

VISUM (Virtual Tour of 18th Century Lasem History) for Historical Learning

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Abstrak

Artikel ini mengkaji potensi teknologi *virtual tour* sebagai alat pendidikan yang inovatif untuk mempelajari Perang Kuning di Lasem, sebuah peristiwa penting dalam sejarah Indonesia pada abad ke-18. Dengan mengembangkan lingkungan virtual yang imersif dan buku panduan pendidikan yang menyertainya, *virtual tour* memungkinkan pengguna untuk menjelajahi lanskap dan lokasi-lokasi penting yang terkait dengan konflik sambil terlibat dengan narasinya. Integrasi sumber-sumber sejarah tertulis dan lisan meningkatkan pengalaman belajar, mendorong pemahaman yang lebih mendalam tentang Perang Kuning dan signifikansinya di masa lalu Indonesia. Makalah ini membahas pertimbangan desain yang terlibat dalam menciptakan *virtual tour* yang efektif, manfaat pendidikan yang ditawarkan, dan implikasinya yang lebih luas untuk pembelajaran sejarah. Makalah ini menekankan bagaimana teknologi *virtual tour* dapat secara aktif melibatkan dan mengedukasi audiens yang beragam, membuat peristiwa sejarah lebih mudah diakses dan dapat dihubungkan. Melalui pendekatan yang dinamis dan imersif ini, pengguna dapat memperoleh wawasan tentang kompleksitas Perang Kuning, yang pada akhirnya berkontribusi pada pemahaman yang lebih bernuansa tentang sejarah Indonesia. Temuan ini menunjukkan bahwa teknologi *virtual tour* memiliki potensi untuk merevolusi pendidikan sejarah, menyediakan platform yang menarik untuk pembelajaran dan eksplorasi.

Kata kunci: pembelajaran sejarah, lasem, *virtual tour*.

Abstract

This article examines the potential of virtual tour technology as an innovative educational tool to study the Yellow War in Lasem, a pivotal event in Indonesian history in the 18th century. By developing an immersive virtual environment and accompanying educational guidebook, the virtual tour allows users to explore the landscape and key locations associated with the conflict while engaging with its narrative. The integration of written and oral history sources enhances the learning experience, encouraging a deeper understanding of the Yellow War and its significance in Indonesia's past. This article discusses the design considerations involved in creating an effective virtual tour, the educational benefits it offers, and its wider implications for history learning. The article emphasizes how virtual tour technology can actively engage and educate diverse audiences, making historical events more accessible and relatable. Through this dynamic and immersive approach, users can gain insight into the complexities of the Yellow War, ultimately contributing to a more nuanced understanding of Indonesian history. The findings suggest that virtual tour technology has the potential to revolutionize history learning, providing an engaging platform for learning and exploration.

Keywords: history learning, lasem, *virtual tour*.

INTRODUCTION

History virtual tours provide an immersive way to learn about important events such as the Yellow War in Lasem. By utilizing digital technology, anyone can explore

historical sites, artifacts and narratives from the comfort of their home or classroom. Interactions between Javanese and Chinese communities in Lasem at different times, including the Yellow War

era, offer insights into cultural dynamics and historical events (Basiroen & Manuaba, 2022). Through virtual tours, learners can study the complex process of acculturation, ethnic interactions and the impact of historical conflicts on local communities. By combining elements such as spatial availability and narrative inquiry, virtual tours can provide a perspective to foster empathy and historical understanding. Therefore, this research uses a design thinking method that emphasizes empathy at an early stage. Understanding the needs, preferences and expectations of individuals interested in Lasem's history is crucial to framing the research questions and objectives. By immersing themselves in the perspective of potential users, researchers can gain valuable insights that inform the direction of the research.

In the midst of modern challenges such as the disintegration of cultural values and local historical knowledge, the integration of digital tools in higher education is very important. (Transforming Higher Education in the Digital Age, 2024). Such issues are often encountered among students taking the "Indonesian History 17-19th Century" course. Based on the questionnaire distributed, 72.7% of students answered (strongly agree), and 27.3% answered (agree). This course generally covers the study of political, economic, social and cultural developments in the archipelago

along with the strengthening of European hegemony from the 17th century to the 19th century. Therefore, integrating local history material about the Yellow War in Lasem with technological advances can solve this problem. Combining face-to-face interaction with distance learning can increase flexibility and accessibility to education, ensuring continuity of learning even during a crisis. Virtual tours focusing on historical events such as the Yellow War can benefit from this blended approach, reaching a wider audience and enabling an interactive learning experience.

The use of digital visualization and virtual cultural heritage experiences has been explored in various studies, demonstrating the potential of technology in bringing history to life. By digitally reconstructing cultural heritage sites and artifacts, such as bomb shelters from the Spanish Civil War, researchers have shown how virtual experiences can enhance learning about the past (Schaper et al., 2018). Applying similar techniques to the Yellow War in Lasem could provide learners with a visually engaging and informative way to explore the historical context, battles and cultural implications of the conflict.

The use of Virtual tour in history learning today has great potential to enrich students' learning experience. Therefore, this research applies the integration of technological advances in

learning with local history content. The application of virtual tour in history learning is expected to answer contemporary issues. With proper preparation and use, virtual tours can be an effective and engaging learning tool for students. This research is important because it utilizes digitalization in history learning. Thus, the focus of this research is to utilize the potential of virtual tours in learning the history of the 18th-century Lasem Yellow War as learning that is responsive to digitalization.

METHODS

The participants in this study were a sample of students from the Department of History at State University of Malang, Indonesia. The sample selection criteria were as follows: students from the Department of History who are currently or have taken Indonesian History courses from the 17th to the 19th century and students who have historical thinking skills. With historical thinking skills, participants can produce objective research (Setiawan, 2023).

In this research, the Design Thinking approach will be used as a framework. Design Thinking is a widely used method in designing application interfaces. This method addresses the emotional impact, aesthetics, and interactions that connect the system with its users. This approach focuses not only on how users feel but also on their overall

experience. The Design Thinking process includes five stages Empathize, Define, Ideate, Prototype, Test (Stewart, 2011).

The first step in the design thinking process is to empathize with the target audience, in this case individuals who are interested in exploring the history of Lasem. At this stage, the researcher also conducted a needs analysis of the participants by distributing a needs analysis questionnaire that had been designed. After the empathize stage, the next step is to define the problem statement and set the objectives of the virtual tour project. Once the problem is identified, the next stage is ideation where creative solutions are generated. This stage is a vital step in the design thinking method because it determines the product to be (Wolniak, 2017). After that, we developed a prototype and tested it.

RESULTS AND DISCUSSION

Selecting and Developing Learning Materials

After the empathizing stage, the research method should continue by defining the problem statement and research objectives. Taking an example from the work of Dewi et al. (2022), clearly articulating the objectives of the research project, such as improving user experience and engagement with Lasem's historical narrative, sets the foundation for the subsequent stages of the research.

This stage ensures that the research remains focused on effectively addressing the identified needs and challenges. At this stage, researchers also conducted field data collection as part of the content for the 18th century Lasem Virtual Tour (VISUM) (see figures 1, 2, 3). In addition, researchers also conducted studies and reviews as part of the material included in the Virtual Tour.



Image 1. The 360 Picture of Masjid Agung Lasem



Image 2. The 360 Picture of Oei Ing Kyat's grave



Image 3. The 360 Picture of Raden Panji Margono statue

Lasem in the 16th century was a bustling port city with a rich history of cultural and economic influences. The city's existence dates back to the 16th

century period, as evidenced by the discovery of a large shipyard on Lasem's Babagan river, which served as an important center long before the arrival of the Verenigde Oost Indische Compagnie (VOC) in the region (Basiroen & Manuaba, 2022). These early developments highlight Lasem's strategic location and economic importance in facilitating trade and maritime activities.

Lasem's cultural landscape in the 16th century was shaped by a blend of Javanese and Chinese influences, with a strong sense of acculturation evident in the city's architecture and social dynamics (Purwanto & Titiek, 2017). Although Chinese are the dominant ethnicity in Lasem, historical records show a close bond of solidarity between the Chinese and Javanese communities, which emphasizes harmonious coexistence and collaboration in various aspects of life. This blend of cultures contributes to Lasem's unique identity as a place where diverse traditions and practices meet.

Lasem's maritime industry played an important role in its growth and prosperity during the 16th century. The Chinese community in Lasem, driven by the need to survive, ventured into the opium business, which flourished at sea in the 19th century (Lestari & Wiratama, 2019). These economic activities not only supported the local population, but also underscored the entrepreneurial spirit and

adaptability of the Chinese population in Lasem.

In the 18th century, the Chinese settlement in Lasem, known as Chinatown, experienced rapid growth following the migration of Chinese residents and the massacre of Chinese known as Geger Pecinan (Lestari & Wiratama, 2019). This event marked a dark chapter in Lasem's history, highlighting the tensions and conflicts that affected the dynamics of the city's Chinese community.

Interactions between Chinese, Javanese and Arab communities in Lasem in the 18th century reflect a complex interplay of cultural exchange and acculturation. Lasem as a small Chinese town emphasizes the cultural intersections and conflicts that characterize coastal areas, explaining the intricate web of cultural influences and historical context (Lan, 2015). This cultural tapestry contributes to Lasem's unique identity as a place where diverse traditions and practices meet.

The establishment of a multicultural society in Lasem in the 18th century marks an important milestone in the city's history. With two distinct urban centers, including the palace as the center of government and Chinatown as the center of trade, Lasem exemplifies a harmonious mix of cultural activities and exchanges (Jayusman, 2019). This multicultural environment fosters a sense

of diversity and inclusiveness, laying the foundation for social cohesion and mutual understanding among different ethnic groups.

The architectural landscape of Lasem in the 18th century bears witness to the acculturation and fusion of Chinese and Javanese influences. The typology of courtyard dwellings in Chinese settlements in Lasem displays a blend of architectural styles and cultural elements, reflecting the harmonious coexistence of different communities within the city (Duhita, 2019). This architectural mix not only shapes the physical environment of Lasem, but also symbolizes the richness and cultural diversity of the region.

The harmonization of inter-ethnic relations and religious tolerance in Lasem in the 18th century is a testament to the city's ethos of inclusivity and mutual respect. Cross-cultural marriages between Chinese, Javanese and Santri communities underscore the spirit of unity and cooperation that transcends ethnic and religious boundaries (Atabik, 2016). This harmonious coexistence is the basis for peaceful interactions and collaborative efforts among the various groups in Lasem.

The batik industry in Lasem flourished in the 18th century, with the development of unique batik motifs that reflected the fusion of Chinese and Javanese cultural elements. The cultural acculturation of batik in Lasem during this

period resulted in distinctive motifs characterized by intricate designs and symbolic meanings (Basiroen, 2019). This cultural exchange in the field of art and aesthetics contributed to the vibrant tapestry of Lasem's artistic heritage.

Creating an 18th Century Lasem History Virtual Tour (VISUM)

Once the research problem is defined and potential solutions are identified, the next step is to prototype the research methodology. Taking an example from the work of Nasution & Nusa (2021), developing a research prototype that integrates key stages in design thinking, such as empathizing, defining, ideating, prototyping, and testing, allows researchers to validate their approach and gather feedback for refinement. This iterative process ensures that the research method is robust and aligned with the research objectives.

In line with the prototyping phase, it is crucial to consider the educational aspects of the research method. Purnamawati & Sunarti (2022) highlighted the importance of incorporating educational principles into the research design, especially when exploring historical content related to Lasem. By integrating elements of experiential learning, field trips or research projects, researchers can increase the educational value of the research and engage participants in a meaningful way.

Creating a historical virtual tour to study the Yellow War in Lasem, it was important to learn about the rich historical background of the region, especially focusing on the interaction between Javanese and Chinese communities. The acculturation between Javanese and Chinese during the Ming period, the Yellow War period, and the 20th century provides a nuanced perspective on the cultural fusion and conflict that shaped Lasem.

In exploring the potential of virtual tours as an alternative to responsible heritage tourism in Lasem, it is important to consider the framework of responsible tourist behavior and evaluate the efficacy of virtual tours in conveying the historical significance of sites such as Kota Lama Lasem (Poetry, 2021). By utilizing virtual tours, individuals can interact with cultural heritage sites in a responsible manner while still gaining valuable insight into the Yellow War and its impact on the region.

Exploring the historical significance of Lasem as an important trading center that facilitated interactions between Indonesia and China since the 14th century can explain the deep-rooted relationship between the two regions (Sobirin, 2017). In addition, investigating Lasem's architectural heritage, such as the construction of Lasem Station during the colonial period, provides insight into the physical manifestations of this historical

relationship (Wijaya, 2023). Understanding how the Chinese community in Lasem coexisted peacefully with the Santri community highlights the importance of tolerance and mutual respect in shaping the social fabric of the region (Sobirin, 2017).

In addition, examining the educational benefits of cultural sites such as the Cu An Kiong Temple in Lasem provides a platform for students to engage with Chinese history, culture and traditions in the local context of Lasem (Awwaliyah & Falaq, 2023). The adaptive reuse of Chinese architectural heritage in Lasem, as documented in the Karangturi area, demonstrates how historic buildings have been transformed and preserved over time, reflecting the evolving cultural landscape of the region (Kwanda, 2020). In addition, the formation of a multicultural society in Lasem, where Chinese and Javanese communities coexist, underscores the unique environment that emerged through centuries of interaction and cooperation (Jayusman, 2019).

Incorporating elements of responsible heritage tourism through a virtual tour of Lasem's Old Town can offer a sustainable and informative way for visitors to engage with the region's historical narrative. By utilizing digital platforms to explore Lasem's history, everyone can gain a deeper understanding of the Yellow War and its implications for

the cultural dynamics of the area. This approach not only promotes accessibility to historical knowledge, but also encourages responsible tourist behavior by preserving and respecting cultural heritage sites.

By synthesizing historical records, cultural studies, architectural analysis, and educational perspectives, a virtual tour focusing on the Yellow War in Lasem can provide a comprehensive and immersive learning experience. Through this tour, participants can explore the complex tapestry of historical events, cultural exchanges and social dynamics that have shaped Lasem into the vibrant and diverse region it is today. By engaging with Lasem's multifaceted history, everyone can gain a deeper appreciation for the interconnectedness of cultures and the enduring legacy of past conflicts and collaborations.

The resulting product is the XVIII Century Lasem History and Culture Virtual Tour (VISUM). VISUM (Virtual Tour of the 18th Century Lasem History - Virtual Tour of the 18th Century Lasem) is a website to preserve the historical and cultural tourist destinations of Lasem in the 18th century. VISUM not only contains a virtual tour, but is also equipped with various elements such as history, tourist destinations, culinary and cafe options, geography, digital maps, videos, and others. Thus, VISUM can not only be seen as a tool for learning, but also as a means to promote

tourism in Lasem. This is in line with SDGs 4 (Quality Education), 9 (Industry, Innovation, and Infrastructure), and 11 (Sustainable Cities and Communities). From the effectiveness test conducted on participants, the results showed an average score of 90.77%, with the lowest score of 50% and the highest score of 100%. Based on the results of the effectiveness test, the participants generally showed a good understanding of the 18th century Lasem history material. The following is an overview of VISUM and its features.

CONCLUSION

The 18th century was a transformative period for Geger Chinatown in Lasem, characterized by cultural exchange, social dynamics and economic growth. The events and developments that took place during this time shaped the city's identity as a multicultural center where various communities coexisted, collaborated and contributed to the rich history of Lasem. Historical virtual tours offer a diverse and engaging platform to learn about important events such as the Yellow War in Lasem. By utilizing research from fields such as cultural studies, psychology, education and technology, educators can design immersive and informative virtual experiences that bring history to life. Through a combination of digital augmentation, interactive storytelling, language education, and cultural

exchange, virtual tours can provide learners with a comprehensive understanding of historical conflicts, their impact on society, and the valuable lessons they offer for the present and future. By harnessing the power of technology and education, history virtual tours have the potential to transform learning experiences and foster a deeper appreciation of the complexities of our shared history.

In conclusion, this study shows that virtual tour is a very effective method to improve students' understanding of the Yellow War in Lasem, with an effectiveness test result of 90.77%. With adequate technological support and integration with other teaching methods, virtual tours can be a valuable tool in history education. Therefore, it is recommended that educational institutions consider adopting and integrating virtual tours into their curriculum and make efforts to overcome challenges that may arise during implementation. Further research is also needed to explore the potential of virtual tours in other learning contexts and to identify best practices for their use.

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