
NAÏVE REALISM, SEEING STARS, AND PERCEIVING THE PAST

BY

ALEX MORAN

Abstract: It seems possible to see a star that no longer exists. Yet it also seems right to say that what no longer exists cannot be seen. We therefore face a puzzle, the traditional answer to which involves abandoning naïve realism in favour of a sense datum view. In this article, however, I offer a novel exploration of the puzzle within a naïve realist framework. As will emerge, the best option for naïve realists is to embrace an eternalist view of time, and claim that in the relevant case, one sees a still existent star-stage located somewhere in the distant past.

The supposition of common sense and naïve realism, that we see the actual physical object, is very hard to reconcile with the scientific view that our perception occurs somewhat later than the emission of light by the object ...

B. Russell, 1927, p. 155.

Why should it not be admitted that our eyes can range into the past ...?

A.J. Ayer, 1956, p. 94.

1. Introduction

Suppose you look up at the sky on a clear night. There are many visible stars, but you decide to focus on just one. Suppose further that, as it happens, what is distinctive about the star you choose to focus on is that, unlike the other stars *it no longer exists*, having exploded and then ‘died’ hundreds of years ago. (This situation seems quite possible, given the finite speed at which light travels, and the great distance between ourselves and the heavenly bodies above.)

Pacific Philosophical Quarterly 100 (2019) 202–232 DOI: 10.1111/papq.12238

© 2018 The Authors

Pacific Philosophical Quarterly published by University of Southern California and John Wiley & Sons Ltd
This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

I submit that regarding this case, it is natural, at least initially, to think that both of the following claims are true, namely,

- (1) You see the star.

And yet,

- (2) The star no longer exists.

At the same time, however, one could be forgiven for thinking that these two claims simply cannot be true at once. For it is far from clear whether we can really make sense of something being seen despite no longer existing. As C. E.M. Joad appositely puts it, in connection with a similar case, the idea that ‘one can see what no longer exists’ seems just ‘absurd’ (1943, p. 113). What is no longer a part of reality seems to have no capacity for being seen. (In what follows let us refer to this as the **Existence Principle**. Cf. §3 below.)

The case described therefore seems somewhat paradoxical. On the one hand, the most natural and intuitive description of that case entails that claims (1) and (2) are both correct. For it seems plausible, at least at first, to say that in the relevant case you see a star that no longer exists. Yet on the other hand, the principle stating that only things that still exist are able to be seen seems very plausible as well. The trouble is that this principle entails that (1) and (2) are logically incompatible. For if only the things that still exist are able to be seen, then (1) entails the negation of (2), and vice versa.

What is the right way to proceed here? What we have, of course, is a quite general puzzle, one that we all face regardless of our specific views regarding the nature of perceptual experience. There is, however, a traditional answer to the puzzle, one that involves adopting a *sense datum theory* of perceptual experience.¹ That is, the traditional response is to adopt the view that in general, having a perceptual experience is a matter of being acquainted or presented with some non-physical sense datum. Seeing an external item, on this theory, is then a matter of that thing causing, in the right kind of way, an appropriate perceptual experience in one (whose intrinsic nature can be exhaustively characterised independently of the external item that is seen).

How does this help us to resolve the paradox? The answer – so goes the traditional thought – is that it allows us to reject the **Existence Principle**. On the sense datum view, seeing an object, O, is a matter of having some visual experience, E, that has been caused by O in the appropriate way (whereby E’s intrinsic nature can be characterised independently of O). Therefore, since it is possible for O to cause such an experience in the right way (i.e. so that it counts as a perceptual experience of O) even if O no longer exists by the time that E begins, it follows that the **Existence**

Principle is false, which means that the problem which we began with is dissolved.²

On the sense datum view, therefore, when you look up at the sky, you have a visual experience which consists in you being acquainted with a sense datum. (Since the sense datum exists at the present moment, there is no problem about your now being acquainted with it.) However, in this situation, it is also true that you are seeing the deceased star (albeit 'indirectly'). The reason why you count as seeing the star is that the star causes your perceptual experience in the appropriate way; i.e. in the way that makes for genuine perception.³ The central thought is that, given this view of matters, one can maintain, with Chisholm (1957, p. 153), that perceiving an extinct star 'is no more paradoxical than the action of such a star on a photographic plate or its reflection in the water'. This is because there is no problem about supposing that a star might cause one to have an 'sense datum experience' even whilst not being in existence at the time that the experience it generates occurs.⁴

Now in point of fact, one can adopt what is in effect this traditional line of response without having to embrace the sense datum theory. For in place of the sense datum theory, one could adopt some form of adverbialism (along with Chisholm, 1957), or else some form of intentionalism, along with most contemporary philosophers (cf. Dretske, 1969, pp. 71–74), and yet still be able to reject the **Existence Principle** as the sense datum theorist does. In short, given any 'Conjunctivist' view whatsoever, one can dissolve the paradox by rejecting the **Existence Principle**. For given Conjunctivism, one can hold that, when one sees the star, one has an experience whose intrinsic nature is independent of the star itself. The idea would then be that, due to the fact that the star produces the experience in the right kind of way, the experience that one has counts as a perception of it. One thus visually perceives the star even though the star no longer exists, whereby this is possible because (i) perceiving the star is a matter of having an experience appropriately caused by the star, and because (ii) the star can cause one's experience in the appropriate way despite no longer existing when the experience occurs.⁵

This, then, is the traditional way to respond to the quite general problem involving the deceased star. In this article, however, I want to set aside this traditional Conjunctivist response. This is because I want instead to explore how the problem-case involving the star might be resolved within the context of a *naïve realist* view, and so a view that entails Disjunctivism and, therefore, the rejection of Conjunctivism.⁶ There are in fact several reasons why focusing on naïve realism in particular is worthwhile, which I shall presently set out.⁷

One main reason is that, as we will see, naïve realists cannot endorse the traditional line of response that is available to Conjunctivists (cf. §3); that is, they cannot deny the **Existence Principle**. For this immediately raises

the question as to what naïve realists *should* say regarding our initial problem. In the recent perception literature, there has been a surge of interest in naïve realism, and so it's well worth working out what exactly naïve realists should say regarding the problem involving the deceased star.

A second, related reason for focusing on naïve realism in particular is that the case involving the deceased star has traditionally been used to show that the naïve realist view of perceptual experience is false.⁸ Indeed, this kind of argument was viewed by many, including Bertrand Russell and C.D. Broad, as being just as effective against the naïve realist as any argument from illusion or from hallucination might be. Yet in the current literature, while the various problems involving illusion and hallucination that naïve realists face remain widely discussed, the case involving the deceased star (and the associated 'time-lag argument') are not.⁹ This means that a potentially deep problem for naïve realism remains very much under-explored at the present time. The current essay aims to rectify matters, at least to some extent, by considering what naïve realists should say regarding the problem case involving the star.

What I shall argue, in effect, is that the naïve realist's only hope is to adopt an 'eternalist' view of time, according to which past objects exist just as much as present objects do. If that is right, however, then it turns out that (perhaps surprisingly) naïve realists, despite the fact that they endorse what many take to be the common sense view of perceptual experience, are unable to accept what many take to be the common sense view regarding the nature of time, namely presentism: the view that only what is located at the present moment exists. Whereas the various rival 'Conjunctive' theories of perception do seem to be able to adopt the common sense presentist view. (For as a Conjunctivist one can maintain that whilst one's presently occurring experience does exist, the star that caused it no longer exists, which is precisely what presentism predicts.¹⁰) The point is that these are surely important results to establish (if indeed they are genuine results). For it surely matters to the contemporary debate regarding naïve realism to discover that if one endorses naïve realism then one has to reject presentism in favour of eternalism, especially given that by holding on to a Conjunctivist view one *can* retain a presentist view of time. This is in effect the third main reason why it is worth focusing on the naïve realist view in particular in relation to the general problem involving the star.

The rest of the article is structured as follows. In the next section, I describe the naïve realist view of perceptual experience in detail (§2). I then move on to exploring the various options available to the naïve realist for diffusing the problem we began with, concluding ultimately that if naïve realists are to offer an adequate interpretation of this case, they must endorse an eternalist view of time (§§3–5). I conclude in §6.

2. *Naïve realism*

Naïve realism is a theory about the nature of perceptual experience, i.e. the kind of experience involved in cases of genuine perception. It comprises two central claims. The first concerns the structure of perceptual experience. The claim is that each perceptual experience consists in the sensory presentation of some external object to the perceiving subject. From this aspect of naïve realism, it follows that our perceptual experiences are relational in nature, and contain external objects as constituents.

The second core claim of naïve realism concerns phenomenology. The claim is that our perceptual experiences derive their distinctive phenomenal characters (at least in part) from the external objects they present, and from the sensible qualities these manifest. As Kalderon (2011a, p. 241) appositely puts it, the core idea is that when I perceive (for example) a red tomato, the conscious character of my perceptual experience ‘depends on, and derives from’, the qualitative character of the tomato that I see. More generally, as Martin (1997, pp. 83–84) observes, the naïve realist maintains that it is ‘the actual objects of perception ... and the properties which they ... manifest to one when perceived, [that] partly constitute one’s conscious experience, and hence determine the phenomenal character of one’s experience’.

One interesting upshot of this latter commitment is that naïve realists have to accept what might be called a radically non-Galilean ontology – i.e. an ontology that, far from kicking the sensible qualities upstairs, into our minds, rather locates those sensible qualities within the external world we see and sense. As Campbell (2010, p. 206) puts it, naïve realism ‘depends on the idea that qualitative properties are in fact characteristics of the world we observe’, whereby this is because, according to naïve realism, ‘our experiences have the qualitative characters ... they do in virtue of the fact that they are relations to those aspects of the world’.

Naïve realism is thus a radically externalistic view about the nature of perceptual experience. For it implies that our perceptual experiences, rather than being ‘narrow’ mental events which occur just inside the head, instead reach all the way out to the external things they are of and thereby ‘literately include the world’ (Martin, 1997, p. 84).¹¹ As Logue (2009, p. 25) observes, on naïve realism, our perceptual experiences ‘literately extend beyond the subject’s head, to encompass what the experience is of’.

With the naïve realist theory set out, I want to return to initial the case, sketched at the start of the article, wherein you see, or at least seem to see, a distant and no longer extant star. The problem is that on the one hand, the following two claims seem to describe the case correctly:

- (1) You see the star.

And,

- (2) The star no longer exists.

Yet on the other hand, the **Existence Principle**, which tells us that if an object no longer exists, then it cannot be seen, seems very plausible. The trouble is, again, that by the **Existence Principle**, it follows that either (1) or (2) is false.

What should we say, as naïve realists, in order to dissolve the problem here? There are of course three options: reject claim (1), reject claim (2), or reject the **Existence Principle**. These options will be explored in the remaining sections (§§3–5). I will first consider whether the naïve realist can follow the sense datum theorist in giving up the **Existence Principle**. My answer here will be negative. This means that the naïve realist has to give up either (1) or (2). These two options will be considered in §4 and §5 respectively.

3. *The existence principle*

The sense datum theorist responds to our puzzle by rejecting the **Existence Principle**. A more precise statement of that principle is as follows:

Existence Principle

It is not possible to see something that no longer exists.

In this section, my aim is to see whether the naïve realist can follow suit. The answer I shall argue for is that she can't. Unlike the sense datum theorist, or the Conjunctivist more generally, the naïve realist cannot dissolve our puzzle by rejecting the claim that what no longer exists is unable to be seen.¹²

On the naïve realist view, seeing involves having a perceptual experience which consists in the visual presentation of the external items one perceives. The external things thus presented to one – or, alternatively, with which one is acquainted – are therefore constituents of one's perceptual experience. My first point is that it is difficult to see how something that no longer exists – i.e. that is no longer a part of reality at all – could be a constituent of a perceptual experience. That which *does not exist* has no capacity to constitute, even in part, something that *does exist*. But if that's right, then no perceptual experience could have something no longer in existence as a constituent.¹³ If that's correct, however, then the **Existence Principle** appears to follow. Naïve realism, therefore, seems to entail that the **Existence Principle** is true.¹⁴

A second point is worth making in this connection. On the naïve realist view, the core phenomenal character of one's experience is determined by the sensible qualities manifested by the objects one is presented with. (On the notion of 'core' phenomenal character, see Brewer, 2011.) However, if something no longer exists, then it manifests no visible qualities. Therefore,

something that no longer exists is not able to determine the phenomenal character of one's experience. So this provides yet further reason for thinking that if naïve realism is true, then one cannot be visually presented with, and hence cannot be said to see, items that no longer exist. Indeed, on a plausible interpretation, what the naïve realist maintains is that something is seen *only if* it contributes to the phenomenal character of the experience one has. For arguably, part of what it is for something to be sensorily presented to one, in the sense that the naïve realist intends, is for it to contribute to the core phenomenology of one's experiential state, via the sensible qualities that it manifests. So if the star does not exist, and hence does not manifest any visible qualities – so that it cannot even partly constitute the phenomenal character of an experience – then it follows that according to naïve realism the star is not visually presented to one. But this then seems to imply that the star is not seen.¹⁵

These points seem compelling. However, there is one way in which a naïve realist wishing to reject the **Existence Principle** might respond. The way to respond would be to deny that seeing something necessarily involves having an experience that consists in the visual presentation of that thing. Compare here the sense datum view, according to which it is sense data, rather than the physical things we (indirectly) see, that are the items visually presented to us. On the sense datum view, we are presented with sense data, but we also (indirectly) see external things that are not visually presented to us. The present thought is that perhaps the naïve realist could adopt a similar view.

How would this work? The proposal I have in mind is this. In the case involving the star, one has a visual experience that consists in the visual presentation of something other than the star – something that still exists. However, one also counts as seeing the star – indirectly if you will – in virtue of being visually presented with that thing. The idea is that so long as the thing one is visually presented with stands in some appropriate relation to the deceased star, then in having the specific visual experience that consists in the visual presentation of that thing one will *thereby* see the no longer existent star.

To make this work, one would have to find a suitable 'surrogate' object, to take the place of the deceased star as the object of acquaintance – i.e. as the item that is visually presented to you when you look up at the night sky. The obvious suggestion is that in the relevant case, what one is acquainted with is the *perceptible light produced by the star*, which still exists at the time of your experience (cf. Suchting, 1969, pp. 55–56). Since the light you are acquainted with is causally related to the star in the appropriate way, one's perceptual experience could plausibly count as 'indirect' perception of the star itself. (Seeing the star by virtue of being acquainted with its light would be analogous, perhaps, to perceiving a car by hearing the sound that it produces, or to seeing an object by seeing its facing front. Such cases of perceiving one thing by virtue of perceiving another count as cases of 'indirect' perception

in the precise sense articulated by Jackson, 1977. And arguably, it is not incompatible with naïve realism to hold that some cases of perception are ‘indirect’ in this specific sense; cf. Johnston, manuscript.)

The trouble with this view, however, is that it is insufficiently general. In the case involving the deceased star, we *can* perhaps locate an appropriate ‘surrogate’ to stand in as the object of acquaintance, *viz.*, the perceptible light produced by the deceased star. However, there are other, relevantly similar cases wherein it is much harder to find a suitable surrogate object. Suppose, for example, that I look over at the orange flowers on my desk. And suppose also that in the very short time it takes for the light leaving those flowers to reach my eyes, they are instantaneously destroyed. Here it is much harder to locate a surrogate object of acquaintance. There is, I submit, no analogue in this situation for the still-extant patch of perceptible light that was produced by the deceased star.¹⁶ More generally, we could have raised our initial puzzle using a different case and a quite different perceptible object, whereby the chosen object would not leave behind any perceptible light (or *any* ‘surrogate object of acquaintance whatsoever) were it to be destroyed just prior to the *perceptual* experience one has of it beginning.¹⁷

I submit, therefore, that the naïve realist cannot resolve our puzzle by following the sense datum theorist (or more generally, the Conjunctivist) in rejecting the **Existence Principle**. It follows that in order to resolve the puzzle, the naïve realist must reject either (1) or (2). I will explore both of these options in the following two sections. We will begin with the question as to whether the naïve realist can reject claim (1).

4. *Seeming to see*

One way to react to our initial puzzle is to assimilate the case of seeing the star to that of ‘seeing’ something in hallucination. That is to say, one might think that in the relevant case, one does not see the star, but only *seems* to see a star – just as in hallucination, one does not see anything but merely *seems* to do so. For example, in the case wherein Macbeth hallucinates a bloody dagger, we might initially speak of the dagger Macbeth sees. We would be quick to add, however, that as there is in fact no dagger there, there is in fact no dagger Macbeth *really* sees. Macbeth seems to see something but there is nothing he actually sees. Rather, he merely seems to see. Thus, is not the case that:

(*) Macbeth sees the bloody dagger.

Again the reason why (*) is not true is that there is no bloody dagger there to see. In place of (*), what is really the case is that:

(+) Macbeth seems to see a dagger, but does not actually see anything.

The present suggestion is that in the star case, since there is actually no star to see (there used to be; but that star no longer exists), it is not true that you see anything when you look up and seem to see a star. Rather you seem to see a star but there is nothing there to see. So is not the case that:

(1) You see the star.

Rather, what is the case instead is that:

(1*) You seem to see a star, but do not actually see anything.¹⁸

If this is right – that is to say, if (1) really is false – then our puzzle dissolves. We can hold on to (2), and to the general principle that what no longer exists cannot be seen, and yet avoid a contradiction by saying that (1) is false.

This sub-section argues against this view. Unlike the case of having an hallucination, seeing a star that no longer exists really does involve *seeing*, as opposed to merely *seeming to see*. So it is misguided to try to assimilate the case of seeing a star that no longer exists to ‘seeing’ a dagger that is in fact unreal.

My first point can be put in this way. Hallucinations are strange and unusual in a particular sort of way. They occur, as Johnston (2004, p. 135) puts it, when the ‘visual system misfires’.¹⁹ However, when one looks up into the sky to see a distant star, even a star that no longer exists, there is no sense in which the visual system misfires. Rather in such cases, it seems that what we have is just an ordinary case of perception, and hence an ordinary case of seeing. As G.E. Myers writes, when discussing the kind of case we are considering:

What is peculiar here, of course, is not some breach in nature’s laws, or [that of] hallucination or delusion on our part in claiming to see a star, but simply the length of time required for light to travel distances (1957, pp. 98–99).

Accordingly, it looks implausible to treat the case in which you look up and (seem to) see a no longer existent star as in effect a case of hallucination. For what we seem to have in such cases is simply genuine perception, and hence genuine seeing – albeit genuine perception that takes place after the object of perception has ceased to be. (N.B. even if one denies that hallucinating always involves ‘the perceptual system misfiring’, we can agree that in some sense one has an hallucinatory experience only when things ‘go wrong’ in a certain distinctive way. What I deny, however, and what I think the above passage from Myers brings out so well, is that things don’t ‘go wrong’ in the star case in the kind of way that would make it plausible to

treat that case as one involving hallucination rather than genuine perception.)

This point can be consolidated in the following way. Many theorists of perceptual experience accept the Conjunctivist idea to the effect that there is just one basic type of experience, which is present in both perceptual and hallucinatory cases (cf. Martin, 2004). Proponents of naïve realism, however, cannot accept this view, and have to hold instead the Disjunctivist claim to the effect that there are two basic types of experience, namely *perceptual* and *hallucinatory* experience, whereby these two experience-types have fundamentally different natures. This is due to the fact that for naïve realists, perceptual experiences consist in the presentation of external objects, yet this is obviously not true of hallucinatory experiences. Thus, it follows that hallucinatory experiences must have different natures to perceptual ones, so that perceptual and hallucinatory experiences end up being experiences of fundamentally different kinds.

For a naïve realist, therefore, having an hallucination – that is to say, having an experience that involves seeming to see, without actual seeing – is to have an experience of a completely different kind to the sort of experience involved in ordinary perception. Therefore, in order to reject claim (1), the naïve realist would have to say that in the case involving the deceased star, you have an experience of a radically different kind to the sort that is involved in ordinary cases of seeing. This view, however, looks rather hard to believe. There is, it must be granted, at least some plausibility to the idea that hallucinatory experiences are events that are fundamentally different in kind to ordinary perceptual experiences.²⁰ Again, hallucinations are strange and unusual in a particular sort of way; they seem to involve the ‘visual system misfiring’, and it does not seem too much of a stretch to think that they might be of a radically different metaphysical kind to ordinary perceptual ones. However, there is not the same level of plausibility to the idea that your experience, when you look up into the sky and (seem to) see the star, is radically different in nature to the sort of experience involved in ordinary seeing. For when you look up and see the star, this situation is nothing like what happens in other cases of hallucination; nothing ‘goes wrong’, and the visual system does not ‘misfire’; you simply look into the sky and seem to see a star (albeit one that happens no longer to exist).

This, I submit, provides one reason to think that we cannot treat (1) analogously to (*). In a case of hallucination, one seems to see something but there is nothing that one sees.²¹ In the case involving the star, however, it seems that something *is* seen. For the case involving the star seems to be one of ordinary perception and nothing like a case of hallucination.

(What about treating the relevant case as being one of *illusion* rather than *hallucination*? The trouble is that for naïve realists, there are only two options when it comes to illusory experiences; naïve realists can either treat

these types of experience as a species of perceptual experience, or else view them as a species of hallucinatory experience. In short, naïve realists can adopt either ‘PI/H Disjunctivism’ or else adopt ‘P/IH Disjunctivism’, to use the helpful terminology of Byrne and Logue, 2008.²² However, if the naïve realist claims that illusory experiences are to be viewed as a type of *perceptual* experience (and thus adopts PI/H Disjunctivism, as most naïve realists do), then she will not be able to deny claim (1), for obvious reasons, but this is the move we are presently considering. Yet if the naïve realist takes the other option, i.e. if she claims that illusory experiences are a type of *hallucinatory* experience, then the above line of argument against doing so will apply, and the naïve realist will still not have found a plausible way to reject claim (1). Thus, the naïve realist apparently gains nothing in terms of solving the puzzle that we began with if she considers the relevant experience as being illusory.²³)

I will now present two further arguments for thinking that claim (1) is true (at least given that naïve realism is true), and, therefore, for thinking that the naïve realist cannot resolve the paradox by rejecting that premise. Both of these arguments aim to show that if we reject (1), then we have to embrace the absurd idea that we never see external objects. The first argument we can call the **Generalising Argument**. The second we can call the **Modal Argument**. Let us consider each in turn.

To begin with, consider the view that in the case of the deceased star, what actually happens is that you do not (directly) see the star, but rather (directly) see a ‘sense datum’, which is an item that’s distinct from the star and from all other ordinary physical objects (cf. §1). Many philosophers have argued for this view about this type of case. But in addition, they have argued that if, in the star case, you see only a sense datum and not the star, then it follows that in *every case of perception*, what one perceives is a sense datum, rather than the physical object one takes oneself to be seeing. The present point I want to make is that this ‘generalising’ move looks plausible. Once it is granted that in the star case one sees only a sense datum, it should be granted that the same is true of all putative cases of physical object perception.

The reason why this generalising move looks plausible is that all perception involves a ‘time-lag’. As Foster (2000, p. 100) notes, when Pauline looks at the apple in her hand (to use Foster’s example), ‘it takes [time] for light to travel from the surface of the apple to her eyes, and ... for her eyes to send the relevant signals to her brain’. But this means that her ‘visual experience at any moment is causally responsive to the state of the apple at a fractionally earlier moment’ (ibid.). The point is that since all perception involves a time-lag, it follows that if the time-lag in the star case implies that the star is not actually seen, but rather that some sense datum is seen instead, then the time-lag always involved in cases of physical object perception implies that the physical object is not (directly) seen,

but rather that some sense datum is (directly) seen instead. Here is Ayer forcefully making the point:

But if in these cases [such as the case involving the deceased star], we are not to say that we see the physical object, then we should not say it even in the case where the time interval is negligibly small; for the comparative length of the interval makes no difference to the character of our experience: there would be no justification for maintaining that we saw an object of one kind when the interval was very short, and an object of an entirely different kind when it was somewhat longer. At what point in the continuous series of possible time intervals would this fundamental change take place? (1956, p. 94; cf. Broad, 1959, p. 807; Suchting, 1969, p. 48).

The point seems plausible. If in the star case one sees a sense datum rather than the star, then since a time-lag is involved in all cases of seeing, it follows that in all cases one sees a sense datum rather than the physical object.²⁴

Moreover, it appears to me that we can make the same basic point without invoking sense data. Suppose one denies that in the star case one actually sees the star. Then I submit that, since a time-lag is involved in all cases of perception, then by parity of reasoning, one must say that in all cases of perception, one does not see the relevant physical object, but only seems to do so. For to say otherwise would be to say that relatively long time-lags involve failing to see the object, whilst shorter ones do not. This ruling, however, looks completely arbitrary. To quote Ayer once more: ‘At what point in the continuous series of possible time intervals would this fundamental change [between seeing and not seeing the relevant physical object] take place?’

This is the **Generalising Argument** for holding on to (1). The fundamental idea is that we cannot reject (1) because if we do, then we have to embrace the absurd conclusion that we never see the physical objects that we seem, in perceptual experience, to see. (Or at least, that we never see such objects in the direct, most basic way.) For to maintain that whilst you do not see the star, nevertheless you do, in the more ordinary cases, see the relevant physical object, would require maintaining that whilst a lengthy time-lag involves failing to see the object, a shorter time-lag is compatible with seeing the object. But this, in turn, would require holding that at some arbitrary point within the continuous series of possible time-lags, a ‘fundamental change’ – between seeing and not seeing the relevant physical thing – takes place.²⁵

There is a perhaps way to reply to this argument. What might be said is that the reason why one sees the physical object in some cases, but not in others, despite the fact that all cases involve a time-lag, is that in some cases, but not others, the physical object no longer exists by the time the relevant experience starts. On this view, there is no arbitrary cut-off, but rather a cut-off that is principled: some cases involve seeing whilst others do not because of the important fact that in some situations, but not in others, the physical object still exists by the time the subject’s experience takes place.

I am not sure how plausible this response really is. However, in any case, it should be noted that the proponent of this reply still faces the **Modal Argument**, which we can consider presently. Suppose we grant that in those cases where the object ceases to exist before the experience takes place, the relevant person does not see anything, but only seems to see something. It can be argued that if this is so, then we never see the ordinary, physical objects that we seem to. But obviously this is not true. There are plenty of cases in which we do see the ordinary external objects that we seem to see.

Suppose, for instance, that Pauline sees an apple in world *w*. Now consider some other world *w**, which is just like *w* except for the fact that, during the very small interval of time that it takes for the light leaving the apple to reach Pauline's eyes, the apple is instantaneously destroyed. Now if, in general, one fails to see the physical object in cases wherein that object ceases to be before one's experience begins, then in *w** Pauline does not see the apple. The question now is whether Pauline sees the apple in *w*, i.e. in the case where the apple is not destroyed in the small interval of time it takes for the light leaving the apple to reach Pauline. I take it that the answer we want to give here is 'yes'. However, what I wish to argue at this point is that if Pauline fails to see the apple in *w**, then she fails to see it in *w* as well (and vice versa, i.e. if she does see the apple in *w*, then she sees it in *w**).

What reason is there for thinking this? The reason is that to say otherwise would be to hold that Pauline has one kind of experience in *w*, and another, quite different kind of experience in *w**. Specifically, one would have to hold that whilst in *w*, Pauline has an experience that is perceptual, and consists in the presentation of some external thing, nevertheless in *w**, Pauline has an experience that is not perceptual, and that does not consist in the presentation of some external thing. However, this view of matters does not look plausible at all. Rather, whatever kind of experience Pauline has in *w**, she also has that kind of experience in *w*. For these two worlds are *just too similar* for this not to be so. In other words, there is nothing that could make it the case that Pauline has a radically different kind of experience in *w* as opposed to *w**.²⁶

Notice, for instance, that all the same physical relations that hold between the apple and Pauline in *w* also hold between the apple and Pauline in *w**. Yet plausibly, the kind of experience one has is determined by the underlying physical facts, and, in particular, by the physical relations between the person and the experienced thing. From this, however, it follows that if Pauline sees the apple in *w*, and hence has a perceptual experience of the naïve realist kind (which includes the apple as a constituent), then the same is true of Pauline in *w**. Contraposing, it follows that if Pauline fails to see the apple in *w**, and so fails to have a perceptual experience of the naïve realist kind (which includes the apple as a constituent), then the same is true of Pauline in *w*. For either the physical relations that hold between the apple and Pauline (in both

worlds) are sufficient for her to see the apple, and hence sufficient for her to have a naïve realist experience including it as a constituent, or else they are not sufficient for this to be so. In short, since the kind of experience a person has supervenes on the physical relations that hold between the person and the object seen or sensed, there is no room to say that whilst Pauline has one kind of experience in w , she has an entirely different kind of experience in w^* . Hence, one cannot say that whilst Pauline sees the apple in the first world (i.e. w), she does not see it in the second (i.e. in w^*) – since if that were so, then she would have to have a different kind of experience in each world, and this is an implausible result.

The conclusion is that if indeed Pauline fails to see the apple in w^* , then she does not see it in w . But clearly Pauline does see the apple in w . It follows that she sees it in w^* as well – even though it (apparently) no longer exists.²⁷

I conclude that ultimately, rejecting (1) is not a viable strategy for the naïve realist. It follows that the naïve realist has to reject (2) if she is to dissolve the puzzle that we started with.

5. *Seeing the past*

I have said that the naïve realist, if she is to dissolve the puzzle we began with, has to reject claim (2). It is initially far from clear, however, how (2) could be rejected. For it looks to be a plain empirical fact, built unproblematically into the case, that the star no longer exists when you look up into the sky.

However, there is in fact a way of rejecting claim (2). To bring this out, we have to take a brief detour through the metaphysics of time.

5.1. PRESENTISM AND ETERNALISM

Perhaps the most intuitive view of time, the view that's often said to be the view of commonsense, is the *presentist* view, according to which only the present moment and presently existing things are real (see e.g. Markosian, 2004; Zimmerman, 2008). The more dominant view among contemporary philosophers, however, is *eternalism*, according to which past, present, and future moments, along with past, present and future *things*, are all equally real (see e.g. Sider, 2001, among many others).²⁸ Ted Sider illustrates the difference between these two theories as so:

According to eternalism ... [i]ust as distant places are no less real for being spatially distant, distant times are no less real for being temporally distant; the ontological significance of distance is thus a respect in which time is spacelike. Reality consists of a four-dimensional spatiotemporal manifold of events and objects – the so-called 'block universe'. In the block universe, dinosaurs, computers, and future human outposts on Mars, are all equally real.

According to presentism, on the other hand, only currently existing objects are real. Computers, but not dinosaurs or Mars outposts, exist (2001, p. 11).

For the eternalist, Napoleon still exists. That is to say, he is still *one of the things there are*. He is a part of reality. It is just that he is *located* further back in the block universe than you or me. (For the eternalist, time is space-like. And so just as we can speak of things being *located* at various spatial positions, so too we can speak of things being *located* at various temporal regions within the four-dimensional manifold; cf. Markosian, 2004, and Sider, 2001, p. 59.²⁹) For the presentist, by contrast, this is not so. Napoleon does not exist, he is no longer a part of reality. For only what exists *now* exists at all. In short, on the presentist view, only the present moment and the things contained therein exist.³⁰ (There is no 'block universe', the universe is just a slice of the eternalist's block. And that slice is as it were ever changing, for *when* is present is ever changing!)

With the contrast between eternalism and presentism stated, it is now possible to see how the naïve realist might reject claim (2) driving our problem case. That is to say, it is possible to see how the naïve realist might reject the claim that the star no longer exists. This she can do if she adopts eternalism. For if eternalism is true, then there is a perfectly good sense in which the star remains in existence, despite having exploded and died hundreds of years ago. This is because the star, despite not being located at the present moment, is still located *somewhere* within the four-dimensional universe.

5.2. ADOPTING ETERNALISM

According to eternalism, past objects still exist. That is to say, they are a part of reality, despite not being located at the present moment of time. Thus, on the eternalist theory, Napoleon, although no longer present, still exists. He is a part of reality, because he is temporally located *somewhere* in the block universe (presumably between 1796 and 1821). So it is true, now, at the present point of time, that Napoleon exists. He does not presently exist, insofar as he is not located in the present. But nonetheless he does exist and is real.

Suppose the naïve realist adopts this eternalist theory. It follows that she is in a position to reject claim (2). What claim (2) says is that the star no longer exists. However, this is the case only if presentism is true. So if the naïve realist holds an eternalist theory, then she is able to reject claim (2), and thus avoid the puzzle we began by setting out in §1.³¹

Let us suppose, for concreteness, that the star exploded and 'died' exactly three hundred years ago. And let us refer to the present time as *t*. Here is what the naïve realist might say if she embraces eternalism and rejects (2):

Like most material objects, the star has a finite lifespan. It is temporally located at a certain period, between t^{-n} and t^{-300} , say, in the block universe. It is not, however, temporally located

anywhere after t^{-300} , for at that point it explodes and ‘dies’. Nevertheless, since eternalism is true, this does not mean that the star does not exist at t (i.e. the present time), for (according to eternalism) reality encompasses more than just the present time; for instance, it includes objects located in the past. So at time t , the star still exists, though it is not *located* at that time. At t , then, when you look up into the night sky, you are presented with a past object, albeit one that is no less real for being past. That is, you are presented with a star that still exists in the most general, unrestricted sense, despite not being located now. More exactly, you are presented with the ‘stage’ of the star that is located at the region of time from which the star emitted the light that (after many years of travel) reaches your eyes and (after suitable cognitive processing) causes your perceptual experience.³² For when you look into the sky, you see the star not as it is, but as it was when the light waves that caused your perceptual experience first began their long journey from the stage of the star that you now see (cf. Joad, 1943, p. 114).

Of course, to view the case in this way, the naïve realist must admit that it is at least possible for our eyes to ‘range into the past’ (to quote Ayer, 1956, p. 94). But if she is an eternalist, such a claim should not be problematic; at least, no more so than the claim that our eyes can range into the present.³³ For the past and present, according to eternalists, are both equally real. It may be convenient, for different people at different times, to label various parts of the block universe ‘past’ and ‘present’ – but these distinctions do not ‘carve nature at the joints’ (cf. Sider, 2011). So being acquainted, in perception, with a past object ought to be no stranger than being acquainted with a present one.

It is my view that the above represents the naïve realist’s best strategy for handling the problem we began with. However, this ‘eternalist’ move is by no means without its problems. To close this section, I want to mention three problems in particular. The first of these, I think, can perhaps be dealt with. The other two, however, pose challenges that it seems rather difficult to meet (though I do not say they cannot be met).

5.3. SOME PROBLEMS

The first problem I want to mention is broadly phenomenological. On the view being recommended above, what happens when you look up at the sky is that your eyes range into the past: you are presented with some past stage of the star that is located at some part of the block universe that is *before* the present time. However, this is arguably not how things will *appear* to you when you look up and see the star. For intuitively, the star-stage that you see will seem to be located in the present, just like everything else you seem to see. As C.D. Broad (1925, p. 145) points out: ‘It is of the essence of a perceptual situation that it claims to reveal an object as it is at the time when the situation is going on’.

The objection, then, is that the view articulated above does not square with the phenomenology. When you look up into the sky, the star you see

will seem to be located in the present. But on the view being proposed, the star you see (or rather, the relevant stage of it) is actually located in the past.

Now, one way to respond here would be to challenge the phenomenological observation. That is, one might reject Broad's suggestion that perceptual experience claims to reveal an object as it is at the time when the perceptual experience is occurring. However, it seems to me that this would be misguided. To quote Broad once again, whilst '[i]t is perfectly true that ... when I see a distant star, there is strong reason to believe that, if the situation reveals a physical object at all, it reveals it as it *was* long before the situation began, [nevertheless] the situation *does claim* to reveal the star as it now is' (ibid.). This observation, it seems to me, looks rather difficult to resist.

The naïve realist thus requires an alternate response. Here is what I think should be said. (Though this is by no means the only option that the naïve realist has, as I bring out below.) In my view, the naïve realist should accommodate Broad's observation at the level of *judgement*. (Cf. Kalderon, 2011b, on naïve realism and illusion and the fact that many so-called illusions can be viewed as presentations of reality as it is, whereby we apt to judge it as being some way it isn't; see also Travis, 2004. Arguably one already finds this kind of view present in Austin, 1962.) That is, she should maintain that in perceptual experience, we naturally *judge* the objects we see to be compresent with our experiences of them (which makes it surprising to learn that this is not always the case). On this view, there is something *illusory* about your experience as of the (relevant stage of) the star, for the thing that you see appears to be compresent with your experience of it, whilst in reality this is not so. However, all this boils down to is the fact that when you see the star, you mistakenly judge it to be located in the present, i.e. to be co-located (temporally speaking) with your experience of it, when this is actually not the case.³⁴

There is another option the naïve realist might pursue at this juncture.³⁵ This would be to view the case as illusory, not in the sense that it leads to mistaken judgements, but rather in the sense that the experience itself seems to present the star-stage that one sees as present when it is past – and indeed as co-present with a host of object-stages that strictly speaking occupy different times. In §2, I said that on the naïve realist view, our perceptual experiences have *relational structure*: when S perceives an object, O, S's experience consists in the sensory presentation of O to S. Some naïve realists, however, prefer a more complicated picture, according to which the presentation relation is three- rather than two-place. Mark Johnston, for example, defends a view on which, when S perceives an object, O, S's perceptual experience consists in the sensory presentation of O to S *under a mode of presentation*, M. More simply, for Johnston, when S sees O, her perceptual experience consists in the presentation of O *as F* to S. (See Johnston, 2007, 2014; cf. Alston, 1999; for similar views on which the presentation (or acquaintance) relation is three-place, see also Brewer, 2011; Campbell, 2009; and French, 2014.)

Now if one has this view, then one can accommodate Broad's insight without appealing to mistaken judgement. What one can see is that when you see the star, your experience consists in the presentation of the star to you *as compresent with the present moment*. The idea is that this would be an *illusory presentation*: the star-stage that you see would be located in the past, and yet presented to you as if you were located in the present. This view would arguably accommodate the relevant phenomenological insight just as well, if not better, than the view that tries to accommodate this insight as the level of judgement.³⁶

Now, one might worry that if one responds in this way, i.e. by saying that Broad's 'insight' merely brings out that there's an element of illusion in certain cases of perceptual experience, e.g. when seeing a deceased star, then one will have to claim that in *every* case of perception, there must be an element of illusion or mistaken judgement, due to the fact that all perception involves a time-lag, however small that time-lag may be. For, due to the fact that all cases of seeing involve a time-lag, it seems to follow that whenever one sees something, one sees a past stage of that thing, and hence sees something that is not located in the present. In short, as Brain puts it, it seems to follow that whenever one sees something one 'sees the immediate past' (1951, p. 16).

Fortunately, however, due to the great speed at which light travels, there is no need for the naïve realist to hold that every case of perception involves *misjudging* the object seen as present when in reality the thing is past (or, alternatively, that every case of perception is illusory due to presenting past objects as present). This is because our concept of the present time is simply not sufficiently fine-grained. As Martin Lean explains:

... the period of time intended in the common sense belief that the objects we see are 'there' when and as we see them, is not a theoretical instant, but is rather an appreciable duration. The time required for the light to reach our eyes from nearby objects is so minute as to defy even careful scientific measurement, let alone unaided perceptual discrimination; and hence it is well within the roughly defined limits intended in the common sense belief (1953, p. 169; cf. Lemos, 1969, p. 26; Phillips, 2009, fn. 45).

In short, in whatever sense it's true to say that we see things *as being present* (and so as being simultaneous with our act of seeing them), this is compatible with our seeing portions or stages of things that are located a fraction of a second earlier in the block universe than our experiences of them. The upshot is that we need not convict our perceptual experiences (and/or our immediate judgements about them) of massive and systemic error. The things we see appear to be simultaneous with our experiences of them, they appear to be present; and for the most part the appearances do not mislead.

I turn now to what seems to me a more serious objection. On the view being considered, when you look up into the sky, you see the star as it was three

hundred years ago. Again, this can be put by saying that you see the t^{-300} stage of the star. But now suppose that when you see the t^{-300} star-stage your hand is also within your of vision. Since it takes time for light to travel, you see your hand as it was a fraction of a second earlier. That is, you see the t^{-1} stage of your hand. Now the problem is that the following two claims seem to be true:

- (A) If two physical objects are within your field of vision, then they are spatially related to each other.
- (B) Two things cannot be spatially related unless they both exist at the same time, i.e. unless they are both located at the same instant of time in the block universe.

The trouble, of course, is that (A) and (B) can't both be true, given that you see both the t^{-300} stage of the star and the t^{-1} stage of your hand. For these two items are not co-present with each other. That is to say, they do not exist at the same time, and hence cannot be spatially related, by (B). This means that, given (B), we must accept that (A) is false. Yet once again, claim (A) seems to be an obvious truth.³⁷

The problem here is quite general. Once one maintains that in all cases, when one sees something, one sees it as it was some time ago – i.e. one sees some past stage of it, whereby *which* stage of the thing you see depends on how long it took for the relevant portion of light to reach your eyes – one has to grant that the various things in one's field of vision need not all be located at the same instant of time. But once one grants this, it seems hard to retain the seemingly obvious truth that any two physical objects within one's field of vision must be spatially related to each other. For it seems clear that to be spatially related, two things have to be located at the same instant of time.³⁸

I confess that it is not entirely clear to me how to handle this problem. One option, of course, is to give up the idea that in order to be spatially related to one another, things have to be located at the same time (for a defence of this manoeuvre, see Power, 2010). The obvious trouble, however, is that the idea that only compresent objects can be spatially related seems very plausible. But then the only other option is to deny that all the thing's within one's field of vision must be spatially related to each other. Yet to deny that claim can seem equally implausible – at any rate, there is *something* compelling about the idea that all of the things that I can see form as it were a unity or a collection of items all spatially related to each other; one might even think one can see their spatial relations. Thus, the proponent of the eternalist strategy faces real a challenge here. It do not call it unassailable, but we do have two premises, (A) and (B), and both look rather compelling; yet they are jointly incompatible, and it is hard to see why one the naïve realist (who embraces the eternalist strategy) should give up, or how to go about it.³⁹

I come now to the third and final problem. Perceptual experiences are quite clearly events which have temporal duration. Now suppose that when you look up at the sky, you gaze at the star for a period of five minutes, so that your experience lasts for the period of time between t and t' . Plausibly, it follows that your experience itself lasts for five minutes. But now recall that the stage of the star you see is located at t^{-300} . And recall also that for the naïve realist, our perceptual experiences contain as constituents the objects of perception. It follows that an item located at t^{-300} is a constituent of an experience that begins way after t^{-300} , and which obtains between t and t' . Therefore, it follows that there exists an experience that lasts between t and t' and which has as a constituent an item located many years *before* that experience even begins.

The trouble, in short, is that one could be forgiven for finding this picture of things absurd. For, to adapt an example taken from Power (2010, p. 14), this seems like supposing a violin player might be a constituent of an event that is a performance of a Beethoven concerto, despite not being temporally located at the time of the performance. But that idea does seem incredible. In short, it seems rather plausible to hold that quite generally, if an event occurs between two times $T1$ and $T2$, then all the constituents of that event must be located between $T1$ and $T2$. But the naïve realist has to reject this if she adopts the view that in the star case, you are acquainted with a past object (namely the t^{-300} stage of the star).

Now one way out of this difficulty would be to deny that your experience of the star occurs only between t and t' . Specifically, one could claim that your experience reaches all the way back to the emission of light from the star at a certain time (*viz.* at t^{-300}), due to being constituted by the entire causal processes beginning at that point. Mark Johnston recommends a view of this sort. Against the idea that visual experiences are the causal upshot of light travelling, hitting the retina, and suitable cognitive processing, etc., Johnston says the following:

[T]he relation between seeing an object and the long physical process involving first the light coming from the object and then the operation of the visual system is not the relation between a first mental effect and a prior physical process that causes it. Seeing the object is not the next event after the visual system operates. Seeing the object is an event materially constituted by the long physical process connecting the object seen to the final state of the visual system. Seeing the object is an event that is (as it actually turns out) constituted by a physical process that goes all the way out to the object seen (2004, pp. 138–139).⁴⁰

Now if our experiences are temporally extended in this way, then the naïve realist does not face the worry that some of our experiences have constituents that are located earlier in the block universe than our experiences of those objects. This is because our experiences of the objects will stretch sufficiently far back in time to encompass all of the things that we perceive.

The trouble, however, is that this view has the rather implausible upshot that in some cases, our perceptual experiences last *much* longer than they appear to. Suppose I look at the sun for three seconds. It is natural to think that my experience lasts for only three seconds.⁴¹ But it takes (approximately) eight minutes for the light that (partly) causes my experience to reach my eyes. So Johnston must say that my experience lasts over eight minutes long! Things are even worse when it comes to perceiving stars that are light-years away. For, according to Johnston's view, if I look up at this star for ten minutes, then my experience must go on for years! Yet surely this is unacceptable. (Indeed, as Dretske [1969, p. 72] and Martin [1992, p. 186] both point out, if our experiences are constituted by the entire causal process, beginning with light leaving the object, then in some cases, our own perceptual experiences begin before we are even born. But that really does look absurd.⁴²).

A better move, it seems to me, would be to deny that it is absurd to think an experience occurring for some stretch of time might have as a constituent an object temporally located prior to that stretch of time.⁴³ Again, what the naïve realist maintains is that experiences are relational events, i.e. events that are constituted by the holding of a relation (between a subject and an object). So once the naïve realist allows that the relation of acquaintance can hold *at some time, t* between (the stage of) a person located at *t* and some (stage of an) object of perception located prior to *t*, it would be natural for her to hold that experiences can have as constituents objects that are not compresent with the experiences they are constituents of. (True, it seems absurd to think that a violinist could be a constituent of a musical performance without existing at the same time as the performance. But perhaps objects of perception are not constituents of experiences in the same way that violin players are constituents of performances.)

Nevertheless, it must be acknowledged that we face a difficulty here. It does seem plausible to think that if an event takes place between T1 and T2, then it can only have as constituents items that are located between those times. If that is right, however, then the naïve realist cannot handle the problem case we have been considering in this article via rejecting (2) in the manner suggested in this section, given her commitment to the idea that perceived objects are literally constituents of our perceptual experiences.⁴⁴

6. Conclusion

In this article, we have been concerned with a puzzle that arises in connection with a certain case, wherein you look up at the sky and see a star that (apparently) no longer exists. The trouble is that whilst it is natural to treat the case as one in which you see a no longer existent item, that description entails the falsity of a very plausible principle, which states that only existent items are able to be seen (see §1).

The traditional way to handle this type of case is to adopt a sense datum theory of perceptual experience – or more generally, to adopt some form of Conjunctivism. In this article, however, I have explored the options that a proponent of *naïve realism* has for handling this type of case. My main conclusion is that the best option for the naïve realist is to reject the claim that the item you see does not exist. On this view of matters, the thing you see is a past object – and in particular, a past stage or temporal part of the relevant star – which still exists and is real given an eternalist view of time.

This view, however, is not without its problems, as we saw in the previous section. For it is hard to square this view with both the plausible thought that all the things within one's field of view (i.e. all of the things one sees at a given time) are spatially related to each other, and also with the core naïve realist thesis that the objects one sees are constituents of one's perceptual experience. A further conclusion we have to draw, therefore, is that it is somewhat unclear whether the naïve realist can offer a satisfactory account of our initial case. As someone attracted to naïve realism, this is not exactly a conclusion I am happy with. It just might be, however, that the traditional, Conjunctivist reply to the time-lag argument is ultimately the best response that is available.⁴⁵

Queens' College
University of Cambridge

NOTES

¹ See for example Ayer, 1956, p. 94; Broad, 1947, esp. p. 121; 1953, pp. 31–32; Joad, 1943, p. 113; Moore, 1966, pp. 67ff; and Russell, 1912, p. 17; 1927, pp. 137–143; 1948, p. 204). For a contemporary defence of this response see Robinson, 1994, pp. 80–84.

² Well, one might wonder how something that no longer exists can be the cause of something that still does. I address this kind of objection shortly, see n. 10. below.

³ In place of causal conditions one might instead appeal to counter-factual conditions or to the notion of 'matching'. For relevant discussion see Lewis, 1980; and Johnston, 2007.

⁴ Another part of the traditional response is the idea that the **Existence Principle** itself is plausible only because we tend to presuppose in our everyday thought a naïve realist view of perceptual experience, on which perceptual experiences consist in the presentation of the external items that we see or sense (cf. §2). For if this naïve realist view were true, then, as C.D. Broad (1953, p. 31) points out with such great clarity, the **Existence Principle** would indeed seem rather hard to deny (cf. §3 of this article for further argument to that effect).

⁵ One caveat should be made regarding the idea that *all* Conjunctivist views can respond in the manner I've just set out. This is because it is not entirely clear whether the advocates of *singular content intentionalism* can reject the **Existence Principle** so easily (cf. n. 14 below). (But then again, it can be argued that singular content intentionalism is really a Disjunctivist view rather than a Conjunctivist one. In this connection cf. Tye, 2009.)

⁶ Roughly speaking, a Conjunctive theory of perceptual experience is one according to which all experiences, whether veridical or hallucinatory, have the same basic nature. Whereas

Disjunctivism is the negation of that claim. For further discussion regarding Conjunctivism versus Disjunctivism see Crane, 2006; Johnston, 2004; Martin, 2004, 2006; and Pautz, 2010.

⁷ Just to be clear, by 'naïve realism' I mean to denote the view defended by Campbell (2002, 2016), Brewer (2004, 2011), and Martin (1997, 2004, 2006), amongst others. Anyone who endorses this naïve realist view must be a Disjunctivist rather than a Conjunctivist, holding that perceptual experiences (those that we have when we actually perceive things) have a different nature to hallucinatory experiences (cf. Martin, 2004, 2006; and Snowdon, 2005a).

⁸ See for example the various discussions of the 'time-lag argument' in the writings of C.D. Broad and Bertrand Russell. (Perhaps the briefest but clearest version of the kind of argument that I have in mind against naïve realism can be found in Broad, 1951, p. 30ff.)

⁹ One exception here is Rashbrook-Cooper, manuscript; see also Fish, 2010, p. 15ff and p. 107.

¹⁰ Is it clear that Conjunctivists can embrace a presentist view? Well, one might argue that this is not in fact so clear, since on the Conjunctivist view of the case involving the star, the star *causes* the experience one is presently undergoing. Yet one might also think that it's not in general possible for one thing to stand in a causal relation to another unless they *both* exist. (The best way to motivate this claim I think would be to rely on the 'Principle of Relations', which states that whenever a relation holds between *any* set of objects, all of the objects in that set exist.) But obviously, if the star has to exist in order to cause the experience one is now having, then Conjunctivists cannot coherently claim that the star both doesn't exist and yet causes one's experience. So it appears that the traditional Conjunctivist response entails the existence of the deceased star after all, and hence necessitates the rejection of presentism too. I want to make two points here. Firstly, I think that anyone attracted to a presentist view both can and should deny that in general, in order for one thing to stand in a relation to another thing, both of those things have to exist (cf. Hinchcliffe, 2010). (Obviously, however, engaging with this debate in any greater detail would take us too far afield.) But if that's right, then Conjunctivists who want to endorse presentism can say that whilst the star does indeed cause the experience one is now having, it doesn't follow that the star has to exist. The second point is that even if the above line of thought shows that Conjunctivists cannot be presentists, it does so by showing that *presentism as such is false*. For there are evidently manifold cases wherein a past object is the cause of a present object, so that if presentism is to be viable, it has to be possible for past, and therefore non-existent, objects to stand in causal relations to present things that *do* exist. (Cf. contemporary discussions of the 'problem of cross-temporal relations' for presentism in (for instance) Crisp, 2005; de Clercq, 2006; Hinchcliffe, 2010; and Inman, 2012.) Whereas what I intend to show here is that *even if presentism as such is unproblematic*, naïve realists *still* cannot be presentists, due to the fact that they must reject presentism to handle the problem involving the deceased star. Accordingly, we still end up with an interesting difference between naïve realism and the various Conjunctive views, *viz.* that while if Conjunctivists have a problem retaining presentism, this is only because presentism as such is undermined by the problem of cross-temporal relations, whereas naïve realists have to abandon presentism *even if the problem of cross-temporal relations can be dealt with*, due to the fact that naïve realists need to address the initial problem case involving the star yet can do this effectively only by rejecting presentism in favour of an eternalist position (see §5). (Interestingly, then, we learn something noteworthy about presentism here as well: *viz.* that whilst it is widely taken to be the naïve or common sense view of time, it is incompatible with the common sense or naïve view of perceptual experience, i.e. with naïve realism.)

¹¹ The metaphor of our experiences reaching out to the external objects seen and sensed is employed by many naïve realists. See for example Campbell, 2002, p. 143; Johnston, 2004, p. 139; and Snowdon, 1990, pp. 136–137.

¹² According to Le Morvan (2004, p. 244) those who endorse a 'direct realist' theory of perception should say that in the star case you are aware of something that 'no longer exists' (cf. Ayer, 1956, p. 95; and Snowdon, 1992, p. 77). However, if naïve realism counts as a form of what

Le Morvan calls 'direct realism', then is not correct. For unlike the proponent of the sense datum theory (or any other Conjunctivist view), the naïve realist cannot maintain that in the star case you see something that is no longer existent. Or so I will argue.

¹³ In this connection, cf. Bill Fish (2009, p. 14), who explicitly defines the relation of acquaintance (which he appeals to in stating his version of naïve realism), as an 'irreducible mental relation ... that the subject can only stand in to objects that exist'. See also Martin, 2004, p. 39.

¹⁴ A similar point can be made regarding singular content intentionalism. On this view, seeing something involves having a perceptual experience that, in its nature, consists in 'visually entertaining' a singular proposition, which has the object seen as a constituent. Since it is generally held that only existent things can be constituents of singular propositions, this view also seems to entail that the **Existence Principle** is false. (One might reply here, however, by giving up the idea that singular propositions cannot have things that no longer exist as constituents. For this move, in connection with the deceased star case, see Snowdon, 1992, p. 77.) Moreover, if the proposition is a constituent of the experience, and if the object seen is a constituent of the proposition, then by transitivity the object seen would appear to be a constituent of the experience (cf. Hawthorne and Kovakovich, 2006, fn. 12). But once again, nothing that no longer exists, it seems, could even partly constitute an experience that *does* exist.

¹⁵ One might object that this line of thought ignores the possibility of a Meinongian view, on which the star does not exist but is still able to bear properties and have relations. (It is definitive of the Meinongian theory, I take it, that even non-existent things have properties and stand in relations.) Given this view, the non-existent star and its qualities *could* apparently constitute one's experiential state. The trouble, however, is that this view is just implausible: even if there are Meinongian objects that can have properties and stand in relations whilst failing to exist, it is surely not the case that when a star goes out of existence, it becomes a Meinongian object which continues to manifest various visible properties and relations. (Note also that on this Meinongian view, a non-existent item (the star) would partly constitute a fully existent item – namely, one's perceptual experience. But surely that is not possible. If an entity is real, if it exists, then it is not made up, even in part, by things that do not exist.)

¹⁶ Of course, there might be a variety of cases wherein the object that one sees will leave a portion of visible light behind after destruction. Suppose for instance that I see my computer screen, but that it too, like the flowers, gets destroyed before the relevant stream of photons reaches my eyes. Here, plausibly, there will be a tiny portion of visible light left behind by the screen that could act as a surrogate object of acquaintance. However, the initial point still stands, namely, that the 'find a surrogate object of acquaintance strategy' is insufficiently general. For it is only in a small number of cases, and certainly not in every case, that the relevant object will leave a portion of perceptible light (or indeed any surrogate object of acquaintance) behind after it is destroyed.

¹⁷ According to O'Shaughnessy (1984), in all cases of vision, one sees a physical object via seeing the light that it emits. Given this view, one could maintain that *in every case of physical object perception*, one is visually presented with light, which acts as the visual surrogate for the no longer extant physical object that one sees in the relevant set of 'time-lag' cases. However, it seems to me that this view has little to recommend it. There are indeed special cases in which we see light – as when for example we see the beam of a torch – but, *contra* O'Shaughnessy, such cases are not the norm. On the contrary, Chisholm (1957, p. 144) is basically correct when he claims that in general, whilst 'light waves...may stimulate the receptors of [a subject], and cause him to sense in certain ways...we do not wish to say that the light waves ... thereby appear to [the subject]'. In this connection cf. also Smart, 1963, p. 38. (Perhaps O'Shaughnessy has failed to take proper note of the crucial distinction between perceptible and imperceptible light. It is true that all visual experience involves imperceptible light – i.e. light waves or streams of photons stimulating the relevant sense-organs – but it does not

follow that all cases of seeing involve the presence of portions of visible light conceived as visible items in their own right.)

¹⁸ Of course, you might perhaps see something – the sky for example, or perhaps one's outstretched arms. In short, if the star case is a case of hallucination, then it will be a case of partial rather than total hallucination. (Compare e.g. the case where Macbeth hallucinates a dagger but really sees the wall that he hallucinates the dagger as being in front of.)

¹⁹ This is of course true only of visual hallucination; hallucinations in other modalities involve the 'misfiring' of other relevant perceptual systems. For more on the idea that hallucinations are the product of what you get 'when things go wrong', understood in causal terms, see Moran (2018).

²⁰ One might of course disagree with this. However, this is a claim that the naïve realist has to make. So it is only those willing to rejecting naïve realism that can claim to find no plausibility in the idea that perceptual and hallucinatory experiences are fundamentally different kinds of mental event.

²¹ There might of course be something with which one is visually presented with, as on so-called Positive Disjunctivist views, according to which hallucinatory experiences present non-normal objects (for views of this kind see Alston, 1999; Johnston, 2004; and Knight, 2013; I defend the view that naïve realists can hold a Positive Disjunctivist position in Moran 2018. See also Moran manuscript.) Such objects, however, would not be perceived, and hence would not classify as being *seen*.

²² There is perhaps one further option here. For it might be said that illusory experiences form a type or category of sense-experience all of their own, so that the disjunctivist does not have just *two* kinds of sense-experience within her ontology, *viz.* perceptual and hallucinatory, but rather three, *viz.* perceptual, illusory and hallucinatory. Given this kind of view, the naïve realist wouldn't need to treat illusory experiences being as either a sub-class of hallucinatory or a sub-class of perceptual experience: rather, illusory experiences would form a *sui generis* type of experiential event. However, there are three problems. First, illusory experiences really do seem to be perceptual, for a case of illusion is precisely a case of *perceiving something that appears other than it is*. Second, to my knowledge no one has defended or developed this view (of illusions as involving a *sui generis* type of experience) in the literature, and so one doesn't really know what to make of it. Then finally, and relatedly, there is worry there, namely, that it is rather hard to see how adopting this view helps with dissolving our puzzle. What we need to do is reject (1) or (2) or the **Existence Principle**. But how does the 'illusions as *sui generis* experience-types' view help us to do this? That's what would need spelling out. But I can't see it adding anything new. It will surely collapse into rejecting (1) – denying that the star is seen, – but then my arguments apply: (a) we mischaracterise illusions as not involving seeing the object and (b) we wrongly say that we do not see the star when clearly we do.

²³ That said, I will later argue that on a naïve realist view, there is *something* illusory about the experience involving the star as with all similar experiences, since such experiences present to us a past object *as being present when it is not*. See §5.3 for discussion of this idea. (Does this view this help us with dissolving our original puzzle (i.e. giving up (1), (2) or the **Existence Principle**?) In short, I think it is quite clear that it does not. Rather, the truth as I see it is as follows: since we are naïve realists, to dissolve the puzzle we have to reject the **Existence Principle**, by adopting a non-presentist view of time; then, once we do this, we have to say that there's an illusory element to all cases wherein we perceive temporally distant items, insofar as those items are given to use as being temporally present when they are not. Again see §5.3).

²⁴ Of course, the sense datum theorist would not deny that one sees the physical object in any sense. Rather, she would insist that one sees the physical object 'indirectly', via seeing the sense datum in the more basic, direct sense. As Ayer (1956, p. 94) writes 'it seems too paradoxical to deny that we see physical objects in any sense at all'. Therefore, 'the solution offered [by the sense datum theorist] is that we see them only indirectly...' (cf. §1).

²⁵ A similar point can be made in connection with illusion. To handle the cases of illusion, and the problem that these pose for naïve realism, the naïve realist might be tempted to treat illusions as experiential episodes of a different kind to fully veridical perceptions. However, if the naïve realist were to make this move, then she would have to say that at some point along a continuous series, moving from fully veridical to illusory cases, the subject would have a radically different kind of experience. Yet this position seems implausible. For it is hard to find a non-arbitrary point in the series when the subject comes to have an experience of a radically different kind. As Broad (1952, p. 8) puts it, 'in view of the continuity between the most normal and the most abnormal cases of seeing, [i.e. veridical perceptions and illusions] such a doctrine would be utterly implausible and could be defended only by the most special pleading' (cf. Robinson, 1994, p. 57).

²⁶ I assume here that the mere absence of the appropriate object is not sufficient for making it the case that Pauline has a different kind of experience.

²⁷ Why 'apparently'? Because I'll ultimately suggest that for the naïve realist, the best thing to say is that the apple still exists in w^* , despite no longer being present. Likewise for the initial case involving the star. See §5.

²⁸ I set aside here an intermediate view, namely the *growing block theory*, on which past and present objects are real, but the future is not – see Broad, 1923, II, and Tooley, 1997. Later on, I recommend that naïve realists reject presentism in order to reject claim (2) and I write as if this means that naïve realists have to be eternalists. However, they could just as well adopt the growing block theory in order to reject claim (2) in the way that I recommend, or indeed any view that entails that *the past portion of the block universe exists as well as the present one*.

²⁹ In the current literature, it is common to use 'exists at' to express the relation that an object x stands in to a time T when x is temporally located at T . Accordingly, as Sider (2001, p. 59) notes, 'exists at' is in such cases being used analogously to the spatial predicate 'is located at'. In what follows, however, I will just speak of 'being temporally located at'.

³⁰ It might sound paradoxical to say that it is true, right now, that Napoleon exists. The eternalist, however, can allow that in ordinary thought and talk, we do at least get *something* right by making claims such as 'Napoleon does not exist'. For we can distinguish between an unrestricted and a restricted sense of existence. To exist in the first sense is simply to be one of the things there are, to be a part of reality. It is to be located *somewhere* within the block universe. (If we confine ourselves to concrete things, everything that exists is located somewhere in the space–time manifold.) Whereas to exist in the second sense is to be part of reality *and* to be located at the present portion of the block universe. Now it is clear that in this second sense it is not true that Napoleon exists. Moreover, the eternalist can plausibly claim that what makes our ordinary claims about existence true, or at least 'nearly true', is that they track truths regarding what does and does not exist in this second, more restricted sense. If this is right, then the eternalist does not have to say that our common sense claims about what does and what does not exist are completely mistaken. On the contrary, she can allow that we get something important right when we say that Napoleon does not exist.

³¹ It seems to me that it is only within an eternalist framework that we can make sense of the suggestion, which many philosophers have made, that in the case involving the deceased star one sees a past object and so in this sense sees into the past. (Philosophers who have defended this view include Brain [1951], Ebersole [1965], Henson [1967] and Pitcher [1971].) In a recent paper, Power (2010) argues that all direct realists should endorse an eternalist position in order to handle the time-lag argument. However, it is not clear to me that every direct realist needs to say this. The intentionalist, for example, is not forced to adopt this view (cf. §1, this article). Yet, intentionalists are direct realists in Power's sense. I do agree, however, that naïve realists should adopt eternalism, or at least some view of time on which past objects exist, at least if they are to have any chance of making sense of the sort of case we have been focusing on in this article.

³² By a 'stage' of the star, I mean one of its temporal parts (see Sider, 2001). Of course, some philosophers deny that material things have temporal parts, opting instead for an endurantist

view on which objects are wholly present at each time they exist. Within an endurantist framework, however, it is significantly harder (albeit not impossible) to capture the plausible idea that when one sees an object, one sees it 'as it was' some time ago, i.e. at the time when the relevant portion of light was first emitted from it (cf. here Moore, 1966, p. 68). For simplicity in this article I will continue to speak in terms of stages and temporal parts.

³³ According to Alva Noë (2006, p. 28), it is 'incoherent' to suppose that 'we now have access to what has already happened'. However, this is far from obvious if we adopt an eternalist view.

³⁴ Compare Price (1932) and Prichard (1950), according to whom, in perceptual experience we are given or presented with sense data (for Price) or 'extended colours' (for Prichard) that we *naturally take to be* or are *inclined to judge as being* identical to the material objects that we 'indirectly' see when as a matter of fact this is not so. The present view is rather similar: in visually perceiving the star one is presented with a past item, but one naturally judges that it is temporally co-located with one's present experience of it.

³⁵ Indeed, there are as many options here as there are for naïve realists to handle illusion (for very helpful discussion here of the naïve realist's options when it comes to illusion see French, 2014). But in the main text I want to set out just one specific option, which follows closely the views of Mark Johnston when it comes to handling the illusory elements in perception from within a naïve realist framework.

³⁶ For Johnston, it is essential that the naïve realist recognise illusory manners of presentation in any case. For naïve realists who agree with this, the line of thought just mentioned may well constitute the more preferable response.

³⁷ Note that by 'field of vision' here I just mean the fusion or collection of the things one is now seeing, including the regions of space they occupy (if the locations of things can be seen as well). (As Johnston [2011] points out, in this sense the term 'field of vision' is relatively innocuous, and does not commit us to the existence of a strange sort of 'mental space'.) However, we could in principle get by without bringing in the notion of a visual field. The alternative argument would run by drawing on this alternative first premise, namely: (A*) If two physical objects are being seen by you, then they are spatially related. The second premise, (B), would stay the same, and the problem would still emerge: for these two premises, (A*) and the original (B), would jointly imply the falsehood that the star-stage you see is co-located with the hand-stage that you see.

³⁸ This problem was first noted, I believe, by Houts (1980), in connection with the answer to the time-lag argument suggestion by Pitcher (1971).

³⁹ On the other hand, however, given that the 'field of view' is just the fusion or collection of all of the things one sees, maybe it's not that hard to deny (A), i.e. the claim all of the things in one's field of view are all spatially related – especially once one grants that one can see past objects, so that the field of vision comprises (in some cases) the fusion or collection of objects (or stages thereof) that are located at different temporal regions. In short, perhaps the naïve realist could turn the argument on its head and reason thus: only compresent objects can be spatially related (premise (B)); but your field of vision (in the star case) contains objects that are not compresent; it is not the case that all of the objects in one's field of vision must be spatially related to each other (contra premise (A)). Perhaps this is the right way for the naïve realist to go; I remain, however, not entirely sure at the present juncture.

⁴⁰ This kind of view is specifically recommended by Hirst (1959, p. 308) in connection with the present difficulty. Similar views are also recommended (for other reasons) by Child (1992, p. 309; 1994, pp. 160–62) and Snowdon (1980, p. 209; 1990, p. 125; 2005b, p. 302).

⁴¹ For a compelling defence of the general thesis that our perceptual experiences inherit their temporal properties (including their duration) from the temporal properties of their objects (or apparent objects in non-veridical cases) see Phillips, 2009.

⁴² Johnston has suggested (in personal correspondence) that this objection fails, since it fails to mention that on his view, the perceptual experience itself, despite being constituted by the long causal process, is also 'an achievement occurring only at the completion of the process'.

However, it is hard to know what to make of this response. How could the experience be *constituted* by a certain physical process and yet *begin* only at the end of that process?

⁴³ This is flagged as an option for the naïve realist by Fish (2010, p. 107). Fish stops short of endorsing this response, however.

⁴⁴ There is perhaps a third way to respond to the difficulty. This is to deny that experiences are events that take place in time at all. One way to do this would be to acknowledge that experiences exist, but deny that they have temporal extent. (Stoneham [2002] argues that this was Berkeley's view in the *Three Dialogues*. See also Pylyshyn, 1979.) Another way would be to deny that there are, strictly speaking, any experiences at all. (In a recent paper, Stoneham [2008] argues that one can develop the naïve realist view without being committed to the reality of experiential events. If this is right, then one could sidestep the present worry completely. It seems to me, however, that there are such things as perceptual experiences, and that these do have temporal extent. So I believe that neither version of this third move is a plausible one to make. However, there is unfortunately no space to discuss these issues any further here.

⁴⁵ An ancestor of this article was presented at the Philosophy of Mind Work in Progress Reading Group at Oxford University, thanks especially to Oliver Rashbrook-Cooper for his comments on that occasion, and to the other participants present. Thanks also to Ian Phillips who despite being unable to attend the Group that week, read the entirety of an earlier draft and provided valuable comments; to Mike Martin for a very pleasant and helpful conversation about this topic some years ago whilst having lunch near UCL; to Mark Johnston for discussion of some of the material in the penultimate section, especially the idea of experiences as spatially and temporally extended; and especially to an anonymous referee for the *Pacific Philosophical Quarterly* for their very helpful and insightful comments that significantly improved the article. Thanks also to my supervisor Professor Tim Crane, especially for his help with the penultimate draft of the article, and to my fiancée, Laura Franchetti, for the many enlightening conversations about this topic, and for her constant support, advice and encouragement.

The research for this article was completed during my time at Oxford, which was supported by a T. H. Green Scholarship. The rest of the research and writing took place at Cambridge, where I have been supported by an AHRC-Walker Studentship, hosted by the Faculty of Philosophy and Queens' College, as part of the AHRC Doctoral Training Partnership (grant number AH/L503897/1), and also by a Jacobsen Studentship and an Aristotelian Society Bursary. I would like to thank these institutions and funding bodies for their support.

REFERENCES

- Alston, W. P. (1999). 'Back to the Theory of Appearing,' *Noûs Supplement: Philosophical Perspectives* 33(13), pp. 181–203.
- Austin, J. L. (1962). *Sense and Sensibilia*, Reconstructed from the Manuscript Notes by G.J. Warnock. Oxford: Clarendon Press.
- Ayer, A. J. (1956). *The Problem of Knowledge*. London: Pelican Books.
- Brain, W. R. (1951). *Mind, Perception, and Science*. Oxford: Blackwell Scientific.
- Brewer, B. (2004). 'Realism and the Nature of Perceptual Experience,' *Philosophical Issues* 14(1), pp. 61–77.
- Brewer, B. (2011). *Perception and its Objects*. Oxford: Oxford University Press.
- Broad, C. D. (1923). *Scientific Thought*. London: Routledge and Kegan Paul.
- Broad, C. D. (1925). *The Mind and its Place in Nature*. London: Kegan Paul, Trench, Trübner & Co. Ltd.

- Broad, C. D. (1947). 'Professor Marc-Wogau's Theorie des Sinnesdata (II),' *Mind* 56(222), pp. 97–131.
- Broad, C. D. (1952). 'Some Elementary Reflexions on Sense Perception,' *Philosophy* 27(100), pp. 3–17.
- Broad, C. D. (1953). *Religion, Philosophy, and Psychological Research: Selected Essays*. London: Routledge and Kegan Paul.
- Broad, C. D. (1959). 'A Reply to my Critics,' in P. A. Schlipp (ed.) *The Philosophy of C. D. Broad*. New York: Tudor Publishing Company, pp. 711–830.
- Byrne, A. and Logue, H. (2008). 'Either/Or,' in A. Haddock and F. Macpherson (eds) *Disjunctivism: Perception, Action, Knowledge*. Oxford: Oxford University Press.
- Campbell, J. (2002). *Reference and Consciousness*. Oxford: Oxford University Press.
- Campbell, J. (2009). 'Consciousness and Reference,' in McLaughlin and A. Beckermann (eds) *Oxford Handbook of Philosophy of Mind*. Oxford: Oxford University Press, pp. 648–662.
- Campbell, J. (2010). 'Demonstrative Reference, the Relational View of Experience, and the Proximity Principle,' in R. Jeshion (ed.) *New Essays on Singular Thought*. Oxford: Oxford University Press, pp. 193–212.
- Campbell, J. (2016). in J. Campbell and Q. Cassam (eds) *Berkeley's Puzzle: What Does Experience Teach Us*. Oxford: Oxford University Press.
- Child, W. (1992). 'Vision and Experience: The Causal theory and the Disjunctive Conception,' *The Philosophical Quarterly* 42(168), pp. 297–316.
- Child, W. (1994). *Causality, Interpretation, and the Mind*. Oxford: Clarendon Press.
- Chisholm, R. (1957). *Perceiving: A Philosophical Study*. Ithaca, NY: Cornell University Press.
- de Clercq, R. (2006). 'Presentism and the Problem of Cross-Temporal Relations,' *Philosophy and Phenomenological Research* 72(2), pp. 386–402.
- Crane, T. (2006). 'Is There A Perceptual Relation?' in T. S. Gendler and J. Hawthorne (eds) *Perceptual Experience*. Oxford: Oxford University Press, pp. 126–146.
- Crisp, T. M. (2005). 'Presentism and Cross-Time Relations,' *American Philosophical Quarterly* 42(1), pp. 5–17.
- Dretske, F. (1969). 'Non-epistemic Seeing', in his, in *Seeing and Knowing*. London: Routledge, pp. 4–77.
- Ebersole, F. (1965). 'How Philosophers See Stars,' *Mind* 296, pp. 509–529.
- Fish, W. (2009). *Perception, Hallucination, and Illusion*. Oxford: Oxford University Press.
- Fish, W. (2010). *Philosophy of Perception: A Contemporary Introduction*. London: Routledge.
- Foster, J. (2000). *The Nature of Perception*. Oxford: Oxford University Press.
- French, C. (2014). 'Naïve Realist Perspectives on Seeing Blurrily,' *Ratio (Special Issue: The Structure of Perceptual Experience)* 27(4), pp. 393–413.
- Hawthorne, J. and Kovakovich, K. (2006). 'Disjunctivism,' *Aristotelian Society Supplementary* 80(1), pp. 145–183.
- Henson, R. G. (1967). 'Ordinary Language, Common Sense, and the Time-Lag Argument,' *Mind New Series* 67(301), pp. 21–33.
- Hinchcliffe, M. (2010). 'The Identity of the Past,' in J. K. Campbell, M. O'Rourke and H. S. Silverstein (eds) *Time and Identity*. Cambridge, MA: The MIT Press.
- Hirst, R. J. (1959). *The Problems of Perception*. London: Routledge.
- Houts, R. W. (1980). 'Some Implications of the Time-Lag Argument,' *Philosophy and Phenomenological Research* 41(1/2), pp. 150–157.
- Inman, R. (2012). 'Why so Serious? Non-serious Presentism and the Problem of Cross-temporal Relations,' *Metaphysica* 13(1), pp. 55–63.
- Jackson, F. (1977). *Perception: A Representative Theory*. Cambridge: Cambridge University Press.
- Joad, C. E. M. (1943). *Guide to Modern Thought*. London: Faber and Faber.

- Johnston, M. (2004). 'The Obscure Object of Hallucination,' *Philosophical Studies* 120(1–3), pp. 113–183.
- Johnston, M. (2007). 'Objective Mind and the Objectivity of our Minds,' *Philosophy and Phenomenological Research* 75(2), pp. 233–268.
- Johnston, M. (2011). 'There Are No Visual Fields (And No Minds Either),' *Analytic Philosophy* 52(4), pp. 231–242.
- Johnston, M. (2014). 'The Problem with the Content View,' in B. Brogaard (ed.) *Does Perception Have Content*. Oxford: Oxford University Press, pp. 105–137.
- Johnston, M. (n.d. manuscript). 'Sensory Disclosure', m.s. draft.
- Kalderon, M. E. (2011a). 'The Multiply Qualitative,' *Mind* 120(478), pp. 239–262.
- Kalderon, M. E. (2011b). 'Color Illusion,' *Noûs* 45(4), pp. 751–775.
- Knight, G. (2013). 'Disjunctivism Unmotivated,' *Phenomenology and the Cognitive Sciences* 13(1), pp. 355–372.
- Lean, M. (1953). *Sense Perception and Matter: A Critical Analysis of C.D. Broad's Theory of Perception*. London: Routledge and Kegan Paul.
- Le Morvan, P. (2004). 'Arguments Against Direct Realism and How to Counter Them,' *American Philosophical Quarterly* 41(3), pp. 221–234.
- Lemos, R. M. (1969). *Experience, Mind and Value: Philosophical Essays*. Leiden: E. J. Brill.
- Lewis, D. (1980). 'Veridical Hallucination and Prosthetic Vision,' *Australasian Journal of Philosophy* 41(3), pp. 221–234.
- Logue, H.A. (2009). *Relations and Representations*, Doctoral Dissertation, Massachusetts Institute of Technology.
- Markosian, N. (2004). 'A Defence of Presentism,' in D. W. Zimmerman (ed.) *Oxford Studies in Metaphysics*, Volume 1. Oxford: Oxford University Press, pp. 47–82.
- Martin, M.G.F. (1992). *The Content of Experience*, D. Phil Dissertation, Oxford University.
- Martin, M. G. F. (1997). 'The Reality of Appearances,' in M. Sainsbury (ed.) *Thought and Ontology*. Milan: Franco Angeli, pp. 81–106.
- Martin, M. G. F. (2004). 'The Limits of Self-Awareness,' *Philosophical Studies* 20(1–3), pp. 37–89.
- Martin, M. G. F. (2006). 'On Being Alienated' in *Perceptual Experience*, in T. S. Gendler and J. Hawthorne (eds) *Perceptual Experience*. Oxford: Oxford University Press, pp. 354–410.
- Moore, G. E. (1966). *Lectures on Philosophy*. London: Routledge.
- Moran, A. (2018). 'Naïve Realism, Hallucination, and Causation: A New Response to the Screening Off Problem,' *Australasian Journal of Philosophy* <https://doi.org/10.1080/00048402.2018.1458142>.
- Moran, A. (manuscript). 'Austinian Disjunctivism Defended', m.s. draft.
- Myers, G. E. (1957). 'Perception and the Time-Lag Argument,' *Analysis* 17(5), pp. 97–102.
- Noë, A. (2006). 'Experience of the World in Time,' *Analysis* 66(289), pp. 26–32.
- O' Shaughnessy, B. (1984). 'Seeing the Light,' *Proceedings of the Aristotelian Society* 85, pp. 193–218.
- Pautz, A. (2010). 'Why Explain Visual Experience in Terms of Content?' in B. Nanay (ed.) *Perceiving the World*. Oxford: Oxford University Press, pp. 254–309.
- Phillips, I. (2009). *Experience and Time*, Doctoral Thesis, University College London.
- Pitcher, G. (1971). *A Theory of Perception*. Princeton, NJ: Princeton University Press.
- Power, S. E. (2010). 'Perceiving External Things and the Time-Lag Argument,' *European Journal of Philosophy* 21(1), pp. 94–117.
- Price, H. H. (1932). *Perception*. London: Methuen & Co. Ltd.
- Prichard, H. A. (1950). 'The Sense Datum Fallacy', in his, in *Knowledge and Perception: Essays and Lectures*. Oxford: Clarendon Press, pp. 200–214.
- Pylshyn, Z. W. (1979). 'Do Mental Events Have Durations?' *Behavioral and Brain Sciences* 2(2), pp. 277–278.

- Rashbrook-Cooper, O. (manuscript). 'Temporal Presence and Time-Lags', m.s. draft.
- Robinson, H. (1994). *Perception*. London: Routledge.
- Russell, B. (1912). *The Problems of Philosophy*. Oxford: Oxford University Press.
- Russell, B. (1927). *Philosophy*. New York: W. W. Norton.
- Russell, B. (1948). *Human Knowledge: Its Scope and Limits*. London: Allen & Unwin.
- Sider, T. (2001). *Four Dimensionalism: An Ontology of Persistence and Time*. Oxford: Clarendon Press.
- Sider, T. (2011). *Writing the Book of the World*. Oxford: Oxford University Press.
- Suchting, W. A. (1969). 'Perception and the Time-Gap Argument,' *The Philosophical Quarterly* 19(74), pp. 46–56.
- Snowdon, P.F. (1980). 'Vision and Causation', *Proceedings of the Aristotelian Society*, New Series 81, pp. 175–192.
- Snowdon, P.F. (1990). 'The Objects of Perceptual Experience', *Proceedings of the Aristotelian Society* Supplementary Volumes 64, pp. 121–166.
- Snowdon, P. F. (1992). 'How to Interpret "Direct Perception"', in T. Crane (ed.) *The Contents of Experience: Essays on Perception*. Cambridge: Cambridge University Press, pp. 48–78.
- Snowdon, P. F. (2005a). 'Some Reflections on an Argument from Hallucination,' *Philosophical Topics* 33(1), pp. 285–303.
- Snowdon, P. F. (2005b). 'The Formulation of Disjunctivism: A Response to Fish,' *Proceedings of the Aristotelian Society*, New Series 105(1), pp. 129–141.
- Smart, J. J. C. (1963). *Philosophy and Scientific Realism*. New York: Humanities Press.
- Stoneham, T. (2002). *Berkeley's World: An Examination of the Three Dialogues*. Oxford: Oxford University Press.
- Stoneham, T. (2008). 'A Neglected View Account of Perception,' *dialectica* 62(3), pp. 307–322.
- Tooley, M. (1997). *Time, Tense, and Causation*. Oxford: Oxford University Press.
- Travis, C. (2004). 'The Silence of the Senses,' *Mind* 113(449), pp. 57–94.
- Tye, M. (2009). 'The Admissible Contents of Visual Experience,' *Philosophical Quarterly* 59(236), pp. 541–562.
- Zimmerman, D. W. (2008). 'The Privileged Present: Defending an A-theory of Time,' in J. Hawthorne, D. W. Zimmerman and T. Sider (eds) *Contemporary Debates in Metaphysics*. Oxford: Blackwell, pp. 211–225.