

SHOT IN THE DARK

NOTES ON PHOTOGRAPHY, CAUSALITY, AND CONTENT

MIKAEL PETTERSSON

I. INTRODUCTION

In the early hours of October 4, 1959, the Soviet space probe Luna 3 was launched from Baikonur Cosmodrome near the river Syr Darya in Kazakhstan. After a three-day journey to the moon, Luna 3 successfully took a total of 29 photographs of its far side during a session of 40 minutes on the morning of October 7. After a failed first attempt at transmitting the images on October 8, on October 18, ten days later, Luna 3 managed to send back to earth 17 of the allegedly first, never-before-seen, images of the far side of the moon. But were these dark blurry images really the first pictures of the moon's far side?

Consider a much earlier photograph of space, taken from earth this time – the almost exactly one hundred years older photograph of a solar eclipse in Spain in 1860, taken by British astronomer Warren De la Rue, and by some claimed to be the first photograph of a full solar eclipse.¹ De la Rue was one of the pioneers of astrophotography and his interest in it seems to have been sparked by a photograph of the moon (by G. P. Bond) that De la Rue saw at the Great Exhibition of 1851. At the time of the photograph of the eclipse, however, his interest was directed at the sun, and in particular at the red flames of the corona, made visible in the photograph around the edges of the occluding moon. But De la Rue's image may not only be considered as a great achievement in solar photography, but may also count as a success in lunar photography. For granted that photography is, as it is commonly expressed, a "causal medium," and granted also, more controversially, that what caused the black disc in De la Rue's image is the *back* of the moon – after all, it is the moon's far side that blocks the light from the sun – it would seem to follow that *this*

¹ Anton Sebastian, *A Dictionary of the History of Science*, (Pearl River, NY: Parthenon Publishing, 2001), p. 307.

image, rather than any of those from Luna 3, is actually the first image of the far side of the moon.²

I will use De la Rue's image, and other, more and less extraordinary images, to discuss a number of aspects of what might be called "the ontology of the photographic image." On a more general level, the main issue of this paper is how to understand the relation *x is a photograph of y*, and, related to this, what the possible contents of photographs are. Much of my discussion will concern the notion, indicated above, that photography is essentially a *causal medium*. Section II introduces the role of causality in photography and the problem of *the appropriate causal relation*. Section III presents different candidates for being the content of De la Rue's image, in particular the idea that it is a photograph of the lunar far side. In Section IV, I argue that De la Rue's image is *not* of the far side of the moon, but rather of what Alva Noë would call the "look" of the moon. In that section, I also express some doubts as to the role Noë ascribes to "looks" in perception, while arguing that an analogous role is exactly right in photography – in particular, that "looks" furnish us with a way to move closer to an answer to the question of the appropriate causal relation.

II. PHOTOGRAPHY AND CAUSALITY – NEGATIVE REMARKS

As just indicated, photography has often been thought to be an essentially causal medium. The role of causality in photography can usefully be illustrated negatively, as it were, by means of another set of photo-like images allegedly of the moon, namely the so-called celestographs "taken" by the Swedish playwright August Strindberg in the mid-1890s.³ These quite remarkable images were produced with the aid of neither lenses, nor camera. The reason for this parsimony was epistemological. Strindberg was during this period deeply engaged with a certain kind of Schopenhauerian "biological idealism,"⁴ according to which our bodily constitution

² This is arguably what Roy Sorensen would claim. Sorensen argues that *seeing* a solar eclipse implies seeing the back of the moon – and the backs of backlit objects in general – since this is what the causal theory of perception to which Sorensen subscribes seems to entail. As will be obvious to those familiar with Sorensen's celebrated "eclipse riddle," much of this paper is inspired and highly indebted to Sorensen's intriguing and fascinating book. See Roy Sorensen, *Seeing Dark Things: The Philosophy of Shadows*, (Oxford: Oxford University Press, 2008). Sorensen discusses photographs of the back of objects briefly on p. 32, and the images taken by Luna 3 on p. 63. The riddle was originally presented in his "Seeing Intersecting Eclipses," *The Journal of Philosophy*, 96:1 (1999), pp. 25–49. I discuss Sorensen's view in Sections III and IV.

³ The reason for the use of scare quotes will soon become apparent. Much of my account of Strindberg's celestographs is indebted to Per Hemmingsson, *August Strindberg som fotograf*, (Stockholm: Bonnier, 1968).

⁴ I borrow this term from Julian Young, *Willing and Unwilling: A Study in the Philosophy of Arthur Schopenhauer*, (Dordrecht: Martinus Nijhoff Publishers, 1987).

necessarily introduces a difference between how the world *really is* and how it *appears* to us. According to one rather astonishing “off-hand hypothesis” of Strindberg, the heavenly bodies might very well be hexagonal and it is simply due to the constitution of our eyes – in particular their *lenses* – that the moon and the sun looks round to us. Accordingly, the celestographs were produced without any (allegedly) distorting lenses, and Strindberg thought of these dark blurry images, with milky spots scattered over them – some of which he thought looked precisely hexagonal – as a way to bridge the gap between seeming and being, showing us, as he puts it, “how the world looks in itself.”⁵ So, in a way, then, what Strindberg tried to achieve was in effect to take photographs of the Kantian thing-in-itself. Now, considered as an attempt to in this way let photography “do” philosophy, to provide knowledge of the thing-in-itself, the celestographs must be seen as a fascinating failure. But with respect to the philosophy of photography, they are more fruitful, I think, and in particular with respect to questions about the role of causality in photography, and the issue of photographic content.

The first question they pose is simply whether they should be seen as *photographs* at all. To give the issue punch, let us, as a thought experiment, assume with Strindberg that the moon (implausibly, but not impossibly) is indeed hexagonal and milky-looking, and, hence, that the celestographs (in some suitable sense of the word) *match* the undistorted, “real appearance” of the moon, to use a paradoxical notion. The world displayed by the images – what we “see in” them, in Richard Wollheim’s use of the phrase⁶ – would be precisely how the world was before Strindberg’s plates, but, again, would they be *photographs* of the moon? There is, to be sure, a certain amount of pictorial content in the images – things to be seen in them – but is the content *photographic* content? I take it that many of us would say no. Rather, the situation described would be a photographic analogue of the much discussed cases of “veridical hallucination” in the theory of perception, in which a subject has

⁵ The full subtitle to the “fifth letter” of Strindberg’s “Antibarbarus II” reads (in my translation): “How the world looks in itself and to me. The proofs that the earth is round are worthless, which does not rule it out that it could be round, all the same. Thoughts about the Sun, the Moon and the stars in the world of illusions.” [“Hur världen ser ut för sig och för mig. Bevisen för att jorden är rund äro värdelösa, vilket icke hindrar att jorden kan vara rund ändå. Tankar om Solen, Månen och stjärnorna i villornas värld.”] August Strindberg, “Antibarbarus II,” *August Strindbergs Samlade Verk*, ed. Per Stam, (Stockholm: Norstedts, 2009), p. 81. The idea that there is a way the world *looks* in itself, apart from how it appears, is perhaps a bit odd. One may wonder how the world *is* in itself, in contrast to how it appears, but to *look* a certain way is precisely to have a certain appearance; looks belong to the side of appearance in the division of the world into *Schein und Sein*.

⁶ Richard Wollheim, “Seeing-as, Seeing-in, and Pictorial Representation,” in *Art and Its Objects*, 2nd ed., (Cambridge: Cambridge University Press: 1980).

an experience as of whatever is before her eyes, but where there is no causal dependence between the experience and the looked at scene.⁷ Similarly, since Strindberg “took” the images with neither lenses nor camera, there would seem to be hardly any causal traffic between image and scene, so even if the celestographs would *match* the moon’s “real appearance,” the former do not seem to *depend* on the latter, and this would seem to disqualify them from being *photographs* of the moon.

Or at any rate, this follows from what has been a common (and plausible) view of photography within philosophical theorising about photographs. According to Richard Wollheim, for example, “[w]hat or whom we correctly see in a photograph is in large part a matter of who or what engaged in the right way with the causal processes realized by the camera.”⁸ Jonathan Friday writes that “photographs have a causal relation to their subject matter which means that what is depicted and how it appears is almost fully determined by a causal process.”⁹ And Robert Hopkins claims that photographs “only depict those particulars which they are causally related to in an appropriate manner.”¹⁰

Now, one question that arises in relation to these claims is how to understand what it means, as Wollheim puts it, that someone or something has engaged in the *right* way with the causal processes. What is it, in Hopkins’ words, to be causally related to an image in an *appropriate* manner? One problem, in particular, which is reminiscent of issues in the philosophy of perception, suggests itself, namely the problem of deviant causal chains. You drop your camera on the floor, light leaks into the camera, and, miraculously, a perfect image of your cat is formed on the film. Again, this would not be a photograph of your cat, although the image matches your cat; it would be a “veridical photographic hallucination.” But suppose that it was your cat that pushed the camera off the shelf, thereby *causing* the image to appear. In this case, there *is* a causal dependence between the image and the cat, but, still, few of us would be willing to say that this is a photograph of your cat, since the causal dependence is of the wrong kind.

⁷ See, e.g., H. P. Grice, “The Causal Theory of Perception,” *Proceedings of the Aristotelian Society*, Supplementary Volume xxxv, (1961), pp. 121-153; P. F. Strawson, “Causation in Perception,” in *Freedom and Resentment and Other Essays*, (London: Methuen, 1974); David Lewis, “Veridical Hallucination and Prosthetic Vision,” *Australasian Journal of Philosophy*, 58:3 (1980), pp. 239-249; Alva Noë, “Causation and Perception: The Puzzle Unravelling,” *Analysis*, 63:2 (2003), pp. 93-100.

⁸ Wollheim, “Seeing-as, Seeing-in, and Pictorial Representation,” p. 208.

⁹ Jonathan Friday, “Digital Imaging, Photographic Representation and Aesthetics,” *Ends and Means*, 1 (1997), <<http://www.abdn.ac.uk/philosophy/endsandmeans/vol1no2/friday.shtml>>

¹⁰ Robert Hopkins, *Picture, Image and Experience: A Philosophical Inquiry*, (Cambridge: Cambridge University Press, 1998), p. 74.

Now, in the theory of perception, the way to deal with deviant causal chains has often (in various forms) been to say that the relevant causal relations in perceiving something should be those, which, roughly, are involved in *normal* perception, ruling out abnormal chains analogous to that above, and perhaps a similar strategy could be adopted in relation to photography. However, with respect to perception, there seems to be at least one problem with this strategy, which appears relevant also for the case of photography, namely the fact that normality is at odds with novelty. With respect to causal theories of perception, it has been complained that appeal to normal causal chains unwarrantably rules out unfamiliar, abnormal or even science-fiction-like cases of causal traffic between experiences and the world, but which are such that they intuitively *would* qualify as instances of perception.¹¹ A similar consideration would seem to be even more pertinent in relation to photography, where novel types of causal chain are not mere possibilities, but have, of course, in fact been introduced during its history. What counted as normal causal chains during daguerrotypy did not do so – at least not all the links in those chains – after the introduction of film and the negative-positive process; the typical causal processes changed again with the emergence of digital photography; and the images produced by means of electron microscopic photography provide yet another kind of causal process. None of these have any special claim to be *the* normal process of photography, and nothing suggests that there will not be novel varieties in the future. The upshot, then, is that specifying the appropriate causal relation *directly*, by pointing to the photographic processes themselves, does not seem the right way to go.¹² I will come back to these issues later on, but before that I will turn to a different understanding of the problem of the appropriate causal relation, which has to do with the question of what *aspect* of the photographed object that provides the anchor point for the appropriate connection. To see what this problem amounts to, let us return to De la Rue’s image mentioned in the Introduction.

III. PHOTOGRAPHY, CAUSALITY AND DARKNESS

Discussions of causality in photography are often framed by discussions of other issues regarding what is special about photography. One such issue is the alleged

¹¹ Cf. Dretske, *Seeing and Knowing*, pp. 50-51; Noë, “Causation and Perception,” p. 94.

¹² Robert Hopkins makes a similar point about causality in *depiction*, rather than in photography. See Hopkins, *Picture, Image and Experience*, pp. 72-73.

“fictional incompetence” of photography,¹³ which seems to surface in the quote from Hopkins. If photography is a causal medium, it follows immediately that one cannot have a photograph of Hamlet, say, since the latter, fictional as he is, is causally impotent. In a recent paper on this topic, Dan Cavedon-Taylor construes the fictional incompetence claim regarding photography as not only excluding ficta from photographic content, but also “particulars [which photographs] fail to be appropriately causally related to (where the ‘appropriate’ causal relation typically involves light reflecting off the surfaces of particulars and into the camera’s lens).”¹⁴ Now, it is the spelling out of the “appropriate causal relation” within the parentheses that interests me here. If the stress is on “typically,” the explication is surely true, but talk of surfaces and reflecting light requires more attention; as De la Rue’s image highlights.

This image, so it would seem, is of (at least) three “things,” neither of which reflects light into the camera’s lens, and of which only two have a surface: the night-sky, the sun, and the moon. The sun would seem to be a rather straightforward case: it causes the white marks in the image and becomes part of the pictorial content by means of the light it *emits* rather than reflects. The moon is more troubling. Precisely *what* is the part of the photograph, which displays the black disc an image *of*? It might seem tempting to say that it is not of anything at all, much like Strindberg’s celestographs are not *photographs* of anything. There has been no light reflected onto this part of the plate, so perhaps it should be regarded as a kind of “gap” in the image. Perhaps De la Rue’s image is similar to mental images, which are plausibly considered as being “gappy.” In Colin McGinn’s idiom, mental images are *unsaturated*, in the sense that there are many points of mental images at which they remain “utterly silent.”¹⁵ Should the black parts of De la Rue’s image be thought of as being just as silent?

I think there is good reason to reject this suggestion (and so photographs are not very like mental images).¹⁶ There is an important difference between De la Rue’s and Strindberg’s images, which can be expressed in terms of what they *record* and *fail to record*, respectively. Strindberg’s image fails to record anything, due to the

¹³ The claim that photographs are “fictionally incompetent” is due to Roger Scruton, “Photography and Representation,” *Critical Inquiry*, 7 (1981), pp. 577–603.

¹⁴ Dan Cavedon-Taylor, “In Defence of Fictional Incompetence,” *Ratio*, 23:2 (2010), p. 142.

¹⁵ Colin McGinn, *Mindsight: Image, Dream, Meaning*, (Cambridge, Mass.: Harvard University Press, 2004), pp. 25–26.

¹⁶ The idea that photographs are unlike mental imagery is not new; Ned Block discusses it in his “The Photographic Fallacy in the Debate about Mental Imagery,” *Noûs*, 17:4 (1983), pp. 651–661.

remarkable technology of the celestographs (no camera, no lens), while De la Rue's image would seem to be a recording of *an absence*, namely *an absence of light*. This difference can be illustrated by means of an analogous difference between photographs and "moving images." Compare Warhol's film *Empire*, which consists of more than eight hours of black-and-white footage of the Empire State Building, with a single photograph of the same building. The film is a moving image, and the photograph is a still picture. But why is this so? Hardly anything moves in the film, and one can imagine a film of the building, the seeing of which would be *indistinguishable* from looking at a still photograph for as long as the film runs. Although nothing moves in this hypothetical film, it still would seem to be an instance of moving images; it is a moving image of something perfectly still. And the reason has to do with the kind of difference mentioned above. The film records the *absence* of movement, while the still photograph remains silent about any possible movement. The film *would have* displayed movement *if* there had been movement in the scene, while no such counterfactual dependence holds for the photograph.¹⁷

Similarly with De la Rue's and Strindberg's images, respectively: the former records an absence while the latter is just insensitive to what happens before it. If, say, a firefly would have flown past before De la Rue's so-called photoheliograph at some suitable distance there would have been a white spot on the black disc, whereas no such dependence holds between the celestograph and the scene before it. Also, this is a way to cash out the idea that De la Rue's image is (also) of the night-sky. Although that part of the image is black due to the absence of light, if the firefly would have continued its flight, it would have been recorded there.¹⁸ So, this part of the image, too, is the recording of an absence, and *not* the absence of a recording, as in the case of the celestographs. As Jonathan Westphal notes in a similar context, there is a big difference between the recording of silence and a non-recording.¹⁹ Similarly, I would suggest, there is a big difference between a photograph of the pitch-dark night-sky and a "photograph" developed from unexposed film, although

¹⁷ For more on the difference between still and moving pictures, see Robert Hopkins, "Depiction," in *The Routledge Companion to Philosophy and Film*, eds. Paisley Livingston and Carl Plantinga, (New York: Routledge, 2009), pp. 64–66. I ignore here how photographs can "record" movement by displaying a blur.

¹⁸ The notion of counterfactual dependence has played a significant role in various accounts of photography, for instance in Kendall Walton's famous account of photographic "transparency." See Kendall Walton, "Transparent Pictures: On the Nature of Photographic Realism," *Critical Inquiry*, 11 (1984), pp. 246–277. I will have more to say about counterfactual dependence in photography below.

¹⁹ Jonathan Westphal, "Silhouettes are Shadows," *Acta Analytica*, 26:2 (2011), p. 193.

the two images might look exactly the same. For only the former succeeds in recording anything.

However, the black parts of De la Rue's image do not merely record the absence of light, but the *presence* of the night sky and the moon, respectively. But *what aspect* of the moon is the photograph an image of. Three options, at least, seem open: the moon's *front*; more counterintuitively, its *back*; and, in a sense to be explained (and the option I will favour), the moon and its *look*.

Perhaps the most natural suggestion would be that the image is a photograph of the lunar *near* side.²⁰ After all, De la Rue's photoheliograph is pointing right towards the near side, and there is nothing obstructing the view. However, as natural as the suggestion might seem, it is untenable on the (arguably as natural) causal theory of photography. For the front is completely within the shadow cast by the lunar far side – is occluded by the far side – and is thereby made causally idle with respect to the photograph. So, the causal theory of photography rules out the moon's front as part of the photographic content.²¹

As indicated in the Introduction, the causal theory of photography would seem to imply that De la Rue's image is rather of the far side of the moon – the British astronomer thereby beating the Russians in delivering the first image of the lunar far side by roughly a hundred years. At any rate, this is probably what Roy Sorensen would say, since he argues from a causal theory of *perception* to the claim that we *see* the back surfaces of backlit objects. It is the back surface that blocks the light from the sun – it is at the surface, as J. J. Gibson puts it, "where most of the action is"²² – and it follows from this, says Sorensen, that the back surface is what we see when looking at an eclipse: we see "into a concave, bowl-shaped surface," the portion of the moon "that is just enough to block the light."²³ Should we say that De la Rue's image is similarly of the concave, bowl-shaped back surface of the moon? The suggestion is surely somewhat counterintuitive, to say the least. But this is not in itself a serious

²⁰ A propos the analogous problem of seeing eclipses, Sorensen says that "common sense" has it that one sees the near side. Sorensen, *Seeing Dark Things*, p. 20.

²¹ This is not to deny that the front may be sensed as being somehow present in the image, although it is strictly speaking not part of the image's pictorial content. There is the phenomenon of (pictorial) "perceptual presence," a perceptual-like apprehension of things one strictly speaking does not see in the image, and De la Rue's image seems to be particularly potent in eliciting this experience; the moon's near side is, as Alva Noë would have it, "present *as absent*." Alva Noë, *Action in Perception*, (Cambridge, Mass.: MIT Press, 2004), p. 61. I discuss perceptual presence in pictures at length in my "Seeing What Is Not There: Pictorial Experience, Imagination, and Non-localization," *The British Journal of Aesthetics*, 51:3 (2011), pp. 279–94.

²² J. J. Gibson, *The Ecological Approach to Visual Perception*, (Boston: Houghton Mifflin, 1979), p. 23.

²³ Sorensen, *Seeing Dark Things*, p. 48.

objection to it, especially if the reluctance to accept the suggestion can be explained away. Two considerations in particular might be useful in this context.

First, there is an obvious difference between De la Rue's image and those taken by Luna 3, namely the different amounts of *information* they provide about the moon's far side. Perhaps some would deny that an image is a photograph of something unless it provides a fairly rich amount of information about it. But how much? Some writers seem happy to let an image qualify as a photograph of something even though it provides almost no information about it. So, for example, Nelson Goodman says that "[i]f I tell you I have a picture of a certain black horse, and then I produce a snapshot in which he has come out a light speck in the distance, you can hardly convict me of lying; but you may very well feel that I misled you."²⁴ Similarly, Susan Sontag famously said that a photograph of Shakespeare would be preferable to "another glorious Holbein" had the painter lived long enough to paint the playwright. And this would be so "even if the hypothetical photograph were faded, barely legible, a brownish shadow."²⁵ Neither light specks, nor brownish shadows, offer much information, but if Goodman and Sontag are right, these hypothetical images are still photographs of their subjects. So perhaps someone like Sorensen could paraphrase Goodman and say that it is at most "misleading" to say that De la Rue's image is of the moon's far side, since the information the image provides about it is so sparse, but it would not be a case of "lying."

Another consideration has to do with habit. Typical photographs are of the fronts of front-lit objects. If there is nothing intervening between an object and the pictorial viewpoint, the photograph will (barring too great distances) be of the front of the object. Granted sufficient encounters with such typical photographs, these facts about photography, and the expectations they may lead to, may have become entrenched in our minds. In De la Rue's image there is nothing between pictorial viewpoint and the moon's near side, so perhaps we even expect to see *it* in the image. Between the pictorial viewpoint and the back of the moon there *is*, by contrast, a massive body of opaque matter, namely its insides, so we do not expect to see the back in the image. But these standard presuppositions about photography concern only front-lit conditions. In the less typical cases of backlit objects the conditions are reversed – the backs of objects occlude their fronts – and so many expectations

²⁴ Nelson Goodman, *Languages of Art: An Approach to a Theory of Symbols*, 2nd ed., (Indianapolis: Hackett, 1976), p. 29.

²⁵ Susan Sontag, *On Photography*, (London: Penguin Classics, 2002), p. 154.

derived from the typical cases will simply not be met. But granted that the expectations have become habitual, they may help to explain our reluctance (if we are reluctant) to say that De la Rue's image is of the lunar far side.

These considerations, then, may help an advocate of the idea that De la Rue's image is of the far side of the moon to at least to some extent ward off accusations that the claim is too counterintuitive. Still, I take it that a view that is less counterintuitive overall, and one which does not have to explain away our intuitions, would be preferable to the idea that De la Rue's image is of the *back* of the moon. The next section will defend precisely such a view. Not only does this view provide a plausible account of the contents of De la Rue's image, but it will also take us towards a more general understanding of the notion of *being a photograph of x*, and of the question of the appropriate causal relation that I left unresolved earlier.

IV. PARTS, PROPERTIES AND POINTS OF VIEW

In discussing the claim that the causal theory of photography implies that De la Rue's image is of the lunar far side, I have left one assumption implicit, namely that there is a particular *proper part* of the moon that is causally responsible for the black disc in the image. Sorensen explicitly makes an analogous claim with respect to seeing, when he says that "I see an object only if I see a part of it," which is such that it "cause[s] my perception in an appropriate way." And, again, in the case of backlit objects, that part "is the object's absorption layer. Therefore, when I see a silhouetted object, I see it's back surface."²⁶ However, the claim that one sees an object only if one sees a proper part of it, or the analogous claim that a photograph is of something only if it is of a proper part of that thing, is not obviously true.

As far as I can see, Sorensen does not offer any explicit argument for this claim, as it pertains to seeing. Note that there would seem to be nothing in the causal theory itself that implies the idea that there has to be a proper part which is causally responsible for the experience, and which we "really" or "strictly speaking" see. And the same goes, *mutatis mutandis*, for the case of photography. If some event (the killing of the archduke Ferdinand of Austria, say) caused some other event (WWI, say) there would not have to be any particular *proper part* of the first event such that

²⁶ Sorensen, *Seeing Dark Things*, pp. 50–51. It seems plausible that Sorensen means *proper part* when he talks of "parts," since he identifies the absorption layer of the moon (which is a proper part of the moon) with the "part" of the moon one sees. See also p. 59 where Sorensen says that "[s]eeing a relevant attached part of an object counts as seeing the object *simpliciter*" and that "[s]ee' behaves just like most transitive verbs in this respect; to scratch a relevant attached part of an object is to scratch the object itself." This use of "part," too, indicates that he means proper part.

it caused the second (Gavrilo Princip contracting the muscles of his index finger, say); rather, the event as a whole caused the other event. But perhaps some (implicit) support of the claim could be seen to come from the abovementioned Gibsonian idea that, first, as a matter of vision-scientific fact, the surface is where the causal “action” is, and, second, that seeing (or photographing) that part suffices to (also) see (photograph) the object? However, this thought is obviously too weak to establish the claim that *only* by seeing (photographing) some proper part of an object does one see (photograph) the object. An example from Kendall Walton, which in one blow challenges Sorensen’s claim both as it applies to perception and to photography, is helpful here.

Kendall Walton famously holds that photographs are “transparent,” that one indirectly, but literally, sees photographed objects themselves, and not merely their images, when one sees photographs of them.²⁷ Contrary to how it has sometimes been interpreted, the transparency thesis is not about the epistemic advantage of photographs.²⁸ Photographs might be badly exposed and fuzzy, and hence epistemically poor, but this, says Walton, does not prevent us from “seeing through” them to the photographed thing, for “we also see through fog ... and through out-of-focus microscopes.”²⁹ Now, imagine that you see a red hibiscus flower through frosted glass and that you see it in an out-of-focus photograph. I think there is an intuitive sense in which both the experience and the photograph are of the flower, and, importantly, are also of its *redness*. So both experience and photograph seem to be of an *object* and (at least) one of its *properties*. But it does not seem obvious that either is of any particular (proper) *part* of the flower.³⁰ (Compare the case of someone who reports that it must have been the murderer she saw through the frosted bathroom window. “Did you see his face [surface]?” “No, but he was rather short.”)³¹ True, the surface of the flower – the part “where the action is” – would figure in a

²⁷ See Walton, “Transparent Pictures.” For Walton’s latest views on this matter, see “Postscripts to ‘Transparent Pictures’: Clarifications and To Do’s,” in his *Marvelous Images: On Values and the Arts*, (Oxford University Press, 2008).

²⁸ See Walton, “Transparent Pictures,” p. 273.

²⁹ Walton, “Transparent Pictures,” p. 258.

³⁰ Westphal says similar things about fast-moving objects. See Westphal, “Silhouettes are Shadows,” p. 193. E. J. Lowe challenges Sorensen’s seeing-objects-via-parts-claim from another frontier, which is interesting in the context of photographic transparency, when he says that “one can literally *see* a distant jet plane by seeing its vapour-trail, or *see* a charged particle in a bubble-chamber by seeing the track of bubbles that it creates, or indeed *see* a footballer on television during a game that is televised ‘live.’” E. J. Lowe, “Review of Roy Sorensen, *Seeing Dark Things: The Philosophy of Shadows*,” *Philosophy*, 84:4 (2009), p. 616. However, at least the last example is slightly puzzling. For if it is the case that we actually, but indirectly, see a footballer “through” televised images, why would this be a case of *not* seeing a proper part of him, in particular the part facing the camera?

³¹ Thanks to Emma Wallin for suggesting an example along these lines.

causal *explanation* of the experience being as of something red, but it does not seem to follow from this that we *see* the surface. Similarly, and more important in the present context, although it is true that the surface has played a crucial role in generating the photographic image, it does not follow that the photograph *is of* the surface, or any other particular part of the flower. But if this is so, Sorensen's claim that one sees an object only if one sees a proper part of it, and the analogous claim that photographs of objects necessarily are of particular proper parts of the objects, is not, or is at least not obviously, true.³² And granted this, it seems that we do not have to accept the counterintuitive claim that De la Rue's image is of the moon's far side. At any rate, I think there is a more plausible candidate for what this part of the image is of, to which I turn now.

i. Looks

The causal theory of photography has it that whatever a photograph is of must have interacted causally with the photograph in an appropriate way. A plausible candidate of what has thus interacted is *the moon*. The causal theory does not, as I have argued, on its own force us to say that the photograph is of a particular *proper part* of the moon. Should we settle with the moon? Should we simply say that the image is of the moon, period? I think there is more to be said, and that there is more that the image is of. As I have indicated, what I would like to suggest is that the photograph is also of the moon's *look*. It is of how the moon *looks* or *appears* from the pictorial *point of view*. Looks, in Alva Noë's idiom, belong to the class of *perspectival* properties, rather than the class of *factual* properties, and it is such perspectival properties, I suggest, that take precedence in De la Rue's image. Let me explain.

In looking at a coin, one can see that it is circular. This property of the coin is part of the experience's factual content. But as one looks at it from different points of view, the coin will also exhibit various elliptical perspectival shapes; it will exhibit what John Hyman calls its different *occlusion shapes* – the shape of the part of an intersecting transparent surface, perpendicular to the line of view, that one would have to cover in order to occlude the coin, were one to see it through such a surface.³³ Similarly, two coins at different distances from the viewpoint might be seen to be of

³² Sure, seeing through frosted glass is not "ordinary" seeing and out-of-focus photographs are not "ordinary" images, but neither are visual experiences where there is no visual information from the front of the seen object, nor is De la Rue's image.

³³ John Hyman, *The Objective Eye: Color, Form and Reality in the Theory of Art*, (Chicago: University of Chicago Press, 2006), pp. 75–79.

the same actual size – might be represented thus as part of the factual content of the experience – while exhibiting different relative *occlusion sizes*: the relative sizes of the parts one would have to block on the aforementioned surface to occlude the coins will differ.³⁴ Also, while a wall may be seen to be of uniform colour, depending on variations in illumination, its perspectival, or *aperture colour* may differ.³⁵

Now, as both Hyman and Noë stress, perspectival properties, or looks, are not subjective, but objective. As Noë puts it:

Looks are not mental entities. Looks are objective, environmental properties. They are relational, to be sure. But they are not relations between objects and the interior, sensational effects in us. Rather, they are relations among objects, the location of the perceiver's body, and illumination.³⁶

This is of course of key importance for my purposes, for unless looks were objective, they could not figure in photographs; one cannot – not even by means of MRI – take photographs of “the interior, sensational effects in us.”

Moreover, on Noë's view of perception, looks are “perceptually basic,” since they serve as a guide to how things are, to properties that belong to the factual content of an experience. We find out “how things are from an exploration of how they appear.”³⁷ In this way, perception on Noë's view is a “two-step” process:³⁸ “We see by seeing how things look.”³⁹ Now, I do not want to defend Noë's “two-step” account of perceptual experience, but an analogous account would seem particularly pertinent with respect to the question of photographic content. On such an account, for an image to be a photograph of something is, as a first step, to be of its perspectival properties. And in the typical case, it is thus of the said properties by (part of) the image's sharing,⁴⁰ or being experienced as resembling,⁴¹ the perspectival properties of the photographed thing. But this, again in the typical case, is only the first step, for as a second step, the image is also of factual properties – actual shapes, sizes and so on. And importantly, it is *due* to the fact that the image is of the perspectival properties – the looks of thing – that it also has factual content. Looks may or may not be perceptually basic, as Noë argues, but they are, I suggest,

³⁴ Hyman, *The Objective Eye*, pp. 98–99.

³⁵ Hyman, *The Objective Eye*, pp. 101–102.

³⁶ Alva Noë, *Action in Perception*, p. 85. See also Hyman, *The Imitation of Nature*, (Oxford: Blackwell, 1989), pp. 59–60, and Hyman, *The Objective Eye*, pp. 77–79.

³⁷ Noë, *Action in Perception*, p. 165.

³⁸ Noë, *Action in Perception*, pp. 82 & 164.

³⁹ Noë, *Action in Perception*, p. 165.

⁴⁰ This, roughly, would be Hyman's view in *The Objective Eye*.

⁴¹ This, roughly, would be Hopkins' view in *Picture, Image and Experience*. So I make no claims to originality in the above account.

photographically basic: photographs display the looks of things, and in doing so they reveal how things are. But again, this concerns typical cases, in-focus photographs of front-lit objects. In less ordinary cases, such as De la Rue's image, the process does not get far beyond the first step, or, in other words, the factual content is very poor. But the image, I suggest, is of the moon, and, importantly, is of the moon's look, most notably its occlusion shape. Much like seeing a flower through frosted glass involves seeing the flower and some of its properties (for example its redness), but does not seem to imply seeing a particular part of it, so, I suggest, De la Rue's image is of the moon and its look, but is not necessarily of any particular part of it, and is hence not necessarily of the moon's far side. True, a causal *explanation* of the occurrence of the black disc in the image might have to refer to the lunar far side, but it does not follow from this that the backside of the moon is what the photograph *is of*.

ii. The appropriate causal relation, again

The framework of Hyman and Noë does not only offer a more plausible account of the contents of De la Rue's image than to say that it is of the lunar far side, but it can also be used to say more about the appropriate causal relation in photography. Indeed, Noë uses the framework to account for the appropriate causal relation in *perception*, but whether or not this works for perception, an analogous view is, I think, exactly right with respect to photography. But before saying what Noë should have said about *photography* – that is, before presenting the view I think is right with respect to the latter – let me raise some doubts as to whether it should be said about perception.

One worry one might have with Noë's "two-step" view of perception regards precisely how the two steps are supposed to be connected. How does the one step lead to the other? Noë says that we see how things are (factual content) "by" seeing how they look (perspectival content). But he also stresses that both kinds of content are given in experience *simultaneously*, and that seeing how things are is not, as Ayer and other sense-data theorists thought, to go *beyond* what is really given in experience (how things look).⁴² Interestingly in the present context, Noë repeatedly uses Wollheim's notion of seeing-in – that is, pictorial or representational seeing – to illustrate what he has in mind:

Just as it is the case that you see a picture, and, in seeing the picture, you see what the picture depicts (and so in that sense see the depicted item in the

⁴² Noë, *Action in Perception*, pp. 79–82

picture), so I want to suggest that we see the elliptical perspectival properties [of a plate] and, in seeing them, we see the plate's circularity (and so in that sense see the circularity in the elliptical perspectival properties).⁴³

But it is not entirely clear how this comparison should be understood. After all, as Noë rightly stresses, it is of course not the case that perception is a matter of appearances *depicting* how things are. So perhaps what he intends is rather the Wollheimian idea of “twofoldness,” how we, when looking at a picture, are simultaneously aware of design properties of the surface and of the pictorial content.⁴⁴ But this way to understand the alleged two steps of the perceptual process is problematic. First, what Wollheim calls “the recognitional fold” of seeing-in (what one sees in the image) *does*, in a natural sense of the word, “go beyond” the seeing of the surface and the looks it displays; after all, seeing-in is a kind of “seeing what is not there.” Also, a more serious worry, perhaps, is that Wollheim describes twofoldness as the possibility to simultaneously *attend* to medium and subject, but it is doubtful, to say the least, that we thus *attend* to occlusion shapes and other perspectival properties.⁴⁵ In fact, it even seems unclear whether we in experience are *aware* of perspectival occlusion properties, and whether they are represented in perception. This is what Eric Schwitzgebel has recently argued on the grounds that it would seem to imply that we experience the world as *flat* (with respect to the perspectival content). Occlusion shape, then, is defined in terms of a two-dimensional surface, but then it seems to follow that if we see such a property, the thing that has it would look two-dimensional, or flat, too (at the same time as looking as taking up a certain portion of three-dimensional space).⁴⁶ But this does not square well with phenomenology. Schwitzgebel further suggests that our willingness to accept the idea that a coin looks elliptical “is due to *over-analogizing* visual experience to flat media such as paintings and snapshots.”⁴⁷ But if this is so, even if looks, as Noë construes them, do not really belong to perception, they are safely at home in

⁴³ Noë, *Action in Perception*, p. 241, footnote 8. See also, Alva Noë, “Experience without the Head,” in *Perceptual Experience*, eds. Tamar Szabó Gendler & John Hawthorn, (Oxford: Oxford University Press, 2006), p. 419, footnote 7.

⁴⁴ See e.g. Wollheim, “Seeing-as, Seeing-in, and Pictorial Representation,” p. 212. See also Noë, *Action in Perception*, p. 246, footnote 11, where Noë suggests that perception in general, not only seeing-in, is twofold.

⁴⁵ Here is Wollheim on twofoldness: “in Titian, in Vermeer, in Manet, we are led to marvel endlessly at the way in which line or brushstroke or expanse of colour is exploited to render effects or establish analogies that can only be identified representationally.” Wollheim, “Seeing-as, Seeing-in, and Pictorial Representation,” p. 216. Needless to say, we do not thus marvel at the looks of things in face-to-face perception.

⁴⁶ Eric Schwitzgebel, “Do Things Look Flat?” *Philosophy and Phenomenological Research*, 72:3 (2006), p. 591.

⁴⁷ Schwitzgebel, “Do Things Look Flat?” p. 593.

photography. In photography, we see how things are by seeing the looks the images exhibit. And even if looks cannot be used to specify the appropriate causal relation involved in perception, they can with respect to photography. Or at any rate, this is what I will now suggest.

Consider Strindberg's celestographs again. These images, I suggested, are not *photographs* of the moon. Even if they would *match* how the moon really is, they do not, as we say, *capture* it, in the way photographs capture how things are. Now, one way to cash out the idea of capturing – and at the same time indirectly specify the appropriate causal relation – is in terms of counterfactual dependence, as indicated earlier. The celestographs do not capture the moon because there is no counterfactual dependence between it and the images. And again, the reason why an unexposed plate or film does not capture the darkness in a way that a photograph of the night-sky does, is because it does not *depend* on what does or does not go on in any “scene.” Photographs, then, not only match how things are, but depend counterfactually on how things are: if the moon would have been considerably larger or smaller, or of a different actual shape, this would have made a difference with respect to how De la Rue's image turned out. But counterfactual dependence with respect to *factual content* is only half of the story. In addition, there is in photography a counterfactual dependence with respect to *perspectival content*, such that occlusion shapes and sizes vary depending on the location of the camera relative to the location of the photographed objects. Moving the camera closer to the subject would make for a larger occlusion size, and a series of snapshots of a spinning coin would provide images with varying occlusion shapes. Why is this important? Consider Sherrie Levine's famous series *After Walker Evans* – a series of photographs of reproductions of Evans' photographs from the Depression era. There is, I think, an intuitive sense in which these images are *not* photographs of the *subjects* of Evans' images, but of the *images themselves*. But why? After all, the process leading from the subjects to Levine's photographs would seem to be as mechanical and causal as one could wish, so why are they not photographs of the subjects? Also, there is a counterfactual dependence between the *factual content* of the images and the photographs, such that had the subjects' facial expressions been different, say, that would make for a difference for how Levine's images turned out. Still, the dependence with respect to *perspectival content* is of the wrong kind: if Levine would have moved the camera to the left or to the right, or would have taken a step forward, this would not (presumably) have been thus moving in relation to the *subjects* of the images, but

only to the images themselves. So the counterfactual differences in perspectival properties do not reflect the relation between Levine's camera and the subjects, and this, I suggest, disqualifies them from being *photographs of* the subjects; the causal relation between the images and the subjects is not appropriate, if you like. Real photographs, by contrast, exhibit shapes that *do* reflect the spatial relations between image and scene, and do so in a counterfactually dependent way. And this is why photography not only is a medium that captures how things are, but is also, as we say, a mechanism for capturing appearances.

iii. Concluding Remarks

If, as I have suggested in this paper, the notion of being a photograph of x is to be cashed out in terms of a dual counterfactual dependence, this suggests that there will be borderline cases. For since the richness of the patterns of counterfactual dependence is a matter of degree, there will be cases where the dependence between image and scene is so poor that we are unwilling to say that the image is a photograph of the scene, and other cases where we will be uncertain about what to say. Recall Goodman's "light speck" and Sontag's "brownish shadow." Slight movements of the camera in Goodman's example will not make much difference as to the part of the photograph which is of the horse, and nor will changes with respect to the position of the horse's legs, say. But the dependence in these kinds of images is not nil. Differences in illumination can make for a difference in how an out-of-focus image turns out, and if Goodman's horse were significantly larger, this would show in the image. Still, in these kinds of images, the dependence is a lot poorer than in more common photographs, and this explains why we hesitate to call light specks and brownish shadows *photographs of* their "subjects." But it should once more be stressed that the dependence that holds in typical photographs has a *dual* nature: in order for an image to be a photograph of a scene – to be appropriately related to the scene – the dependence should not only hold with respect to the factual content, but also to the perspectival content. This, as I suggested, is a way to account for the thought that photography is a mechanism that captures the appearances of things. But appearances, or looks, are not only needed to explicate the notion of an image being a photograph of a scene. They are also, as I have suggested, what less ordinary

images of backlit objects – such as De la Rue’s photograph – mainly are of. Briefly put, in photography – if not in other parts of life – looks really do matter.⁴⁸

⁴⁸ Thanks to Jonas Åkerman, Staffan Carlshamre, Kathrin Glüer-Pagin, Anna Jörngården, Sara Packalén, and Emma Wallin for valuable discussion and/or comments.