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Introduction

Perception, Causation, and Objectivity

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Perceptual experience, that paradigm of subjectivity, constitutes our most immediate and fundamental access to the objective world. At least, this would seem to be so if commonsense realism is correct—if perceptual experience is (in general) an immediate awareness of mind-independent objects, and a source of direct knowledge of what such objects are like. Commonsense realism raises many questions. First, can we be more precise about its commitments? Does it entail any particular conception of the nature of perceptual experience and its relation to perceived objects, or any particular view of the way perception yields knowledge? Second, what explains the apparent intuitive appeal of commonsense realism? Should we think of it as a kind of folk theory held by most human adults or is there a sense in which we are pre-theoretically committed to it—in virtue of the experience we enjoy or in virtue of the concepts we use or in virtue of the explanations we give? Third, is commonsense realism defensible, in the face of formidable challenges from epistemology, metaphysics, and cognitive science? The project of the present volume is to advance our understanding of these issues and thus to shed light on the commitments and credentials of commonsense realism. As you may have guessed from the title, the volume also aims to highlight the pivotal role the concept of causation plays in these debates. Central issues to be addressed include the status and nature of causal requirements on perception, the causal role of perceptual experience, and the relation between objective perception and causal thinking—issues that, as many chapters in the volume bring out, are inseparable from concerns with the very nature of causation.

The chapters in this volume explore commonsense realism from a range of perspectives. The psychological essays are concerned with the development, phylogenetic and ontogenetic, of the human adult conception of perception. Some of the philosophical essays are mainly concerned with the explanatory role of perceptual experience—its role in explaining our possession of knowledge, and concepts, of mind-independent objects, and our grasp of the very idea of objectivity. Others focus on issues concerning

the causal conditions for objective perception and the nature of causation. My aim here is not to summarize the chapters. Rather, I want to bring out some interconnections among their respective concerns, taking as my central theme an argument John Campbell put forward in his paper 'Berkeley's Puzzle'. The argument forms the background to his exchange, in this volume, with Quassim Cassam. It also provides a springboard for introducing the volume as a whole.

1 Berkeley's Puzzle

According to commonsense realism, perception provides *immediate* access to the *mind-independent* world. Berkeley took the two highlighted elements of this outlook to be mutually incompatible. His reaction was to retain its naïve view of our cognitive contact with the world, but to discard its realism. Campbell deplores this. Yet he maintains that Berkeley reached his rejection of realism by pressing a principle that we have every reason to respect. Campbell calls the principle

The explanatory role of experience: Concepts of individual physical objects and their observable characteristics are made available by our experience of the world. (Campbell 2002a, p. 128)

Berkeley's point was that, given a causal analysis of objective perception—such as Locke's—experience is unable to make concepts of mind-independent objects available to us. He concluded that our concepts of physical objects are not concepts of mind-independent objects. In Campbell's view, Berkeley was perfectly right about the implications of a Lockean causal analysis of objective perception. If experience of physical objects is a matter of being aware of ideas that are signs of their regular causes, experience cannot provide us with a conception of what physical objects are like. Campbell's recommendation is that we should therefore reject the Lockean causal analysis. Instead we should embrace what he calls the relational view of experience. For only the relational view makes it possible to respect both realism and the explanatory role of experience. Focusing on the case of vision, the view can be summarized as follows:

The relational view of visual experience: to see a mind-independent object O is to have a visual experience of which O is a constituent, with the character of the experience being determined partly by the features of O visible from the perceiver's point of view.

The relational view stands opposed to what is sometimes called a 'factorizing' account of object perception. Seeing an object, on the relational view, is a primitive cognitive phenomenon, with a distinctive explanatory role. The notion of seeing an object is not open to a reductive analysis in terms of some 'purely mental ingredient'—visual experience—plus certain external conditions, including perhaps some causal condition. No such 'purely mental ingredient', even in combination with further conditions, could play the distinctive explanatory role of seeing an object. Importantly, the relational view also makes a claim about the nature of the character of perceptual

experience. It holds that the character of the experience you have in seeing O is partly determined or constituted by the visible features of O (and, as Campbell elaborates in his chapter, partly by the point of view from which the thing is perceived). Thus Campbell is in agreement with the 'disjunctivist' view that a perception of O and a hallucination as of O have no 'experiential factor' in common (2002a, p. 133). I think that, as Campbell sees things, the two aspects of the relational view—its rejection of a factorizing account and its commitment to disjunctivism—are closely connected.[1] They both arise from the explanatory significance of the character of experience, as constituted by the layout and characteristics of perceived external objects. (See 2002b, p. 116.)

Campbell's argument for the relational view (and against an extended family of alternative theories of perception, from Locke through Burge to McDowell) turns on a specific claim as to what it takes to respect the explanatory role of experience. If experience is to make concepts of mind-independent objects available to us, it has to *explain and justify* our use of such concepts—specifically, our use of them in patterns of reasoning that manifest our understanding of the mind-independence of their reference. An example might be the sort of reasoning that can be involved in working out whether the tree now before you is the same as the tree you encountered at a certain time in the past (2002a, p. 137).

This is not the place for a detailed analysis of Campbell's argument. Of the numerous issues raised by it, I select three that represent major themes of the volume as a whole:

1. What does it mean to conceive of the world as objective?
2. What is the status of causal requirements for the perception of mind-independent objects?
3. What role, explanatory and/or justificatory, does perceptual experience play in making objective thought possible?

2 Conceiving the world as objective

Given that physical objects are in fact mind-independent, why does the explanatory role of experience pose a problem, let alone a puzzle? Does it not follow trivially from the mind-independence of physical objects that anyone who has concepts of physical objects has concepts of mind-independent objects? One response to this question would be to draw a distinction between, on the one hand, particular concepts of what are in fact mind-independent objects and properties and, on the other hand, the abstract, general concept of a mind-independent object. Then perhaps there is a puzzle over the role of experience in making this latter abstract concept available to us. In chapter 2, Quassim Cassam argues that the key to a solution, or dissolution, of this puzzle is to realize that the concept of a mind-independent object is a theoretical

[1] See Martin 2004 for an illuminating discussion of these matters.

concept, albeit one that is instantiated in experience. I'll return to Cassam's discussion in section 4 below. Campbell's interest is primarily in particular empirical concepts, such as 'that knife'. He thinks that grasp of such concepts involves more than representing objects that are in fact mind-independent. It involves a conception of objects *as* mind-independent, in the minimal sense that it requires the ability to understand certain *modal* and *tensed* propositions: 'propositions to the effect that the object could have existed even though I had not, or that the object exists even at times at which I am not experiencing it' (2002a, p. 137). If this is right, there is a minimal sense in which anyone who uses concepts of physical objects and their properties conceives of the physical world as mind-independent.

On one view, objective thought, in this sense, can only be attributed to subjects who have some understanding of the notion of a point of view. Gareth Evans argued that grasping the idea of an objective world requires the ability to think of the course of one's perceptual experience as jointly determined by where one is and what is there to be perceived (plus further enabling conditions of perception in a given modality). It is possession of this 'primitive theory of perception' that allows us to 'make sense of' the idea of existence unperceived: 'to understand why what is perceivable should sometimes be, and sometimes not be, perceived' (Evans 1985, p. 263). This view of the *status* of the primitive theory may be disputed. Objective thought, it may be argued, is a more basic achievement than a reflective understanding of perception and its enabling conditions. Admittedly, Campbell's illustration of a tensed proposition of the kind that manifests objective thought is that 'the object exists even at times at which *I am not experiencing it*'. But it is not obvious that thought about one's own experience is essential here. What matters, it might be said, is the ability to think of objects as numerically the same over time, including over periods of time during which, as a matter of fact, they are not perceived. Campbell's account, as elaborated in chapter 3, is congenial to this view. On his account, causal thinking is a prerequisite of objective thought. But the causal thinking he regards as critical is not a reflective understanding of the enabling conditions of perception but a grasp of physical objects as a mechanism by which causal influence is transmitted (e.g. of the fact that sharpening a knife at t_1 affects the behaviour of the knife when it is used to chop tomatoes at t_2). Of course it is a further question whether one can think of objects in this way without being able to reflect on the course of one's experience. Still, it is not obvious that the primitive theory is constitutive of objective thought, though it may of course be required to make the realist commitments of objective thought explicit. (For a more detailed discussion of different conceptions of objective thought, and their bearing on debates about the intentionality of perception, see Naomi Eilan's chapter in this volume.)

I want to raise two further questions about the primitive theory: one to do with its content, the other with what is involved in grasping it. An illuminating way to approach these issues is to ask a seemingly simple question: at what point in development do children acquire a primitive theory of perception in Evans's sense? Part of the philosophical interest of developmental work in this area is that it forces us to elaborate

and refine this question, and in this way helps to shed light on what it means, and takes, to possess a primitive theory. It will be useful to highlight two distinctions that have structured the developmental debate in recent years. First, a large body of evidence suggests, or appears to suggest, that children have some understanding of the enabling conditions of perceiving *objects* in the various modalities several years before they are able to perform well on tasks requiring them to compare and contrast the way an object looks from the way it is, or the way it looks from one perspective from the way it looks from another. The point is often put in terms of Flavell's distinction between level-1 and level-2 perspective taking. (See Flavell 2004.) A fundamental question raised by this work is what kind of understanding is critical for success on level-2 perspective taking tasks. On one view, success on such tasks requires a conception of perceptual experience as a state with representational content: children need to appreciate that their visual experience may, for example, represent a sponge *as* a rock. In chapter 15, Matthew Nudds presents an alternative view. To pass standard appearance-reality tests, he suggests, children have to master a relatively sophisticated way of talking about a certain aspect of *perceived objects*, viz. their looks. He argues that this involves no representational conception of experience, and furthermore questions whether young children's poor performance indicates a conceptual deficit, as opposed to difficulties with a particular conversational format.

A second central distinction is between two sources of relevant evidence: direct vs indirect tests.[2] Direct tests probe children's understanding in some area simply by asking them a question the correct answer to which would make the kind of understanding we're interested in explicit. Indirect tests include (a) looking time studies, (b) evidence concerning looking in expectation, and (c) evidence concerning children's interpretation of referential gestures.

An interesting finding of type (c) is discussed by Henrike Moll and Andrew N. Meltzoff in chapter 16. When an adult ambiguously expresses interest in, and makes a request for, one of three objects, children as young as 12 months tend to accede to her request by handing her the object she has not seen before. Moll and Meltzoff dub the ability manifested in this task 'level-1 *experiential* perspective-taking', as it seems to involve an understanding of what someone has experienced or is familiar with or 'knows', in the 'objectual' sense of knowing. This ability apparently precedes level-1 visual perspective taking by almost a year. Indirect tests, of course, are also used in experiments with non-human primates. A striking result, discussed by Martin Doherty, is that when presented with two pieces of food in the presence of a dominant chimpanzee, subordinates are more likely to go for the piece that is hidden from the dominant by an opaque barrier than for the one visible to him (Hare *et al.* 2000).

Indirect tests have generated intense and occasionally heated debate. In the case of chimpanzees, one influential position has it that 'although chimpanzees almost

[2] See Perner and Roessler 2010, appendix 1, for further discussion of the distinction between direct and indirect tests.

certainly do not understand other minds in the same way that humans do (e.g. they apparently do not understand beliefs) they do understand some psychological processes (e.g. seeing)' (Tomasello *et al.* 2003, p. 239). In opposition to this, other (equally influential) primatologists have argued that not only does the current evidence not license the attribution of psychological understanding to chimpanzees, but extant research paradigms are *in principle* unable to provide the evidence that would be needed to justify such an attribution (Povinelli and Vonk 2004). In their chapter, Vonk and Povinelli continue this debate, focusing on the specific question of the effect of enculturation on chimpanzees' mind-reading abilities.

Martin Doherty proposes a general framework for integrating discrepant evidence concerning children's understanding of gaze. While indirect tests reveal sensitivity to gaze from an early age, children's explicit judgements of eye direction do not become accurate until about the age at which they start to pass explicit theory of mind tasks (about 4 years). Doherty argues that young children have some understanding of the causal role of a state he labels 'engagement'—something like attentional contact with objects. But he cautions against the assumption that this amounts to an early grasp of *seeing*, or perception. Young children's conception of 'engagement', he argues, is not 'mentalistic' or 'representational'. While children treat someone's 'engagement' with an object as an enabling condition of appropriate action on the object, they do not think of it as a cause of belief, knowledge, or desire. And while they have some grip on the enabling conditions of 'engagement' itself, these are somewhat less stringent than those of visual experience. For example, once 'engagement' has been established, it is not possible to disrupt it by inserting a barrier between subject and object. This picture contrasts with the more continuous approach favoured by Moll and Meltzoff. On their view, even one-year-olds' capacity for level-1 'experiential perspective taking' manifests an understanding of what it means to *see* an object, though that understanding is limited, for example by one-year-olds' tendency to 'overestimate another person's perceptual access in communicative situations' (this volume p. 295).

Doherty's account aims to make sense of the developmental evidence in terms of a distinction in the *content* of children's understanding (their understanding of 'engagement' vs perception). Elizabeth Robinson is interested in a distinction regarding the *nature* of children's understanding. In chapter 18 she reviews work on the development of children's understanding of the role of perception as a source of knowledge. She considers the hypothesis that an explicit grasp of the epistemic role of experience, as probed in direct tests, is preceded by an implicit understanding, informing various kinds of 'finding out behaviour'. Some support for this hypothesis is provided by evidence that even younger children—who find it difficult to *report* on the source of their knowledge—sometimes manifest an appreciation of the relevance of particular sources of knowledge in the way they go about answering questions; for example, in their spontaneous use of a particular sensory modality (looking vs touching) in answering questions about particular kinds of features of an object (what colour it is vs whether it is soft).

In summary, the developmental debate raises, and sheds light on, at least two kinds of questions. First, what is the essential content of the primitive theory of perception? What do we need to know about perception, and perspective, to 'make sense' of existence unperceived? Is it enough to have some grasp of the conditions of object perception, or is it essential to be able to reason about perceptual appearances? Is it enough to think of perception as an enabling condition of appropriate action, or is it essential to understand the epistemic role of perception? Second, what is the nature of the understanding that's required for possession of a primitive theory? Is it possible to grasp the primitive theory through a practical or implicit understanding of the conditions for sharing attention with others in communicative situations, or is it essential to have a detached grasp of the explanatory role of perception?[3]

An issue that is relevant to both kinds of questions is in what sense, if any, the primitive theory is a *causal* theory; and in what sense, if any, the concept of perception is a *causal* concept. I now turn to a set of chapters that address this issue.

3 Causal requirements on perception

The main target of Campbell's argument in 'Berkeley's Puzzle' is the idea that 'experience is *only* caused by the object it is of' (2002b, p. 129, emphasis added). The word 'only' here is obviously significant. It ensures that the idea is inconsistent with the relational view, on which perceived objects are *constituents* of experience. If the lemon before me is a constituent of the visual experience I enjoy in seeing it, there is evidently more to the relation between the lemon and my experience than that the former is the cause of the latter. The relationship would not be *only* causal. Still, this leaves open whether the relationship is *also* causal.

It is often taken to be obvious and undeniable that a causal element is part and parcel of the concept of perception. And it used to be thought to be relatively easy to say what this means. As Grice presents it, the 'causal theory of perception' identifies necessary and jointly sufficient conditions of its being the case that someone perceives a material object (1989). According to Strawson, 'the idea of the presence of the thing as accounting for, or being responsible for, our perceptual awareness of it is implicit in the pre-theoretical scheme [of commonsense realism] from the very start' (1988, p. 103). Clearly a 'causal theorist' of perception wants to credit the causal condition with a distinctive status. The idea is that it is not just an empirical truth that perceived objects figure in the causal explanation of our perceptions of them. But how should we understand the special status of the causal condition? And how is the causal condition to be formulated? What are its relata? Should the condition refer to a certain kind of causal *process*? Or should it be couched in terms of the object *making a difference* to the experience? Finally, how is the causal analysis to be supported?

[3] See Eilan 2005 for illuminating discussion of this last point.

In what is sometimes called the golden age of conceptual analysis, philosophers tended to be confident both that they knew what counted as support for the causal analysis, and that such support was indeed available. If this confidence has recently been waning somewhat, this is probably due, in part, to a general decline in the respect commanded by the project of conceptual analysis; but also, in particular, to a series of well-known papers by Paul Snowdon, in which he identified a serious weakness in traditional arguments for the causal analysis (1980–81, 1990). Briefly, Snowdon's point was that the traditional route to the causal analysis—reflection on intuitions elicited by certain sorts of examples, e.g. by cases of 'veridical hallucinations'—is predicated on a particular conception of the nature of perceptual experience. It is assumed that a veridical experience and a subjectively indistinguishable hallucination are events 'the intrinsic natures of which are independent of anything outside the subject' (1990, p. 123). He then pointed out that there is a rival, disjunctivist conception of experience, according to which veridical and hallucinatory experiences do not share a common intrinsic nature. The mere coherence of this alternative conception, he argued, is sufficient to undermine the traditional case for the causal analysis.

Several chapters in this volume are engaged in a debate provoked by William Child's response to Snowdon (Child 1994). Child made two key points. First, he claimed the causal analysis is in fact compatible with disjunctivism (and with the relational view of experience that underpins disjunctivism). Second, he argued that the causal analysis can be supported in a way that is quite independent of the kind of consideration Snowdon took issue with, by offering an account of the conditions for mastery of perceptual concepts. The following quote illustrates this alternative route to the causal analysis:

> For example, if one has the concept of vision, one must know that S will stop seeing something if she shuts her eyes, or if we interpose something opaque between her and the object, and if the object is moved away; and to know that is to know that something cannot be seen if it is prevented from, or cannot be, causally affecting S. (Child 1994, p. 165)

It is instructive to compare this line of argument with a similar, but in some important respects weaker suggestion. Suppose it is agreed that mastery of perceptual concepts requires an understanding of some of the enabling and disabling conditions of perception in the given modality, i.e. grasp of a 'primitive theory of perception'. And suppose it is accepted, further, that possession of a primitive theory amounts to, or at least comprises, the capacity to give causal explanations of facts as to what someone sees or hears etc., or is in a position to see or hear etc. One small but nevertheless significant difference between this proposal and Child's is that where Child appeals to knowledge of *truths* ('one must know that. . .'), the Evans-inspired proposal invokes a capacity for engaging in a certain pattern of explanation. A second, more tangible difference is that the current proposal merely insists that explanations of perception in terms of enabling conditions are or at least include causal explanations; it does not mention the idea of perception as a causal process, as a matter of objects '*causally affecting*' the perceiver.

Would the weaker proposal be sufficient to encourage a version of a causal analysis of perception? This depends on two background questions:

(1) Is the causal theorist committed to the existence of truths that anyone possessing the concept of vision has to accept?
(2) Is the causal theorist committed to the idea that the concept of vision represents vision as a causal process?

Child's original discussion appears to endorse an affirmative answer to (1). Snowdon responds to this (in chapter 9) by voicing scepticism about the idea that 'anyone with the concept of vision must acknowledge those relatively specific things' (that we can be disabled from seeing an object by shutting the eyes, interposing an opaque barrier, or moving the object away). He thinks 'it would hardly discredit someone as a possessor of the concept if he should think that some people can see through their eyelids' (this volume p. 135). And he suggests that young children may be 'relatively uninformed about factors affecting visibility', yet can surely be credited with knowledge of what vision is. Now, on this latter point, current practice in developmental psychology may be said to support Child's stance. As we have seen, Doherty is inclined to deny that young children's performance on gaze understanding shows a grasp of seeing (as opposed to 'engagement'), precisely because they seem unable to appreciate that someone's seeing an object, once established, can be interrupted by inserting an opaque barrier. Be that as it may, in chapter 11 Child explicitly dissociates himself from the idea of truths that anyone grasping the concept of vision has to accept. He now recommends that the causal theorist should defend a more modest claim: 'our ordinary thought about vision is a form of causal thinking' (this volume p. 169). Child spells this out in terms of ordinary explanatory practice, along the lines of Evans's 'primitive theory'.

But would this modest claim be enough to show that seeing is a *causal* concept in any interesting sense? Consider the suggestion that possession of the concept of being asleep requires a primitive theory of the typical enabling conditions of being asleep (e.g. being tired, adopting a recumbent position). On the face of it, this would not lead one to conclude that the concept of being asleep is a causal concept; that the causal requirements for being asleep are somehow part of the very concept of being asleep. We can distinguish two ways a causal theorist of perception may react to this point, corresponding to two kinds of response to (2), the issue of whether the causal theorist is committed to the idea of vision as a causal *process*. We can call them liberal vs orthodox causalism. An orthodox causalist thinks a commitment to vision as a causal process is integral to causalism. A liberal causalist denies this.

Helen Steward advocates a liberal form of causalism. She argues that traditional formulations of the causal theory of perception are wedded to an implausible view of the ontology of causation. On the traditional picture, it is part of the concept of vision that vision involves a *causal chain*, a sequence of causally related events, where events are construed as particulars. Now, as a completely general matter, Steward denies that 'all

causation need involve chain-like phenomena' (this volume p. 156). There are notable parallels between her rejection of 'causal particularism' and James Woodward's rejection of 'geometrical/mechanical' theories of causation in favour of 'difference-making' theories. The former regard causation as a relation between events linked by a 'connecting causal process', where this is often spelled out in terms of a 'spatio-temporally continuous process that transmits a conserved quantity such as energy and/or momentum' (Woodward this volume p. 236). Difference-making theories, on the other hand, start from the idea that causes must make a difference to their effects, where, in Woodward's own version of the difference-making approach, this is spelled out by reference to 'intervention' counterfactuals—counterfactuals concerning what would happen to an effect under selective external manipulations of its cause. (See also Christoph Hoerl's chapter for discussion of the contrast between 'difference-making' and 'causal process' theories of causation).

To return to Steward's liberal causalism, her central claim is that the causal theory of perception should be formulated in terms of causal-explanatory relations among *facts*, not in terms of any 'transactional relationships between particulars' (this volume p. 157). Part of the significance of this move, in her view, is that it allows us to defend Child's compatibilist view of the relation between the causal theory of perception and disjunctivism. Strawson's causalist slogan, she suggests, is exactly right so long as it is read as follows: 'the idea of the presence of the thing (= the fact that it is present) as accounting for our perceptual awareness of it (= for the fact that we can see it) is implicit in the pre-theoretical scheme [of commonsense realism] from the very start'.

Of course, there remains the question of whether this is enough to make the concept of vision a causal concept. But it is not obvious that the liberal causalist is without resources here. For one thing, she might simply appeal to Strawson's slogan. There is no analogous slogan about being asleep—there is no single essential causal factor responsible for being asleep remotely comparable to the fundamental role of the spatial enabling conditions of vision. Anyone with the concept of vision, it might be suggested, has to be disposed to engage in patterns of explanation that manifest an appreciation that vision causally depends on (amongst other things) the presence of the seen object. Perhaps this would suffice to make the concept of vision a causal concept, at least in the weakest of the three senses distinguished by Snowdon: 'a causal concept$_3$' is a concept such that 'by and large any relatively mature person with the concept takes it that it applies only if a (sort of) causal link obtains' (this volume p. 125).

Orthodox causalists insist that the enabling and disabling conditions of perception must be conceived not just as conditions that causally explain someone's seeing or hearing something, but as conditions that permit or disrupt the unfolding of a causal process. Of course, orthodox causalists do not pretend that having the concept of vision requires any knowledge of vision science. Instead they may adopt Grice's suggestion: 'I see nothing absurd in the idea that a nonspecialist concept should contain, so to speak, a blank space to be filled in by the specialist' (Grice 1989, p. 240). But what

grounds are there for thinking that the idea of a causal *process*, originating with the seen object and terminating in a visual experience, is integral to the concept of vision?

One way to answer this question would be to cite phenomenological considerations. It is often regarded as a truism that perceptual experience involves a distinctive kind of *passivity*. Historically, the idea has tended to be articulated in causalist terms, the most influential example being Kant's account of receptivity. In chapter 12 Matthew Soteriou argues that the passivity of perceptual experience is partly a matter of the way 'the temporal location of a perception is determined by the temporal location of its object'. This analysis of the phenomenology of perceptual experience, he suggests, encourages a causal conception of experience 'as the passive effects on us of the objects we perceive' (this volume p. 186).

An alternative tack would be to put pressure on the liberal causalist's conception of the enabling and disabling conditions for perception. One way to do so would be to argue that the idea that ordinary reasoning about the enabling conditions of vision involves causal explanation is inseparable from the idea (in Child's words) that 'pre-theoretical thought about vision represents it as a causal process' (this volume p. 172). There would then be a kind of incoherence at the heart of liberal causalism. I want to end this section by sketching one way of understanding the issue here, drawing on a contrast Campbell makes between two 'dimensions' to our ordinary causal thinking. According to a liberal causalist, there are a variety of ways in which we may obstruct someone's visual experience of an object. We may intervene on the distance between object and subject, we may interpose something non-transparent, or we may shut the perceiver's eyes. There are reliable and robust counterfactual connections here. This, on the liberal conception, is simply what the primitive theory of perception is about: it is about grasping causal factors that make it possible to explain and manipulate the course of our own and others' experience. The orthodox causalist finds this an implausibly shallow representation of the primitive theory. What disturbs him is the complete absence in it of what Campbell describes as a 'second dimension to our ordinary thinking about causation', viz. our tendency to 'think in terms of mechanisms by means of which the counterfactual connections exist' (this volume p. 37). For the orthodox causalist, an indispensable element of the primitive theory of perception is the idea of a mechanism in virtue of which the various counterfactual connections obtain: we think of vision as a causal process that constitutes the *reason why* interventions on certain variables—distance, interposed objects, and so forth—make a difference to someone's visual experience of an object.

4 The explanatory role of perceptual experience

Campbell's argument for the relational view of experience proceeds in two steps. The first step articulates what Campbell regards as a commitment of commonsense realism: if commonsense realism is correct, it must be possible to explain and justify our use of concepts of physical objects by appeal to our experience of the world. The second step

argues that this demand can be satisfied only if the relational view of the nature of experience is correct. I will focus here on the notion of justification at work in the first step of the argument. What does Campbell's demand for justification involve, and how is it motivated? I want to pursue this question by asking how the kind of justification that Campbell claims is demanded by realism, and can (only) be provided by experience as conceived on the relational view, is related to another kind of justification, which Barry Stroud, in chapter 7, argues should *not* be demanded and, in any case, can *not* be provided by experience (however conceived). For ease of reference, I will call the former C-justification and the latter S-justification. I begin by setting out the case for compatibilism, i.e. for the idea that the availability of C-justification is compatible with the unavailability of S-justification.

Stroud is in agreement with Campbell on the importance of *object perception*. They both regard the concepts of perceiving physical objects in particular modalities as fundamental for explaining our ability to have thoughts about, and knowledge of, such objects. For Stroud, object perception matters, in part, because, in conjunction with recognitional conceptual capacities, it enables us to perceive immediately *that* a particular object falls under a certain concept. (See this volume p. 95.) That you see *a* can help to account for your ability to see that *a* is *F*, and thus help to explain how you *know* that *a* is *F* (given that seeing that *a* is *F* is a way of knowing that *a* is *F*). What Stroud denies is that this sort of explanation involves identifying 'a reason or ground or justification for the knowledge-claim in question', or 'something on the basis of which the believer justifiably accepts or believes what he does' (this volume p. 97).

This suggests that S-justification and C-justification are quite different matters. S-justification pertains to *beliefs*. To be S-justified in believing that *p* is to hold the belief on the basis of what one takes to be good reason for believing that *p*. C-justification, in contrast, applies to our *use of concepts* of physical objects in certain patterns of reasoning. Moreover, Campbell's account does not encourage the thought that C-justification is something ordinary reasoners should be able to articulate. (He sees a parallel between the way perceptual experience justifies our use of patterns of reasoning about mind-independent objects and the way truth-tables justify the rules of inference for the propositional constants.) The obvious conclusion is that there is no disagreement between Stroud and Campbell. Campbell claims it is a demand of realism that experience of objects justify certain patterns of reasoning. Stroud denies that experience of objects can justify non-inferential perceptual beliefs. The claim and the denial are mutually consistent.

It is possible, though, that this superficial analysis conceals a genuine and profound disagreement. For one thing, one might wonder whether C-justification and S-justification are independent of each other. If your experience justifies your use of concepts in reasoning, should it not also be expected to justify your use of such concepts in perceptual judgements? But the real issue, I think, lies in the dialectical role of scepticism. It is often said that there is an intimate relationship between realism and

scepticism. As Thomas Nagel puts it, realism makes scepticism intelligible (Nagel 1986). There is more than one thing this may be taken to mean, some of them stronger, and more contentious, than others. I think it is in this area that there may be an interesting disagreement between Campbell and Stroud.

We can distinguish three readings of the slogan that realism makes scepticism intelligible:

(a) Realism makes scepticism intelligible in the basic sense that it implies the coherence of certain sceptical possibilities. Given that the world is the way it is independently of how we take it to be, and how it appears to us in perceptual experience, it is logically possible that the world is quite unlike the way we take it to be.

(b) Realism makes scepticism intelligible in the stronger sense that it implies that the sceptic has identified a real and pressing *question*, a defining feature of which is its complete generality. We have to confront the question of how it is possible for perceptual experience to provide a basis for knowing, or justifiably believing, *anything at all* about the mind-independent world, in the face of the sceptical challenge.

(c) Realism makes scepticism intelligible in the sense that it lends some plausibility to the sceptic's *answer*, viz. the denial that experience can be an adequate basis for knowledge of or justified belief about physical objects. For a genuinely realist view of physical objects is really incompatible with the naïve idea that in perceptual experience we can be directly presented with such objects.

If (c) were correct, part of the philosophical significance of scepticism would be that it undermines commonsense realism: it is unlikely that any philosophical refutation of scepticism could reinstate the commonsense realist view that experience immediately reveals what the world is like. In Stroud's terms, the likely outcome would be a 'stepwise explanation' of perceptual knowledge, on which knowledge of mind-independent objects can never be obtained by perception alone but results from a combination of knowledge of perceptual appearances with something we know from other sources. Stroud takes a dim view of the prospects for the 'stepwise' conception. Campbell takes a similarly dim view of the prospects for solving Berkeley's Puzzle once we have been cajoled into endorsing (c). They are agreed in rejecting (c). Nor is there any dispute about (a), which both accept.

As for (b), things are less clear. There is some reason to think that Campbell accepts (b). For a certain sceptical possibility seems to play a significant role in motivating the first step of Campbell's argument for the relational view (viz. the claim that it is a commitment of commonsense realism that our use of concepts of physical objects can be explained and justified by appeal to our experience of the world). He characterizes the sceptical possibility he is interested in as follows:

> Suppose you think that the world we are in is fundamentally quite unlike anything we encounter in experience. You might be encouraged in this view, on which the external world is alien, by your reading of physics, or by your reading of Kant. In that case, our possession and use of the concepts we ordinarily use on the basis of perception, concepts relating to the medium-sized world, cannot be explained or justified by appeal to facts about our environment (this volume p. 35).

By a happy coincidence, the two sources of the conception of the world as alien mentioned here receive full-length treatment in the chapters by Bill Brewer and James Van Cleve. Brewer considers the physicalist challenge that ordinary explanations of perceptual experience in terms of experienced objects and features are falsified by the correct scientific account of the causes of experience in terms of fundamental physics. Van Cleve examines Rae Langton's reconstruction of an argument for 'Kantian humility', the doctrine that perceptual experience yields no knowledge of the intrinsic properties of things. Both challenges to commonsense realism turn on substantive claims about the nature of causal explanation and causation. Brewer argues that the physicalist challenge relies on a certain kind of explanatory reductionism, which denies what he calls the 'robustness' of commonsense explanations of perceptual experience in terms of perceived objects and features. Van Cleve argues that the Kantian challenge depends on a hidden premise to the effect, roughly, that there is no causation without necessitation. Suppose both challenges can be defused, as Brewer and Van Cleve offer reason to think they can. Still, we can ask what the putative upshot of these challenges, that the world is fundamentally unlike anything we encounter in experience, would take away from us. Campbell suggests it would take away our right to use concepts of mind-independent objects the way we use them. Reflection on the sceptical view of the world as alien is used here to identify a commitment of ordinary objective thought—that we do in fact have the right of which the sceptic would deprive us. In other words, it is a commitment of objective thought that there is a justifiable affirmative answer to be given to the sceptic's completely general question. It does look, then, as if (b) may be doing some important work in Campbell's argument. It seems to provide us with the question to which the relational view of experience is held to be the answer.

The importance of this point is nicely illustrated in Campbell's exchange with Cassam. Cassam's proposed solution to Berkeley's Puzzle exhibits some structural analogies with Kant's account of the categories. Cassam argues that while the abstract concept of a mind-independent object cannot be 'extracted' from experience, it is 'sensibly realized', or 'instantiated in experience' (this volume p. 32). Importantly, he thinks that his more modest conception of the explanatory role of experience subverts Campbell's case for the relational view of experience. Suppose we deny that perceived objects are constituents of perceptual experience. Suppose that instead we think of perceptual experience as a state with non-conceptual representational content. This view, Cassam contends, would not disable us from acknowledging the role of experience in 'sensibly realizing' the abstract concept of a mind-independent object.

Campbell's central line of response to this picture is to question its realist credentials. What justifies our use of concepts of mind-independent objects? Within the Kantian framework, Campbell claims, the answer has to take the form of what Kant called a transcendental deduction, deriving our right to use certain concepts from 'facts relating to the inner architecture of the mind' (this volume p. 35). The trouble with this account, in Campbell's view, is that it is incompatible with commonsense realism. The Kantian validation of our use of concepts of mind-independent objects is underpinned by the Kantian view of the world as alien. On the Kantian conception, 'our patterns of reasoning and their validation come first, and they are projected onto an alien underlying reality' (this volume p. 47). Our use of concepts of mind-independent objects is explained and justified by facts about us, not facts about the experienced mind-independent world.

This line of response assumes that the task of 'validating' or justifying our use of concepts of mind-independent objects is in a certain way inescapable. If you resist a validation in terms of experienced objects, this leaves you with a choice between unmitigated scepticism and transcendental idealism. I think it is here that we may locate a genuine disagreement between Campbell and Stroud. Stroud sketches a line of argument that aims to undermine (c) by showing that the capacity to recognize that it *looks as if* (say) some object is red requires the capacity to recognize directly, in appropriate circumstances, that an object *is* red (this volume p. 97). If this sort of connective analysis can be defended, it would in a certain way defuse the sceptical challenge. Crucially, though, in Stroud's view, it would not do so by securing an affirmative answer to the completely general question the sceptic is pressing, but by giving us grounds for repudiating the very project of engaging with that question. It would expose as illusory the sceptic's assumption that the coherence of certain sceptical possibilities implies that they represent a *threat* to our perceptual knowledge of the mind-independent world. Being in a position to gain direct knowledge of the mind-independent world would turn out to be a necessary condition of an ability the sceptic takes for granted, that of gaining direct knowledge of sensory appearances. (See Stroud 2000 for discussion of this 'modest' type of transcendental argument.)

Stroud's denial that perceptual beliefs are S-justified, then, is motivated in part by his *scepticism* concerning (b), whereas Campbell's insistence that our use of concepts of mind-independent objects stands in need of C-justification seems to reflect his *affirmation* of (b). The 'modest' transcendental argument that leads Stroud to question (b) is of course a descendant of Kant's 'transcendental' investigation of human knowledge. Yet there can be no doubt that the historical Kant would have endorsed (b). He considered the sceptic a 'benefactor of human reason', precisely because the sceptic compels us to confront the question of whether our putative right to use concepts of external objects is a 'well-earned possession'. (Kant 2007, A 377–78) On this crucial point, it seems to be Campbell who sides with Kant.

I should stress that this anti-compatibilist analysis is not intended to be the last word on the matter. Closer scrutiny may reveal that the demand for C-justification is not in

fact wedded to the philosophical project that Stroud's 'modest' transcendental argument aims to deconstruct. In any case, note that it is a further question how the debate I have been reviewing bears on the credentials of the relational view of experience; in particular, on the success or otherwise of arguments that aim to derive that view from the explanatory role of experience. Such arguments *may* take the form of invoking the relational view as part of an affirmative, reassuring answer to some version of the traditional philosophical question over the role of experience in grounding our conception of the objective world (the very question which scepticism answers in the negative). But it is not clear that they have to take that form. Instead, it may be argued that the relational view articulates a commitment of our ordinary explanatory practice, of making our possession of knowledge intelligible in terms of experienced objects, a practice that may not be open to the kind of philosophical understanding demanded by the traditional question. (I examine this suggestion in more detail in chapter 8.)

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