Photographs Are Not Transparent

Jonathan Cohen\textsuperscript{2} and Aaron Meskin\textsuperscript{3}

\textit{The photograph is the only picture that can truly convey information, even if it is technically faulty and the object can barely be identified. A painting of a murder is of no interest whatever; but a photograph of a murder fascinates everyone.}

- Gerhard Richter, quoted in [Obrist, 1995], 56-57.

Abstract: In [Walton, 1984], Kendall Walton offers a startling explanation of the widely voiced, but poorly understood, claim that photographs are epistemically special. Namely, he claims, photographs are "transparent" - that is, unlike other depictive representations, they enable us literally to see their depicta. While many share the intuition that Walton's proposal is enlisted to explicate, his thesis that photographs are transparent has not convinced many. On the other hand, it has proven surprisingly difficult to say just what is wrong about the transparency thesis. In this paper we answer this challenge and explain why photographs are not transparent.

In [Walton, 1984], Kendall Walton offers a startling explanation of the widely voiced, but poorly understood, claim that photographs give us a firmer epistemic connection to the world than do other depictive representations. He suggests that photographs are special because they are "transparent" - that is, they are special because, unlike other depictive representations, they enable us literally to see their depicta. While many share the intuition that Walton's proposal is enlisted to explicate - consider, for example, Bazin's famous claim that "The objective nature of photography confers on it a quality of credibility absent from all other picture-making" ([Bazin, 1967], 14) - his thesis that photographs are transparent has not convinced many. On the other hand, it has proven surprisingly difficult to say just what is wrong about the transparency thesis. In this paper we answer this challenge and explain why photographs are not transparent.

1 Transparency and Photographs

In saying that photographs are transparent, Walton means that visually attending to a photograph enables us to see something numerically distinct from that photograph - viz., its depictum. For Walton, photographs are of a kind with mirrors, telescopes, and microscopes: they are prosthetic
devices that enable us to see things that we could not see without them (cf. [Lewis, 1980]). Whereas these other prostheses help us to see things around corners, very distant things, and very small things, photographs enable us to see things that are spatio-temporally remote. Walton emphasizes that he means this proposal quite literally:

I must warn against watering down this suggestion, against taking it to be a colorful, or exaggerated, or not quite literal way of making a relatively mundane point. I am not saying that the person looking at the dusty photographs has the impression of seeing his ancestors - in fact, he doesn't have the impression of seeing them "in the flesh," with the unaided eye. I am not saying that photography supplements vision by helping us to discover things we can't discover by seeing.... Nor is my point that what we see - photographs - are duplicates or doubles or reproductions of objects, or substitutes or surrogates for them. My claim is that we see, quite literally, our dead relatives themselves when we look at photographs of them ([Walton, 1984], 251-252, emphasis in original).

Why does Walton insist that photographs are transparent? He believes that there are significant similarities between the way that photographs provide visual experiences and the way that ordinary vision provides visual experiences. For one, photographic images are counterfactually dependent on the scenes they represent; for example, had your ancestor been smiling rather than frowning, the photograph of her would have looked different. For another, and unlike realistic paintings and drawings (where such counterfactual dependency may hold), this counterfactual dependence is not mediated by the intentional states of any intermediary agents. As Gregory Currie puts it, there is a "natural dependence" of photographs on the scenes that they depict ([Currie, 1995], 55). Finally, photographs also preserve real similarity relations between objects: like ordinary perception, confusions about photographic representations (i.e., with respect to what they depict) tend to be linked to real similarities between objects.

For Walton, then, photographs are transparent but paintings are not. Moreover, he argues, this difference makes an epistemic difference - for example, it explains why the appearance of photographs but not that of paintings supports counterfactuals about the appearance of the depictum. In addition, it explains why we often treat photographs as evidence (both formal and informal), whereas we are resistant to treating paintings and drawings as such.

We believe that Walton's proposal does highlight certain important features of photographs that are worth capturing. However, it has the significant defect that its core thesis - that of the transparency of photographs - is (to put it gently) highly counterintuitive. But just what is wrong with this thesis? In particular, if we are to deny the thesis, we owe an explanation of what it is about photographs that makes them non-transparent, given that there are other visual prostheses, such as mirrors and telescopes, which are transparent. This, then, is Walton's challenge to those who reject the transparency thesis: explain the relevant difference between photographs, on the one hand, and mirrors and telescopes, on the other.

2 Egocentric Spatial Information

To motivate our own answer to Walton's challenge, it will be useful to begin with a proposal that has been suggested by a number of authors (cf. [Carroll, 1995], [Carroll, 1996] (62-63), [Currie, 1991], [Currie, 1995], [Warburton, 1988]), and that turns on an appeal to visually represented spatial information. The idea here is that a necessary requirement for x's seeing y is that x represents information about the spatial relations between x and y. This requirement, it has been suggested, effectively draws a line in the sand between uncontroversial examples of transparent visual prostheses on the one hand, and photographs on the other.

Currie and Carroll state the view explicitly. 


With ordinary seeing, we get information about the spatial and temporal relations between the object seen and ourselves .... Photographs on the other hand do not convey egocentric information; seeing a photograph does not tell me anything much about where the object photographed is in relation to me ([Currie, 1995], 66). I submit that we do not speak literally of seeing objects unless I can perspicuously relate myself spatially to them - i.e., unless I know (roughly) where they are in the space I inhabit ([Carroll, 1996], 62).

The most obvious way of understanding this proposal is as adding a doxastic requirement (a requirement about what the agent believes or knows) to the conditions that an agent must satisfy if she is to count as seeing an object. Understood in this way, the proposal is that seeing requires the formation of certain beliefs or judgments. For example, Currie specifically refers to the "kinds of judgments we make in cases of ordinary seeing ... which have no counterparts in the case of seeing photographs" ([Currie, 1995], 66). Similarly, Carroll speaks of ordinary seeing as requiring knowledge about spatial relations.

Walton has argued in [Walton, 1997] that no proposal of this sort can be successful because the requirement it places on seeing is too strong. To make this point, Walton imagines two cases in which a viewer sees a carnation without meeting the doxastic requirement about spatial information set out above.

In the first, a viewer receives visual information about a carnation through a long series of mirrors; the viewer knows neither how many mirrors are involved nor how they are oriented, so he has no idea what direction the carnation is from him (70). Walton claims that this viewer will lack information about the location of the carnation in egocentric space; but since all parties to the discussion concede that mirrors are transparent, he thinks, the viewer should count as (prosthetically) seeing the carnation. In the second case, the carnation is indeed right in front of me, but there are many mirrors around, or I suspect that there are. Here, too, Walton claims that I lack the relevant egocentric spatial information about the carnation: "I think I may be seeing the image of a carnation reflected in one or many mirrors, So I have no idea where the carnation is in relation to me" (70). Since he thinks that in both cases the viewer sees the carnation, even though she lacks the egocentric information about its location, Walton concludes that possession of that information about the carnation is not necessary for seeing it.

While these cases pose serious problems for Currie and Carroll, we do not believe that they settle the issue against the doxastic proposal by themselves. For one thing, although Currie is comfortable denying that seeing takes place in the sequence of mirrors case ([Currie, 1995], 70) - and would seem forced to take the same position about Walton's second case - an alternative answer would be to weaken the doxastic requirement so as to evade the case. For example, one might hold that seeing requires not (as before) holding a belief about the egocentric location of the object, but merely the belief that the object is in the same general space as oneself. On a weakened doxastic theory of this sort, it is plausible that the agent in both of Walton's cases manages to see, since, plausibly, such very minimal belief is present in these cases. Unfortunately, we anticipate that the debate would become stymied if carried on in this fashion: Walton would respond with further counterexamples to the weakened doxastic requirement, which could then be used to motivate still weaker versions of the doxastic requirement, at which point Walton would concoct yet stranger counterexamples, and so on. We believe that a cycle of counterexamples and responses of this kind is unlikely to convince anyone of anything. However, we propose to sidestep these difficulties: as we shall argue below, there are independent (and, we believe, more compelling) reasons for doubting that any doxastic solution can succeed. It is to these reasons that we now turn.

3 Toward a Non-Doxastic Solution
We are convinced that the contemplated requirement on seeing proposed by Currie and Carroll is too strong. However, we believe that a proper appreciation of the reasons for the failure of this requirement points the way toward a more successful answer to Walton's challenge. Rather than weakening the doxastic requirement, we propose to drop it all together, while retaining Currie's and Carroll's insight that spatial information is the key to resisting Walton's transparency thesis.

The requirement at issue (on the doxastic reading considered so far) concerns what subjects must believe in order to count as seeing an object. Walton's cases are designed to bring out the failure of such a doxastic requirement on object seeing by pointing out that beliefs can be undermined too easily - viz., beliefs can be undermined in ways that do not undermine seeing. For example, virtually any of my beliefs can be undermined by the onset of a sufficiently far-reaching skepticism. But, while it is plausible that the onset of skeptical doubt might erode a subject's belief that she sees a carnation (or belief that she is within four feet of a carnation, or even the belief that she is somewhere near a carnation), presumably we do not want to say that it would (by itself) prevent her from seeing a carnation that is right in front of her face. This is why we are inclined to say of Walton's second case, wherein the subject merely doubts that she lacks egocentric information, that the subject nonetheless sees the carnation. Similarly, the onset of confusion may undermine a subject's belief that she sees (or any of her other beliefs, for that matter), but it is implausible that such confusion should (by itself) vitiate her capacity to see. This is why we are inclined to say of Walton's first case, wherein the intervention of a series of mirrors at unknown angles makes the subject confused about the egocentric location of the carnation, that the subject continues to see the carnation.  

These reflections suggest to us that no doxastic condition on object seeing will suffice to distinguish prosthetic seeing through mirrors from (putative) prosthetic seeing through photographs. That is, it cannot involve the requirement that the subject believe any particular content, such as content about the egocentric location of particulars. Belief is fragile with respect to perturbations that leave seeing intact, so no doxastic state can be necessary for seeing. (A further reason for thinking that a doxastic requirement on object seeing is too strong involves the possibility of object seeing by non-human animals and neonate human beings. For one thing, while many writers have felt uncomfortable attributing doxastic states to non-human animals and human neonates, they have generally been less reluctant to claim that such creatures are incapable of object seeing; but if object seeing requires any doxastic state, then the latter claim follows from the former. For another, the question whether all seeing animals are cognizing animals strikes us as broadly empirical; as such, it strikes us as inappropriate as a matter of methodology to allow this question to be settled as a consequence of the requirements on object seeing imposed from the armchair.)

4 Reliable Egocentric Spatial Information

The moral we have drawn so far is that a successful answer to Walton's challenge cannot involve a doxastic requirement on object seeing. On the other hand, we do not believe that photographs are transparent, and we are sympathetic to the general idea of exploiting egocentric spatial information to distinguish between genuine and non-genuine cases of prosthetic seeing. In this section we shall offer a response of this general form that does not depend on a doxastic requirement, and therefore that evades the problems that plague the variants examined so far.

To motivate our response, recall the standard distinction in epistemology between internalist and externalist accounts of justification (and knowledge), set out nicely by Bonjour in the following passage:
... a theory of justification is internalist if and only if it requires that all of the factors needed for a belief to be epistemically justified for a given person be cognitively accessible to that person, internal to his cognitive perspective; and externalist, if it allows that at least some of the justifying factors need not be thus accessible, so that they can be external to the believer's cognitive perspective, beyond his ken ([Bonjour, 1992], 132, emphasis in original).

While it is beyond the scope of this paper to review the internalist/externalist controversies about knowledge and justification, it will be helpful to have in view an example of an externalist theory, and for this purpose we will rely on what is perhaps the most prominent form of epistemological externalism: the reliabilist view proposed in [Goldman, 1976]. To a first approximation, Goldman's version of justification reliabilism holds that a belief counts as justified if and only if it is produced by a reliable belief-forming process. In virtue of what does a belief-forming process count as reliable? Again, to a first approximation, cognitive processes count as reliable to the extent that they tend to produce true beliefs (where the latter tendency is understood as involving all the beliefs that a process is disposed to produce, and not simply those it actually produces). On this view, then, justified beliefs are those produced by reliable cognitive processes.\textsuperscript{13}

In the context of the problems examined in §3, an externalist view such as reliabilism seems to be just what we need to move forward. We emphasize that it is no part of our brief to argue for a reliabilist account of justification or knowledge. However, the idea of a factor external to the subject's cognitive perspective is of utmost importance in solving the problem as we see it. Moreover, reliable processes seem to be just the sort of external factor upon which to focus. We propose to use the notion of a reliable process to formulate a non-doxastic requirement on object seeing. We believe that this will enable us to draw the desired distinction between ordinary and prosthetic seeing on the one hand, and photography on the other.

Here, then, is our proposed answer to Walton's challenge. We propose that knowledge about the egocentric spatial location of an object is not a necessary condition for seeing it, but instead that what is essential is that the relevant visual experience is produced by a process that is also a reliable source of egocentric spatial information about the object. That is, x sees y through a visual process z only if z is a reliable source of information about the egocentric location of y with respect to x. According to us, mirrors are transparent in Walton's sense because mirrors are reliable sources of egocentric spatial information about objects. In contrast, our view secures the desired conclusion that photography is not transparent, insofar as photographs are not reliable sources of egocentric spatial information about their depicta.

Some comments are in order.

1. We are not claiming that the provision of reliable information about egocentric location of perceived objects is sufficient for seeing. Clearly it is not, and our account reflects this.

2. Our view does not entail that x sees y only if x actually possesses accurate information about the egocentric location of y. We take it that object seeing can occur in conditions in which the information about the distance and position of the relevant object is far from accurate. Our account only requires that the process by which the egocentric information is obtained is a reliable one. We follow standard practice in epistemology in holding that reliability should be understood dispositionally; this allows that reliable processes may fail, in individual cases, to produce accurate information.

3. Our account does not place a doxastic requirement on seeing. We hold that what is essential to seeing is that the relevant visual experience is produced by a process that is also a reliable source of egocentric spatial information about the perceived object. On our account, knowledge - or even mere belief - about the location of the object is not necessary for seeing. For the activity of reliable processes need not result in beliefs (for example, such processes may be at work in the case of the thoroughgoing skeptic, although in her case they would fail
to result in beliefs; this is in accord with our insistence in §3 that the onset of skeptical doubt should not erode the capacity for object seeing).

For this reason, our account evades the problems pressed against other answers to Walton in §3.

To see that our proposal is extensionally correct, let us examine a few cases. We begin by looking at some cases where it is clear that we do see. We take it is as fairly obvious that our view allows for ordinary (non-prosthetic) seeing and uncontroversial cases of seeing by visual prostheses. Ordinary seeing is a reliable source of information about the egocentric location of objects. It does not get things right all the time (sometimes, for example, we misjudge egocentric distances of seen objects), but this is not a problem for our proposal, as we have made it explicit that the notion of reliability must be understood dispositionally. In addition, our proposal allows for uncontroversial cases of prosthetic vision involving eyeglasses, binoculars, telescopes, and periscopes. All of these prostheses are reliable sources of egocentric information (although they may fail in certain circumstances). 14 For the same reason, our view allows for seeing through a single mirror. Moreover, the condition we propose creates no problem for saying that I see in the case in which I am surrounded by many mirrors (or merely suspect that I am). Although this situation might undercut my belief that I am seeing, and hence my ability to know that I see, this cannot undercut the reliability of the mirror with respect to egocentric information.

What about cases in which we do not see? Our proposal clearly precludes seeing in the case of photography, film, and video. While these visual processes are reliable sources of some sorts of information, they are not reliable sources of egocentric spatial information. This is true even if they occasionally do provide such information, for it is the lack of a disposition to provide such information that precludes these processes from underwriting seeing.

What about painting and drawing done in realist (or even photo-realist) style? Consider cases in which a painter strives to depict an actual person or scene accurately. In these cases, counterfactual dependence and the preservation of real similarity relations may be present. In addition, such paintings may be reliable sources of a great deal of information about their subjects. But these painting (like photographs) fail to be reliable sources of egocentric information about the objects they depict. Hence, seeing is precluded (as desired). 15

References

[Alston, 1995]

[Bazin, 1967]

[Bonjour, 1992]

[Carroll, 1995]

[Carroll, 1996]
Footnotes:

1 This work is fully collaborative; the authors are listed alphabetically.

2 Department of Philosophy, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0119, joncohenREMOVETHIS@aardvark.ucsd.edu (omit text in caps, which reduces automated spam)

3 Department of Philosophy, Texas Tech University, Box 43092, Lubbock, TX 79409, aaron.meskin@ttu.edu

4 Cinematographic and video depictions also count as transparent on Walton's account. The contrast he draws is primarily with painting and drawing. Our focus of discussion in what follows will be the status of photographs.
He does not claim that the depictum is the only thing we see; and, in particular, he does not deny that we see the photograph in addition to its depictum. Indeed, he insists that it is in virtue of seeing the photograph that we see its depictum. Hence, on this view, transparency does not entail invisibility.

Note that photographs are not unique among these visual prostheses in allowing for a specifically temporal separation between viewer and the object seen: we speak unhesitatingly of seeing a stellar explosion through a telescope, even if the explosion transpired millions of years before the viewer existed.

We suspect even Walton would concede this much - this would explain why he felt the need to warn against taking the thesis non-literally.

Some articulations of this point (e.g., that in [Currie, 1995], 66) put the point in terms of spatio-temporal relation. We prefer to express the point in terms of spatial relations in the context of an attempt to exclude photographs because, arguably, when x looks at time t at a photograph of y, x (or x's visual system) represents the information that y existed before time t. We don't see any non-stipulative reason for refusing to count this as information about the spatio-temporal relation between the viewer and the depictum, but it doesn't seem reasonable to count it as information about the spatial relation between the viewer and the depictum.

Currie and Carroll claim that the spatial requirement in question is a necessary condition for prosthetic seeing, not that it is a sufficient condition. This is all to the good, since it is not a sufficient condition: if I am looking straight down at my desk, wearing blinkers, and you hand me written descriptions of the spatial relations that obtain between me and objects in my vicinity, then I may know where these objects are in relation to me, but presumably I am not (or not literally) seeing these objects prosthetically (using you as my prosthetic).

We can imagine a defender of the egocentric information requirement who would allow that, after the number of intervening mirrors between the subject and the carnation gets sufficiently large - say, greater than n, the subject ceases to see the carnation. Therefore, she might suggest, the case involving n+1 mirrors is not a case where the subject sees without egocentric spatial information, hence not a counterexample to the requirement she is defending.

But we find this response unconvincing. For as Walton's second case shows, the point does not turn on assuming large numbers of mirrors are involved. Therefore, the point goes through even if we concede the objection.

The intuitions about Walton's specific cases adduced here are certainly not beyond dispute - especially if the doxastic requirement under discussion is weakened in the way imagined at the end of §2. But the general moral we are drawing stands, independently of verdicts about these specific cases: mere confusion can undermine belief but cannot undermine seeing.

Arguably there is a non-doxastic reading of at least Carroll's version of the spatio-temporal information proposal. For, at times, Carroll seems to be suggesting that the relevant difference between ordinary seeing and photographic looking has to do with their relation to our physical abilities: I can 'orient my body' spatially to what I see, either with the naked eye or through a telescope or microscope. But when I see a photograph I cannot orient my body to the photographed objects. The space of the objects is 'disconnected phenomenologically from the space I live in' ([Carroll, 1995], 71).

If the 'orientability requirement' Carroll suggests here is understood as not placing doxastic requirements on would-be seers, then it would evade the problem we have been discussing. However, this requirement, too, seems too strong, since it would inappropriately follow from the requirement that organisms incapable of moving their bodies (e.g., normal human victims of paralysis) cannot see any objects.

Of course, reliabilist accounts of knowledge and justification are not free from controversy. However, it is worth noting that many of the more serious problems pressed against reliabilism - namely, complaints to the effect that reliability is by itself unnecessary or insufficient to explain
justification or knowledge - don't affect our proposal. We are not defending a reliabilist (or any other) theory of justification or knowledge, but only helping ourselves to the idea of reliable processes in the service of a proposal about object seeing. Among the anti-reliabilism complaints that our view does not evade, we believe the most serious is the so-called Generality Problem - i.e., the problem of how finely or coarsely to individuate process-types (see [Feldman, 1985], [Alston, 1995], [Conce and Feldman, 1998]). We cannot hope to solve the Generality Problem here.

Indeed, it is critical to the standard use of these tools that they are reliable sources of egocentric information. Consider, for example, binoculars and periscopes: we don't simply want to find out what the enemy soldier and enemy battleship look like, we want reliable information about where they are in relation to us.

We are grateful to Ram Neta and Rob Rupert for helpful comments on earlier drafts.