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Objectivity, Causality, and Agency

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How does perception relate to agency? The classical pragmatist thesis is that only an agent can perceive. I will interpret this as the claim that the ability to have perceptions of an objective world depends on the ability to perform bodily actions. This is a claim that one can approach from two points of view: the third-person point of view and the first-person point of view that we have of ourselves. From the third-person point of view, the claim is that one cannot suppose a being to enjoy perceptions of an objective world without incurring a commitment to accept that the being, whatever it is, is also capable of bodily action. The shift to the first-person point of view involves the application of this hypothesis to oneself, and acceptance of this application is already implied by acceptance of the original third-person hypothesis. But I think one can also regard the first-person hypothesis as asking for a rather different kind of argument. For where the third-person hypothesis implies the existence of a necessary connection between perception and action, without any special constraints on the considerations that can be introduced to support it, the adoption of a first-person point of view is standardly associated with an epistemological perspective that introduces the constraint that one should not appeal to facts that transcend subjective appearances. Whether this is really a coherent project is, of course, much disputed, but in this context it suggests the possibility of substantiating, within an account of the contents of perception and action, the necessary connection between perception and action that the third-person hypothesis posits "from the outside." This, at any rate, is how I will interpret the first-person hypothesis, and since the arguments I advance in support of both the third-person and the first-person suppositions are not just variants of each other, I will return at the end of this paper to the question of the relationship between the two lines of argument.

1 The Pragmatist Argument

First and rather briefly, the third-person issue: can one suppose that x enjoys objective perceptions (perceptions that represent to x objective features of x's

environment) without supposing that x is an agent? I think not. The mediating concept to bring out the connection here is that of belief; on the one hand, a necessary feature of perceptions is that they provide grounds for beliefs; on the other hand, beliefs dispose to action. The first point here does not require the strong claim that perceptions just are beliefs, or even presumptive beliefs; it only requires the thesis that perception could not have objective representational content unless it were part of a cognitive system in which the contents of perception were treated as prima facie believable. The reason for this is that in assigning objective content to a perception, we think of it as a representation for the subject of features of its environment, and to think of it as such is precisely to think of the role of the perception in the subject's cognitive economy. Once one abstracts from this role, one is left with the conception of perceptions as just sensory states with qualities that are correlated with features of the environment that give rise to them. But from this kind of causal correlation alone one cannot get a conception of these sensory states as representations of these features for a subject. Without an acknowledgment of their potential cognitive role, they are as nonintentional, as contentless, as the rings on a tree whose width covaries with the type of weather endured by the tree.

The second stage in this argument concerned the connection between belief and agency, and the argument here largely continues the previous point. The argument goes as follows: To think of a being as having the belief that such and such requires one to think of the being as ready to act as if such and such. Beliefs considered in abstraction from action can only be individuated causally, and, quite apart from the difficulty in understanding how this is to apply to beliefs concerning the future, this causal individuation will not provide the basis for an intentional characterization of them. This can only come through the use the subject makes of them and must ultimately rest on their role in the causation of action. This is, of course, the claim of the pragmatist theory of belief, according to which the content of a belief can be defined in terms of its role in helping to bring about actions that would satisfy the subject's desires if the belief were true. 1 But just as there was no need before to interpret perceptions as beliefs, so there is no need here to subscribe to the full pragmatist theory. which, by itself, appears to provide an account of the content of belief that is altogether too extensional. To obtain a more satisfactory account, one needs, I think, to introduce both causal considerations and an account of the conceptual structure of belief, but these matters need not concern us here. For all that is required here is the fundamental insight of the pragmatists that beliefs are essentially states whose contents enter into the explanation of actions caused by them.

2 Objects as Causes

These two points together yield the desired conclusion: that one cannot coherently suppose that a being has perceptions of an objective world without supposing that the being is capable of bodily action. One can then apply this conclusion directly to oneself, but, as I indicated above, one can also argue for this first-person thesis in a different way. The starting point here is the abstract conception of oneself as a subject of experience, and the question one can then put to oneself is, What does one need to assume about oneself to legitimate the thought that one's experiences are experiences of an objective world. This is, of course, a starting point that is at least as old as Descartes, and there are many responses to it, including a denial that the starting point is coherent.² But I will set aside doubts on this last score so that I can concentrate on the hypothesis that to know oneself to be a subject of objective experience, one must experience oneself as an agent.

A useful introduction to this thesis, in the kind of dialectical situation with which I am here concerned, is provided by a writer who rejects it: Gareth Evans. In his famous paper "Things without the Mind," Evans explores the relationship between the objectivity of experience and the spatiality of the objects of experience by considering the situation of an abstract subject of auditory experience ("Hero") and asking what needs to be made available to such a subject for him to conclude legitimately that his experience is of spatially located sounds. At one point in his discussion Evans writes as follows:

If the hypothetical theory is to follow ours at all closely, sounds would have to be occupy space, and not merely be located in it, so that the notions of force and impenetrability would somehow have to have a place, and we may well wonder whether we can make sense of this without providing Hero with an impenetrable body and allowing him to be an agent in, and manipulator of, his world. But perhaps this is the wrong line to pursue.⁴

Despite Evans's dismissal, it is this line that I want to pursue here. Whereas Evans raises this option in the context of his discussion of the Kantian theme of the relationship between objectivity and space, I want to consider the matter in a different context. For whether or not space is a necessary feature of objective experience, the fact that some feature of experience is experienced as located in space is certainly not sufficient for its putative objectivity, because such sensations as pains are experienced as located within the subject's body (or, in a few abnormal cases, in its immediate proximity), yet pains are not themselves objective features of the subject's body, items whose existence is independent of the subject's experience of them. But if one does

not rely on the spatiality of the objects of objective experience to provide a context for a discussion of the relationship between objectivity and agency, then some other point of entry is required. As my title implies, I suggest that considerations of causality provide one. My general line of argument will be (1) that to take oneself to have objective experience, one needs to accept that the objects of experience are among its causes, and (2) that only the experience of agency makes available to us the notorious idea of a necessary connection, which is an essential component of the concept of causality. Both these points obviously need considerable elaboration and defense.

There are, I think, two ways of arguing for the first point, concerning the dependence of objectivity on causality. One is suggested by Kant's argument in the second Analogy in The Critique of Pure Reason (1787). Kant has already argued (in the Transcendental Deduction) that the possibility of obiective experience depends upon the "unity" of consciousness, by which he seems to mean the ability of a subject to refer his experiences to himself in a coherent way as experiences of an objective world. His next move (in the Schematism) is to maintain that for us, at least, this abstract unity of consciousness takes the form of a temporally ordered stream of experience. But, Kant argues in the second Analogy, time itself cannot be perceived, so the temporal ordering of experience requires some other basis, and Kant argues that this is provided by awareness of the causal order of the objects of experience. Hence, to take oneself to have objective experience, one must take oneself to have experience of objects whose causal relationships enable one to fix the temporal order of one's experiences. Thus, for Kant, objectivity depends essentially on awareness of causality. Admittedly, he seems to think of this causality as obtaining primarily between the objects of experience, but he seems equally committed to the existence of causal relations between objects and our experiences of them, since only thus can he hope to secure his thesis that "we must derive the subjective succession of apprehension from the objective succession of appearances."5

This argument is plainly questionable in many ways, but one can reinforce the latter part of it, concerning the link between time and causality, with the help of Mellor's views about time.⁶ Suppose we take it, as seems reasonable, that the temporal unity of consciousness that Kant has in mind is a stream of consciousness within which McTaggart's A-series temporal concepts (the indexical concepts of the past, present, and future) are applicable.⁷ We can now ask, in a Kantian spirit, what makes these A-series judgments possible, and we can introduce here Mellor's plausible thesis that these indexical A-series judgments draw on the nonindexical B-series temporal ordering of events as earlier than, or simultaneous with, one another. For changes in truth values of such A-series judgments as 'It is now

raining' reflect the fact that their truth conditions are determined both by the state of the world and by the nonindexical temporal context of the judgments. Thus, without seeking to reduce the A-series concepts to the B-series ones, it is plausible to suppose that the A-series temporal order depends on the B-series order. And if we ask further what determines the direction of time, the direction from earlier to later, the obvious answer is causality: causes precede their effects. So, under this reconstruction, awareness of the A-series temporal order of experience depends on awareness of the B-series context of these experiences, and this in turn depends on awareness of the causal order of these experiences and other events, which is roughly where Kant's argument ends up. Admittedly, this still leaves unexamined the first part of Kant's argument, which concerned the connection between the possibility of objective experience and the temporal unity of consciousness, but this is not the occasion to discuss this claim which, though contentious, seems to me defensible.

Instead, I want to present a different, and rather less metaphysically demanding, line of argument for the thesis that the self-ascription of objective experience depends on recognition that the objects of experience are among their causes. This argument proceeds altogether more directly. starting from the conception of objective experience as experience of objects (or events) whose existence is independent of the experience of them. Now the naive phenomenology of perception, especially vision, may tempt us to think of this as altogether unproblematic. For the naive realist builds the objectivity of experience into the conception of the content of experience itself by thinking of experience as the "transparent" or "diaphanous" awareness of objects, so that experience is conceived of as a relationship with objects that present themselves to us just as they are.8 But a moment's reflection reveals to us that this conception really is too naive: the contents of experience just do not cohere in a way that permits us to regard them all as objective qualities of objects independent of us. Hence, the objectivity of an experience cannot in general be something that is just given unproblematically within the content of the experience itself; some further feature that implies this objectivity needs to be introduced, and the causal thesis is that recognition of the causal dependence of an experience on its object provides this feature, so that the self-ascription of objective experience requires that experience should itself furnish a basis for the recognition of this causal dependence. The idea is that since experience in fact gets its objective relational structure from its causal relationship with those objects in the world that fit its apparent content, subjects who think of themselves as subjects of objective experience must have reason to think that their experiences are caused by their objects.

My claim, therefore, is that we can make sense of the objectivity of our own experiences only in the context of a folk psychology of perception that includes the causal thesis. It is obvious that anyone who accepts that the objects of their experience have a causal role in the genesis of their experience thereby treats their experience as objective; what needs more argument is the converse claim, that belief in objectivity requires acceptance of a causal role for the objects of experience. The reason this is so is that to divorce belief in the objectivity of one's experience from the causal thesis would be to hold that one's identification of the objects of experience does not contribute to one's understanding of why one's experience is as it is. But once the objects of perception are considered not to play any explanatory role in perception itself, we are thrown back to Malebranche's occasionalism or something similar, and, as Locke observed, our reason for belief in the objectivity of experience is then radically undermined.9 For if, as the denial of any causal role to the objects of experience implies, one supposes that one's actual experience could have been just as it was even if its apparent objects had not existed at all, one makes it quite unclear why one is entitled to hold that the content of that experience provides any reason for supposing that things are in some respects as they appear to be. We have reason to take our perceptions to be objective only where we find that their supposed objects, combined with an understanding of our sense organs and situation, yield an explanation of the content of the perception itself. No deep understanding of sensory psychology is required here; only common sense folk psychology is assumed. But we manifest our awareness of this all the time in our investigative activities, for such activities are precisely attempts to arrange our situation so that the content of experience will show us how things are, because our situation, we believe, will yield experience whose content is explained by its being veridical.

This, then, completes the second line of argument for the thesis that objectivity implies causality, that by thinking of one's experiences as objective, one is committed to thinking of their objects are their causes, or at any rate as contributing to a causal understanding of the experience. This is, in turn, just the first leg in the broader thesis I am proposing: that ascribing objectivity to one's own experience implies experience of oneself as an agent. So now I turn to the second leg, the connection between a grasp of causality and experience of agency.

3 Bodily Power

This is an old thesis with both a negative and a positive component. The negative component is that our sense experiences do not by themselves en-

able us to discriminate causal connections among perceived objects from bare spatiotemporal conjunctions. The positive component is that the experience of our own agency gives us a distinct idea of causal connection and enables us to see how this applies within the world. Locke provides a classic formulation of these two components:

But yet, if we will consider it attentively, Bodies, by our Senses, do not afford us so clear and distinct an *Idea of active power*, as we have from reflection on the Operations of our Minds. . . . Neither have we from Body any *Idea* of the beginning of Motion. A Body at rest affords us no *Idea* of any *active Power* to move; and when it is set in motion it self, that Motion is rather a Passion, than an Action in it. . . . The *Idea* of the beginning of motion, we have only from reflection on what passes in our selves, where we find by Experience, that barely by willing it, . . . we can move the parts of our Bodies, which were before at rest. ¹⁰

It is, of course, Hume who provides a classic formulation of the negative component of this line of thought. He places special emphasis on the modal implications of causal thoughts (their connections with ideas of necessity and power) and asks how the course of experience can reveal to us not only what is the case but also what has to be case, what could not be otherwise. 11 One familiar response to this argument is to appeal to our experience of the resistance of things, e.g., my experience now as I press against the table. For, some have said, does not this give us an experience of impossibility and therefore provide us with a way into the circle of modal concepts? I suspect this is what Dr. Johnson had in mind when, according to Boswell, he sought to refute Berkeley (whose views about natural causality are similar to Hume's) by reminding us of what it is like to kick a rock. Hume himself acknowledged this line of thought, writing, "It may be pretended, that the resistance which we meet with in bodies, obliging us frequently to exert our force, and call up all our power, this gives us the idea of force and power. It is this nisus, or strong endeavour, of which we are conscious, that is the original impression from which this idea is copied."12 Hume rejects this proposal because it is not universally applicable and does not provide us with an a priori concept of power. These objections do not seem altogether to the point, but there is a better critical discussion of this proposal by Heidegger in a discussion of Max Scheler's presentation of a version of it.¹³ Heidegger argues that the familiar tactile and kinesthetic sensations that we interpret as evidence of the resistance of things bear this interpretation, and thus the crucial modal interpretation as experience of impossibility, only because we conceptualize them from a perspective that includes the thought that they occur in the context of an attempt to effect some physical change in the world. So the experience is interpreted as experience of resistance only within a perspective that already includes

the concept of causation. If this perspective is not assumed, then the experience yields no more than a peculiar type of sensation conjoined with certain bodily movements. Hence, to use experienced resistance to challenge the negative component of Locke's argument, we have already to accept something like the positive component of his argument: that our grasp of causation is founded on our experience of bodily action.

This positive component is, of course, challenged by Hume, who objects that the idea of causation cannot be founded on our experience of our own agency. According to Hume, this experience is shrouded in mystery: we understand all too little of the mechanism of action, of the way in which our thoughts give rise to movements of our bodies. Thus, so far from this experience yielding us an example from which we might gain a clear and distinct conception of causal power, we find nothing but the conjunction of acts of will with the motion of certain parts of our body: "We learn the influence of our will from experience alone. And experience only teaches us, how one event constantly follows another; without instructing us in the secret connexion, which binds them together, and renders them inseparable." So the appeal to the experience of agency, which forms the positive component of Locke's account of our grasp of the idea of active power, or causation, is, according to Hume, entirely mistaken.

One part of the response to Hume must be that the account he offers of agency is not tenable. For Hume, agency is constituted by a constant conjunction of mental acts of an appropriate type (acts of will) with bodily movements, and this constant conjunction can then be interpreted, in the light of Hume's projective theory of causation, as a causal relationship. The objection to this is that physical action is not simply bodily movement caused by a purely mental act that "wills" some worldly end. For this account misconstrues the relation between acts of will and bodily movement; it is not just a conjunction worth noting for future reference (like that, say, between consumption of too much alcohol and a subsequent hangover), since the intentionality of the mental act is transmitted to the bodily movement itself. The Humean account, which treats acts of will as exclusively mental, makes it seem that I raise my arm just by engaging in an appropriate mental act and then waiting for the result of that act. But I can, in Hume's sense, "will" as hard as I like that my arm should rise without anything happening, just as I can will that the sun should shine without anything happening. To come closer to the experience of agency, therefore, we require an account in which bodily movement is integrated into the act of will itself so that in cases of successful action an act of will becomes bodily.

The kind of account that is wanted has, I think, been provided by Brian O'Shaughnessy.¹⁵ Here I will not attempt a description of O'Shaughnessy's

account. But one central point is the conception of an attempt, or a striving, which, although definitely psychological at the moment of inception, encompasses those subsequent bodily consequences that are directly under the agent's control. Thus my raising my arm is a successful attempt on my part to raise my arm; the attempt comes to "fruition" through the movement of the limb. Furthermore, the experience of agency is precisely the experience of such attempts coming to fruition through the agent's control of bodily movement: the agent experiences the psychophysical unity of bodily action through experience of satisfaction of a set of conditionals connecting choice and movement. O'Shaughnessy writes,

I refer to the obtaining of a set of conditionals, which are such as to ensure the existence of a power. For the normal human agent can when he chooses stop the movement of his arm, . . . and he can when he chooses change the direction of its movement, . . . and he can speed up or slow or whatever. Now these properties, summed up in the concept of the having of power or control over the limb, are of absolutely central importance to the occurrence of a physical act of movement-making. . . . Herewith, a dialectical synthesis of the seemingly opposed bodily and psycho-physical requirements of physical action is effected.¹⁷

The significance of this conception of "the having of power or control over the limb" is that it implies that once one replaces the volitionist account of action that Hume invokes, his objections to the Lockean thesis about the relationship between the experience of agency and the idea of power can be set aside. For O'Shaughnessy's account of action implies that the experience of agency includes the experience of bodily powers, defined by the psychophysical dispositions that link the will to bodily movements. The experience of agency is, therefore, not one of acts of will just regularly, but mysteriously, conjoined with bodily movements; it is one of acts of will that extend themselves to those parts of the body that are under direct control of the agent.

A Humean might still object that it remains to be shown that we have reason to think that we are agents with bodily powers. Indeed, he might at this point seek to recruit O'Shaughnessy to his own side, for O'Shaughnessy shows that illusion is as possible with respect to one's own agency as with respect to ordinary perception, by describing a case in which an agent thinks he is performing a very simple arm movement that requires no effort when in fact his arm is being moved by a machine that goes into action just when the agent thinks he is starting to move his arm. ¹⁸ But recognition of this kind of possibility of error need not undermine the idea that the coherence of our experience provides us with good enough reason to hold that we are normally reliable in this respect. The thesis that it is through the experience of agency that we get a grasp of bodily power,

and thus of causation, does not require infallibility with respect to our experience of agency.

Yet what remains to be clarified is the way in which the experience of bodily power enters into the constitution of objective experience. Schopenhauer provides, I think, a useful cautionary example in this respect. In some respects his account of the will anticipates that of O'Shaughnessy. Thus he writes, "Only in reflection are willing and acting different; in reality they are one. Every true, genuine, immediate act of the will is also at once and directly a manifest act of the body. My body is the objectivity of mv will."19 Furthermore, he endorses a version of the Lockean thesis about the idea of power or force: "Hitherto, the concept of will has been subsumed under the concept of force: I, on the other hand, do exactly the reverse, and intend every force in nature to be conceived of as will."20 However, as this closing comment indicates, Schopenhauer goes well bevond a simple epistemological grounding of the concept of force on experience of will. He harnesses his doctrine of force as will to the Kantian conception of things-in-themselves, to draw the conclusion that will is "the innermost essence, the kernel, of every particular thing and also of the whole. It appears in every blindly acting force of nature, and also in the deliberate conduct of man, and the great difference between the two concerns only the degree of the manifestation, not the inner nature of what is manifested."21 Exciting though this metaphysics sounds, what we need is an account that, by locating the will within experience, puts limits on it. In grounding the idea of causation on the will, we do not want to be drawn to the conclusion that all causation is willpower. For the will itself is just a causal power.

In outline, the first part of the requisite construction appears fairly straightforward. If the experience of agency is the irreducible experience of bodily power, then the way is clear for the experience of resistance to bear the obvious interpretation in terms of forces acting upon us to place limits on our bodily power. In brief, if the experience of bodily power is an experience of possibilities, the experience of resistance is the experience of impossibilities. Furthermore, since these impossibilities are experienced as arising in the context of bodily contact, the ground for these impossibilities can be (fallibly) assumed to be located outside the body. Hence the idea of external forces constraining us can be legitimated within experience. Thus, given the modal content of the experience of agency, tactile experience itself can be legitimately assigned a content in which modal concepts are used to characterize the objects of experience; in this way Hume's modal challenge can be faced down, and the objectivity of tactile experience vindicated.

An important step has, however, been omitted here in that the objectivity of tactile experience presupposes the objectivity of the proprioceptive body sense that informs us of our limb movements. For it is only because we are able to regard our proprioceptive sense as providing us with putatively objective information about our limbs that we can rely on tactile experience to extend objective content beyond the body.²² On the basis of bodily experience one cannot form a conception of the objective physical world that only commences beyond the limits of the body: the body itself has to be included within that world, even though our experience of the body is quite unlike our experience of the rest of the world. How, then, should the objectivity of proprioception itself be handled? The question is strange because experience is always in some respect bodily, so it is not at first clear what it might be for one's own body to exist unperceived. The approach I have been following implies that the objectivity of proprioception, like that of the other senses, should rest on a causal interpretation of the relationship between proprioceptive experience and its bodily object. But if, following O'Shaughnessy, we accept the irreducible experience of bodily power as fundamental, then the availability of a causal interpretation of proprioception is implied. For the experience that some current limb movement is under the control of one's will permits one to recognize that the experience itself depends on the limb movement. In my awareness that my arm is rising because I have chosen to raise it, there is implied a recognition that this very awareness itself depends on the movement of my arm (and thus on my will). The experience of agency as the causal power of bodily control brings with it the objectivity of the body as a cause of this very experience.

What needs more discussion here is whether the availability of this objective information concerning limb movement does not itself depend to some extent on tactile experience to provide an objective spatial framework of the subject's body (a body image) within which the proprioceptive sense then locates the subject's limbs. This claim has been advanced by O'Shaughnessy,²³ and it poses a threat to the thesis that the objectivity of the contents of tactile experience is grounded in the objectivity of the proprioceptive body sense. In response to O'Shaughnessy, however, I want to urge that the body image has a recursive structure. At the primitive level of infancy, I suggest, the body image has a crude spatial structure given entirely by proprioception. This gives the infant a simple sense of agency and bodily power that enables it to employ its sense of touch to explore its own body and, on the basis of these explorations, enrich its body image, and thus the content of its proprioceptions, and so on. This recursive model of the successive enrichment of the body image through the sense of touch

preserves the plausible part of O'Shaughnessy's thesis that the normal adult body image has a degree of spatial articulation that cannot be derived from proprioception alone, yet retains the thesis that, at the most fundamental level, proprioception does not depend on touch.

The difficult part in the story is the next; how is one to vindicate a causal understanding of the content of other modalities of sense experience (e.g., hearing and sight), and thus their objectivity? They do not include the experience of the resistance of their objects, so the ascription of causal powers to such objects, and a causal comprehension of our experience of them, cannot just follow the pattern of tactile experience. Not surprisingly, these are the senses that we think of when we think of perception as just a matter of passive receptivity. One obvious route here is to build out from the objectivity of touch via the thought that the objects of touch are usually also potential objects of sight, hearing, etc. By itself this will not give a causal understanding of the role of these objects in, say, auditory experience of the kind that tactile experience makes available. But we need not think of causes as forces that we can feel, as if we had to be able to feel sound waves striking our ears and making the inner ear vibrate in order to vindicate the objectivity of auditory experience. Instead, we can think of causes as the grounds of dispositions, so that, as long as we can attain a dispositional understanding of auditory experience that ties the experience counterfactually to the audible presence of some tangible sound source, the conclusion that the source of the sound is the cause of the experience can be fairly drawn. Admittedly, this line of thought takes it for granted that the objects of touch are also potential objects of sight, hearing, and so on. But this assumption is readily defensible: it rests on our awareness that there is just one space because of the single bodily point of origin of the spaces of the different senses. Because bodily experience locates one's sense organs within a single body space, the sense fields that open out from the different sense organs are experienced as different ways of perceiving one and the same space.

Is it right to assign this degree of priority to the sense of touch in the constitution of objectivity? Do the other senses have to build out from the conception of the objects of experience given by touch? There is certainly an intuitive inclination to judge that things are real only when we can touch them: Macbeth, confronted by the vision of a dagger, reaches forward to clutch it and, finding nothing tangible there, concludes that it is just "a dagger of the mind." But there are plenty of real visible objects that are not tangible, such as smoke, so tangibility is certainly no necessary condition of physical reality. But this is not the issue; what is in question is whether the sense of touch should have the priority that this line of thought assigns

to it. Indeed, although the line of argument is primarily epistemological, it lends itself readily to a developmental interpretation and can thus be taken to support the empirical priority of bodily experience and touch in the constitution of a child's conception of the physical world. Yet once the role of counterfactual thought within nontactile experience is acknowledged, it may appear unnecessary to suppose that the other senses need to build out from a conception of objectivity that is grounded in bodily experience and the sense of touch.

The case of Ian Waterman, which Ionathan Cole has described in fascinating detail, provides a way of making this challenge especially vivid.²⁴ Despite lacking normal proprioception and sense of touch (though he still retains sensitivity to temperature), Ian Waterman can employ his other senses much as we do. Indeed, he relies on visual feedback to control his body. And although Waterman is confident that he is drawing on the mastery of his full perceptual capacities that he enjoyed prior to the illness at the age of 19 that deprived him of proprioception and touch.²⁵ it is not easy to be confident that this is an essential feature of any similar case. Could there not be someone who was struck by the same illness during early infancy and yet managed to develop abilities comparable to those that Waterman developed? Such a case would be astonishing, yet Waterman's achievements, which far exceeded the expectations of those who first treated him, are themselves astonishing and must give pause to anyone who assigns a fundamental role in the constitution of objectivity to the sense of touch and bodily experience.

I think Waterman's case and hypothetical extensions of it show that there must be an alternative to the normal, intuitively accessible route to the constitution of the objectivity of experience that passes through proprioception and the sense of touch. On this alternative route, the modal component of the causal role of objects of experience will be manifested through subjects' acceptance of counterfactuals linking the presence of objects in their environment to the condition of their sense organs and the contents of their experience. Now it is not difficult to imagine courses of experience rich enough to make explanatory hypotheses of this kind reasonable if a general framework of causal explanation can be assumed. But the issues in the present context are whether this can be assumed without begging the question and whether this alternative route shows that the emphasis on agency that I have been exploring is after all in principle dispensable.

I suggest that this second conclusion does not follow, for reasons that connect with the need to confront the first issue. To suppose that agency is altogether dispensable is to revert to the model of the passive interpreter, and in support of this it may be said that the visual systems of humans and

similar organisms have evolved to include subsystems that enable visual input to be progressively interpreted as experience of a physical world that is spatially organized from the subject's point of view without any reference to the subject's agency. Hence, one might argue, neither from a developmental, nor from an epistemological, point of view is agency really necessary. Now I am not competent to adjudge the developmental issue here. but the necessity for some degree of agency is strongly supported by the famous experiment by Held and Hein in which kittens that had been rendered unable from birth to move themselves (although they were passively carried around in circles by other kittens) were unable to develop normal spatial vision.²⁷ This experiment suggests that full three-dimensional spatial experience indeed requires physical agency, the capacity to explore space and relate visual experience to bodily experience. But Watermantype cases suggest the need for some caution here (especially if one imagines such a case combined with paralysis of much of the body), and I would like to propose that a more modest degree of agency may in principle suffice, namely voluntary control of the sense organs.

Despite his lack of proprioception, Ian Waterman can turn and focus his eyes, and indeed he relies on visual feedback to control his limb movements, but whether he or any hypothetical variant of his case could control limb movement if he were blind is doubtful. I suggest that this kind of voluntary control of the sense organs is essential. One reason for this is that in assigning an objective content to visual experience, the subject has to take account of his point of view and the condition of his eyes. If these are to some extent under voluntary control, the subject can factor them out in interpreting his experience and identify the objects distinctively responsible for his current experience. A subject who lacks this degree of voluntary control would not be in a position to control, and thus identify, the variables that determine visual experience, and thus he would never be able to solve the "simultaneous equations" that experience presents. It may be objected that this point depends on taking the interpretation of visual input as altogether too much a matter of conscious reasoning; once it is recognized that this interpretation is carried out primarily by subsystems over which we have no control, it may be said, this argument for the need for control over the sense organs is undermined. In response to this, I would say that even though, of course, the interpretation of visual input is carried out largely by subsystems over which we have no control, it remains to be shown that the programming of these subsystems does not depend on learning and feedback that assume a capacity for voluntary control. Someone with no voluntary control over his eyes would lack the ability to focus his attention on specific regions of the visual field; hence he would lack both the ability to visually track the path of moving objects and the ability to stabilize his visual identification of objects while his own point of view alters. Without these abilities, which have a fundamental role in the organization of the visual field, I strongly doubt whether any objective interpretation of visual experience could be sustained.

This line of thought can be reinforced by considerations that return to my earlier stress on the modal component of objective experience. By finding that some aspects of the content of visual experience, unlike its direction, are not subject to the will, a subject encounters a kind of impossibility within visual experience (a visual analogue of tactile resistance) and is thus led to think that the content concerns objects whose existence is independent of the experience and can therefore be employed to explain the experience. Yet one can only encounter this kind of impossibility within a context in which other changes are experienced as possible. If we imagine that Ian Waterman lacks voluntary control of his eyes, and thus is altogether passive in relation to the course of his visual experience, no changes in the course of his experience would be experienced as more or less possible than any other, so not only would there be insuperable problems in factoring out the contribution to the content of experience made by its objects, there would also be deeper questions as to why such a subject should imagine that his experience is experience of objects whose existence is independent of him. Nothing in the experience of such a subject would warrant the assumption that one can extract from the content of experience the materials for a causal explanation of it.

There is more to be said concerning the phenomenology of Ian Waterman's situation and other more extreme cases that might be imagined or discovered. Yet I hope that I have said enough to show that these cases do not provide decisive counterexamples to my thesis that agency helps to constitute objectivity, although they do show that one should qualify any assignment of priority to proprioception and touch. Rather than prolong direct discussion of this issue, however, I want finally to turn to the metaquestion of how this whole second line of argument for the first-person thesis that objective experience depends on the experience of agency relates to the third-person thesis that perception implies agency.

4 The Harmony Requirement

The first argument tells me that I cannot suppose myself to enjoy perceptions of an objective world without supposing myself to be an agent. Isn't this just the conclusion of the second argument? If so, wherein lies the point of that argument? Its rationale must derive from its distinctive starting

point: the abstract conception of oneself as a subject of experience, wondering what kind of assumptions about oneself and one's experience warrant belief in the objectivity of experience. For from this starting point, the first line of argument, with its essential third-person perspective, is unavailable, or at any rate question-begging, as this line of argument takes it for granted that one is a subject within an objective world that includes other subjects, and that the kind of connections that apply in general among perception, belief, and agency apply in one's own case. The first argument does not aim to establish the presuppositions of rational belief in the objectivity of experience; it just concerns the connections among perception, belief, and agency, where these are conceived as states of beings whose objectivity is simply not in question. Now there is nothing wrong with this line of argument. But the second argument starts from a point of view that has bracketed such assumptions and, with correspondingly less material to draw on, seeks to draw out the presuppositions of assigning a distinctively objective content to one's own experience.

As indicated by the use of the idioms of 'legitimation', 'warrant', and 'constitution' throughout the second argument, the concern of this argument is fundamentally epistemological. The argument is not, however, primarily antiskeptical; instead its concern is transcendental: the argument seeks to show that agency is a necessary condition for the legitimate selfascription of objective perception, and because it is of this kind, the epistemological considerations readily connect with developmental ones, as the final stages of my discussion indicate. The epistemology involved here is distinctively "internalist," 28 for it adopts a first-person point of view from the outset and explores the lines of reasoning available to a subject of experience who seeks to explore the basis of his belief in the objectivity of his own experience. Internalist epistemology of this kind is currently out of favor, but I myself think that it is a proper part of the traditional philosophical enterprize of gaining a reflective understanding of ourselves and our place within the world. I will not attempt here to defend this claim, but in a full defense I would want to acknowledge that this kind of epistemology needs to be completed by an externalist epistemology, which confirms, from the outside, so to speak, the conception of our cognitive relation to the world that the internalist argument implies.²⁹ If this is right, it follows that the two arguments I have been discussing are not altogether alien to each other after all, for the first argument can be regarded as an externalist confirmation of the conclusion of the second one. On reflection, this should not seem surprising for if one were to suppose (contrary to my argument) that the legitimation of the objectivity of one's perceptual experience did not require a conception of oneself as an agent, it would seem altogether mysterious if, in thinking of oneself from a third-person point of view as a subject of objective perceptions, one was nonetheless committed to thinking of oneself as an agent. In such a frame of mind one would seem compelled to adopt a Sartrean division of the self into one's being-for-oneself and one's being-for-others.³⁰ Since such an outcome can only be regarded as a reductio ad absurdum of the assumed combination of positions here, it is reasonable to require that the approaches of the first and second arguments be in harmony, and since the first argument appears hard to fault, this requirement of harmony helps to confirm at least the conclusion of the second, more contentious, line of argument.

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Notes

- 1. This position is explored in Stalnaker 1984, chap. 1.
- 2. See, for example, Heidegger 1927, pt. 1, sec 43.
- 3. Evans 1985.
- 4. Evans 1985, 280.
- 5. Kant 1787, A193, B238.
- 6. See Mellor 1981.
- 7. See McTaggart 1927, chap. 33.
- 8. See Moore 1903, 37, 41.
- 9. See Locke 1714, secs. 20, 53.
- 10. Locke 1700, II.xxi.4.
- 11. Hume 1739, I.iii.14. In writing here of Hume's emphasis on the "modal" implications of causal thought, I employ the philosophers' concept of modality, which applies to possibility, necessity, etc., and not the psychologists' concept, which applies to the different modalities of sense, such as sight and touch.
- 12. Hume 1777, 67, n. 1.
- 13. Heidegger 1979, sec. 24.
- 14. Hume 1777, 66.
- 15. O'Shaughnessy 1980, esp. vol. 2, chaps. 11-15.
- 16. O'Shaughnessy 1980, 2:214.
- 17. O'Shaughnessy 1980, 1:119.

- 18. O'Shaughnessy 1980, 1:115-116.
- 19. Schopenhauer 1844, 101-103.
- 20. Schopenhauer 1844, 111.
- 21. Schopenhauer 1844, 110.
- 22. This point was urged by Naomi Eilan and Paul Snowdon in discussion.
- 23. O'Shaughnessy 1989, 57-58.
- 24. Cole 1991.
- 25. Cole 1991, p.123.
- 26. See Bennett 1966, 37: Evans 1985, 266-268.
- 27. Held and Hein 1963.
- 28. See Bonjour 1992 for a summary of the externalism/internalism debate in epistemology.
- 29. I have argued for this in Baldwin 1991, esp. pp. 185-186.
- 30. Sartre 1943, esp. pt. 3, chap. 1.

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