

SENSE-DATA, INTROSPECTION AND THE REALITY OF APPEARANCES¹

Datos sensoriales, introspección y la realidad de las apariencias

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ABSTRACT

Nowadays philosophers of perception often dismiss sense-data theory as something extravagant, without further qualifications or detailed arguments, despite its historical importance and current influence. In this paper I will properly reassess its basic commitments and consequences in light of new developments in the philosophies of mind and perception. I will examine in detail the nature of sense-data and I will point out that sense-data theory not only carries the unacceptable ontological and epistemological consequences frequently identified, but that it also cannot be conclusively established or refuted solely on the basis of introspective evidence as many authors have previously suggested.

Key words: Sense-data, external world, subjectivism, physicalism, introspection.

RESUMEN

En la actualidad la teoría de los datos sensoriales es frecuentemente descartada por los filósofos de la percepción como algo extravagante sin otorgar calificaciones adicionales o argumentos detallados, pese a su importancia histórica y a la influencia que aún tiene. En este artículo pretendo reevaluar adecuadamente sus compromisos básicos y consecuencias a la luz de nuevos desarrollos en las filosofías de la mente y la percepción. Examinaré con detalle la naturaleza de los datos sensoriales y señalaré que esta teoría no solo conlleva las inaceptables consecuencias ontológicas y epistemológicas que se identifican con frecuencia, sino también que esta no puede ser establecida o refutada conclusivamente solo en base a nuestra evidencia introspectiva como muchos autores han sugerido.

Palabras Clave: Datos sensoriales, mundo externo, subjetivismo, fisicalismo, introspección.

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The reality of appearances

Challenging our naïve assumptions regarding visual perception² some philosophers think that there is something common to perceptual and non-perceptual visual experiences; namely that during every visual episode (veridical, illusory or simply hallucinatory) we are always immediately aware of *something other* than mind-independent physical objects and properties. In order to establish this controversial conclusion philosophers often formulate sophisticated arguments based on the possibility of perceptual error, such as the well-known argument from illusion:

(a) In perception sometimes real physical objects appear different from how they actually are; they appear to possess sensory qualities that they do not actually possess.

(b) When it appears to a subject that something possesses a sensory quality *F*, then there is something possessing that quality *F*.

(c) If something *G* has a sensory quality that something *O* lacks, then *G* and *O* are not identical.

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(d) Since by hypothesis, in these cases the real physical object does not possess the sensory quality *F*, then it follows that the subject is either not aware of the real physical object at all or is at least not aware of it directly.

(e) There is introspective phenomenological continuity between those cases in which the real physical objects appear other than how they actually are and those in which they appear as they are.

(f) If there is introspective phenomenological continuity, then the same account of perception should be applicable to all cases of perceptual awareness.

(g) In *all* cases of perception the subject is immediately aware of something different from the real physical objects which are being purportedly perceived.

² There are certain commonsensical assumptions that we usually grant about visual perception, the nature of visual experiences and the way we acquire knowledge about the external environment using our senses. These assumptions are generally said to be naïve in the sense that they clearly indicate or capture a set of pre-theoretical intuitions that most subjects uncritically endorse when they try to characterize how one is to perceive or to undergo a perceptual experience. These considerations are pre-theoretical or commonsensical because they aim to express what is naturally compelling, independently of any sophisticated scientific or philosophical story about perception in general or about the nature of our perceptual episodes in particular. I think that it is uncontroversial to say that from a pre-theoretical naïve standpoint we assume that during successful episodes of veridical perception the immediate objects of perception are mind-independent physical objects and properties that continue to exist while not perceived, such as black tables, brown chairs and straight sticks of wood.

(h) The naïve pre-theoretical thesis that in perception we are directly/immediately aware of mind-independent physical objects is false.

The conclusion of the argument from illusion is mainly grounded introspectively, on the basis of the phenomenology of visual experiences. However, there are relevant causal non-introspective considerations, which are also regularly used to justify the same conclusion, such as the theoretical possibility of producing a phenomenologically indiscriminable hallucination by activating the same proximate causes involved in genuine perception. This further step is a well-known premise of another argument based on the possibility of perceptual error, the radical “argument from hallucination”. Robinson, for example, argues that “it is necessary to give the same account of both hallucinating and perceptual experience when they have the same neural cause” (1994, p. 151). However, it seems clear that these introspective and causal non-introspective considerations must be supplemented with extra premises in order to establish that during every visual episode we are always immediately aware of *something other* than mind-independent physical objects and properties. The most controversial of these premises is premise (b) of the argument from illusion specified above, which states that if it seems (visually) to you to be something that possesses a particular sensible quality, then there *must be* something of which you are aware that does possess that quality.

In illusion, there sensibly appears to a subject to be something that possesses a particular quality, when in fact there is no candidate object in the environment that actually possesses that quality. In hallucination, there is no suitable worldly object at all that could satisfy how things appear sensibly for the subject. However, it is often supposed that in both cases there must be something of which the subject is aware that explains how things are from the subjective standpoint. Without this assumption, sometimes referred in the philosophical literature as the “phenomenal principle” (ROBINSON, 1994, p. 32), it seems implausible or arbitrary to argue that there are situations in which we are immediately aware of *something other* than the physical objects and properties that we allegedly perceive. In what follows I will not question this controversial assumption directly. Rather I will try to understand what are these “other things” implied by the truth of the phenomenal principle, which supposedly figure as the immediate objects of awareness in every conscious visual episode (including veridical perceptions, illusions and hallucinations) and evaluate whether their nature can be sufficiently established and accommodated as a key component of an adequate philosophical theory of perception.

For many years these “things” were often referred as “sense-data” and the theories that adopted this strategy as an unavoidable consequence of the arguments from perceptual error were baptized as “sense-data theories” of perception.³ Nowadays, the existence of sense-data is sometimes dismissed as inadequate or old-fashioned without further qualifications. However, I think that the inadequacy of the sense-data theory should not be taken for granted, particularly if we recall that some influential philosophers still insist that we need identical or similar entities to make sense of the phenomenology of visual experience.⁴ For the sense-data theorist in every visual experience there is *something*, a sense-datum that explains why –whether or not you are perceptually linked with the physical world– it seems to you *as if* you were. The essence of this theory rests on the unconditional acceptance of the phenomenal principle for all conscious visual episodes. Every visual experience seems to you a certain way because you are always immediately aware of *real entities* –which are not everyday physical objects or properties– that fully determine the phenomenal character of your experience.

What is a sense-datum? The historically standard interpretation suggests that a sense-datum is a real entity that satisfies the following minimal features: (i) immediacy, (ii) non-physicality, (iii) actual possession of every phenomenologically salient quality, (iv) mind-dependency, and (v) privacy. Let’s start with immediacy. We are immediately aware of an object *x* if and only if we are not aware of it by virtue of being aware of something else *y*. A sense-datum –unlike the physical objects that we take ourselves to perceive– is always something directly or *immediately* available in visual experience. Austin accurately expresses this central idea:

The general doctrine, generally stated, goes like this: we never see or otherwise perceive (or ‘sense’), or anyhow we never *directly* perceive or sense, material objects (or material things), but only sense-data. (AUSTIN, 1962, p. 2)

Indeed, for a sense-data theorist the nature of any kind of visual experience is defined by the immediate awareness of these entities and not by the existence or non-existence of the relevant mind-independent physical objects and/or properties. One of the motivations underlying the immediacy of sense-data is undoubtedly epistemological. Sense-data theorists usually insist that if something is immediately *given* or presented in

³The terms “sense-data” and its singular “sense-datum” were introduced at the beginning of the 20th century by philosophers as a way of referring to the immediate objects of perception and to unify the different terms that early modern philosophers used for the same purposes (arguably), such as “ideas”, “impressions”, “images” or simply “appearances”.

⁴Check Robinson (1994), Foster (2000) and García-Carpintero (2001)

a direct way, then one must be certain or incapable of being mistaken about it. If sense-data are taken to be epistemologically fundamental, then only our beliefs about how things seem to us introspectively (about appearances) are foundational and certain. All other beliefs –particularly our empirical beliefs about external physical objects, relations and properties– are only probable or logically derived from those foundational beliefs that we form strictly on the basis of how things seem to be from the subject’s point of view. Fallibility, error and misperception make sense only when making reference to empirical mind-independent objects located beyond the limits of what is introspectively available, but not when we make introspective reports about how things seem to be.

The view common to all versions of the sense-datum theory that the perception of objects [external physical objects] is really a kind of inference seems to arise from a belief that, while perception proper must be infallible, inference need not be, and thus that all mistakes are fallacies. (QUINTON, 1965, p. 502)

The second feature that characterizes sense-data is their non-physical ontological status. Given that according to the theory we don’t perceive immediately ordinary physical objects like chairs, tables or cars –but only unconventional actual entities different from them– it is very difficult to provide a *positive* characterization of the ontology of sense-data. Usually they are introduced only *negatively*, for example, saying that they are *something other than physical objects* or simply claiming that they are essentially *non-physical*. This *negative* approach, which defines sense-data only by contrast with ordinary physical objects, is the standard one.⁵ It is important to emphasize that in this interpretation “sense-datum” is not merely an instrumental term similar to many others postulated by science, a metaphorical expression or an empty linguistic name, such as Vulcano or Pegasus. On the contrary, according to the sense-data theory when we make introspective reports of the form “It seems to me as if there is a bent stick submerged in water”, the expression and its different terms denote a *real non-physical entity*. Now, this leads us to the third general characteristic I mentioned. These real non-physical entities actually instantiate and possess all the properties that determine what it is like for the subject to have the experience. If you are hallucinating and it looks to you as if there is a pink round balloon in the middle of your visual field, then there is some balloon-

⁵ Indeed, there are different interpretations, such as Price’s neutral approach when he argues that a sense-datum is a neutral term which doesn’t entail the acceptance of “any particular theory” (1932, p. 19) or Ayer’s (1936) view in which a sense-datum is just a useful way to *express* what happens when we undergo an experience

like non-physical entity that really *is* round and pink. If you are having an illusion and it seems to you as if there is a bent stick submerged in water, then “bentness” is a *real* property possessed by a sense-datum.

Finally, I will briefly introduce the last two features: (iv) mind-dependency and (v) privacy. According to (iv) sense-data are entities whose existence is confined to our awareness of them. Unlike external physical entities, sense-data cannot exist independently of the visual experiences in which they figure.⁶ According to (v) a sense-datum is never available for *public* cognitive scrutiny. Privacy should not be considered as ruling out cognitive access at all, but only as a way of constraining it to a single subject (logically private to the subject of experience). Mind-dependency and privacy taken together seem to demand a *subjective* metaphysics, according to which every object and qualitative-element consciously and immediately available to a subject S in a particular time when undergoing a visual experience is constitutively dependent on S’s visual experience. In the following two sections I will focus the discussion in two different sorts of problems (epistemological and ontological) linked to this *subjective* constitutive relation between non-physical objects and our acts of experiential awareness. Even though these problems are familiar and often identified in the philosophical literature about sense-data, I think it is worth taking a new look at them with more clarity and in the context of new developments and interpretations in epistemology and the contemporary philosophy of mind.

Skepticism and the external world

According to the sense-data theory the immediate objects of perceptual awareness are nothing like the public physical objects that we pre-theoretically take it we perceive. On the contrary, a sense-datum is a non-physical entity, which is mind-dependent and logically private to a single subject. From an epistemological perspective one of the main motivations of this theory is to find a common foundational ground for the edification of thought. Introspective reports and beliefs about what it is like to have a

⁶The standard approach is that a sense-datum must depend for its existence upon the subject’s awareness of it. However, this standard view differs from the one held by some early sense-data theorists. Price, for example, argues that the proposition that says sense-data “depend for their existence or for their qualities upon our awareness of them... is a gross absurdity, incompatible with the very connotations of the terms ‘existent’, ‘awareness’, and ‘qualities’” (1932, p. 126) and Moore claims that “... the visual sensibles which I directly apprehend in looking at this paper still exist unchanged when I merely alter the position of my body by turning away my head or closing my eyes...” (1922, p. 168). For the sake of the argument I will consider here only the standard view that sense-data are indeed mind-dependent.

visual experience are regarded as foundational and infallible given the nature of their immediate objects. By definition, sense-data are always as they seem to be, leaving no room for error at least at the immediate experiential level.

Unfortunately, I assume (mainly because we do care about the history of philosophy) that we all know that when there is perceptual mediation of this particular kind skepticism about the external world comes alive. If we accept that in every perceptual episode we are exclusively in direct/immediate contact with some actual non-physical entity that possesses all the properties consciously available during the experience, then it is mandatory to ask to what extent our immediate experiences provide us with reliable information about the external physical environment. The traditional worry associated with the sense-data theory is that our immediate objects of perceptual awareness could work as a *veil* that may persuade us to drop any reason to believe in the physical world and its mind-independent properties. What is in danger is the justification of our beliefs about the external world.

Sense-data theorists have historically supported two main strategies to deal with the problem of the external world. As Searle points, they either adopt views in which a sense-datum “is in some sense a copy or representation of the material object” (1983, p. 59) or quite differently in which “the object is somehow just a collection of sense data” (1983, p. 59). We can call the first strategy “sense-data representationalism” and the second simply “phenomenalism”. Inspired by the work of Descartes and Locke, sense-data representationalists think that there must be some explanation for the regularities that we find at the immediate subjective level of visual experience. Based on causal and explanatory inferences, these theorists claim that sense-data must *stand for* or *represent* the external material world more or less accurately.⁷ They insist that if sense-data resemble or represent to some degree the external physical objects/properties allegedly causally responsible for the visual experiences, then the empirical beliefs that we form on their basis are generally justified.

Despite its initial plausibility, sense-data representationalism conveys relevant problems. Probably the most familiar one is derived from the status of sense-data as the immediate objects of experience. If all that is immediately available during experiences are non-physical, private, mind-dependent entities, we may wonder what are the grounds to claim that these entities actually stand or represent the mind-independent physical

⁷ I say “more or less” because there might be different degrees to which sense-data allegedly represent the external world. For example, representing or resembling primary and secondary qualities, representing *only* primary qualities and finally only representing a structural isomorphism of the primary qualities

reality.⁸The difficulty is simple, it has been argued that it is impossible to take x as a sign or representation of y unless we have independent access to both x and y . If we claim that we only have direct perceptual access to sense-data and that every instance of perceptual awareness involves an immediate acquaintance with a non-physical entity, then our grounds for inductive inference seem insufficient.

Traditionally, to answer this question, sense-data representationalists emphasize that we need an explanation for the presence of some relevant features that characterize our visual experiences, such as their systematic order and coherence and the fact that we do not have voluntary control over them.⁹They argue that the *best explanation* that we have for perceptual phenomena such as regularity and coherence is the postulation of a public external world constituted by physical objects and properties, which are causally responsible for the type of immediate experiences that we have. The idea of an external physical world causally responsible for the type of immediate experiences that we have is, in this sense, the product of an *inference to the best explanation*. Despite the fact that this is a plausible suggestion, I think that there are two important aspects to keep in mind. First, the *conjectural* status of the material world considered as the best explanation for what happens at the experiential level is not something that everyone would happily accept. Indeed, given the acceptance of sense-data as intermediaries the theory is highly unintuitive from the commonsense point of view. We don't usually think of the physical realm as the result of an inference and, even though this might be a possible anti-skeptical way out for sense-data representationalism, the theory still needs to show that it is the best overall account of visual experience in offer.¹⁰Second, what we might call a *Humean* skeptic might reject the legitimacy of this sort of inference to the best explanation on the basis of the regularity and coherence of our experience. Consider, for example, Robinson's remarks on this issue:

⁸The situation is even worse if we think that sense-data only possess "qualities which do not refer beyond themselves" (ROBINSON, 1994, p. 2).

⁹Despite the fact that we can modify some of the conditions for perception, for example, by changing the lighting conditions or that we are not constantly attending to all the features that characterize our experience, there are repeatable patterns of qualitative instances

¹⁰Alston has pointed out that explanatory arguments of this kind suffer from two serious difficulties: "(a) No one has ever succeeded in making a plausible case for the superiority of this "standard" explanation to its alternatives, like the self-generation of sensory experiences or their direct production by a Cartesian demon or Berkeleyian God. (b) More crucially, the patterns in experience cited as the explananda involve suppositions about the physical environment we could only know through perception, thus introducing a circularity in the argument" (1999, p. 227).

Any search for an explanation presupposes that there is something in need of an explanation – that is, something which is improbable unless explained. In this case, this would be so only if it were improbable that it should be a brute fact, without any explanation, that our experience should be highly ordered. We do, indeed, have a strong intuition that it is so. Our experience is sufficiently highly structured for us to be able to interpret it as experience of a fairly stable physical world. Our natural response to this is to assume that experience has a cause; it doesn't just happen in this ordered way by accident. In arguing this way from experience we are presuming that the fact that order requires an explanation is an *a priori* principle; we do not learn *a posteriori* that the order in the phenomena has a cause, for we have reason to believe that experience has a cause only if we take its orderedness as being evidence for such an hypothesis. The Humean tradition rejects the application of *a priori* probabilities to empirical questions. (ROBINSON, 1994, p. 216)

Common sense tells us that if there are no causal constraints then we should not experience the clear perceptual regularities that we in fact do. If there are no causal restrictions, then it seems that every perceptual event has an equal probability and it would be quite odd to find regularities such as the ones we usually have. However, the skeptic might reply that an ordered sequence is *a priori* no less probable than any other. He might take a dice and throw it, insisting that *a priori* –in every throw– any number has the same probability of 1 in 6. Perhaps there are ways of avoiding this problem.¹¹ Nonetheless, the relevant point I want to make here is that this kind of Humean skeptical objection has had an enormous impact in the 20th century, causing some sense-data theorists to accept that we can't have knowledge of the external physical realm, which supposedly causes our experiences. A good example of this philosophical trend is the second main strategy that I wanted to consider, phenomenism.

The phenomenist strategy acknowledges the Humean idea that we are not justified in making causal or explanatory inferences from sense-data to external physical objects. However, it grants that our beliefs about the external world can be said to be justified and generally true because their content is restricted to our immediate experience of sense-data and the order and regularity they exhibit. Unlike sense-data representationalists, phenomenists think that sense-data don't represent or resemble the external world. Rather, they suggest that the immediate realm of sense-data *is all*

¹¹ For example, Robinson tries an alternative argument in which he decides to leave aside the probability of particular series in order to work with probabilities of types of series or "probabilities of series qua members of such a class" (1994, p. 217).

there is to know and that in some way it constitutes what we commonly think is our world.

According to the phenomenalist, to believe that a physical or material object of a certain sort exists just *is* to believe that sense-data of various sorts have been experienced, are being experienced, will be experienced, and/or would be experienced under certain specifiable conditions. (BonJour, 2002, p. 136)

The counterfactual conditions under which sense-data could or would be experienced must be specified exclusively in terms of what is immediately accessible to the subjects of experience. In this sense, the phenomenalist view of the physical world is fully understood in connection to *actual* and *possible* awareness of sense-data. Even though phenomenism might initially strikes us as a highly bizarre and implausible view, it is important to mention that philosophers accepted it in the past and still insist upon some of its main commitments. Foster (2000; 2008), for example, has recently argued for an *idealist* view in which there is no physical mind-independent physical world causing or being responsible for the regularity of our perceptual experiences. Rather, he suggests that our organized and regular experiences create or configure what we usually understand as the “external world”. He thinks that the apparent externality exhibited by our immediate experiences is the consequence of the order and regularity exhibited by sense-data that move us *to interpret* (non-inferentially) our experiences as involving the awareness of something external. In other words, Foster wants us to accept “a system of perceptual experience which so misrepresents its own nature” (2000, p. 162).

I think that these sophisticated attempts to make sense of the phenomenalist conclusion are not sufficiently convincing and carry unacceptable epistemological and metaphysical problems. First, it seems very unreasonable to hold that the complex regularity of our immediate experience has *no explanation at all*. If all the conditions under which sense-data are experienced must themselves be specified in terms of sense-data, phenomenism –more than a plausible reinterpretation of ordinary experience– seems to be an argument for skepticism about the external world. Second, I do not see any non-arbitrary way to make sense of the alleged intrinsic order possessed by the reality of appearances independently of the physical world. Given its central role in the theory, this is not something that the phenomenalist can simply *assume* without a convincing story. Third, the phenomenalist also needs to address the problem about the content of

propositions about physical objects in the *past*. Consider for example the truth of propositions concerning the alimentary habits of Dinosaurs of the Cretaceous. Are they fully specifiable in terms of sense-data that have been experienced, are being experienced or would be experienced under certain circumstances?

Finally, the phenomenalist is also confronted with serious objections regarding knowledge of other people's mental states. Surely your conscious experiences are beyond the limits of what I immediately experience. If these events are outside my immediate experience, how do I reach conclusions about what you are genuinely thinking now? A reasonable thing to say is that I need to make *inferences* on the basis of my immediate experience. First, an inference from my immediate experience of sense-data to certain facts about your physical body, and second, an inference from facts about your body to some conclusions about your current mental states. However, as BonJour rightly points out, "both of these inferences depend on causal relations that are, according to the phenomenalist, unknowable" (2002, p. 143). Apparently, any phenomenalist strategy to deal with the problem of others' mental states needs to be addressed from a *solipsist* standpoint and this seems to be an unacceptable consequence.¹²

The sense-data theory faces serious epistemological objections concerning skepticism about the external physical world. On the one hand, sense-data representationalists need to provide a more adequate account of the causal and explanatory inferences that form the basis of their theory, especially if they want to avoid the Humean skeptical challenge. On the other hand, phenomenalist who take the Humean objection seriously not only face skepticism about the external world and the existence of other minds, but also seem to lack enough resources to make sense non-arbitrarily of the complex regularities exhibited by our immediate experience. Even if there are options still available for the sense-data theorists, the search for an alternative model capable of explaining visual experience without sacrificing common sense is justified. I think that the fundamental problem rests on the foundations of the sense-data approach, that is, on the acceptance of the basic metaphysics of actual non-physical objects demanded by the theory. This will be the topic of the next section.

¹²I owe some of the crucial points of this section to BonJour's (2002) excellent comments on these issues.

Sense data, subjectivism and physicalism

The alleged mind-dependency and privacy of sense-data demand what we might call a subjective metaphysical view about the immediate objects of visual awareness. According to this *subjectivism*, every object and qualitative-element consciously available to a subject *S* when undergoing a visual experience is constitutively dependent on *S*'s experience. In other words, sense-data are ontologically and existentially confined to particular episodes of presentational awareness. This account has a close resemblance to the ontology sometimes attributed to sensations and sensory objects. It is said that the existence of a particular sensation, like pain, is constituted by our awareness of the sensation in question. In the same fashion, the existence of a sense-datum is constitutively dependent on the subject's experience. The sense-datum wouldn't have existed if the subject were not aware of it.

The constitutive dependency demanded by this subjective metaphysics has consequences not only for the nature of sense-data, but also for the nature of our experiences in general. For every visual experience there is always an actual existent object or an actual existent property-instance that constitutes the visual experience in a fundamental way. We might say that subjectivism is in this sense a rather strong view that requires not merely a causal connection, but a mutual metaphysical-constitutive link between objects and acts of awareness. On the one hand, the existence of a particular sense-datum essentially depends on the existence of a particular act or episode of visual awareness. On the other hand, the perceptual episode or sensory act *is* the conscious presence of a sense-datum.

I think it doesn't take too much effort to notice that this subjective metaphysics involves important problems. To think of a sense-datum as ontologically confined to a singular visual occurrence (perceptual or non-perceptual) is to think of it as something that cannot have existence outside this particular context of subjective responsiveness. According to this subjective traditional interpretation, a sense-datum is –using Foster's terminology– defined *internally* as something that cannot exist independently in the physical world:

... we mean that, for each sense datum *x*, there is an episode of presentational awareness *y*, such that *x* is the object of *y*, and the fact of *x*'s being the object of *y* fully covers, and necessarily covers, all that is involved in the occurrence of *x* as a concrete ingredient of reality. Amongst other things, this will mean that a sense-datum cannot occur as the object of more than one episode of presentational awareness (it cannot be presented to different subjects or on different occasions), and that it cannot occur as an ingredient of the physical (mind-independent) world. (FOSTER, 2000, p. 164)

The subjective ontological characterization of sense-data plays an important role in contemporary discussions in the philosophy of language, particularly in connection with the problem of private language, our understanding of truth and the possibility of defining psychological terms on the basis of introspection alone.¹³ I will not consider this complex debate here, but I think it's worth emphasizing that problems in the philosophy of language are sometimes symptoms of more fundamental problems at the metaphysical level. In this case the problem seems to be how to make sense of sense-data as *subjective* (constitutively dependent on the subject's acts of awareness) and *non-physical*, insisting at the same time, on their metaphysical status of actual entities that really belong to the fabric of the world. I think sense-data theorists must provide an explanation of two different, but related issues that take the form of an ontological dilemma. First, they must explain how something can *really* exist and be confined to a single episode of subjective awareness. The subjective ontology of sense-data seems to be incompatible with their actuality as entities that really belong to the fabric of the world. Second, they must provide a clue to understand how something can be non-physical and, at the same time, a real component of the world, that is, an entity. The non-physical ontology of sense-data seems to be at odds with the physical ontology that we commonly attribute to objects and properties which are *real* and causally efficacious.

Let's discuss the first horn of the ontological dilemma. The sense-data theorist needs to explain how something can *really* exist and yet be confined to single episodes of subjective awareness. The "real existence" of sense-data seems to be incompatible with the fact that they are mind-dependent and logically private entities. The philosophical literature on sense-data theories provides some alternatives to address this issue. I will closely follow Foster's (2000, pp. 166-170) excellent categorization of these alternatives into three different accounts that have historically dominated the discussion. Indeed, paraphrasing Foster I will show that none of them are fully satisfactory. Let's start with the traditional interpretation (the interpretation that we have been generally following in this paper), that there is a *constitutive link* between our visual experiences and the kind of objects we are immediately aware of. In this view, the existence of a particular sense-datum fully depends on the subject's particular act of awareness:

¹³ I am thinking especially of Wittgenstein's anti-private language argument and the idea that *private* entities, such as sense-data cannot be the objects of linguistic or semantic reference. In this respect it is highly advisable to check Wittgenstein's (1993, p. 290) early remarks on sense-data in his *Rhees' Lectures* given in 1936 and his highly influential discussion in the *Philosophical Investigations* (2001).

[Traditional interpretation] The existence of any sense-datum is *constituted* by its phenomenal presentation to a subject S at time t. The existence of a sense-datum is in this sense *nothing more or less* than the obtaining of the subject's act of awareness.

This interpretation may explain the alleged mind-dependency and privacy that characterize sense-data, but it is problematic for a different reason. It attempts to derive the existence of sense-data from facts about them. What constitutes the existence of a sense-datum is specified by virtue of specifying facts of the sense-datum itself. We are not suggesting that the idea of an ontological derivative entity is unintelligible or incoherent. Indeed, we can think about all sorts of entities that are said to derive their existence or be *constituted by* a set of more fundamental facts. We might think, for example, of molecules as constituted by atoms or of cars as constituted by more basic entities such as engines, doors, etc. The worry is that to provide an explanation of *x*'s existence appealing to a fact or set of facts about *x* itself is unsatisfactory.¹⁴ In other words, I sympathize with the idea that “the claim that the sense-datum is ontologically available to feature in the presentational fact is in direct conflict with the claim that it derives its existence from this fact” (FOSTER, 2000, p. 167).

Now, it is surely possible to say that this interpretation simply does not capture the relevant point about the existence or constitution of these non-physical entities. It could be argued that sense-data theorists do not need to say that the existence of a particular sense-datum *derives from* or *originates from* certain facts about itself. Rather differently, a theorist could simply argue –à la Berkeley– for the existence of sense-data in the following fashion:

[*Esse est percipi* interpretation] The existence of a particular sense-datum and its sensory presentation to a subject S at time t are one and the same thing.

Like the traditional interpretation, the “*esse est percipi*” alternative also makes sense of the privacy and mind-dependency that characterize sense-data, this time without appealing derivatively to facts about or derived from the entities themselves. However, there is something again deeply puzzling about this line of argumentation. It is not that it is incoherent, but only that it is hard to consider how the existence of something could simply *be* or

¹⁴ Foster points out that we cannot coherently suppose that the existence of the sense-datum is constituted by facts about itself, mainly because “in supposing its existence to be *derivative from* these facts, we would be supposing that it was not available for the facts *to be about*” (2000, p.167).

consist of its presentation to a subject. It is even harder if we think that one of the main features of sense-data is their logical privacy. Foster, for example, clearly identifies this problem when he complains that “given any entity x, subject S, and time t, unless x has a form of existence which is distinct from its being presented to S at t, it will not have the right kind of ontological independence to be able to stand in that relationship” (2000, p. 167).

When we think about the immediate objects of perceptual awareness, we think of them as entities that are *related* or presented to the subjects of experience in a certain way. In this sense, we naturally attribute to the objects of experience certain transcendence beyond the constraints of the perceptual act for a precise reason, namely that we think of *relations* as involving distinct *relata*. Therefore, the thought that the existence of a sense-datum and its sensory presentation to a subject at a certain time are one and the same thing is highly unsatisfactory and controversial.

These previous considerations motivate a further alternative that the sense-data theorists could take in order to determine the ontological status of these entities. They could argue that the existence of a sense-datum and its private presentation are *constituted* by the subject’s being in a mental state *distinct from* the occurrence of the sense-datum itself. This approach also makes sense of the alleged privacy and mind-dependence that characterize sense-data and, at the same time, preserves the fundamental act/object distinction that seems to be required by the theory.

[Mental state interpretation] The existence and presentation of a particular sense-datum is constituted by the subject’s being in a mental state different from the actual occurrence and phenomenal presence of the sense-datum.

This interpretation not only implies the idea that the existence of a sense-datum is confined to the instantiation of a psychological state without being itself such a brain/mental state. It also states that for any particular sense-datum there is a mental state that –when realized– suffices for its existence. At first sight, this strategy seems very appealing. Nevertheless, I think that after careful consideration of its main elements it is clear that it threatens some of the definitional aspects of the sense-data theory. We have been emphasizing that the sense-data theory is not only a theory about the immediate objects of visual experience, but also a theory about the nature of experiences themselves. It is said that it is a *subjectivist* approach, mainly because the bringing about of a mental state is sufficient for the existence of a perceptually manifest sense-datum. Bearing this in mind, there are two problematic issues that seem to follow immediately if we consider this

ontological *subjectivism* in conjunction with the “mental state interpretation” that we are examining.

First, we don't have a clear uncontroversial characterization of a psychological state *different from* but *sufficient* for the presentation of sense-data. Indeed, even if there is such a state it seems very difficult to apply the relevant distinction required by the theory. Remember that sense-data philosophers need to provide an explanation of how it is possible for a psychological state (a visual experience), which is not identical with the immediate object of awareness and its features, to suffice –when realized– for the *real* existence of this object and its features. Sense-data theorists have barely accomplished this task, especially if we consider that this needs to be valid to all visual scenarios, including illusions and hallucinatory instances.

Second, the sense-data theorist might be tempted to say that the activation of brain states could play the role of being distinct and sufficient for the existence of sense-data. The idea would be that the activation of the relevant proximate neural causes is sufficient to bring about the existence of a sense-datum ontologically distinct from the experience, but constitutive of the overall visual psychological state. It is at this stage that the sense-data theory enters into deep problems given that it embraces an ontology that posits non-physical entities and non-physical properties allegedly located outside the physical space. If the existence of sense-data is to be explained in terms of the activation of neurophysiological states of the brain, then we need a convincing story about how something physical can sufficiently *bring about* or *cause* a non-physical sense-datum. Unfortunately, the more we think about causation, the clearer becomes that the *dualist* ontology that underlies the sense-data-theory is highly problematic for several reasons that have been acknowledged by many contemporary discussions in the philosophy of mind.

These previous considerations put forward the second horn of the ontological dilemma that we mentioned in the early paragraphs of this section. How can something be *non-physical* and at the same time a *real* component of the fabric of the world? The non-physical ontology of sense-data seems to be at odds with the physical ontology that we commonly attribute to objects and properties which are *real* and causally efficacious. From a naïve pre-theoretical standpoint, when we perceive objects/properties we assume that they possess a physical underlying structure and that they are located in space and time. We allegedly perceive chairs, tables, cars and lemons and we assume, for example, that these physical objects of awareness cannot occupy the same location at the same time. However, based on the arguments from illusions and hallucination sense-data theorists claim that

what we immediately perceive in *all* visual contexts are non-physical actual entities. If this is the case, then the sense-data theory is fundamentally incompatible with what I take to be the dominant theory in the philosophy of mind during the last decades, namely *physicalism*.

According to physicalism everything is physical or supervenes on the physical. In the present context this entails the view that conscious visual experiences are neurophysiological states of the brain or at least *supervene* upon those neurophysiological states of the brain. Regarding the immediate objects of visual experience, the physicalist point of view states that these objects must be identical or supervenient with physical objects or properties. A sense-datum –given its non-physical nature and actuality– is something simply unacceptable from a physicalist standpoint. I will not argue for any general or specific version of physicalism here. This task would take us far beyond the scope of this paper.¹⁵ Nonetheless, I think it is very important to emphasize that *physicalism* has been embraced by most contemporary philosophers of mind not just because the idea that everything is physically constituted is more appealing on the face of our pre-theoretical standpoint about visual experience and the science of perceptual processes. There are also serious philosophical considerations that suggest that *physicalism* is better placed than its Cartesian inspired rival theories (substance or property dualism) at the moment of explaining mind-body interaction.¹⁶ The sense-data theory and the non-physical nature of the entities that it postulates does not really help to explain how our mentality is so deeply integrated in the causal physical network:

The more we think about causation, the clearer becomes our realization that the possibility of causation between distinct objects depends on a shared space-like coordinate system in which these objects are located, a scheme that individuate objects by their “locations” in the scheme. Are there such

¹⁵ I am asking the reader, for the sake of the argument, to assume that the ontological thesis of physicalism is better placed than dualism in the present context. However, since I will not present a detailed argument to back up this assumption here, I grant committed dualists will be unpersuaded by some of the remarks at the end of this section.

¹⁶ The general idea behind dualism in its two most significant versions (substance dualism and property dualism) is that the mental and the material world are essentially different in kind. Unlike dualists, physicalists and idealists think that everything must be understood as belonging to one and the same fundamental kind. Physicalism, understood minimally as the thesis that everything that causally interacts with the physical world must be itself physical, rests on the so-called completeness of physics or causal closure of the physical realm. For an overall discussion of this topic please check Gillet & Lower (2001). For a physicalist standpoint take a look at Kim (2005) and Papineau (2002). For a defense of Cartesian dualism check Foster (1991).

schemes other than physical space? I don't believe we know of any. (KIM, 2005, p. 91)¹⁷

I think that the claim that spatiotemporality plays a central role when explaining causal relations is uncontroversial.¹⁸ In this sense, even if we accept something like the reality of appearances –like sense-data theorists do on the basis mind/body dualism– it seems crucial to address the following question in a straightforward way: If sense-data are not located in the physical space, where are they? Somebody might be tempted to sacrifice the traditional interpretation, arguing that we need to identify sense-data with brain states and claim that they are literally located in one's head. This is clearly mistaken since brain states do not have the properties consciously available to us during visual experiences. The neurophysiological state involved in seeing a door, for example, is obviously not *door-shaped*. A rather different way out of the problem could be to say that sense-data are located where the physical objects causing them are located. This is clearly unsatisfactory and inconsistent given the possibility of having perfectly matching hallucinatory experiences in which there are no objects available in the subject's environment that could play that causal role. Assuming that

¹⁷ Kim notices the importance of physical space when addressing a fundamental difficulty in the philosophy of mind, namely how something outside physical space –such as a Cartesian mind or a sense-datum– could causally interact with regular objects located in physical space. In particular, he is concerned about the so-called “pairing problem” in which two or more different simultaneous events or facts (for example, the firing of two different guns, A and B) cause different, but simultaneous effects (for example, the death of two different people: John and Peter). If we need to specify the correct pairings of cause and effect in a particular case of physical causation (for example, if we need to establish that it was the firing of A and not of B that caused John's death) we normally appeal to spatial locations and spatial relations such as distance, orientation, etc. According to Kim, the same applies to perceptual relations and most intentional phenomena. However, if we characterize perceptual experiences in terms of direct acquaintance with sense-data that by definition are not located in physical space we cannot appeal to a physical coordinate system in order to establish at least a unique location (at a time) for a non-physical entity. Kim's insight invites us to avoid any ontological commitment with non-physical entities if we want to establish correct pairing relations.

¹⁸ Following Kim's (2005) advice we have suggested that causal relations between physical objects, facts or events depend on their spatiotemporal relations to each other. This is certainly true of the Humean regularity account of causation in which contiguity in space and time is required and of many other philosophical accounts of causation. However, there are some contemporary theories of causation –like the probabilistic theories– that embrace the possibility that our world might be fundamentally indeterministic as implied by quantum mechanics. In these worlds causes need not be constantly conjoined with their effects. A full discussion of spacetime and its relevance as a requirement for causation is beyond the boundaries of this paper. I encourage the reader to check Pooley's (2008) and Hitchcock's (2008) excellent introductions on these issues.

sense-data have spatial properties like size and shape, the only two remaining alternatives seem to be linked with the phenomenology of appearances: Either (a) sense-data are located where they *appear* to be, or (b) sense-data are located in what is sometimes referred to as “phenomenal space”.

Let’s consider first the view (a), that sense-data are positioned wherever they appear to be.¹⁹ Following Huemer (2001) we may envisage at least two important objections against this alternative. First, there are *possible* scenarios that might conflict with the special theory of relativity, that “there is no objective time ordering to space like separated events, and that apparently implies that such events cannot be causally related” (HUEMER, 2001, p. 154). Consider an experience of seeming to see something *x* very far away. The sense-data theory requires the appearance of a particular sense-datum roughly at the same time the brain states associated with your experience are activated. In other words, it requires the sense-datum to exist, while you have the experience of seeming to see something *x*. However, it is possible to envisage cases in which the objects seen appear so far away that, according to the theory of relativity, literally nothing could get from my brain to the apparent location in the time it takes for the subject to have the experience.

Huemer’s first objection rests in the truth of theoretical assumptions about the relativity theory that I will not pursue further. However, he moves forward and suggests a second objection that strikes me as more intuitive and commonsensical. Huemer points out that when considering this interpretation (a) we need to pay attention not only to scenarios in which we dream about events taking place in non-existent or fictional places, but also to the possibility of hallucinating such events. Keeping in mind that we are assessing the view that sense-data are located wherever they appear to be, he invites us to imagine a brain in a vat scenario in which the brain is having and has been having its whole life just hallucinations. The brain has seemed to be living in Tolkien’s Middle Earth:

When the brain has one of its experiences as of seeing a unicorn, the unicorn sense datum appears “in front of” the brain. But since the brain doesn’t have any eyes, what counts as “in front of” the brain? Perhaps where the frontal lobes are. But why should *that* direction count as “where the unicorn appears to be”? The brain in a vat has no awareness of its own frontal lobes. The brain might not even know what a brain is. In what sense, then, does the unicorn the brain thinks it is seeing appear to be in that place which is in fact in front of the brain’s frontal lobes? (HUEMER, 2001, p. 158)

¹⁹ Jackson (1977) can be interpreted as saying something similar when he claims that “when *X* looks further away than *Y*, there are sense-data which actually are different distances away” (p. 103).

This thought-experiment helps to undermine the idea that sense-data are in the places where they appear to be. Given that we are talking about a fictional place –Tolkien’s Middle Earth– the supposed place in which a sense-datum appears to be simply does not exist. There can be no such place. Experiences of non-existent places, such as vivid dreams of fictional places, and other thought experiments in which it is simply inappropriate to use spatial coordinates such as “in front” or “to the back” have motivated some philosophers to postulate (b), the idea that sense-data are located in their own peculiar and separate space that we cannot identify with the physical space.

I think that this final possibility (b) that states that sense-data are located in a rather peculiar “phenomenal space” is simply *ad hoc*, given the enormous difficulties that sense-data theorists need to face if they want to specify a coherent notion of space different from the physical one. We have seen how difficult is to make sense of the idea of a non-physical entity. In this sense, the task of specifying a non-physical “space” in which these entities are actually “located” seems even more inappropriate if not impossible. As Huemer (2001) points out, a “phenomenal space” seems to be unintelligible from the point of view of theory of relativity which holds that space and time are strictly speaking not two separate things, but just a unitary four-dimensional manifold usually associated with the notion “spacetime”. Secondly, there are wider and significant problems regarding the connection or relation existent between the physical space and the phenomenal space. Specifically, we need an explanation about how events that occur in physical space can causally interact with events that occur in the phenomenal space if these spaces are fundamentally different.

Like in the case of sense-data, we need an account of the nature of phenomenal space compatible with the view that mental states and events are the outcome of natural physical processes subject to natural laws. If we do not have a clear natural understanding of the relationships existent between *phenomenal space* and *physical space*, then I do not see the advantage of taking this point of view in particular. In spite of the different ways or modes of presentations in which perceptual phenomena sometimes strike the subjects of experience, I would rather suggest a view in which *phenomenal space* and *physical space* are mutually dependent, sharing at the metaphysical level the same sort of fundamental properties. This is of course an alternative not available for the sense-data approach.²⁰

²⁰For a detailed discussion of *phenomenal space* in connection with the theory of relativity and natural laws see Huemer (2001, pp. 159-168). It is worth pointing out, that there are other familiar problems connected with the non-physical nature of sense-data that I will not consider, such as the issue of three-dimensionality, depth or determinacy/indeterminacy.

Introspection and mind-dependence

Despite the serious metaphysical and epistemological consequences that seem to be involved in the sense-data theory of visual experience some theorists suggest that the existence of sense-data is something phenomenologically self-evident or indubitable on the basis of introspection. They think there are certain phenomenological aspects of perception that simply strike us as evident. It is the “obviousness” of these introspectable phenomenal features that lies at the heart of the arguments for the existence of sense-data or equivalent entities. As a good example, consider Robinson’s phenomenal principle with particular emphasis in those cases in which we hallucinate:

If there sensibly appears to a subject to be something which possesses a particular sensible quality then there is something of which the subject is aware which does possess that sensible quality. (ROBINSON, 1994, p. 32)

Even if the subject of experience is hallucinating, Robinson’s phenomenal principle forces us to accept that in these cases there indeed *something* of which the subject is aware that actually has all the qualitative features phenomenally manifest during the experience. Several years before Robinson, H.H. Price didn’t hesitate when he said that “this principle cannot indeed be proved, but it is absolutely evident and indubitable” (1932, p. 63). Price claimed that there are many things we can actually doubt regarding the nature of our perceptual states, except that there are certain features that indeed exist, even in the hallucinatory cases, and that they are “directly present to my consciousness”:

When I see a tomato there is much I can doubt. I can doubt whether there is a tomato that I am seeing, and not a cleverly painted piece of wax. I can doubt whether there is any material thing there at all. Perhaps what I took for a tomato was really a reflection; perhaps I am even the victim of some hallucination. One thing however I cannot doubt: *that there exists a red patch of a round somewhat bulgy shape, standing out from a background of other colour-patches, and having a certain visual depth, and that this whole field of colour is directly present to my consciousness.* (PRICE, 1932, p. 3 (my emphasis))

In these passages, introspection is considered as an infallible faculty that reveals that there is *something* existing that actually possesses all the phenomenal properties consciously available during a visual experience. The central issue here is the phenomenology of experience and how to make sense

of it. Some philosophers think that the sense-data theory gives an adequate answer to what is introspectively available in these cases.²¹ Allegedly there is *always* (in every visual experience, including hallucinations, illusions and successful perceptions) something constitutively dependent on the subject's awareness that undoubtedly exists and that actually instantiates all the phenomenal properties available during conscious experience. Ironically, philosophers who deny the existence of sense-data have also suggested that this debate can also be settled solely on the basis of how things seem from the subject's standpoint. Reichenbach, for example, says that during successful perceptual experiences what we immediately observe are "things, not impressions. I see tables, and house, and thermometers, and trees, and men, and the sun, and many other things in the sphere of crude physical objects" (1938, p. 164). Like many others, he accepts the pre-theoretical naïve view and thinks that introspectively, objects do not *seem* to be private mind-dependent entities.

Enemies and friends of the sense-data theory seem to use introspection to ground their ontological intuitions. In order to address this paradox I will introduce what I take to be the denial of the subjective metaphysics implicit on the sense-data theory, sometimes called the "Transparency Thesis". Then, in the final section of the paper, I will argue that neither the subjective metaphysics of sense-data nor its denial can be held solely on the basis of introspection. This lack of introspective grounds for the truth of the subjective metaphysics of sense-data opens the possibility for an alternative account of perceptual experience and illustrates that all we can tell on the basis of introspection is that there is something common across perceptual and non-perceptual instances, but nothing at all about the specific nature of the immediate objects and properties being manifest.

Transparency and transparency*

As a *reductio ad absurdum* of our pre-theoretical intuitions about the nature of perception and visual experience, the sense-data theory is certainly very radical. We have seen that sense-data are not only *actual* entities, but also *ontologically subjective* or constitutively dependent on singular subjective episodes of visual awareness. If we accept that the immediate

²¹ Even though Price acknowledges that there is something that is red, in the same quotation he remains neutral about the ontology of sense-data claiming that "what the red patch is, whether it is physical or psychical or neither, are questions that we may doubt about. But that something is red and round then and there I cannot doubt" (Price, 1932, p. 3). In this sense, we might say that Price's account is less controversial than other traditional sense-data theories.

objects of visual experience are always *real* entities constitutively dependent on our subjective acts of awareness, then it follows that veridical perceptions, illusions and hallucinations share a fundamental aspect, namely, that as experiences they always suffice for the real existence of their immediate objects. For example, a perceptual experience of a bent stick submerged in water, is not only sufficient for the real existence of something non-physical that looks like a stick, but also for the actuality of all the properties that characterize the experience, such as “bentness”. In the same fashion, a hallucinatory experience *as of* a pink rat is sufficient for the real existence of a “rat-looking” non-physical entity that actually possesses the real non-physical property of “pinkness”. In other words, according to sense-data theorists the occurrence of a particular experiential episode at a particular time t_1 , regardless of the actual state of affairs in the physical environment at t_1 , is sufficient for the *real existence* of the objects/properties consciously manifest to the subject at t_1 .

The idea that our experiences are *constitutive* –sufficient for the existence– of the objects and properties of perception is in tension with our pre-theoretical naïve understanding of those objects and properties as physical and mind-independent. We usually assume that what is consciously available when we undergo a genuine perceptual experience does not depend in any ontologically significant way on our awareness for existing. We do not ordinarily think of perceptual experiences as the kind of states or mental events that can constitute the existence of what we are aware of. On the contrary, we think of perceptual experiences as mental states that in some way put us in touch with physical objects and properties instantiated in the environment. By means of our experiences –assuming that our visual mechanisms are working correctly– we aim to get information about the mind-independent physical world that might help us for the achievement of different tasks. If we think that this is the case it is because we think that perceptual objects are independent of our experiences *of* them.

The assertion of the mind-independence of the immediate objects of visual experience is of course *inconsistent* with the truth of the subjective ontology held by sense-data theorists. Indeed, those who deny the subjective ontology of sense-data usually think and characterize visual experiences as being essentially “transparent”. The so called “Transparency Thesis” –like its negative subjective counterpart– involves a claim not only about the nature of the objects and properties that are manifest when undergoing an experience, but also about the experiential states themselves and whether or not they constitute the relevant objects of experience:

[Transparency Thesis] Every object and qualitative-feature consciously manifest to a subject *S* when undergoing a perceptual experience is *not* constitutively dependent on *S*'s experience.

This formulation is basically a claim about the nature of the immediate objects/properties that determine what-it-is-like to have a perceptual experience.²²The Transparency Thesis denies the mind-dependency of the immediate objects of perception as characterized by the sense-data theory. In this sense, the Transparency Thesis is closely related to the naïve pre-theoretical idea that perceptual experiences are “open to the world”. Like the alleged “openness” that characterizes commonsense, the Transparency Thesis acknowledges that the immediate objects of perception are not constituted by the experiences we have of them.

However, it is important to point out that “openness” and “transparency” are sometimes used in the philosophical literature in a weaker sense that doesn't entail the denial of the subjective metaphysics of sense-data. In its weaker version, “transparency” is merely a term sometimes used to capture the idea that introspection of what visual experiences are like only reveals what these experiences are about. I take it that it is in this weaker sense that, for example, Valberg claimed that “if we are open to our experience, all we find is the world” (1992, p. 18) or that Moore (1903) famously argued that visual experiences were diaphanous. Under this interpretation “transparency” is only a thesis about introspection, specifically about what we find when we introspect our visual experiences or when we “look inwards”. Let's refer to this interpretation as the “Transparency* Thesis”:

[Transparency* Thesis] When we introspect experiences one is aware only of what the experience is about and not of the experience itself.

The distinction between transparency (as specified in the Transparency Thesis) and transparency* (as specified in the Transparency* Thesis) suggests that it is only the former that conflicts with the sense-data view that the immediate objects of visual experiences are always fully subjective (mind-dependent and logically private) non-physical *real* entities that bear a constitutive link with the experiences in which they figure. Unfortunately, there is an important aspect to the debate between the Transparency Thesis and the sense-data theory that really troubles me, and which I think deserves attention. Often, people that want to accept the subjective reality of

²²I want to acknowledge that my formulation of the Transparency Thesis is inspired by Martin's (forthcoming, Ch.3) excellent discussion of this issue.

appearances and people who want to reject it equally appeal to *introspection alone* as the crucial element for determining the nature of the immediate objects of visual experiences. It seems that they take transparency* as the final criterion for deciding between the sense-data theory and the Transparency Thesis.

I want to provide some brief comments that may help us to decide if the Introspective Thesis can actually help to clarify the metaphysical debate. The task will involve (i) an epistemic evaluation regarding what is introspectively available when we undergo perceptual experiences and (ii) an assessment of the possibility of deciding conclusively about the nature of the immediate objects of perception solely on the basis of introspective awareness. I will suggest that introspection is neutral and cannot ground either the truth of the ontological subjectivism inherent to the sense-data view or the truth of the Transparency Thesis.

Introspection

What is the role of introspection when discussing the nature of perceptual experiences? Imagine I ask you to focus your visual attention on a particular area of your visual field. Let's assume that you are seeing a red tomato. In attending to *that* particular tomato you seem to be aware of certain features or properties instantiated as being out there in the mind-independent world, such as, for example, the "redness" or "plumpness" of the particular tomato. Suppose that I ask you now to look "inward" and focus your attention on what we might call the *experience itself* in order to check if you find inner objects or properties intrinsic to your experience. You would probably agree with me, that no matter how hard you try you will not find these inner additional features, apart from the redness and plumpiness of the tomato. It is as if your visual awareness inevitably went through the experience itself, onto worldly objects and properties. Indeed, everything suggests that during visual experience perceivers are *only* aware of the objects and properties the experiences are about. According to this interpretation, experiences are transparent* because introspection does not reveal any properties *of* the experiences themselves. Tye clearly has this view in mind:

Consider finally the problem of transparency. Why is it that perceptual experiences are transparent? When you turn your gaze inward and try to focus your attention on intrinsic features of these experiences, why do you always seem to end up attending to what the experiences are *of*? Suppose you have a visual experience of a shiny, blood-soaked dagger. Whether, like

Macbeth, you are hallucinating or whether you are seeing a real dagger, you experience redness and shininess as outside you, as covering the surface of a dagger. Now try to become aware of your experience itself, inside you, apart from its objects. Try to focus your attention on some intrinsic feature of the experience that distinguishes it from other experiences, something other than what it is an experience of. The task seems impossible: one's awareness seems always to slip through the experience to the redness and shininess, as instantiated together externally. In turning one's mind inward to attend to the experience, one seems to end up scrutinizing external features or properties. (TYE, 1995, pp. 135-136)

In this passage, Tye is clearly using "transparency" as a feature of our visual experiences in order to emphasize that *introspection* only reveals objects and their properties. In other words, for him experiences are transparent*, given that when we introspect a visual experience we are only aware of what the experience is about and not of the experience itself. Grice, for example, seems to endorse a similar standpoint:

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If we were asked to pay close attention, on a given occasion, to our seeing or feeling as distinct from what was being seen or felt, we should not know how to proceed; and the attempt to describe the differences between seeing and feeling seems to dissolve into a description of what we see and what we feel. (GRICE, 1962, p. 144)

For Grice and Tye experiences are transparent*, that is, *invisible* in the sense that we *look-through* (so to speak) them and we become aware only of what our experiences are about. Introspectively, during perception we find *what* is seen and not the intrinsic qualities of the experience of *seeing* itself. Introspection of the phenomenology of our visual experiences does not reveal anything to us but the objects that we purportedly perceive. My concern is that this transparency* exhibited by visual experiences seems to be fully compatible with both sides of the ontological debate about the nature of the immediate objects of visual experience. Transparency* seems to be fully compatible with those who defend the phenomenal principle and the idea that we in every case we immediately perceive sense-data, and also with those theorists that think that what it is experientially manifest doesn't necessarily need to be *actual*, *real* and *non-physical*.

On the one hand, sense-data theorists typically claim that we see physical things mediately by virtue of seeing real sensory items that we take to correspond to those physical things. What it is introspectively available are not modifications of one's visual experiences, but actually the *immediate*

objects of the experience. These immediate objects or sense-data are – according to the phenomenal principle– *always* real entities that actually possess the properties that they exhibit. On the other hand, those who deny the phenomenal principle and the alleged *reality of appearances* may accept that this is appropriate in veridical perception and for some of the features involved in illusory experiences, but certainly not in the case of hallucination. In non-perceptual episodes, they say that visual experiences can be *about* objects and properties, which are not real or actual. Interestingly, despite a fundamental disagreement regarding the nature of the objects and properties consciously available in visual experience, both sides can, in principle, perfectly agree that when we look inward all we find is what experiences are *about* and not qualitative features *of* the experiences. In short, I think that friends and enemies of sense-data can agree that visual experiences are transparent* on the basis of introspection.²³

The sense-data theory should say that these introspectively available objects and properties are non-physical real entities, which are private and mind-dependent. In contrast theorists who want to deny this subjective metaphysics must claim that, at least during genuine perceptual episodes, these objects and properties are in some way objective, that is, mind-independent and publicly available for introspection and demonstrative identification. The disagreement is clearly about the plausibility of the Transparency Thesis, a metaphysical thesis regarding the nature of the subject matter of experience, and not about the Transparency* Thesis. However, is it possible to settle the dispute appealing only to introspection?

Let us take a look at transparency considered as the denial of the subjectivist ontology of sense-data. From a metaphysical perspective, the Transparency Thesis demands that every object and qualitative feature consciously manifest to a subject *S* when undergoing a perceptual experience is not constitutively dependent on *S*'s experience. The important question in the present context is: Does introspection show the relevant objects and properties, which appear to us when we have visual experiences, to be mind-independent? There is a natural naïve pre-theoretical inclination that

²³Please bear in mind two important issues. First, the Transparency* Thesis is often used as a way of rejecting the idea that perception involves the conscious awareness of qualia or qualitative intrinsic features *of* the experiences. In this paper I simply assume that the qualitative aspects of visual experience can be fully explained in terms of what our experiences are about. Secondly, there are theories, such as adverbialism, which not only reject the phenomenal principle and the ontology of sense-data, but also any act-object characterization of visual perception. For the sake of the argument I am certainly not considering adverbialism or equivalent views among the theories on dispute.

mind-independence is given within introspective grounds, or at least is something derivable *a priori* from how things appear to be. However, that there is a natural *inclination* or *tendency* to think that perceptual objects are not constitutively dependent on our awareness of them doesn't seem enough to establish *a priori* the truth of the Transparency Thesis. Hume, for example, argued that this *inclination* to assume the mind-independency of perceptual objects as an undeniable truth, solely on the basis of what we can tell by introspection, seems to be something upon which human beings naturally and spontaneously rely.

... when men follow this blind and powerful instinct of nature, they always suppose the very images, presented by the senses, to be the external objects, and never entertain any suspicion, that the one are nothing but representation of the other. (HUME, 1975, pp. 151-152)

For Hume the system in which the “vulgar” naturally relies is of course false and based on the fictional supplementation of the imagination. For different reasons he also criticized what he called the “philosophical system”, grounded on the double existence or distinction between the existence of our mind-dependent perceptions and the mind-independent perceptual objects. For the present purposes, what strikes me as problematic is the nature of the disagreement between those who deny the Transparency Thesis and those who unconditionally assume it. Why do they disagree if the subject matter of the dispute is supposed to be introspectively obvious or self-evident?

Most people accept the vulgar or pre-theoretical naïve view and thinks that, introspectively, objects do not *seem* to be private mind-dependent entities. Nonetheless, it is possible for a sense-data theorist to say that the immediate objects of perceptual experience are thoroughly subjective and exist only in virtue of our being aware of them, while insisting that the alleged externality or mind-independency is something that *we*, as subjects of the experiences, attribute to them. In simple words, the sense-data theory admits that all that we require to challenge the naïve assumption is to say that the objects of perceptual experience *seem as if* they were mind-independent, when in fact we have strong reasons –based on the possibility of perceptual error– to think that this is not the case. Indeed, the sense-data theory may accept that introspection is right about perceptual experience being transparent* to something, insisting at the same time that *a priori* –without considering causal or empirical considerations about perceptual error or the way our experiences are brought about– introspection doesn't tell us anything conclusive about the ontology of what our experiences are

transparent* to. Sense-data theorists should accept that the Transparency* Thesis does not entail either the falsity or the truth of the Transparency Thesis. The same is valid for those who want to reject the sense-data theory appealing only to introspective considerations.

The possibility of perfectly matching hallucinations plays an important role at the moment of undermining what follows *a priori* from introspection. Perfectly matching hallucinations are *ex hypothesis*, experiences that we cannot tell apart from veridical perceptions. The fact that hallucinations are phenomenally indistinguishable from genuine perceptions is of course an *epistemic* fact about what we can or cannot tell on the basis of introspection. As in many other issues in philosophy and psychology, sometimes epistemic claims regarding what we can know on the basis of our introspective cognitive abilities alone are insufficient for deciding the ontology of a particular mental state/event or the ontology of the objects and properties that are consciously present during those states/events.

Imagine that a particular subject –John– undergoes a psychological experiment in which he is presented with a red apple and he is constantly asked to report how things are with him introspectively. However, the scientist who conducts the experiment has not informed John that every 5 seconds, his experience will be manipulated in the following way: A machine capable of producing a perfectly matching hallucination as of a red apple in front of John will be turned on. The intervention will last 10 seconds and then the scientist will switch off the device, leaving John in perceptual contact with the actual red apple located in his environment. Let's assume that John (sometimes during the intervention and sometimes not) always reports the same: "It looks to me as if there is a red apple" or simply "That is a red apple". Firstly, it is clear that during the hallucinatory instances John cannot tell solely by introspection that he is presented with what we might call a "mind-dependent" red apple. Secondly, John cannot detect the transitions between hallucinatory and perceptual episodes. Therefore, he cannot tell merely by introspection that sometimes he is immediately presented with a mind-independent red apple and other times with a mind-dependent apple or sense-data.

The possibility of thought-experiments of this kind suggest that transparency, understood as the denial of sense-data subjectivism and the acceptance of the alleged mind-independence of perceptual objects, is something which is not *introspectively* obvious, something that we cannot decide from the armchair. Unlike the Transparency* Thesis, the Transparency Thesis is not something that we can settle solely on the basis of introspective reflection. Introspection alone is neutral regarding the ultimate ontological

nature of the objects of perceptual experience. Introspectively speaking, the sense-data theory is in no better position than any other theory, including those theories that actually deny the existence of non-physical entities. If you want to attack the sense-data theory or establish the truth of a rival account you should consider the epistemological and ontological features that we previously discussed in this paper and remain skeptical about what can be established about the nature of the immediate objects of visual experience just introspectively.

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