



The Existence of Aesthetic Transformation in Traditional Batik Colors Based on the Review of Memetics Theory (Case Study: Traditional Batik in Tuban, East Java, Indonesia)

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Abstract

This article discusses the existence of aesthetics in traditional batik colors in Tuban, East Java, Indonesia, which is reflected in the appreciation of the deep values in the activity of making cloth. Batik colors have been one of the foundations for producing traditional identity values belonging to the Tuban community and have been preserved for generations. However, the existence of this aesthetic is gradually experiencing degradation due to some disruptions, such as modernity, trends, and technology, which has led to transformation. The purpose of the study is to interpret the relationship between the weakening of the existence of aesthetics in traditional Tuban batik colors and the daily behavior patterns of people in current conditions. The research method was conducted using a phenomenological approach, and it is reviewed based on the principle of memetics theory to find out the factors that cause this phenomenon. It is essential to produce a conclusion to enrich fundamental knowledge in understanding the causes of transformation in the aesthetic existence of a tradition so that it becomes the basis for consideration in taking transformative action to preserve the tradition.

Keywords: transformation; aesthetic existence; color; memetics; batik

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INTRODUCTION

Batik, for most traditional communities in Indonesia, is believed to embody aesthetic values that can be perceived not only in its physical function but also in the philosophical meanings represented through symbols in the form of motifs and colors (Widagdo, 2021; Maulina et al., 2021; Yulianto et al., 2020), and in contrast to most contemporary batik designs, which prioritize visual appearance, traditional batik patterns also depict a contemplative activity interpreted through

symbolic motifs and the persistence of the process carried out by craftsmen for centuries (Sachari, et al., 2020). The aesthetics of Tuban batik, like other batiks in Indonesia, also refers to an object that is able to produce and distribute its inherent values in the form of tangible and intangible expressions and is recognized as something “good” and “beautiful” (Yulianto et al., 2020). The existence of this aesthetics can be seen among batik craftsmen through their batik-making activities, resulting in beautiful and highly valued pieces of fabric and creating a contemplative atmosphere

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influenced by tradition, history, and spiritual values believed during the production process (Kusumawati et al., 2017).

The aesthetic existence of tradition is a significant driving force. In the batik-making process, for instance, the tradition will have good resilience when the practitioners work diligently by utilizing their skills and knowledge and contemplating their ideas, beliefs, and hopes (Meranti & Soeteja, 2021; Puryanti et al., 2019). However, preservation should not only be interpreted as protective measures to maintain and reproduce the tradition in its original form but also the ability to adapt to various external interventions that transform the tradition into a new face and identity (Kari et al., 2018; Kim, 2013). This is a form of understanding the concept of tradition itself, which is not static but continually undergoes adjustments through fusion, addition, or withdrawal of its identity as an effort to maintain itself (Ariffin et al., 2023; Putra, 2020; Raden et al., 2020).

It is essential to explain the study of a traditional object transformation today by looking at its relevance to the context of change and innovation. Research related to innovation in objects in the form of traditional products generally addresses the design appearance issue, which can develop into a design style that better represents modernity. According to Nugraha (2011), a transformation tradition concept, 'ATUMICS,' focuses on combining design elements that represent tradition and modernity to make a traditional object considered new. The elements contained in this concept include the micro level and macro level. At the macro level, elements include technique, utility, material, icon, concept, and shape.

Meanwhile, there are motivational components at the macro level, including economic, social, ecological, survival, and self-expression. According to Leong & Clark (2013) and Lin (2016), these elements at the micro level are the 'outer layer,' referring to all tangible things from culture or tradition, while at the macro level, they are the 'mid-layer,' referring to behaviors

or habits of the society. The ATUMICS concept has not yet touched on issues related to the 'inner layer' related to matters of philosophical meaning and value.

Other research regarding the transformation of craft products, as carried out by Tung (2021) and Chen et al. (2022), also explains that transformation to produce novelty in traditional objects needs exploring the knowledge and skills of designers to collaborate with local craftsmen through practical use of local raw material, functional items inspired by traditional use, as well as form aesthetic decoration. Then, the target for absorbing these products is the contemporary market. In this research, there is a gap at the fundamental level of tradition, where, according to Sun et al. (2022), there are the essential elements that form traditions, namely 'Tradition Teaching,' which is the 'mid-layer' characteristic of tradition and culture. According to Hill (2004), this traditional teaching is the driving force behind a tradition's continued existence from the past to today through a natural learning process. Apart from that, there is also 'Nonmaterial Culture' according to McDonnell (2023) which is the 'inner layer' characteristic of tradition and culture that should be considered in intentionally developing and transforming traditions. If designers, in this case, do not have a deep understanding of this matter, it will impact the loss of the traditional roots in the products being developed.

Especially in the issue of traditional batik tradition, this idea of transformation arises from the way of seeing that traditional artifacts are a solution to finding ways to survive and improve the quality of life (Norman, 2004). Therefore, changes in a traditional artifacts are constantly happening, in line with the challenges of life that continue to increase. Humans naturally do this to meet their most basic needs of feeling safe and happy (Nugraha, 2011; Nunn, 2022). The process begins with culture and conducting a 'cultural dialogue' between the original culture and the donor culture until various forms of 'mixed' culture are born over a long period until the final cul-

ture format is established (Lazzeretti et al., 2021; Roibin et al., 2021). This condition is a concrete example in traditional Tuban batik artifacts. Since ancient times, Tuban has been a port of ancient trade between the “West” and “East” regions. From there, Tuban has experienced many foreign cultures outside its local culture, manifested in its batik aesthetics (Ciptandi, 2021; Sedyawati, 1992).

The original culture of Tuban Batik, which experienced cultural dialogue with foreign cultures, resulting in a form of batik representation today, is something important to study. This original culture, of course, also exists in layers starting from outer, mid, and inner, each of which gives strength to the characteristics of batik itself. However, this has been widely discussed, especially at the outer and mid-levels, as in research in other areas of traditional transformation. So, it is also necessary to look in depth at the elements that form traditions at the inner layer level in order to be able to truly reveal what philosophical motivations are so strong in encouraging the rise of people’s awareness and behavior in creating a final product/artifact.

In traditional Tuban batik, one of the embodiments of its aesthetics is found in the colors of the batik fabric itself, which has always been a significant part of the tradition and even serves as the basis for reproducing traditional identity values held by the Tuban community today. However, external interventions have influenced and transformed the understanding and appreciation of Tuban’s aesthetic existence in the form of activities and identity values. Therefore, it is necessary to address the intervention factors that have caused these changes using established cultural theories to produce findings in the form of an interpretation of the factors causing the weakening of the existence of aesthetics in traditional Tuban batik colors and the daily behavior patterns of people in current conditions. Then, it can enrich basic knowledge to produce a conclusion to enrich fundamental knowledge in understanding the causes of transformation

in the aesthetic existence of a tradition so that it becomes the basis for consideration in taking transformative action to preserve the tradition.

METHOD

The research was conducted using a phenomenological approach with the aim of obtaining a substantive understanding related to the experiences of a group of humans, where the researcher analyzes to describe a phenomenon as it is without manipulating the data within it (Williams, 2021) while paying attention to the following aspects: (1) referring to reality, by setting aside personal understanding and references related to the subject being studied to produce objective knowledge and truth; (2) considering the object of study as something whole and inseparable from other objects (holistic), in order to obtain a complete understanding of an object; and (3) observing and paying attention to every detail of an event as important information (Gallifa, 2018; Rangarajan et al., 2022). The data collection through several processes, including:

Literature study from scientific journals, articles, main reference books belonging to Ren Heringa and Judi Knight Acj-hadi, as well as visual materials in the form of cloth photos, and observations.

Interviews were conducted to obtain detailed information about the phenomenon being studied and to discover something that has not been seen. In this interview process, questions were asked about the knowledge and real conditions perceived by the community and traditional batik craftsmen in Tuban regarding the aesthetics of traditional batik colors.

Observation was carried out to observe various data and phenomena that occurred at the location, namely the center of batik production in Tuban, precisely in the Kerek District, which is spread across four hamlets, namely Kedungrejo, Margo-rejo, Gaji, and Karanglo. In addition, observations were also made in the form of observing interaction patterns that occur

among the craftsmen in the process of making and using batik.

Oral tradition was used to obtain evidence in the form of testimony from traditional practitioners that contained information from the history of previous generations that is difficult to find in written sources. This process was conducted with several parties, including 1) Uswatun Hasanah and Sri Lestari, who are third-generation traditional batik makers in Tuban and also entrepreneurs, 2) Rukayah, a community figure who is also one of the main informants in Heringa's 1994 research.

The data was then analyzed using data explication techniques (Volodin, 2020) in the following steps: Understanding the data obtained by creating a transcript (notes of all verbal and nonverbal communication) and summarizing it without preconceptions about the entire data; Compiling Individual Phenomenology Descriptions based on interview and oral tradition results by first cleaning the data from irrelevant statements and grouping and rearranging meanings into a series; Performing explication on the obtained data by verbalizing the expressions given by the research subjects by going back, including implied expressions to make them easy to understand. This expression is arranged in sequence, from past experiences to current life, influencing the appreciation of tradition; Linking data and phenomena found to relevant theories, namely: a. The Three Layers Theory and the Cultural Object and Design Characteristics Level (CL Lin et al., 2016; R. Lin, 2018) to explain the overall description of traditional fabric tradition in Tuban, and b. Meme theory explains the relationship between memes in humans as replicators that drive humans to the process of imitation so that traditions continue to be repeated from generation to generation, with external interventions/interferences causing mutations/changes in the process of imitating these traditions.

RESULT AND DISCUSSION

Tuban Traditional Batik

Making traditional Tuban batik fabric involves a process from upstream to downstream. It starts with the traditional spinning of the thread, followed by weaving the thread into the fabric using a traditional weaving tool called *gedhogan*. Then, the woven fabric is decorated with motifs using the traditional batik technique and dyed with natural dyes (Achjadi & Natanegara, 2010).

Traditionally, Tuban batik serves several functions within the community, which are as follows: Visual function: Tuban batik serves as a differentiator from other batik fabrics. The visual characteristics include rough and irregular lines with unique colors obtained from natural dyes, giving an antique and old-fashioned impression. Most of the batik motifs in Tuban are inspired by the surrounding environment, such as the *Srigunting* bird and *Ganggeng* plant. Additionally, some motifs are derived from foreign cultures, such as *Lokchan*, a mythological bird commonly found in Chinese ornaments brought to Indonesia (Ciptandi, 2021).

Physical function: Tuban batik serves as both a *jarit* and *sayut*. *Jarit* is a rectangular cloth with a width of 90 cm and a length of up to 250 cm wrapped around a woman's body up to the chest and ankles. *Sayut* is a cloth with a width of around 60 cm and a length of up to 300 cm, wrapped around the shoulders and waist to help carry daily necessities, especially when going to the fields (Achjadi & Natanegara, 2010; Heringa, 2010).

Philosophical function: Tuban batik is used specifically for sacred spiritual events, such as weddings, births, deaths, and other significant ceremonies. Batik fabric also serves as a social status indicator for a particular group of people based on the patterns and colors used (Heringa, 2010).

Bartering function: Using the barter system, Tuban batik also serves as a valuable trading commodity for daily necessities. This demonstrates that Tuban batik *gedhog* is considered valuable and of high

worth within the Tuban community. Moreover, some craftsmen still use batik fabric as a trading tool or pawn it to obtain some money (Suryanto et al., 2022).

Therefore, four fundamental factors shape the tradition of making traditional Tuban batik: Artifacts, Nonmaterial Culture, Traditional Ecology, and Tradition Teaching. First, traditional artifacts are one of the essential elements that form the uniqueness of the Tuban tradition and are the physical manifestation of the tradition that developed in the community. According to Ciptandi et al. (2022) and Nugraha (2011), the primary aspects that can be observed in traditional artifacts are 1) Form (shape, function, dimension); 2) Aesthetics (color and ornamentation); 3) Material (all obtained from nature); and 4) Technique (how to process materials properly using only hands or with the help of tools). Second, nonmaterial culture consists of philosophical values in the form of beliefs, ideas, behavior, and assumptions that apply communally. Third, traditional ecology refers to the environment in which a group of people live and interact with the elements of their ecology (including air, soil, sunlight, animals, and plants). This interaction occurs naturally, where communities and the environment make reciprocal efforts to care for each other. According to Farkas (2022), Fang & Li (2022), and Kaur (2011), traditional ecology can stimulate local knowledge and wisdom (customs, ethics, norms, and worldviews) to develop within it. Fourth, traditional teaching is the way of passing on habits, knowledge, and skills from one person to another naturally, where the environment conditions the individual to observe and interact with a traditional activity and eventually master the habits, knowledge, and skills.

The form of the traditional batik tradition of Tuban is mapped based on the theory of Three Layers and Levels of Cultural Objects and Design Features (Lin et al., 2016; R. Lin, 2018), as shown in Figure 1 below:

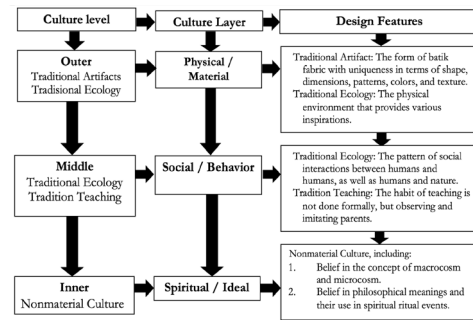


Figure 1. Mapping of the Uncertainty of Tuban Batik Tradition based on the Theory of Three Layers and Levels of Cultural Objects and Design Features.

The Existence of Aesthetic in the Colors of Batik Tuban and Its Transformation

The existence of aesthetics, according to Nimita & Yundari (2017) and Sachari et al. (2020), is referred to as the appreciation of aesthetics, defined as a contemplative activity that someone experiences when creating and producing, which is actually an expression of their beliefs and perceptions about their existence in relation to nature and human beings. This places full human consciousness as part of the macrocosm and microcosm, which maintains its balance as a peak of true aesthetics (Pitana, 2023). According to Harmaen (2016), aesthetic existence does not only appear in the form of individual expressions of beauty, but can also be collective because each individual is influenced by values between human beings and the environment outside of themselves so that what is expressed can complement and sustain the interdependence of the individual within a complex environment. The definition of aesthetic existence is also found in the term born of the local wisdom of the balinese community in Indonesia, namely Taksu, which is a manifestation of pure cultural creativity in an artistic activity that gives spiritual power to the artist to express themselves to become better than their current self (Nilotama, 2006). To embody taksu or this aesthetic existence, hard work, dedication, and surrender are necessary so that it can also be reflected in a work that has its own soul and vitality (Sunarya, 2021).

The relationship of this aesthetic

existence with the Tuban community is manifested in a deep appreciation for the batik tradition, where every process is detailed with a collective attitude towards their beliefs and perceptions related to the concept of cosmology, concern for nature, and earnestness in their work. By linking this with the color elements in traditional Tuban batik, we can find the application of aesthetic concepts in the areas of cosmology, nature, and the skills involved, which are highly meaningful and appreciated as seen in Figure 2.

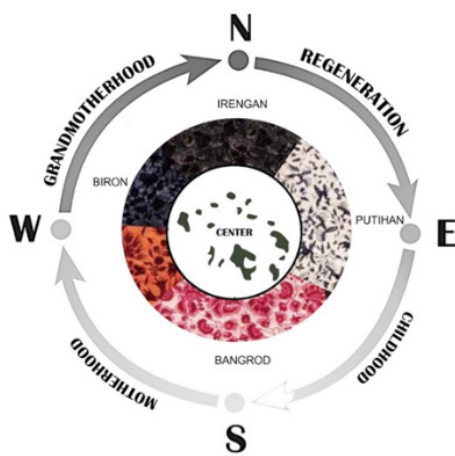


Figure 2. Background colors in Tuban's distinctive batik and their philosophical meanings

The existence of aesthetics is related to the belief in the concept of the cosmological cycle of life applied to the colors on the background of batik, which represent the directions of the compass and symbolize the cycle of human life (Heringa, 2010). This concept is not exclusive to Tuban, but is also found among traditional communities in Indonesia. The concept refers to the unity of the layout of a village that has been determined as the center, surrounded by four other villages positioned in accordance with the directions of the compass. This is known as Mancapat, which is an arrangement of a village center surrounded by other villages to the north, west, east, and south (Ridjal et al., 2020; Meylinda et al., 2018). The market becomes a central point of various activities and meetings, surrounded by villages that are spread out

in accordance with the four directions of the compass (Aliyah, 2016; Maulidi & Rukmi, 2019).

The white background of batik is called *putihan*, representing the eastern direction of the compass, where the Sun rises as a symbol of birth and childhood. *Putihan* fabric is used to wrap newborn babies. The red background of batik is called *bangrod*, representing the southern direction of the compass, symbolizing an important process in a woman's life, namely the onset of menstruation. The blue background of batik is called *biron*, and the brownish-purple background is called *pipitan*, representing the western direction of the compass, symbolizing a woman's transition to becoming a wife and mother. Finally, the black background of batik is called *irengan*, representing the northern direction of the compass, symbolizing the end of human life, namely death, and is used during funerals. The process of making *irengan* batik involves dipping it in mud during the final dyeing process, as an analogy of "planting" the human body back into the earth (Heringa, 2010).

The manifestation of aesthetic existence is related to the awareness of preserving nature, as seen in the traditional batik colors made using natural dyes. These natural color sources are obtained from plants found in the surrounding environment of the community, such as leaves, fruits, flowers, stems, and roots. The resulting distinctive colors include white, red, blue, brownish-purple, and black, which aesthetically have become a visual feature of the fabric. The use of natural dyes, according to Basri (2023); Karadag (2021); Widyawati (2018) is like most local wisdom in other regions, a form of existence based on knowledge of the potential of the surrounding nature, as well as an awareness and responsibility as part of nature. Incorporating nature into the fabric they use daily is a way for humans to preserve nature itself.

Meanwhile, the manifestation of aesthetic in the technical process of batik dyeing can also be seen in the form of high

expertise that reflects the skill of carrying out the practice of dyeing with full diligence, patience, and wholeheartedness, relying solely on the strength and skill of the hand. All relationships between colors in batik and the manifestation of aesthetic existence is evident by referring to the theory of cultural levels, as shown in Figure 3 below:

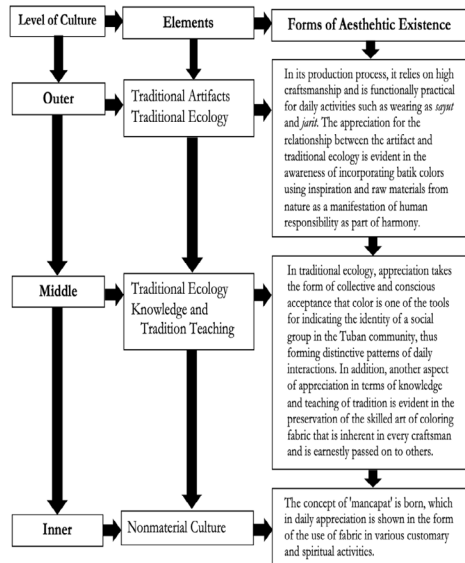


Figure 3. The manifestation of aesthetic existence of colors in Tuban Batik.

The transformation of the aesthetic existence of colors in Tuban Batik occurs in the form of changes in contemporary activities managed by craftsmen during the fabric dyeing process. The activity of dyeing, which was previously richly imbued with collective beliefs about the philosophies of life and their perception of the relationship between their existence and nature and between humans, as well as their seriousness in working, is now replaced according to the context of something that influences it. However, according to Subawa & Widhiasthini (2020), in the cultural context amidst the disruptive era, transformation is an inevitable factor that not only needs to be faced but must be faced. This is because humans actually have needs and desires that are constantly changing with diverse and uncertain environmental conditions. Specifically, in the context of the existence of the aesthetic of tradi-

tional Tuban batik colors, which is one of the elements forming the strong identity of local traditions, it has undergone transformation caused by various interventions, as follows: Top of Form Bottom of Form

The Form of Fabric Colors (Artifacts)

Traditional Tuban batik colors are still made by some craftsmen today, but they are not entirely consumed by the awareness of harmonizing with nature by using inspiration and natural materials as a form of human responsibility to live in harmony with nature. Traditional colors such as *putihan*, *biron*, *bangrod*, and *irengan* that are still maintained have changed using synthetic dyes to achieve a visual appearance. This has happened because of the condition of craftsmen and market characteristics that do not understand the aesthetics of Tuban batik and prioritize practicality, time efficiency, and cheap cost. Other factors also come from programs rolled out by local governments, universities, and industries in the form of training presentations that introduce various alternative synthetic coloring techniques, gradually moving away from traditional methods. This then affects the aesthetics of the existence of Tuban batik color artifacts, which previously upheld craftsmanship and nobility, now for the sake of practicality and economy.

The Non-Cultural Material of Fabric Color

The cultural material in the form of philosophy in the traditional fabric of Tuban has been present since the pre-Islamic period (Hindu-Javanese) or even earlier. At that time, traditional fabrics also functioned as a medium for performing ritual practices, such as offerings to the earth, warding off disasters, weddings, births, and deaths. The aesthetic existence of colors in Tuban batik is manifested in its use, which is connected to a talisman's efficacy that can provide its users with goodness. Later, after Islam's introduction, aesthetics in the colors of batik changed as the animistic and dynamistic ritual practices were

abandoned and replaced by ritual practices that contained prayers and worship to Allah. However, in today's conditions, the people of Tuban are becoming more logical, realizing that batik colors are just a common material object and do not need to be interpreted philosophically, so its use is sufficient as a form of clothing identity.

Traditional Ecology in Fabric Color

The environment in Tuban was originally dominated by agriculture, and there were sideline jobs such as making textiles for spinners, weavers, and batik craftsmen. However, today, there are also alternative jobs as factory workers, which were triggered by the establishment of the Indonesian Cement Factory, which covers an area of 1,500 hectares and has a factory building area of 400,000 square meters, located around 7 km from the batik center in Tuban. The establishment of this cement factory has also improved infrastructure development in Tuban, opening up a free flow of information, trends, and technology. The establishment of the factory has also caused the loss of most cotton and other plantations. The factory has become the main intervention factor that changes the order of human interaction with nature and also impacts changes in the pattern of natural support as inspiration and supplier of raw materials to maintain the traditional textile culture.

Another intervening factor in the ecological context is the community's homogeneity, which has changed due to many immigrants coming and settling in Tuban, thus influencing their perspectives on life, social interaction patterns, skills, motivation, and aspirations. In the context of the meaning of batik fabric colors for the people of Tuban, this has caused a shift in the existence of all actors within the systemic relationship in the supply chain organization, from upstream to downstream. Previously, this relationship was driven not only by economic motivation but also by traditional and ecological harmony, but today, the relationship is purely transactional for economic motives.

Knowledge and Teaching of Traditional Fabric Dyeing

Knowledge of traditional fabric dyeing is important to maintain the aesthetic value of the tradition and pass it on to the next generation. However, today, knowledge of this practice among young people in Tuban has degraded due to factors such as changing teaching methods. Previously, it was taught through traditional methods such as observing and learning directly from parents while they were dyeing batik, listening to stories from past generations, and practicing under their direct guidance to preserve traditional aesthetics. But now, teaching has shifted towards formal institutions such as schools, courses, and training, which often prohibit various new techniques and materials in fabric dyeing. The traditional teaching method is considered more effective.

The Memetics Theory of Culture

The means regarding memetics theory is actually based on an analogy with Darwin's evolution popularized by Richard Dawkins in 1976 with the term *The Selfish Gene*. The idea of this scientific evolution today has led to questions related to posthumanism. In cultural studies, memetics is a means to explain how to understand the replication of ideas and norms in cultural evolution (Haw, 2021; Wijayanto & Soekarba, 2019). The meme analogy arose due to the discovery of the nature of DNA genes in living creatures that can be inherited and passed down from generation to generation. Uniquely in humans, it is found that there is another replicator besides genes that is also inherited, namely the replicator called memes (Dawkins, 1976). So, in terms of terminology, memes can also be associated as an analogy to genes at the cultural level (Harms, 1996).

The term "selfish" here refers to the fact that this meme replicator only acts for itself, and its sole interest is to replicate itself for the next generation. This can take the form of knowledge, vocabulary, legends, behavior, games, songs, or rules

and can be transferred, communicated, duplicated, and inherited (Blackmore, 1999). Quoting Dawkins (1976), memes are easily spread because humans have a tendency to imitate others. Memes can be an essential part of the evolution of the human species because humans have survived not because of the shape of our bodies but because memes enable the human species to manipulate the environment by creating tools for life.

Referring to Wijayanto (2013) and Harms (1996), the workings of memes can be compared to the workings of genes, namely:

The existence of genes explains evolutionary changes that occur at the biological level, while the existence of memes explains evolutionary changes that occur within culture.

Genes replicate themselves through the process of reproduction, while memes replicate themselves by “jumping” from brain to brain through the process of learning or agreement.

Genes continue to duplicate themselves to maintain their non-replication, while memes work on the same principle but at the level of ideas and values.

Genes duplicate using cell enzymes, while memes duplicate through imitation.

Genes compete with each other in sexual reproduction to vie for a chromosome, and memes do the same with other memes to vie for human attention. If the selection fails, it will face extinction.

Memes require social life to imitate and grow within the cultural sphere.

The workings of memes, as shown in Figure 4, occur in the brain, which is the center for processing information in the form of thinking, remembering, and deciding on something. Memes work by responding to and processing all kinds of cultural information that enters the brain (whether in the form of information heard, seen, touched, smelled, tasted, or other types of experiences that have been experienced), which then produces a decision translated by the body into repetitive actions, such as movements, verbal (sound),

language, and emotions (Baucal & Lazić, 2022). According to (Wijayanto & Soekarba, 2019), memes can become winners influenced by the main factor, which is the information that enters the brain being doctrinal and cannot be debated.

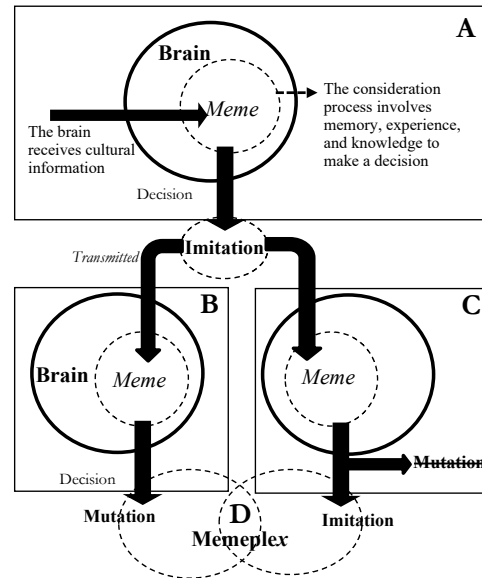


Figure 4. Illustration of How Memes Work

Notes :

A: Meme in Social Environment #1

B: Meme in social environment #2, which is experienced by mutation meme decision

C: Meme in social environment #3, which is experienced by imitation meme decision

D: Meme B and C merged through acculturation, resulting in a memeplex.

Dawkins added that not all memes can be inherited and replicated as they originally were. The term is akin to DNA genes that are also passed down from generation to generation, but it is unlikely that the same DNA would persist in each generation. Cultural imitation does not always proceed perfectly, and often, there are mutations due to external interventions, resulting in differences in behaviors and habits that have evolved since the classical era (Dawkins, 1976). However, besides mutations (Blackmore, 1999), there is also the concept of memeplexes, where various memes work together to form a unity that is caused by acculturation. In this case, a memeplex is a group of memes that come together to form mutual benefits.

Memetics Cultural Theory Review on the Aesthetic Existence of Batik Colors

The true replicator meme is considered important in explaining the phenomenon of transformation in the aesthetic existence of color factors in batik, which is one of the elements that has produced the traditional identity of the Tuban community. This is based on the explanation by Wijayanto & Soekarba (2019) that at the psychological level of memes, they can contribute to the formation of group behavior in society. In addition, there are also similarities in patterns and characteristics between memes and culture, both of which have inheritance systems at the level of values, beliefs, behaviors, and knowledge.

The tradition of fabric in Tuban, in the form of color expression, can maintain its aesthetic existence if viewed based on memetic theory, caused by memes at the idea level related to all knowledge and skills about those colors that easily spread among the community due to their trend to imitate ideas, thoughts, or conversations of others. Dawkins (1976) states this is the first step in the learning process. Thus, in the characteristics of memes, they have the ability to replicate themselves by "jumping" from one brain to another, and this process has been going on for generations in the inheritance of traditions from one generation to another.

On the other hand, the conditions that cause a transformation in the existence of color aesthetics in Tuban batik are due to the failure to meet the requirements for memes to continue their survival, including:

The presence of interventions in the form of domination of new cultural information that is more attention-grabbing. This is evident in the change in market characteristics, which makes it difficult to understand the aesthetics of Tuban batik, which is low quality, low prices, and fast processes. Craftsmen feel this is more enjoyable and profitable, thus changing their motivation to be solely for economic reasons. Another example is the presence of new postmodern cultural information

that ridicules all traditional beliefs and concepts of Tuban society, which previously still considered the fabric and its colors to have a relationship with ritual activities. In this condition, the meme has actually succeeded in infecting someone's mind so that the expression displayed is a manifestation of mutation/change at the level of ideas in society.

The widening tolerance towards changes within the tradition, especially in the context of ecology, is shown by loosening the relationship between humans and the concept of natural harmony by allowing the influence of the Indonesian Cement Factory industry in Tuban. The relationship between humans and the environment becomes a negotiable factor as long as there is a mutual benefit considered equal for improving the community's well-being. Today, the factory is increasingly dominated, and its negative impacts have been felt by the traditional cloth craftsmen in Tuban in their efforts to preserve the tradition. According to the restoration of memetic theory by Wijayanto & Soekarba (2019), this is caused by the traditional ecological meme of the country competing with the donor meme to grab human attention. The final decision shows that the donor meme has won the attention, leading to the weakening of the aesthetic existence in terms of preserving the environment as part of the effort to maintain tradition. This is also supported by the failure to fulfill the conditions for the meme to win, namely the absence of information that cannot be debated in the form of rules or policies related to the preservation of the environment and tradition, both culturally and officially.

The occurrence of acculturation is apparent in the openness to accepting new elements or complements in the activity of dyeing colors of Tuban batik originating from donor cultures outside Tuban. According to Alam (2023), cultures that meet each other accept each other's inherent values without experiencing conflicting conditions and have similarities in patterns and functions in their respective

cultures. The use of synthetic dyes in the process of coloring Tuban batik has persisted until today and has become part of the tradition in Tuban itself, in addition to natural dyes. This tradition, as explained by Bhatia & Ram (2009), is not something static or represents something ancient and destructive, but rather something dynamic and evolving to adjust to existing contexts. This is explained by the theory of memetics as a memplex, where a meme may not be inherited and duplicated to persist in its original form due to mutation. In this context, it is more influenced by the acculturation that occurs between the natural dye meme and the donor meme in the form of synthetic dyes that can run in parallel without causing conflict and enable mutual benefits.

CONCLUSIONS

The tradition of coloring traditional batik fabric in Tuban has undergone changes in the presence of aesthetics towards four fundamental elements of tradition: Artifact, Nonmaterial Culture, Traditional Ecology, and Traditional Teaching. Based on the recovery of the causal factors of this transformation, the failure to fulfill the requirements for meme replicators to continue inheritance is caused by mutation. This is triggered by competition at the level of ideas from several meme replicators in the minds of the Tuban community and won attention by donor/intervention memes that can disrupt the ideal tradition conditions.

The forms of intervention that exist and affect the traditional batik coloring tradition in Tuban and the aim of preserving traditions amid the onslaught of intervention can become knowledge for anticipatory action by providing appropriate counters to each condition in the tradition that receives the intervention, including:

At the level of ideas/spiritual, it is in the form of insights into modern lifestyle that are accompanied by concepts of belief in things that have not philosophical meanings, which is currently no longer

relevant to people's beliefs because it has shifted to an emphasis on logic, hybridity can be carried out by bringing these philosophical ideas no longer to the level of belief but to the level of concepts and accompanying narratives and product stories.

At the social/behavioral level, it is in the form of disturbances in the form of domination of economic motivation due to the growth of the region towards industrialization, which leads all actors in the supply chain organization to act transactionally in carrying out the traditional color traditions on traditional cloth. It can be done by still providing space for maintaining internal market segmentation for the Kerek community so that community life patterns in making clothing for practical needs can continue.

At the physical/material level, it is in the form of a weakening of the skills of craftsmen and a decline in the visual aesthetic form of the products. It can be developed to improve skills through workshop approaches and training initiated at the government, private, organizational, and community levels. In supporting innovation motivation, developments in techniques and materials do not need to be limited, as long as they still adhere to traditional principles, which in this case are related to the visual identity (color) of the batik itself so that it is still easily recognized.

Meanwhile, the factors that cause the defeat of meme replicators in the fight against intervention to maintain their traditional concepts/ideas are various, including: 1) the presence of new cultural information dominance that attracts more attention with an intense 'attack' on the brain; 2) a wider tolerance for change within the tradition that provides a 'promise' of a better life; and 3) the occurrence of acculturation at the level of local culture and tradition.

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