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VISUAL MYTHOLOGY REYOG PONOROGO IN ARTIFICIAL INTELEGENT

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ABSTRACT

Reyog Ponorogo is an artwork with a rich history and folklore, as well as a particular visual narrative that is worth studying through the lens of visual data studies. Reyog performers offer significant meanings via the visuals of their performance as well as the ideology of Ponoragan Javanese culture. The purpose of this project is to convert oral myths into visual signals in Reyog performances using visual data. Using W.J.T. Mitchell's "Picture Theory" method, this research investigates the complicated interplay between pictures and text, introducing the idea of "imagetext" as one manifestation of this interaction. The method used is a prompt-based descriptive approach in which keywords are entered to instruct the artificial intelligence (AI) system to translate the command into a visual form, as well as a re-representation technique based on "picture words" in an effort to create images with narratives rooted in Reyog Ponorogo mythology. This study included two AI systems: Leonardo AI and Midjourney. The study found that the AI system is not entirely capable of understanding local regional languages, leading to plot discrepancies between pictures in the same story series. Nonetheless, this technique adds a new dimension to visual communication technology, particularly in the delivery of visual messages using AI.

Keywords: Reyog Ponorogo; myth visualization; artificial intelligence; Picture Theory; visual communication

INTRODUCTION

The visualization and interpretation of mythology are being revolutionized by artificial intelligence (AI), which is revitalizing old cultural myths. Researchers are not only maintaining but also strengthening legendary features through the integration of AI with conventional storytelling approaches. This results in immersive visual experiences that effectively bridge the gap between the past and present. With the help of this creative strategy, cultural heritage may be better understood and appreciated, and classic tales become more interesting and approachable for modern audiences. Mythology is reviving because to AI-driven visualizations, which provide a dynamic and engaging approach to examine the rich fabric of human history and imagination.

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Artificial intelligence technology is being used extensively these days to try and change regional values with local aesthetic preferences. These initiatives, which aim to present Indonesian regional cultural treasures in visual formats like photos or posters resembling movie posters, are frequently seen on social media platforms like Facebook and Instagram. It is common practice to approach visual content with an exploration of Indonesian forms, models, and characteristics through a variety of intricately displayed image elements.

The tale of Reyog Ponorogo is among the epic tales that have been appropriated for metamorphosis and representation in the form of artificial intelligence. Even so, creating other stories—like the ones that are currently popular on social media about Javan cities and are reimagined as hyperrealistic stories with regional features—is just as thrilling and difficult.

Source https://web.facebook.com/photo/?fbid=1865426797310549&set=pcb.1865427270643835

Figure 1. Example of an image representing the city of Tegal in the exploration of artificial intelligence by @Frihasnimal on the Facebook page on December 21, 2023.

Nonetheless, philosophers who attempted to characterize human mind as a mechanical manipulation of symbols sowed the roots for current artificial intelligence. The programmable digital computer, a device built on the abstract core of mathematical reasoning, was created in the 1940s as a result of this effort. Historically, innovators created mechanical, self-moving devices known as "robots" that required no human assistance. The ancient Greek term "automaton" meant "acting of one's own accord." 400 BC is one of the oldest dates for the existence of robots; it speaks about a mechanical pigeon that Plato, the philosopher, made. Years later, in about 1495, Leonardo da Vinci developed one of the most well-known robots (Hays, n.d.; Nof, 2009).

The 1956 Dartmouth workshop marked a pivotal moment in AI research, where early pioneers envisioned a future where machines could match human intelligence. Despite their ambitious predictions, the journey toward achieving such intelligence has been complex and fraught with challenges. The Dartmouth workshop laid the groundwork for AI, with participants believing that human-level intelligence in machines was achievable within a

generation. This optimism led to significant funding and research efforts aimed at realizing these predictions. Recent workshops emphasize the importance of diversity and capacity in AI education, highlighting the need for curricula that reflect the competencies required in the workforce (Maher & Tadimalla, 2024).

AI research in the 1960s concentrated on symbolic approaches and problem solving, including rule-based and expert systems. Machine learning, which employs algorithms to learn from data and get better over time, took over as the focus of AI research in the 1970s. AI research in the 1980s concentrated on knowledge-based systems, which reason about issues using a knowledge base. Neural networks, which mimic the human brain and can learn from data, were the focus of AI research in the 1990s. AI research in the 2000s concentrated on computer vision, robotics, and natural language processing (Lawlor, 1984). With applications in industries including healthcare, banking, and transportation, artificial intelligence (AI) has been present in our daily lives more and more in recent years (Stone et al., 2022). Since its beginnings, artificial intelligence (AI) has grown quickly, propelled by developments in computer technology, algorithms, and data. Though there are still many obstacles to be solved, artificial intelligence (AI) has the power to completely change the way we work and live (Abduljabbar et al., 2019).

A branch of computer science known as "visual AI" gives robots the ability to recognize, comprehend, and respond to visual pictures and data in a manner similar to that of human vision. To extract insights and produce "something" from pictures, it incorporates a number of technologies, including computer vision, natural language processing (NLP), different content types (video, photographs, and augmented reality), and deep learning (Majumder, 1988).

Computer-based visuals are a key area of artificial intelligence (AI) that enable computers to observe and learn to identify objects and people's faces in visual data. Among the various kinds of visual-based computer jobs are those that involve looking for faces, text, or images. Image recognition is what enables machines to recognize, comprehend, and classify certain objects in visual input. Neural networks, enormous processing capacity, algorithms, and training methods are used by visual AI to accomplish visual tasks at scale. These tools enable the system to recognize complex patterns in processed images. This is made feasible by visual-based deep learning, another area of artificial intelligence (Islam, 2022).

Visual AI can be applied to a wide range of uses, including document classification, product detection and search, brand monitoring, social monitoring, advertising monitoring, trademark compliance, counterfeit detection, digital piracy monitoring, product authentication, sponsorship monitoring, security, healthcare, automotive, and much more. Visual AI is already widely used today, and has the potential to have a major impact on a number of markets and industries (Khan et al., 2021). There are free artificial intelligence (AI) art generators available on some websites and apps that are useful tools for adding originality to visual content. This AI art generator can develop existing images or create something new with text descriptions. Additionally, there are fully managed development environments such as Vertex AI Vision that allow you to easily build, deploy, and manage computer vision applications for unique business needs. You can even automate the training of your own custom machine learning models using AutoML's easy-to-use graphical interface.

Then, we may use this AI intelligence to communicate through images that we can condition based on certain factors. We may convey thoughts in the form of visually appealing

graphics that are simple to comprehend and can be interpreted in a variety of ways with the aid of artificial intelligence (AI). The use of pictures, graphics, and other visual aids to communicate information is known as visual communication. The area of visual communications is evolving as a result of AI technology, which makes it simpler and more effective to produce eye-catching images and designs (Malamed, 2009).

Zhao et all provides a new perspective in addition to previous research in the field of visual AI that is directly related to culture and mythology such as the mythological story from the Chinese Classic of Mountains and Seas with ChatGPT and Midjourney (Zhao & Song, 2024). Han trying to examines the design implications of leveraging generative AI tools such as ChatGPT, Stable Diffusion, Midjourney for literacy development and creative expression for children (Han & Cai, 2023). The use of AI in graphic design allows for the reinterpretation of Turkish mythological characters, merging traditional elements with modern digital techniques to preserve cultural heritage (Aydemir, 2023). Automated mythological scene recognition in artwork is accomplished using machine learning algorithms, which have demonstrated a remarkable degree of accuracy in identifying characters and places from literary works such as the Indian epic "The Ramayana" (Bharadwaj et al., 2020). An evolutionary computing system creates synthetic personas that embody different mythologies, demonstrating how AI might be used to retell cultural tales in novel ways (Domingues et al., 2004).

In Ponorogo civilization, reyog performances are categorized into two main performance models. In the first, reyog takes the shape of an obyogan, while in the second, reyog takes the form of a celebration. Reyog, also known as obyogan, is a type of performance that is presented in open spaces like streets, fields, or other areas without giving careful consideration to performance standards like plot, costumes, or equipment used in the play itself. On the other hand, reyog in the form of a festival is a collection of dances that are methodically produced using a Bantarangin version of the tale and a full performance model that includes several dancers, a standard plot, and all necessary accessories. The President of the Republic of Indonesia at the time became interested in the National Reyog Festival's growth and turned it into a national event in 2005 by having competitors vie for the inaugural President's trophy. The contingent from Wonogiri Regency was the first to receive a revolving trophy from the President.

Given this context, Reyog Ponorogo—also known as the Reyog Festival or production—appears to have evolved into a distinct genre. This remix performance featuring a festival model makes us think of the Ramayana Ballet, a type of dance performance at Prambanan Temple. Ballet in the style of Reyog, performed in a festival setting, narrates the tale of Prabu Klana Sewandana's quest to ask Dewi Songgolangit of the Kediri kingdom to marry him.

Ponorogo Reyog is an intriguing and one-of-a-kind show. This art form involves the Ponorogo reyog returning to Ponorogo for a reyog performance during the Ponorogo reyog festival, which takes place on the Javanese calendar's Suro month or on New Year's Day. Reyog groups or Reyog groups participating in the Ponorogo Reyog festival in this plaza are from the Ponorogo area as well as agencies within the Ponorogo district, including government agencies like sub-districts or artistic communities, high school and vocational level schools, and other agencies. What's more intriguing, though, is that a large number of these contingents originate from beyond Ponorogo, where they vary from the Ponorogo Reyog itself in terms of culture and creative expression; in fact, there are many Reyog groupings such as South Korea.

The Ponorogo Reyog mythology, which was chosen for this study specifically, was observed in the festival performance format of the Reyog performance during the National Reyog Festival, which takes place annually in Ponorogo Regency Square. The narrative that is integrated into the Reyog Ponorogo tale visualization tells the account of Prabu Klana Sewandana's travels as he attempted to ask Dewi Songgolangit from Kediri to marry him. However, tigers and peacocks stopped Prabu Klana Sewandono's gang in their tracks. Thus, in order for Prabu Klana Sewandana to proceed with his expedition, he had to vanquish the tiger and peacock. This article attempts to resurrect the "imagetext" approach using artificial intelligence, replicate it, translate it methodically using a machine that uses a deep learning system, and re-describe it as an image that resembles a photo.

Reyog Ponorogo is a remarkable example of how sophisticated technology, notably artificial intelligence (AI), may be combined with rich traditional cultural components. The profound legendary ideals contained in Indonesia's cultural history of Reyog Ponorogo offer an intriguing opportunity to investigate how artificial intelligence might be utilized to depict and promote this mythology in a modern setting. However, this study recognizes the possible concerns involved with AI's use in depicting traditional cultural symbols, including the possibility of cultural appropriation and misrepresentation.

One of the key challenges in employing AI to visualize Reyog Ponorogo is ensuring the authenticity of cultural symbols and narratives. Given the complexity and depth of Javanese Ponoragan culture, which is tightly woven with historical, spiritual, and societal meanings, there is a significant risk that AI systems may not fully grasp these nuances. While AI can be a powerful tool for enhancing cultural dissemination, it also has the potential to oversimplify or misrepresent cultural narratives, which may lead to unintentional cultural appropriation.

Cultural appropriation poses significant risks to the integrity of cultural expressions, such as Reyog Ponorogo, particularly when AI systems misinterpret its sacred symbols and narratives. This misrepresentation can lead to a distortion of meaning and a loss of respect for the cultural origins, potentially causing discontent within the community. AI systems may lack the contextual understanding necessary to accurately interpret cultural symbols, leading to misrepresentation (Al-Attabi, 2024). Such misinterpretations can trivialize sacred performances, reducing them to mere aesthetic elements devoid of their cultural significance (Zhang et al., 2023). One of the impacts that occurs is that the appropriation of cultural elements without proper recognition can damage people's ownership and relationship to their heritage, Misrepresentation can foster feelings of alienation among community members, as their cultural expressions are commodified and distorted (Mosley et al., 2023).

Authenticity & Conservation of Reyog Ponorogo traditions offers a new method for documenting and preserving ancient cultures in addition to producing new artworks through the use of artificial intelligence in the depiction of mythology. This is significant in light of globalization, which makes it difficult for many local cultures to thrive.

LITERATURE REVIEW

An artificial intelligence text-to-image generator is a machine learning model that generates pictures that correspond to natural language descriptions given as input. In order to provide good results, this model creates pictures using two neural networks and evaluates their realism based on text commands. Transformer models are becoming the more preferred option, however recurrent neural networks, such as short-term memory networks, can also be used for

the text encoding stage. Conditional generative adversarial networks have been widely employed for the picture creation stage, with diffusion models also gaining popularity in recent years (Vinyals et al., 2015).

Machine learning is the idea that produced the images in this article. One of the fundamental ideas of artificial intelligence is this technique, which enables computers to learn from data without the need for additional programming. The study of computer programs that can learn from experience is known as machine learning, according to renowned computer scientist Tom M. Mitchell (Rifky et al., 2024). W.J.T. Mitchell introduced the term "picture theory," which is used in this article and his book Image Theory. Mitchell refers to a picture as imagetext. The entry of language into (or out of) the field of the image itself, which is understood as a complex medium that is always mixed and heterogeneous, situated within institutions, history, and history, is where this theory's investigation of this change begins. discourse: visuals are viewed as visual texts in a nutshell (Miller, 2023). Subsequently, Mitchell introduced a crucial component to the advancement of artificial intelligence by utilizing "representation" (Purgar, 2016) to produce "imagetext," which is currently utilized to generate artificial intelligence through computer programming language. The writing of this article uses this technique of re-presentation based on "picture words" in an attempt to create pictures or images with narratives based in the Reyog Ponorogo mythology.

The concept of "picture theory" or "imagetext" explores the intricate relationship between visual and verbal elements in art and literature, emphasizing how these modes of communication interact to create meaning. This interdisciplinary approach is crucial for understanding how images and texts can complement and enhance each other, offering a richer interpretive experience. AI's role in cultural representation is multifaceted, involving both the potential to mediate cultural narratives and the risk of perpetuating existing biases. The research papers provided explore how AI technologies, particularly text-to-image models and visual generative media, interact with cultural contexts and representation. These studies highlight the challenges and opportunities AI presents in accurately and ethically representing diverse cultures.

Brett Whiteley’s artwork, "Interior, Lavender Bay," exemplifies the synergy between words and images. The integration of textual elements with visual art highlights the communicative power of combining these modes. The translation of Whiteley’s work into another language further reveals the symbolic interplay between art and language, as discussed through the lens of W. J. T. Mitchell’s Picture Theory (Zanoletti, 2013).

Other research that relevant to this study is The works of poets Anne Carson and Nicole Brossard illustrate the intersection of literature and visual culture. Their exploration of female bodies through a pictorial lens bridges the gap between textual and visual representation, drawing on a rich intertextual background. This approach resonates with Roland Barthes’ theories on pictorial experience, highlighting the intimate connection between the author’s persona and the visual elements in their texts (Sophie Mayer, 2008).

In Korean cultural production, particularly through the lens of platformization in the Korean cultural market. It highlights how AI has significantly transformed cultural production processes, impacting everything from the creation to the consumption of cultural content. This transformation is particularly evident in industries like K-pop, where AI is reshaping the future by enhancing creativity and global appeal (Jin, 2024).

Another Perspective on understanding how people perceive the integration of AI into the art and culture sector, specifically in general cultural fields, music, visual arts, detecting forged art, and creating art. The findings indicated that individuals' positive attitudes toward AI in art are significantly influenced by their experiences of relatedness and autonomy when using new technologies (Latikka et al., 2023).

METHODS

Data Acquisition and Processing for AI Training

1. Data Source and Mythological Content

The training data for AI image generation was derived from a comprehensive understanding of the Reyog Ponorogo mythology. The foundational text used is the officially documented mythological narrative known as the "yellow book" or Pedoman Dasar Kesenian Reyog Ponorogo dalam Pentas Budaya Bangsa, which was recorded in 1993 by the Ponorogo Regency government (Pemkab Ponorogo, 1993). This document serves as the primary source of reference for Reyog Ponorogo performances and provides a detailed account of the mythological stories that form the basis of the visual representations.

2. Data Visualization and Translation Process

To generate visual content that reflects the Reyog Ponorogo mythology, we used specific visual design concepts and technical terms. For instance, terms like "wide lens" and "Kodak Portra" were used to guide the AI in creating images with wide-angle effects and a golden tone, respectively. These terms help the AI tools replicate certain photographic qualities and aesthetic effects that align with the traditional portrayal of the mythology.

3. AI Tools Utilized

- Midjourney: This AI tool generates visuals from textual descriptions. Midjourney was trained using a large dataset of images and textual descriptions to interpret and create visuals based on the narrative provided flexibility (*From Pixels to Paintings: The Rise of Midjourney AI Art*, 2023) (Pryor, 2023). The AI tool, developed by David Holz and launched on March 14, 2022, has undergone several updates, including versions 2 and 3 in April and July 2022, respectively, and the alpha version of version 4 released in November 2022. Midjourney uses deep learning algorithms and natural language processing to transform written descriptions into images, reflecting the mythological content with high (Kimura & Nakajima, 2023; *Midjourney*, 2023).

- Leonardo AI: this tool specializes in generating creative visuals and game assets. Leonardo AI leverages AI-powered algorithms to assist in creating detailed and imaginative graphics, including people, objects, and environments. It supports artists and developers by converting conceptual ideas into visual art, thereby contributing to the visualization of Reyog Ponorogo mythology through its capabilities (Azza, 2023)(*Leonardo.Ai*, 2022).

4. Data Challenges and Considerations

The use of AI in generating these visuals presents challenges, such as ensuring the accuracy of mythological representation and avoiding misinterpretation of cultural symbols. While AI tools like Midjourney and Leonardo AI offer innovative ways to visualize narratives, there is a risk of divergence between the AI-generated images and the expected visual outcomes based on traditional understandings. The prompts used, including both short-sentence explanations of the myths and technical visual design aspects, play a crucial role in guiding the AI to produce appropriate representations. Despite these efforts, some discrepancies between the generated visuals and traditional imagery may occur, reflecting the ongoing need for refinement in AI-based image generation (BroutonLab, 2020).

The validation of AI-generated images involves a variety of methods, each leveraging different technological approaches to ensure accuracy and reliability. These methods primarily focus on distinguishing AI-generated images from real ones, using advanced machine learning models, transfer learning, and benchmarking techniques. Some of the validation techniques in AI development are Transfer Learning and Deep Learning Models, Benchmarking with Large Multi-Modal Models (LMMs), Generalization and Pixel Prediction and Fact-Checking with Image-Text Associations.

In this research, we employ a Fact-Checking methodology using Image-Text Associations to validate AI-generated reports. Specifically, a novel approach is developed to verify the authenticity of these reports by learning the associations between visual elements and their corresponding textual descriptions. This process involves the creation of a dataset comprising both authentic and fabricated reports, enabling the training of a model to distinguish between genuine and falsified information. The goal is to ensure the accuracy of AI-generated content by comparing it with primary sources, such as the *Pedoman Dasar Kesenian Reyog Ponorogo dalam Pentas Budaya Bangsa*. This comparison allows for the extraction and validation of visual representations of Reyog Ponorogo, utilizing AI tools such as MidJourney or Leonardo AI for enhanced visualization (Mahmood et al., 2023).

This article is an experimental study that combines digital visual processing and trial-and-error techniques to provide the relevant image of the mythology of the reyog performance in the Bantarangin version. A number of legends about the beginnings of reyog emerged in the Ponorogo district, including the Bantarangin version, the Demang Suryongalam version from Jetis, and the Bathara Katong version, are considered to be the source of the Bantarangin version of Reyog Ponorogo.

RESULT AND DISCUSSION

There are still several variations and a complicated history of Reyog. The Bantarangin Kingdom version, the Ki Ageng Kutu Suryangalam version, and the Batara Katong version are the three most well-known variations. The Bantarangin version of the Reyog narrative, which is situated in the Kediri period or about the 12th century, is the original version based on the chronology. The origins of Reyog may be traced back to a commoner from Kediri named Klana Sawandana, who offered himself as a sacrifice. At that time, a very serious epidemic was affecting Kediri, with many individuals becoming ill in the morning and passing away in the afternoon. The King of Kediri then held a competition, the essence of which was that whoever

could overcome the “pagebluk” would be appointed Senopati and married to his daughter, Dewi Songgolangit.

The second version, known as the Suryangalam version, narrates the tale of Ki Ageng Kutu Suryangalam, a poet who lived during Bhre Kertabumi's reign at the end of the 15th century. This version is humorous or satirizing the state of the Majapahit monarchy at the time, which was in danger because of the powerful influence of Bhre Kertabumi's Chinese wife. Then Suryangalam relocated to the Wengker region, where he resided in the hamlet of Kutu (which is currently inside Jetis District's administrative boundaries). Ki Ageng Kutu established a hermitage in this area and produced a play that portrayed the Majapahitean ruler as a tiger perched on a peacock, a representation of Bhre Kertabumi's wife who came from China. The image of horse warriors, who are meant to be courageous and nimble, as elegant and feminine as ladies represents the fragility of the nation's armed forces. In this tale, Suryangalam is portrayed as an unconquerable tiger seductress who goes by the names Bujang Ganong or Pujonggo Anom, which are alterations from Suryangalam's real name while he was a Majapahitan official (Simatupang, 2013).

The Bathara Katong version of the Reyog mythology is the final one. According to many accounts, the Bathara Katong rendition of the legend is an improved version of the Suryangalam rendition. Born from a family of warriors, Bathara Katong is the son of Bhre Kertabumi, who was tasked with defending Majapahit's sovereignty in the Wengker region. This account also adds that Bathara Katong's half-brother, Raden Patah, who was ruling the Demak kingdom at the time, converted him to Islam prior to him going on his mission. Bathara Katong confronted Ki Ageng Suryangalam, who continued to follow Buddhist teachings, and engaged in combat in an attempt to secure the Wengker region. Ki Ageng Suryangalam gave up to Bathara Katong after losing. At this point, Bathara Katong maintained to conserve the art produced by Ki Ageng Suryangalam by adding Islamic teachings into it, rather than eradicating or eliminating it. Ki Ageng Kutu, a former pupil of Ki Ageng Suryangalam who converted to Islam and enrolled at Bathara Katong, reaffirmed this. This version is thought to have been the prototype for the Reyog performance, which incorporates a number of Islamic teaching symbols, such as the term Reyog's Arabic root, Riyoqun, which means *kendang, kempul, kenong, and udeng*. Using the visual cues on the reyog itself, the researchers attempted to decipher the legends and stories behind the performance by connecting it to Javanese visual mythology and providing evidence from other related and comparable myths.

Even now, there is ongoing discussion and dispute over the exact origins of reyog. Regarding the 1993 edition of the Yellow Book, the name of the performance guideline for the National Reyog Festival, the word Reyog itself is derived from the Arabic word *Riyoqun*, which signifies *Khusnul Khotimah. Riyoqun'*s deeper meaning summarizes the entire human life experience, which is marred by numerous faults and blemishes. Being conscious, believing, and eventually being devoted to God Almighty will ensure that you are a flawless, moral person and a sincere Muslim (Ponorogo, Pemkab, 1993)

Figure 2. Visualization of the Ponorogo Reyog mythology in the reliefs on the west side of the Bathoro Katong Ponorogo Stadium (photo: researcher documentation).

1. Reyog Ponorogo Mythological Animal created by the Ai Application

Figure 3. Mythological animals created by the Leonardo AI application with the concept of tigers and peacocks

A tiger and a peacock together are the principal characters of the Ponorogo myth Reyog Ponorogo. The peacock is at the top and the tiger's head is at the bottom. According to the Bantarangin version of the story, this manifestation happened when a party of King Klana Sewandono was strolling hand in hand to the kingdom of Kediri to propose to Dewi Songgolangit. The tigers and peacocks were playing in the center of the forest when they met.

King Klanasewandono engaged in a bloody battle with these two creatures while traveling. The monarch found it challenging to subdue these creatures. Ultimately, the King vanquished the tiger and peacock by using the Samandiman Whip as his primary weapon. According to legend, this animal banded together and traveled all the way to the Kingdom of Kediri as a Prabu Klanasewandono supporter.

The aforementioned picture was produced by the Leonardo AI program and features the idea of legendary creatures like the tigers and peacocks seen in Ponorogo. The phrase "Photo of a peacock spreading the feathers and tiger in the middle of the jungle" was subsequently used to describe this idea in descriptive terms. Since the reyog at this point is really greater than that produced by the image, the application's outcomes actually differ much from what the creator had anticipated. However, upon closer inspection, we find that the peacock's proportions are similarly oversized, rendering the tiger smaller than the peacock. despite the fact that peacocks are far smaller than tigers in the actual world.

Because the peacock's head is positioned to the left of the tiger's, the composition of the picture doesn't seem to flow together well. It appears as though the tiger lacks hind legs since its legs are not particularly noticeable. If you included a brief account of a peacock and tiger engaged in combat in the midst of the jungle, it would be different. The Leonardo AI and MidJourney programs appeared to have a lot of trouble interpreting this description, even if we entered a prompt or command many times. What appears is an odd image that is not what we anticipated.As the picture below illustrates, there are several mistakes that might arise when using this command from different angles. Simple orders that are easily interpreted by a book might not always be easily interpreted by a machine. Even if the descriptions of tigers and peacocks may be easily interpreted by this computer, it becomes quite challenging to explain these two species in a single frame. "A battle between a tiger and a peacock among the mountains with smoke effects, spreading feathers and blood" is the order found in Leonardo and Midjourney.

Figure 4. Illustration of a battle between a peacock and a tiger created by the Leonardo AI application

2. The Convoy Event of Reyog Ponorogo

The procession is one of the key moments in the Reyog Ponorogo mythology. In the Ponorogo reyog performance, the idea of a procession refers to a way of presenting or staging reyog in motion. This full transfer technique, also known as konco reyog, involves players, gadgets, and spectators. This procession idea is readily found in reyog obyogan performances that take place in villages; it is extremely uncommon to discover this notion in performances that take place in cities or even outside of Ponorogo. In reyog performances in Ponorogo, the

notion of iring-iring is a standard that has been passed down from generation to generation in obyogan performances. In addition to providing entertainment, this reyog performance teaches life lessons. This presentation will spread the idea of playing while learning, whether intentionally or unconsciously.

Reyog Obyogan's core, in Mbah Bikan's opinion, is the procession itself. Reyog's history describes the procession as King Klana Sewandana walking hand in hand with his followers, Patih Pujangga Anom, also known as Bujangganong, a horseman, or Jathil, who was walking to the kingdom of Kediri to propose to Dewi Songgolangit but was stopped or confronted by tigers and peacocks along the way. The tiger and peacock that subsequently became Prabu Klana Sewandana's supporters in the kingdom of Kediri were ultimately vanquished by the warrior with the Pecut Samandiman sword.

Typically, this type of performance makes use of public spaces or spaces for performance. Public highways, market yards, schools, village halls, home yards, junctions, fields, and even moors or rice fields are among the locations frequently utilized for reyog obyogan performances. The first type of reyog performance in society was obyogan, or reyog. Reyog Obyogan dance follows a totally distinct shape or format than festivals. In contrast to reyog, which takes the shape of a festival and is sanctioned by the regent of Ponorogo, who is in charge of overseeing the event as a whole, obyogan dance appears to lack defined norms. However, obyogan reyog genuinely adheres to reyog principles that have been passed down from ancient times from generation to generation.Using the Artificial Intelligence technology, we may attempt to transform the description of the procession into a visual narrative story. Here are a some of the opportunities that the Midjorney application has brought about.

a. The incident of the King and his troops

   King Klanasewandana's horseback companionship throughout the parade was one of the ceremony's major epic moments. The monarch is visibly hidden behind an army of white horses decked out in white clothing in the ballet narrative fragment."Wide angle photo of a cavalcade of horsemen with the faces of women in front and the king of Java behind, --ar 16:9" is the prompt. Try to build a command using this description. Consequently, the final image looks like the fourth image below. The incident we are referring to is approximately shown in the four alternate photos that emerge. The Javanese king's representation, meanwhile, still appears to struggle with description and visualization, particularly when it comes to describing the name Prabu Klanasewandana, which this AI system is sure to remember. With a comparable portrayal of the Javanese king, image number 2 is therefore the most similar to the description, even though some of the objects are not at all what we had in mind. However, given this outcome result an event can be described.

Figure 5. An alternative image offered by MidJourney with the command "wide angle photo of a cavalcade of of women in front and the king of Java behind, --ar 16:9"

Figure 6. The most relevant depiction of the Javanese king is leading his troops. (midJourney)

Figure 7. Image of horsemen wearing white clothing from MidJourney generate with the command "side view convoy of horsemen, wearing white traditional cloteshilly, tropical rain forest background, kodak portra, --ar 16:9"(MidJourney).

b. Battle between the king of Klanasewandana and the Tiger.

The battle between King Klana Sewandono and a tiger and a peacock was the following, equally significant event. This description, in our opinion, is quite simple to understand and is illustrated by a simple picture. But it appears that the two apps from Leonardo Ai and Midjourney struggle to show the Wandana clan's ruler engaged in combat with tigers and peacocks in the middle of the forest. The

command "ultra wide angle photo of Javanese king holding whip fighting with tiger and peacock in the middle of forest, low angle, spreading light, dark blue sky, --ar 16:9" creates an example that demonstrates this. This alternate image is provided by MidJourney.

This alternate picture seems to show the machine performing many strange tasks. The tiger's stance is obviously altered by the AI system to make it resemble a human being. The fact that the tiger can wield a weapon and strike like a person is made abundantly evident in photos 1 and 2. It is quite OK for it to be a legendary animal as local communities' imaginations freely shape the mythology and stories that emerge in their communities. Furthermore, the AI engine does a fantastic job of explaining how an animal personification acts in ways that are similar to those of a human. The one that makes the most sense and can be accepted in terms of angle and composition as well as naturalness in the image is image number 4.

As expected, image number 4 accurately interprets the command "low angle photo". The picture arrangement is dynamic and feels alive because of the low viewpoint. The tiger's attitude is equally fierce as it confronts the king's might, while the king's expression of battling with the tiger is amply demonstrated by the weapon he is wielding. The representation of a whip weapon, which is not adequately conveyed or portrayed in the picture, is one of its flaws. It is evident that the weapon being handled is shaped like a sword and is colored gold.

Figure 1. Alternative image that Midjourney tries to display with the command ultra wide angle photo of Javanese king holding whip fighting with tiger and peacock in the middle of forest, low angle, spreading light, dark blue sky, --ar 16:*9*

Figure 2. the image most relevant to the command ultra wide angle photo of Javanese king holding whip fight with tiger and peacock in the middle of forest, low angle, spreading light, dark blue sky, --ar 16:9, which depicts the event of the battle between the king of Klanasewandana and the tiger with a Samandiman whip.

3. Depiction of Goddess Dewi Songgolangit

The Reyog Ponorogo tale tells the tale of King Klana Sewandana's courtship with the goddess Songgolangit of the Kediri Kingdom. Dewi Songgolangit is said to be an exceptionally beautiful deity. One of them is that King Airlangga's daughter, the goddess Songgolangit, is one of them. The mythology of Dewi Songgolangit originates in Indonesia. A princess from the Kingdom of Kediri, Dewi Songgolangit was also known as Diyah Ayu Songgolangit. Dewi Songgolangit is a kind lady with a lovely face. Dewi Songgolangit was courted by several Javanese princes and monarchs who were drawn to her lovely looks and kind disposition. In addition, Dewi Songgolangit's parents expressed their desire to wed him right away. Dewi Songgolangit, on the other hand, is not interested in getting married just yet, thus meditates asking for guidance (MURNI, n.d.).

If we examine the MidJourney application, the image of the goddess Songgolangit with the caption "beautiful Javanese a princess from with brown skin and long black hair wearing batik, full shot, --ar 9:16" is still a generic representation of an Asian lady. This representation is made feasible by the fact that the application does not yet comprehend the local cultural context and that there are insufficient licensed data sources available for the machine to use as a resource when learning local culture. Since the visuals we have seen thus far are generated from images that we generally view on a daily basis. A technical word with the code "-ar 9:16" is used to create the desired image format while creating this image. This indicates that the term "ar" stands for aspect ratio, which compares the horizontal and vertical lines in an image format. A "9:16" format is one in which the horizontal size is represented by the number 9 and the vertical size by the number 16. The dimensions of this can be adjusted based on the type of media being used, but for portrait picture formats, such as figure 10, the ratio format will always stay at "9:16".

Figure 3. Depiction of Dewi Songgolangit in MidJourney with the command "beautiful Javanese a princess from with brown skin and long black hair wearing batik, full shot, --ar 9:16".

CONCLUSION

This article provides an innovative exploration of how artificial intelligence (AI), particularly visual AI tools such as MidJourney and Leonardo AI, can be employed to visualize the cultural and mythological elements of Reyog Ponorogo. The study successfully demonstrates the use of W.J.T. Mitchell's "Picture Theory" in creating narrative-driven images, rooted in local folklore. However, the study also highlights several limitations in current AI technology, such as its inability to fully comprehend regional languages and cultural nuances, resulting in inconsistencies and inaccuracies in character portrayal and narrative fidelity. Despite these challenges, the article emphasizes that AI technology offers new possibilities for preserving and revitalizing traditional myths and legends in visual forms, presenting a unique contribution to the intersection of cultural heritage and modern technology.

For future, studies should focus on expanding the database of cultural images and mythological references. By incorporating more extensive and region-specific datasets, AI systems can be trained to generate more culturally accurate and nuanced visual representations, improving their ability to handle local mythologies. Other significant for future is Research should be directed toward enhancing AI’s capability in maintaining the consistency of characters throughout a visual narrative. This can be achieved by developing more advanced algorithms that focus on character continuity across different visual frames.

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