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The Unpredictable Self: Algorithmic Contingency in Digital Portraiture

Yu Shang

Abstract

Dieser Artikel untersucht die tiefgreifenden Auswirkungen der algorithmischen Kontingenz auf die digitale Selbstdarstellung in der zeitgenössischen visuellen Kultur. Anhand der Entwicklung visueller Medien - vom Spiegel über die analoge Fotografie bis hin zur digitalen Bildbearbeitung - wird untersucht, wie technologische Fortschritte unser Verständnis von Identität und Selbst verändert haben. Die inhärenten Beschränkungen und Fehler algorithmisch gesteuerter Prozesse führen zu Unvorhersehbarkeiten, die sowohl zur Homogenisierung von Bildern als auch zu unerwarteten visuellen Verzerrungen führen. Diese Zufälligkeiten, die nicht einfach technische Mängel sind, eröffnen eine neue Perspektive auf das Verhältnis von Selbstidentität und Bildsprache.

Durch die Analyse meiner eigenen künstlerischen Praxis, darunter Arbeiten wie „How to be or not to be Recognized as A Human“ und „Beats“, zusammen mit den KI-generierten Porträts des Künstlers CROSSLUCID, zeigt der Beitrag, wie Künstler algorithmische Fehler nutzen, um traditionelle Vorstellungen von kreativer Kontrolle in Frage zu stellen. Die Studie beleuchtet die sich verändernde Dynamik der Aneignung digitaler Selbstbilder, bei der die endgültige Präsentation digitaler Bilder durch ein komplexes Zusammenspiel verschiedener Kräfte geformt wird, das die Absicht des Schöpfers, technologische Werkzeuge und unvorhersehbare Zufälle kombiniert und schließlich zu einer einzigartigen hybriden Form des visuellen Ausdrucks führt.

This paper investigates the profound impact of algorithmic contingency on digital self-representation within contemporary visual culture. By tracing the evolution of image media—from mirrors to analog photography to digital image processing—this study examines how technological advancements have reshaped our understanding of identity and selfhood. The inherent limitations and errors in algorithm-driven processes introduce unpredictability,

leading to both the homogenization of images and the emergence of unexpected visual distortions. These contingencies, rather than mere technical flaws, provide a new perspective on the relationship between self-identity and imagery.

Through an analysis of my own artistic practice, including works such as *How to be or not to be Recognized as A Human and Beats*, along with the AI-generated portraits by the artist **CROSSLUCID**, the paper illustrates how artists leverage algorithmic errors to challenge traditional notions of creative control. This study highlights the shifting dynamics of ownership over digital self-images, where the final presentation of digital images is shaped by a complex interplay of various forces, combining the creator's intent, technological tools, and unpredictable contingencies, ultimately resulting in a unique hybrid form of visual expression.

1. Introduction

In contemporary digital culture, the rapid advancement of technology not only transformed our understanding of the world but also profoundly influenced our perceptions of self and its representation. Image processing algorithms driven by artificial intelligence, while striving for visual consistency and recognition accuracy, often produced unforeseen visual effects. These technologies, although instrumental in the homogenization of images, also contributed to a rupture in individual self-representation due to their inherent limitations and contingencies.

This paper seeks to investigate how “contingency” in digital image processing, as mediated by technology, impacted individual self-representation and further complicated identity within a broader visual culture. As image-making evolved from mirrors to photography and now to AI-driven image processing, the homogenization of imagery and the contingencies arising from technological flaws not only diminished individual uniqueness but also intensified the disconnect between individuals and their digital self-images.

Against this backdrop, this paper explores these contingencies through my and other artists' artistic practice. In my video works and performances, such as *How to be or not to be Recognized as A Human* and *the body is*, I deliberately leveraged the technical limitations and flaws of digital tools to reveal and magnify the impact of these contingencies on image presentation. These experiments not only uncovered the uncontrollable nature of technology in image processing but also questioned the influence of digital technology on self-identity and visual culture.

By analyzing these phenomena, this paper aims to elucidate how contingency and variability in a technology-dominated visual culture have become critical factors in redefining the relationship between self-identity and imagery.

2. The Evolution of Media and Body Representation

As Merleau-Ponty (1964) stated, “The body is our anchorage in the world,” the body is the zero point in reality. However, an intriguing contradiction arises—the body/face is also the only blind spot for the person. People and their images have never been unified. One can only attain “what I look like” through a medium. Initially, people discovered themselves through the mirror, awakening self-awareness and achieving identity recognition. The invention of photography subsequently ushered the world into what William Flusser (2011) termed the era of technical images, where the involvement of machines in image production marked the beginning of contingencies within technical images. Today, data-driven innovations have reshaped imaging systems, posing a radical challenge to traditional concepts of identity and subjectivity. These facial/body visual data, once processed by algorithms, transform into new images imbued with algorithmically imposed homogeneity and contingency. The uniqueness of individuals becomes averaged and standardized by these algorithms. Moreover, the contingencies inherent in these technologies—such as algorithmic errors, pixel computation methods, and image distortions—gradually weaken the connection between these images, which are based on the real “me” and perceived as representations of “me,” and the actual self as the homogeneity and contingency increase.

Beyond natural water bodies, the mirror, as one of the earliest man-made tools for reflecting individual images, played a crucial role in enhancing personal self-awareness. The widespread popularity of mirrors among the general population occurred in the 15th century (PENDERGRAST 2008; SABINE 2001). This period coincided with the Renaissance, a time marked by the discovery of the human and the rise of humanism. In other words, the Renaissance was characterized by humanistic exploration and the rediscovery of the individual, accompanied by the proliferation of mirrors. During this era, people began to discover themselves through their mirror images, forming a sense of identity, which contributed to this significant cultural transformation.

As a simple device, the mirror held a central position as a visual mediator for an extended period. The “processing” of the images it reflected depended entirely on its physical surface; the mirror needed to maintain the uniformity of the real world it reflected. Consequently, the occurrence of contingencies in mirror-generated images was relatively low. Any alterations to the reflected image

were typically due to the unevenness of the mirror's surface or its coloration—factors that do not fall within the realm of contingency because these surface variations were usually predetermined, as in funhouse mirrors. These physical characteristics of mirrors became symbols or metaphors within visual culture for the theories of imitation and representation, emphasizing a faithful, objective, and realistic reflection of reality. This principle remained a core focus in the art world from the Renaissance through to modernism. Leonardo da Vinci (1888) famously stated that the mind of the painter should resemble a mirror, clear and transparent, faithfully reflecting everything before it.

In this visual culture, dominated by the concepts of “resemblance theory” and “correspondence theory” of truth, “the fundamental principle of mirror reflection is the relative unity between the object, its image in the mirror, and the gaze at that image” (ZHOU 2008), encompassing both appearance and time. Thus, the relationship between individuals and their mirror images was one of high identification, even complete overlap, a point that can be further corroborated by Lacan's (2004) mirror stage theory¹¹.

Since the advent of photography in France in 1839, the primary subject of fervent interest for the masses has been their own portraits, rather than landscapes, still lifes, or animals. For an ordinary or impoverished family or individual, if given the rare opportunity to be photographed, the chosen subject would almost invariably be a personal or family portrait—a body image or merely a facial close-up. During the era of analog photography, the technical limitations of complex machinery meant that the processing and production of images often resulted in “unexpected” effects. Early in its invention, photography raised issues of race, class and colonialism over the point of black and white skin. Photography has been described as a technology invented for white people. Due to technical problems with light in the photographic imaging principle, images of black people's faces could not be captured well, and their facial features were erased. “The problem is memorably attested in a racial context in school photos where either the black pupils' faces look like blobs or the white pupils have theirs bleached out” (DYER 1997). It is suggested that this problem was not solved until the age of digital photography. However, a similar problem has not been fixed very well even today. It is still present in facial recognition systems (BUOLAMWINI/GEBRU 2018: 77-91).

11 Lacan's mirror stage theory posits that between 6 to 18 months of age, an infant first recognizes their reflection in a mirror, which marks a critical moment in the development of self-identity. The infant perceives the mirror image as a coherent and unified version of themselves, in contrast to their own fragmented bodily experience. This recognition establishes a dual relationship with the self: the idealized image in the mirror represents the “I” or ego, while simultaneously creating a sense of alienation as the image is both ‘me’ and ‘not me.’ This foundational experience, Lacan argues, shapes the individual's ongoing relationship with their body and identity, influencing their interactions with others and their perception of reality throughout life.

The advent of digital images has transformed the imaging process into an even more complex black box. In the mid-1950s, led by Russell A. Kirsch, a scientific team from the National Bureau of Standards utilized a basic mechanical drum scanner to transform photomultiplier signals into a 176x176 binary array, subsequently processed by a computer and displayed on an oscilloscope. This marked the beginning of digital information's integration into image composition (MITCHELL 1998: 3).

Digital cameras, computers, and software have introduced a more complex encoding process for images compared to mirrors and analog photography. Consequently, digital images, shaped by algorithms, exhibit a significant increase in contingency factors compared to those produced by the previous two media. Simultaneously, they introduce a new characteristic that was absent in the earlier forms—homogeneity. With the involvement of media, the machine's encoding process incorporates more “non-human” perspectives into the editing of body images, further transforming the representation of the self's body into an observable and editable object.

Hito Steyerl (2017) provides an interesting example. A technician working on smartphone cameras reveals that half of the data captured is noise due to the small and low-quality phone lenses. To address this issue, we need to develop an algorithm that can clean and sharpen the image from the noise. How does the camera know what needs to be preserved? The algorithm tries to match faces and shapes by scanning the photos you've already taken and stored in albums, and the pictures you've used in networks such as social media. The algorithm creates the picture—“based on earlier pictures, on your/its memory. It does not only know what you saw but also what you might like to see based on your previous choices. In other words, it speculates on your preferences and offers an interpretation of data based on affinities to other data.” What is presented on the screen is not the present moment being photographed, but an image intertwined with the past.

3. Algorithm-Driven Homogenization and Contingency

The face is the most identifiable aspect of a person's image information. In the process of facial recognition and processing, algorithms typically aim to enhance accuracy and efficiency. To achieve this, they often seek to eliminate “anomalies” or “deviations” in the data, selecting features that most closely align with statistical averages. While this approach improves overall recognition rates, it simultaneously diminishes the individuality of facial images. For instance, AI filters and beautification algorithms typically remove so-called “imperfections” like freckles and wrinkles—features that are, in fact, integral to personal uniqueness. The result is that the processed images lose their individuality and instead conform

to a standardized aesthetic. This aesthetic is increasingly accepted and emulated globally, further intensifying visual homogeneity.

When using smart devices for photography, even without manually applying filters, the device automatically enhances the image in ways it deems more “beautiful,” such as by intensifying colors, blurring backgrounds, or smoothing skin. As these homogenized facial images become widespread, visual culture gradually moves toward uniformity and standardization. This ultimately gives rise to an “algorithmic aesthetic,” characterized by the convergence of visual culture on a global scale. Such an aesthetic is not only widely disseminated through social media but also influences people’s expectations and judgments regarding their own and others’ appearances, leading to a decreased tolerance for individual differences.

Hito Steyerl (2023) used the concept of the “mean image” reveals that images under algorithmic guidance are trending towards homogenization, and behind each image, there are too many intertwined factors that are difficult to isolate. Steyerl notes that contemporary AI-generated images no longer rely on the authenticity of actual objects but are instead created based on probabilities and statistical averages, producing so-called mean images. “Mean image” relates to statistical averages: these images are generated based on the statistical mean of large data sets, not necessarily corresponding to specific objects or scenes in reality, but representing an abstract, data-driven visual expression. They extract a “mean” image from the data of many individuals, often losing the uniqueness of the individual.

In fact, the concept of the “mean image” did not originate in the computer age. As early as the 1880s, Francis Galton created what might be considered the precursor to the “mean image” by manually overlaying multiple facial photographs to generate composite portraits. Galton’s composite portraits aimed to identify a face with “typical” features by combining the characteristics of several individuals. This method reflected an interest in group traits rather than individual uniqueness.

However, with the advancement of computer technology, algorithm-generated “mean images” have surpassed Galton’s original intent. These are no longer merely simple overlays of multiple images but are instead based on the statistical averaging of vast datasets, incorporating more social, cultural, and technological factors. These images tend to exhibit visual uniformity and may also carry inherent social biases and ethical risks. As Steyerl pointed out, these images reflect common societal notions or biases. For example, in facial recognition technology, images processed through algorithms may perpetuate stereotypes about certain races or groups. In terms of quality, Steyerl labels these images as “poor quality,” suggesting that they may lack high resolution or visual clarity but stylistically and substantively represent a “mean,” or even “mean-spirited,” societal viewpoint. Moreover, in moral or emotional terms, Steyerl criticizes these images

for potentially carrying negative moral implications, such as unconsciously conveying discrimination or prejudice against certain social groups. In this context, “mean” also implies a lack of empathy and humanity, as these images, through simplification and generalization, overlook the complexity and diversity of individuals. Consequently, the uniqueness of individuals in digital images is increasingly averaged and blurred.

Although algorithms tend to achieve efficiency and accuracy in recognition through standardization and averaging, this process is not without flaws. As Gombrich (1960) mentioned in *Art and Illusion*, all visual representations are inevitably influenced by the tools and media used, and algorithms are no exception. In fact, the contingencies inherent in algorithmic processing often result in unexpected visual outcomes, which can have unforeseen effects on these homogenized images. These contingencies include technical errors, data noise, and hardware limitations, all of which may lead to unintended distortions and processing errors in the images.

A visual example of this occurred during my video using zoom software, as shown in the screenshot (Fig. 1), where my eyebrows show a clear asymmetry. I do not look like this in fact, and the ZOOM doesn’t want to show me like this either, but it happened. This is one of the technical limitations I talked. The limits of this technology are neither what humans nor the technology itself want, but it becomes a non-negligible but invisible power – affecting the appearance of images, the relationship between the body image and body, and the building of self.



Figure 1: My asymmetrical eyebrows on the screen, 2022

Virilio (1994) pointed out that all technological inventions contain their inherent “accident logic.” In digital image processing, this logic manifests in the challenges algorithms face when handling complex images. For instance, when algorithms attempt to recognize and process low-resolution or dynamic images,

pixel calculation errors or data loss may lead to blurred edges or color distortions. These “technical errors” are, in fact, the natural responses of algorithms when confronted with uncertainty and complex data, rather than outright failures. Virilio’s perspective reminds us that technological contingency is inevitable; it arises from the friction between technology and reality.

In this context, contingency is not merely a limitation of technology but also a means of redefining visual culture and identity. It turns the image into a hybrid, encompassing both algorithmic logic and the complex interaction between technology and human creativity. Thus, contingency in digital image processing is not solely a technical issue but a cultural phenomenon with far-reaching implications.

4. Artistic respond

Contingency in artistic creation is not limited to computer-based art. In *Interviews* (SYLVESTER 1980), Bacon emphasized the profound implicative power of accidental marks occurring in his painting process. This contingency injects unforeseen elements into the artwork, allowing it to attain new meaning and depth beyond the original conception. In painting, these accidental traces not only enrich the layers and expressiveness of the composition but also enable the artist to engage more deeply with the materials during the creative process, ultimately resulting in a unique artistic effect shaped by both intention and chance.

The application of this contingency has been further amplified by the intervention of computer technology. The limitations of technology, whether in low-tech or high-tech contexts, are an ever-present theme, with technical images often serving as direct evidence of contingencies caused by these limitations. In my ongoing practice-based research, I use my own body and body images as the subject, seeking to identify and extract these technical limitations and contingencies in everyday digital frames. Through this process, I aim to challenge and redefine the relationship between self-identity and imagery.

Compared with analog images, recognition is an essential step in the operation of algorithms for processing digital images, particularly for the body/face. This software features a highly intuitive and visible recognition process, especially when users employ a virtual background, requiring the algorithm to make real-time judgments and process dynamic human figures: Is this a person? Is this a human face? Does this belong to a part of a human being? Is this the edge of a human being? The processing speed is extremely fast, almost matching the human eye’s reaction speed. However, it has a technical limitation: when people move quickly, the edges are not well-handled, causing blurring or errors. Sometimes, the algorithm may cut off a part of the body that belongs to the person or

incorrectly display a part of the background that does not belong to the person due to misidentification (Fig. 2). These are the unintended consequences of algorithmic contingency on the image. Based on this, I conducted a performance titled *How to be or not to be Recognized as A Human*,^[2] which took place in front of a ZOOM camera, and I recorded the performance through screen recording (Fig. 3). Throughout different stages of the performance, I continuously tested the algorithm's boundary for recognizing me as human, using factors such as distance and pixels, and documented various contingent visual effects during the process.



Figure 2: Screenshot. When I use a virtual background on an online meeting software, a part of my body disappeared, 2023.



Figure 3: Screenshots of my video work-How to be or not to be recognized as a human, 2023.

2 Video link: <https://www.youtube.com/watch?v=lBVOvFdELRM>

In the short video work *Beats*³¹ (Fig. 4), I activated the real-time facial slimming feature of the video conferencing software VooV. At a certain angle, my face toggled between being recognized as a face and not being recognized as one, causing the slimming filter to alternately apply and not apply to my face. Thus, without using any post-production effects or other technical means, the algorithm's contingency made my face appear like a beating heart. This effect was not something I anticipated or planned in advance; it was entirely an accidental discovery during the use of the software.



Figure 4: Screenshot of my video work-Beats, 2024

In both of these works, the imperfections and contingencies of algorithms directly impacted the presentation of my facial and body images. The Zoom algorithm's inability to accurately recognize and process dynamic or low-resolution images resulted in blurred edges, image jitter, and misaligned backgrounds. By continually testing the algorithm's boundary for recognizing me as human, I revealed the fragility of technology in processing human images and simultaneously questioned the authority of digital technology in shaping self-image. Through this approach, I transformed unforeseen technical errors into the core of visual expression, highlighting the control and manipulation that technology exerts over body images. This redefinition is driven not only by the intentions of the technology but also by its limitations and errors. In *Beats*, the algorithm's processing errors were not only random but also occurred in a continuously shifting state. These works blurred the boundaries between the creator and technology. By embracing and utilizing this unpredictability, I not only expanded the possibilities for creation but also, to some extent, allowed technology to become a "collaborator" in the creative process.

3 Video link: <https://www.youtube.com/watch?v=uIZzaZOnaYc>

In an algorithm-driven visual culture, artists consciously relinquish some of their control over the creative process to explore the artistic possibilities presented by technological errors. This acceptance of contingency and technological limitations not only opens up new avenues for artistic creation but also prompts us to reassess digital images and their generation processes. However, this partial surrender of creative control also symbolizes the loss of ownership over the subject's image in their work. This phenomenon can be seen as a submission to what Deleuze (1990) described as "invisible control," wherein the subject gradually loses control over their own image. As the control over creative rights and image ownership diminishes, both artists and viewers are drawn into a new visual cultural paradigm where the contingencies of technology and the controlling power of algorithms continually reshape the relationship between self and image.

In the process of creating works that embrace algorithmic contingencies, artists effectively relinquish a portion of their creative control or authorial rights, resulting in outcomes that are inherently random. This is even more evident in another series of my works: in my another series work *Upscale* (Fig. 5), I selected some extremely low-resolution poor images caused by the compression of internet distribution. Then I tried to upscale them on some so-called intelligent image quality improvement websites. Although the damage to the images is irreversible, the algorithms process the pixels, or they analyze, imagine and guess at the image's content based on their vast libraries or databases. Although the photographers' decisions initially influenced the appearance of these images, such influence became increasingly faint on the picture surfaces under the erosion of data, algorithms, and the network. In my process of appropriating these images for secondary creation, I have almost completely lost control over the final appearance of these digital images: their original images being compressed and corrupted by the data, then enhanced or "restored by" the data again.



Figure 5: My still image work-Upscale, generated by AI, 2022.

The rapid development of artificial intelligence (AI) has led to the creation of numerous AI-generated images, with many artists utilizing the contingencies of AI to generate facial images. The Berlin-based artist **CROSSLUCID** offers a concrete example of this shift in creative control. In their “Landscapes” series (since 2020), the artists trained an AI model using only their own images as the dataset (Fig.6). These works were subsequently published individually on the covers of *Slanted* design magazine. Each issue presented a unique ‘AI-generated portrait,’ which, despite being AI-generated, still bore the recognizable features of the “same person,” transforming these portraits into original printed artworks. These co-creations with AI present a hallucinatory vision and speculative fantasy of the human body in the future, transcending the dialectics of biology and technology, nature and artifice, as well as gender, age, and ethnicity. Through 5,000 AI-generated portraits, they delineated the potential for continuous transition and further evolution in the current state of latent interconnectedness and network connectivity—an ongoing, dynamic, iterative process hypothesized within the artwork itself.



Figure 6: Image source: Crosslucid, Landscapes [Online]. Available at: <https://crosslucid.zone/landscapes> [Accessed: 15 August 2024]. This image was retrieved from the Crosslucid website and is used for academic discussion purposes.

In these creations, they actively employed digital glitches, blurred metamorphoses, osmotic blending, dynamic remixes, synthetic mishmashes, and fluid morphing effects. This artistic practice not only challenges traditional concepts of identity and bodily representation but also demonstrates how artistic creation under the dominance of algorithms can expand its boundaries by embracing technological contingency and unpredictability. **CROSSLUCID**'s work is a concrete manifestation of this process, further evidencing the increasingly blurred boundaries between creators and technology in the intersection of algorithms

and art, leading to a new exploration of the relationship between self and image (SCORZIN 2023).

The “Landscapes” series by **CROSSLUCID** provides us with a unique perspective on the control of self-portraits in the digital age. In everyday life, with the development of social media and digital technology, personal images are increasingly processed and manipulated by algorithms, resulting in a gradual transfer of control over self-image from individuals to technology and platforms. This phenomenon is taken to an extreme in **CROSSLUCID**’s artistic practice, where AI models generate “AI portraits” that are determined not only by the parameters and image libraries set by the artists but also by the contingencies and failures that occur during the AI generation process.

Each AI-generated portrait in these works is unique, symbolizing the complexity and unpredictability of digital self-images in everyday life. **CROSSLUCID**’s artistic creations parallel how ordinary users process and disseminate their self-portraits in daily life: through various filters, algorithms, and social media platforms, our digital portraits gradually slip out of our direct control over our self-image. Similarly, the AI-generated portraits of **CROSSLUCID** also move beyond the artists’ complete control, becoming a product of co-creation between humans and algorithms.

5. Conclusion

From the invention of the mirror to analog photography and now to contemporary digital image processing technologies, the evolution of image media has profoundly influenced our understanding of self-representation and identity. During the era of the mirror, people first visually perceived their self-image directly through reflections, which served as a fundamental tool for self-identification, with little contingency or technical interference. However, with the advent of photography, particularly the widespread use of analog photography, image representation began to be influenced by technical limitations, such as lighting conditions and the physical properties of photographic materials, which occasionally challenged the accuracy and fidelity of image reproduction. Nonetheless, analog photography still faithfully represented the self-image in reality with relatively high fidelity.

As we enter the digital age, especially with the widespread application of artificial intelligence and algorithmic processing in image generation and processing, the reproduction of images has become more complex and filled with uncertainty. Digital images not only inherit the technical legacy of the previous two media eras but also introduce significant contingencies and homogenizing tendencies due to their heavy reliance on algorithms and data processing. These

contingencies, arising from technical errors, data noise, and algorithmic limitations, lead to distortions and complexities in digital self-images. This process significantly impacts the relationship between individuals and their digital personas, widening the gap between the self and its representation, and even leading to a breakdown in identity recognition.

In this digital context, the relationship between people and their body images is continuously negotiated through technology, which adds layers of meaning and alters the perception of selfhood and embodiment.

Meanwhile, artists have embraced these technical limitations and contingencies, continually challenging traditional creative control and methods of self-image representation. Through artistic creation, they reflect the shift in control over their works and ownership of the subject's image.

Who now controls the digital image of oneself? The answer is that control over digital images is not entirely in the hands of the creator or photographer, nor is it wholly dominated by the image's subject or the algorithms and machines. Instead, the final presentation of the image is the result of an interplay of multiple forces. It includes both the anticipated intentions of the creator and technological tools, as well as the unpredictable contingencies that arise during the image generation process. This complex process shows that images are not controlled by a single entity but are a hybrid formed through the combined influence of various factors, ultimately portraying a unique expression in digital imagery.

The complexity of this hybrid directly contributes to the complexity of digital self-images. As multiple factors interact, the distance between the individual and their digital persona gradually increases. This sense of detachment not only weakens the individual's identification with their self-image but may also trigger a deeper identity crisis, further blurring the relationship between self and representation in the digital age.

As digital technology and artificial intelligence continue to advance, the complexity of image processing will further increase, exacerbating the challenges to visual culture and self-identity. In the future, as algorithms become more sophisticated, the phenomenon of image homogenization may become more pronounced, while the unexpected effects brought by contingency could become key elements in artistic creation. Looking forward, researchers and artists should focus on how to maintain individuality in a technology-dominated environment and explore the impact of emerging technologies such as virtual reality on self-representation. In conclusion, technological progress will continue to reshape our understanding of self and imagery. The ongoing exploration of this field will provide new opportunities for the development of visual culture and artistic innovation.

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Über die Autorin

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