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Photographic Realism, Transparency, and Perception

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ABSTRACT. In this paper I consider an important aspect of photographic realism that is strongly connected to the debate over photographic transparency, and to the question of what types of processes are to be considered perception proper. Photographic transparency theory holds that in photographs we see the scene photographed as we see objects through eyeglasses or in mirrors. I discuss some of the major arguments for and against transparency, and then I argue that formulating a position first requires an explication of one's position about the nature of perception (seeing). In order to show what decisions one must make to arrive at a position about seeing, I consider beings with perceptual systems more or less different from ours. This discussion not only enables us to see how relative our notion of photographic realism is to our specific visual capacities, but it also helps to explicitly formulate a position about what conditions one might or might not consider necessary for seeing. Although I do not argue for or against any of these specific conditions here, my considerations show through what steps the transparency debate may be resolved. This discussion also sheds some light on how to proceed when arguing for or against the (proper) perceptual status of specific perceptual mechanisms.

Photographs have had a special status among pictorial representations, for ever since the invention of recording light values on some form of light sensitive material, the automatic nature of the technical apparatus has marked off photography from other, manually produced pictures, such as drawings or paintings. The special status was justified by pointing out that the automatic nature of photographic representation ensured a kind of realism that is not available to artists producing pictures with their hands (including more recent computer graphics).

Philosophical considerations about the nature of photographic images reached a point when the specific details of what we should understand by photographic realism (as opposed to realistic, even photorealistic paintings or drawings) lead to the explication of how perceiving photographs differs from perceiving manually produced pictures. Some argued that looking at photographs is more adequately understood as seeing the objects themselves than as looking at pictorial representations of objects. Kendall Walton most notably argued that photographic images are “transparent”; we see objects in photographs as we see them in mirrors or through eyeglasses.¹ Specifically, he suggested that „the viewer of a photograph sees, literally, the scene that was photographed”².

Walton supported this position by arguing that our visual experience when looking at photographic images of objects and when looking at the objects themselves are the same kind of experiences, for the nature of the dependency relations determining our visual experiences in these cases are adequately analogous. The visual properties of the scene in a photograph are counterfactually dependent on the visual properties of the scene photographed. If the scene had different visual properties, then the scene in the photograph would also display different visual properties. This is exactly what characterizes our visual experience as well; if the scene we look at had different visual properties, then our visual experience would be accordingly different. Therefore, seeing and looking at photographs may be understood as visual experiences that are both counterfactually dependent on the visual properties of the scene. Drawings and paintings, on the other hand, do not depend counterfactually on the visual properties of the scene, for it is an artistic choice to preserve counterfactual dependence. Certainly, an artist may choose to preserve counterfactual dependence, but it still means that the visual properties of the painting or drawing depend on the mental states (beliefs, desires) and decisions of the artist, not directly on the visual properties of the scene.

In order to avoid problems arising from possible non-pictorial representations that are counterfactually dependent on a scene (for instance a verbal description produced by a computer program that is capable of analysing visual input and transforming the result of the analysis to a verbal description) the transparency condition may be supplemented with a further requirement when arguing that looking

¹ See Walton, 1984, 1986, 1997.

² Walton, 1984, p. 252.

at photographic images of objects is analogous to looking at the objects themselves. This is the requirement of preserving real visual similarity relations. Verbal descriptions, even if they are counterfactually dependent on the scene, do not preserve real similarity relations (they do not look like the scene), but photographs do.³ In order to maintain that looking at photographs of objects constitutes looking at the objects themselves, photographic transparency theorists may conclude that photographic images are transparent and they also preserve real similarity relations, therefore looking at photographs of objects is adequately analogous with looking at the objects themselves. This is, indeed, Walton's position.

Several objections were raised against the transparency theory, but here I will only consider two of them, pertaining to what is argued or assumed to be perception proper. First, it was argued that the transparency theory entails that photographs are not representations, because the theory maintains that through photographs we see the objects themselves, not their representations.⁴ Walton responded to this objection by arguing that photographs are "transparent representations", which means that they enable us to indirectly see the objects themselves.⁵ Second, it was also argued that photographs do not provide us with "egocentric information" about the scene we look at; in case of ordinary seeing we can orient our bodies with respect to the spatial location of the objects we can see, but we obviously cannot do that when we look at photographs.⁶ Walton, however, suggested that a confusing array of mirrors may also deprive us from egocentric information, therefore, if we accept that looking at objects in mirrors is still (indirect) seeing, then egocentric information is not a necessary condition, even if it is available to us in most cases we consider seeing.⁷

I think this debate is centred around the question of what constitutes perception proper (seeing), but without explicit arguments about what reasons we have to support the view that this or that aspect of our visual experience is a necessary condition of „real" seeing (seeing proper). In what follows I will not suggest a definition of seeing either in terms of necessary and sufficient conditions, but I want to shed some lights on what decisions one must make before committing herself to a specific position concerning the status of photographs with respect to seeing.

³ Walton 1984. See also Carroll, 1996; Currie, 1995.

⁴ Carroll, 1995, 1996; Currie 1995.

⁵ Walton 1997.

⁶ Carroll, 1996; Currie, 1995.

⁷ Walton 1997.

Let me first consider two types of possible extra-terrestrial beings with abilities providing them with experiences that are functionally analogous to our vision: one that is fairly close to human visual experience, and another that diverges from human vision in a more radical way. Our first extra-terrestrial being is anatomically similar to us, but instead of having two eyes placed in their skull, they have twenty, one and a half meter long tentacles, each ending in an eyeball. The individual eyeballs work just like ours, with a retina. However, while our brain needs to process two (upside down) retinal images in order to provide us with a 3D visual experience, their brains need to work with twenty retinal images. When they look at a far away landscape, their visual experience is not radically different from ours, since in that case the one and a half meter long tentacles will not allow them to position their eyeballs in ways that would produce considerably different retinal images. (Our two retinal images are not much different either when looking at objects at a distance.) However, they are used to (from our perspective) a very unique visual experience when looking at smaller size objects around them. They can, for instance, look at a flower or a cat in their vicinity from a number of very different angles; they can look „around” objects by positioning their eyeballs around them. In that case their brains will process twenty different retinal images, a number of them radically different from each other, e.g., some retinal images about one side of the object, while others about the opposite side. We can hardly even imagine the subjective character of such a visual experience, because we are incapable of having anything like that. We do not have twenty eyeballs on tentacles, and we do not have a brain that would process twenty retinal images.

Our second possible creature simply has a perceptual ability based on a sophisticated organ emitting and processing ultrasound. These intelligent bats have no organs similar to our eyeballs, but their experience based on their ultrasound emitting and processing organ functionally is not much different from ours. When asked to describe a scene verbally, they would give descriptions that are very similar to the ones we would give when looking at the same scene.

Notice that in both cases photography would be a very different practice from what we do. Our tentacle-eyed friends might not consider our 2D photographs very adequate. We can easily process perspective in 2D photographs, because it is not radically different from our 3D visual experience. (3D photography and 3D movies are interesting, they become popular from time to time, but we are also pleased with

2D photographs and movies). The tentacle-eyed creatures, however, might consider our photographs very deprived representations, for they are used to visual experiences arising from looking „around” objects by positioning their tentacle-enabled eyes around the object they want to look at. They may then use cameras to photograph objects around, and they could look at a number (at most twenty) of the photographs in order to experience the photographic representation of the object in a way that is more similar or adequate to their ordinary visual experience. Their photography exhibitions would be very interesting, indeed; some “single” photographic works might consist of twenty photographs to be looked at (at the same time). Our intelligent bats, of course, would not use cameras. They might use tape recorders, which – after recording the ultrasound reflected from the objects recorded – would enable them to replay and experience the recorded ultrasound, so that they may recognize the ultrasonic properties of the object. Nevertheless, they would recognize the recording of their cars, faces of loved ones, cats, etc. just as we recognize their photographic images.

The unique perceptual abilities and photographic or recording practices of these creatures may help us now consider what decisions we must make before arguing for or against the position that photographic images enable us to perceive (see) the scene photographed. Before turning to the considerations based on these examples, however, I will first address the question concerning the seeing pictorial representation *versus* seeing proper objection (the first objection against transparency I considered above). It is not clear why seeing proper cannot involve pictorial representations, for our retinal images are also precisely that; pictorial representations of the scene we look at. Should a tiny video camera be available (capable of outputting the proper signals for the optic nerve) as a prosthetic device for the blind (due to dysfunctional eyeball), the visual experience (including egocentric information) would be identical to the one people with fully functional eyeballs and visual system have. The objections against transparency theory provide nothing to disqualify such a system from enabling seeing proper, for replacing the retinal image with a photographic image is merely replacing one pictorial representation of the scene with another.

Our intelligent bats do not have eyeballs, and their brains do not process retinal images. Nevertheless, their perceptual system is perception proper in terms of being

functionally equivalent with our seeing. Arguing that they do not see means that one has committed herself to a definition of seeing that is exclusively based on eyeballs and retinal images. It is a further question whether that position would include the video prosthetic eye mentioned above as seeing. The tentacle-eyed creatures do have eyeballs and they do process retinal images. It is not clear, however, that egocentric information would be as readily and automatically available to them as it is available to us, for the spatial placement of their eyeballs (in the three-meter range allowed by their tentacles) might not always entail the immediate awareness of the location of their bodies with respect to the object seen. When looking around a cat, they may rather concentrate on how the cat looks like, and the visual experience (coming from all twenty directions around the cat) may not readily include egocentric information with respect to the cat. Therefore, although it seems that we have reasons for considering the ability to provide us with egocentric information a necessary condition for *human* vision⁸, there might be proper visual experiences without necessarily including egocentric information all the time.

The decisions one must make before arguing that looking at photographic images is or is not seeing the scene that was photographed are the following. First, one must decide if seeing proper is restricted to processing light values (creatures with organs processing ultrasound can have functionally equivalent abilities to our seeing). Second, one must decide, if a tentacle-eyed type of creature (not *always* having egocentric information automatically) would see or not. (If the answer is yes, then even egocentric information is not a necessary condition of seeing proper.) Third, one must decide if replacing the retinal images with images provided by a video-based prosthetic device will entail that people with such devices would not see. Some of these decisions might be easier to make, others need more considerations and arguments. Nevertheless, a position concerning the photographic transparency debate seems to require these decisions first, if one wants to avoid basing her arguments on not fully explicated and argued for intuitions about perception (seeing) proper.

⁸ Elsewhere (Bátori, 2011) I argued that although photographs may be considered transparent with respect to many properties of the objects photographed, they cannot be transparent with respect to egocentric information, because egocentric information is about a non-inferred relational property (location of our body relative to the objects seen) in case of human vision.

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