

Photographic Psychology in the Age of Generative Artificial Intelligence: Media Authenticity, Visual Judgment, and Identity Construction

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ABSTRACT

Generative artificial intelligence is reshaping the psychological foundations of photography. For a long time, photography gained its persuasive force from physical presence, optical recording, and temporal trace. Viewers tended to read photographs as evidence of an encounter between a camera, a subject, and a moment. AI-generated images disturb this habit. They can look photographic without requiring a photographed object, a shared scene, or bodily participation by the maker. To analyse this shift, this study examines the transformation of photographic psychology across: media authenticity, visual judgment, algorithmic bias, copyright and authorship, memory practice, and identity construction on social platforms. This suggests that generative AI does not simply replace photography. It reorganizes photography into a hybrid visual system where recording and generation coexist. As a result, photographic psychology shifts from the psychology of capturing reality to the psychology of judging sources, negotiating trust, and constructing identity under algorithmic conditions. The continuing value of photography lies not only in visual realism, but also in human experience, ethical responsibility, situated attention, and the durable connection between images and lived reality.

KEYWORDS

Generative artificial intelligence; Photographic psychology; Visual authenticity; Identity construction; Algorithmic bias; Media ethics

1. INTRODUCTION

Earlier discussions of photographic psychology usually began with cameras facing the world. A photographer selects a scene, organizes attention, frames visual relations, and transforms a lived moment into an image. The viewer then interprets the image through memory, emotion, cultural knowledge, and social context [1-4]. AI-generated images disrupt this sequence. A photographic image may now emerge from prompts, datasets, models, and repeated selections rather than from direct contact with a photographed scene.

This change does not make photography obsolete. It makes photography harder to define psychologically. Photorealism and photography need to be distinguished more carefully in the age of AI-generated visual disinformation, because a convincing photographic appearance no longer proves photographic origin [5]. Generative imaging systems can treat the history of photography as a reservoir of styles, turning photographic seeing into a process of stylistic automation [6]. These arguments reveal a crucial shift: photography is no longer only a practice of recording the world, but also a language of visual expectation that algorithms can imitate, recombine, and scale.

The boundary of photography remains active because people still see photographically. Photographic seeing can be understood as a form of cultural memory that travels across screenshots, disappearing images, AI images, and other unstable visual forms [7]. AI-generated photographic images also enter long-standing debates about nature, reality, the uncanny, and power within photographic discourse [8]. These studies suggest that the psychology of photography in the AI era cannot rely on a simple opposition between real photographs and fake images. The more urgent question concerns how viewers assign credibility, how creators locate agency, and how image users form identity in a visual culture where photographic appearance has become easy to synthesize.

2. MEDIA AUTHENTICITY AND VISUAL JUDGMENT IN AI-GENERATED IMAGES

Traditional photography has been psychologically persuasive because it appears to connect the viewer with a scene that existed before the lens. The power of a photograph comes not only from resemblance. It also comes from the assumption that light, body, time, and object once met in a concrete situation [1, 4, 9-10]. This assumption supports many social uses of photography, including family memory, news reporting, documentary work, artistic witness, and personal identity.

Generative AI weakens this assumption. Traditional theories of photographic transparency rely on the idea that photographs provide a special form of access to depicted objects [11]. AI-generated images complicate that claim because they can resemble people, places, and scenes without requiring the same causal relation between image and object. In psychological terms, the viewer can still experience immediacy, but the source of that immediacy has changed. It no longer has to come from a photographed scene. It can arise from learned visual conventions, model training, and the familiarity of photographic style [5, 12]. Generative AI can therefore be understood as a disruptive force in photographic art, not because photography had fixed borders before AI, but because photorealistic generation makes those borders newly visible [13]. This point matters for photographic psychology. A photographer traditionally works with contingency: weather changes, faces move, light disappears, and the scene resists total control. AI generation works through iteration: a user adjusts prompts, selects outputs, changes styles, and refines details. Both activities involve choice, but the object of choice differs. The photographer chooses from reality. The AI user chooses from generated possibility.

The shift from recording to generation changes the mental structure of making images. Field photography trains sensitivity to timing, spatial relation, physical risk, and ethical encounter. AI image-making trains anticipation, linguistic precision, style management, and evaluative selection. The first process asks the maker to respond to the world. The second asks the user to manage an image system. Neither process is psychologically empty. Yet only one preserves direct dependence on an encountered scene. This difference should remain central when evaluating the cultural and ethical meaning of photographic images.

The most immediate psychological effect of generative AI is the judgment of authenticity. Viewers have long used visual clues, such as lighting, texture, gesture, spatial coherence, and emotional plausibility, to decide whether an image feels real [12, 14]. AI image systems can reproduce many of these clues. As a result, visual realism becomes less reliable as evidence. Aesthetic realism and emotional salience influence people's judgment of AI-generated disinformation images, and realistic AI images are more likely to be regarded as authentic, whereas confidence in judgment does not necessarily increase in the same way [15]. This mismatch is significant. A viewer may be persuaded by an image and still feel uncertain. Therefore, the psychology of authenticity includes both belief and hesitation. In the AI era, uncertainty has become a part of everyday visual experiences. A related conclusion appears in tourism research: perceived authenticity can influence trust and patronage intentions, especially when images are not clearly labelled as AI-generated [16]. People often respond to images not only by asking whether they are real but also by asking whether they are desirable,

coherent, attractive, and compatible with expectations. A synthetic image can shape intentions if it satisfies these psychological conditions.

Real photographs may also be doubted because the public has learned that convincing images can be manufactured. This involves a broader shift in visual culture. Viewers must now judge images through multiple layers: visual form, source credibility, platform context, labelling, distribution pattern, and their own emotional reactions. Therefore, photographic psychology must move beyond composition and perception. It must also study suspicion, source attribution, and trust in conditions of technical uncertainty.

3. ALGORITHMIC BIAS, COPYRIGHT, AND CREATIVE AGENCY IN AI PHOTOGRAPHY

AI-generated images are shaped by training data, model design, platform defaults, prompt conventions, and user expectations, which can reproduce and intensify stereotypes already present in society. In photographic psychology, repeated images train perception. People learn what a doctor, scientist, leader, family, beauty standard, migrant, worker, or artist is supposed to look like through their visual environment. Studies of text-to-image generation show that models often replicate or amplify stereotypes related to sex, race, and culture [17]. Debiasing prompts may reduce stereotype indicators while creating tension in the contextual fit. Viewers often experience stereotypical images as familiar. Familiarity can be confused with accuracy as well. The result is a visual loop in which biased images feel natural because they repeat what viewers have already learned to expect. Analyses of images generated by DALL·E, Midjourney, and Stable Diffusion have also found both underrepresentation and stereotypical presentation of women across platforms and prompts [18]. Similar problems appear in AI depictions of Australian paramedics and first responders, where generated images disproportionately represented men, white people, and light skin tones [19]. These patterns indicate that this is a structural feature of visual generation when social inequality is embedded in the data and aesthetic conventions.

This raises two risks for photography. First, AI images may narrow public imagination by presenting social roles through repeated patterns. Second, creators may become dependent on average visual outputs that erase local details, irregular bodies, regional cultures, and lived complexities. AI generation may have the opposite effect if left unexamined. It may return the image to the statistically common, visually smooth, and socially expected. Therefore, photographic education should include bias recognition as a core skill. A technically impressive image may still be socially poor if it repeats these harmful patterns.

Copyright disputes regarding AI images are also psychological disputes about authorship and labor. Photographers view their work as the culmination of experience, seizing opportunities, patient waiting, risk-taking, aesthetic judgment, and an ethical relationship with the subject. When generative systems are trained on large image datasets and later produce photographic-looking results, creators may feel that their visual labor has been absorbed into an anonymous machine process. Current debates on AI-assisted creation can be compared with earlier legal debates about photography, and copyright should continue to focus on human creative contributions [20]. This position helps to clarify the photographic problem. The camera once challenged the older ideas of art because it involved mechanical mediation. However, photography gained recognition because human agency remained visible in the framing, timing, arrangement, and expressive control. AI-assisted image-making requires a similar but more complex evaluation. A prompt alone may not provide sufficient creative control. A sustained process of selection, revision, composition, and conceptual direction may carry more. The relationship between generative AI, copyright, and the EU AI Act remains marked by ongoing ambiguities surrounding training data, transparency, text and data mining, and future policy gaps [21]. These legal uncertainties affect creators' psychological security. If photographers cannot

know whether their images trained a system and if AI outputs compete with human-made images, professional identity becomes unstable.

AI can assist in photographic work. This can assist with planning, restoration, editing, visualization, and conceptual experimentation. The danger appears when assistance becomes a substitution without disclosure or when human experience is treated as unnecessary because a system can generate the surface of that experience. Photographic agency should be understood as more than just image production. It includes the decision to enter a place, meet people, wait for a moment, accept limits, and remain answerable for the image after it circulates. These forms of agency still distinguish photography from mere photorealistic outputs.

4. PHOTOGRAPHIC ATTENTION, MEMORY, AND LIVED EXPERIENCE

Photography is a cognitive practice before it becomes a social object. What enters the frame becomes meaningful, partly because other elements are excluded. This selective structure gives the photograph psychological depth. A photograph records not only a scene but also a pattern of attention [2-3, 12, 14]. Smartphone photography has changed this trend. As taking images has become nearly effortless, many people photograph constantly. This can support memory but can also reduce direct engagement with the present. Recent findings challenge the intuitive notion that taking more photos leads to stronger memories; under certain conditions, taking photos may impair subsequent recognition and memory confidence [22]. Deliberate photography can deepen this perception. A person who studies light, waits for a gesture, and frames carefully may encode the scene more richly. Mechanical capture can achieve the opposite effect. When an image becomes a quick external storage device, the mind may reduce its own work. Therefore, the psychology of photography should distinguish between active seeing and automatic saving.

AI extends this issue. If users generate images that stand in for experiences they never had, their image memory can detach from their lived memory. A person can create a plausible travel scene, ideal family portrait, or heroic self-image without any corresponding event. Such images may support fantasy, design, and storytelling. However, when they are presented as personal memories, they weaken the connection between the image and experience. Photography has helped people remember what happened. AI images can help people imagine what might have happened. Both functions have value, but they should not be confused.

5. SELF-PRESENTATION AND ALGORITHMIC IDENTITY ON SOCIAL PLATFORMS

The psychological force of an image lies in its social visibility. A photograph is not only viewed by the person who creates it. It enters a feedback system of likes, comments, shares, comparisons, and imitations. Selfie taking and posting are related to positive appearance-specific self-evaluations, whereas selfie editing is related to more negative self-evaluations [23]. Image-making can support self-confirmation, but excessive correction may intensify this dissatisfaction. The edited self can become a standard against which the lived body feels inadequate. Generative AI intensifies this tension. This expands expressive freedom, but it also increases the distance between the lived and displayed selves. When the displayed image becomes too smooth, users may begin to experience ordinary reality as insufficient. However, AI-generated self-images may support exploration when recognized as imaginative constructions. They may produce anxiety when they become the standards for social comparison.

Social media can be understood as a context for adolescent identity development through self-presentation, social comparison, role models, and online audiences [24]. Identity outcomes depend not only on the amount of use but also on the quality of engagement, authenticity, comparison,

exploration, and distress [25]. A user may gain confidence through shared images but may also feel pressured to maintain a desirable visual persona. The platform converts personal images into quantifiable signals. Over time, these signals can guide users in terms of what they photograph, how they edit, and which version of themselves they believe is socially acceptable.

AI-generated imagery changes the platform self from selected reality to manufactured identity. It can begin with desire alone. A person can generate the appearance of a lifestyle, body, home, career, or social scene. The platform then rewards or ignores the image in the same economy of attention used for photographs. This creates new identity pressures. If generated images receive stronger feedback than ordinary images, users may gradually move away from lived self-presentation toward an optimized simulation. The self is not only photographed but also modelled. Therefore, photography psychology must study how platform metrics interact with generative tools.

A countermovement can already be seen in the renewed interest in slower and more material photographic practices. Analog photography in Southeastern China has been linked to identity formation, psychological well-being, and social connection [26]. The importance of this finding lies in its contrast to instant generation. Analog photography includes waiting, uncertainty, tactile handling, imperfect results, and shared practices. These elements can restore a sense of presence that is often removed by algorithmic imaging. In a highly automated visual culture, slowness can be psychologically valuable.

6. CONCLUSION

Generative AI has changed the way photography produces meaning. Photographic images no longer gain credibility only through cameras, physical scenes, and optical recordings. Their credibility is also shaped by algorithmic generation, platform circulation, visual labeling, and viewer judgment. Consequently, the central concern of photographic psychology has shifted. It now needs to explain how people judge authenticity, understand authorship, respond to visual bias, and construct themselves through image-based feedback in a generative visual environment.

Within this transformation, the value of photography must return to the relationship between human beings and reality. AI can expand visual imagination and lower the threshold of image production; however, it may also create confusion about authenticity, algorithmic bias, copyright disputes, and identity anxiety. The creator's lived experience, attention, ethical responsibility, and emotional engagement truly support the continuing value of photography. Future photographic practice should maintain a clear boundary between technological use and real experience so that images can absorb the expressive possibilities of new technology while preserving photography's connection with memory, life, and social reality.

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