

REVIEW ARTICLE

Objective reality in the digital age

Safa Tharib

Buckinghamshire New University, High Wycombe HP112JZ, United Kingdom; safa.tharib@bucks.ac.uk

ABSTRACT

This paper explores the complexities of objective reality in the digital era, using André Bazin's theory of realism as a lens. As digital advancements, such as deepfakes and immersive technologies, blur the boundaries between the tangible and virtual, they prompt a re-evaluation of Bazin's principles on the 'ontology of the photographic image'. The study critically examines how these digital innovations both challenge and enrich Bazin's notions of unmediated representation, underscoring the need for a contemporary dialogue on the implications of digital technologies for our understanding of truth and reality.

Keywords: André Bazin; objective reality; digital age; deepfakes; immersive technologies; 3D characters; virtual reality

1. Introduction

André Bazin, a French film critic and theorist, fundamentally transformed our understanding of the cinematic world with his principles of objective reality and its rendering in film. His concept of realism, which posits that film is a window to reality and an unmediated representation of the world, is the cornerstone of our modern perception of cinema. However, the arrival of the digital age necessitates a profound reevaluation and recontextualization of Bazin's ideas. As we stand on the precipice of an era where physical and virtual realities intertwine more than ever, and technologies such as artificial intelligence, virtual and augmented reality, and deepfakes redefine the boundaries of 'real' and 'virtual', Bazin's theories acquire new significance and complexity. This paper sets out to engage with Bazin's theory of realism and explore its relevance in the context of the digital age. Using Bazin's ideas as a theoretical framework, we seek to interrogate the extent to which the digital age upholds, challenges, or modifies our understanding of objective reality. From the implications of manipulated visual content threatening the integrity of information to the emergence of immersive technologies that blur the boundaries of perception, we delve into the multifaceted dynamics of digitization and their impact on our shared reality. This exploration acknowledges the transformative role of digital technologies as well as their potential to distort, manipulate, or enhance our perception of objective reality, thus engaging in a Bazinian discourse of the representation of the real.

The aim of this paper is not just to draw attention to the transformation of reality perception in the digital era but also to develop a dialogue between Bazin's seminal ideas and the contemporary digital landscape. By doing so, it hopes to provide an enriched understanding of the evolving nature of reality, contributing to the ongoing discourse on the implications of digital technologies on our perception of truth and reality. This paper

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explores the notion of how objective reality through a digital context by developing a dialogue between existing research and the current state of digital media.

This study adopts a theoretical and critical analysis approach, drawing on André Bazin's theory of realism to examine various digital phenomena, including deepfakes, social media, immersive technologies, and 3D characters. By referencing a range of scholarly works, the analysis constructs a dialogue between foundational theories of image realism and the transformative role of digital innovations. Through a comprehensive literature review and critical discourse analysis, the paper explores and elucidates its central themes and arguments, offering a nuanced understanding of the evolving nature of reality in the digital age.

2. Objective reality in the digital age

The 21st century is emblematic of technological advancements, especially in digital imaging and communication, that have profoundly reshaped our perception of objective reality. The proliferation of digital tools, platforms, and techniques has called into question the authenticity, permanence, and trustworthiness of images and representations that saturate our daily lives. Understanding these shifts necessitates a return to foundational theories of image realism, while simultaneously examining the role of digital innovations. Lowenstein^[1] provides a compelling argument surrounding the surrealism of the photographic image, particularly in the juxtaposition of Bazin's notions of photographic realism and the digital 'Sweet Hereafter'. Lowenstein suggests that despite the tangibility and materiality of photographs, a sense of surrealism permeates the digital space, blurring lines between real and fictional, actual and hyperreal. This characteristic of the digital photograph disrupts traditional conceptions of the 'objective' and adds layers of complexity in the decoding of visual narratives. Our perceptions of beauty, relevance, and significance have evolved with the advent of digital images and photo-sharing platforms. Murray^[2] delves into the shift in everyday aesthetics due to the omnipresence of digital images. The instantaneous nature of digital photo-sharing, coupled with algorithms, user-generated content, and feedback loops, has reshaped our aesthetic judgements. These judgements no longer solely rely on traditional standards; instead, they're frequently shaped by collective online engagements, trends, and instant gratifications. The once-clear demarcation between personal and public aesthetics becomes muddled in this digital milieu. Cribb^[3] revisits the politics of the index in an attempt to rekindle belief in the image, especially in an age where digital scepticism looms large. Drawing on André Bazin's *Ontology of Sense*, Cribb argues that while the digital age poses undeniable challenges to image authenticity, it simultaneously offers avenues to re-anchor our belief in images. This is not to say that all digital images can or should be blindly trusted, but rather that the digital realm presents both challenges and solutions. The antidote to digital scepticism, as Cribb suggests, might lie in a renewed understanding of the politics of the index, intertwined with technological literacy.

In essence, as we stand amidst the flux of the digital age, it becomes imperative to continually re-evaluate our understanding of objective reality. Theories presented by thinkers like Bazin offer foundational insights, yet their reinterpretation in the digital context, as highlighted by Lowenstein, Murray, and Cribb, underscore the necessity of an evolving discourse to make sense of our digitally mediated realities.

The introduction of novel concepts or technologies often presents them as abstract entities, seemingly distant from our lived realities. Over time, as these novelties become more integrated into our daily lives, their abstract nature diminishes, revealing their profound connections to our tangible experiences. This evolution from abstraction to realism can be likened to the surrealistic influences observed in the works of André Bazin and Roland Barthes on photographic realism. Initially, their interpretations of the photographic image might seem abstract, emphasising the dreamlike and irrational aspects of the medium. However, as Lowenstein^[1] elucidates, both theorists' engagements with surrealism underscore a deeper exploration of the photographic

image's capacity to merge the rational with the irrational, presenting the world as a factual hallucination. Over time, their surrealistic inclinations become more recognisable as profound insights into the essence of reality, much like how new concepts gradually reveal their relevance to our lived experiences^[1].

3. The digital age

In the digital age, the 'reality' as we perceive it is a complex amalgamation of the physical and the digital. This transformation is rooted in the evolution of technologies that reshape the boundaries of perception and representation, thus questioning our understanding of objective reality. It is within this context that Bazin's concepts of realism and objective reality become highly relevant. Bazin's theory of realism posits that every shot is a representation of reality, that cinema acts as a window onto the world^[4]. His belief in the 'ontology of the photographic image' highlighted the inherent objectivity of the camera as a mechanical device that could capture reality without human interference^[4]. However, in the context of the digital age, these concepts become problematic as the digital environment continually challenges and modifies our understanding of reality. In the digital age, our understanding of reality has become increasingly complex, with physical and virtual realities intertwining more than ever before. This evolution is rooted in the continuous development of technologies that reshape the boundaries of perception and representation, posing new questions and challenges to our understanding of objective reality.

4. Deepfakes

The rise of deepfake technology has been one of the most significant technological advancements in recent years. Deepfake technology, which leverages machine learning and artificial intelligence, can create synthetic images and videos that are nearly indistinguishable from real ones. This technology has raised concerns regarding the ontology of digital images and their impact on our ability to discern reality. The hyperreal simulation created by deepfakes challenges our perception of reality, which is in stark contrast to Bazin's belief in the objective nature of the photographic image. Moreover, the proliferation of digital technologies has led to an unprecedented level of accessibility to information, transforming the way we communicate and interact with each other. Social media platforms have emerged as powerful curators of digital reality, shaping individual and collective perceptions of the world. However, the curated realities presented on these platforms often represent subjective interpretations of the world rather than an objective reality, further complicating Bazin's conception of realism. Technological advancements have enabled the reincarnation of deceased actors in film roles, sparking debates on ethics and consent. Peter Cushing's entirely digital portrayal of Grand Moff Tarkin in 'Rogue One' stands in stark contrast to films like 'Furious 7', where digital methods compensated for Paul Walker's unexpected death during production. Unlike brief commercial appearances by Audrey Hepburn and Bruce Lee, Cushing's role was extensive. This resurgence of past personas was sharply criticised, especially with the announcement of 'Finding Jack', a film planning to digitally feature James Dean. Twitter users voiced their concerns, deeming it inappropriate to cast an anti-war actor in a war film without his approval. Prominent figures like Chris Evans, Elijah Wood, and Zelda Williams, the late Robin Williams' daughter, also expressed their disapproval. Zelda's perspective was especially poignant given her father's will explicitly prohibiting the use of his image for a quarter-century posthumously. The film's reception remains uncertain, especially considering these ethical considerations^[5].

The digital age has ushered in remarkable capabilities in the realm of cinema, one of which is the potential to resurrect deceased actors for roles in films. This technological prowess, while impressive, is fraught with ethical dilemmas. Laney^[5] underscores the increasing trend of employing computer science to reincarnate actors in new cinematic ventures, raising pertinent questions about the potential commodification of actors as

mere digital clones. For instance, the posthumous stipulation in Robin Williams' will, which prohibited the reuse of his persona for a quarter-century after his death, accentuates the paramount importance of honouring an actor's wishes beyond their demise. Films such as 'Game of Death' and 'The Crow', which saw the untimely deaths of Bruce Lee and Brandon Lee respectively, opted to complete production using doubles or digital techniques. While on the surface, this might appear as a tribute to their work, it's imperative to interrogate whether such actions genuinely respect their legacy or merely capitalise on their tragic departures. In the context of 'Gladiator', which employed digital methods to conclude Oliver Reed's role post his unexpected demise, the distinction between maintaining artistic integrity and potential commercial exploitation becomes even more blurred^[2]. The digital age, as Murray^[2] elucidates, has significantly altered our engagement with visual content. Consequently, contemporary audiences might exhibit greater acceptance towards digital recreations, perceiving them as an extension of cinematic artistry. However, the ethical dimension remains: does this digital resurrection detract from the film's authentic experience, and are audiences being subtly deceived? Drawing an analogy from Ravetto-Biagioli^[6], just as dance, an inherently ephemeral art form, resists true capture, so does the essence of an actor's performance. No matter the sophistication of digital recreations, they might never genuinely encapsulate the original actor's nuances and emotions, leading to ethical concerns about authenticity and the potential dilution of the actor's craft. As cinema continues to explore the boundaries of digital innovation, it becomes crucial to navigate such advancements with a blend of sensitivity, transparency, and ethical consideration.

5. New understandings

The emergence of immersive technologies, such as virtual and augmented reality, has also blurred the boundaries between the physical and the digital worlds. These technologies provide experiences that feel 'real' but exist solely in the digital realm. Bazin's concept of realism becomes complex within this context, as the technologies provide experiences that challenge our understanding of objective reality. Additionally, the creation and widespread use of 3D characters, often referred to as virtual beings or avatars, adds another layer of complexity to our understanding of reality in the digital age. Virtual beings are digitally created entities that can interact with users in real-time and possess their own distinct personalities, appearances, and behaviours. They are not merely static images or symbols, but dynamic entities that can engage with their environment and other beings, be they real or virtual. While they are not representations of objective reality, in the traditional sense, they are perceived as 'real' within the framework of the digital environment they inhabit. Considering these developments, it has become increasingly important to critically evaluate the implications of digital technologies on our perception of truth and reality. Bazin's theory of realism, which posits that film is a window to reality and an unmediated representation of the world, provides a crucial starting point for this conversation. However, it is essential to expand our understanding of realism in the context of digital media and the evolving nature of reality.

As we navigate this digital age, it is crucial to engage in a dialogue between Bazin's ideas and the contemporary digital landscape. This conversation will help us develop an enriched understanding of the evolving nature of reality, contributing to the ongoing discourse on the implications of digital technologies on our perception of truth and reality. The rise of virtual and augmented reality technologies offers immersive experiences that blur the boundaries between the physical and the digital worlds. Bazin's concept of realism becomes complex within this context, as these technologies provide experiences that feel 'real' but exist solely in the digital realm^[7]. Further, social media platforms have emerged as powerful curators of digital reality, shaping individual and collective perceptions of the world^[8]. The curated realities presented on these platforms often represent subjective interpretations of the world rather than an objective reality, further complicating

Bazin's conception of realism. The creation and widespread use of 3D characters, often referred to as virtual beings or avatars, adds another layer of complexity to our understanding of reality in the digital age, specifically when examining it through Bazin's theoretical lens. Virtual beings are digitally created entities that can interact with users in real-time and possess their own distinct personalities, appearances, and behaviours^[9]. They are not merely static images or symbols, but dynamic entities that can engage with their environment and other beings, be they real or virtual.

Bazin's notion of realism is inherently challenged by the existence of these 3D characters. While they are not representations of objective reality, in the traditional sense, they are perceived as 'real' within the framework of the digital environment they inhabit^[10]. Thus, we encounter a paradox. While 3D characters do not align with Bazin's idea of cinema as an unmediated representation of reality, they uphold the essence of Bazin's realism in that they create a believable reality within the context of their digital universe. This paradox highlights the fluidity of 'reality' in the digital age. The physical world is no longer the only source of reality; the digital realm has become a parallel space where different rules and norms apply. It also underscores the need to expand our understanding of realism in the context of digital media, a conversation to which Bazin's theories provide a crucial starting point.

'Bazin, however, was more incredulous of the film's potential for authenticity. Much like Photoshop did for changing the public's understanding of trustworthy photographs, evolutions in artificial intelligence training and advanced computer graphics have resulted in a moment wherein altered video can seamlessly replace authentic video.'^[11]

Tension between the physical and virtual worlds becomes increasingly evident, as highlighted by the insights from Marshall^[12] and Chen^[13]. Marshall's investigation into the digital evolution of annotations, particularly within library contexts, underscores a transformative shift in our engagement with digital content. This shift suggests a blurring of boundaries between the tangible and the intangible, as traditional methods of content interaction, such as annotations, undergo significant metamorphoses. Concurrently, Chen's examination of the influence of Bazin's realist film theory on Chinese-language cinema offers a reflective perspective on the challenges of capturing and representing reality through cinematic lenses. Films, akin to immersive technologies, act as conduits bridging our physical experiences with virtual representations of reality. However, while both Marshall and Chen provide invaluable insights into this interplay, there remains a notable gap in empirical studies that delve into the direct ramifications of these technologies on human perception and behaviour. Incorporating such empirical research could offer a robust foundation, enhancing our understanding of how individuals navigate and respond to these intertwined realities, thereby strengthening the overarching discourse on immersive technologies.

6. Conclusion

In the digital age, the understanding of reality undergoes a profound transformation, with the boundaries between the physical and digital worlds becoming increasingly intertwined. Drawing upon André Bazin's theory of realism, this study critically examines the challenges and nuances introduced by digital phenomena such as deepfakes, social media, immersive technologies, and 3D characters. Bazin's belief in the 'ontology of the photographic image' finds renewed significance in this era, even as it faces challenges from these digital innovations. As the convergence of the physical and digital realms continues, it becomes imperative to engage in a dialogue between Bazin's foundational ideas and the contemporary digital landscape. This ongoing narrative underscores the importance of responsibly navigating and shaping these intertwined realities, with a keen awareness of their implications on our perception of truth, reality, and the collective human experience.

Conflict of interest

This article has been composed with adherence to the principles of academic integrity. There are no conflicts of interest to report, including no financial support for the conduct of the study or the preparation of this article. Additionally, there are no relevant affiliations or financial involvements with any organisation or entity that could be perceived as influencing the subject matter or materials discussed in the article.

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