Aesthetics exploration of chiaroscuro light: capturing the visual atmosphere of traditional markets in Jakarta

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ABSTRACT

Photography is needed as a medium of expression and delivery of communication messages. In the field of art, Chiaroscuro is a new vehicle for expression to be translated as a visual object in creating street photography. The main focus that is interesting to know is about the aesthetics of chiaroscuro light in the art of photography. The purpose of this research is to describe how to visualize the aesthetic expressions of researchers about traditional markets in the area of Jakarta. The research method employs an artistic approach within the context of visual field research, emphasizing creativity, subjective perspectives, and interpretations. The analysis techniques center on formal aspects of visual elements, including composition, color, shape, line, and texture, with the goal of understanding how these elements contribute to the overall aesthetic and communicative qualities of the image. Photographic exposure and description are supported by subjective observations. The results of the study show that photography is able to provide aesthetic expression according to the wishes of the researcher. The research contributes to the field by exploring the use of chiaroscuro as a novel expressive tool in street photography, particularly in the context of traditional markets in Jakarta. It demonstrates how an artistic approach and formal visual analysis techniques can effectively capture and convey the aesthetic qualities of these markets, ultimately resulting in a tangible outcome in the form of a photo book, enriching our understanding of urban culture and visual communication.

1. Introduction

Currently, taking pictures is a common activity that is done by anyone. Because there are facilities and conveniences provided by photographic technology that make it easier when take pictures. So that photography is no longer something foreign to the public. The current photographing equipment is good and doesn't have to be with a sophisticated camera, but it can be done from a smartphone which is usually equipped with a camera. Photography is needed as a medium for conveying communication messages. In communicating, especially in mass communication, the media is a tool that can connect sources and recipients that are open. According to Yaacob *et al.,* photography is a powerful medium for conveying messages and bringing about social change. Yaacob *et al.* investigated social commentary photography artists and the extent to which the public understood the messages in their works of art. In this research, Yaacob found that the photographic works of art produced by these artists were just ordinary exhibition material that did not carry a message or impact. anything to the public [1].

The focus and purpose of this research is to photographically document the atmosphere of a traditional market using chiaroscuro light techniques which is a street photography genre. Perpetuating the atmosphere of traditional markets at a time when market conditions have begun to change along with the emergence of modern markets such as supermarkets, mini markets, and malls both in big cities and small towns, especially in the area around Jakarta. Previous studies have also explored street photography, such as the research conducted by Cinnamon et al., which delved into the concept of "do-it-yourself" street displays, encompassing the creation of street-level visual representations by individuals or communities. This study, on the other hand, investigates the Google Street View urban imaginary, which pertains to the collective mental image and perception of urban space shaped by GSV [2]. The work by Jonathan Cinnamon et al. offers a comprehensive overview of the utilization of panoramic street-level imagery for urban analysis across five research domains: the built environment and land use, health and wellbeing, natural environment, urban modeling and demographic monitoring, and the quality and reputation of the área [3].

In another study, Filip Biljecki et al. examined the impact of various approaches and practices on computationally derived form metrics using street-level imagery, such as the Sky View Factor (SVF) and Green View Index (GVI). According to their findings, different panoramic approaches yield distinct yet largely comparable results when calculating the same metric, with correlations ranging from R=0.82 for Green View to R=0.98 for the Sky View metric. Single-frame images, like those captured by front-facing ultrawide cameras, were found to produce results on par with commercial panoramic counterparts, simplifying the utilization of panorama data and unlocking the potential of crowdsourced images [4]. Pedram Dibazar investigates the utilization of road function visualization for documenting street protests, fostering the collective imagination of urban communities, and aiding in street scene navigation. This study additionally delves into the aesthetic aspects of social media visualizations of volunteer-led marketplaces in the UK and examines how street visualizations contribute to the construction of narratives and the shaping of imaginations within urban communities [5].

According to Renger-Patzsch, it is stated that the purpose of photography is to depict the subject as seen by a camera that can work faster, with higher precision and objective than the artist's hand [6]. Here photography has entered the realm of art, which is able to provide dimensions by touching on aesthetic technical aspects as well as conceptual and thematic discourses. Photos are also a tool for observing, describing, studying, and compiling information about the world [7]. The reality of photography can be used as a vehicle for expression by photographic artists, and it can be said that photography has gone beyond realism in art to become super-realism. The opinion of Walter Benyamin is that the ability of photography is to bring up and display certain aspects of a reality that are not accessible to the naked eye. In this case, it becomes an aspect of the strength and uniqueness of photography as a visual medium [8]. Light is an important part of photography, so without light, there is no photography [9]. For this reason, as an effort to develop the repertoire of intuition in photography, the researcher emphasizes the exploration of chiaroscuro light into traditional market visuals in the street photography genre. Chiaroscuro is an artistic lighting technique in film that emphasizes light as a significant aspect of storytelling and image composition [10]. The boundary between the dark and light areas produced can provide a dramatic effect and emotional depth in a visualization [11].

In fine arts, chiaroscuro is known as a style of painting popularized by the painter Rembrant, while in the world of photography, it is also known as Rembrant's lighting [12]. The term originally stems from the Renaissance art movement and combines the words "chiaro," meaning "clear" or "bright," and "oscuro," meaning "vague" or "dark" [13]. This refers to the dramatic effect of light experienced when using contrasting areas of light and dark in a visual work [14]. The choice of the genre of street photography in applying the chiaroscuro light effect is the desire of the researchers to provide a new atmosphere in photographic works. Understanding Street Photography, according to Michael Freeman, is a form of photojournalism that prioritizes unexpected moments, uncontrollable situations from humans, and in the form of surprises [15]. The essence of street photography is the spontaneous recording of unique, interesting, and fleeting moments [16].

Likewise, researchers chose traditional markets in Jakarta and its surroundings as the object of the photo. According to Ilhami *et al.,* the traditional market is the center of people's socio-economic activities, thus resulting in the establishment of intimate social interactions between traders, buyers, and suppliers, which is a social inheritance from the representation of the need to socialize between individuals [17]. Along with the development of the era, traditional markets grew in various cities. Traditional markets were formed by trading activities developed in open and adjacent spaces, fields, and roads, and their situation was not far from settlements. Traditional markets are usually located in strategic places, easily accessible by both parties and places that are safe from public disturbances [18].

The present study provides a valuable contribution to the field of photography by examining the utility of chiaroscuro as a creative tool in street photography, with a specific focus on the conventional markets of Jakarta. The research showcases how an artistic approach and formal visual analysis techniques can yield fruitful outcomes in capturing and conveying the aesthetic features of these markets. The final product, a photo book, serves as a tangible demonstration of the enriching impact of the study on our comprehension of urban culture and visual communication.

2. Method

The researcher used an artistic research method approach in conducting this research. Artistic research, also known as practice-based research or artistic inquiry, refers to a mode of research that primarily takes place within the context of artistic and creative practices [19]. It is a form of research where artistic creation, expression, and exploration are central to the research process itself [20]. At this initial stage, the researcher was guided by the question of how to utilize chiaroscuro lighting to enhance the visual atmosphere of traditional markets in Jakarta. Based on this inquiry, an exhaustive review of existing literature on chiaroscuro lighting techniques in photography, urban photography, traditional markets, and aesthetic perception was conducted. Before data collection, the researcher identified the specific traditional markets in Jakarta that would serve as the focal point of the study.

Additionally, necessary equipment, including cameras, lenses, and lighting apparatus, was prepared. A timeline for data collection was established, taking into consideration the appropriate time and lighting conditions conducive to achieving the chiaroscuro effect. Preceding the photography sessions, the researcher also secured the required permits for conducting photography within the markets. This fieldwork proved crucial, as it facilitated the experimentation with diverse angles, intensities, and lighting sources to create the chiaroscuro effect. Furthermore, the research effort involved meticulously examining the interplay between light and shadow within the market scenes, elucidating their contributions to the visual atmosphere.

Researchers meticulously document all captured images, including information such as the date, time, location, and lighting settings for each photograph. These visual records play a vital role in documenting personal observations, emotions, and artistic decisions made during the course of the study [21]. Concurrently, while conducting photography sessions, researchers engage in ethnographic observations within traditional markets, focusing on cultural nuances, interpersonal interactions, and distinctive attributes that contribute to the overall visual atmosphere [22]. The analysis of the selected images encompasses aspects such as composition, color, contrast, and the emotional responses they evoke.

Interpreting the findings from this analysis involves considering the role of chiaroscuro lighting in shaping the visual atmosphere of traditional markets. Subsequently, the interpretation results guide the production phase, which entails the creation of artistic works utilizing photographic media for the purpose of visual exploration. This production process consists of the following stages; (1) Data collection, encompassing visual data and essential references; (2) Qualitative description of the artistic content and its implications; (3) Presentation of conceptual ideas and work descriptions, along with the identification of associated challenges; and (4) Innovation in artistic expression and refinement of technical craftsmanship (refer to Fig. 1).
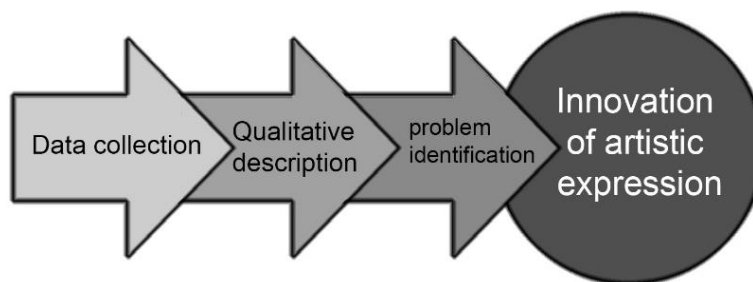
Fig. 1. Artistic research flow chart

In the context of this method, the researcher engages in the interpretation, analysis, and comprehension of the visual objects under observation. Leveraging critical analytical skills, the researcher scrutinizes and systematically deciphers the compositional elements that are inherent in the observed visual objects. In this context, photography serves as the primary medium through which the researcher deciphers the intended meaning. Grounded in the social reality of a developing society, the researcher actively observes social phenomena through visual imagery and symbols, endeavoring to contextualize and elucidate the conveyed messages with utmost precision and accuracy. During the process of visual analysis, the researcher applies the Chiaroscuro theory—a term rooted in art history denoting the strategic use of pronounced contrasts between light and dark areas to impart depth and dimension to an image. This theoretical framework aids in comprehending its application to photography and its impact on the perception of spatiality and objects.

Simultaneously, the semiotic theory is harnessed to delve into how chiaroscuro lighting communicates meaning and emotions within the produced photographs. Semiotic analysis is particularly advantageous for its resource-efficient nature, applicable to both textual and visual elements. Furthermore, the researcher employs a theory that aligns with the image's characteristics and discoveries regarding visual effects to discern the interplay between hidden meanings and the image itself. In the realm of visual interpretation, the researcher adopts Roland Barthes' semiotic theory, expressly articulating the meanings within the denotation and connotation of visual objects. This approach enriches the depth and breadth of the investigative process. By amalgamating insights drawn from these theories and concepts, researchers can cultivate a comprehensive understanding of how to effectively employ chiaroscuro lighting to enhance the visual ambiance of traditional markets in Jakarta. This technique contributes to the enrichment of practical experimental models and fieldwork applications, grounding these endeavors in real-world contexts.

3. Results and Discussion

The most important thing in creating chiaroscuro in photography is to develop lighting techniques. Composition rules need to be made so that it will achieve the right brightness on objects and backgrounds. Creation of a dramatic effect by positioning objects in very bright and very dark places. This is for figuring out how to set a high contrast. Contrast is the difference between light and shadow in an image and affects the quality of lighting in the aesthetics of a photo. The effect of light with accompanying shadows on objects is provided with greater precision by good photography than any other method of depiction. Visible light is electromagnetic radiation with wavelengths detectable by the human eye (about 400-700 nm). In a scientific context, the word "light" is sometimes used to refer to the entire electromagnetic spectrum [23].

In photography, knowledge of how to manage light and shadows with intermediate gradations is needed to create a chiaroscuro effect. Light and shadow appear as reality, providing depth and contributing to expression. Achieving this requires understanding the values of light and making use of them. Each image should contain the brightest lights and darkest shadows. In this way, all lights and shadows can be described in their proper relations.

The use of the Chiaroscuro technique in street photography will provide another form than just street photography in general. So that the street photos with the theme of traditional markets that researchers make are able to speak and give meaning to the atmosphere, struggle, passion, and bustle that exists in these traditional market spaces. For this reason, the researcher selected photos from the many photos that had been produced by selecting as many as seven photos to be reviewed in this study. In practice, the researchers conducted a search for the atmosphere of traditional markets in Jakarta and its surroundings. During this search, researchers found that the busy atmosphere in traditional markets tends to vary depending on the "market hours" of each market. As in the Tangerang area, the tourist market/old market in Tangerang, Banten, is crowded with visitors from the afternoon to the evening.

While in the Cibinong market area, the market is busy from night to morning. Markets in Jakarta, such as the Glodog market, Palmerah market, and Tebet market, are busy from morning to noon. There is also the Santa market, where the market is a tourist market, so it is crowded on weekends at night. The researchers also obtained official permission for shooting in markets in the Jakarta area, namely through PD Pasar Jaya DKI Jakarta. To support the creation of traditional market Chiaroscuro works, researchers used a Canon EOSM200 mirrorless camera with a 15-45mm kit lens, plus supporting lenses, namely 50mm and 135mm fixed lenses. Tripot and reflectors are also used when needed. The following are 7 (seven) photos that have been produced, and the researchers randomly selected them based on location for analysis.

Fig. 2 describes the afternoon atmosphere at the Art market in Pasar Baru, Central Jakarta. This photo is entitled: Waiting for Buyers. In the photo, using a Canon EOSM 200 camera with a 15-45mm lens. Aperture, shutter speed, ISO is f/5,6 -1/125-400. The visual analysis of this photo is as follows: Visually and the meaning of the denotation in the photo; it appears that a man is sitting facing the road. Afternoon light illuminates the location, creating a contrast of light and shadow due to the fact that the place is also bordered by trees. So that some of the unobstructed light will hit some of the paintings and the father who is sitting. But a harsh shadow also partially covered the place. So that the difference between light and shadow gives a dramatic impression even in bright conditions. Connotatively, this photo talks about the feeling of life, especially street artists selling their work. Likewise, it also gave rise to a form of economic anxiety, especially in the art market.
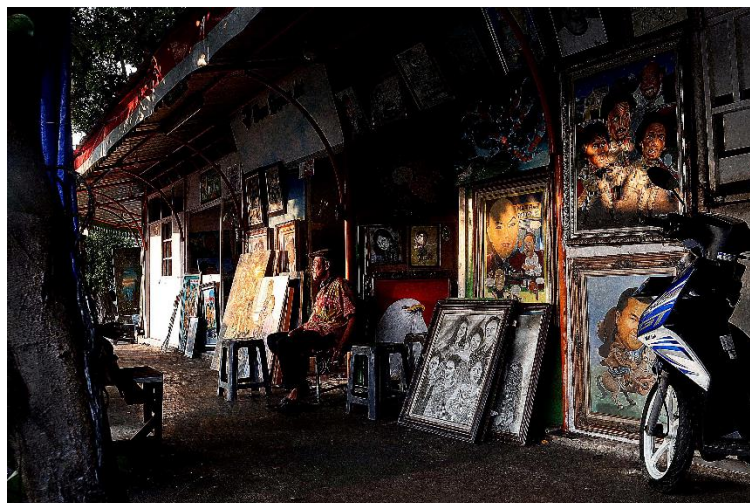

Fig. 2. Photo Title: Waiting for Buyers. Photo by Abdul Aziz

Fig. 3 describes the atmosphere of buying and selling between traders and buyers. This photo is titled: Cilok Seller. In the photo, using a Canon EOSM 200 camera with a 135mm lens. Aperture, shutter speed, ISO is f/5,6 -1/60-800. The location of the object is in the Tangerang Banten Tourism Market. Visual analysis of this photo denotatively this photo shows visually clearly and well-lit the faces of sellers and buyers figures with merchandise and carts.

Researchers want to show the atmosphere between traders and buyers along with the relatively crowded atmosphere around them. The center composition is applied to help the eye focus directly on the object in the center, as well as on the contrast of the light. The impression obtained from the photo is that traditional markets provide social closeness between people in socializing.

Fig. 3. Photo Title: Cilok Seller. Photo by Abdul Aziz

Fig. 4 describes the atmosphere of a small road. This photo was titled: Through the Alley. The technical data is using a Canon EOSM 200 camera with a 15-45mm lens. Aperture and shutter speed, ISO is f8– 1/2000-1600. The location of the object is at Glodog Market-Plot 9, West Jakarta. The visual analysis of this photo denotatively shows the atmosphere in the Glodok Market, especially in the area of Petak Sembilan, which cannot be separated from the attributes of the Chinese ethnic, such as lanterns hanging in every street in the alley. In the photo, the contrast of light from above gives an artistic shadow effect on the streets leading to the market. In connotation, this photo gives an aesthetic sense of the difference between objects and their shadows which are composed harmoniously.

Fig. 4. Photo Title: Through the Alley. Photo by Abdul Aziz

Fig. 5 describes the atmosphere of the bird market. This photo is titled: In the Morning. The technical data is using a Canon EOSM 200 camera with a 15 -45mm lens. Diaphragm, shutter speed, ISO is f/8– 1/800-1600. The location of the object is in the Pramuka Bird Market, East Jakarta. Visual analysis of this photo in denotation shows the atmosphere of the bird market with the many bird cages on display there. The light effect of chiaroscuro is obtained from the contrast of light and shadows as a result of the area that is closed, the room becomes dark, and the distant atmosphere is exposed to light. Thus forming an aesthetic framing of these differences. So that the impression of depth with the resulting color will be an attractive visual aesthetic.

Fig. 5. Photo Title: In The Morning. Photo by Abdul Aziz

Fig. 6 describes a clown singing in the market. This photo is titled: Clown. The technical data is using a Canon EOSM 200 camera with a 15 -45mm lens. Aperture, shutter speed, and ISO is f/4– 1/250-1600. The location of the object is in the Musi-Depok market, West Java. Visual analysis of this photo denotatively shows a clown busking at a butcher shop. The light contrast appears to form the backlighting so that it gives a dimension of space to the photo object. In terms of the impression that is obtained from this photo is a togetherness in an effort to find fortune in each other's way. They meet in the market as a medium of encounter.

Fig. 6. Photo Title: Clown. Photo by Abdul Aziz

Fig. 7 describes the atmosphere of the market in the early morning. This photo is entitled: Your Shadow. The technical data is using a Canon EOSM 200 camera with a 15 -45mm lens. Diaphragm, shutter speed, ISO is f/13– 1/20-1600. The location of the object is in the Cibinong-Bogor market, West Java. Visual analysis of this photo in denotation shows the lack of light on the object. The light gives a silhouette effect. Cosmetically, the contrast of light strengthens the shadows so that silhouettes of people appear, giving this photo a dramatic impression. This

impression is a manifestation or form of the persistence of traders in gaining fortune, which is no longer in doubt. This rice merchant shop has been open since early morning

Fig. 7. Photo Title: Your Shadow. Photo by Abdul Aziz

Fig. 8 describes the market atmosphere. This photo is entitled: Ready to Sew. The technical data is using a Canon EOSM 200 camera with a 15 -45mm lens. Aperture, shutter speed, ISO is f/8– 1/40-1600. The location of the object is in Pasar Santa, South Jakarta. Visual analysis of this photo denotatively shows a tailor in the aisle of the stalls on the 2nd floor of Pasar Santa. This tailor is busy with his work. The atmosphere in the market, which tends to be dim, requires stall owners to turn on the lights to illuminate. This dimness gives the impression of the connotation of patience to keep trying. As a small trader, of course, you need patience and perseverance in carrying out your profession.

Fig. 8. Photo Title: Ready to Sew. Photo by Abdul Aziz

According to Barthes, a photo is a message formed by emission sources, transmission channels, and reception points [24]. The photo structure is not an isolated structure because it is always in communication with others, such as written text, namely titles, descriptions, and articles accompanying photos [24]. For this reason, the creation of this photographic work is in the context of exploring chiaroscuro light on the visuals of traditional markets in Jakarta and its surroundings. Apart from being a form of aesthetic expression for researchers, it is also to make a real contribution to reviving traditional markets as a tourism repertoire, especially in the city of Jakarta and its surroundings. Besides that, there is the desire of researchers to visually re-perpetuate photography of traditional markets in Jakarta and its surroundings. The results of this research by creating works of art photography are expected to be able to make a practical contribution to students. Especially in its application to photography courses, especially in the application of conceptual photography and photographic techniques, such as compositional

games and lighting techniques. The results of this research will be packaged in a photo book about traditional markets.

4. Conclusion

Several things can be concluded in this study based on the subjectivity of researchers that the use of chiaroscuro techniques in lighting is able to create a feeling of depth and volume in two-dimensional media, in this case, photography. Chiaroscuro provides a visual dramatization of traditional markets in the Jakarta area, which have begun to be abandoned by visitors. In this study, the street photography genre approach is able to give a photographic visual impression that appears artistically and is honest in the actual situation. A proper understanding of light and its effect on three-dimensional shapes is necessary to recreate this visual effect in a two-dimensional medium. This leads to a particular lighting strategy, how the chiaroscuro effect can enhance digitally created characters or environments to make them appear more realistic to the viewer. The visualization of street photography in the above traditional markets is expected to be a saving of visual documentation according to the era. So that it can be a visual reference in the future. Suggestions for sustainability that this research has the potential to inspire other projects and can be applied to other alternative media. Moreover, it can also be added the prospect of the development of research results and application prospects of further studies into the next (based on results and discussion).

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