the interest of the younger generation in the Javanese script?”

This research aims to produce a visual form of typography that not only has aesthetic value but is also able to enrich the character of the Javanese script through the exploration of modern typography. By presenting creative and contextual visuals, the Javanese script is expected to no longer be seen as just a symbol of rigid tradition but as a dynamic medium of visual expression. This effort is also aimed at increasing the attractiveness and interest of the younger generation in the Javanese script, so that they can see this cultural heritage as something relevant, inspiring, and worthy of appreciation in daily life and in the contemporary creative realm.

This research is expected to provide benefits both academically and practically. From the academic side, this research contributes to the development of typography studies, especially in an effort to present Javanese script typography innovations through modern approaches, and can serve as a reference for similar research related to the revitalization of traditional scripts (618Media, 2024). From a practical perspective, the results of this typographic design offer an alternative form of Javanese script that is relevant to various contemporary design media, as well as a creative strategy for increasing the interest of the younger generation in the Javanese script (Scherping, 2025).

The history of the Javanese script, known as *Hanacaraka*, is one of the traditional writing systems of the archipelago that developed from the Brahmi script through the intermediary of the Kawi script. Since the 9th century, this script has been widely used in Java to write literary works, religious manuscripts, and government documents. Its development cannot be separated from cultural and political dynamics, from the Hindu-Buddhist, Islamic, to colonial periods. The structure of the Javanese script is different from the Latin alphabet because it is a syllabary, where each script represents a syllable, not a single letter (Vampfonts.com, 2025).

However, entering the 20th century, the use of the Javanese script began to decline drastically with the introduction of simpler Latin letters, which were promoted as the standard of modern writing. Publishers preferred Latin characters because they required lower costs and production time compared to the traditional Javanese script. Therefore, understanding the history of the Javanese script is important in efforts to preserve and revitalize it, especially if it is contextualized through a modern typographic design approach (Prihantono, 2020, p. 12).

Blackletter is one of the classic typography styles that emerged in Europe in the Middle Ages, especially around the 12th to 15th centuries. This style is often called Gothic Script, Texture, or Fraktur, and became the dominant form of writing in Europe before being replaced by humanist and Roman typography in the Renaissance era. Visually, Blackletter is characterized by firm, dense, and vertical letters, with sharp strokes resembling the results of a broad-nib pen. Its main characteristics include tight vertical lines, clear thick-thin contrasts, and arch and hook ornaments that give a decorative yet rigid impression. This style has an authoritative, formal, and traditional image that is often used in religious texts and official documents (Lee, 2025, p. 53).

Roman and Blackletter letters have significant visual differences. Romans were seen as simple, rational, balanced, and graceful, while Blackletter was considered dark, narrow, and complicated. Blackletter as a visual language has "darkness", a dense composition ("cramped"), ornamental details, and is capable of creating a mystical or traditional atmosphere (Lee, 2025, p. 53). In its development, Blackletter not only remained a historical writing form but also became a symbol of cultural identity. In Germany, for example, the Fraktur style was used as the national script until the 20th century. Today, Blackletter remains popular in contemporary design to convey classical, authoritative, or subcultural feels, such as in metal music and tattoo designs (Lee, 2025, p. 53). Therefore, Blackletter's characters have high expressive power, are rich in history, and are flexible to adapt, including in combination with traditional characters such as *Hanacaraka*.

Typography is a design discipline that aims to convey messages effectively. According to Samara (2018, p. 22), typography must maintain a balance between function and aesthetics for visual communication to be effective. The main principles are legibility (readability of individual letters) and readability (comfort of reading the text as a whole), which are influenced by the size of the letters, the spacing between the letters (kerning), the spacing between the lines (leading), and the length of the lines (Ambrose & Harris, 2011). Aesthetics are also a fundamental aspect, where typography should attract attention but not interfere with the reading process (Bringhurst, 2019, p. 14).

In addition, typography serves to build identity and strengthen communication nuances. For example, the use of serifs creates a formal and traditional impression, while sans-serif gives a modern and simple impression (Lupton, 2010, p. 28). With these principles of legibility, readability, aesthetics, and function, typography design—including the exploration of traditional characters such as *Hanacaraka* in the Blackletter style—can create strong and relevant visual communication.

This research aims to produce a visual form of typography that not only has aesthetic value but is also able to enrich the character of the Javanese script through the exploration of modern typography. By presenting creative and contextual visuals, the Javanese script is expected to no longer be seen as just a symbol of rigid tradition but as a dynamic medium of visual expression. This effort is also aimed at increasing the attractiveness and interest of the younger generation in the Javanese script, so that they can see this cultural heritage as something relevant, inspiring, and worthy of appreciation in daily life and in the contemporary creative realm.

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## METHOD

This study uses a practice-based research approach with experimental design methods structured in five main stages. The first stage involves an in-depth literature study of two main sources: the structure and anatomy of the Javanese script, referring to Prihantono (2020), and the Blackletter typographic principles based on Bain & Shaw (1998) and Lee (2025). The second stage is an exploration of manual sketches using a broad-nib pen to create a visual synthesis between the flexibility of the Javanese script and the rigidity of Blackletter, while still considering aspects of readability and aesthetics. The third stage involves the digitization process, where the selected sketches are scanned and converted into vector shapes through tracing techniques in Adobe Illustrator to ensure precision and scalability. The fourth stage focuses on the analysis of vector letter forms, evaluating the application of Blackletter principles to the structure of the Javanese script. The fifth stage is a thorough evaluation of the readability of the typographic design, considering counter and kerning processing, as well as exploring its potential application in contemporary visual media. Although the research has produced an applicable vector form, the development of the digital font format (TTF/OTF), along with the layout of the Hanacaraka keyboard, is recommended for further research.

## RESULTS AND DISCUSSIONS

In 1926, in an amusement park that was then the pride of the city of Solo, Sriwedari, scholars, cultural experts, and teachers from various parts of Java gathered. They came not just to watch people's movies or enjoy the nightlife, but to talk about something much more serious: the Javanese script. At that time, the hanacaraka writing, which had been a cultural heritage for centuries, was actually divided into many versions. The shape of the letters in Surakarta is different from in Yogyakarta, the rules for writing on the coast are not the same as in the interior, even the way of putting clothes sometimes makes people confused. Such a situation prompted the holding of a large meeting in Sriwedari, Surakarta. From that long discussion, a mutual agreement was born which became known as the Sriwedari Agreement. The content is simple but important: it unites the standard forms of the Javanese script, establishes uniform writing rules, and makes it the basis for teaching in schools.

Since then, the Javanese script we know today—with its 20 main letters, pairs, and neat clothes—was the result of "great deliberations" nearly a century ago. This agreement makes the Javanese script have the same footing, no longer scattered by regional differences. It can be

said that Sriwedari 1926 was the moment when the Javanese script was "mutually agreed" so that it could remain alive and studied to this day.



**Figure 1. Javanese Characters and Their Partners**  
(Capture Photo, Infokecil69.blogspot.com)

Since the beginning of the 19th century, the Javanese script was not only written manually by hand, but also sought to be present through typewriter technology. One of the proofs can be seen in the Radya Pustaka Museum, which houses a collection of Javanese typewriters. In his time, this script played an important role in administrative activities and official correspondence in the palace, which functioned as the center of government.



**Figure 2. Javanese Typewriter at Radya Pustaka Museum Surakarta**  
(Photo, Andri Hervian 2022)

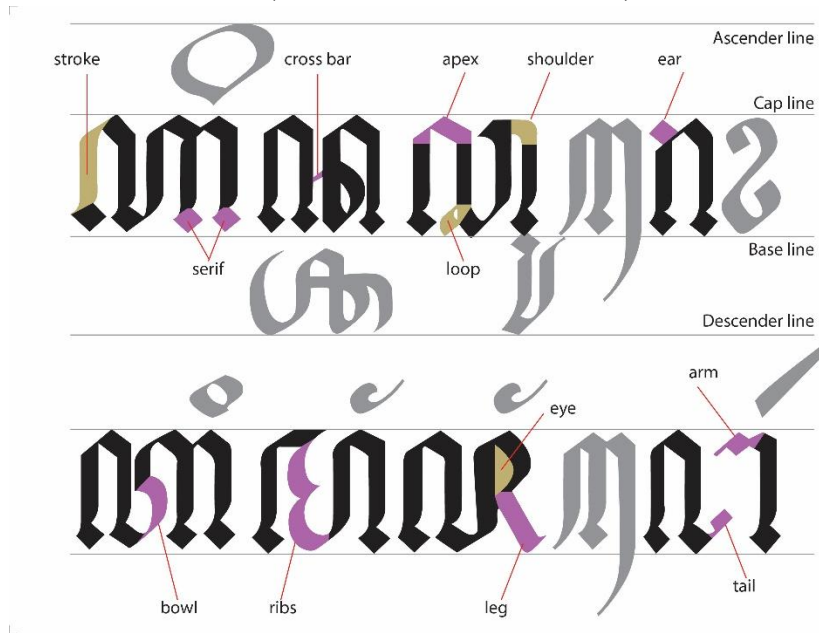
However, Javanese writing made with a calligraphy pen has its own uniqueness. Using a flat pen, the strokes of the letters can show a beautiful contrast of lines—sometimes thick, sometimes thin—depending on the direction the pen is moved. Each change in position results



in a different visual feel, so that the script is not just a sound sign, but also present as an art form. This technique makes Javanese letters look more vibrant, rhythmic, and expressive, similar to Latin or Arabic calligraphy that emphasizes elegance in every stroke of the pen.



**Figure 3. Ecoline Calligraphy and Ink Pen Equipment**  
(Photo, Andri Hervian 2025)



**Figure 4. Anatomy of the Javanese script**  
(Design, Andri Hervian 2025)

**Stroke** : The lines on the letters consist of 2 types, namely: stem stroke and hairline stroke. The difference lies in its thickness and thinness, the Stem stroke is the main line while hairline stroke as support lines connect between other stem strokes.

**Serif** : A special addition to the main letter in the form of a hook, gives the impression that uniformity, neatness in letters

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<b>Crossbar</b>	: Horizontal transverse lines connect the parts of one with others.
<b>Apex</b>	: The meeting of the 2 diagonal strokes that form the top.
<b>Loops</b>	: A small curve is located below replacing the legs (Serif)
<b>Bowl</b>	: Strokes that are curved / circular
<b>Ribs</b>	: Like a human rib. Ribs are the curved part like a bow
<b>Shoulder</b>	: The shoulder as the name suggests is shaped similar to a human shoulder. Shoulder is a curved transition part of the Vertical stroke
<b>Ear</b>	: A small stroke that seems to grow out as it should ears at the top of the letter..
<b>Leg</b>	: Like the human foot, the leg is a stroke that is one of the ends attaches to the stroke of the other while the other end is free
<b>Arm</b>	: Like a human hand. Combination Between stem stroke and hairline stroke attached to the body (other stroke)
<b>Tail</b>	: Like a Tail, Tail is a stroke that is below
<b>Counter</b>	: Space Between Strokes and Other Strokes
<b>Terminal</b>	: is part of the end of the stroke

The phrase "(Ha Na Ca Ra Ka)" as the opening line of the Javanese script has a distinctive visual rhythm: the letters are lined up with a dominant curved shape, dynamic lines, and relatively loose space between letters (natural kerning). In their original form, these lines feature an organic, fluid, and flexible feel, reflecting the character of traditional handwriting.

The process of digitizing the Javanese script typography in the style of blackletter is carried out through structured methodological stages. First, the design of the letters is carried out manually using a pen, with the aim of maintaining aesthetic characteristics in the form of contrast between thick and thin lines that are characteristic of both the Javanese script and the blackletter style. Second, the resulting design is then scanned to obtain the initial digital data. The next stage is the tracing process using Adobe Illustrator software, which functions to convert raster images into vector shapes. This conversion is important so that each character has shape precision, scalability, and flexibility for further design needs. Actually, there are still technical obstacles in the preparation of keyboard layouts that adjust to the order of the Javanese script, which is fundamentally different from the Latin alphabet. To proceed to the next stage. Here are the vectorization results:



Figure 5. Final Result of Javanese Script Digitization in Blackletter Style



Figure 5. Final Result of Javanese Script Digitization in Blackletter Style





**Figure 5. Final Result of Javanese Script Digitization in Blackletter Style**  
(Design, Andri Hervian 2025)

When applied in the blackletter style, this line of letters changes its nuances significantly. Each letter is given a thick vertical stroke to create a sturdy and rigid impression, while the curved parts are processed with sharp thick-thin modulation. The space between the letters is made more tight, following the rhythm of the dense blackletter texture. As a result, the phrase "Ha Na Ca Ra Ka" still reads as Javanese script, but appears with new nuances: firm, monumental, and gothic, as if presenting the meeting of two ornamental Javanese typographic traditions and rigid medieval Europe.

Stroke:

In Blackletter typography, its main characteristic lies in the play of lines or strokes that arise from the technique of writing with an oblique pen. The position of the pen that is usually placed at an angle of about 45 degrees makes the vertical line appear thick, while the horizontal line – which is actually horizontal – is tried to be drawn slightly at an angle to produce a thin stroke. This combination of contrast between thick and thin is what then gives the Blackletter letters a strong identity. If observed closely, the ends of the line meet sometimes form a rhombus-like plane, which can then be used as a foot or serif element. It doesn't stop there, the curved lines are not uniform; The thickness also changes according to the direction of the pen's movement, so it gives a dynamic impression even though the shape of the letters tends to be rigid and geometric. The end result is a letter structure that seems to combine architectural rigor with

rhythmic visual rhythms, making Blackletter appear at once assertive, graceful, and monumental.

#### Serif

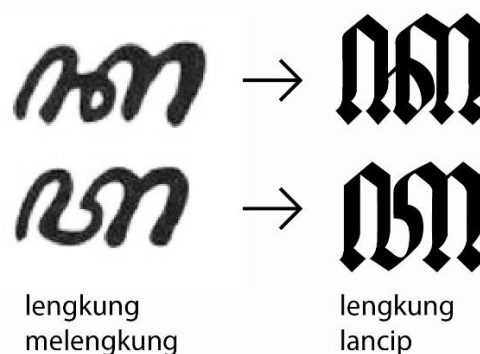
In blackletter typography, a serif is not just a small decoration at the end of a letter. It is like the stamp of a soldier's foot firmly on the ground, giving rhythm to the line. Any solid vertical line will feel "complete" when covered with a uniform serif foot, as if to confirm that the letter stands authoritatively.

When this element was brought into the Javanese script, the presence of serifs became a kind of visual cultural dialogue. The Javanese script, which usually flows curved like the hand dance of a lontar writer, is now given a stiff bang at the ends. For example, it will be felt in the line of letters "(Ha Na Ca Ra Ka)", each vertical line downwards is given a support to form a rhombus. In effect, the once flexible line of script now appears like an army of regular lines: still Javanese in its essence, but absorbing the visual discipline of medieval Europe.

In this way, the serif serves a dual function: it maintains its connection to the tradition of blackletters, while presenting a new face to the Javanese script. Not just a foot, but a foothold that brings together two worlds of typography.

#### Modulation:

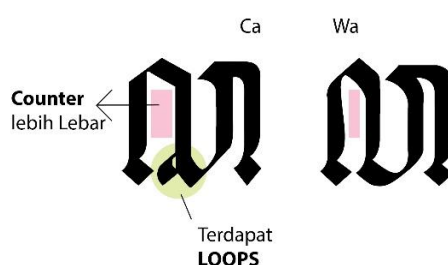
The modulation in blackletter typography is evident in the sharp contrast of the stroke, where the vertical lines are made thick, while the diagonal or horizontal lines are thinner. This thick-thin pattern actually follows the direction of the broad-nib pen, which is an inclined flat pen that since the Middle Ages has been the main tool for writing blackletter style in Europe. The result is a letter shape that feels stiff, rhythmic, and full of ornaments. When this modulation principle is brought into the design of the Javanese script, it becomes the key to bridging the basic character of the script which tends to be curved and turn into a taper with the firm nuances typical of blackletter. For example, the letters "(ka)" or "(ta)" which usually appear round, curved can be accented in the form of thin vertical strokes combined with thick curved lines. With this approach, the Javanese script does not lose its original structure, but at the same time acquires a new face with gothic and monumental nuances.



In terms of readability, the Javanese script in the blackletter style has its own challenges when compared to the standard form. The original Javanese script which is generally curved and flowing gives a flexible impression and is relatively easy to recognize by readers who are used to it. Meanwhile, the adaptation of the blackletter style features thick vertical lines, sharp modulation, and pointed corners that sometimes make the characters appear more compact.

This can create a dense impression and make it a little difficult for beginner readers, although for those who are used to it, it can still be recognized by the basic structure of the letters.

If you look further, the readability aspect of the Javanese script in the blackletter style is greatly influenced by the processing of the counter (space in the letter) and the distance between the letters. In standard shapes, the counter tends to open so that it is easier for the eye to recognize the letter pattern. However, in the blackletter adaptation, the counter can narrow due to the pressure of the thick vertical line, making the lines of writing feel denser. Or make a wider counter if there are loops or bowls. As a result, it takes longer for the reader to distinguish similar letters, for example between (ca) and (wa). However, the resulting visual rhythm actually provides a unique reading experience, different from the standard Javanese script.



From an aesthetic point of view, this transformation actually opens up a new space of expression. The standard Javanese script accentuates elegance through its curved flexibility, while the blackletter version gives a bold, monumental, and gothic impression. The combination of the two presents a visual dialectic: between fluid local traditions and the taper discipline of medieval European typography. Thus, the result of this design is not only a reading medium, but also a visual work that affirms cultural identity in an experimental nuance.

In terms of aesthetics, sleekness, gothic strokes and the existence of rhombus serifs in the blackletter style actually present an ornamental and monumental impression. If the standard Javanese script resembles a soft, fluid dance of lines, then in the blackletter style it appears like gothic architecture: upright, layered, and full of detail. It is this contrast that presents a new dimension—a space of dialogue between local traditions and global typographical influences. In other words, although the legibility is slightly reduced, the aesthetic aspect provides an added value that strengthens the visual appeal while enriching the cultural significance of this typography design.

App trials

Example: poster/book cover application



Both in the Javanese script and Blackletter typography, the presence of serifs or letterhead tips often gives the impression of unique uniformity. In the Javanese script, the curved shapes that end firmly present an orderly visual rhythm, while in Blackletter, the rhombus-shaped serif adds a monumental impression while strengthening the firm character of each letter. This uniformity is not just a technical problem of form, but also contributes to a distinctive aesthetic feel: the letters seem to have discipline, as if each stroke follows the same rules, yet still retains elegance in the variety of details. Thus, the serif serves not only as a structural element, but also as a marker of stylistic identity, bringing together visual order with expressive power

## CONCLUSION

The transformation of the Javanese script into a blackletter style highlights how typography can create a striking visual dialectic, blending local traditions with medieval European influences. Blackletter elements, such as thick vertical strokes, contrasts, and rhombus serifs, turn the flexible, organic "Ha Na Ca Ra Ka" into something firm, monumental, and gothic, while preserving the basic structure of the script. Despite challenges with readability, such as stroke density and counter narrowing, this adaptation enriches the script aesthetically. The modern limitations of Javanese typography stem from the lack of specialized devices, such as typewriters, and the fact that digital fonts are mainly used for graphic design, not daily typing. To make the script more accessible to the younger generation, further research could explore the development of digital fonts compatible with various software and their

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integration into social media, alongside the creation of new visual styles that combine Javanese script with contemporary typography trends. This expansion could strengthen the script's aesthetic value and serve as a strategy for cultural preservation, ensuring its relevance in modern design, digital media, and everyday use.

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