


EXPLORING THE BOUNDARIES OF CREATIVITY IN THE DIGITAL AGE BY UNDERSTANDING THE IMPACT AND IMPLICATIONS OF AI WORK IN PHOTOGRAPHY COMPETITIONS



Ine Rachmawati, Suhadi Parman, Yuni Awalaturrohmah Solihah
Faculty of Information Technology, Visual Communication Design,
Universitas Catur Insan Cendekia Cirebon
ine.rachmawati@cic.ac.id. suhadiparman@cic.ac.id, yuniasolihah@cic.ac.id

Abstract: The digital era has significantly impacted photography, especially in competitions, with AI-generated works sparking debates on creativity and ethics. This study investigates two key incidents: the controversy over an Indonesian photograph's AI accusation in a European competition, and the revocation of a competition winner's title upon discovering AI use. Using Edmund Feldman's analysis, the research explores these cases through description, formal analysis, interpretation, and evaluation. The description outlines the incidents' details, while formal analysis examines the visual and technical distinctions between AI-generated and human-made works. Interpretation reveals the implications of AI on creativity, and evaluation addresses the ethical concerns and how AI challenges traditional creativity definitions. The study also aims to investigate the impact of AI on artistic integrity and its implications for future photography contests, while identifying ways to distinguish AI-generated works from original photography as a guide for judging in competitions. This study offers insights for photographers, judges, and artists on navigating AI's influence and redefining creativity in the digital era.

Keywords: AI Photography, AI Creativity, AI vs. Human Creativity, Visual Analysis, Human Creativity

Introduction

The development of digital technology in recent decades has had a significant impact on various fields, including the art of photography. The digital era has enabled innovations that enrich the process of art creation, one of which is through artificial intelligence (AI). Artificial Intelligence or AI is the development of systems that can perform tasks that usually require human intelligence. AI is applied in various forms, ranging from virtual assistants, data analysis to voice and image recognition (Satrinia et al., 2023).

The existence of AI in everyday life can be utilized to support a photographer's creativity in developing his ideas. In the context of photography competitions, the presence of AI-generated works has sparked debate among photographers, artists, and judges. Creativity, which was previously the essence of human work, is now being questioned as the boundary between human and AI work becomes blurred. This leads to the fundamental issue of how creativity can be defined and what ethical boundaries need to be observed in the use of AI technology.

The essence of photography is a medium that has a long process, for example in technical terms, first determining the object to be photographed, second taking the object with a camera as an object recorder, third processing the object that has been recorded by the camera and producing an image or photo of the object either in the process through the darkroom or the camera.

This process involves a human touch and sense of artistry that cannot be replaced by a computer. In addition, time markers are of value in photography because factually the existence of a photograph is evidence of the presence of time (Bolo, 2024). This is what is not found in AI in the integrity of the events recorded in photography, the way AI works is only composing and combining from several assets collected in the data then organized and reshaped according to the instructions given so as to create a new picture.



Photography is one of the mediums that record events and can even be used as a reflection of life. The process of creating photography when seen in its meaning involves more or less objective and subjective values in the maker, which has gone through a process of observation which is then represented in a visual medium (Supriyanta, 2024). AI does not own this process in the context of the meaningfulness of the presence of the photo itself. AI only combines various sources of assets collected through data search engines, which is far from the historical process or direct experiential involvement in the making of the photographic work itself. On the other hand, AI is also very useful for supporting creativity in developing the idea itself. However, AI cannot reach the process of presence, direct experience and power of an artist in creating a work of art.

The advancement of AI in the art of photography has a great impact by opening up various opportunities for photographers to improve quality and creativity. AI is used as a tool to assist the creative process and to support the enhancement of human creative potential (Everlin, 2022). AI simplifies the editing process and enables a more optimized end result, and supports wider and easier access to the world of photography through apps and online platforms. However, the development of AI also brings some negative effects. Excessive use of AI can make photos look too artificial and lack a personal touch, which can erode the uniqueness and creativity of the photographer. Therefore, photographers need to consider the role of AI carefully and use it wisely to maintain authenticity and distinctiveness in the work (Yudisetyanto & Firmansyah, 2024).

The use of AI in photography has also impacted the photography competition events that have been organized and debated, here are two such events:

1. The visual work entitled '*Pseudomnesia: The Electrician*' by Boris Eldagsen, a German photographer, was entered into the Sony World Photography Awards 2023 in the Creative Category, which is an open competition with a *single image*. In March 2023, his work was declared the winner of the competition. However, Eldagsen refused to accept the award on the grounds that his work was not photographic (Glynn, 2023).
2. The photographic work entitled '*Warung Kopi*' by Diky Ariani, an Indonesian photographer who won the CEWE Photo Award 2023 in Europe, was accused of using AI by some netizens' comments through Instagram accounts (Yusuf, 2023).

These two works have two different techniques, the first being a drawing by Boris Eldagsen using AI technology. Boris had rejected his victory because he considered the originality of the image to be far from the provisions of taking



traditional photography techniques. The second one, 'Warung Kopi' by Ariani, is an original work that uses photography techniques and processes from the preparation of the photo, taking the photo, to the final result of the photo, which is done in traditional photography but is accused by netizens as an AI photo.

Seeing these two phenomena is certainly contradictory, blurring the boundaries of which is the original made by traditional photography techniques and which uses AI. In competitions, it is necessary to have restrictions and conditions on taking photos traditionally or using AI. In some cases, AI-created photos are considered a violation of authenticity and honesty in art competitions. For example, several incidents of international photography competitions have raised this issue.

This research seeks to explore visual analysis through Edmund Feldman's analytical approach that involves four stages: Description, Formal Analysis, Interpretation, and Assessment (Widyaevan, 2017). Through this approach, this research is expected to provide an in-depth look at the implications of using AI in the art of photography, especially in the context of competition. As such, this research aims to clarify the boundaries of creativity and provide insights for artists and decision-makers in dealing with the dynamics presented by AI technology in this digital era.

Previous research in the journal entitled *Creative Landscape Change and Ethical Dialogue in Photography: The Influence of Artificial Intelligence* by Regina Otavia Ronald (Ronald & Karyono, 2024). This research discusses creative changes, especially in photography techniques that are increasingly developing with the presence of AI so that the originality of photography techniques is debated. In addition, another journal that discusses AI and photography in a study entitled *Photography in the Era of Disruption: Artificial Intelligence as a Reference in Developing Creative Photography Ideas* by Yudisetyanto. In his research, he describes AI technology with photography works, especially in the realm of photography positions and current AI technology (Yudisetyanto & Firmansyah, 2024).

These two studies are similar to the research conducted by the author which discusses AI and photography, but what can distinguish this research from the case study is different.

Research Method

Research methods that focus on analyzing artworks or visuals to have thick description is the method using Edmund Feldman's approach, which includes



four main stages: description, formal analysis, interpretation, and assessment. Each of these stages allows the author to understand the work in a structured way, highlighting its visual aspects, meaning, and impact (Maulana, 203).

1. Description

The description stage aims to provide an objective description of the visual elements in photography or visual work. At this stage, the author describes various details without inserting opinions or interpretations, including the objects present, colors, composition, lighting, and other elements visible in the work. Studies that use visual description often explore these visual elements as a foundation for further analysis.

2. Formal Analysis

This stage focuses on the relationship between elements in the work, including composition, balance, proportion and the use of other artistic techniques. Formal analysis aims to look at how the various elements support each other or form a visual whole. This approach is often used to identify artistic structure and composition, so that the author can understand the technical and formal aspects of the work.

3. Interpretation

The interpretation stage explores the meaning implied in the work. In this stage, the author tries to find the message or meaning conveyed by the creator of the work. Interpretation often involves the study of social, cultural and psychological contexts, so as to reveal the reasons behind the choice of objects, themes and techniques in the work (Tahalea, 2019).

4. Evaluation or Assessment

Evaluation is the stage of assessing the quality, relevance and aesthetic value of the work. At this stage, the researcher provides a critical view that may include moral, social, or impact aspects of the work. Evaluation helps the researcher to determine the contribution or position of the work in the context of art or society.

Using Edmund Feldman's four stages, the research can provide a comprehensive view of the artwork or photography, from visual elements to meaning and impact.

Discussion and Results

The following is a discussion of the two works analyzed using Edmund Feldman's theory

1. The visual work entitled 'Pseudomnesia: The Electrician' by Boris Eldagson

a. Description, the first step in Feldman's theory is description, which focuses on observing details without interpretation. In "Pseudomnesia: The





Figure 1 The Electrician (Boris Eldegson, 2020)
(Source: <https://www.eldagsen.com/category/ai-generated/>)
Downloaded on November 1, 2024, 10:58

Electrician”, the photograph shows two women in a seemingly unusual composition. The two women appear to be emotionally interconnected, with one of the women in the foreground being more dominant in the pose, while the other is in the background, slightly blurred and peeking out. The black-and-white effect adds a classic feel to the image, reminiscent of photographs from the early 20th century.

- b. Formal Analysis, this stage focuses on the visual and technical elements of the work. The composition in this photo shows two subjects placed asymmetrically, with one subject standing out in detail while the other appears blurred. The lighting in this work is very distinctive, accentuating the main subject with subtle shadows that give depth to her face and shoulders. There is a sense of tension between the two figures, created by the visual contrast between the sharp focus on the front subject and the blurrier back subject. The black-and-white palette adds to the dramatic atmosphere, creating a sense of nostalgia and mystery. The use of texture and depth of field is also very strong, with the focus on the details of the expression and the presence of the second, more blurred figure, creating a visual duality between reality and memory.
- c. Interpretation at this stage begins to search for the meaning behind the visual elements that have been analyzed. Pseudomnesia: The Electrician may be about memory, illusion, and the past. The title itself, “Pseudomnesia,” meaning false memory, indicates that this is not simply a portrait but an exploration of how memories or images of the past can be altered or reshaped by perception. The presence of two female figures—one clear, one blurred—can be interpreted as a metaphor for memories or multiple identities. The woman in front seems more real and more alive, while the

woman behind is more like a shadow or a forgotten figure.

- d. This stage of the assessment involved evaluating the artistic quality and the success of the piece in conveying the message of *Pseudomnesia: The Electrician* is a technically impressive work, with a highly structured composition and subtle use of lighting to create a nostalgic atmosphere. Despite the use of AI, Eldagsen realized that his work should not be considered a traditional work of photography. By declining the prize from the Sony Photography Awards, he wanted to challenge the art community to redefine the boundaries of photography and the role of AI in visual arts.

Overall, through Edmund Feldman's approach, the work *Pseudomnesia: The Electrician* by Boris Eldagsen is a thought-provoking example of how AI technology can be used to challenge traditional definitions of photographic art. The work explores themes such as false memories, visual manipulation and altered reality. The use of AI in this work succeeds in creating a unique atmosphere, where viewers are invited to question the authenticity and function of art in the digital age.

The use of AI in art, including photography, has been the subject of great debate. Here are some of the main criticisms of the use of AI in art, especially in the context of photography, which can be analyzed through the perspectives of ethics, creativity, and its impact on the art world:

- a. **Blurring the Line Between Art and Technology** A major criticism of the use of AI in art is the loss of clarity between works created by humans and those produced by machines. In cases such as Boris Eldagsen's "*Pseudomnesia: The Electrician*," AI is used to produce images that closely resemble human works. This raises questions about authenticity and whether art created by AI can still be considered part of human artistic expression. Many argue that art is the result of a human creative process that involves experience, emotion, and an understanding of the world of things that machines do not have.
- b. **Challenging the Definition of Creativity** AI challenges the traditional definition of creativity. In many cases, AI simply follows predefined algorithms and programs, and so is not truly "creative" in the human sense. When AI is entered into art competitions, such as the Sony Photography Awards won by Eldagsen, this raises issues of on whether works created by AI can compete fairly with works produced entirely by humans. Eldagsen himself declined the prize, stating that the work should not be categorized as traditional photography because AI played a major role in the creation process.
- c. **Ethics and Artistic Honesty** From an ethical perspective, the use of AI is



often criticized for potentially undermining the integrity and honesty of the art creation process. Many feel that relying on AI in art can be perceived as a shortcut, reducing the manual effort and skill usually required by artists or photographers. There are also concerns that AI removes the personal and emotional aspects of the artwork, which are important elements in assessing the value and meaning of a work.

- d. Risk of Homogenization of Artwork AI works based on inputted data and patterns learned from large data sets. As a result, AI tends to produce works that are similar or follow trends, as it does not have the capacity to think innovatively or express unique experiences like humans. This can lead to homogenization in the art world, where works become less original and more generic as they are generated from patterns that already exist. In the long run, this can be detrimental to the diversity of creativity that comes from an artist's individual exploration.
- e. Threat to Artists and Photographers The widespread use of AI raises concerns that it will replace human artists and photographers, especially in industries that demand efficiency and speed, such as advertising or graphic design.
- f. Intellectual Property Rights Blurring AI is often trained using large datasets that include artwork from human artists without their knowledge or consent. This raises serious issues related to copyright and intellectual property. Many artists feel aggrieved that their works are being used by AI to produce new works without any credit or compensation. In the world of photography, for example, AI may mimic the style or visual elements of a particular photographer without giving credit or recognition.
- g. Risk of Manipulation and Cheating The use of AI also poses a risk of manipulation in art competitions. As seen in the Eldagsen case, AI-generated works can compete in competitions that are supposed to be for human works only. In the absence of strict supervision, this could lead to cheating and lower the standard of judging artworks, as works produced with the help of technology may have a technical advantage over works created entirely by humans.
- h. Conclusion Criticism of the use of AI in art, especially photography, centers on issues of authenticity, ethics, fairness of competition, and the future of art itself. While AI opens up new opportunities in artistic exploration, it is important to limit its use in the right context, especially in preserving the honesty, creativity, and integrity of art. Many artists and critics argue that while AI can be used as a tool, true art must still come from the human creative process, with its unique experiences, feelings, and skills.

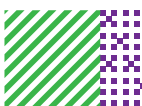




Figure 2 Coffee Shop (Dikye Ariani, 2023)
 (Source: <https://www.eldagsen.com/category/ai-generated/>)
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2. Photographic work entitled 'Warung Kopi' by Dikye Ariani

- a. At this stage of the description, we simply describe what is visually seen in the work without giving an interpretation. 'Warung Kopi' shows a typical scene at a traditional Indonesian coffee shop, perhaps in a rural area or market. The photo shows some elements of local culture: the simple building, the intimate atmosphere between sellers and customers, and the use of simple utensils that depict the nuances of everyday life. The colors used tend to be warm and natural, giving an authentic and pleasant impression. There is interaction between the subjects in the photo, showing the social activities commonly found in traditional coffee shops.
- b. **Formal Analysis** This stage focuses on the visual and technical elements. The composition in this photo is balanced, with the main subject placed in the center of the image and the background filling the space harmoniously. The use of natural light is dominant, creating subtle shadows that add depth to the image. The photo also shows rich textures, especially in the wooden surfaces, coffee utensils and the subject's clothes, which give it a realistic feel. Warm colors such as brown, yellow, and brick red dominate the image, reinforcing the cozy atmosphere. and the casualness of the coffee shop. The angle of the shot also provides an intimate perspective, as if the viewer is inside the space, experiencing the atmosphere inside the warung.
- c. **Interpretation** At this stage, we interpret the meaning and message that the work might convey. "Warung Kopi" seems to be trying to capture the essence of togetherness and warmth from the social interactions that occur in a traditional coffee shop. It is not only a place to drink coffee, but also a space to share stories, gather, and maintain social relationships. Dikye may want to emphasize the simplicity of life and local wisdom that is

still very relevant in the lives of Indonesian people, especially in rural areas. The intimate and peaceful atmosphere presented by the human interaction in the photo reflects the values of family, friendship, and a high sense of community.

- d. The evaluation in this section assesses the artistic quality and the success of the work in conveying the message. Aesthetically, "Warung Kopi" manages to capture an authentic atmosphere, using compositional elements and lighting well to create a strong visual narrative. The accusations of AI against the work are interesting to consider, as the work relies on traditional and natural elements as opposed to digital or machine-made concepts. This highlights how the public's perception of artworks can be misconstrued when technology advances rapidly, but in reality, this work demonstrates Ariani Dikye's strong manual photography skills.

Overall, from the perspective of ethics and creativity, the unproven allegations of AI use show how important artistic honesty is in creating works of art. It maintains artistic integrity and makes an important contribution to maintaining local cultural heritage through the medium of photography. It succeeds in proving that art created with traditional techniques can still compete and gain recognition, even in an era dominated by digital technology.

- a. Originality in Manual Photography Traditional photography such as the work "Warung Kopi" relies on the photographer's skill in manually adjusting the composition, lighting, shooting angle, and other visual elements. Every aspect of this photograph shows the distinctive human skill that cannot be synthesized by a machine. The originality in this work arises from the photographer's direct experience, interaction with the subject in the field, and sensitivity to the moment to be conveyed.
- b. The manual technique applied in "Warung Kopi" involves the ability to capture real local emotions and atmosphere, including social interactions, traditions, and the ambience around the coffee shop. This is a form of authenticity inherent in every coffee shop.

Photographic works that are taken manually, where every decision-be it lighting settings or angle of view-is made by a human based on his or her creative instincts. This cannot be generated automatically by an algorithm.

AI and the challenge to originality On the other hand, works produced by AI are often programmed to mimic certain styles or visual elements derived from data collected from human works. While AI is capable of producing technically excellent and even aesthetically pleasing images, artistic originality is often questioned as AI lacks the human experience of creating art. AI does



not experience emotion, direct observation, or personal involvement with the subject or moment captured.

The use of AI in art raises the fundamental question of whether the work can still be called “original” if AI only processes pre-existing data and produces works based on pre-programmed patterns. In this context, AI acts more as a tool to mimic or produce something based on instructions, rather than an entity capable of feeling or experiencing creativity.

In the case of ‘Warung Kopi’, the accusation that the work uses AI is ironic as the photo essentially captures authenticity and traditional moments that are very humanistic. The defense of this work shows that manual photography techniques remain relevant and excel in maintaining authenticity. The originality lies in how Ariani Dikye is able to capture social interactions and local atmosphere that cannot be replicated by AI. Manual photography provides more room for improvisation and spontaneity derived from human observation, which is an important element in creating original artworks. Each photographer brings his or her unique perspective in presenting the reality he or she sees through the lens, which cannot be equated with the way AI produces images.

In the context of photography competitions, it is important to emphasize that the originality of human techniques is still valued. The alleged use of AI against works such as “Warung Kopi” highlights a wider concern in the art world that AI-generated works may blur the distinction between human and machine works. However, originality and artistic integrity remain the key benchmarks in judging photographic works. In this case, Ariani Dikye proves that her works derived from direct observation and engagement are still highly valued and relevant, even in the midst of evolving AI technology.

The comparison between manual photography techniques and AI-based photography ultimately centers on the value of originality and human experience in creating art. Originality in photography techniques such as in “Warung Kopi” by Ariani Dikye is a manifestation of experience, skill, and in-depth observation, whereas AI, although sophisticated, is only capable of imitation or engineering without involving the element of personality or unique creativity.

Ultimately, the originality of manual techniques brings an artistic quality that cannot be replicated by machines, making human works still have a special place in the world of art and photography.



Conclusion

To find the gap or difference between the two events in the case of Boris Eldagsen with his work “Pseudomnesia: The Electrician” and Ariani Dikye with her work “Warung Kopi” at the CEWE Photo Award 2023, here are some key points that stand out:

1. AI Involvement vs. No AI Involvement

Boris Eldagsen openly admitted that his work used AI in its creation. He even refused the award as he felt that the work could not be considered traditional photography. Dikye Ariani, on the other hand, was accused of using AI, when in fact her work did not use AI at all. Warung Kopi photos are the result of traditional photography techniques that are entirely manual and reflect social reality.

The gaps found here are:

- a. In Eldagsen’s work, AI is truly used as part of the creative process.
- b. In Dikye’s work, AI is only a false accusation, where his work is deemed to use AI because the visual details are deemed too perfect or subtle.

2. Artists’ Response to the Use of AI

Boris Eldagsen deliberately used AI as an artistic experiment and even sparked an ethical discussion about AI’s place in art. He rejected his prize and called for further regulation of AI in the art world. Dikye Ariani had to defend her work against unfounded accusations, showing that her skills as a true photographer are still questionable in the context of a digital age that is increasingly suspicious of technological manipulation.

The gap here is:

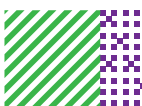
- a. Eldagsen consciously places AI within the framework of art exploration, recognizing the use of technology to challenge the boundaries of art.
- b. Dikye had to prove that a completely manual work could look “too perfect” to be accused of being AI.

3. Question of Originality

Eldagsen utilizes AI to create works that blur the lines between imagination and reality, sparking a debate on what can be considered original art. Ariani Dikye created a work that is highly original, but ironically, this originality is questioned and suspected to be the result of technological manipulation.

Gap in terms of originality:

- a. Eldagsen uses AI to explore new concepts of originality that are not bound



by traditional rules.

- b. Dikye maintained the originality of traditional photography techniques, but was forced to prove his authenticity.

4. Public and Media Reaction

Boris Eldagsen deliberately opened a discussion on the ethics and role of AI in art, gaining global media and public attention regarding the impact of AI on visual art. Ariani Dikye was falsely accused, which created baseless uncertainty and furor in the media, but it was eventually proven that her work was entirely authentic.

The gap here is:

- a. In Eldagsen's case, the debate focused on the legality and validity of AI works in art competitions.
- b. In Dikye's case, the debate is more about misperceptions about the authenticity of works produced without AI.

5. Competition Ethics

Eldagsen himself feels that AI should not compete in traditional photographic art competitions, pointing out the ethical complexities of integrating technology into art competitions. Ariani Dikye faces a different ethical issue, which is how AI technology can cause prejudice against authentic and traditional works, where suspicions of technological manipulation can arise even without evidence.

Gap here:

- a. Eldagsen challenged whether AI work should compete with human work.
- b. Dikye became a victim of technological prejudice that doubted the authenticity of manual work.

Conclusion of the Gap Between the Two Events:

1. Conscious use of AI vs false accusations about AI: Eldagsen used AI openly and ethically for experiments, while Dikye was accused of using AI when his work was authentic.
2. The goal of artistic exploration vs the challenge of authentication: Eldagsen uses AI to challenge the boundaries of art, while Dikye must maintain that his originality is not generated by technology.
3. The ethical influence of technology in art: Eldagsen opened the debate on the ethics of AI in art competitions, while the allegations against Dikye reflect public concerns over the influence of AI even in fully manual works.



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