DIRECT REALISM REVISITED; OR NO ONE ASKED ARISTOTLE THE RIGHT QUESTION

BRIAN E. O'NEIL

It seems fair to say that Anglo-American philosophy has for a number of decades become increasingly oriented toward something like a generic epistemological direct realism. But what sort of account of realism would justify this orientation and render the position plausible? How can a man know the world through sense perception directly, and not just by inference? The knower is one thing, and the known is quite definitely another. How can they get together with the surety and intimacy that is necessary? As Aristotle observed: "the stone itself doesn't get into your head."

Even if we put totally to one side history's host of sceptical arguments, and even if we take the near incontrovertible knowledge of contemporary physics as a help, and not as a source of problems, we are left with an awesome puzzle. We are left asking how a center of consciousness can touch a physical entity immediately, and not merely reason to it from the stuff of ideation. Whether Sextus Empiricus and Science, Pyrrho and Physics, are with us or against us, we still have a chasm to cross which in principle seems to deny bridging.

What should we accept as a successful explanation? What needs to be accomplished in any account? As a minimum, what needs to be stated is how the solid, oblivious world can reach consciousness, through sense perception, without the use of a veiling, obscuring, or misleading intermediary. As desirous as such a theory may be, is it at all possible to produce? Its bare possibility is attested, for historically, in one version or another, it has been brought forth. The generic Aristotelian-Aquinian thought advanced such a theory.

But nothing abides unshaken for long in philosophy. As has been said, philosophic systems are not refuted; they become outmoded and are abandoned. So today, save for the more traditional of the Neo-Thomistic Schools, the great Greco-Scholastic account is without adherents. Why it is no longer considered adequate (let alone correct) is problematic, but two general points suggest reasons for its passing. For one thing, the system depended from a particular metaphysical conception–form theory–and this led to the development of a rather extraordinary amount of clanking machinery. Worse, some of these mechanisms often seemed suspiciously *ad hoc* and arbitrary. For another thing, and linked to the demise of the metaphysics and the scheme needed, the whole world of knowable real essences making macroscopic objects to be the way they are ceased to be taken as correct.

These rejections are probably basically right, and science, if not philosophy, demands fundamental emendations to the antique system. Given the overwhelming and detailed knowledge of the physical and the life sciences, it is awfully difficult anymore to believe that "Eternal Dogness" is what constitutes Fido and makes him do what he does. Within the bustlings of the atom lies the source of puppies, and of barkings and tail-waggings. This may all be so, but the new knowledge trails after it the temptation to a mistake which doesn't have to be made, but which nearly always is. Science explains exhaustively the ways in which the physical world impinges on the sense organs, and traces this influence through the nervous system on up to the cerebral cortex (or wherever). At this terminus, epistemologists begin to fiddle with the interaction of this data to consciousness; this latter focus I take to be an error. What the physiologist, the neurologist, and the physicist have to say is scarcely controvertible, but the philosopher is wrong to concentrate only on, so to speak, the inner end of the process. What must not be neglected is the 'outer end,' the crucial point where the world and a potentially sensing organism first meet. It is so easy to assume that light striking the cornea, waves reaching the tympanum, or heat and pressure on the finger tip are simple events captured quickly and totally by some account of electromechanism. Instead, the philosopher's work must begin at least this 'early.'

The Aristotelian-Aquinian view we have mentioned did take very serious account of these initial contacts. As paradoxical as it may seem, the weakness, limitation—even the errors—of their science kept them closer to philosophical accuracy. Not knowing about molecular chemistry, photochemical effects, or electromagnetism, they assigned a much more important role to the several specific sense organs. Far greater attention was focused on what "must" be the quasi-cognitive operation of the senses themselves. The Greeks and the Scholastics were, of course, careful to stress that it was primarily and correctly the mind or soul or man himself who saw or heard or felt, and not, *propter se*, the sense organ. Yet, they insisted that the act of knowing through sense perception began at the extremities—and began in a fashion which was not merely mechanical. The organs themselves performed an abstractive function which was beyond mere registering, and could fairly be called perceptive. This is an insight which subsequent thought has tended to neglect.

And when this view is lost sight of, it becomes near impossible to avoid being "locked up in the telephone exchange." If knowing through sense is something which occurs only at the inner terminus, then one has but two choices: either to elaborate a subtle and complex speculation to account for successful and reliable inference to the world, or to swim back down

the stream of incoming data and strive to emerge in the world. This whole struggle can, in a sense, be avoided; granted the fundamental correctness of the "natural attitude," it was simply a blunder ever to start to work from the inside out. But it is impossible to escape this trap unless one holds firm to the view that consciousness knows directly the world and not, initially, its own data. And this requires that the cognitive functions of the sensory process start with the organ.

Well and good, perhaps. But what sort of sense can be made out of the assertion that a sense organ exercises a *cognitive* function? If this claim is advanced loosely or metaphorically, there is not much difficulty. We all know directly enough that in casual daily experience it is surely our tongue which detects the sweet or the sour, and our finger which feels the slick, the sharp and the hot. But if the claim is made with literal intent, then it is startling and seems surely false.

It is easy enough for that Traditional view we have talked about to hold that the sense organ's very *actus* or *energeia* is just the abstraction of the sensible species from the impinging object—still leaving, of course, that species or form subject to what was called "the local individuating conditions of matter." We may well remember that this process is what we now commonly call the production of a percept. And, we may recall, that somewhat higher faculties were said quickly to convert this percept into a sensory phantasm. (Parenthetically, it might be a tiny bit helpful here to say that the shift—so to speak—at this early state was rather like what is so often called the movement from perception to apperception—on the purely sensory level. For example, being in the presence of red, say, and then registering, or becoming aware of red.) We know, too, that this sensory phantasm was said to become grist for some rather elaborate baroque machinery whose end product is a full-blown "idea"—or as they liked to express it: "an expressed species of an intelligible order." This product results, it was explained, from the complex cooperation of the agent intellect, the estimative faculty, and the potential intellect. So, at the terminus of the process, we are in full conscious possession of the constituting essence of the entity of the world. Or, to put it better, the *energeia* of our intellect at that moment is identical with the *actus* of the object in question—only at the intentional level. If it has been our salad we've been staring at, then now we are one with the tomato or lettuce.

All this, I say, is easy enough to rattle off, and surely it is *an* explanation—and a complete one—of how direct realism could be possible. But is it at all plausible? Maybe—but more important—is it at all persuasive? Here the answer is "probably not." The most natural response, I feel, is to be put off badly by the suspiciously *ad hoc* flavor of many of the stages or devices in the apparatus. Further, even if one were

willing to acknowledge that the system is a successful–albeit questionably arbitrary–account, it is evident that the whole theory balances precariously like a pyramid on its apex. The nodal point is the claim that the senses themselves, the organs, abstract. This is the key, the crux, the vital postulate–whatever metaphor you choose. This is the essential element which subsequent analyses of perception have abandoned. Have they done so wisely?

But surely philosophers were wise to reject so wildly erroneous a belief. How can the sense organs be other than passive receptors, mere conduits for data of an essentially physical order? However 'rarefied' and subtle the data–chemically, electrically, or electromagnetically–it is still of the order of matter, and courses inward via the organs to wherever it is cognitive faculties of some sort can render it express as what we call conscious experience. Since this is so, the prop is pulled from the traditional construct and the whole structure collapses.

This analysis seems so overwhelmingly right that one neglects to note how dangerously seductive it truly is. If we slip into taking the television camera as the correct analogue for the human eye, then we are really in trouble. And when I say "the human eye," I mean not just the ball in the socket; I mean the whole system from lens and vitreous humor through retina and optic nerve to and including the neurons of the visual center of the cerebral cortex. Crudely put, if we stall the first *cognitive* step in the process till we get to some spot under the cap of the cranium, then we'll never be really successful in saying how it is we get to meet daisies, donkeys and doughnuts. Regardless of whether we choose to reject the Aristotelian-Aquinian theory *in toto*, or retain spruced-up remnants of it, if we throw out the possibility of abstraction at the level of sense, then we're not going to get an account for direct realism that works.

But as Stephen Potter once asked: "Is this such a badness?" It is such only if–as I stressed at the beginning of this paper–we take the 'Natural Attitude' as justified, and feel compelled to provide theoretically satisfying underpinning for our deep daily convictions. Perhaps so; but even if we admit that we need retain abstraction at the level of sense, is not our admission quite hollow, for what possible content can we give to so queer a notion? More important, how could this notion be fleshed out after a fashion which would accord meaningfully with our present extensive grasp of the neurophysiology of perception?

The closing few paragraphs of Book II, and the first two chapters of Book III of Aristotle's *De Anima* (approximately 424a-427a in Bekker numbering) are sprinkled with remarks which may help. These remarks make it plain that the key to Aristotle's conception of the sensory power is the *logos* or *ratio* of the combinations of the elements and of their

qualitative shadings-in-potency which constitute the sense organ. These same elements and the various appropriate segments of this 'spectrum' of qualities-in-potency constitute the object itself which awaits sensing. What we've got is–schematically–an entity out there in the world composed of, say, elements a,b,c,d,e,f, arranged in the order of ratio, let's say, of e,b,a,f,d,c. The sense organ itself is composed of elements a,b,c,d,e,f, also–plus the rest of the alphabet. The union of the object and the organ *is* the rearranging of the first six letters of the organ into the order they are in *as* they constitute the object. This is what is meant by a sensible species en-forming a sense power.

Admittedly this sort of talk can use a superficial clarity to mask deep obscurity. It is by no means conclusively successful to slip under the protective lee of metaphor–but it is helpful. J. I. Beare in his description of Aristotle's theory of the sensory power has said:

> So a lyre in tune is a *mesotes* or *logos* to the variety of chords or airs which may be played upon it. It is capable of sounding high or low notes indifferently; and has in its tension, or in the relative tensions of its strings and of the frame on which they are strung, the due harmonic ratio to all the sound solicitations to which it may be called upon to respond. But until struck, the lyre is silent.[1]

What I wish to draw out of this metaphor is its highly mathematical flavor; a lyre is not so much a structure of wood and wire as it is a pattern of mathematical functions crouched in potentiality. The tune to be played *is* number; and when it is played, its arithmetic being and that of the lyre are one and the same. There is just *one* actuality. Just so can Aristotle say (loosely) "the actuality of the bell-as-sounding and of the ear-as-hearing is one and the same actuality–though, of course, their respective being as bell and as ear is not identical"[2]

All well and good, perhaps, for tunes and lyres, bells and ears, but how do we propose to apply this analysis to tomatoes? An even partial answer requires a brief, but to me, suggestive detour. Ask a physicist what's real about a tomato and he'll conduct you quickly from cells and tissue through molecules and atoms to subatomic particles and then to subnuclear entities. At this point he'll beg you to abandon your intuitive planetary model thinking and to pay attention only to his mathematical formulas–formulas so abstruse as to be largely arbitrary symbols linked with Greek letters–with only here and there a reassuring Arabic numeral. This, he will tell you, is the true heart of physical reality in so far as the mind of man can reach it. So, reality is number and the Pythagoreans were right after all.

Am I trying to argue that the sphericity, the squishiness, the sub-acid flavor, and–above all–the red of the tomato *are just* number? In a way, yes; but also in another way, very much no. Very simplistically put, I'd be

willing to accept the tomato as being 'just number' in some sense or other, and hold that its behavior and observable qualities are the expression of the ratios obtaining among those numbers. As far fetched as it may sound, there doesn't seem to be any reason in principle why the organs of man may not also be constituted by appropriate ranges of those same numbers, and our conscious experience be the ratios among those numbers.

It is interesting that of all the frequencies possible to light, only a relatively narrow band functions for us as the visible spectrum. Seeing red, for example, just is what it feels like to have the elements of one's visual apparatus express the same ratio as obtains in the frequencies of vibration among the molecules constituting the surface of the tomato. This would permit us, I take it, to make sense out of the antique technical phrase: "abstraction of a sensible species." For color-as-sensed is the form or sensible species, and sensing color is accepting into the organ the same ratio that exists in the object under observation. And, a key point here is that the particular ratio of the elements in the object which constitutes the quality sensed comes into being at—and only at—the moment of being sensed. In terms of our a,b,c,d,e,f of earlier mention, we get the order e,b,a,f,d,c in the object only at the moment when the sensory power itself rearranges its own factors in that order. So, we have one actuality in two places; it seems to me that this line of analysis places us—at the very least—where we can justifiably claim that *sense knows* its object—knows because it does not receive, but *abstracts.*

NOTES

[1] John I. Beare, *Greek Theories of Elementary Cognition from Alcmaeon to Aristotle* (Oxford: Clarendon Press, 1906), p. 233.

[2] See: *De Anima*, 425b, 27-29 and 426a, 16-19.

University of New Mexico