

THE BODY AS METAPHYSICAL TRANSDUCER
IN MODERN PHILOSOPHY

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I wish to illustrate some specific ways in which modern philosophers either attempt to deal with the ontology of perception in a sophisticated manner, in a naive manner, or to skirt ontology altogether in their epistemologies. Space disallowing for more, I will deal with only one rationalist (Descartes), one empiricist (Locke), and one critical philosopher (Kant). Descartes attempts to deal with the ontology of perception, Locke deals with it naively, Kant attempts to skirt it.

The Metaphysical Transducer

I will focus on the issue by examining three authors in the light of the notion of a metaphysical transducer. A transducer is a device or substance which transforms one form of energy into another. I wish to use the term "metaphysical transducer" to designate any actual or purported device, substance or entity which transforms physical energy, whether mechanical, chemical or an electrical into physisc energy, by which I mean consciousness, thoughts, ideas, empiricist impressions, sense data, or any analogous equivalent. I believe that the metaphysical transducer is an incoherent notion—specifically, a physical notion which purports to solve a metaphysical problem. Hence, I am using the phrase "metaphysical transducer" in the abusive sense that one might use a phrase like "metaphysical rabbit," "metaphysical gear box", and so on.

I have no doubt that the retina of the eye transforms radiant energy into nerve impulses, that the inner ear changes the mechanical impulses of varying air pressures first into vibrations of the ear drum, then into vibrations of the ossicles, which in turn are transformed into electrochemical nerve impulses through the cilia in the inner ear. Analogous remarks may be made for receptors for odors, tastes, pressures, heat, cold, and so on. Sensory receptors are then biological transducers. Examples of simpler transducers are phosphorescent screens which turn patterned electron streams into visible light. Electron streams are invisible, but upon striking the phosphorescent screen of a television screen these energies are turned into radiant energy which can produce neural energies in retinal nerve bundles which, as is said, are interpreted by the brain! The apparently inoffensive and innocent word "interpreted", allows us to glide over the epistemological subject-object gap, it makes it spuriously "possible" to span the unfathomable abyss of modern philosophy's "inner and outer worlds". It also implies the existence of metaphysical transducers.

In a typical book on neurophysiology we are told things like this "Receptors imbedded in the walls of the intestines contract vigorously

due to the presence of indigestible food or gas. These receptors transmit signals which are interpreted as pain. Sometime it is said that the brain does this interpreting, but rarely if ever is it pointed out that "interpretation" means the transformation of straightforward Nobel Prize winning, scientifically respectable nerve impulses or brain activity into pain, sight, odor, taste, pleasure, etc., in a word into what modern philosophy has characterized as "subjective". Most neurophysiologists accept the view that the nervous system of the living body is a metaphysical transducer.

Some of the most fundamental claims of epistemology since the time of Descartes are versions of a pseudo-science which also describes the living body as a metaphysical transducer. The inputs are scientifically intelligible realities; the outputs, are mental—sometimes regarded as isomorphically related to the objects they are supposed to represent, sometimes purportedly provided by mind itself.

The Metaphysical Transducer in Descartes

When Descartes conjured up the vision of the malin genie, as cunning as he was powerful, who could deceive one into believing that he was watching a landscape and hearing the chirping of the birds in the trees, although none of it might be true, he did not have the advantage of being able to envisage what is today a distinct technological feasibility. With enormous strides in organic chemistry and bio-technology, an entire person's nervous system could be isolated and kept alive in some nutrient medium. If appropriate forms of energy could be applied to specific nerve endings, and if a consciousness still survived on a kind of hither (psychic) side of that in vitro neural mass, it would have sensations and experiences. Were an incredibly complex computer set up which was attached by myriad electrodes to the nerve endings, and should it stimulate the retinal nerve endings with the appropriate energy equivalents of radiant energy, the consciousness "behind" that neural mass would see lights. Were the patterns of neural energy sufficiently like those which are normally set up by radiant energy focused by eye lenses on the mosaic of normal retinas, the consciousness would experience complex visual Gestalten. Seeing would occur! Such a computer and such signals would be the technological equivalent of Descartes' Malin Genie.

According to Descartes, one must rationally assent to the view that external objects are, at least for the most part, the source of the sensible contents of consciousness, for that is the only hypothesis which can be reconciled with God's existence and goodness and our incorrigible natural belief that there is a world, which at least in some way (either formally or eminently), has the features which are actually present to consciousness as sensations. Obviously, Descartes labored under no illusions about the difficulties involved in making sense of the relationship between the psychic reality of mind and its contents, and physical reality which is somehow what makes the psychic state possible.

However, Descartes is too much of the modern to leave the issue

shrouded in the high metaphysics of God and his goodness and the vague scholastic language of formaliter and eminenter, so he makes a half-hearted effort to attenuate the mystery by introducing his unduly infamous animal spirits located in the pineal gland.

When Descartes makes what are, in the context of his philosophy, merely obiter dicta regarding animal spirits and their possible location in the pineal gland, he is discussing the interface between mind and matter, between consciousness and physical reality, between res cogitans and res extensa. He is speculating in the most extravagant sense of that term but apparently without conviction about the existence of some sort of entity which is somehow neither res cogitans nor res extensa but which might serve as a go-between. He is searching for something that can turn physical energy into psychic energy. Animal spirits are Descartes' metaphysical transducer.

Hindsight allows us to pronounce the verdict that Descartes could have spared himself the postulate, since the guarantee of whatever isomorphism there might be between the contents of consciousness and the external world is to be provided by God's benevolence, and since a radical dualism is only muddled by introducing animal spirits which are neither, Descartes spoils the elegance of his ontology by the oddity of the metaphysical transducer. In any case the invocation of God's benevolence as guarantee of the veracity of perception, the scholastic language and even the pineal gland as metaphysical transducer are all consequences of Descartes' clear-sightedness and keen awareness of a genuine problem.

The Metaphysical Transducer in Locke

It is somewhat baffling to turn to Locke's almost startling naivete about the matter, coming as it does on the heels of Descartes', Malbranche's Arnould's and others labored metaphysics with which he was familiar.

In answering whence the mind comes to be furnished with ideas, the materials of reason and knowledge, Locke argues in the Essay, that our senses, affected by external bodies, afford us with ideas, such as red, yellow, hot, cold, soft, hard, bitter, sweet and so on. Locke's representative theory of perception is therefore also a causal theory of perception. The causality which takes place is between a series of physical events acting on the body which in turn produce a series of events on another, unlike type of substance, the mind. Our senses are Locke's metaphysical transducer.

Let us let Locke speak for himself. In book II, chapter 1, 2, of the Essay, he says: "The next thing to consider is, how bodies produce ideas in us; and that is manifestly by impulse, the only way which we can conceive bodies to operate. If...external objects be not united to our minds when they produce ideas therein...it is evident that some motion must be thence continued by our nerves or animal spirits, by some parts of our bodies to the brain or the seat of sensation, there to produce in our minds the particular ideas we have of them". [Italics mine] Further on he says, "...since...the motion of bodies...may be perceived

at a distance by sight, it is evident (that) some imperceptible bodies must come from them to the eyes, and thereby convey to the brain some motion which produces these ideas which we have of them". Behold Democritus redivivus!

In Democritus' writings we find an almost exact equivalent to Locke's imperceptible bodies in the motion of the eidola or imperceptible images which traverse the intervening space from object to eye, entering the mind and giving rise to visual sensations. Moreover, except for the somewhat archaic language in Locke and the reference to parts of the body rather than to neural energies; to imperceptible bodies rather than to electromagnetic waves, Locke is saying exactly what a standard text in neurophysiology might say today. What is philosophically crucial, namely the production of ideas, is thought of as merely the last member of a sequence of causal events.

It does not even seem to occur to Locke that the innocent word "produces", offers a spurious description and hides the crucial problem. Aristotle says of Plato's notion of participation that it is an empty word and a poetic metaphor. It would not be too harsh to say of Locke's "produces" that it too is an empty word or a poetic metaphor.

Metaphors may, and I believe frequently do, express more vibrantly, truths which would suffer diminution of their proper efficacy by being stated less creatively. The sun may be my brother and the moon my sister as St. Francis felt they were, but if I look for their toes I have been taken in.

I think it can be said that Locke's view, which presents us with a metaphysical transducer without making an issue of it, places him in a relatively unique position in modern philosophy. Precisely because Leibniz, Descartes, Berkeley and even Hume and Kant in their own way, cannot feel comfortable with a straightforward and simple imprinting of the world on the blank sheet of the mind, their epistemologies are more removed from "common sense". Locke's "common sense" comes from his naive acceptance of the body as metaphysical transducer.

It may seem that I have overstated the case against Locke, for some of the perplexities and niceties of Locke's epistemology are a consequence of his attempt to show that only some of the ideas which are produced in us correspond to qualities existing in bodies. As with Galileo and others in the western tradition, some of the contents of consciousness are given an objective status, as being correlative to qualities in things, but others are adjudged purely subjective. An object may be hard and round, but cannot be actually red and cold. However, metaphysical transduction is going on in both cases—in the one case producing an isomorphic representative, in the other not so. It is true that Locke declines to claim that he knows how this takes place, but he is content with the certitude that it does. The fact that Locke sometimes makes comparison between ideas and qualities in things indicates that he was not wholly unaware of the difficulty. But sometimes he considers them identical, for example, when he speaks of secondary qualities when he means secondary ideas. Generalizing this conception, Locke claims that ideas of sense arise from experience, but experience is often discussed as if it were a panoramic series of ideas of sense. This would

mean that the ideas of sense arise from the ideas of sense, and that experience produces experiences. As Berkeley will make so bewilderingly clear later on, ideas in Locke's sense are a sheer redundancy.

It is worth noticing that Locke's incoherence works to his benefit in that if one glides over the crucial problem with the terms "produces", "interprets", etc., one feels no need to account for how psychic contents arise. Then one can accept a naive metaphysics and then turn in glee on the miserable quandaries of the so-called "metaphysicians".

In all fairness it should also be pointed out that Locke is quite coherent in another sense, for mind is just as substantial, causal and spatial and in a word as mechanical, as the "world" that mind makes possible as representation.

If I am not mistaken, all the so-called phenomena of later modern philosophy will be explorations of what is on the hither (psychic) side of the metaphysical transducer. Contemporary existentialism will try to get rid of the metaphysical transducer and "phenomena", and all the rest by judicious use of the notion of intentionality. Succinctly stated, disclosures cannot in principle be disclosure of what is not disclosed. Alternatively, something that is not the self is made manifest in perception, otherwise there is no perception.

A similar insight on Berkeley's part, but expressed in a language still basically in thrall to a mechanical philosophy led Berkeley to his subjective idealism.

The Metaphysical Transducer in Kant

Examining Kant's epistemology in the light of the notion of the metaphysical transducer may seem at best merely whimsical, and at worst the result of a gross misunderstanding. In so far as an epistemology attempts to understand any relationship between a purported external world and an internal world, it is engaged in metaphysics. It has been considered by many that the singular genius of Kant is having recognized that epistemology, i.e., critical philosophy must not be a kind of inquiry into the mechanics of perception and/or the emergence of knowledge or into the relationship between an outer and inner world, and this seems to be resoundingly confirmed by the conclusions arrived at about the nature of metaphysics from within the critical philosophy, i.e., that metaphysics is impossible.

Can critical philosophy affirm the existence of knowing and perceiving? If it does, is it not returning to metaphysics? If it does not, is it justified in examining as its sole and exclusive subject matter something that it does not even allow itself the right to affirm the existence of? From the standpoint of the notion of the metaphysical transducer, is Kant immune from starting his inquiry without in fact presupposing its existence?

It seems apparent that Kant regards sensation as a passive affair except that the manifold of sensations are ordered by a priori forms of space and time. Kant, then, can be said to have a more or less hidden metaphysical transducer at the level of the sensuous manifold prior to its being ordered by the a priori forms of space and time. Setting

aside the baffling distinction between sensations which have no spatial order, it seems that it ought to be asked how sensations arise in the first place, or more specifically, if one is to speak of givens in sensation with clarity it seems necessary to determine if they are psychic events or neurophysiological ones or something else.

Even this may be passed over in silence as not germane to the method by which Kant approaches epistemological questions, for in seeking the conditions for the possibility of cognition, Kant is doing something which must be established before any justification of any knowledge can be made at all, including knowledge about the way in which sensations arise as a consequence of activity outside the body if such exist.

But we find Kant speaking of Things-in-Themselves as unknowable. If this merely means that nothing can be present unless there is someone for whom that presence is present, I at least could not object, but much more is involved, for there is a constant reminder that the legitimate use of categories of pure reason can only occur when they determine phenomena. Objectivity in Kant becomes phenomena as conceived by the categories.

As Kant puts it in the Critique of Pure Reason: "...since that which is not appearance cannot be an object of experience, the understanding can never transcend those limits of sensibility within which alone objects can be given to us. Its principles are merely rules for the exposition of appearances; and the proud name of an Ontology that presumptuously claims to supply in systematic doctrinal form, synthetic a priori knowledge of things in general... must therefore, give place to the modest title of a mere Analytic of pure understanding". B (303)

Is it not the case that Hume's skepticism is at least in part, if not fundamentally, a consequence of attempting to understand perception on the basis of presuppositions appropriate to mechanics? Is not Kant's critical philosophy an attempt to demonstrate the impropriety of a mechanical, understanding of perception? Kant clearly envisages his endeavor in something like that light.

However, consider the following—from the standpoint of a conception of perception which describes it as a series of impressions it becomes convincing that causality reduces to constant conjunction. Kant accepts this as a genuine challenge to the "dogmatic" conception of "metaphysical" causality in general, not only with respect to its employment in an analysis of perception.

In terms of the notion of the metaphysical transducer is it not the case that, like Hume, Kant is thinking that on the "hither side" of the metaphysical transducer, the only "side" to which a consistent empiricism has access, a ping-pong ball is not an object, but an impression of a ball having an apparent permanence and hence trajectory, apparently impinging on a paddle, which is associated with a sound impression? The objects, movements, collisions and in general the dynamics of our lived experience of the game are being re-described here as a kind of philosophical equivalent of electronic ping-pong. In this device a flood of electron streams from the back of the television tube phosphoresce in the form of a ball at consequitively different points on the screen. The apparent ball of light does not traverse the screen horizontally then,

but is rather being constantly produced in different locations, and the ball-paddle "impact" is only post hoc and not propter hoc (after such and such, and not because of such and such).

From the standpoint of critical philosophy there are no things as we naively assent to them. Phenomena first become "things" when they are determined by the concept of substance, or more precisely, by the schema of substance which is permanence of the real in time. Kant is taking Hume's impressions and giving them the kind of substantiality, causality, universality and necessary dependability that they need for science to be possible, by providing all these from out of pure mind. When he says the schema of substance is permanence of the real in time, the schema of cause is the real upon which whenever posited something else always follows, the schema of necessity is existence of an object at all times (B 183-184) it is as if he were telling us that Hume's electronic ping-pong becomes genuine human experience when we project upon the sequence of impressions something not found there, namely permanence in time, causal relationship and necessity. Moreover, all of this is objective no longer in the sense that we have obtained knowledge of the real, but in the sense that unless we think phenomena with precisely these concepts we cannot have what we in fact do have, i.e., genuine knowledge of events.

It is as if the perceiver and the percept are on the hither side of the metaphysical transducer and the whole world would be hypothetical except for the saving grace that we can think the world, which is as reliable as reason itself for it is phenomena thought through the categories. Moreover, reason must limit itself to being applied to phenomena.

It seems to me that the uncritical acceptance of such a notion of phenomena belies the avowed rejection of ontology in a number of ways. First of all, don't phenomena have some ontological status, if not in that not tantamount to saying that they do not exist? Secondly, are not appearances spoken of as being on a kind of hither side of the unknowable things-in-themselves? Thirdly, isn't it simply taken for granted that our body, which the critical philosophy can regard as substantive, causal, and existent, has the peculiar feature of being able to generate sensations, which are then processed through the paraphernalia of theoretical philosophy's more respectable "conditions for the possibility of knowledge"?

My Lebenswelt—that is what I find in perception is so shot through with its own insistence on its own existence in so many instances and in so many ways that only a philosophical reflection attached to the notion of experience as coherent dream or coherent appearance would ever even suggest that it could be described as anything but other than what makes its disclosure possible. If the contents of consciousness were given their full significance as well as independence, in so far as that is warranted by the most careful reflection and assessment, we would put to rest the whole metaphysical transducer syndrome, which came out of philosophy's excessive obeisance, if not wholesale capitulation, to the premises of the marvelous fledgling that was modern science.