

The Digital Challenge: Photographic Realism Revisited

Geert Gooskens*
University of Antwerp

ABSTRACT. It has been argued that digital photography, unlike its analog predecessor, is not realistic. The digital photograph would be more like a painting than like an analog photograph, as it can veraciously portray the world but does not inevitably do so. Plausible as this thesis might seem – we are all familiar with the possibility to manipulate digital pictures – I will argue against it. In my paper, I make a case for digital photography’s realism, arguing that the strong causal link between picture and depictum, i.e. the link warranting analog photography’s realism, is also present in digital photography.

Photography is traditionally regarded as a particularly realistic type of depiction. Whereas a painting can depict a state of affairs, a photograph necessarily does so. Photography’s strong realism has been the cornerstone of a wide range of theories about the medium.¹ Recently, however, these realistic theories have been challenged. Not by philosophical arguments, but by the arrival of a new technique for creating pictures of the world: digital photography. It has been argued that digital photographs lack the essential realism of their analog predecessors.² They would be more like paintings, as they can realistically depict the world but do not inevitably do so. Still, the thesis that digital photography is not realistic, plausible as it might seem, leads to a dilemma with two equally undesirable outcomes.

Either the thesis implies that:

(i) Realism is not an essential property of photography, as there are photographs – digital ones – which lack it.

* Email: geert.gooskens@ua.ac.be

¹ Walton (2008), Barthes (1982)

² Mitchell (1992), Savedoff (1992)

This outcome is undesirable, since it leaves us without a criterion to distinguish photography from other (non-realistic) types of depiction, like painting.

Or the thesis implies that:

- (2) Digital ‘photographs’ are not photographs at all, as photographs are essentially realistic.

This outcome is undesirable too, because it is so counterintuitive: we usually refer to pictures made with digital cameras as ‘photographs’.

To avoid this unpleasant dilemma, I will argue that the thesis from which it originates – that digital photography is not realistic – is false. I make a case for digital photography’s realism in three sections: First, I introduce the traditional definition of photographic realism, i.e. the one derived from analog photography (section 1). Next, I present two ways in which digital photography challenges and resists such a realistic understanding (section 2). Third, I take on these two ‘digital challenges’ to argue that digital photography is just as realistic as its analog predecessor (section 3).

1. Two Kinds of Photographic Realism

There are, roughly speaking, two definitions of photographic realism on the market: an epistemological and an ontological one.³ I will briefly introduce both and argue them to be intertwined. This leads to a unified definition of photographic realism which, in the remainder of this paper, faces the challenge of incorporating digital photography.

Photographs are *epistemologically realistic* because they are reliable informants about the visual properties of their depicta. Whereas a judge is probably not interested in a drawing of a murder, she is likely to be interested in a photograph of it. This is due to photography’s mirror-like reflection of reality. Like mirrors, photographs can only depict real things and have limited possibilities to misrepresent them. In contrast to a painter, a photographer cannot decide to depict a black horse as purple. Emphasizing photography’s objectivity, epistemological realists assign to it the function of informing us about the visual appearance things.

³Maynard (1983, pp. 155-156).

Photographs are *ontologically realistic* because they are causal effects of their depicta. This ontological connection is an implication of how analog photographs are made: A chemical emulsion serves to capture rays of light reflecting from the depictum. The result can be compared with a footprint in the sand. The depictum has imprinted its visual appearance on the photographic material, just like the foot has imprinted its shape in the sand. Prints and photographs are the result of causal interaction between sand and foot or photo paper and depictum. Emphasizing this causal dimension of photography, ontological realists assign to it a relic-like function. We care for photographs as causal effects of their depicta. A photograph of my girlfriend, for example, matters to me in the same way as her lipstick marks at the end of a letter. Not because of the informational content expressed – she could have expressed her love using conventional signs like ‘x x x’ – but because of the causal origin of this content. I care for the lipstick-markings because they are a causal effect of my girlfriend pushing her lips on the paper. Similarly, I do not care for my girlfriend’s photograph as a source of information about her – as if I could forget what she looks like – but because there has been a physical connection between my girlfriend and the photograph.

Epistemological and ontological realists agree that photographs have an intimate relation with reality. The former, however, defines this relation as one of ‘adequate reflection’, whereas the latter defines it in terms of a ‘causal connection’. However different these definitions of photographic realism might be, they are still intertwined as epistemological realism depends on ontological realism. Only because the informational content of the photograph is produced in a causal manner, do we take its content to be supremely veracious. What makes a photograph reliable is not itself some visible feature, but rather the causal origin of its visible features. In principle, a painting and a photograph can have the exact same content. Imagine someone showing you a highly detailed picture, which you take to be a photograph of your burning house. The person showing you the picture sees your panic and quickly reassures you that it is not a photograph but an extremely realistic looking painting. Although we still see the same picture – the knowledge that the marking’s of the picture’s surface lack a causal origin does not change the picture as such – there is a difference in our experience of it. As the content of the picture is not a causal effect of

the depictum, we know it does not necessarily represent a state of affairs. If the picture were a photograph we would have had a reason to despair, as photographs – due to their causal origin – can only show us the world like it is.

2. *The Digital Challenge*

The idea that all photographs are realistic has been challenged by the rise of digital photography. Pictures produced with digital cameras would lack the realism of their analog predecessors.⁴ Remember that analog photography's realism is an implication of its causal origin: a depictum imprints its visual appearance on a chemical emulsion. The digital camera, by contrast, does not use an emulsion, but scans the visual field, turning it into a grid consisting of a finite number of cells. Each of these cells is assigned a code specifying its color and shade.⁵ Afterwards, these codes can be translated into visual information again and the depictum emerges. Hence, digital cameras do not seem to produce a representation which is causally related to the depictum, but rather one that refers to it with conventional signs, i.e. digital code. In this section, I present two ways in which digital photographs, because of their different technical origin, resist a realistic understanding. They would (a) not be epistemologically realistic, nor (b) would they be ontologically realistic.

Digital photographs would not be epistemologically realistic, because they are not reliable carriers of information about the things they depict. The reason would be that they can be easily *manipulated*. According to Barbara Savedoff this is an implication of their code-based origin.⁶ When I take a digital picture of something, the depictum's visual appearance is translated into code. This code can subsequently be altered, which produces changes in the way the depictum is represented. Hence, digital photographs can present their depicta inadequately, for example, as white in stead of black or as large in stead of small.

Does the possibility to manipulate the visual content of a digital photograph present us with a knock-down argument against a realistic under-

⁴ Mitchell (1992, pp. 3-4).

⁵ Lister (2000, p. 311).

⁶ Savedoff (1997, p. 210).

standing of digital photography? For three reasons, I think it does not:

First, every manipulation requires a realistic original which can subsequently be altered. Only because there is an epistemologically realistic original digital image on which a horse is black, can I produce one on which it is green. The possibility of manipulation cannot serve in an argument against digital photography's realism, as manipulation presupposes realism.

Secondly, even manipulated photographs can be reliable informants about many aspects of their depicta. Consider a photograph of the pyramids at Giza on the cover of *National Geographic*.⁷ In order to fit all three pyramids on the narrow front-page, the magazine adjusted the position of the pyramids, placing them slightly closer to another. Still, we are probably comfortable to admit that (a) this picture is a photograph of the pyramids at Giza and that (b) we can learn a lot about the pyramids from it. It provides us with information about their color and shape. We only suffer disappointment if we want to find out about their exact location, which is hard to find out using a photograph anyway.

Thirdly, it has been argued that digital photographs are unrealistic because they are capable of depicting things that never existed.⁸ There is, for example, a picture of a meeting between Tom Cruise and Dustin Hoffman which, in reality, never took place. Two digital photographs of the actors were merged to make it appear as if they had met. This case, however, is not an argument against the epistemological realism of the digital photograph either, because the picture in question – the one in which Cruise and Hoffman appear to meet each other – is not a photograph at all. It is a *collage* which uses epistemologically realistic photographic elements to produce a picture which is not a photograph. Photographic elements are used like 'paint' to portray a fictional event. The material out of which this portrait is made are photographic, but the end product is not. Of course, this end-product is not photographically realistic, but as it is not a photograph, it cannot serve as proof for the hypothesis that digital pictures are (epistemologically) unrealistic.

The possibility to manipulate digital photographs does not hinder an

⁷ Savedoff (1997, p. 211).

⁸ Savedoff (1997, p. 211).

(epistemologically) realistic view of digital photography. It does not, since manipulation requires an epistemologically realistic original, manipulated photographs are reliable informants about certain aspects of their depicta, and many unrealistic 'photographs' are not photographs at all but collages.

The more fundamental challenge to a realistic understanding of digital photography is not to be found in the possibilities of image manipulation. It rather lies at the heart of every unmanipulated digital photograph, and concerns its (lack of) ontological realism. Digital photographs would not be ontologically realistic, because they are not causal effects of their depicta.⁹ To understand this thesis a brief comparison with their analog counterparts is useful.

Remember that analog photographs are like footprints, as they have a double relation with their depicta. They are epistemologically intimate with them, as they reliably inform us about the things represented. But they also are ontologically intimate with them, as the depictum is a causal effect of the depictum. Just like a footprint is the result of physical contact between foot and sand, a photograph is the result of physical contact between depictum and picture. In the case of digital photography this ontological tie would be absent. The physical intimacy between picture and depictum appears to be interrupted by an intermediate level of code. What I see on a digital picture's surface is not the result of a thing imprinting its visual appearance on it, but of a certain constellation of digital code. Whereas analog photography is indexical in nature, i.e. causally related to its depictum, digital photography apparently lacks this causal connection. Rather than being a direct imprint of the visual appearance of the depictum, it is a *reconstruction* of its depictum on the basis of digital code. This implies, that the digital photograph and its depictum are never ontologically intimate with each other.

The ontological lack of the digital photograph is best illustrated by means of analogy. Imagine a letter with lipstick-marks on it. Suppose a girl tells her boyfriend that these marks are not the product of lips being pushed against paper, but were drawn by an artist. This confession takes the magic surrounding the markings away, even if they perfectly resemble the shape of the girl's lips: they are not the effect of causal contact

⁹ Mitchell (1992, p. 4).

between the paper and the object of interest (the girl). Marks caused by physical contact between girl and paper have a surplus lacked by the drawn likeness. Although this surplus is invisible – the fake marks and the actual marks may look perfectly alike – it does affect our experience of them. Causal markings are preferred over the drawn ones, as they are closer to the ‘real thing’ than the latter.¹⁰

The digital photograph would suffer from a similar lack as the dawn lipstick-markings. Even when they are veracious representations of their depicta they would not be causally related to them. Their visual content is not an effect of causal interaction between photograph and depictum. Whereas an analog photograph is ‘of’ its subject in a double sense – it displays this subject and is an effect of it – the digital picture can only be ‘of’ its depictum in the first sense. The markings on its surface are not caused directly by the depictum, but by an underlying level of code which refers to the visual properties of the depictum with conventional signs. Thus, all digital pictures appear to lack ontological realism.

I discussed two ways in which digital photography resists a realistic approach. The first challenge – the possibility to manipulate digital photographs – proved to be no real threat to a realistic understanding of photography. A second challenge is more serious: Every unmanipulated digital picture would lack a causal relation to its depictum. It might veraciously represent its depictum, but would not be physically connected with it.

3. Digital Realism.

The claim that digital photography is not realistic leads to an unpleasant dilemma. *Either* we conclude from it that realism is not an essential property of photography, as digital photography is not realistic. This is an undesirable outcome, as it leaves us without a criterion to distinguish photography from types of depiction that are not essentially realistic, like painting. *Or* we hold that realism is an essential property of photography and argue that the pictures made with a digital camera are not photographs. This outcome is undesirable too, because it is counterintuitive: in daily life we refer to pictures made with digital cameras as ‘photographs’. To avoid this dilemma, I argue that the assumption from which it originates

¹⁰ Maynard (1983, p. 159).

– that digital photographs lack ontological realism – is false. I take on the ‘ontological challenge’ formulated in the previous section, and argue that digital photography is ontologically realistic too.

How am I going to argue for this ‘digital realism’? Remember that ontological realists ascribe to analog photographs a relic-like function, based on their causal connection with the depictum. Now, if it is true that digital photographs lack ontological realism, one can reasonably expect they cannot perform this relic-like function. In the following, however, I discuss three examples in which digital photographs do function as relics. This is already an *indication* that there digital photography is more realistic than some argue. At the end of the section, I use my examples to develop a proper *argument* for digital photography’s realism.

EXAMPLE 1. Suppose I keep a photograph of a deceased friend in my wallet. This picture is not primarily there to inform me about my friend’s appearance, but rather to stay in touch with him. His photograph can perform this function because it is the effect of physical interaction between my late friend and the picture. In this sense, his photograph has an analogous meaning for me as, for example, his cigarette lighter, that was passed on to me after his death. I care for the lighter because my friend touched it; because there was physical contact between the lighter and my friend. Both in the lighter and the in the photograph something of my friend seems to be present. Not in a supernatural way, but simply because they were physically connected

If digital pictures lack ontological realism, we can expect them to be unable to function as relics. Still, they seem very much able to function as such. Imagine a digital photograph of my friend used as ‘wall-paper’ (i.e. as background-image) on my mobile phone. Is this digital picture there to inform me about the visual appearance of my friend? Probably not. It rather serves to keep in touch, i.e. to sustain contact with the depictum. Thus, digital photographs can also serve as relics, a function which is traditionally related to photography’s ontological realism.

EXAMPLE 2. The surface of an analog photograph is integer. Suppose you have an analog photograph of a deceased friend in your office. One day, a colleague enters, takes a pen, and draws a moustache on your friend’s

face. Most people consider this offensive, but why? The ontological realist would argue that drawing a moustache on a photograph is offensive because picture and depictum are ontologically close. When we draw on the photograph we do not just draw on a likeness of him, but on something which is physically connected with him. My friend is more 'present' in the photograph than in a description or a drawing, which makes drawing on it especially inappropriate.

Digital photographs, presumably unrealistic, have an integer surface too. Suppose someone downloads a digital photograph of your friend and digitally adds a moustache to his face. This action is just as impudent as adding a moustache to an analog photograph with a pen. Thus, a digital photograph can also be treated in way which is inappropriate towards its depictum, even though we know perfectly well that the depictum is not actually harmed by these actions. Both analog and digital photographs can be treated in a way that violates the integrity of the object displayed, which suggest they both are ontologically close to their depicta.

EXAMPLE 3. Whereas the first two examples serve as *indications* that digital photography might be more realistic than often assumed, a third one offers a springboard for a proper *argument* in favor of this conclusion. I first introduce this example and use it afterwards to make my argument against the claim that digital photography is not causally related to its depictum.

Suppose I have a friend that recently passed away. As I have no photographs of him, I ask his brother to e-mail me one, which he does. Some days later, I run into my friend's brother and thank him for e-mailing me the picture. To my surprise, however, the brother admits that the picture he sent were not digital photographs, but pure simulations. His hard-drive crashed and he lost all his photographs, so he decided to reconstruct his brother's visual appearance out of raw digital code. The result is an apparently photographic picture portraying my friend. Although I see that this simulation adequately represents my friend's appearance, I am probably disappointed. In an ideal world, I would have chosen a digital photograph over a mere simulation. In comparison with a simulation, which lacks any origin in reality, digital photographs suddenly appear to be ontologically intimate with their depicta. Whereas the simulation is the product of the intention's of a human subject, the real digital photograph displays a depict-

tum that was in front of a lens and caused certain constellations of digital code in the camera. These codes would not have been formed, and no picture would have been produced by them, if my friend had not been in front of the camera to cause them.

This last example reveals the causal nature of digital photography: Only when a depictum with a certain visual appearance is in front of the lens, a particular constellation of codes can be formed in the digital camera. These codes can subsequently be translated back to the visual appearance of the depictum. In contrast to the pure simulation, constructed from scratch out of raw code, the digital camera produces its code in an entirely causal, non-intentional manner. Consequently, indexicality is a feature of digital photography too: The depictum causes certain codes, these codes cause markings on the picture's surface, and these markings allow me to see the depictum in the photograph. Of course, there is a longer chain of causes than in analog photography, but it is still a purely causal process in which reality creates its own picture.

Although it is undeniable that analog and digital photography are different, one cannot hold that the former would be realistic and the latter is not. Both pictures are indexes, i.e. causally related to their depictum, be it that the analog photograph is so in a more direct way. In the case of digital photography, the marks on the picture's surface are not the *direct* effect of interaction between photograph and depictum, but they are *indirectly*. There is a direct causal link between the appearance of the depictum and the code in the camera, and there is a direct causal link between the code and the markings on the picture's surface. Analog and digital photography are both ultimately caused by the object or events in front of the lens.

References

- Barthes, R. (1982). *Camera Lucida: Reflections on Photography*. New York, Hill and Wang.
- Lister, M. (2001). *Photography in the Age of Electronic Imaging*. In Wells, L. (ed.) (2000) *Photography: A Critical Introduction*. London, Routledge, pp. 303-347.

- Manyard, P. (1983). The Secular Icon: Photography and the Functions of Images. *Journal of Aesthetics and Art Criticism*, 42, pp. 155-169.
- Mitchell, W. (1992). *The Reconfigured Eye: Visual Truth in the Post-Photographic Era*. London, MIT Press.
- Savedoff, B. (1997). Digital Imagery and the Resources of Photography. *Journal of Aesthetics and Art Criticism*, 55, pp. 201-214.
- Walton, K. (2008). Transparent Pictures: On the Nature of Photographic Realism. In Walden, S. (ed.) (2008). *Photography and Philosophy: Essays on the Pencil of Nature*. Oxford, Blackwell, pp. 14-49.