

distance, which, if real, implies that congruence is real. With respect to the second result, if the fact that distance fails to satisfy slightly modified versions of (a') and (b') is held to establish the strong thesis, consequences follow which are so contrary to plain truth that they need only be made explicit in order to reject the theory from which they follow. Finally, though discreteness establishes the possibility of distinguishing intervals on the basis of cardinality, since there is no a priori reason to suppose that sameness of cardinality will coincide with sameness of distance, it was concluded that discreteness does not establish the nonconventionality of metrical relations.¹³

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Asymmetries and Mind-Body Perplexities

"O wad some Pow'r the giftie gie us
To see ourselfs as others see us!"

from "To a Louse" by ROBERT BURNS

Any satisfactory solution to the mind-body problem must include an account of why the so-called "I," "subjective self," or "self as subject of experiences" seems so adept at slipping through the meshes of every nomological net of physical explanations which philosophers have been able to imagine science someday bestowing upon them.¹ Until this agility on the part of the self is either curtailed or shown to be ontologically benign, not forcing us to attribute inexplicable properties to our self-consciousness or consciousness of self, the mind-body problem is not going to go away. Unless the self itself, however characterized, can be shown to be comfortably at home within the domain of the physical, many of its putative attributes—thoughts, feelings, and sensations—will not seem to be at rest there either.

Nor will it do to attempt to preempt the playing out of these perplexities by launching a frontal attack à la Hume or Ryle on allegedly quixotic views about the nature of the self. The problem I am alluding to does not arise because of quixotic views of the self. It is just the reverse: Philosophers find themselves forced to endorse quixotic views of the self primarily because they systematically fail to show how a human being might conceive of himself as being completely in the world.

Some kind of thoroughgoing physicalism seems intuitively plausible mainly because of a dramatic absence of reasons for supposing that were

¹ I wish to thank Professor Feigl and Mrs. Judith Economos for encouraging me to write up the central ideas in this paper. I have also had the benefit of a number of discussions with Mr. Mischa Penn on these matters. I have no idea how happy they will be with the final result. Cf. the final chapter of Mrs. Economos's "The Identity Thesis" (doctoral dissertation, Department of Philosophy, UCLA, 1967). I am also greatly indebted to my former colleague Charles Chastain, with whom I have discussed this paper in detail. I owe to him the idea for describing Case III in section VI in terms of a Chomsky-like rendition of phrase structure grammar.

¹³ This work was supported by a grant from the Minnesota Center for Philosophy of Science.

we to dissect, dismantle, and exhaustively inspect any other person we would discover anything more than a complicated organization of physical things, properties, processes, and events. Furthermore, as has been emphasized recently, we have a strong sense of many of our mental features as being embodied.² On the other hand there's a final persuasiveness physicalism lacks which can be traced to the conceptual hardship each person faces when trying to imagine himself being completely accounted for by any such dissection, dismantling, or inspection. It is not so much that one boggles at conceiving of any aspect of his self, person, or consciousness being described in physicalistic terms; it is rather that one boggles at conceiving of every aspect being simultaneously so describable. For convenience of exposition I shall sometimes use the word "self" to refer to whatever there is (or isn't!) which seems to resist such description. Such reference to a self or aspect thereof will not commit me to any positive characterization of it. Neither will it commit me to the view that one's self remains unchanged from moment to moment or to the view that it doesn't or to the view that it is a thing, process, or bundle of events. What I am committed to is phrasing and unpicking the following problem: If a thoroughgoing physicalism (or any kind of monism) is true, why should it even seem so difficult for me to view my mind or self as an item wholly in the world? And this independently of how I may construe that mind or self: whether as a substance or as a cluster of properties, processes, or events. The paradox becomes this: A physicalistic (or otherwise monistic) account of the mind at the outset seems quite convincing so long as I consider anyone except myself. If, however, physicalism provides an adequate account of the minds or selves of others, why should it not, then, provide an adequate account of the nature of my mind or self so long as I lack any reason to suppose that I am utterly unique?³ But if I am unable to see how physicalism could account for the nature of my mind or self, why then should it not seem equally implausible as a theory about the mind or self of anyone else, again assuming that I lack reasons for supposing that I am unique? In this way we teeter-totter between the problem of viewing our self as wholly in the world, or physical, and the problem of viewing other people who seem wholly in the world as being somewhat mental. But if the mental is after all physical, why should this be so? Al-

² G. A. Vesey, *The Embodied Mind* (London: Allen and Unwin, 1965).

³ Cf. Paul Ziff's "The Simplicity of Other Minds," *Journal of Philosophy*, 72 (October 21, 1965), 575-584.

though I may not initially believe that in my or anyone else's investigation of the world I or they will find need to riddle our explanations with references to immaterial selves or spirits, it still remains easy to believe that I will never turn up the whole of my self as something cohabiting with items in the natural world. Hence the presumptuousness of assuming I really do find other selves *in* the world.

II

Descartes claimed that it made sense to suppose the set of limbs called his body and whatever physical thing, gas, air, fire, or vapor (animal spirits), might infuse it were nonentities, but that he would still be left with the need to assert that "nevertheless I am something."⁴ And by doing so he called attention in a roundabout way to the seeming difference between whatever is associated with the expression "I" when I use it and whatever else there is which is characterized by my use of (generally physicalistic) descriptions.

In a different metaphysical setting Bishop Berkeley was to write: "But besides all that endless variety of ideas or objects of knowledge, there is likewise something which knows or perceives them; and exercises divers operations, as willing, imagining, remembering, about them. This perceiving active being is what I call MIND, SPIRIT, SOUL, or MYSELF. By which words I do not denote any one of my ideas, but a thing entirely distinct from them, wherein they exist. . . ."⁵ This is tantamount to Berkeley having asserted that he does not come upon his mind, spirit, soul, or self as an item of the world in the way in which he is able to come upon cogs or pulleys, dendrites or axons. His claim that we only have notions of the mind, spirit, soul, or self and not ideas (perceptions) of it is another way he has of expressing his belief that there is a basic difference between how it is we can have knowledge of our own mind(s) and how it is we can know knowledge of nature.

And Kant, in spite of his general disaffection with Descartes and Berkeley, echoes to some extent their sentiments concerning the mind when he claims that he "cannot have any representation whatsoever of a thinking

⁴ René Descartes, *Meditations on First Philosophy*, pp. 69-70 in *Descartes' Philosophical Writings*, trans. and ed. Elizabeth Anscombe and Peter Thomas Geach (London: Nelson, 1954).

⁵ George Berkeley, *The Principles of Human Knowledge* (New York: Meridian, 1963), pp. 65-66.

being, through any outer experiences, but only through self-consciousness."⁶

Furthermore, I believe it can be shown in writings from Fichte to Sartre that a well-advertised view of the self as a free or autonomous subject occurs as a simple corollary to the just discussed claim that whatever its nature the self will not be found to reside as do objects at any spatiotemporal address. As occupant of a more ethereal dwelling the self can hardly be expected to feel constrained by the zoning laws of determinism. (Compare the quotation from Schopenhauer in section VI.)

In a contemporary vein Professor Herbert Feigl's view⁷ that even with the weapons of a "Utopian neurophysiology" at our disposal the (admittedly suspect) argument from analogy for the existence of "raw feels" in others would not be obsolete but, indeed, necessary is still another way of claiming that the "subjective" selves of others are beyond the pale of physical descriptions. This conclusion need not, yet may, be arrived at by way of the belief that it is difficult to make sense out of one's own "raw feels" being located in the net of physical descriptions ("physical₂ descriptions" in the terminology of Sellars and Meehl⁸). This is not the same as, but is a companion to, the view that one's self seems to slip through the net.

Strictly speaking, Professor Feigl's identity thesis commits him to the claim that mental states are wholly characterizable in terms of features within the nomological net (of physical₂ descriptions). This should cast the admittedly controversial "argument from analogy" into disuse. But I believe that his desire to retain that argument in his repertoire of inferences can be appreciated not as a blatant inconsistency (which it seems to be) within his physicalistic theory, but as an honest acknowledgment that to date there remains something fishy about viewing one's own self and

⁶ *Critique of Pure Reason*, trans. Norman Kemp Smith (London: Macmillan, 1929), p. 332.

⁷ Cf. Herbert Feigl, "The 'Mental' and the 'Physical,'" in H. Feigl, G. Maxwell, and M. Scriven, eds., *Minnesota Studies in the Philosophy of Science*, vol. II (Minneapolis: University of Minnesota Press, 1958), pp. 370-497; see especially pp. 429-430. The utility of some version of the argument from analogy within the framework of Feigl's physicalistic theory became more apparent to me during a number of discussions with Professors Herbert Feigl, Paul Meehl, and Grover Maxwell, during a Colloquium on Mind-Body Problems sponsored jointly by the Minnesota Center for the Philosophy of Science and the UCLA Philosophy Department, March 1966.

⁸ See P. E. Meehl and W. Sellars, "The Concept of Emergence," in H. Feigl and M. Scriven, eds., *Minnesota Studies in the Philosophy of Science*, vol. I (Minneapolis: University of Minnesota Press, 1956), pp. 239-252.

hence other selves or other selves and hence one's own self as items within the net. This in spite of the fact that physicalism may seem in most other respects impeccable. In short, Feigl's espousal of the argument from analogy is a way of admitting that something very like the paradox stated at the outset of this essay exists.

Thomas Nagel in his recent article "Physicalism" writes: "The feeling that physicalism leaves out of account the essential subjectivity of psychological states is the feeling that nowhere in the description of the state of a human body could there be room for a physical equivalent of the fact that I (or any self), and not just that body, am the subject of those states."⁹ No doubt (as Nagel himself intimates) such puzzlements are to some extent reflected in (perhaps in some sense caused by?) the peculiar linguistic role played by expressions such as "I" ("now," "this," and so on) or what have been called egocentric particulars (by Russell),¹⁰ token reflexives (by Reichenbach),¹¹ indicators (by Goodman),¹² and indexicals (by Bar-Hillel).¹³ Even so, what then needs to be shown is that the pragmatic conditions underlying the difference in use between the indexical "I" and nonindexicals do not add up to a metaphysical difference between whatever the indexical "I" denotes when it is used and the sorts of things which the nonindexicals might refer to or characterize. Only after this is done will it be easy to concur with Russell's claim concerning egocentric particulars "that they are not needed in any part of the description of the world, whether physical or psychological."¹⁴

In brief, I believe that a major temptation to reject a physicalistic theory of mentality, or any *monistic doctrine*, and by default flirt with some variety of Cartesianism or epiphenomenalism derives from the as yet inadequately assessed asymmetry between (a) how I am able to view myself as a potential object of investigation (within a spatiotemporal setting) and (b) how at first sight it seems one would be able to investigate virtually anything else including (supposedly) other people within such a setting. Given this asymmetry it is cold comfort to be told that my sensations and

⁹ In *Philosophical Review*, 74 (July 1965), 354.

¹⁰ Bertrand Russell, chapter VII, "Egocentric Particulars," in *An Inquiry into Meaning and Truth* (New York: Norton, 1940).

¹¹ Hans Reichenbach, *Elements of Symbolic Logic* (New York: Macmillan, 1960), pp. 284-287.

¹² Nelson Goodman, *The Structure of Appearance* (Cambridge, Mass.: Harvard University Press, 1951), pp. 290-295.

¹³ Y. Bar-Hillel, "Indexical Expressions," *Mind*, 63 (1954), 359-379.

¹⁴ *Ibid.*, p. 115.

feelings may be identical with certain brain processes *in the way that* a lightning flash is identical with an electrical discharge or a cloud is identical with a mass of tiny particles in suspension.¹⁵ Such comparisons may serve to assuage whatever logical qualms had been felt concerning the compatibility of an identity statement (“Sensations are identical with brain processes”) with the supposedly synthetic empirical character of the mind-body identity thesis. (For we have learned that although a lightning flash is identical with an electrical discharge we had to make empirical discoveries to disclose it.) But as long as we seem systematically unable to view our own mind or self as something which can be wholly investigated in the way in which lightning flashes or electrical discharges or, as it seems, other people can be wholly investigated, illustrations involving lightning flashes, electrical discharges, and the like will seem less than illustrative. It is for this reason that the seeming duality of the phenomenal and the physical does not constitute an analogue to the “complementarity” involved in the Copenhagen interpretation of quantum mechanics. For both particles and waves are, *in some sense*, equally at home in or “out of” the world.

The invisible bull in the china shop of the physicalist’s analogies is the ominous absence of whatever those arguments might be which would show one that his own self is as wholly amenable to physical investigation as are *either* clouds or molecules or lightning flashes or electrical discharges. The identity analogies usually engaged in the service of physicalism involve only identities between entities rather obviously susceptible to eventual specification and characterization by expressions which conveniently locate them within a spatiotemporal framework and describe them in physicalistic ways. The question of whether my mind or self is wholly amenable to even roughly this sort of description is one of the major points at issue. It is not sufficient to argue that if other minds seem to consist of nothing other than that which can be physically located and characterized then my mind must be too, unless I suppose it is unique; for the failure to suppose it’s unique can be utilized to show that other minds cannot be accounted for in a purely physicalistic way.

If the diagnosis above is correct, any solution to the mind-body problem must proceed through (at least) two stages: At the first stage what must

¹⁵ Cf. J. J. C. Smart’s “Sensations and Brain Processes,” in V. C. Chappell, ed., *The Philosophy of Mind* (Englewood Cliffs, N.J.: Prentice-Hall, 1962). Such analogies are, of course, scattered throughout the writings of proponents of the identity thesis.

be overcome is a natural resistance to viewing one’s own mind or self as something which can be wholly investigated in a way in which other people and things can be imagined as being wholly investigated by one’s own mind or self. I shall refer to the difficulties encountered at this first stage as the *Investigational Asymmetries Problem*. Once such difficulties have been dissolved one may go on to attempt to answer the question of whether one’s mind (and hence other minds) which is amenable to such investigation can best be characterized after such an investigation as “a certain kind of information processing system,” as “a coalition of computerlike routines and sub-routines,” or instead as “a certain type of entelechy” or as “a certain sort of vital force” and so on. I shall refer to the difficulties encountered at this second stage as the *Characterization Problem*.

I mention entelechies and vital forces in passing because I wish to emphasize that a solution to the *Investigational Asymmetries Problem* does not settle in favor of physicalism the question of whether physicalism is true. The extent to which this latter question remains unanswered is the extent to which a theory such as vitalism could blossom from our investigation of nature in general. For example, it might seem reasonable to conclude on the basis of current physical theory that there are entities (say entelechies) inexplicable within the framework of that theory. (Compare Hans Driesch’s vitalistic conclusions insofar as they were based on his investigation of the development of sea urchins and not based on his investigation of Hans Driesch.¹⁶)

Also, as I have already intimated, the problem of the first stage is not just a problem for a physicalist view of the mind.¹⁷ (I shall, however, generally treat this problem as a problem for physicalism since I currently view this as the most persuasive monism abroad in the land. But see my final spooky footnote.) Suppose we wish to ask, sensibly, whether my mind, self, or consciousness is identical with some entelechy or vital force. Then, too, we must first establish that my mind, self, or consciousness is

¹⁶ Hans Driesch, *The History and Theory of Vitalism* (New York: Macmillan, 1914). Vitalistic metaphysics did not generally depend on puzzles about the self for its antimaterialistic conclusions. These conclusions were usually based upon seemingly inexplicable but publicly observable features of animals or people such as self-adaptive behavior. This is one reason why the counterexamples which cybernetic machines provided to the claim that nonmechanistic explanations (involving entelechies, etc.) were needed to account for self-adaptive behavior did not settle certain basic mind-body problems. That is to say, puzzles about the self could be utilized on behalf of a mind-body dualism whether or not cybernetic models made reference to entelechies unnecessary in explaining behavior.

¹⁷ Cf. Thomas Nagel’s “Physicalism.”

the sort of thing which is amenable to the investigations we use for finding out about entelechies or vital forces. It is obvious, for example, that even if Descartes had been willing to contend that he could imagine entelechies or vital forces as being nonentities he would *still* have thought himself left with the need to assert that “nevertheless *I* am something.” The “residue” of self or the *I* which remains once one has doubted away the existence of all physical and/ or vital things or features is precisely that which seems intuitively so implausible to identify with any physical and/ or vital thing or feature. So too, the dualism of the “knowing subject” and the “objects of knowledge” so prominent in a variety of idealist writings can be argued for quite independently of how nature in general is conceived—whether, say, in panpsychic or materialist terms.

An unsettling feature of most altercations concerning the mind-body relationship during recent years is that the disputants have often (a) ignored the necessity for passing through what I have called the first stage or (b) prematurely argued about the details of the second stage possibly in the hope that once these were worked out this might settle the perplexities encountered at the only dimly defined first stage, or (c) restricted their attention to asymmetries closely akin to yet not fully reflecting the *Investigational Asymmetries Problem*. These asymmetries are closely associated with the “other minds” problems, but they are not identical with it. In what follows I shall concentrate on the first stage, and propose a solution to the *Investigational Asymmetries Problem*. I shall set aside for the most part the issue of *Characterization*. This issue at the moment, I believe, can be best dealt with by developing and assessing analogies between minds and machines. But first some remarks on (c).

III

In the context of current controversies concerning the problem of “other minds” much attention has been given to the asymmetries¹⁸ expressed by the claims (A) that first-person psychological statements when honestly proffered are incorrigible and that third-person psychological statements are generally corrigible, and (B) that in order to know about my own thoughts, feelings, sensations, and so on, I need know nothing about my own neurophysiology whereas if physicalism were true you could

be certain of my thoughts, feelings, and sensations only by knowing something about my neurophysiology. The overlap between the problem of other minds and the problem of the mind-body relationship is that where there seem to be radically different ways of knowing about my own as opposed to your thoughts, feelings, and sensations, there is some reason to suppose that the sort of things I know about on the one basis, my own thoughts, feelings, and sensations, cannot be identical with any things of the sort I know or find out about on the basis of the other. The semantically unpalatable view that when I say “I am in pain” and when I say “you are in pain” I mean two different things by “pain” retains an edge of reasonableness only because it’s not wholly unreasonable to deny that my sensation, say, could be identical with any brain process. For it seems I need know nothing about my brain processes in order to know that I am in pain, whereas all that I can ever know in order to know (if I can know) that you are in pain is something like a brain process (together with behavior). This line of reasoning, of course, often leads to the claim that I don’t really know anything about your mind at all. So too, if first-person psychological statements when honestly proffered really are incorrigible, then how could the items which they are statements about (thoughts, feelings, sensations) be identical with the items which statements about neurophysiological events processes are about? For these latter statements are generally thought to be not incorrigible. In brief, as long as these asymmetries persist, there may be ways of arguing that physicalism is not home safe.

Claims (A) and (B) are at best crude paraphrases of richly textured positions which are celebrated enough to need no detailed recounting here. In some important respects progress has been made in clarifying the exact nature of these asymmetries and the extent to which they jeopardize a physicalistic interpretation of mentality. Two of these respects should be briefly discussed:

I think recent writers have convincingly argued that whatever the nature of the asymmetry with respect to me *vis-à-vis* my own mind and *vis-à-vis* someone else’s mind, it does not consist simply in the capacity to frame incorrigible psychological statements pertaining to my own case, as distinct from at best corrigible statements with respect to other people. For it seems conceivable, though perhaps surprising, that I might, with good reason, be persuaded to doubt and relinquish honestly proffered first-person reports of my own thoughts, feelings, and sensations. One of

¹⁸ For summaries of these asymmetries and numerous references to further discussions of them, see Jerome A. Shaffer’s “Recent Work on the Mind-Body Problem,” especially pp. 3–5 under the heading “The ‘Asymmetry’ of Mental Reports,” in *American Philosophical Quarterly*, 2 (April 1965), 1–24.

the most recent proponents of this claim, Paul Meehl, has sketched a persuasive case¹⁹ of a person becoming convinced that he is not experiencing a "visual raw feel of red" although it seems to him that he is. The person is brought to the point of believing that his own honestly offered report on his current experience may be inappropriate due to his overwhelming conviction that the neurological theory which tells him he should be experiencing something other than what he has said he is, is true. It's not simply a case where a person comes to *feel* that his first-person psychological statements are in error. He may, in fact, persist in *feeling* they are correct. It's rather a case where the person has sound theoretical backing for believing himself mistaken. (Compare some of the claims set forth in Richard Rorty's imaginative article "Mind-Body Identity, Privacy, and Categories"; see section 5.²⁰) Consequently if the asymmetry between what and how I can know about my psychological self and what and how I can know about the psychology of others which poses a problem for physicalism had consisted simply in the asymmetry between first-person psychological statements which were seemingly incorrigible and third-person psychological statements which were seemingly corrigible, then the problems encountered at what I have called stage one of any solution to the mind-body problem would have been solved.

I also think that J. J. C. Smart *et al.*²¹ have undermined the assumption that physicalism can be refuted simply by proving that I may know that I am in a certain mental state without knowing anything at all about my

neurophysiology. They argue as follows: Just as I may know something about Cicero without knowing that what I know is also true of Tully without thereby threatening the identification of the person Cicero with the person Tully, so too I may know something about my own psychological states or processes without knowing that what I in effect have knowledge of is the same thing you have knowledge of through knowing about my neurophysiological states or processes. Thus if the asymmetry between how and what I can know about my own psychological states and what and how I can know about the psychological states of others which poses a problem for physicalism had turned out to be simply the asymmetry between needing no neurophysiological knowledge in my own case and much neurophysiological knowledge in the case of others (or this asymmetry plus the first-mentioned one), then again there would be reason to suppose that the problems encountered at stage one of any solution to the mind-body problem would have been dissipated by recent writings.

Along these lines Professor Feigl reports²² that Bruce Aune had suggested (in conversation) that because of the "referential opacity" we do not at first realize that in talking about raw feels you are "really" (also) talking about certain (configurational) aspects of the cerebral states or processes. Feigl thinks that Aune's suggestion implies that by introspection we can do a crude sort of neurophysiology! He goes on to say "perhaps, if you try hard 'three times before breakfast' (*Alice in Wonderland*) you'll manage to believe this." But apart from reservations one might have concerning this approach, I think that Smart's remarks and Aune's suggestion at least point out that it's not a conclusive objection to the identity thesis of mind and body simply to show that I can know about my own psychological states without apparently knowing neurophysiology whereas you can know about my psychological states only by knowing about my neurophysiology. Furthermore, it is not at all clear to me that Aune's suggestion implies that introspection is a crude sort of neurophysiology. However it is we obtain information about Tully, there is no reason to suppose that this amounts to a crude version of however it is we obtain information about Cicero.

But I am not summarizing these views with which I am in general sympathy in order to defend or develop them. Instead what I wish to argue is

¹⁹ Paul Meehl, "The Compleat Autocerebroscopist: A Thought-Experiment on Professor Feigl's Mind-Body Identity Thesis," in Paul K. Feyerabend and Grover Maxwell, eds., *Mind, Matter, and Method: Essays in Philosophy and Science in Honor of Herbert Feigl* (Minneapolis: University of Minnesota Press, 1966). Cf. Meehl's remarks on privacy in this article, p. 134. He begins by saying: "It is agreed that no other person is the locus of my raw-feel events. This simple truth can be reformulated either epistemically or physiologically, as follows: a. A raw-feel event x which belongs to the class C_1 of events constituting the experiential history of a knower K_1 does not belong to the class C_2 of a different knower K_2 . b. The tokening mechanism whose tokenings characterize the raw-feel events of organism K_1 is wired "directly" to K_1 's visual cortex, whereas the tokening mechanism of K_2 is not directly wired to the visual cortex of K_1 ." If I had chosen to phrase one of my asymmetries above explicitly in terms of privacy or privileged access, I would then have included an adumbration of Meehl's analysis from which the quotation above is excerpted. I agree with the essentials of his treatment but would simply add that seeing why it is that privileged access to our own mental state does not refute physicalism does not show us why it seems we are unable to treat ourself as just another item of the physical world.

²⁰ *Review of Metaphysics*, 19 (September 1965), 24-54.

²¹ "Sensations and Brain Processes"; Thomas Nagel, "Physicalism." Also see Smart's "Materialism," *Journal of Philosophy*, 60 (October 24, 1963), 651-662.

²² In a mimeographed outline called "Crucial Issues of Mind-Body Monism" distributed at the University of Minnesota-UCLA Joint Colloquium on Mind-Body Problems held at UCLA, March 1966.

that even if the incorrigibility claims made on behalf of first-person psychological reports could be undermined, and even if it could be established that “talking about raw feels” might really amount to “talking about certain (configurational) aspects of the cerebral states or processes,” physicalism is not free from trouble. A reasoned resistance to it would remain. For the feeling would linger that wherever and however I might investigate the physical universe I could never come across the whole of the self which I am. In particular, I would never come across the self or aspect of it which was doing the investigation. Hence discussions of the asymmetries mentioned above do not really tune in on a basic mind-body perplexity. They do not, in short, exhaust the *Investigational Asymmetry Problem* as I have stated it. It is, of course, helpful to be shown that first-person psychological statements are not incorrigible simpliciter. And it is clarifying to see that even if my mental state is identical with a certain physical state it does not follow by Leibniz’s law that if I know I am in that mental state then I know I am in that physical state (since the context is intensional). But we are not thereby informed how it is that we could ever view ourself as a purely physical being. For in order to do this it certainly seems that I must be able, at least in principle, to see myself simply and wholly as one among many physical things in a physical universe. But this is precisely what remains so very difficult to do. And given that this is difficult to do, one is disinclined to accept the claim that descriptions of brain states are *in fact* descriptions of mental states. One might even suggest that the difficulty is of such magnitude that it is more appropriate to claim that it hardly makes sense to propose that talk about mental states might really be talk about neurophysiological states in the way that talk about Cicero is really (often) talk about Tully. (Compare “talk about $\sqrt{-1}$ might really be talk about the wind in the way that talk about Cicero is really talk about Tully.” But why should anyone ever believe this?) So the problem I wish to focus on is not simply that my self seems so private to me and hence could not be a physical object of scientific investigations carried out by others, but rather that it seems in some part so unpublic to me, and hence cannot be viewed by me at any given time as an item wholly susceptible even in principle to scientific investigations by me. (We might call this the problem of empirically “underprivileged access” to ourselves.) But if my self could never be wholly public to me in the way that cogs or pulleys, dendrites or axons seem to be, it is easy to be persuaded that it is not really wholly public to anyone else either.

Hence a thesis such as physicalism, which certainly ought to be committed to the view that my mental states are public in virtue of their being physical states or processes which are incontestably public, still seems implausible.

So what I now hope to show is that the asymmetry between how I am able to investigate myself (and thereby the subject of my thoughts, feelings, and sensations) and how it is I can investigate what I regard as other selves and other things within some spatiotemporal scheme is structurally similar to other ontologically benign asymmetries. By seeing why it is that these analogous asymmetries fail to thrust upon us any dualistic ontology of things, processes, or features, I think it will be shown that there is no need to suppose that the *Investigational Asymmetries* underlying the mind-body problem force upon us a dualistic ontology of things, processes, or features. If this is correct we shall pass through what I called the necessary first stage of any solution (and hence any physicalistic solution) to the mind-body problem. What will remain of the mind-body problem will be the *Problem of Characterization*, or the problem of providing an adequate inventory and anatomy of those features which we, in fact, find other persons to possess. Given the notable absence of any (current) arguments on behalf of vitalism or kindred anti-physicalist doctrines, the inventory and anatomy of other persons at present is heavily weighted in favor of physicalism.

IV

Although I regard each of the following cases to involve asymmetries analogous to the *Investigational Asymmetry*, the first will seem somewhat removed from it and as it stands is more problematic and perhaps less ontologically benign than the other cases. I include it in spite of some unsettled opinions about it mainly because it provides some indication of the variety of ways in which an *Investigational Asymmetry Problem* may be stated. If I am correct, it can be used to illustrate the manner in which problems concerning the mind-body relationship have a bearing on certain problems in linguistic theory: namely, the problem of disambiguation and the formulation of an adequate speaker-hearer model. But this I shall only hint at and not develop.²³ The second case bears more directly on the issues at hand, and has in slightly different forms appeared in the

²³ Cf. my *Lockean Linguistics* (in preparation).

writings of others (for example Wittgenstein²⁴ and Ruyer²⁵). As I shall try to show, the wrong conclusions are generally drawn from this sort of case. The third case and a curious corollary to it are, I trust, wholly on target.

Case I: *The My Meanings Problem*

Speaker-hearer asymmetries. When I say “I’m going to the bank,” you (the hearer) may have to “disambiguate” my utterance. You may need to interpret whether I’m going to the river bank or to a bank where one deposits money. But I do not, in the normal case, need to disambiguate for myself my own utterance. And not only do I not need to do so, in the usual case I could not do so. We can, of course, imagine a speaker going through the motions of doing this. For example, we can imagine Professor Chomsky asserting that “Flying planes can be dangerous” and then asking himself whether he meant “Flying” to be construed as a verb or as an adjective. But here we have only imagined someone going through the motions of disambiguating an utterance. Given that the speaker is actually making an assertion, it is absurd to suppose he should have to figure out for himself what he has asserted at the time of asserting it. (That someone may later have to disambiguate his own utterance for himself—coming across it in a diary or because he has a strange memory such that he can hardly remember the last two words he has spoken—is a logically possible case which need not be discussed once it is acknowledged.) Hence in the usual case we find that there is an asymmetry between the speaker vis-à-vis his utterance and the hearer vis-à-vis the speaker’s utterance. One could say, following Ziff,²⁶ there is an asymmetry between the encoding process involved in producing an utterance and the decoding process involved in interpreting that same utterance. This fact I shall redescribe for the purpose at hand by saying that for the usual case we as speakers are unable to make our utterances items for public interpretation by ourself after the manner in which we find, as hearers, the utterances of others to be public items for interpretation by ourself (or anyone else excluding the speaker).

²⁴ Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. D. F. Pears and B. F. McGuinness (London: Routledge and Kegan Paul, 1961), 5.621–5.641.

²⁵ R. Ruyer, *Néo-Finalisme* (Paris: Presses Universitaires de France, 1952).

²⁶ This asymmetry was first called to my attention by Paul Ziff. Cf. Charles E. Osgood and Murray S. Miron, eds., *Approaches to the Study of Aphasia* (Urbana: University of Illinois Press, 1963), especially “A Mediation-Integration Model,” by Charles Osgood, pp. 95–101.

Why, in general terms—not in terms of any specific information processing system—is this so?

Let us try to imagine its being otherwise. In what sense could my utterances be my utterances if I had to interpret them in a speaker-hearer context in the way a hearer does, if the problem of disambiguating my own utterance arose as naturally for me vis-à-vis my utterance as it does for a hearer vis-à-vis my utterance? There would, of course, still be an output (syntactic, lexicographic) which was mine, in a sense, but in what sense or to what extent would it be my assertion? To put it in a slightly different way, in what sense could my linguistic output be treated as a specific locutionary act with a specific illocutionary force (following Austin²⁷)? For example, in what sense could I in saying “I am going to the bank,” where I too need to disambiguate what I have said, be making a statement, if I was meaning to say something, if I know what I was saying when I was saying it, and so on? For to say that I would need to know what I was meaning to say in order to perform a certain illocutionary act is the same thing as saying I would not need to disambiguate my own utterance in the way that someone else would. For a condition for saying something and meaning it is simply that one is choosing to utter those phrases which will get his meaning across, and to say that one is doing this is to say that one does not need to disambiguate what he means, for what he is saying is being determined by what he means.

Suppose we tried to break down the asymmetry between a speaker’s stance toward his utterance and the hearer’s stance toward that same utterance. What would this involve? It would involve attempting to treat the locutionary meaning and illocutionary force as a hearer’s input. But how could this be done if what the speaker is saying is being determined by what he means? How can he reasonably be put in the position of having to ask “What does what I am saying (which is being determined by what I mean to say) mean?”

So suppose I utter “I am going to the bank” and someone else one minute later utters “I am going to the bank.” The two utterance tokens are tokens of the same utterance type, but the problem of disambiguating for me arises only in the case of the utterance token which was not mine. In other words, I am unable to view my utterance as an item for my own interpretation in the way I must treat the other speaker’s utterance as an

²⁷ J. L. Austin, *How to do Things with Words* (Cambridge, Mass.: Harvard University Press, 1962).

item demanding interpretation by me. There is, it seems, a systematic difference between any of my ambiguous utterances and any of anyone else's ambiguous utterances uttered as potential items in interpretation by me. But could such differences provide a basis for some kind of dualism with respect to the nature of my utterances as distinct from the utterances of others? Would, for example, such differences justify the claim that the nature of my utterance is utterly unlike the nature of utterances which I hear, since the latter can need interpretation by me, but my own do not need interpretation by me. (Consider: "My utterances could never be identified with the sorts of things which utterances needing interpretation consist in.") Of course not. So long as what I am saying is determined by what I mean, and what someone else is saying is being determined by what that someone else means, there is bound to be an asymmetry. In the usual case, I can never be a full-blown hearer, as it were, of my own utterance at the time of the production of that utterance, and so, if you produce the same utterance that I do at roughly the same time, I will stand toward your utterance in a way I do not stand toward mine. But that does not mean that there is anything peculiar about my utterance as distinct from any other utterance I may hear which stands in need of interpretation. To think so would be to overlook the fact that my output is for everybody else except myself like everybody else's verbal output *vis-à-vis* me. (As I will claim later, my self also is to everyone else except myself like everybody else's self *vis-à-vis* me.) The temptation to imbibe a dualistic ontology with respect to the nature of utterances can be seen to derive wholly from the harmless though ultimately exciting fact that I cannot be the receiver and sender of a particular message simultaneously. Consequently whenever I am sending a message, there will be at least one particular utterance in the world, the meaning of which I seem to have a privileged access to, namely, the utterance I am uttering. To wish to be either in as unprivileged a position with respect to the meaning of the utterance I am uttering, or in as privileged a position with respect to the utterances of others, is to wish that there was no such thing as the difference between a speaker and a hearer, or an encoder and a decoder of utterances.

But the bearing which an asymmetry of the speaker-hearer sort has on the problem of the self, as well as the metaphysical harmlessness of its character, can be made clearer and more convincing by considering another case.

Case II: *The My Eyes Problem*

How can I tell what both my eyes look like (at one time)? Not in the same way I can tell what someone else's eyes look like, not simply by observing them. Only by looking in mirrors, or at photographs, or at movies of me, or by asking others to tell me what my eyes look like.

There are two ways of finding out what a person's two eyes look like at one time: (1) a way of finding out about the eyes of others, and (2) a way of finding out about my own. A familiar division. Here we have a kind of other minds problem in reverse. I can know by directly looking at them what other people's eyes look like, but I can never know what my own eyes look like by looking at them—except with the aid of mirrors, photographs, and so on. (I shall hereafter rule out the latter.)

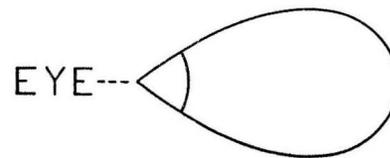
I can imagine what it would be like to be in a position to see what anybody else's eyes look like, but I cannot imagine what it would be like to be in a position to see with my present eyes what my present eyes look like. At least I cannot imagine being in a position to see what my eyes look like, without, say, imagining something like the case where I have my current eyes removed and replaced by a different pair of eyes. But this changes the case. By "my eyes," I mean to mean "the eyes which I now possess in my body and which I now see through."

But is there any reason to suppose that the general characteristics which my eyes have differ in kind from the sorts of features which other people's eyes have and which I can see that they have by looking at them? That is to say, are we in the least bit tempted here to propagate a double ontology concerning eyes: (1) the sorts of features my eyes have and which from my point of view seem nonvisible and (2) the sorts of features (or looks) everybody else's eyes have and which I am aware of whenever I look at them? Are we to imagine that there is more (or, better still, less) to other people's eyes than meets my eye since I have no reason to suppose I am unique, and, seemingly, every reason to suppose there is something in eyes which cannot be investigated since I cannot investigate my own?

Consider the complications which would arise if we tried to refute the testimony of mirrors, photographs, and other people as wholly adequate for our own case. We would have to assume that though we know what everyone else's eyes looked like, and know that they looked just as they looked in the mirror, ours do not look as they look in the mirror to everyone else. Ours, we might insist, have nonvisible features. If we were to do this we would also have to assume that the looks of our eyes differ from

any other part of the body with respect to their reflections in a mirror. We know our hands look as our hands look in the mirror; we know our stomachs look as our stomachs look in the mirror; and so on. But eyes, well, no, or maybe, or we can't tell whether they do look as they look in the mirror or that they are even the sorts of things of which it makes sense to say "they look a certain way," and so on. We would have to believe that everybody else lies with respect to our eyes, and that mirrors "lie" with respect to our eyes, though they "tell the truth" with respect to every other reflectable feature of us.

I do not conclude that my eyes look as they look in the mirror because I adopt a simple "reverse" argument from analogy: "Since other people's eyes look like what they look like in the mirror, therefore my eyes must look like what they look like in the mirror." Rather, it is because it would take an immensely complicated and implausible theory to try to explain my eyes not looking as they look in the mirror, given that my hands do, given that my feet do, given that other people's eyes do, given that I have no reason for thinking other people are lying when they tell me what my eyes look like, and so on. Lacking a special theory for my own case, I not only accept what other people say about the looks of my eyes, and what is shown in the mirror, I have excellent reasons for accepting this. And certainly I do not conclude that my eyes are, say, "featureless." This latter absurdity, however, is one we would be bossed into accepting were we to decide to "start from our own case" and reason by analogy to the nature of the eyes of others. We would be forced to submit to the conclusion, even in the face of other faces, that the eyes of others have no visible features, for our own eyes seem to us to have none. But we never seemed pressed to such calamitous conclusions, and this is because we have a perfectly good explanation of why we could never be in a position to see the features of our own eyes in the way we are in a good position (potentially) for seeing the features of anyone else's eyes. And the explanation is that in order for me to see my eyes with my eyes, my own eyes would have to be in two (actually four) places at once: in front of themselves to be looked at as well as at the point from which they are being looked at. Note too the conceptual absurdity involved in supposing we know how eyes (in general) look by "starting from our own case" and then reasoning by analogy that other eyes are as ours seem to us, i.e., featureless. What possible sense could be given to the claim that our eyes seem to us to have or lack features of any sort whatsoever if we suppose there are no mirrors about etc.?



Wittgenstein remarked in the *Tractatus*: "For the form of the visual field is surely not like this,"²⁸ that is, like the diagram, which connects up with his earlier remarks at 5.631: "There is no such thing as the subject that thinks or entertains ideas." "If I wrote a book called *The World as I Found It*, I should have to include a report on my body, and should have to say which parts were subordinate to my will, and which were not, etc., this being a method of isolating the subject, or rather, of showing that in an important sense there is no subject, for it alone could not be mentioned in that book."²⁹ Surely Wittgenstein here has his eye on what I have called the *Investigational Asymmetries Problem*. In other words, just as the eye does not, cannot, see itself in its own visual field, so too, the self will never, in its inventory-taking of the world, find itself in the world in the manner in which it finds other people and things. But Wittgenstein wrongly concludes from this that the self ("the subject") in "an important sense" does not exist. What I am arguing is that there's no more reason to suppose the self does not exist because it is unable to observe itself than there is reason to suppose eyes have no visible features since they are unable to observe them for their own case. Compare: The speaker's meaning does not exist for utterance tokens because only items which require some degree of interpretation or disambiguation can have meaning, and a speaker doesn't interpret or disambiguate his own remarks! Note that Wittgenstein anticipates this move but seems willing to accept the consequences: "You will say this is exactly like the case of the eye and the visual field. But really you do *not* see the eye."³⁰ Of course. But we really *do* see eyes, and (1) have an explanation of why it is we cannot observe our own, and (2) have no reason to assume our case is unlike the case of other eyes which we do observe. But if our having eyes does not guarantee that we ourselves will be able to inspect their looks, their visible natures, why should we suppose that our being or having selves should guarantee that we will be in a position fully to inspect their natures, and so on? The way back into the world for the self which seems to itself not to be there is

²⁸ *Tractatus*, p. 117.

²⁹ *Ibid.*

³⁰ *Ibid.*

simply its coming to realize that it is to other people what other people are to it.

The case of “my eyes,” though it is a kind of other minds problem in reverse, about which I’ll have something to say later, is exactly parallel to that problem of the self which has concerned me here. For the problem of convincing myself that the looks of my eyes are (more or less) exactly like the looks of other eyes is parallel to the problem of becoming convinced that the nature of my self is (more or less) exactly like the selves of others which, it seems, can be exhaustively described by reference to their behavior and physiology.

But one last case will help us to consolidate and further clarify the conceptual theses advanced in the first two cases. It might be noted that nowhere in our third case is any mention of a living organism involved. This should serve to erase any suggestion that the form which the *Investigational Asymmetry Problem* takes is peculiar to sentient agents.

Case III: The Self-Scanning Scanner Problem

Suppose we have a nonconscious scanning mechanism, call it SM_1 , which is able to scan what we shall call its communication cell, CC_1 , somewhat after the manner in which current computing machines are able to scan symbols in their communication cells. We shall imagine CC_1 to be a cell of rather flexible size. It will be able to expand and contract. We shall suppose that SM_1 could scan CC_1 for the appearance of symbols, or the presence of objects, say a bug or a watch or a feather. Let us also imagine that SM_1 could scan other scanners, SM_2, SM_3, \dots, SM_n , all of which would differ from SM_1 only in that they’d be smaller than SM_1 during the time at which they were being scanned. Whenever a scanner such as SM_1 scans another scanner, the scanner being scanned will have to shrink suitably in order for it to appear in CC_1 . (Later we shall relax the restriction that any object being scanned by SM_1 must appear in SM_1 ’s CC_1 . This will lead us to temper some of the following claims.) We shall also suppose that SM_1 could scan other scanners while they were in the state of scanning things. Scanners SM_1, SM_2, \dots, SM_n will be similar in all interesting respects: in design and structure, and in the sorts of inputs, outputs, and so on which are possible for them. So now let us suppose that SM_1 is able to perform what we shall call a “complete scan” of the workings of SM_2 , while SM_2 is scanning its communication cell CC_2 in which there appears some symbol or thing. Thus the nature of SM_2 , its

program, its actual operation while scanning CC_2 , will be made available to SM_1 in the form of descriptions. Each scanner we shall suppose to be endowed with certain pattern recognition or generalization capacities. For example, each scanner will be able to recognize various instances of triangles as triangles, apples of different sizes and color, all as being apples, and so on. Thus a scanner will be equipped to answer simple questions about how a certain item is classified. Let us imagine that such information could be stored as an entry to a list contained in some storage system which is an appendage of SM_1 . Let us call this list SM_1 ’s “World List.” And let us call the list of all possible World Lists (of scanners SM_1, SM_2, \dots, SM_n) “The World List.” So now let us imagine that SM_1 goes on to scan SM_3, SM_4, \dots, SM_n while each is in a state of scanning a symbol or a bug or a watch or a feather. Thus a description of each scanner scanning would be potentially available to SM_1 and could be stored in SM_1 ’s storage system on its “World List.” And if we imagine the universe in which SM_1 exists as being a universe in which there are only other scanners SM_2, SM_3, \dots, SM_n and a few objects and events—feathers, bugs, watches, scanners scanning—then we can imagine SM_1 being able to describe virtually everything in its universe. That is, it could in principle scan almost everything in its universe and store a description of each item on its World List. But obviously there is going to be one description which SM_1 will never be able to insert on its own World List: namely, any complete description of SM_1 while it is in a state of scanning. SM_1 is, of course, not able to obtain information about itself while scanning in the same way that it is able to gain information about SM_2, SM_3, \dots, SM_n . In order for SM_1 to obtain information about itself scanning an X, say, in the way that it obtains information about SM_2 scanning an X, SM_1 would have to be in two places at once: where it is, and inside its own communication cell.

Nevertheless, a description of SM_1 in a state of scanning will be available to the World List of some other scanner—say SM_{27} . Hence, such a description could appear on *The World List*. All descriptions of scanners in a state of scanning could appear on *The World List*. So if we think of scanners SM_1, SM_2, \dots, SM_n as all being of a comparable nature, and the descriptions of them in a state of scanning as depicting that nature, then we can see that SM_1 in a state of scanning is the same in nature as the other scanning scanners it scans, though it will never be able to locate a description which depicts its nature of other scanners scanning which

are descriptions on its (SM_1 's) World List. In other words it would be utterly wrong to conclude from SM_1 's failure to find a description of its own state of scanning on its World List (or for SM_1 somehow to report on the basis of this) that SM_1 possessed features different in nature from the features which other scanners scanning had and which could be revealed to SM_1 . For this would be to suggest that a comparison between SM_1 's features and the features of other scanners made available to SM_1 while scanning had been made and that radical differences had been found. Although scanner SM_1 is in principle unable to construe itself on the model of other scanners in a state of scanning in the restricted sense that it cannot construct a list of information about itself comparable to the lists of information it can compile about other scanners, there is no reason for it to report or for us to suppose that some kind of scanning dualism is in order. In other words, there is no reason to assert that SM_1 while in the state of scanning differs in nature from the sorts of features it finds other scanners to possess while in a state of scanning X. Hence, there is also no reason to suppose that there is more to other scanners in a state of scanning than that which could be revealed to SM_1 .

An alternative and somewhat more formal way of stating some of the points above together with further ones suggested by them is to construct a "grammar" with which we can generate all possible semantically well-formed descriptions of any scanning mechanism, SM_i , which is in a state of scanning. Our grammar will be a "device" for parsing or analyzing any SM_i in a state of scanning into its constituent parts. Following, metaphorically and incompletely, Chomsky's account (in *Syntactic Structures*³¹) of phrase structure grammars, we can conceive of a thing-structure "grammar" for describing nonabstract objects, SM_i 's, in a state of scanning as being "a finite set F of instruction formulas" of the form $X \rightarrow Y$ interpreted: "rewrite X as Y." Thus given our "grammar" (Σ, F) we can "define a derivation as a finite sequence of strings, beginning with an initial string of Σ , and with each string in the sequence being derived from the preceding string by application of one of the instruction formulas of F." Those derivations which cannot be rewritten by any further application of the rules F will be called terminated derivations.

So now let SM_{1s} be the symbol for a given scanning mechanism in a state of scanning. Given our previous account of the nature of SM_i 's, their

³¹ The Hague: Mouton, 1957; see especially pp. 26-30.

flexible communication cells, the variety of objects they might scan, etc., we can ask: What according to our "grammar" should be the permissible combinations of constituents for SM_i 's? And the answer seems to be that our grammar should consist of, and certainly not violate, the following rules:

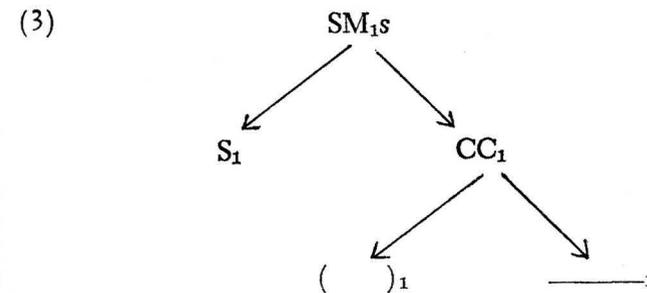
- (1) (i) $SM_{1s} \rightarrow S_1 + CC_1$
- (ii) $CC_1 \rightarrow (\quad)_1 + \text{---}_1, SM_{1s}, \text{Object}_i, \text{etc.}$

where each rule $X \rightarrow Y$ of (1) involves a left to right rewrite, and where a given SM_{1s} is the symbol for a scanning mechanism in a state of scanning; S_1 is the symbol for a scanner; CC_1 is the symbol for SM_{1s} 's communication cell; $(\quad)_1$ is the symbol for the space in that communication cell; ---_1 is the symbol for the absence of any object in CC_{1i} ; and for any object in SM_i 's communication cell other than an SM_i we shall use italicized terms such as *bug*, *feather*, *watch*. (Restrictions on SM_{1s} in (ii) will be discussed in due course.)

Now consider:

- (2) SM_{1s}
- $S_1 + CC_1$ (i)
- $(\quad)_1 + \text{---}_1$ (ii)

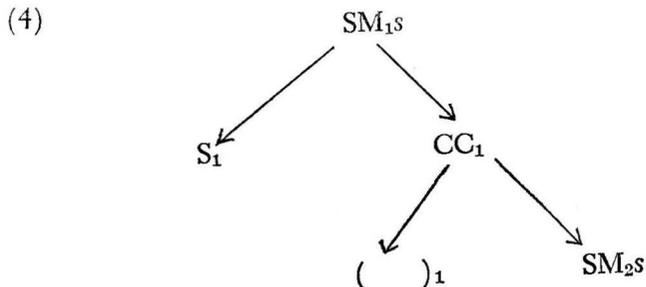
where the second line of (2) is derived from the first by rewriting SM_{1s} in accordance with rule (i) of (1), and the third line is obtained by rewriting $S_1 + CC_1$ as $(\quad)_1 + \text{---}_1$ in accordance with rule (ii) of (1). We can also represent (2) by means of a tree diagram:



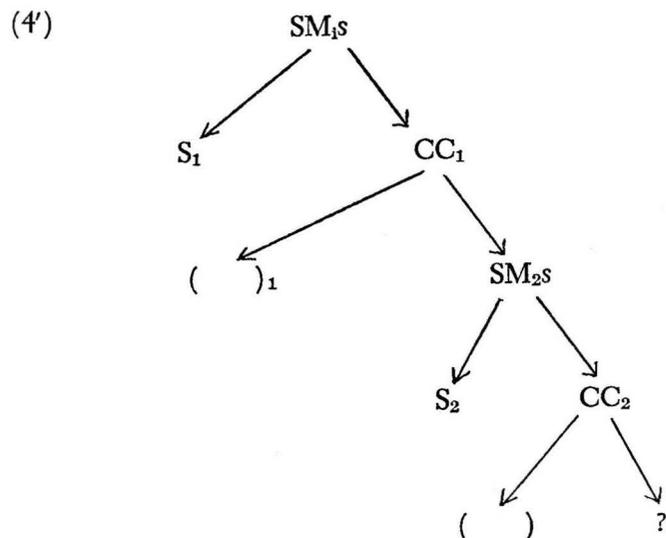
$S_1 + (\quad)_1 + \text{---}_1$ may be thought of as a *terminated* derivation in our "grammar" since, given our restricted vocabulary, we have no way of rewriting either S_1 , $(\quad)_1$, or ---_1 . This terminal line we may interpret as describing a possible SM_{1s} with the nature of its constituents

fully analyzed by the tree with which the terminal string is associated. If we were to substitute *feather* for _____₁, however, we would get a terminal line showing SM_{1s} as a scanning mechanism scanning its communication cell in which there was a feather, etc.

Interesting problems arise, however, when we ask what, if any, constraints should be placed on the occurrence of other SM_{1s}'s in SM₁'s communication cell. Certainly for any SM_{1s} ≠ SM_{1s} it is permissible to substitute SM_{1s} (say SM_{2s}) for _____₁ in tree diagram (3). Thus we could have:



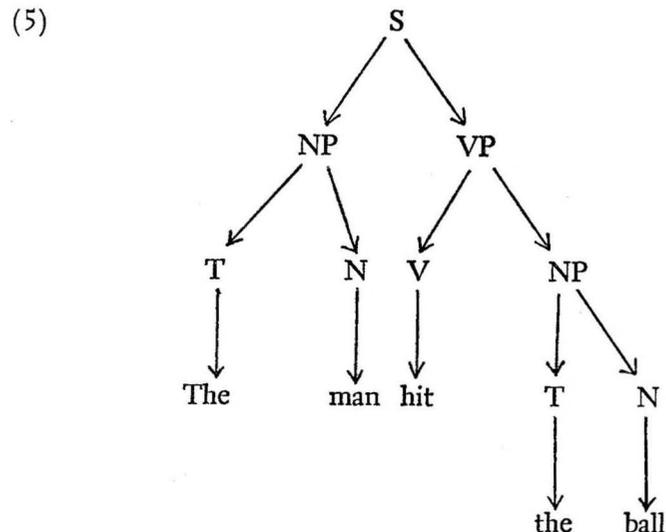
where S₁ + ()₁ + SM_{2s} would not be a *terminated* derivation since SM_{2s} could itself be parsed. Hence the complete tree, call it (4'), might be:



where if ? is replaced by _____₂ or *feather* we would have a *terminated* derivation; whereas if another SM_{1s}, say SM_{3s}, were substituted for ? we would have an *unterminated* derivation, etc.

But now we must ask: Can we allow an SM_{1s} = SM_{1s} to recur as the label of some right-most node in a tree which finds SM_{1s} as the label of the top-most node? Certainly one conclusion of our less-formal previous discussion would seem to preclude this. For it was explicitly stated that SM₁ could not occur in its own communication cell. And since "contained in" denotes a transitive relation SM_{1s} could not occur in any communication cell, say SM_{2s}'s, if the scanning mechanism to which that communication cell belonged occurred in SM₁'s communication cell, etc.

There is, so far as I can tell and as I shall subsequently show, no way of relaxing this restriction without falling into contradiction. And given our thing-structure "grammar" we are now in a position to say, in a rather novel, and I think interesting way, exactly why this is so. We can do this by comparing the role of the SM_{1s} in our grammar to the role of S = sentence in an actual phrase-structure grammar. Suppose we have:



where S = sentence, NP = noun part, VP = verb part, etc., and The + man + hit + the + ball is a *terminated* derivation. (For rules parallel to our (1) above and further details of phrase-structure grammars see Chomsky, *Syntactic Structures*.) What is of primary interest to us in (5) is whatever restrictions are to be placed on the recurrence of S. S is a cate-

gory symbol for sentences in the same way SM_{1s} is a category symbol for scanning mechanisms in a state of scanning. Clearly there is no reason why S should be prohibited simpliciter from recurring at nodes of either right- or left-branching paths descending from S . For such a recurrence would be a convenient way of indicating a sentence which had as one of its constituents an embedded sentence. (Cf. Chomsky's *Aspects of the Theory of Syntax*.³² Note, however, in *Syntactic Structures* reference to two distinct sentences, S_1 and S_2 , does not occur in (Σ, F) type grammars. The nature of this constraint need not trouble us here.) On the other hand it is obvious that some restrictions must be placed on the embedding of sentences within sentences. And clearly one restriction, the restriction that is of most interest here, must be that a sentence cannot embed itself. For what would this involve? It would involve the recurrence of S , call it S' , such that $S' = S$. But this would be tantamount to allowing S with itself embedded as one of its constituents to be equivalent to S , which is a contradiction. (Compare: The man hit the ball \neq The man hit The man hit the ball the ball. And a still different yet analogous example suggests itself: the difficulty of a painting of a painting where the first painting = the second painting. I might paint a painting of "Guernica" and preserve all the dimensions of "Guernica" in doing so. So might Picasso; but not while painting "Guernica.") Hence S can recur in a tree only if it is understood that the initial string $S \neq$ the recurrent string S . Part of a sentence, or another sentence, can, of course, occur in a sentence as one of its constituent parts, e.g., the main clause of a sentence can occur in the subordinate clause of the same sentence as in "The man who told me that the man hit the ball," etc. (Compare: Any SM_{1s} might scan part of itself.)

So now let us suppose, as seems reasonable, that total consciousness of one's self would be analogous to a scanner completely scanning itself. Further let us suppose that SM_{1s} 's are describable in terms of a thing-structure "grammar" which has a formal equivalent in a phrase-structure grammar (of the sort mentioned above). Then the following conclusion emerges: *Total consciousness of one's self is formally equivalent to a self-embedded sentence; any self-embedded sentence involves a contradiction, for no whole sentence can be one of its own constituents; hence any example of total consciousness of one's self involves a contradiction.* And the corollary of this which interests us is: *For one's self to observe one's self*

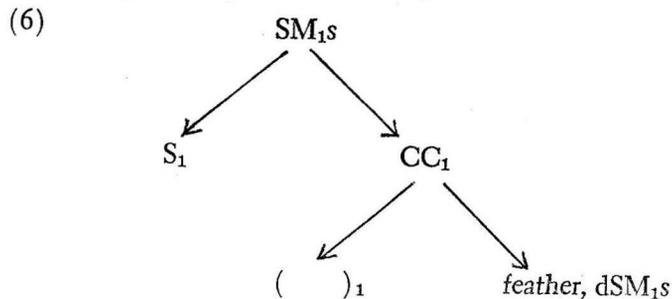
³² Cambridge, Mass.: MIT Press, 1966.

as a wholly physical object would be an example of one being totally conscious of one's self, which is a contradiction.³³

We have reached this conclusion by a most curious route; namely by extending our (allegedly) ontologically benign asymmetries so that they now include the asymmetry between any whole sentence S vis-à-vis its constituents and certain sentences $S \neq S_1$ vis-à-vis S_1 's constituents.

It might seem, however, that some of our conclusions above would be left begging for premises were we to relax our restriction that for SM_1 to scan an object, that object must appear in SM_1 's communication cell. Instead we might allow SM_1 to scan any objects which, while remaining wholly external to SM_1 , come within what we may call the "scope" of SM_1 's scan. Further suppose that any scanner scanning an object internalizes some sort of image of that object which it uses as the basis for its derivation of a description of the object being scanned. Now let us imagine the case where SM_{1s} is being scanned by SM_{2s} and where SM_{1s} is able to scan the image of itself appearing in SM_{2s} . It might then be argued, would not this be a way of SM_{1s} wholly inspecting itself? In a sense, of course. But not in a sense which abrogates the sort of asymmetry which has been troubling us. For SM_{1s} can only store a description of itself by way of an examination of the image it obtains from the image of itself which appears in SM_{2s} . Thus SM_{1s} can confront the whole of itself only in the sense that I can, through my current eyes, see those eyes, namely by looking in a mirror. But there is no way that SM_{1s} can confront the whole of itself which does away with the asymmetry between its confrontation with the whole of itself and its confrontation with the whole of some other SM_{1s} .

So too we can easily imagine SM_{1s} at time t_1 scanning, together with a feather, say, a description of itself at t_1 . Thus:



³³ In a reading of this paper at the Rockefeller University (February 15, 1968), Professor Robert Nozick (now back at Harvard) suggested that my conclusion would hold

where dSM_1s = a token of the tree diagram (6).

But if we suppose that in order to be informed that a description actually describes a given object the description must in some sense be seen to apply to or be true of that object, then we cannot imagine SM_1s being able (1) to scan a description of itself scanning, and (2) recognize the applicability of the description to itself, if recognizing the applicability of the description involves making SM_1s wholly available to SM_1s . But of course, SM_1s could do this in the case of SM_2s . Hence the troublesome asymmetry persists.

The case of the scanning mechanism is very much like a case of a periscope which is able to sight other ships, even parts of the ship to which it belongs, but which is unable to place itself in its own crosshairs (compare R. Ruyer's *Neo-Finalisme*³⁴).

The import of such examples for the mind-body problem should by now be transparent: The difficulty in construing our self at any given moment as an item wholly susceptible to third-person physicalistic and behavioristic descriptions is comparable to the difficulty a periscope would face in attempting to place itself between its own crosshairs.

v

On the basis of the foregoing cases, I think it is correct to conclude that the following statements are true: (1) My (potentially ambiguous) utterance tokens are identical in kind with members of the class of utterance tokens requiring disambiguation even though I am, as encoder of my utterances, never in a position of needing to disambiguate them. (2) Even though I can never be in a position to look at them, the visual appearances which my eyes possess are identical in kind with members of the class of visual features to which the visual features of the eyes of others belong, which features are revealed to me simply by looking at other eyes (sans mirrors, photographs, etc.). (3) Whenever scanner SM_1 is in a state of scanning its communication cell, it is in a state identical in kind with the sorts of states other scanners in a state of scanning are in, and which are revealed to SM_1 whenever other scanners scanning are placed in SM_1 's communication cell. (A periscope₁ is identical in kind with members of

only if the mind were finite, and that if it could be represented by an infinite sentence total self-embedding would be possible. A number of us including myself found this a very interesting suggestion, though none of us seemed wholly to understand it.

³⁴ See footnote 23.

the class of periscopes₂_n any one of which periscope₁ can place between its crosshairs.)

The three statements above might all be called "metaphysically neutral." For even though it can be shown that X, say, is identical in kind with Y's, it leaves open the question what kind of things Y's are. Yet such a "metaphysically neutral" identity statement is, I believe, exactly what must first be shown to be true if a theory such as physicalism is to seem justified. The statement which the analogies above are designed to support is this: "I am identical in kind with what I find other people to be" where by "what I find other people to be" is meant as they are (or might be) revealed to be on the basis of empirical investigation, etc. (which could in principle be found out by me). This latter qualification must be made in order to distinguish our case from the case where someone accepts the claim that he is identical in kind with other people but asserts that other people all have private selves not amenable to empirical investigation where this is derived from his belief that he is a self not amenable to such investigation. That is, I am assuming that what we find other people to be will no longer be colored by the assumption that since I cannot wholly investigate myself, then since there is no reason to assume I am unique, there is something for all people which does not yield to empirical investigation either. In other words, "what I find other people to be" will be construed as "what I find them to be sans use of the just mentioned assumption." This again, as argued earlier, does not load the dice in favor of physicalism. It simply seems that way, since it is obvious at the moment that unless we resort to such an assumption there is no reason to suppose other people are not wholly physical beings.

It is easy to saddle oneself unwittingly with the view that if I am an object wholly amenable to scientific investigation, I had better be able to imagine myself as being an object which I myself could wholly investigate. This, I have argued, is an absurd demand. And for the same reason that it's absurd to demand that I be able to see my own eyes if I am to credit them with the same sorts of features I ascribe to the eyes of others. Yet the self-centered insistence that if I am an item susceptible to empirical investigation I ought to be able, at least in principle, to carry out the complete investigation is quite understandable. For what this really adds up to is the insistence that anyone, myself or others, be able to demonstrate to my satisfaction that I am such an item. And the insistence that it be possible to demonstrate to my satisfaction that I am such an item slips into

seeming comparable to the demand that I be in a position to appreciate the demonstrations. (Compare: I must be the sort of creature which can never die, since I cannot imagine being in a position to observe my own death. And since I'm not unique, perhaps we are all immortal.)

But given that what I have called the "metaphysically neutral identity statement" is true, the main obstacle is removed from the path leading to the conclusion that I am exactly like the sort of thing I find other organisms to be, even though I can never examine myself fully in the way that I could at least in principle examine other organisms. And in the absence of uncovering in our investigations of others any evidence or reason to support the existence of immaterial entelechies, psychoids³⁵ (in Meehl's sense), Cartesian egos, or what not, there is every reason to suppose that physicalism will do. If any kind of dualism is to show its mettle, it must now do so from a third-person standpoint. It will have to be solely from an investigation of other people or things that we find reason to suppose the existence of Cartesian egos, entelechies, or psychoids.

Furthermore, once it is realized why it is we are never in a position fully to investigate ourselves, it should seem less counterintuitive to suppose that as we find out more and more about the neurophysiology of other people we will be really finding out more about the nature of their (and hence our) subjective minds. Let us suppose that at any given time we can only investigate ourselves up to a certain point, before we, as investigator, are unable to treat ourselves as the object of our investigation; where, say, some information-processing center in the brain, some subregion of the cortex, is unable to process information about its own information processing. Let us call this point P. Let us further suppose that we are able to investigate others beyond point P, to point BP. And let us assume that what we find out at BP is similar in kind to what we find at P. What might at first sight seem odd is that what we find out by advancing to BP in the case of others should in effect be an indirect explanation of the nature of whatever there is to our own minds which we seem utterly unable to investigate in the way in which we can investigate ourselves up to P. It is easy to assimilate the rest of our mental life to this seemingly intractable residue of self and then comment on the amalgam by saying, "But I have knowledge of my self which consists of sensations, of thoughts, and of feelings—simply by having thoughts, feelings, and sensations." And what we find when we advance to point BP in the case of others will intuitively

³⁵ See Paul Meehl, "The Compleat Autocerebroscopist," pp. 120–127.

seem to have nothing to do with the clarification of our own self and what we take to be its various aspects, namely thoughts, feelings, and sensations. But the answer to the person who feels the necessity for saying something like this is simply to point out that all he knows about thoughts, sensations, and feelings is that he knows what it is to have them, what it is to have a sensation, or a thought, or a feeling. He does not thereby know how to sketch a complete picture of the nature of whatever it is he is having. To be an item which is having experiences does not guarantee a knowledge of their nature anymore than to be an item with an anatomy guarantees an awareness of the nature of that anatomy. (Compare the defect in "I know what a roller-coaster ride consists in by having a ride on a roller coaster.")

VI

The initial plausibility of nonphysicalism according to my story turns out to derive in large part from the fact that I cannot be in two places at the same time, and the tendency to wish to be in as good a position to investigate myself (scientifically) as I am in (at least potentially) with respect to others. Curiously enough the failure to be able to be in two places at once in this case forces us to feel that we, as minds, or consciousnesses, are not in any place at all. As Schopenhauer was to write:

... the body is an object among objects, and is conditioned by the laws of objects, although it is an immediate object. Like all objects of perception, it lies within the universal forms of knowledge, time and space, which are the conditions of multiplicity. The subject, on the contrary, which is always the knower, never the known, does not come under these forms, but is presupposed by them; it has therefore neither multiplicity nor its opposite unity. We never know it, but it is always the knower wherever there is knowledge.

So then the world as idea, the only aspect in which we consider it at present, has two fundamental, necessary, and inseparable halves. The one half is the object, the forms of which are space and time, and through these multiplicity. The other half is the subject, which is not in space and time, for it is present, entire and undivided, in every percipient being.³⁶

And it is this sense of nonlocation which tends to reinforce the view that the mind is only contingently connected with the physical. But the foregoing arguments, if correct, should rid us of any temptation to adopt either view.

³⁶ Arthur Schopenhauer, *The World as Idea*, I, 2, pp. 5–6, in Irwin Edman, ed., *The Philosophy of Schopenhauer* (New York: Modern Library, 1928). Cf. George Pitcher's

So too, if I am really never in a position to exhaustively inspect the self which I am, to include it in my inventory of physical facts garnered through physical investigations, since I would have to be investigator and object of investigation simultaneously, we might expect this fact to reflect itself in our language. And this, I believe, is precisely what underlies the odd referential status of the indexical "I." (Recall Professor Ryle's discussion of the "systematic elusiveness" of 'I'³⁷ where part of his strategy was to show that the evasive reference of the indexical did not foist Cartesianism upon us.) What I have, in effect, tried to show is that the puzzle surrounding "I" is a manifestation of a deep dissatisfaction with either physicalism or any monism, a dissatisfaction which is rooted in the seeming unpublicness of our self. That "I" when used in an utterance refers only to the user and not to anyone else and is in this sense for each token occurrence private, or nonpublic, is parallel to the fact that I cannot make myself an object for public inspection by me and still remain myself. That I cannot refer wholly "outward" by using "I" reflects the fact that I cannot investigate myself as a wholly public object. By saying that the use of "I" in an utterance is restricted in that it can never be used to refer wholly "outward," I wish to call attention to the fact that even in cases where I use "I" in an utterance to specify a certain person (obviously myself) who was or will be, "I" will necessarily specify as well the person I am at the moment of utterance. Consider: I say (while looking at an old photograph) "Here I was in 1950." In such cases the "I" still serves to specify the speaker (whatever else it might do). (Note: It is precisely this fact that "I" is in any utterance token speaker-specifying which leads to the oddity Hintikka³⁸ points out in the case where a person attempts to convince someone he doesn't exist by saying "I don't exist.")

This feature of the first-person pronoun indexicals is the linguistic frosting on the factual cake: the ingredients of the latter being my (or anyone's) inability to treat myself (himself) wholly as another person or thing. If I were able on occasion to treat myself wholly as another person or thing, then "I" would not be, could not be, restricted in the manner specified above. The reflection of this fact underlying this restriction on

discussion of this passage in his *The Philosophy of Wittgenstein* (Englewood Cliffs, N.J.: Prentice-Hall, 1964), p. 147.

³⁷ In *Concept of Mind* (New York: Hutchinson's University Library, 1955), pp. 195-198.

³⁸ Jaakko Hintikka, "Cogito, Ergo Sum: Inference or Performance?" *Philosophical Review*, 71 (January 1962), pp. 3-32.

"I" would, of course, be plowed under were we to imagine our language sans egocentric particulars (following Russell). Yet in agreement with Russell we can see why in one sense "I" is not needed in our descriptions of the world. For once we are aware that the unpublic nature of my self vis-à-vis me does not show my self to be unpublic simpliciter, each of us is then in a position to see and describe ourselves by way of an acceptance of how others see and describe us—and others do not (cannot), of course, utilize "I" in their descriptions of us.

The solution to stage one of the mind-body question, on the analysis above, turns out to be nothing more than coming to accept that we will never be in as good a position to investigate ourselves as we are to investigate others, and seeing why this makes no more difference (ontologically) than the fact that a submarine's periscope cannot locate itself in its own crosshairs makes an ontological difference between the nature of the periscope doing the sighting and the things it can sight. If this is true, then what remains to the mind-body is working out the details of characterization which so far, at least, seems snugly confined to the province of biology, chemistry, and physics.

The Schopenhauerian self which could not locate itself as just another member in the sprawly family of physical objects is comparable to a periscope which is safe from the torpedoes of its own submarine because it can never locate itself in its own crosshairs. But just as such a periscope is only safe from its own torpedoes and not the torpedoes of others, so too a Schopenhauerian self (or Cartesian ego) is only safe from spotting itself in the physical world. It is not safe from being spotted there by others.

VII

Finally, I wish to sketch the way in which I believe it possible to derive from the foregoing solution to the problem of the unpublic self a corollary solution to the problem of other minds insofar as that problem has seemed to place a stumbling block in the path leading to a consistently formulated physicalism. This corollary seems to me to deserve more elaboration than I can give it here, but at least the strategy involved can be adumbrated.

It was claimed earlier that the "My Eyes" problem is (1) exactly parallel to the problem of the self as herein described; and (2) exactly the reverse of the other minds problem. In the one case I lack a kind of knowledge of my self which I possess with respect to others. In the other

case I lack a kind of knowledge of others which I seem to have with respect to myself. Now if I have shown that the asymmetry involved in the case of the unpublic self does not constitute a threat to physicalism, or to any other monism, there is hope that the asymmetry involved in the case of other minds does not constitute a threat to physicalism either. That is, if the problem of “My Eyes” does not force dualism upon us, and if that problem is the reverse of the other minds problem, then perhaps the solution can simply be reversed and yield a solution to the other minds problem. In other words, although the problem of the unpublic self and the problem of other minds are to some extent separate investigational asymmetries, they are similarly asymmetric. They have a common source and structure.

Let me now explain what I mean by this. I shall do this by showing in more detail how one’s being limited to being in one place at one time gives rise to the other minds problem. The best way to proceed may be to begin with a case where there is a simulation of a solution to the other minds problem. By inspecting the simulation we may be able to uncover the conditions which would in actuality have to obtain in order to prevent an other minds problem from arising.

The Cinematic Solution to the Problem of Other Minds

What I shall refer to as *the cinematic solution to the problem of other minds* is really a simulation of a situation in which aspects of someone else’s mental life are made fully available to me in the way my own are. This epistemological shiftiness is encountered in those movies where a director wishes to provide the moviegoer with a sense of being fully acquainted with, say, the visual experience of one of the characters on the screen. Suppose, for example, the director wishes to make (or seem to make) available to me the visual experience vC of some character C as C walks down the garden path. How best to effect this? Not, surely, by simply flashing on the screen the scene of C walking down the garden path. Why not? Because what we seem to see or are made familiar with, come to know in such a case, is not C ’s visual experience vC , but our own visual experience vO which includes the view of C walking down the garden path. What is needed to avoid this, and to effect a sense of view C ’s vC , is some way of exporting our own perspective from the situation, and importing C ’s perspective into it. But how can this be done, or even appear to be brought about? The way to do this, and the way any movie director

with slight cunning will do this, is to create the illusion that we are where C is. And this is most simply (and in fact necessarily) brought about by showing little or nothing of C ’s body as C walks down the garden path. The camera, in other words, is able to produce a sense of moving down the garden path without showing someone moving down the garden path. In brief, we are provided with C ’s perspective, the visual experience expected for C when walking down the garden path, by removing C ’s body from our own perspective. (Of course, selected parts of C ’s torso may remain in view without destroying the illusion.) In such a case it is not untoward to say we seem to see C ’s seeing. Consequently we are provided with a simulated solution of the other minds problem as it arises for us vis-à-vis C ’s visual experience.

A suspiciously whimsical example perhaps, but one with a nonwhimsical aspect. The connection between the *cinematic solution to the other minds problem* and the solution I have suggested to the problem of the unpublic self should be clear. Both demand what cannot in practice be brought about: being in two places at once. This is made even more apparent when it is pointed out that the problem of the unpublic self has a similar pseudo-solution in the case of movies. The solution is, simply, to create the illusion that there is no investigational asymmetry, or that I stand to myself in the way I stand to others, by flashing my body on the screen along with the bodies of other people. Hence, it would be as if I were to seem to see myself walking down the garden path. Note: Although it does not seem possible to have one’s perspectives and see them too, even this might be simulated in the case where (a) I see my body on the screen, and then (b) the *cinematic solution to the other minds problem* is brought about for me vis-à-vis my own body as viewed on the screen! In other words, I am made to share the perspective of myself by the removal of most or all of the body from the screen with which I have identified myself. What this selected short subject suggests is that one cannot envision a situation in which the problem of the unpublic self is in practice solved for a person without the problem of other minds arising for that person vis-à-vis himself.

To encapsulate: The other minds problem as I have been construing it is really a problem in sharing perspectives. And to share perspectives with another would entail being in two places at once. (Note: What others have called egocentric particulars, etc., William James labeled “words of

perspective.”³⁹) We never do share perspectives, so in fact there always is, in one sense, a problem of other minds. We must in the case of coming to know the nature of someone else’s visual experiences, for example, rely on reasonable inferences based on what we observe, discover, and so on with respect to that person (where he stands, whether he is an organism of such-and-such a sort, and similar matters). But once the nature of the other minds problem is made clear, it should be easy to see why it does not constitute a threat to a consistent physicalism. For it is based on an investigational asymmetry which is as ontologically benign as the one underlying the problem of the unpublic self. Anyone else’s visual experiences, for example, which include a perspective of the world, will never be made available to me through behavioral or neurological information. But from this it does not follow that there is anything nonphysical involved in, say, anyone’s visual experiences. Although we will not find someone else’s perspective by inspecting his brain, there need be and is no reason to suppose that there is some nonphysical feature involved in that person’s mental life.

I’m inclined to think that the so-called grain argument attributed to Sellars and recently discussed by Meehl rests on the mistaken assumption that physicalism involves commitment to the view that the (non-“gappy”-grained) perspective which someone has of the world could, in principle, be found in his (“gappy”-grained) brain. And it may well be that some physicalists have themselves thought this. But this is the same as supposing that the best way for a movie director to provide us with C’s vC while walking down the garden path would be to flash on the screen a detailed cross section of C’s brain as he walks down the garden path plus a (Utopian) neurophysiological interpretation of it. Such factors could never yield even a simulation of our seeing C’s seeing. For C’s brain, neurophysiological interpretation and all, would still remain mere items embraced in our own perspective.⁴⁰

³⁹ William James, *The Varieties of Religious Experience* (Modern Library Edition), p. 192. In remarking on beliefs of Buddhists or Humians he writes: “For them the soul is only a succession of fields of consciousness: yet there is found in each field a part, or sub-field, which figures as focal and contains the excitement, and from which, as from a centre, the aim seems to be taken. Talking of this part, we involuntarily apply words of perspective to distinguish it from the rest, words like ‘here,’ ‘this,’ ‘now,’ ‘mine,’ or ‘me’; and we ascribe to the other parts the positions ‘there,’ ‘then,’ ‘that,’ ‘his’ or ‘thine,’ ‘it,’ ‘not me.’ But a ‘here’ can change to a ‘there,’ and a ‘there’ become a ‘here,’ and what was ‘mine’ and what was ‘not mine’ change their places.”

⁴⁰ The problem of other minds, which I have tried to rephrase as a problem of sharing perspectives, was clearly construed that way by G. T. Fechner in his *Elemente der*

A Remark on ψ - ϕ Correlations

It is no doubt apparent that nothing has yet been said about correlations between psychological states and physiological states—a topic which has certainly been at the forefront of many contemporary treatments of mind-body perplexities. The reason this has not been dealt with (except indirectly) is that if my diagnosis of the mind-body problem is correct, it need not be dealt with at all in discussing the *Investigational Asymmetry Problem*. If, as I have contended, the temptation to reject physicalism (in the absence of reasons for hypostatizing vital forces, etc.) derives wholly from *Investigational Asymmetries*, then given that my foregoing arguments are correct we are freed from such temptation, for the asymmetries have been rendered harmless. Thus, in the absence of reasons for accepting vitalism or like doctrines, physicalism “wins the game” by forfeit.⁴¹ So-called ψ - ϕ correlations, no doubt, have contributed and will contribute to solutions to what I have called the *Problem of Characterization*. But before there is a solution of the *Investigational Asymmetries*, these correlations cannot even with the aid of Occam’s razor trim the psychic sideburns from the face of physicalism.

Psychophysik (Leipzig: Breitkopf & Härtel, 1907). He worked up to this construal by first remarking: “When anyone stands inside a sphere its convex side is for him quite hidden by the concave surface; conversely, when he stands outside, the concave surface is hidden by the convex. Both sides belong together as inseparably as the psychical and the bodily sides of a human being, and these also may by way of simile (*vergleichsweise*) be regarded as inner and outer sides, but it is just as impossible to see both sides of a circle from a standpoint in the plane of the circle, as to see these two sides of humanity from a standpoint in the plane of human existence.” And he goes on to write: “The solar system seen from the sun presents an aspect quite other than that which it presents when viewed from the earth. There it appears as the Copernican, here as the Ptolemaic world-system. And for all time it will remain impossible for one observer to see both systems at the same time, although both belong inseparably together, and, just like the concave and convex sides of a circle, they are at bottom only two different modes of appearance of the same thing seen from different standpoints.” And finally he claims: “The difference of standpoint is whether one thinks with one’s brain or looks into the brain of another thinker. The appearances are then quite different; but the standpoints are very different, there an inner, here an outer standpoint; and they are indescribably more different than in the foregoing example (i.e., the circle and the solar system), and just for that reason the difference of the modes of appearance is indescribably greater. For the double mode of appearance of the circle, or of the solar system is after all only obtained from two different outer standpoints over against it; at the centre of the circle, or on the sun, the observer remains outside the line of the circle, or outside the planets. But the appearance of the spirit to itself is obtained from a truly inner standpoint of that underlying being over against itself, namely the standpoint of coincidence with itself, while the appearance of the bodily self is obtained from a standpoint truly external to it, namely, one which does not coincide with it.”

⁴¹ But a question too crazy and deep for me to consider here has begun to haunt me: In the last analysis might physicalism and panpsychism turn out to be the same doctrine?