

Preserving Javanese Language and Culture in The Digital Age : Challenge and Future Prospects

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ABSTRACT

Javanese holds a central place in the rich tapestry of Indonesian culture, and its significance extends far beyond mere linguistic communication. Its historical roots, role in art and tradition, importance in shaping regional and national identities, and contribution to the nation's literary heritage make it a language of immense significance in Indonesian culture, which needs to be preserved and passed down to future generations. Javanese language revitalization efforts by utilizing digital technology, such as websites, applications, and social media, have become effective as they are easily accessible and engaging. It empowers indigenous communities to take control of their own preservation efforts while connecting them with a global network of supporters and resources. This literature study aims to describe Javanese language preservation in the digital age. Data is obtained from various sources of journals, books, documentation, and the internet. The result of this study is that digital learning serves as a dynamic and inclusive tool to preserve the Javanese language and culture, making it more accessible, engaging, and customizable to the needs and preferences of a diverse and digitally connected audience. The digital age has opened up exciting opportunities to not only explore this rich heritage but also contribute to its preservation.

Keywords: *Javanese language, Javanese culture, revitalization, digital technology, digital media*

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1. INTRODUCTION

The Javanese language, locally known as "Basa Jawa," is one of the most prominent and widely spoken languages in Indonesia. It holds a central place in the rich tapestry of Indonesian culture, and its significance extends far beyond mere linguistic communication. Here, we'll explore the Javanese language's historical and cultural importance within the Indonesian archipelago. The Javanese language has ancient origins dating back over a thousand years. The language has been shaped by a complex interplay of influences, including Sanskrit, Arabic, Dutch, and other regional languages. Javanese culture is renowned for its profound connection to language, arts, and traditions. The Javanese language serves as a vehicle for expressing cultural norms, values, and rituals. It plays a

pivotal role in various art forms, including Wayang Kulit (shadow puppetry), Gamelan music, and Batik textile design, all of which are UNESCO-recognized elements of intangible cultural heritage. It's spoken not only in Java but also by Javanese communities scattered throughout Indonesia and in diaspora communities worldwide. Speaking Javanese fosters a sense of belonging and connection to one's cultural roots (Rokhman et al., 2022).

Javanese literature, rich in poetry, folklore, and philosophical texts, has been documented in the Javanese script, known as "Aksara Jawa." These texts contain a wealth of knowledge, from ancient epics like the Ramayana to contemporary reflections on life and spirituality. The Javanese language is a repository of cultural wisdom and intellectual heritage. Indonesia, a diverse nation with hundreds of languages and ethnic groups, recognizes the Javanese language's importance in shaping its national identity. In summary, the Javanese language is a key element of Indonesia's cultural mosaic. Its historical roots, role in art and tradition, importance in shaping regional and national identities, and contribution to the nation's literary heritage make it a language of immense significance in Indonesian culture.

Preserving them ensures that this rich cultural heritage is passed down to future generations. When indigenous languages and cultures are preserved, it fosters a sense of pride and belonging among community members. Preserving this diversity enriches the global cultural tapestry, promoting tolerance, understanding, and respect for different ways of life. Preserving these cultures can contribute to sustainable practices and conservation efforts. Preserving them is an act of social justice, rectifying past injustices and empowering indigenous communities to assert their rights. Digital platforms, including websites, apps, and social media, can serve as accessible and interactive tools for language learning and cultural sharing (Hadiwijaya, 2022). Preserving these languages contributes to the broader understanding of human language and cognition.

Digital tools and global collaboration provide new avenues for achieving these preservation goals and ensuring that indigenous cultures continue to thrive and contribute to the rich tapestry of human heritage. Digital platforms make it possible to reach a global audience, including members of indigenous communities living in remote areas. Anyone with internet access can participate in digital language and culture programs. Digital learning platforms can host online courses that teach indigenous languages (Andriyanto et al., 2022).

Language revitalization efforts can use digital technology to create language learning apps, websites, and interactive games. These tools can make language learning more engaging, especially for younger generations (Wicaksono et al., 2020). Digital platforms can be used to record and preserve oral traditions, including storytelling and oral history. Digital learning allows for personalized learning experiences. Learners can progress at their own pace and focus on specific aspects of language and culture that are most relevant to their community's needs. Digital resources can provide training and support for indigenous language teachers, helping to build a skilled and dedicated teaching workforce. Digital libraries and archives can store and protect indigenous language materials, preventing loss due to physical decay or disasters and Networking (Galla, 2009).

According to the Queen (Quinn, 2022) there were impact of digital technology on creative writing in Javanese. It found that the widespread use of digital technology has had a stimulating effect on creative writing in Javanese. Digital technology has made creative writing in Javanese more accessible to a global audience. Writers can publish their work online, reaching readers far beyond their immediate geographical location. Although, the future of Javanese literature is still uncertain, but digital technology has profoundly changed the rules of the game.

Digital platforms enable collaboration between indigenous communities, linguists, educators, and activists worldwide. This sharing of knowledge and resources can strengthen preservation efforts. Gamification elements in digital learning can make

language and culture learning more engaging, particularly for younger generations (Harvey Arce & Cuadros Valdivia, 2020). Interactive apps and games can be designed to teach language and cultural knowledge through play. In summary, digital learning leverages technology to make language and culture preservation more accessible, engaging, and effective. It empowers indigenous communities to take control of their own preservation efforts while connecting them with a global network of supporters and resources.

The primary objective of this study is to comprehensively investigate and analyze the multifaceted dynamics surrounding the preservation of Javanese language and culture in the context of the digital age. Specifically, this research aims to assess the impact of digital technology, identify and examine the challenges and threats faced by Javanese language and culture in an era characterized by globalization, urbanization, and rapid technological advancements. By pursuing these objectives, this study aims to contribute to a deeper understanding of the complex relationship between digital technology and the preservation of Javanese language and culture, ultimately informing and inspiring effective strategies for safeguarding this rich cultural heritage in the digital age.

2. METHOD

This research is a literature review study, which is a comprehensive summary of research already conducted on a specific topic to show readers what is known about that topic and what remains unknown, to seek the rationale for previous research, or to generate ideas for further research (Denney & Tewksbury, 2013).

Data were collected from various sources, including journals, books, documentation, and the internet. Data retrieval was conducted through a literature search published on the internet, using the Research Gate and Scholar search engines with keywords: preservation of Javanese language, preservation of Javanese culture, learning Javanese language and culture, and digital technology for learning the Javanese language. The inclusion criteria for this study were: 1) Articles with themes related to the preservation of Javanese language or culture; 2) Articles in both Indonesian and English languages; and 3) Articles in full-text format. Literature that met the inclusion criteria was then collected, summarized, and analyzed using the critical appraisal method.

In the course of this literature review, we systematically examined a total of 25 articles related to the preservation of Javanese language and culture in the digital age. While these articles provided valuable insights into various aspects of the topic, it is worth noting that the available literature may not encompass the entirety of this multifaceted subject. The relatively limited number of articles reviewed indicates that more comprehensive research efforts are warranted to gain a deeper understanding of the challenges and prospects associated with preserving Javanese language and culture in the digital era. As the landscape of digital technology and cultural preservation continues to evolve, the inclusion of a larger body of literature in future studies would offer a more comprehensive view and potentially reveal additional insights and emerging trends. Therefore, we acknowledge that further exploration and analysis of a broader range of scholarly articles, research reports, and related sources would be beneficial in order to enrich the discussion and provide a more nuanced perspective on this vital cultural endeavor.

3. DISCUSSION

3.1. The Richness of Javanese Language and Culture

Javanese has been influenced by various languages and cultures over the centuries. The Javanese language has been written in several scripts throughout its history (Ricci Ronit, 2015). The Kawi script, an ancient Javanese script, was used for centuries before the adoption of the Latin script, which is now the standard writing system for Javanese. Javanese culture, with its rich traditions, art forms, and social customs, has had a profound influence on the broader Indonesian identity. The Javanese language plays a central role in

these forms of artistic expression, conveying stories, myths, and cultural values. Speaking Javanese fosters a strong sense of regional identity and pride. Elders pass down wisdom and cultural knowledge through the language, strengthening familial and community bonds. On the other hand, the Javanese language holds a central place in the cultural and historical landscape of Indonesia. It serves as a medium for artistic expression, religious and philosophical discourse, and the transmission of cultural values. Additionally, its influence extends beyond Java, impacting the broader Indonesian identity and shaping the nation's official language, Bahasa Indonesia. Preserving the Javanese language is crucial for safeguarding Indonesia's rich cultural heritage and linguistic diversity.

Javanese culture has unique features like art, music, and traditional rituals (Poedjosoedarmo, 2017). *First*, Gamelan Music is instruments that are played together in intricate arrangements to create mesmerizing and harmonious music. It represents the collective spirit of the community and is often associated with courtly traditions. *Second*, Batik Artistry creates intricate designs using wax and dyes on different surfaces by the local artists. *Third*, philosophy and Literature such as «Kejawen,» reflects the syncretic blend of spiritual beliefs. In summary, Javanese culture is characterized by its deep-rooted traditions, artistic expressions, and rituals that reflect the region's rich history and spirituality (Setiya et al., 2019). These unique features are not only a source of cultural pride but also serve as a means of preserving and passing down the Javanese heritage to future generations. Highlight the challenges faced by the Javanese language and culture in the modern world.

Younger generations are increasingly using Indonesian as their primary language, especially in urban areas. This shift can lead to a decline in Javanese language fluency and usage. The globalization of culture, media, and technology has led to the dominance of English and global popular culture. This can erode traditional Javanese cultural practices and values. Rural-to-urban migration within Indonesia often results in Javanese communities moving to cities where the use of Javanese may be limited. This can contribute to language and cultural displacement. While Javanese is taught in some regions, it is often limited to local dialects, and the curriculum may not adequately promote Javanese language and culture. This reduces the exposure to Javanese language and culture in the media, especially among younger generations. The rapid urbanization of Java and the expansion of urban areas can disrupt traditional rural communities and their cultural practices.

3.2 Digital Learning as a Tool for Preservation

Digital technology has brought about significant transformations in education and language preservation, revolutionizing how languages and cultures are taught, learned, and preserved. Here's an explanation of how digital technology has made an impact:

- a. Online Language Learning Platforms has given rise to a plethora of online language learning platforms, apps, and websites that offer courses in various languages, including indigenous and less commonly taught languages like Javanese. These platforms provide accessible and flexible ways for individuals to learn languages, regardless of their geographical location. People can access lessons, practice exercises, and interact with native speakers or instructors online (Widodo, 2016).
- b. Interactive Learning Resources has made it possible to create interactive and multimedia learning resources. Language learners can now access videos, audio recordings, quizzes, and games that engage multiple senses and enhance the learning experience. Interactive resources make language learning more engaging and effective, improving retention and fluency. They are especially useful for preserving indigenous languages, which may have limited written resources (Karasimos, 2022).
- c. Language Learning Apps such as Duolingo and Rosetta Stone, have become popular tools for learners. These apps offer structured lessons and adaptive learning experiences. Apps are portable, allowing users to practice language skills on their mobile devices.

- They often incorporate gamification elements, making learning fun and motivating (Loewen, S., Crowther, D., Isbell, D., Kim, K., Maloney, J., Miller, Z., & Rawal, 2019).
- d. Online Communities and social media have enabled the creation of online language learning communities and social media groups where learners can connect with native speakers and fellow learners to practice and exchange knowledge. These communities provide a supportive environment for language enthusiasts and can be particularly valuable for preserving and revitalizing minority languages, as they facilitate communication between speakers across geographical boundaries (Widodo, 2016).
 - e. Preservation of Cultural Content has made it easier to preserve and share cultural content, including texts, songs, stories, and oral traditions, in digital formats. Indigenous communities and cultural institutions can digitize and archive cultural materials, ensuring they are accessible for future generations. These digital archives are invaluable for language and cultural preservation efforts (Konsik, 2016).
 - f. Machine Translation and Transcription like Google Translate, have become more sophisticated, enabling automatic translation between languages. While not a replacement for human translation, these tools can aid in the transcription and translation of indigenous languages, making it easier to create written resources and documentation (Loewen, S., Crowther, D., Isbell, D., Kim, K., Maloney, J., Miller, Z., & Rawal, 2019).
 - g. Distance Education and E-Learning have facilitated distance education and e-learning programs, allowing learners to access courses remotely. This approach is particularly beneficial for preserving languages spoken by geographically dispersed communities. It enables individuals to participate in language courses and cultural programs without the need for physical proximity (Guri-Rosenblit, 2005).
 - h. Language Revitalization Efforts play a pivotal role in language revitalization efforts. Indigenous communities and language activists use technology to develop language materials, dictionaries, and curricula. These efforts are instrumental in reviving endangered languages and ensuring that younger generations have access to language resources (Khan et al., 2017).

In summary, digital technology has transformed language education and preservation by expanding access to resources, making learning more interactive and engaging, and providing tools for archiving and sharing language and cultural content. It has become a powerful ally in the effort to preserve and revitalize languages, including indigenous and minority languages, in an increasingly digital and interconnected world.

Using digital platforms for teaching and learning the Javanese language and culture offers several advantages, making education and preservation efforts more effective and accessible. Digital platforms are accessible from anywhere with an internet connection, making Javanese language and culture resources available to individuals around the world. This accessibility is crucial for reaching diaspora communities and learners outside Java. Learners can access digital content at their convenience, allowing for flexible scheduling and self-paced learning. This flexibility accommodates diverse learning styles and individual preferences. Digital platforms often incorporate interactive elements such as quizzes, games, and multimedia resources (Anastasiadis et al., 2018). Allen stated that interactive features engage learners and make the educational experience more enjoyable and effective (Allen, n.d.). Digital platforms offer a wide range of resources, including videos, audio recordings, e-books, and interactive lessons. Learners can choose the resources that best suit their learning preferences. Many digital platforms include self-assessment tools that allow learners to track their progress and identify areas that require improvement. This promotes self-directed learning and motivation. Online forums, social media groups, and virtual classrooms create opportunities for learners to connect with fellow Javanese language and culture enthusiasts, share experiences, and practice speaking the language. Digital platforms make it easier to document and share cultural practices, rituals, and

traditions, ensuring their preservation for future generations. Videos, photos, and written content can be archived and accessed digitally.

Woolf explained that Digital learning often eliminates the need for physical textbooks and printed materials, reducing costs for both learners and educators. It can also minimize travel expenses associated with in-person classes (Woolf, 2010). Digital platforms can offer personalized learning paths, allowing learners to focus on specific aspects of Javanese language and culture that align with their interests or needs. Some digital platforms use artificial intelligence (AI) to adapt to individual learner's strengths and weaknesses, providing targeted exercises and content to enhance learning outcomes. Digital platforms enable collaboration between Javanese language educators, cultural institutions, and learners worldwide. This global network can pool resources, share best practices, and collectively contribute to language and culture preservation.

As technology continues to advance, digital learning platforms can incorporate new features and tools, enhancing the learning experience and providing access to cutting-edge resources. Digital platforms empower indigenous communities to revitalize their languages by creating language learning materials, online courses, and digital dictionaries. Digital platforms can accommodate a large number of learners simultaneously, making it possible to reach a broader audience and cater to the diverse needs of learners at different levels of proficiency (Allison Littlejohn, 2007).

In summary, digital platforms offer a versatile and effective means of teaching and learning the Javanese language and culture. They promote accessibility, interactivity, customization, and community engagement while contributing to the preservation and revitalization of Javanese heritage in the digital age.

There were several digital tools, apps, and websites that facilitated Javanese language learning (Insani et al., 2022). Here are some resources that were known to offer Javanese language learning materials:

- a. LearnJavaneseOnline.com: This website provides free lessons and resources for learning Javanese, including basic vocabulary, pronunciation guides, and cultural insights.
- b. Memrise: Memrise offers user-generated courses for various languages, including Javanese. Users can create and share Javanese language courses with audio and visual aids.
- c. Duolingo: While Duolingo primarily focuses on more widely spoken languages, it occasionally offers courses for less commonly taught languages, including Javanese. Check the app or website for updates on course availability.
- d. Javanese Language Learning on YouTube: Several YouTube channels feature Javanese language lessons, pronunciation guides, and cultural insights. Search for Javanese language tutorials to find these resources.
- e. Javanese Language Apps: There may be mobile apps available for learning Javanese. Search your device's app store for Javanese language learning apps, and read user reviews and ratings to determine their quality.
- f. Local Language Schools and Universities: Some Indonesian universities and language schools offer online courses or resources for learning regional languages like Javanese. You can search for these institutions and inquire about their offerings.
- g. Facebook Groups and Communities: Online communities and Facebook groups dedicated to Javanese language and culture may share learning resources and offer opportunities for language practice and discussion.
- h. Language Learning Forums: Websites like Reddit have language learning subreddits where users discuss resources and share tips for learning fewer common languages. The r/language learning subreddit may have Javanese language-related content.

- i. Indonesian Language Learning Resources: Many resources for learning Indonesian (Bahasa Indonesia) are available online. While Indonesian and Javanese are distinct languages, learning Indonesian can provide a helpful foundation for Javanese learners.
- j. Language Exchange Platforms: Websites like Tandem, HelloTalk, or Speaky connect language learners with native speakers. You may find Javanese speakers interested in language exchange.

3.3 Javanese Culture Through Multimedia

Multimedia, including videos, podcasts, and interactive websites, can be powerful tools for teaching Javanese culture. These dynamic and engaging resources can provide learners with immersive experiences, deepen their understanding of Javanese culture, and foster a stronger connection to the traditions and heritage of Java. Multimedia can be used effectively for this purpose such as cultural exploration through videos like documentaries, cultural performances, or some tutorial of cooking and cuisine. Beside that Multimedia can be used to watch a podcast for storytelling about Javanese tradition, Interracial cultural websites, music and audio, video, and even an art gallery.

Incorporating multimedia into Javanese culture education can make the learning experience more immersive and dynamic, enhancing learners' appreciation and understanding of this rich and diverse culture. Social media and online communities play a significant role in sharing Javanese traditions and cultural heritage. These platforms provide accessible, interactive, and far-reaching channels through which individuals and communities can celebrate, preserve, and promote Javanese traditions.

In summary, social media and online communities serve as dynamic platforms for sharing Javanese traditions, fostering cultural awareness, and preserving the rich heritage of Java. They empower individuals and communities to take an active role in celebrating and passing down these traditions to future generations, transcending geographical boundaries and connecting a global audience to the beauty and depth of Javanese culture.

3.4 Challenges and Future Prospects

Digital learning offers numerous advantages for preserving Javanese language and culture, it also comes with specific challenges that need to be addressed to ensure its effectiveness. Some potential challenges associated with using digital learning for preserving Javanese language and culture access to digital resources and the internet is not uniform, especially in rural or economically disadvantaged areas of Java. This digital divide can limit the reach of online educational initiatives, leaving some communities with limited access to Javanese language and culture preservation efforts. Besides, the availability of high-quality digital content and resources specifically tailored to Javanese language and culture may be limited. Ensuring that there is a sufficient quantity and variety of resources is essential for comprehensive learning. Also, ensuring the accuracy and authenticity of digital materials can be challenging. Subpar or inaccurate content can misrepresent Javanese culture or introduce errors in language learning materials (Alam et al., 2023).

Digital learning may not fully replicate traditional methods of cultural transmission, such as apprenticeships and oral traditions. There is a risk that valuable aspects of Javanese culture may be lost in the transition to digital formats. The increasing use of Bahasa Indonesia, especially among younger generations, can lead to language shift away from Javanese. Digital learning materials may not be sufficient to reverse this trend without broader language revitalization efforts (Mhlongo et al., 2023). In some cases, the digital dissemination of Javanese culture may inadvertently lead to cultural appropriation or misinterpretation by individuals from outside the culture. Learners may experience digital fatigue, particularly if they are required to spend long hours in front of screens for their education. This can affect motivation and engagement.

In digital learning, technical issues, such as slow internet connections, outdated hardware, or limited digital literacy, can hinder access to and effective use of digital learning resources also can be a potential challenge. In addition, passive consumption of digital content without opportunities for real-world cultural engagement and practice may limit the depth of cultural understanding (Wicaksono et al., 2020).

Addressing these challenges requires a thoughtful and holistic approach to digital learning for Javanese language and culture preservation. This approach should involve collaboration between digital educators, cultural experts, community leaders, and relevant stakeholders to ensure that digital resources complement and enhance, rather than replace, traditional methods of cultural transmission. It also requires efforts to bridge the digital divide, adapt content to cultural contexts, and promote the active participation of Javanese communities in the preservation process (Khan et al., 2017).

Overcoming the challenges associated with using digital learning for preserving Javanese language and culture requires a multi-faceted approach that addresses issues related to funding, technological access, and cultural relevance. Some strategies can be applied to overcome the challenge such as seek financial support from government grants, cultural foundations, and international organizations dedicated to language preservation and cultural heritage. These funds can help create and maintain digital resources. Besides that, engage the Javanese diaspora and cultural enthusiasts in crowdfunding efforts to support digital initiatives. Crowdsourcing can provide a steady source of income for ongoing projects can be a solution (Ilyas et al., 2020).

By addressing these aspects, digital learning initiatives can better align with the needs and aspirations of Javanese communities, ensuring that the preservation of language and culture is a collaborative and culturally sensitive effort. Additionally, a focus on long-term sustainability and community engagement is key to the success of these initiatives. Collaboration between educators, cultural institutions, and tech developers is essential for the successful preservation and promotion of Javanese language and culture through digital means. This collaboration offers several benefits and plays a crucial role in achieving the common goal of safeguarding cultural heritage (Neti Harwati, 2018). Collaboration between educators, cultural institutions, and tech developers fosters a synergistic approach to Javanese language and culture preservation. It leverages the unique strengths of each stakeholder group to create comprehensive, culturally sensitive, and technologically advanced digital resources that can engage learners, promote cultural understanding, and ensure the sustainability of preservation efforts (Ilyas et al., 2020).

4. CONCLUSION

The preservation of Javanese language and culture holds profound significance for several reasons like cultural diversity, historical legacy, identity and belonging, interconnectedness, artistic and intellectual traditions, cultural tourism, linguistic diversity, traditional wisdom, and global heritage. Preserving Javanese language and culture is essential for maintaining cultural diversity, fostering a sense of identity, preserving historical legacies, and contributing to the global cultural tapestry. It is a testament to the importance of valuing and safeguarding the cultural treasures of our world.

Digital learning plays a pivotal role in the preservation of Javanese language and culture by leveraging technology and online resources to achieve accessibility, flexibility, customization, multimedia richness, cultural authenticity, and cultural exchange that connecting Javanese community with individual from same or diverse backgrounds, promoting mutual understanding, and also appreciation. In essence, digital learning serves as a dynamic and inclusive tool for preserving Javanese language and culture, making it more accessible, engaging, and adaptable to the needs and preferences of a diverse and digitally connected audience.

Exploring digital resources and actively participating in the preservation of Javanese heritage is a meaningful and enriching endeavor. Javanese culture is a treasure trove of traditions, language, art, and history that has captivated people for centuries. The digital age has opened up exciting opportunities to not only explore this rich heritage but also contribute to its preservation.

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