RICHARD RORTY

CONTEMPORARY PHILOSOPHY OF MIND

1. "MIND" AS A BLUR

The question as to the place of Mind in Nature is a reformulation of the question as to the place of human beings in nature. T. H. Huxley's essay on 'Man's Place in Nature'[1] was an attempt to break down the distinction between human beings and animals by viewing our species in the light of biological evolution. For most people at least, Huxley settled the question of whether the existence of our species required a different sort of explanation than did the existence of other kinds of animals. But this result simply transferred the problem to philosophy. The question now became: granted that what is special about human beings was produced by the same sorts of causes as produced the special faculties of the other animal species, are these human faculties nonetheless *so* different that there is a special, philosophical problem about their nature? Granted, in other words, that what we call "mind" came into the world by spatio-temporal mechanisms homogeneous with those which produced the rest of the world's contents, what *is* it that we call "mind"? Something which is simply a special case of the other – physical – things which emerged? Or something "irreducible" to the physical?

This is a vague question because "irreducible" is a multiply ambiguous word. Most discussions of "the mind–body problem" argue for reducibility or irreducibility by tacitly choosing a sense, or senses, of "reducible" favorable to their own side. There are many such senses, stretching along a spectrum between a purely causal sense at one end and a purely definitional sense at the other. Those inclined to reduce mind to matter like to think that Huxley's point that mind emerged from matter is enough to show that there can be no ontological discontinuity. So this side employs a sense of "reducible" in which X's are reducible to Y's if all the causes of X's are Y's. Those inclined to proclaim the irreducibility of mind like to think that since you cannot communicate what tarragon tastes like by telling a story about molecules there obviously *is* an ontological discontinuity. So

Synthese **53** (1982) 323–348.

they employ a sense of "reducible" in which X's are reducible to Y's only if somebody who knows everything about Y's also automatically knows everything about X's.

More judicious philosophers write long books making endless distinctions between various senses of "mental," of "physical" and of "reducible." Such distinctions are necessary to keep discussion of the subject honest, but by the time they are made the philosophers have usually lost their audience. One classic book of this sort – *The Mind and Its Place in Nature*, by C. D. Broad, written in 1923[2] – offers 666 pages of close argumentation. It arrives at conclusions so precise, complex, and tedious as to make one wonder why anybody ever worried about the mind in the first place. Broad congratulates himself on having stripped his subject of human interest. He claims to have shown

> that there is no special connexion between Mentalism as such and a cheerful view of the prospects of Mind, and no special connexion between Materialism as such and a depressing view of the prospects of Mind. (p. 655)

This conclusion amounts to transforming the "mind–body problem" into a *scholastic* issue – an issue whose outcome doesn't make a difference to anything else, one which only specialists could care about.

Such scholasticism is a recurring danger in philosophy of mind. The notion of "mind" seems full of excitement and significance at the outset, but by the time philosophers have finished discussing its reducibility or irreducibility their conclusions seem to have no relation to the initial motivations of inquiry. I think there is a reason for this. It is that the distinction between the mental and the physical, or between mind and body, is a very bad distinction. The question "What is the place of man in nature?" is a good one if it is construed to mean something like: "What self-image should we humans have of ourselves?" For then it is shorthand for Kant's classic questions "What do we know? What should we do? What may we hope?" Darwin and Huxley gave us reason to think that Kant, and the philosophical tradition generally, might have given bad answers to these questions. But the idea that we could refocus these questions, makes them susceptible to more precise answers, by zeroing in on the notion of "the mind," turned out to be a mistake. The more one zeroes in the less there is to discuss.

The reason there is nothing there is that the distinction between mind and body is entirely parasitical upon two other distinctions: the distinction between knowers and non-knowers and the distinction between the morally relevant and the morally irrelevant. It is important for our self-image to think of ourselves as knowers – distinguished from the brute creation in being intelligent, in acting from knowledge rather than from habit or instinct, in being able to contemplate things far away in space and time. It is also important for our self-image to see our species, and perhaps those species close enough to us to share some special faculty (e.g., being conscious, or feeling pain) as part of a *moral* universe – as things which have either obligations or rights or both. The notion of "mind" looks like a way of bringing these two notions – that of a knower and that of a moral agent or subject – together, of subsuming them under a single, clearer, concept. But it is not. The supposedly clearer concept is just a blur – the sort of thing you get when you lay tracings of two delicate and complicated designs down on top of each other.

To say that the notion of "mind" is a blur which we would be better off without is to say that we have no "intuitions" about mind as such. We do not have any data about the nature of the mental. In particular, we do not have any knowledge of what it is to have a mind by looking inside and inspecting our own. This denial that the mind (or "consciousness" or "subjectivity") is a natural kind – further investigation of which might shed light on knowledge or on morality or both – is characteristic of a tradition which has been dominant in Anglo-Saxon philosophy during the last three decades. I shall call this the Ryle–Dennett tradition. It got underway with Gilbert Ryle's *The Concept of Mind*,[3] and reached its culmination in Daniel Dennett's *Brainstorms*.[4] Dennett's book synthesizes thirty years of work along the lines which Ryle opened up. This work tried to answer the question: how can we say everything we want to say about ourselves – about our cognitive abilities and our moral status – *without* talking about the difference between mind and body? It substituted this good new question for the bad old question "Is mind, as something determinate and familiar, about which we have considerable data, reducible to matter?" Philosophy of mind, paradoxically enough, became an interesting area of philosophy only when philosophers began to stop taking the notion of "mind" for granted and began asking whether it was a misleading locution.

In earlier periods, the question about the reducibility or irreducibility of mind was linked either with the question "What is the mind such that it can reach beyond itself and know the physical?" or "What is mind such that its possession makes one a member of the moral universe?" or with both. The latter question was characteristic of philosophers who treated "mind" as meaning what the German Idealists had meant by *Geist*. The former was characteristic of philosophers who, under the influence of British Empiricism, were troubled by questions about perception and the relation between "objects immediately present to the mind" and other objects. Both questions presupposed that if one knew more about mind, if one zeroed in upon its nature, then one would know more about either what Locke had called "the original, certainty and extent of human knowledge" or what Hegel had called "the Idea become conscious of itself," or both. By denying that we had independent information about our mental states which would cast light on either of these matters, the Ryle–Dennett tradition made it possible to talk about such things as beliefs and pains without talking about the mind. That is, it made it possible to develop accounts of what beliefs and pains were which disregarded the question "Are they mental entities or physical entities?"

This tradition thus was able to focus on the question of what psychologists were up to without getting involved with bad questions about the legitimacy of "behavioristic" or "introspective" methods. It was also able to take the advent of computers in its stride, by refusing to be buffaloed by the question "Do these machines really *think*?" "Can they *really* feel?" These virtues were attained by its refusal to think that anything vastly important turned on the answer to these questions – that matters of epistemological or moral moment were involved in psychologists' research programs, or in the success of veiled computers in fooling people into thinking that they were human. In my view, this tradition is one of the few successes of which analytic philosophy can boast – one of the few recent cases in which philosophy professors have actually performed a service for culture as a whole. They performed it by getting us out from under a lot of bad questions, of bad, scholastic, answers to such questions, and of misleading rhetoric based on such bad answers.

This tradition has, however, recently come under attack. Furthermore, it has come under attack at just the point at which it most

firmly separated itself from pre-Rylean work in the area – its claim that we have no intuitions about the mind as such. In a reaction against the Ryle–Dennett tradition as "verificationist" and "reductionist," philosophers like Thomas Nagel and John Searle have been trying to turn the clock back to the days of Broad. Broad thought it enough to refute behaviorism to say such things as:

> It is plain that our observation of the behaviour of external bodies is not our only or our primary ground for asserting the existence of minds or mental processes ....[5]

> If we confine ourselves to bodily behavior it is perfectly certain that we are leaving out something of whose existence *we are immediately aware* in favourable cases. (Italics added)[6]

Similarly, Nagel thinks it enough to appeal to our immediate awareness of "what it is like to be us" in order to establish an ontological divide between "the subjective" and "the objective":

> A feature of experience is subjective if it can in principle be fully understood only from one *type* of point of view: that of a being like the one having the experience, or at least like it in the relevant modality. The phenomenological qualities of our experience are subjective in this way. The physical events in our brain are not.[7]

Nagel thinks, like Broad, that there are different "referential paths" leading to our use of the term "pain" on the one hand and to our use of terms like "stimulated C-fibers" on the other. He thinks the suggestion that the two terms refer to the same thing unintelligible:

> At the present time the status of physicalism is similar to that which the hypothesis that matter is energy would have had if uttered by a pre-Socratic philosopher. We do not have the beginnings of a conception of how it might be true .... The idea of how a mental and a physical term might refer to the same thing is lacking, and the usual analogies with theoretical identification in other fields fail to supply it.[8]

They fail, Nagel thinks, because the only true account of "the referential path" for terms like "pain" is one which goes through the sort of "direct awareness" of which Broad speaks.

2. REDESCRIBING THE KNOWN AND REDESCRIBING THE KNOWER

My main concern in this paper will be to defend the Ryle–Dennett tradition against Nagel's revival of the notion of our direct acquaintance with our minds, the idea that we have ontological intuitions

which make the notion of "mind" more than just a blur. But before confronting this question directly, I think it will be helpful to put the issue in a broader perspective by considering the history of what A. O. Lovejoy called "revolts against dualism." Lovejoy, writing in 1930, said that the past quarter-century of philosophy had been "the Age of the Great Revolt Against Dualism . . . a phase of a wider Revolt of the Twentieth Century Against the Seventeenth."[9] This revolt was, he said,

> an attempt to escape from the double dualism which the seventeenth-century philosophers did not, indeed, originate, but to which they gave reasoned and methodical expression – the epistemological dualism of the theory of representative perception and the psychophysical dualism which conceives empirical reality to fall asunder into a world of mind and a world of matter mutually exclusive and utterly antithetic.[10]

Lovejoy thought that the first dualism was the root of the second, and that people were, rightly, led to accept epistemological dualism

> simply because they have formed certain preconceptions as to what an object of knowledge ought to be, and then, comparing the characteristics of the thing directly presented in their experience with these preconceptions, have found that the two do not match.[11]

Most of the revolts which Lovejoy discussed were attempts to say that these preconceptions about what an object of knowledge ought to be were false. Whereas common sense, according to Lovejoy, suggests that most of the things we want to know about are quite unlike the sort of thing which we find "before the mind," anti-dualistic philosophers like James, Dewey, Whitehead, and Russell had insisted that they were much the same.

These philosophers argued in two ways: some, like Russell, said that we were directly aware of physical objects, that the "data of experience" themselves had a place in the physical world. Others, like Whitehead, said that the normal conception of a physical object as something ontologically distinct from experiences was a "fallacy of misplaced concreteness," and argued for pansychism. Both of these lines of argument agreed, however, in taking the notion of a "datum of experience" – of something "directly presented in experience" – at face value. Russell and Whitehead both wanted to unify the "stuff" of the world, rather than letting it be divided into non-spatial mind and spatial matter. The point of doing so was to redescribe the sort of stuff which is "out there" so that it turns out to be the same stuff

which is "before our minds." Finding such a stuff was the object of the exercise. In a phrase of Austin's, these anti-Cartesian philosophers took as their starting-point "the ontology of the sensible manifold" – the Kantian view that something primordial and homogeneous was *intuited*, prior to the employment of *concepts* to mark off this manifold into mental and physical sectors. If one could describe the world in terms of relations between bits of this more basic stuff – e.g., Russell's "views" or Whitehead's "prehensions" – then there would no longer be a contrast between cognoscenda and data, between "what an object of knowledge ought to be" and "the characteristics of the thing directly presented in experience." Thus there would be no problem of knowledge. Nothing would remain of what Lovejoy described as

> the seeming mystery and challenging paradox of knowledge – the possibility which it implies of going abroad while keeping at home, the knower's apparent transcendence of the existential limits within which he must yet, at every moment of his knowing, confess himself to be contained.[12]

This pre-Rylean revolt against dualism, then, was entirely motivated by epistemological considerations, and never questioned the initial assumption that there was *something* "directly presented to the mind." The epistemological problematic which Russell and Whitehead confronted was, like Kant's, a matter of bridging the gap which Descartes had seemed to open up – the gap between the immediately known and the inferentially known. Their solutions thus belong to a genre which includes Leibniz's monadism, Spinoza's double-aspect theory, Berkeley's phenomenalism, Kant's own transcendental idealism, Hegel's notion of the progressive development of self-consciousness as the progressive overcoming of the subject–object distinction, James's "world of pure experience," Ayer's notion of minds and physical objects as "logical constructions," and so on. This genre might be dubbed "Cartesian metaphysics," referring not to Descartes' own dualistic metaphysics but to the genre which arose out of accepting Descartes' notion of "immediate presence" to the mind, while trying to avoid the skeptical consequences which ensued (by some less *ad hoc* procedure than Descartes' appeal to divine benevolence).

By contrast, Ryle's revolt against Descartes was not an attempt to redescribe the inferentially known in order to make it homogeneous

with the immediately known. Rather, it was an attempt to undercut the original Cartesian notion of the mind as the immediately knowable, the given. It belongs to the anti-Cartesian tradition which includes Reid's complaints against "the way of ideas," neo-Thomist protests against the doctrine of representative perception, and phenomenologists' insistence on the intentionality of consciousness. It attacks the assumption which Cartesian metaphysics never questioned, the assumption that there is something "directly present to consciousness," immediately before the eye of the mind, and that we know what sort of thing that is because it is itself *mental* in nature.

The way in which Ryle questioned this assumption was to question whether we had any privileged access to our inner states. Ryle denied this, saying:

> The sorts of things that I can find out about myself are the same as the sorts of things that I can find out about other people, and the methods of finding them out are much the same. A residual difference in the supplies of the requisite data makes some difference in degree between what I can know about myself and what I can know about you, but these differences are not all in favor of self-knowledge.[13]

Ryle said that once we appreciate this point we could get rid of the notion that "The things that a mind does or experiences are self-intimating" and that mental events are such that "it is part of the definition of their being mental that their occurrence entails that they are self-intimating."[14] Ryle summed up as follows:

> The radical objection to the theory that minds must know what they are about, because mental happenings are by definition conscious, or metaphorically self-luminous, is that there are no such happenings . . . .[15]

But he then seemed to contradict himself by admitting that there were such things as introspectible events – as when he said that the only reason why I might know more about my intellect and character than you do is that "I am the addressee of my unspoken soliloquies."[16] His critics jumped on such passages to show that the notion of a train of introspectible inner events – conscious experiences – was being presupposed even by an author who claimed not to believe there were such things.

These critics were justified, and in retrospect we can see that Ryle got off on the wrong foot in questioning the existence of introspection. What he should have said, and what others (such as Sellars) did say, was that our knowledge of what we are like on the inside is

no more "direct" or "intuitive" than our knowledge of what things are like in the "external world." For knowledge to be "direct" is simply for it to be gained without going through an introspectible process of inference – so that we know with *equal* directness that we feel nostalgic, that something before us is brown, that it is a table, that it is the table that used to stand next to the fireplace in our childhood home, and so on. We no more know "the nature of mind" by introspecting mental events than we know "the nature of matter" by perceiving tables. To know the nature of something is not a matter of having it before the mind, of intuiting it, but of being able to utter a large number of true propositions about it.

If one takes this view of knowledge, and in particular of "intuitive" knowledge, then one will be able to say that, *pace* Ryle, there really is a set of mental events going on inside us, and that in defining them as "mental" we are, indeed, saying that we cannot help but be aware of them when they occur. But this admission will not lead us to think that Descartes was right, that we have an extra added ingredient called a "mind" in addition to our bodies. To suggest that we do is to suggest something which we could not possibly know by intuition – namely, that when science finally breaks our bodies down into their finest-grained spatial components it will not be able to explain how we work without postulating the existence of something different than those components. This is a conjecture which we are not now in a position to test – simply because our instruments are too gross to grapple effectively with our brain. But whether this conjecture is true has nothing to do with the traditional bad, ambiguous, philosophical, armchair question of whether mental events are "reducible" to physical events.

Once this Wittgensteinian–Sellarsian epistemological point was made, the essential step in revolting against Cartesian dualism was accomplished. For the central notion of epistemological dualism (upon which, as Lovejoy rightly claimed, psychophysical dualism rests) is now discarded. Taking this step amounts to saying: we already know all about the nature of knowledge without knowing anything new, or deep, about the mind. To think of knowledge as a matter of being disposed to utter true sentences about something, rather than in terms of the metaphor of "acquaintance" – to think of our knowledge of objects as identical with our knowledge of the truth of propositions about them rather than as a pre-linguistic precondition for such

knowledge – is to enable us to stop thinking of ourselves as divided into two parts, a mental part and a physical part. For now we are able to describe the gap between ourselves and the beasts, in respect of intelligence, not as a matter of our having additional faculties, but simply as a matter of our behaving in more complex ways – more specifically, as exhibiting *linguistic* behavior. On this "psychological nominalist" view (in Sellars's phrase), Lovejoy is just wrong in saying that knowledge involves "a seeming mystery and challenging paradox." Lovejoy thought it wondrous that starting with visual images we could get to tables, since the introspectible "data" were so very different from the spatial cognoscenda. But the reply is that we do not start with visual images. We do not "start" with *anything*. We just are trained to make reports – some perceptual, some introspective – as part of our general training in uttering true sentences, our learning of the language. There is no more or less mystery and paradox in our species having learned to manipulate sentences than in bower-birds having learned how to manipulate plant-stems and vines. Huxley and Darwin thus turn out to have told us all we need to know about our place in nature – for what needs to be explained is simply our *behavior*. Once we know all about our behavior we shall automatically know all about our nature and our place. This was the anti-Cartesian result which Ryle wanted to get, and he was right in wanting this, even though the strategy he used was wrong.

To sum up what I have been saying in this section: the second, Rylean, behaviorist revolt against dualism, construed in a Wittgensteinian and Sellarsian way, succeeded where the first revolt – that of Cartesian metaphysics – had failed. For the second revolt undercut the premise which the first kind of revolt shared with Descartes himself: the premise that we have intuitive knowledge, knowledge which is pre-linguistic and which thus serves as a test for the adequacy of languages.

3. BEHAVIORISM, MATERIALISM, AND FUNCTIONALISM

The history of philosophy of mind since Ryle has been one of fratricidal quarrels among philosophers who agreed, for the most part, in accepting the anti-Cartesian analysis of knowledge which I have just sketched, but who nonetheless managed to quarrel. They quarreled because they took it to be the task of the philosophy of mind to

answer the question "What are mental states?" This, like the question "What is the nature of the mind?" is not a good question. The trouble is that there are too many different sorts of states which get called mental. These philosophers wanted a nice short answer to his question which would cover everything that anybody had ever called "mental," or at least anything which a psychologist might want to take as his task to investigate. In particular, they wanted to cover both pains and beliefs. Trying to find a neat way of characterizing what a toothache and a theological conviction have in common is as unpromising as attempting to find a characterization of "physical event" which covers both the death of a partridge and the polarization of a beam of electrons. If, following up the suggestion made above, one takes the definition of mental to be "introspectible" then one will have no trouble with toothaches but lots of trouble with beliefs. For we seem to have lots of beliefs we don't *know* we have. If one follows Kant's lead and suggests that since partridges and electrons both have spatial locations, maybe mental states are non-spatial, one has trouble with toothaches, which seem about as spatial as one can get. But philosophers of mind, undaunted by these difficulties, proceeded to announce either that mental states were "dispositions to behave" (Ryle et al.) or "states of the brain" (Smart et al.) or "functional states" (Putnam et al.).[17]

These announcements gave rise to three "isms" – "logical behaviorism," "central-state materialism," and "functionalism." The proponents of these views had very little to disagree about, but managed it nevertheless. The logical behaviorists said that to say that a person believed that *p* was to say that, *ceteris paribus*, he would act in certain ways, including saying certain things. To say that he had a toothache was to say the same sort of thing. This claim was attacked on two grounds. First, nobody can give necessary and sufficient behavioral conditions for the truth of "Flynn has a toothache" or "Flynn has Docetist views about the operation of Grace." Second, it seems as odd to say that a toothache is a disposition to behave as that a battered nerve is a *disposition* to behave. It would seem more natural to say that both are *causes* of behavior.

This second line of attack led to the popularity of "central-state materialism." Philosophers of this persuasion said that whatever else a toothache was it was the cause of behavior, that a stimulated nerve was the cause of the same behavior, and that Occam's razor sug-

gested that we view "toothache" and "stimulation of such and such a nerve" as two names for the same thing. When it was objected that toothaches don't *feel* like battered nerves, the central-state materialists asked, reasonably enough, how one could possibly know that it didn't. Why shouldn't the way a toothache feels *be* the way the stimulation of a certain nerve feels? How would one *expect* such a stimulation to feel?

There was, however, another objection to central-state materialism which was not so easy to dispose of. This was that it sounded much more plausible for toothaches than for beliefs. To say that Flynn's belief in the Docetist heresy is a state of his brain ought to imply that everybody who believes that particular heresy has a brain that is in that same state. But, as Putnam and others remarked, there seems nothing to prevent a Martian or a robot having this heretical view even though their brains are made out of different stuff, or wired up differently, than ours. So Putnam suggested, pursuing the analogy with computers, that mental states were functional states – "program" or "software" states – as opposed to the "hardware" brain states. This looked to many people like simply veering back to Rylean "behavioral dispositions." But although functionalism certainly was a move in this direction, it was an advance on Ryle. It avoided the first objection to logical behaviorism which I listed above. It did not require that necessary and sufficient behavioral conditions be given for the ascription of beliefs or pains. Rather, the functionalists said, to say that a given state of an organism is a belief of a certain sort is no more to say something about what the organism will do under certain conditions than to say a computer is running a certain program is to say that it will generate output *X* if it gets input *Y*. For many *different* programs will have that feature. So, the functionalists said, we now have a non-reductive account of the mental, since we recognize that the meaning of mentalistic terms cannot be "reduced," but must be explained in *other* mentalistic terms.

This jerky movement from logical behaviorism to central-state materialism to functionalism was pushed along by successive realizations that what you say about pain doesn't work for belief and vice versa. The final synthesis of this antinomy is, I think, offered by Putnam. In answer to the charge that functionalism doesn't catch the raw awfulness of pain, the felt excruciatingness, what it is *like* to be in pain, Putnam simply identifies the particular way a given pain feels

with the particular physical realization of the functional state "being in pain" which the subject has. Putnam imagines a case in which somebody's spectrum is inverted. Here one is inclined to say that the mental state which now triggers his response "that's blue" (once the person has gotten used to the fact that blue things now look the way yellow things used to) is functionally identical but *qualitatively* different from the mental state which triggered the response before the inversion. Putnam says:

> It seems to me that the most plausible move for a functionalist to make, if such cases are really possible, is to say "Yes, but the 'qualitative character' just is the physical realization." And to say that for this special kind of psychological property, for *qualities*, the older form of the identity theory was the right one.[18]

In other words, Putnam is saying: what resists being treated as software should be treated as hardware, and conversely. The upshot of functionalism is thus a casual syncretism. Functionalism comes down to saying that anything you want to say about persons will have an analogue in something you can say about computers, and that if you know as much about a person as a team consisting of the ideal design engineer and the ideal programmer know about a computer, then you know *all* there is to know about the person. So what a team made up of the ideal physiologist and the ideal Miller–Galanter–Pribram "cognitive psychologist" would know is *all* there is to know about people, and, *a fortiori*, about their minds.

This pragmatical attitude towards persons and minds is, I think, the upshot of the last thirty years of work in the philosophy of mind. Its clearest expression is Dennett's "homuncular functionalism," which says that the basic strategy of psychological explanation is for the psychologist to postulate little believers, desirers, feelers of pain, decision-makers, and the like inside the person, and then to postulate similar homunculi inside of *them*, and so on down through layers of simpler and stupider homunculi until you hit a homunculus so simple and stupid that your colleague in physiology can identify it with something he knows about – e.g., a certain type of neuron. No mysteries remain about how a computer does something when we break its program down into a flow-chart so finely-grained that the littlest boxes are recognizable as a particular, simple, electrical circuit. Similarly, on Dennett's view, no mysteries would remain about people if we had a flow-chart for them – one whose smallest boxes were recognizable as a particular, simple neural circuit.

On my account, then, homuncular functionalism is a happy blend of all that was best in logical behaviorism and all that was best in central-state materialism. However, to adopt it is not, as Putnam once thought, to have a new and enlightening answer to the bad question "What are mental states?" For to say that they are *functional* states is trivial. Every state of anything is a functional state. To say that an entity E can be in a functional state S is just to say that E can be described in one vocabulary, V_1, which is relatively fine-grained, and another, V_2, which is relatively coarse-grained, that some descriptions of E in V_2 can be correlated with sets of descriptions of E in V_1 so that the truth of any of the latter will suffice for the truth of the former, and that "S" is in V_2. For any E and any S, with the possible exception of some states of elementary particles, one can find a vocabulary which plays the role of V_1 with respect to the vocabulary in which "S" occurs. The force of Putnam's and Dennett's functionalism is not to have discovered the nature of mental states but to say that they don't have a nature – or, if you like, to say that mental states are those functional states which are investigated by the psychologists, as opposed to those investigated by the physiologists. Mental states are simply those whose descriptions occur in a *given* vocabulary used by psychologists, the one that contains, e.g., both "belief" and "pain." The question whether this is the *right* vocabulary to describe these states is as silly as the question of whether those states are *really* mental, or rather are physical states in disguise.

There is no deep reason why we should lump pains and beliefs together, rather than lumping both in with nerve-stimulations, or lumping pains with the stimulations of nerves and beliefs with states of supernatural Grace. But our clumsy efforts to predict and control ourselves have given rise to a discipline – psychology – which has taken both pains and beliefs in its charge. At the moment, at least, there seems to be no reason to portion things out differently. So we can content ourselves with saying that the nature of a mental state is to be the sort of state of the human organism which psychologists study. This sort of definition has the same advantage as defining legal, as opposed to moral responsibility, as the sort of responsibility which the courts are willing to adjudicate. Such definitions remind us that distinctions like legal vs. moral, or mental vs. physical, are not written on the face of the world. Rather, they are cultural artifacts, to be judged by their utility in accomplishing our aims.

To take this nominalist view is to carry through on the Rylean–Wittgensteinian–Sellarsian attitude towards knowledge which, in the previous section, I claimed was the rationale of the "second" revolt against dualism. Once again, I want to urge that the upshot of this second revolt is not to have given us a clearer view of "the nature of the mind" or of "our concept of mind" but merely to have enabled us to give up the attempt to find real essences in the area. We have been freed from this need by the realization that Descartes was wrong in saying that "nothing is easier for the mind to know than itself" and Broad wrong in saying that behaviorism "leaves out something of whose existence we are immediately aware." Debunking this Cartesian notion of immediate awareness is not the effect of a better philosophical understanding of mind. Rather it is the cause of our ceasing to ask for a "better philosophical understanding of mind," of our ceasing to ask certain bad questions.

4. DENNETT'S NOMINALISM VERSUS SEARLE'S AND NAGEL'S ESSENTIALISM

The issue between the Descartes–Broad tradition and the Ryle–Dennett tradition comes into focus in the following passage from Dennett:

> Any philosopher of mind who (like myself) favors a "functionalist" theory of mind must face the fact that the very feature that has been seen to recommend functionalism over cruder brands of materialism – its abstractness and hence neutrality with regard to what could "realize" the function deemed essential to sentient or intentional systems – permits a functionalist theory, however realistically biological or humanoid in flavor, to be instantiated not only by robots (an acceptable or even desirable consequence in the eyes of some), but by suprahuman organizations that would seem to have minds of their own only in the flimsiest metaphorical sense.[19]

As Dennett goes on to say, the problem is that functionalism (and, indeed pretty well any imaginable psychological account) is going to give an account of pain or belief in terms of entities which aren't themselves "subjects of experience" – entities at what Dennett calls a "sub-personal level." "Intuition," Dennett continues,

> proclaims that any sub-personal theory must leave out something vital, something unobtainable moreover with sub-personal resources.[20]

Any account of pain or belief which gives you a flow chart is going to be met with the objection that nothing on the flow chart is a believer

or a feeler of pain, and thus that the total system which the flow chart purports to analyze cannot be either.

John Searle has made this objection in the case of "intentionality" – that feature of beliefs which makes them philosophically interesting:

> No purely formal model will ever be sufficient by itself for intentionality because the formal properties are not by themselves constitutive of intentionality, and they have by themselves no causal power except the power, when instantiated, to produce the next stage of the formalism when the machine is running....
>
> All the arguments for the strong version of artificial intelligence that I have seen insist on drawing an outline around the shadows cast by cognition and then claiming that the shadows are the real thing.[21]

> If we are to conclude that there must be cognition in me on the grounds that I have a certain sort of input and output and a program in between, then it looks like all sorts of apparently noncognitive subsystems are going to turn out to be cognitive.[22]

The proper nominalist response to this is that the word "cognitive" applies to whatever psychologists say it applies to – that is, to whatever their best account of cognition leads them to call a cognitive process. But Searle will have none of that. He says:

> ... the mental–nonmental distinction cannot be just in the eye of the beholder but it must be intrinsic to the systems, otherwise it would be up to any beholder to treat people as nonmental and, for example, hurricanes as mental if he likes.[23]

Thomas Nagel mounts the same objection as does Searle, focusing on pains rather than on beliefs. Like Searle, Nagel believes that words like "pain," "belief," "cognition," "conscious," and "mental" signify real essences, that they are not just convenient handles to get a grip on what's going on. Nagel's objection to flow-chart accounts of pain and belief, of the sort which Dennett gives, is that

> Certainly it *appears* unlikely that we will get closer to the real nature of human experience by leaving behind the particularity of our human point of view and striving for a description in terms accessible to beings that could not imagine what it was like to be us.[24]

More generally, Nagel says,

> We appear to be faced with a general difficulty about psychophysical reduction. In other areas the process of reduction is a move in the direction of greater objectivity, toward a more accurate view of the real nature of things.... Experience, however, does not seem to fit the pattern. The idea of moving from appearance to reality seems

to make no sense here. What is the analogue in this case to pursuing a more objective understanding of the same phenomena by abandoning the initial subjective viewpoint toward them in favor of another that is more objective but concerns the same thing?[25]

It is important to see that Nagel's and Searle's disagreement with Dennett is not about the nature of the mind but about the nature of explanation and objectivity. The nominalist approach to the distinctions between appearance and reality, subjective and objective, is to say that these are misleading ways of formulating the distinction between a vocabulary which doesn't help you get what you want and a vocabulary which does. This approach is based on a philosophy of science which is Baconian, Hobbesian and Galilean rather than, like Nagel's and Searle's, Aristotelian. On an Aristotelian view, Galileo's account of motion is absurdly counter-intuitive, as are, for example, contemporary biochemistry's account of life, Feuerbach's and Tillich's accounts of God, and utilitarians' accounts of morality. For the Aristotelian thinks that we need to distinguish between discovering the nature of something and discovering a vocabulary which will permit us to predict and control events in the area of the thing. The nominalist, on the other hand, construes "finding the nature of X" as just finding the most useful way to talk about the things which have traditionally been called "X" – a way which need not employ any term co-referential with "X".[26]

Dennett takes this nominalist line when he rejects the assumption that

> our ordinary way of picking out putative mental features and entities succeed in picking out real features and entities . . . most if not all of our familiar mentalistic idioms fail to perform this task of perspicuous reference, because they embody conceptual infelicities and incoherencies of various sorts. (xix)

This is just the sort of thing which Galileo said about the jargon of Aristotelian physics. Dennett's claim, however, seems the more paradoxical. In part this is because we forget how very paradoxical Galileo's appeared to many of his contemporaries. But mainly it is because of our conviction that we *cannot* have failed to refer perspicuously to the mental, because "nothing is easier for the mind to know than itself." This Cartesian myth is enshrined in Nagel's claim that "every subjective phenomenon is essentially connected with a point of view, and it seems inevitable than an objective, psychical theory will abandon that point of view." "Essential connection with a

point of view" is just another name for that specially intimate relationship which Broad called "immediate awareness." Nagel's visual metaphor is a variation on the standard Cartesian metaphor of "directly present to consciousness," the metaphor which Ryle derided as the notion of "contemplation of events in an inner arena."

Perhaps the best way to express the relevant difference between nominalism and essentialism is to take up Searle's point that functionalist flow-charts of the sort which Dennett constructs merely "draw an outline around the shadows cast by cognition." The question at issue is whether there is a contrast between shadow and substance – between grasping the causal relations which X bears to other things and grasping what X is in itself, its real essence. The view that there is not is a species of the view often, though somewhat misleadingly, called "verificationism." The view that there *is* a contrast is a species of what is often, somewhat misleadingly, called "realism." "Verificationism," in this generic sense, is the view that you know about the nature of X when you know the inferential relationships which are generally agreed to hold between sentences using the word "X" and the other sentences of the language. On this view, you may always learn more about the nature of X, because new scientific developments (for example) may bring about agreement upon new such relationships. But there is nothing beyond such relationships to be discovered. For realists, there is a real essence to be discovered and, since reference swings free of agreement in belief, the nominalists' inferential relationships (the contemporary counterpart of Locke's "nominal essence") may have nothing to do with real essence.

The Nagel–Searle view that we have pre-linguistic knowledge of real essence which is not caught in our knowledge of the truth of propositions, is a special case of realism. Searle's view is that intentionality is "intrinsic" and that we can tell it from its shadows, even though the shadows include everything psychologists think relevant to the use of the word "intentionality." Verificationists think that to say, with Searle, that we shall not know what intentionality "really is" until we know more about the brain is an attempt to make a distinction of kind out of a distinction of degree. On their view, we shall of course know *more* about intentionality when we can realize any given flow chart with neural tissue instead of bits of metal and silicon, but we won't know what intentionality "really is" in a sense in

which we hadn't known this previously. Similarly, verificationists think it merely tautologous to say, as Nagel does, that "the subjective character of experience" is not captured by "any of the familiar recently devised reductive analyses of the mental, for all of them are logically compatible with its absence".[27] *Of course* no analysis could capture what Nagel calls "the subjective character of experience" since he has *defined* this character as what "human language" is inadequate to express.[28] Nagel thinks that "we can be compelled to recognize the existence of such facts without being able to state or comprehend them."[29] There could be no clearer expression of what the verificationist denies.

To see that the question about verificationism, about the reach of human language, is the real issue between Dennett and Nagel, consider Dennett's own description of how he deals with anti-functionalist intuitions such as Nagel's. Dennett thinks that there is "a better course than mere doctrinaire verificationism on the one hand or shoulder-shrugging agnosticism on the other" (173). He describes this better course as follows:

> What convinces *me* that a cognitivistic theory could capture all the dear features I discover in my inner life is not any "argument", and not just the programmatic appeal of thereby preserving something like "the unity of science", but rather a detailed attempt to describe to myself exactly those features of my life *and the nature of my acquaintance with them* that I would cite as my grounds for claiming that I *am* – and do not merely *seem to be* – conscious.

Dennett, in other words, thinks that he can beat Nagel at his own phenomenological game. He thinks that looking inward and noticing what goes on will help settle the question. Thus when he discusses mental images, and in particular a psychological experiment in which subjects typically say "I rotated the image in my mind's eye," he says:

> Now how can my view possibly accommodate such phenomena? Aren't we directly aware of an image rotating in phenomenal space in this instance? No. And that much, I think, you can quickly ascertain to your own satisfaction. For isn't it the case that if you attend to your experience more closely when you say you rotate the image you find it moves in discrete jumps – it flicks through a series of orientations. You cannot gradually speed up or slow down the rotation, can you? *Now "look" again. Isn't it really just that these discrete states are discrete propositional episodes*? (Italics added.)[30]

This last appeal, to introspect and see whether you are introspec-

ting movement or just making judgments, or both, seems to me the wrong move to make. The issue about whether to think of any kind of "looking and seeing" – introspective or observational – as just the acquisition of a belief (the sort of analysis offered by Armstrong and Pitcher), or as something "more" than this, is not one which is itself going to be settled by looking and seeing. It is to be settled by considering whether the latter view does any explanatory work left undone by the former.

To make this point a little more precise, consider Dennett's argument that

> If you are inclined to argue that only an internal system that actually did proceed by some rotation in space of a representation or image could explain the sequence of judgments, you might be right, but your grounds are hardly overwhelming. In fact these discrete series of judgments bear a striking resemblance to the discrete series of small flashing lights that create the illusions of perceived motion, which have received so much attention from psychologists.
>
> ... What I am suggesting is that as the discrete series of flashes is to that non-veridical judgment, so our series of judgments in the image rotation case is to the judgment that something is rotated in our minds.... There *may* be something "behind" our judgments in the rotation case, but if there is, it is something quite outside our present ken, and its very existence is suggested only by the most tenuous inference, however psychologically irresistible it may be.[31]

Dennett is saying that our introspectively based claim that there is a rotating image is intelligible, but is not the only, or the most likely explanation, of the judgments we make. What he should say, on my view, is that in both the case of veridical *and* nonveridical, perceptual or introspective judgement, the claim that there is something "more" than the acquisition of belief – something not locatable in public space which explains the acquisition – is not an explanation at all. It is just a wave of the hand. To say that "there *may* be something" behind "our judgments in the rotation case" is right if it means merely "there is doubtless some neural set-up which makes clear why we have that series of judgments." But it is wrong if it means that there is some antecedent probability that that neural set-up will be the rotation of something.

I have staged this little skirmish with Dennett simply in order to show why I think that the best strategy to use against Nagel and Searle is what Dennett calls "a doctrinaire verificationism." Dennett thinks that one can be sceptical about Nagel's insistence on the phenomenologically rich inner lives of bats "without thereby becom-

ing the Village Verificationist." I do not. I think that scepticism about Nagel- and Searle-like intuitions is plausible only if it is based on general methodological considerations about the status of intuitions. The verificationist's general complaint about the realist is that he is insisting on differences (between, e.g., bats with private lives and bats without, dogs with intrinsic intentionality and dogs without) which make no difference: that his intuitions cannot be integrated into an explanatory scheme because they are "wheels which play no part in the mechanism."[32] This seems to me a good complaint to make, and the only one we need make. It amounts to saying that we are going to have to pick and choose among our intuitions in the interest of scientific progress, and that the test of whether an intuition is worth hanging on to is whether it can be integrated into the best theories we currently have. This holistic view of knowledge may be doctrinaire, but surely it is no more so than, for example, Searle's remark that:

> The study of mind starts with such facts as that humans have beliefs, while thermostats, telephones, and adding machines don't. If you get a theory that denies this point you have produced a counter-example to the theory and the theory is false.[33]

This brings back memories of the view that the study of the heavens starts with such facts as that the sun moves around in circles and that the earth is at rest.

5. MIND AS INEFFABLE

I said earlier that the central claim of the Ryle–Dennett tradition was that we had no intuitions, no "initial facts" which all theorizing must always respect, about the mind. It should now be clear that I mean this not as a remark about the mind but as a remark about intuitions – it is a methodological strategy rather than an introspective report. The claim that "mind" is not a useful concept, that the mental–physical contrast is an awkward and clumsy one which the philosophical tradition has wasted too much time on, is not the sort of claim that can itself be backed up by intuitions. It can only be backed up by general considerations about whether language is the sort of thing which can be judged adequate or inadequate to prior, intuitive, non-linguistic knowledge (as Nagel thinks), or whether the notion of such a comparison between language and the data is empty. On the interpretation of recent developments in the philosophy of mind

which I have been offering, the Ryle–Dennett tradition simply works out the consequences of the nominalist view that language is ubiquitous – that there is no such thing as comparing a linguistic formulation with a bit of non-linguistic knowledge, but only a matter of seeing how various linguistic items fit together with other linguistic items and with the purposes for which language as a whole is to be used.

I here argued in favor of this nominalist view on other occasions,[34] and cannot repeat these arguments in the present space. Rather, I should like to conclude by returning to my initial claim that our concept of mind is a blur. When one has a large and blurry concept on one's hands, one can either discard it in favor of a series of smaller, handier, more useful concepts, or one can say that this very largeness and bluriness is a symptom of something *deep* and hard to articulate, something *ineffable*, something to which language is inadequate. The concept "God," as it is used in the sophisticated discourse of Christian theology, is an example. This concept, I should argue, is a result of laying a number of concepts – those of an omnipotent atemporal creator, a stern father, and a loving friend – on top of each other, producing a blur. It is no wonder that a concept which is of a being both "without parts or passions" and "closer than hands or feet" should tempt village atheists to discard it. Nor is it any wonder that others have proclaimed it a deep mystery. I want to suggest that the concept of mind is the blur with which Western intellectuals became obsessed when they finally gave up on the blur which was the theologian's concept of God. The ineffability of the mental serves the same cultural function as the ineffability of the divine – it vaguely suggests that science does not have the last word.[35]

I cannot, in the present space, provide the historical backup which this claim requires. But I would ask you to think of the way in which German Idealism's notion of *Geist* came to be the watchword of a reaction against scientism, a way of recapturing, or making intellectually respectable, what religion had possessed and the Enlightenment seemed to have lost. In Hegel, and again in the British and American idealists of the turn of the century, we find the distinction between Spirit and Nature doing the job which used to be done by the distinction between the Divine and the Human. The Spirit–Nature distinction attempts to synthesize, and succeeds in blurring, the two distinctions upon which, I have claimed, the mental–physical distinction is parasitic: that between the cognitive and the noncognitive

and that between the moral and the non-moral. Philosophers in the naturalist, anti-idealist tradition (such as Russell, Whitehead, James, and Dewey) took the notion of "the mind" seriously because they felt they had to show that cognition was possible without our possession of an "extra added ingredient" of the sort which would serve as an "ontological foundation for morality." But unfortunately these naturalists thought that ordinary vulgar materialism – a simple acceptance of the story that science had to tell about humans and their faculties – was not enough. This was because they thought that there was a genuine problem about the nature of knowledge, one which could only be resolved by redescribing the known – matter – in a way which was unscientific and specifically philosophical. Thus, in the period prior to Wittgenstein and Ryle, both sides in controversies about the "irreducibility" of the mental agreed that there was *something* mysterious about the mind – something which needed philosophical clarification. They did so because the question "What do we need to know about ourselves which science cannot tell us?" seemed urgent, and because they thought that philosophy, by discovering something about mind, could tell us something about the self-image human beings should have. So both the idealists, who invented the mental as successor to the divine, and the naturalists, who wanted to de-divinize man without thereby trivializing him, agreed that the blur represented by the concept of "mind" was a suitable topic for philosophical reflection.

On the view I am suggesting, we should just stop being afraid of science and of vulgar materialism. We should substitute the question "What *further* descriptions of ourselves do we need, in addition to those with which science provides us?" for the question "What knowledge of ourselves can theologians or philosophers give us which scientists cannot?" The difference between "description" and "knowledge" is the essence of the matter. To say that the terminology of a materialistic science (and what other kind of science is there?) is unsatisfactory in providing us with a self-image is obviously true. But this does not imply that there is something science does not know, much less something which language cannot capture. It only shows that we need *many different* descriptions of ourselves – some for some purposes and others for others, some for predicting and controlling ourselves and others for deciding what to do, what meaning our lives shall have.[36] There is no need to say that each such

description should be grounded on the discovery of a part of our real essence – what we really are deep down inside. Indeed, on the nominalist view I am suggesting, there is no sense to such a claim.

If you accept this pragmatical nominalist outlook, then you will see the attempt of village verificationists like myself to discard the philosophers' blurry concept of mind as essaying the same cultural function as that performed by village atheists who urged that we discard the theologians' blurry concept of God. We are insisting that our moral dignity – our sense of moral obligations and rights, of the uniqueness of our species – is compatible with the ubiquity of scientific explanation, with there being nothing more to discover about ourselves than science has discovered or will discover. We are arguing that our sense of moral worth should not be dependent upon a theological or philosophical account of our real essence. We are urging that the question as to our place in nature has been pretty well settled – that it is highly unlikely that further scientific developments will second-guess Huxley.

But we are also urging that when we have learned our place in nature we have only begun. For beyond the vocabularies useful for prediction and control – the vocabulary of natural science – there are the vocabularies of our moral and our political life and of the arts, of all those human activities which are not aimed at prediction and control but rather in giving us self-images which are worthy of our species. Such images are not true to the nature of species or false to it, for what is really distinctive about us is that we can rise above questions of truth or falsity. We are the poetic species, the one which can change itself by changing its behavior – and especially its linguistic behavior, the words it uses. The ability is not to be explained by discovering more about the nature of something called "the mind" any more than by discovering more about the nature of something called "God." Such attempts to "ground" our ability to recreate ourselves by seeking its ineffable source are, in Sartre's sense, self-deceptive. They are attempts to find a vocabulary, a way of speaking, which will be more than *just* a way of speaking. To say, with nominalism, that language is ubiquitous and to deny, with verificationism, that there are intuitions to which our language must conform, is just to assert that we need nothing more than confidence in our own poetic power.[37]

University of Virginia

NOTES

[1] Thomas H. Huxley, *Man's Place in Nature* (Ann Arbor: University of Michigan Press, 1959). This essay was originally published in 1863 under the title 'Evidence as to Man's Place in Nature.'
[2] C. D. Broad, *The Mind and Its Place in Nature* (New York: Humanities Press, 1951).
[3] Gilbert Ryle, *The Concept of Mind* (London: Hutchinson, 1949).
[4] Daniel Dennett, *Brainstorms* (Montgomery, Vt.: Bradford Books, 1978).
[5] Broad, p. 613.
[6] Ibid., p. 614.
[7] Thomas Nagel, *Mortal Questions* (Cambridge: Cambridge University Press, 1979), p. 188.
[8] Ibid., p. 177.
[9] Arthur O. Lovejoy, *The Revolt Against Dualism* (La Salle, Illinois, Open Court Publishing Company, 1930), p. 1.
[10] Ibid., p. 3.
[11] Ibid., p. 13.
[12] Ibid., pp. 14–15.
[13] Ryle, p. 155.
[14] Ibid., p. 158.
[15] Ibid., p. 159.
[16] Ibid., p. 169. Karl Popper points out this tension in Ryle's thought in Karl C. Popper and John C. Eccles, *The Self and Its Brain* (Berlin: Springer, 1977), pp. 105–6.
[17] I was guilty of this sort of mistake myself in various papers which I published in the period 1965–71. I tried to do better by distinguishing various ingredients in our blurry concept of "the mental" in Chapter 1 of *Philosophy and the Mirror of Nature* (Princeton: Princeton University Press, 1979). For the views of Smart and Putnam, see their articles, respectively titled 'Sensations and Brain Processes' and 'The Nature of Mental States,' in David M. Rosenthal, ed., *Materialism and the Mind-Body Problem* (Englewood Cliffs, N.J.: Prentice-Hall, 1971).
[18] I quote from the manuscript of a forthcoming book which Professor Putnam has kindly made available to me.
[19] Dennett, pp. 152–53.
[20] Ibid., p. 154.
[21] John R. Searle, 'Minds, Brains and Programs,' *The Behavioral and Brain Sciences* 3 (1980): 422.
[22] Ibid., pp. 419–20.
[23] Ibid., p. 420. This claim is central to many of Searle's arguments against a Sellarsian account of awareness as a "linguistic affair" and thus against a functionalist account of cognition. For by insisting that no account of thought will do which deprives non-language-using animals (e.g., dogs) of thoughts, he insists that we preserve precisely the concept of thought which Dennett thinks incoherent. (See Dennett, op. cit., p. 38, and chapter 2 passim.) Searle's forthcoming book on the philosophy of mind turns around the claim that any analysis must cover dogs and men, a claim which presupposes that our use of the term "thought" in ordinary language expresses an intuition which any psychological or philosophical account must preserve. This strategy seems to me to preserve the bad, "ordinary language philosophy" side of Ryle – the portion of Ryle's

work which the development of central-state materialism and functionalism helped us to set aside.

[24] Nagel, p. 174.

[25] Ibid., p. 174. Here Nagel takes for granted that one can analyze the notion of "appearance" only in terms of presentation to consciousness, rather than (in the manner of Sellars) in terms of the use of a certain sort of statement (one containing locutions like "seems"). For the latter analysis, see Wilfrid Sellars, *Science, Perception and Reality* (London: Routledge Kegan Paul, 1963), pp. 140–56.

[26] This position is sometimes criticized as "instrumentalist," but that is a misleading term. The nominalist is not saying that science cannot find out what is really there, but rather that "really there" (*both* for the referents of the perceptual vocabulary of common sense and those of the theoretical vocabularies of science) means nothing more than "what we find it most useful to talk about."

[27] Nagel, p. 166.

[28] Ibid., p. 171.

[29] Ibid., p. 171.

[30] Dennett, p. 168.

[31] Ibid., pp. 168–69.

[32] The phrase comes from Ludwig Wittgenstein, *Philosophical Investigations* (London: Macmillan, 1953), Part I, section 271.

[33] Searle, p. 420.

[34] See *Philosophy and the Mirror of Nature*, chapter 4, and the Introduction to my forthcoming *Consequences of Pragmatism* (Minneapolis: University of Minnesota Press, 1982).

[35] Thus when Nagel says that "there are facts which do not consist in the truth of propositions expressible in a human language" (Nagel, p. 171) I see his view as the contemporary expression of William James' admiration for the mystic, the person who has experiences such that "no adequate report of its content can be given in words" (William James, *Varieties of Religious Experience* (New York: Longmans, 1902), p. 380.) Wittgenstein, who read James' book and repeated James' point about "das Mystische" in terms of what lies "beyond the limits of language," seems to me the genealogical link between James and Nagel. (See Ludwig Wittgenstein, *Tractatus Logico-Philosophicus* (London: Kegan Paul, 1922), 6.522.)

[36] I develop this point at greater length in 'Method, Social Science and Social Hope' included in *Consequences of Pragmatism*.

[37] This paper was originally written for a Nobel Memorial Conference on 'The Place of Mind in Nature', held at St. Olaf's College in October 1981. It will appear in the proceedings of that conference under the title *Mind in Nature*, to be edited by Professor Richard Elvee and published by Harper & Row, New York. I am most grateful to both the editor and the publisher for permission to reprint this (only slightly different) version in *Synthese*.