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Don't Go There: Reply to Crooks

Larry Hauser Alma College

From the fact that experiencing is in the head, nothing follows about the nature, location—or even the existence—of the experiencing's presumed object. It does not follow that direct realism "cannot possibly be true" (Smythies, 1989, p. 84); much less that "that the experienced world is wholly locked up within one's brain"; much less still, that it must be "located" in in some spiritual "place" outside of physical space (à la Descartes) or some "higher-dimensional space (higher relative to the physical world)" (Smythies, 1989, p. 98). Direct realism is not only consistent with all the known neurophysiological facts, it coheres far better with surrounding and grounding science—and the neuroscience itself—than the Smythian alternative towards which Crooks (2002, this issue) tends; and it may be had for a reasonable naïve phenomenological cost.

Socrates to Theaetetus: "And if someone thinks mustn't he think something?" — Th.: "Yes, he must." — Soc.: "And if he thinks something, mustn't it be something real?" — Th.: "Apparently."

And mustn't someone who is painting be painting something real! — Well, tell me what the object of painting is: the picture of a man (e.g.), or the man that the picture portrays. (Wittgenstein, 1958, §518)

Admit It?

How (pace Descartes) can anyone deny that there are conscious experiences; a difference between seeing your mother in a dream and having a disposition, on waking, to say "I dreamt I saw my mother" (contra Malcolm, 1959); "a difference between pain-behaviour accompanied by pain and pain-behaviour without any pain" (Wittgenstein, 1958, §304)? What greater dif-

Requests for reprints should be sent to Larry Hauser, Ph.D., Department of Philosophy, Alma College, Alma, Michigan, 48801. Email: hauser@alma.edu

¹The allowance, as I am about to characterize it, runs together two things — the *phenomenality* and *subjectivity* of consciousness — that Descartes distinguishes; and I think rightly distinguishes. For me as for Descartes, the consciousness allowance, then, is two-fold. Phenomenality is the principal focus of the discussion here.

ference could there be? There is "something that it's like" (pace Nagel, 1974) to have a visual experience. There are conscious experiences (e.g., of seeing) with distinct phenomenal "feels" (contrast, e.g., visual and tactual shape recognition). Who can deny this?

Secondly, as a point of "logical grammar" (as Wittgenstein would say) let us distinguish between the *factive* sense of "see" in which *seeing* X entails (the existence of) X, the sense in which Macbeth didn't see a dagger; and a *nonfactive* use wherein we *disallow* the entailment, in which we say he did see it. This is a distinction distinguishing, roughly speaking, between *veridical* seeing and just "having a visual perception" (Descartes, 1642/1984, Med. 2) or (better to say) having a perceptual *experience*.² I will reserve "see" for *veridical* cases and speak of "visual experience" (or put "see" in quotes) where "see" is used nonfactively. Lead us not into equivocation. To argue (after the photo flash) —

I see a purple dot before my eyes.

Being seen entails being.

... There is this purple dot before my eyes.

- would be a sin.

Finally, let us acknowledge scientific authority and commit to established scientific facts. Vision, normally, begins with the thing seen (distal stimulus) from which reflected or radiated light proceeds to affect photosensitive cells in the retina of the eye, causing activation of the optic nerve, resulting in stimulation of the visual cortex. In science we trust for this and further details. Similarly for hearing, and the other senses.³

Putting two and three together, different cases of nonfactive "seeing" (or otherwise "perceiving") reflect different kinds of communications breakdowns in the visual (or other perceptual) systems:

- 1. where there is no such distal thing as impinging light suggests, we speak, e.g., of "illusions" such as the watery appearance of shimmering heat on the summer pavement, or the bent appearances of sticks half submerged in water;
- 2. where there is no such light impingement causing the retinal image as it suggests, we speak, e.g., of "afterimages," like the purple dot you sometimes "see" in front of your eyes after a photo flash;

²"Lastly, it is also the same 'I' who has sensory perceptions, or is aware of bodily things as it were through the senses. For example, I am now seeing light, hearing noise, feeling heat. But I am asleep [it's all a dream], so all this [about the bodily things] is false. Yet I certainly seem to see, to hear, and to be warmed. This cannot be false; what is called 'having a sensory perception' is strictly just this, and in this restricted sense of the term it is simply thinking." (Descartes, 1642/1984, p. 19)

³I henceforth ignore the other senses. Though there are interesting points of contrast (regarding *directness*, e.g.), points raised about vision below, I assume, apply *mutatis mutandis* to the other senses.

3. where there is no such retinal input as the impression subsequently raised suggests, we speak, e.g., of "hallucinations" (e.g., pink rats delirium tremens sufferers "see,") and dreams (e.g., your mother as "seen" in a dream).

Putting it all together, it is tempting to conclude with Smythies:

Only these events in the cortex are necessary for perception to occur. If the impulses are interrupted before they reach the cortex, nothing is perceived. If the impulses are set up artificially by stimulating the surface of the cortex, for example, if the right pattern is set up, the object is perceived normally even though there is really no object there (1989, p. 84)

Except (speaking carefully) we should not say "perceived" - much less "perceived normally" — when the experience is caused by "artificially stimulating the surface of the cortex." I will say, "an experience is had indistinguishable from when the object is perceived normally": let optical transmission, retinal transduction, and optic-nervous transmission come what may, it's the visual cortical goings-on that are or underlie the visual experiences. This much I allow (pace Crooks, 2002, this issue) to be a "direct inference from the known nature of perception" taken together with "our everyday phenomenology."4 But there it ends. From the fact that the experiencing is in the head, nothing follows about the nature, location — or even the existence — of the experiencing's presumed object. It does not follow that direct realism "cannot possibly be true" (Smythies, 1989, p. 84); much less that "that the experienced world is wholly locked up within one's brain"; and much less still, that it must be "located" in some spiritual "place" outside of physical space (à la Descartes) or some "higher-dimensional space (higher relative to the physical world)" [Smythies, 1989, p. 98].

The Direct Question

How — given acceptance of the known scientific facts of optical transmission, retinal transduction, and nervous transmission — does the direct realist construe perception to be *direct*? What the direct realist denies is not intervening media of *transmission* between the distal object and visual experience thereof. What she denies (at the very least) is any intervening medium of *pictorial representation* — a "veil of images" — such that it is these images

⁴My enthusiasm for this conclusion is bounded by this nagging doubt that says "Sure . . . like you can cook up a fine Chianti directly from its chemical elements — avoiding the usual vine-vat roundabout . . . 'in principle' as they say." I've this nagging suspicion that, compared to "normal perception," this cooked up experience (like the cooked up Chianti) will never be quite so "lively and distinct" (c.f., Hume 1738/1978). Here, I suspect, "practical" difficulties verge on principled. I will not, however, pursue such suspicions or heed such voices here.

that are really experienced and *directly* "seen" (in the case of visual perception); and from which sense-data the existence and qualities of the distal object are (on classic formulations, such as Locke's) consequently *inferred*. Classic representationalism, as I'll style it, proposes to give perception a three-stage analysis in terms of

- 1. distal stimulus (objective reflection or radiation) and optical-nervous transmission—transduction (to take the case of seeing);
- 2. direct-experiencing of something besides the distal object, a "sense-datum" or "percept";
- 3. inference to the existence and properties of the distal object from the direct-experienced evidence.

Crooks (2002), like Smythies, endorses this classic representationalist picture over against direct realism; and even, in the end, it seems, against materialism. Where scientific push comes to metaphysical shove, it seems, is where directness is understood to involve something *more* than just the absence of inner perception-like mediation.

Naïve Dualism

Naïve realism, Crooks says, mistakes percepts and qualia (their characteristics) for distal-objects (and their characteristics). For naïve realism, distalobjects simply are as they visually appear. Similarly, naïve dualism (as I'll call it) takes percepts and their qualia simply to be as they experientially appear, entailing what David Lewis calls "the identification principle": that "when I have an experience with quale Q, the knowledge I thereby gain reveals the essence of O" (Lewis, 1995, p. 142). Traditional Cartesianism — holding our experience (each of our own private experiential objects) to be absolutely direct in being unmediated by any intervening processes whatever — may be understood to be an intellectualization of naïve dualism (much as Crooks understands direct realism as an intellectualization of naïve realism). No mediation, no "communications breakdowns": experience, accordingly, would be infallible. As naïve dualism has it, when I visually experience something purple and round before my eyes after the photo flash — though there's nothing "out there" I'm seeing, there really is something I'm visually experiencing (to put it carefully); something really purple, moreover, and really round; a percept. Here the metaphysical plot thickens. Where could this percept be?

Location, "Location"

Out-There: Physical Space

Paul Churchland (1985) proposes that "objective phenomenal properties" such as heard pitch and seen color should be "confronted where they stand, and they should be reduced where they stand: outside the human observer" (p. 19). This direct realistic approach to naturalizing such "objective qualia" (p. 19) as pitch (= oscillatory frequency of sound-waves) and color (in reflective bodies = triplets of electromagnetic reflectance efficiencies) appeals to our realistic commonsense belief that we see into physical space and directly observe distal stimuli as, Crooks allows, "we are immediately appearing to do" (original italics, p. 196). But "examination of the physics and physiology of perception," Crooks thinks, shows "we cannot actually see into physical space, or directly observe distal stimuli" (original italics, p. 196).

Why? Because,

all perception must be transpiring within the CNS, though what this perception is of is external objects. No sense-mode has left the CNS to do any observing out-there (in physical space). [original italics, p. 196]

Science trumps common sense. But no sense-mode has to leave the CNS. I can see out-there because light comes in from out-there. We can have our science and really see into physical space too. And if the reply is that this isn't direct seeing . . . for this to follow just from the basic fact that "all perception must be transpiring within the CNS," directness must be understood in something like the absolute sense (excluding even media of transmission) limned above. Direct realism conflicts with naïve dualism, not with science. That's a cost: one's "naïveté" is another's "common sense": other things being equal, naïveté is a good thing. But it's no trump. And on second thought, the cost here seems even less: commitment to absolute directness is not naïve conviction but Cartesian intellectualization.

But when I "see" something that's not there, like an afterimage, what then? "Surely you see something!" the representationalist says (not putting it carefully). The direct realist may here reply, "What part of 'not there' don't you understand?" You're "seeing" somehow — roughly the same how as if you were seeing a purple spot — but not something. Go adverbial. There's no purple spot. Abverbialism is an expense — "I'm seeing a purple spot" is assuredly a more colloquial description of the case than "I see purple-spottishly." Perhaps a considerable expense: I suspect naïveté does license Smythies' intu-

ition that "'experience' is always a relation between 'me' (my ego) and 'it' (the object)" [Smythies, 1989, p. 88]; especially, on the *object* side.⁵

In the Head: Physical Space Too

Direct realism can be had, it seems, at the price of adverbialism. Does Crooks (2002) make us a better offer? Let us suppose the existence, then, of inner-objects (of sense-data, or percepts) — a whole inner "sensory-" or "phenomenal-field" of consciousness, if you like — and consider the costs. Though Crooks' argument from "the physics and physiology of perception" cannot establish the existence of such inner-objects or fields, given such (upon this further phenomenological admission), his argument does apply — alas, I fear (for Crooks), with a vengeance.

Crooks argues "out-there" is the wrong place for *qualia* or *percepts* to be, because "percepts are interpreted as *effects themselves* . . . of dynamic interactions of CNS(s) and proximal stimuli": the distal stimulus is at the wrong time (*preceding* the "dynamic interactions") and in the wrong place (*distant* from the "dynamic interactions") for the quale (as CNS *effect*) to be. Now, however, the same considerations apply equally *within* the CNS. Someone might be tempted to identify the *object* of our after-image-experiencing with the retinal after-effect — "what you're really seeing," as it's sometimes put, "is the retinal 'shadow' (the fatigued area) left by preceding flash." But wait. "If the impulses are set up artificially by stimulating the surface of the cortex, for example, if the right pattern is set up" (Smythies, 1989, p. 84) *now*, the purple spot appears just the same, even though there is really no retinal "shadow" there. The retinal effect *too* is at the wrong (preceding) time and in the wrong (spatially distant) place.

Narrow our search for percepts down to the visual cortex. We are now supposing, "dynamic interactions" in visual cortices cause percepts which, in turn, "induce effects on minds" (Crooks, p. 202, footnote 15). The supposed experiencing-mechanism, accordingly, needs *three* parts: not only a percept generator (e.g., Smythies' "TV-like raster mechanism"); and the percepts generated (e.g., a TV-like pixel array); but a TV-viewer-like mechanism

⁵The alleged intuition of a subject-relatum or "ego" is famously apt to be dislodged on further reflection. This intuition of an inner subject or "ego," of course, is famously presupposed by Descartes' cogito inference — from his thinking to his self — and notoriously denied by Hume ("I never can catch myself at any time without a perception, and never can observe any thing but the perception" (1738, I:4:vi)); Nietzsche ("it is a falsification of the evidence to say that the subject 'I' conditions the predicate 'think'" (1955, p. 100)); and others. Belief in an intuition of an inner object-relatum — the "percept" or "quale" or "sense-datum" — has been more resistant. Ironically — given Crooks' approving citation of the early Wittgenstein — it is most famously the later Wittgenstein (1958) to whom the most sustained and compelling attempts to debunk the inner object are due.

(Crooks' "mind" or Smythies' "ego"). But wait. Why can't the inner-viewing processes be set up artificially in the TV-viewer-like component, if the right pattern is set up there? Now you're visual experiencing as if there's a percept, in the absence of the percept. In the end, there is nowhere in the visual cortex for the experienced percept to be except exactly where the process is. We here confront what Joseph Levine describes as "perhaps most deeply puzzling" about "the distinctive cognitive relation subjects of experience bear to their conscious contents": "that the qualitative contents themselves, qualia, seem to have a dual character as both act and object" such that it "does not seem possible to really separate the reddishness from the awareness of it." "Yet," Levine confides, "it also seems impossible to tell a coherent story about how this could be so" (Levine, 2001, p. 9).

This is more than deeply puzzling, it's a vexation for everyone committed to inner object-perception. The picture to which these considerations lead is a Cartesian one where the subject—object relation is, once again, *absolutely* direct, with its implication of infallibility. The consequent vexation is empirical. Recall Crooks' little square:

a physical object, which is . . . the causal ancestor of your sensation of it, is a square, but its correlated brain disturbance is not If you gaze at the little square again, you may be naïvely convinced that you are confronted with a small entity at the center of your visual field, but actually you are not, for your visual sensation of a square cannot be the physical square . . . nor is the square in the brain, except in the form of coded information in the nerve net. Thus the little square has literally nowhere to be. (Smythies, 1989, p. 87)⁶

However little we know, as yet, about neural coding, it seems we know enough to assign a very low probability to the hypothesis that the "form of the coded information in the nerve net" is *square*. If salving naïve-dualistic intuitions of inner experiential-objects, or percepts, leads *here* — to their being not anywhere in physical space — the adverbialist bargain begins to look more attractive. Classic representationalism, it seems to me, leads, scientifically, *absolutely nowhere*. It does not seem that way, however, to Crooks (again, it seems, following Smythies).

"In" Consciousness

For Crooks, it seems, the naïve-dualist intuition is sacrosanct. If science says there's nowhere in physical space for the little square to be, we must conclude (like Smythies) that it's *elsewhere*. If this contravenes fundamental tenets of the scientific world-view, then we must allow that science is thus

⁶Here speaking, obviously of his own little square, not Crooks'.

shaken to its foundations. If this contravenes our naïve-realist intuitions these are, thereby, utterly confuted. This won't do. As between naïve-dualism and naïve-realism, neither trumps the other; and science trumps both. If the representationalist dialectic would lead us wholly beyond the accepted scientific pale, to be worth undertaking, such an arduous journey must yield considerable *scientific* benefits. Does it?

I proceed forthwith to Smythies' intrepid attempt to make scientific hay in "fields" of consciousness located in "higher-dimensional space (higher relative to the physical world)" [Smythies, 1989, p. 98].⁷

A ray of light leaves an object and strikes the retina of the eye. This starts a complex series of electrochemical events in the brain, culminating in a particular spatiotemporal pattern of excitation in the visual and *paravisual* cortex. (Smythies, 1989, p. 84: my emphasis)

"Only these events in the cortex are necessary for perception to occur," Smythies continues . . . but wait! "Only these events in the [paravisual] cortex are necessary for perception to occur. If the impulses are interrupted before they reach the [paravisual] cortex, nothing is perceived. If the impulses are set up artificially by stimulating the surface of the [paravisual] cortex, for example, if the right pattern is set up, the object is perceived normally even though there is really no object there" (p. 84)! The same dialectic that progressively narrowed the 3-dimensional space until none was left applies equally to "higher dimensional space." Indeed, it applies exactly as stated, since Smythies' hypothesized "TV-like raster mechanism," TV-like screen, and TV-viewer-like unit — it turns out — are themselves, not in the cortex, but the paracortex:

The neuroscientist examining the brain cannot observe the postulated material parts of the human organism that actually construct conscious experience because they lie on the farther side of a dimensional interface. (Smythies, 1989, p. 96: my emphasis)

Around this "transdimensional bend" (p. 97), it seems, lies another transdimensional bend.

A "bootstrapping" problem also arises from Smythies location of the qualia generating "TV-like raster mechanism" itself in the field of consciousness. If the qualia generating mechanism is supposed to be *made of qualia*, consciousness must "pull itself up by its own bootstraps" like Baron Munchausen. It seems recourse must be had, then, to some sort of pre-qualitative ectoplasmic

⁷Its intrepidness makes Smythies' attempt instructive as a would-be scientific expedition into those "fields" of consciousness some philosophers (notably, Searle and Chalmers) have urged reopening for scientific investigation.

"matter" for qualia to be made of: *spook stuff* (pardon my Australian). Neither does it seem the sorts of stuff machines might be made of includes the stuff of dreams. A mechanism made of images, I say, is no other than an imaginary mechanism.

The benefits are nil. The phenomenal field turns out to be a very expensive piece of unreal estate; and without potential, it seems, for scientific development.

Don't Go There

If it comes down to a choice between naïve realism and naïve dualism, other things are very far from being scientifically equal. As J.J.C. Smart puts it:

Why do I wish to resist this suggestion [of dualism]? Mainly because of Occam's razor. It seems to me that science is increasingly giving us a viewpoint whereby organisms are able to be seen as physiochemical mechanisms: it seems that even the behavior of man himself will one day be explicable in mechanistic terms. There does seem to be, so far as science is concerned, nothing in the world but increasingly complex arrangements of physical constituents. (Smart, 1959, p. 142)

Smythies himself recognizes that his proposals are contrary to accepted physics and cosmology:

Modern physics and cosmology state that the universe consists of a matter-energy system extended in a four-dimensional space-time continuum. This system comprises the sum total of reality. Nothing else whatsoever exists outside, beyond, or in addition to it in any way whatsoever. (1989, p. 93)

They are even contrary — as he does not so clearly recognize — to the very neuroscience he invokes, e.g., in noting,

it is very widely believed by most scientists and philosophers that science, and in particular neuroscience, has conclusively proved, beyond any reasonable doubt, that all mental events are . . . wholly dependent upon brain events. (1989, p. 101)

Note well: to the extent that scientists and philosophers do believe this they believe it of brain events on the *physical* side of any would-be transdimensional bends, in a manner coherent with grounding and surrounding science.⁸

⁸The extent to which most scientists and philosophers believe this is limited by widespread acceptance (among analytic philosophers of mind and cognitive scientists) of Hilary Putnam's claim that "meanings ain't in the head" (Putnam 1975, p. 227). Since this applies to the meaning of thoughts, in an important sense, such semantic externalists say that thoughts are not "wholly dependent upon brain events." Most such externalists, however, still agree that qualia-experiences (as opposed to thoughts) are so dependent.

If we were faced with a choice between metaphysical extravagance and resolved mystery, on the one hand, and unresolved mystery but no metaphysical extravagance, on the other, Occam's principle would allow us to complicate our ontology for the sake of explanatory gain. If that were so – insofar as science hates mystery – we should be rationally obliged, I think, to undertake such complication. But it's not like that. We are faced with a choice between both the extravagance and the mystery, and just the mystery. This being so, Occam obliges us to have our mystery neat. What we find it "impossible to tell a coherent story about" (Levine, 2001, p. 9) we must pass over in silence.

But wait! Direct realism avoids both the mystery and the metaphysics for what seems — by comparison with competing offers of dualism and despair — a reasonable cost to naïve dualistic beliefs about the object-of-experience. Yes, Mark Crooks, there is no little square. There is no phenomenal field beyond the scientific pale, around the next transdimensional bend. Don't go there.

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