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Dispositions and Occurrences

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Since the publication of Gilbert Ryle's book, *The Concept of Mind*,[1] the distinction between dispositions and occurrences has loomed large in the philosophy of mind. In that enormously influential book Ryle set out to show that much of what passes as mental is best construed as dispositional in character rather than, as traditionally supposed, being made up of private "ghostly" occurrences, happenings, or "episodes." Many philosophers, including some of Ryle's ablest critics, have accepted the terms of Ryle's contentions. They have either agreed, with respect to certain kinds of mental states, that they are not occurrent because dispositional, or have undertaken to vindicate their occurrent status by showing Ryle's dispositional account to be inadequate. Thus U. T. Place in his essay, "The Concept of Heed,"[2] while agreeing with Ryle's dispositional account of belief, memory, intention, and desire, rejects a similar account of heeding, attention, and consciousness, and defends the traditional account according to which they are construed as distinctive sorts of internal activity. And Terence Penelhum, in "The Logic of Pleasure,"[3] defends an "episode-view" of pleasure as against Ryle's dispositional account. These writers share the assumption that the dispositional and the "occurrent" ("episodic") interpretations are incompatible, so that, e.g., to defend the view that attending involves something "private" going on, one must dispose of the dispositional account. In this essay I shall give reasons for rejecting that assumption. More specifically, I shall distinguish

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[1] London: Hutchinson's University Library, 1949.

[2] *The British Journal of Psychology*, Vol. XLV, no. 4, 1954.

[3] *Philosophy and Phenomenological Research*, XVII, 1956-57. This article, as well as the above mentioned article by Place, is reprinted in D. F. Gustafson, ed., *Essays in Philosophical Psychology*, Garden City, N.Y.: Doubleday & Co., Inc., 1964. Page references to both articles will be to this volume.

two quite different issues that are conflated in the usual discussions, and I shall argue that although vis-a-vis one of these issues "disposition" and "occurrent" are mutually exclusive, vis-a-vis the other and more ultimate issue they are not. By way of a quick preview, the first issue concerns the interpretation or analysis of mental terms or concepts, while the second has to do with the nature of mental states (processes, acts, events). Though a (pure) dispositional *analysis* of a concept leaves no room for an "episodic" *analysis* of that concept, we cannot infer that a state which satisfies a purely dispositional concept does not also involve "something going on."

I

The Concept of Mind, as the title suggests, is usually interpreted as a discussion of mental concepts, and if Ryle were confronted with the distinction drawn above, he would undoubtedly choose to construe his own claims as having to do with the proper interpretation or analysis of ordinary mental predicates or concepts, or with spelling out what we are saying when we attribute such predicates to persons. His pronouncements, both at the most general and at more specific levels, are often couched in this idiom.

> It is being maintained throughout this book that when we characterize people by mental predicates we are not making untestable inferences to any ghostly processes occurring in streams of consciousness which we are debarred from visiting; we are describing ways in which those people conduct parts of their predominantly public behavior. True, we go beyond what we see them do and hear them say, but this going beyond is not a going behind, in the sense of making inferences to occult causes; it is going beyond in the sense of considering, in the first instance, the powers and propensities of which their actions are exercises. (51)[4]
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> To talk of a person's mind is not to talk of a repository which is permitted to house objects that something called 'the physical world' is forbidden to house; it is to talk of the person's abilities, liabilities and inclinations to do and undergo certain sorts of things, and of the doing and undergoing of these things in the ordinary world. (199)
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> In saying that he is in a certain mood we are saying something fairly general; not that he is all the time or frequently doing one unique thing, or having one unique feeling, but that he is in the frame of mind to say, do and feel a wide variety of loosely affiliated things. (99)

[4] It has often been pointed out that general pronouncements like this, which range over all mental predicates, are quite misleading as regards Ryle's own position. As things work out, he does not claim that all mental terms can be given dispositional analyses, feeling- and sensation-terms being the most obvious exceptions. For present purposes we can ignore this issue, since our concern is with the relation between dispositional and "episodic" accounts in those cases where a dispositional account is put forward.

> The expansion of a motive-expression is a law-like sentence and not a report of an event. (113)

Now as Ryle understands 'dispositional,' a purely dispositional predicate or statement cannot also receive an occurrent interpretation, and vice versa.

> When we describe glass as brittle, or sugar as soluble, we are using dispositional concepts, the logical force of which is this. The brittleness of glass does not consist in the fact that it is at a given moment actually being shivered. It may be brittle without ever being shivered. To say that it is brittle is to say that if it ever is, or ever had been, struck or strained, it would fly, or have flown, into fragments.... To possess a dispositional property is not to be in a particular state, or to undergo a particular change; it is to be bound or liable to be in a particular state, or to undergo a particular change, when a particular condition is realised. (43)
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> To say that a person knows something, or aspires to be something, is not to say that he is at a particular moment in process of doing or undergoing anything, but that he is able to do certain things, when the need arises, or that he is prone to do and feel certain things in situations of certain sorts. (116)
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> Sentences embodying these dispositional words have been interpreted as being categorical reports of particular but unwitnessable matters of fact instead of being testable, open hypothetical and what I shall call 'semi-hypothetical' statements. (117)

Let us say that a given predicate, e.g., 'believes that his boss is coming to dinner' is "purely dispositional" if and only if a statement attributing that predicate to someone is synonymous with a subjunctive conditional, or a conjunction thereof, where the antecedent of each conditional specifies some state of affairs, and the consequent specifies a reaction of the subject of attribution to that situation. A conditional that might figure in the analysis of '*X* believes that his boss is coming to dinner' is: 'if he wants to please his boss, and if he knows that his boss likes Scotch and that he has no Scotch at the moment, he will buy some Scotch.' We may also term the statements attributing such predicates to someone "purely dispositional." We may term a predicate, and any statement attributing that predicate to something, "purely occurrent" if and only if the statement simply asserts that the subject of attribution is doing or undergoing something at the moment (where the implication of the 'simply' that is most relevant to present concerns is that the statement carries no implications as to how the subject of attribution would react to any particular state of affairs). It is clear that purely dispositional and purely occurrent predicates and statements, as so construed, are mutually exclusive, just

because these linguistic categories are so constructed as to exclude each other.[5]

To be sure the *dispositional-occurrent* opposition that is involved in some of Ryle's conceptual theses is more complicated than the neat contrast sketched above. Although Ryle apparently thinks that many psychological statements, e.g., those attributing beliefs, capacities, and traits of personality, are purely dispositional, there are others he takes to be only partly dispositional, and it is with respect to some of these, e.g., moods and various forms of "heeding," that we find some of his most controversial claims.

> 'He is in a cynical mood' like 'he is nervous' does not merely say 'He would . . .' or 'He could not . . . .' It alludes to actual behavior as well as mentioning liabilities, or, rather, it alludes to actual behavior as realising those liabilities. (97)
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> . . . to say that someone has done something, paying some heed to what he was doing, is not only to say that he was, e.g., ready for any of a variety of associated tasks and tests which might have cropped up but perhaps did not; it is also to say that he was ready for the task with which he actually coped. He was in the mood or frame of mind to do, if required, lots of things which may not have been actually required; and he was, *ipso facto,* in the mood or frame of mind to do at least this one thing which was actually required . . . . The description of him as minding what he was doing is just as much an explanatory report of an actual occurrence as a conditional prediction of further occurrences. (141)

Clearly on this interpretation mood and heed attributions are not purely dispositional. They assert some actualizations of the dispositions as well as asserting that the person in question possesses the dispositions in question. But although Ryle acknowledges that such statements assert that occurrences did take place, he is anxious to deny that they commit us to the occurrence of any private, "occult," or "ghostly" occurrences taking place in another, "mental" world. The only occurrences they imply are those that take place in the ordinary, physical world.[6] Thus even with these mixed concepts Ryle's interpretation is such as to exclude any implication of the existence of

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[5] To relate this distinction to the Rylean distinction between single-track and multi-track dispositions, note that a predicate can be purely dispositional in the above sense though it is as multi-tracked as you like. It is just that its analysis will, in that case, involve a large number of subjunctive conditionals. The predicate could even be such as to be insusceptible of analysis into any finite list of conditionals and still be purely dispositional, provided it were the case that nothing would appear in partial analyses except subjunctive conditionals.

[6] It is not completely clear that Ryle is prepared to stick by this restriction. More specifically, it is not clear that he is prepared to deny that being in a sulky mood involves dispositions to certain kinds of feelings, where feelings count as distinctively private occurrences. However, if his account of such things as moods and varieties of heeding is to have the distinctive thrust he intends it to have, it must be interpreted as in the above.

private inner "mental" occurrences. I shall henceforth understand 'occurrent,' in the opposition of dispositional and occurrent, as restricted to the sorts of inner "private" occurrences Ryle wants as much as possible to avoid; so that in this revised terminology a dispositional statement that also implies the existence of (only) public occurrences will still count as "purely dispositional."

II

Thus far we have been focusing on Ryle's theses concerning the content of mental concepts or predicates and the import of psychological statements. Ryle's pronouncements are by no means always so limited. Not infrequently he makes claims as to what the mind *is,* or what sort of thing a particular sort of mental state *is.*

> The radical objection to the theory that minds must know what they are about because mental happenings are by definition conscious, or metaphorically self-luminous, is that there are no such happenings; there are no occurrences taking place in a second-status world, since there is no such status and no such world, and consequently no need for special modes of acquainting ourselves with the denizens of such a world. (161)
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> But the reason why the skill exercised in a performance cannot be separately recorded by a camera is not that it is an occult or ghostly happening at all. It is a disposition, or complex of dispositions, and a disposition is a factor of the wrong logical type to be seen or unseen, recorded or unrecorded. (33)
>
> Inclinations and moods, including agitations, are not occurrences and do not therefore take place either publicly or privately. They are propensities, not acts or states . . . . Feelings, on the other hand, are occurrences . . . . (83)

On the face of it these claims go well beyond the theses canvassed earlier. The claim that *there are no* mental happenings is clearly stronger than the more restricted claim that certain (or even all) of our mental concepts *do not carry any implication* of the existence of mental happenings. And if it is possible that an inclination, or other psychological state, should involve features that are not reflected in our concept of an inclination, then the claim that our concepts of inclinations are purely dispositional does not entail (much less is it synonymous with) the claim that inclinations are purely dispositional. Of course it may be contended that Ryle did not intend these formulations to "go beyond" his conceptual claims; that, on the contrary, they are just "material mode" variants of the more sober theses concerning the proper analysis of concepts and predicates, and were indulged in for the sake of stylistic varia-

tion. However there are two reasons for refusing to take this easy way out.

First, Ryle is preeminently concerned to reject the "dogma of the ghost in the machine." Since this "dogma" construes various mental states of affairs as consisting in the occurrence of inner private occurrences and processes, its denial will involve the denial that those states of affairs are in fact so constituted, and not just the denial that our psychological concepts do not commit us to such occurrences.

> I hope to refute the doctrine that there exists a Faculty, immaterial organ, or Ministry, corresponding to the theory's description of the 'Will' and, accordingly, that there occur processes, or operations, corresponding to what it describes as 'volitions'.... It will be clear why I reject this story. It is just an inevitable extension of the myth of the ghost in the machine. It assumes that there are mental states and processes enjoying one sort of existence, and bodily states and processes enjoying another. (63)

See also the quote above on page 129 in which Ryle presents as the "radical" objection to the Cartesian theory of self-consciousness the claim that "there are no occurrences taking place in a second-status world." Indeed *The Concept of Mind* is liberally strewn with passages in which it is flatly denied that there exist occurrences and processes such as are envisaged by the Cartesian position.[7] No doubt Ryle's major weapon against Cartesianism is the argument that many of our ordinary psychological concepts are to be construed dispositionally, and hence do not commit us to a Cartesian interpretation. Nevertheless in the light of Ryle's repeated and passionate denial of the Cartesian position, it seems clear that his contentions vis-a-vis the character of our ordinary psychological concepts are not developed just for their own sake, but also, and even primarily, as a weapon to turn against Cartesian dualism, and as the basis for a more adequate alternative account of the nature of the mind (although this latter remains inchoate in Ryle's writings).

Second, some of the most pervasive types of argumentation in *The Concept of Mind* are such as to establish, if cogent, not only the conceptual thesis that a certain predicate or concept cannot be analyzed as carrying the implication of the occurrence of some private episode, but also the ontological thesis that

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[7] To be sure, as we have seen, Ryle does not really carry through his rejection of all inner private occurrences. However that is not crucial for our concerns in this paper. We are simply interested in his position vis-a-vis those stretches of the mind where he *does* oppose a dispositional to an inner-private-occurrence interpretation.

a certain kind of mental state cannot *be* a private episode. Consider, e.g., the infinite regress argument that Ryle deploys against a number of private episode interpretations. Its use in connection with "heed" is typical. There Ryle argues that doing something attentively, with one's mind on it, cannot consist in accompanying the first-level activity with a second-level inner activity of "inspecting or monitoring," for "inspecting and monitoring are themselves special exercises of heed," and so may themselves be done more or less attentively. Thus according to the account in question when a person performs the second-level inspecting attentively, we should have to posit a third-level activity of inspecting the second-level inspecting. And so on *ad infinitum* (pp. 136-7). If this argument is sound,[8] it clearly establishes not just the conceptual thesis that *our* concept of heed does not entail the occurrence of any private episodes, but the stronger ontological thesis that heeding cannot *be* such an episode. For if a vicious infinite regress *is* involved in the private episode view, it follows that such an interpretation of the nature of heeding is untenable, whatever the nature of our ordinary psychological concepts. As another example, consider the rather common "we don't always find so-and-so's when we have such-and-such's" argument. This is often used to show that a certain kind of mental state, e.g., enjoyment, cannot be construed as a certain kind of feeling.

> Doubtless the absorbed golfer experiences numerous flutters and glows of rapture, excitement and self-approbation in the course of his game. But when asked whether or not he had enjoyed the periods of the game between the occurrences of such feelings, he would obviously reply that he had, for he had enjoyed the whole game. (108)

Here Ryle is contending that in fact we enjoy things when we are not experiencing any of the sorts of feelings with which some theorists have identified enjoyment. This argument, if sound, establishes that enjoyment is not in fact a certain kind of feeling, not that our concept of enjoyment is not a concept of some kind of feeling. These arguments stand in contrast to the many arguments in *The Concept of Mind* which do bear exclusively on conceptual theses, e.g., arguments to the effect that some locution or other doesn't make sense.

> The verbs 'know,' 'possess' and 'aspire' do not behave like the verbs 'run,' 'wake up,' or 'tingle'; we cannot say 'he knew so and so for two minutes, then stopped and started again after a breather,' 'he gradually aspired to be a bishop,' or 'he is now engaged in possessing a bicycle.' (116)

[8] For an effective *riposte* see Place, p. 209.

Thus Ryle's enunciation of ontological claims, claims about what the mind or some stretch thereof *is,* stems from basic features of his enterprise and is no mere slip of the pen. Although he does not underline the distinction between the two sorts of theses, and indeed gives no indication of being aware of the difference, he is deeply committed to both. Furthermore he clearly presupposes a relation of exclusiveness between disposition and occurrence on the ontological as well as the conceptual level. Since a skill "is a disposition, or complex of dispositions," "it is not a happening at all," and "a disposition is a factor of the wrong logical type to be seen or unseen, recorded or unrecorded." (33) Again, "inclinations and moods, including agitations, are not occurrences and do not therefore take place either publicly or privately. They are propensities, not acts or states." (83)

Since I will be contesting this last assumption, I must be more specific as to its exact force. We can, of course, formulate for the ontological level a clearly acceptable analogue to the exclusiveness principle we have accepted for predicates. Just as a purely dispositional predicate cannot also be occurrent, and vice versa, so a purely dispositional mental state cannot also be an occurrence, and vice versa, where by a *purely* dispositional state we mean one that is a disposition and nothing else, and by a *purely* occurrent state we mean one that is an occurrence and nothing else. If that were all the assumption came to, it would be quite unexceptionable. However it is clear that when, as in the passages last cited, Ryle argues that since something-or-other, e.g., a skill, "is a disposition, or complex of dispositions" we can infer that "it is not a happening at all," he has done nothing to show that a skill is a *purely* dispositional state in the above sense, except for his argument that our *concept* of a skill is purely dispositional, i.e., can be adequately analyzed into a set of subjunctive conditionals. Since this is his only basis for the exclusiveness he imputes on the ontological level, he is committed not just to the trivial principle that if a state is nothing but a disposition it is not also something else, but also to the much stronger principle that if a state can be identified as a disposition (i.e., can be identified by the use of a purely dispositional predicate), then it cannot also be an occurrence. In other words he is assuming that if a state is at least a disposition, that same state cannot also possess features that would qualify it as an occurrence. Nothing less than this assumption would

mediate his inference from the premise that our concept of a skill is purely dispositional to the conclusion that a skill is not a happening. It is this strong principle to which I shall henceforward be referring as the "Exclusiveness Principle."

(1) A state which can be identified (conceptualised) by the use of a purely dispositional predicate (concept) cannot also be an occurrence.

III

In the considerable literature, both *pro* and *con,* inspired by *The Concept of Mind,* we typically find all the features I have noted in Ryle. There too we find a melange of conceptual and ontological claims without any clear recognition of the differences. There too it is assumed on both levels that dispositions and occurrences are mutually exclusive, and as a result it is supposed that the only way to defend against Ryle the occurrent nature of something is to show our *concept* of that something not to be purely dispositional. I shall briefly document these contentions by reference to the critical articles referred to earlier, Place's "The Concept of Heed" and Penelhum's "The Logic of Pleasure."

These authors often present the issue on the conceptual level. Thus Place speaks of the question of whether "mental concepts entail a reference to covert states, processes and activities" (207), of "the logic of 'heed concepts'," (210) and characterizes Ryle's view as: "to say that someone is paying attention to what he is doing entails that he has at least two important dispositions" (212). Penelhum formulates the view of pleasure Ryle is attacking as "An obvious view to take of the noun 'pleasure' is that it is the name of a certain type of private episode, analogous perhaps to feelings and sensations. To say that someone took pleasure in something would therefore be to say that it caused him to experience this feeling." (227-8) Again, "Ryle... not only claims (very plausibly) that 'enjoyment' is a heed-concept, but also claims (less plausibly) that heed-concepts are not episodic but dispositional. My own view can be put roughly by saying that I accept the first and deny the second." (239) However there are also formulations in an ontological vein. These are more prominent in Penelhum than in Place. For example, in presenting his own view at the end of his article, Penelhum says: "It is hard to *describe* what it feels like to have a headache or a toothache, but these

occur. How much can one say positively about enjoyment? It, too, *occurs;* it is, in other words, an episode and not a disposition." (244)[9] And apart from the unabiguously ontological formulations of the opposed positions, both Penelhum and Place, like Ryle, make use of arguments that, if sound, will establish a conclusion as to what heeding or enjoying *is,* as well as, or instead of, a conclusion about our concept of heeding or enjoying. Thus Place deploys an infinite regress argument against his revision of the dispositional theory, according to which to be conscious of something is to be in a state of readiness to react appropriately to that something. He argues that when I am conscious of a sensation, there is nothing that I am thereby disposed to react appropriately to, except the sensation; but since a sensation and consciousness of the sensation are indistinguishable, we are forced to posit a consciousness of the consciousness, and so on *ad infinitum* (220-1). This, like Ryle's infinite regress arguments, proves, if it proves anything, that we cannot suppose consciousness to *be* such a disposition. Again, Penelhum argues that "It is hard to see how a convincing explanation could be given on the dispositional view of *degrees* of enjoyment." (234) This contention does not seem to have to do with the character of our concept of enjoyment at all. It would seem to be directed, rather, to the question of which view can best explain certain empirical facts.

Moreover the general strategy employed by these authors shows that they accept the exclusiveness principle on the ontological level. They take it to be an essential part of their defense of the "inner episode" view of the nature of attending or enjoying, to show that Ryle's dispositional account of the *concepts* of attending or enjoying is inadequate. Thus they are presupposing that if our concept of *x* were purely dispositional, it could not be claimed that *x* is (also) an inner episode.

IV

Let us now proceed to a critical scrutiny of the Exclusiveness Principle. First, it is clear that this kind of claim is not generally warranted. It is a familiar truism that the things we conceive and talk about generally extend far beyond the concepts we use to grasp them. Thus the fact that my concept of an oak tree is simply the concept of a large woody plant with leaves of a certain range of shapes, has no tendency to show

[9] There are also many formulations in terms of reference, especially in Place's article, formulations which as I shall argue below, are ontological if literally interpreted.

that oak trees do not have many features not reflected in that concept, e.g., a certain system of sap distribution. My concept can be perfectly adequate for the accurate identification of oak trees and yet fail, by an indefinitely large margin, to embody all the features of oak trees, even all the features common to all oak trees. Or to take an example more closely analogous to our present concerns, my concept of an electric current (or even the standard concept of electric current at a given stage of scientific development) may simply be the concept of what is produced in certain ways (e.g., what goes through a wire when the wire is attached to a certain kind of substance that is undergoing a certain kind of friction) and/or of what produces certain effects (e.g., a felt shock in a finger touching the wire). We may be in total ignorance of the intrinsic nature of what stands in these causal relations; e.g., we may be quite ignorant of whether or not such a "current" consists of some sort of "stream" of moving invisible material particles; and so our concept of electric current at that stage of development will not involve any such specification. But for all that it may still be true that what stands in the causal relations specified, i.e., that which is picked out by the concept in question, is in fact so constituted.

Thus it is not in general true that whenever a certain concept is limited to certain kinds of features, that of which it is a concept will also be limited to those features. Hence if the Exclusiveness Principle is to be justified, its justification will have to come from a specific consideration of the concepts of *disposition* and *occurrence*. Is there anything in the specific contours of these concepts that prevents something identifiable by means of a purely dispositional concept from also being in fact an occurrence of some kind? I fear that we will get no help on this question from Ryle or from most of his critics. They are not sufficiently aware of the difference between conceptual and ontological claims to be alive to the issue. We shall have to strike out on our own.

The first step is to consider more carefully the categories that Ryle and other parties to the discussion suppose to be incompatible with *disposition*. Thus far we have been talking mostly in terms of 'occurrence'; but in various passages Ryle opposes dispositions to processes, episodes, operations, happenings, occurrences, incidents, events, doing or undergoing something, acts, and states. This is obviously a very mixed bag, and being a disposition might exclude some of these and not others. With-

out entering into the subtlest nuances we can note the following major lines of difference. Processes and episodes, unlike states, essentially involve internal change. To undergo a process, e.g., of oxidation or renovation, is to pass sequentially through several distinct states. While to be in a given state, e.g., of disarray or disappointment, is not necessarily to be moving from one condition to another, though it may be. Happenings, occurrences, incidents, and events, are, in a way, intermediate between processes and states. When we think of something occurring or happening, rather than thinking of something as *being* in a certain state, we are directing our attention to the initiation of some state, condition, or process, rather than, so to say, recording it in the middle of its tenure. Nixon's election and inauguration are occurrences, while his occupation of the White House, his being president, can be thought of as states or conditions. Acts (and perhaps operations) differ from other occurrences in that they involve the concept of agency (whatever that is). Here there is not only the initiation of a new state but the initiation is to be attributed to some agent.

Of these various categories, "state" would seem to be the most implausible contrast with disposition. In a wide, but not at all unnatural, usage of the term "state" we specify a state of a thing whenever we truly predicate something of that thing (or at least something other than some change(s)). Thus in asserting solubility of a certain lump of sugar, we are attributing to that lump a certain state, which can be identified as the state of being so disposed that when put in a liquid (perhaps with certain further specifications) it will dissolve. And in asserting irritability of a certain person, we are claiming that person to be in such a state that he is relatively likely to become irritated in the face of potentially irritation-producing situations. We followed this wide usage in our formulation of the Exclusiveness Principle (p. 133), which had to do with whether the same *state* could be both dispositional and occurrent.

Ryle obviously cannot be using 'state' in such a wide sense when he opposes it to 'disposition,' as in the following quotations:

> To possess a dispositional property is not to be in a particular state, or to undergo a particular change; it is to be bound or liable to be in a particular state, or to undergo a particular change, when a particular condition is realized. (43)
>
> Inclinations and moods, including agitations, are not occurrences, and do not therefore take place either publicly or privately. They are propensities, not acts or states. (83)

Although he puts no explicit qualification on the term, what he presumably has in mind is some notion of an *actual* state, where to truly attribute an actual state to someone is to specify some condition that he is actually in now, rather than to say what condition he would actually be in *if* certain conditions were to obtain. Now this distinction is not so unproblematic as it may appear at first sight. The dispositional side we may take as fairly clear, but how are we to conceive its contrast, "some condition he is *actually in now.*" Isn't being irritable a condition he is "actually in now"? To be sure, to say that he is now irritable is not to say that he is now irritated, but that does not imply that there is *no* present condition we are ascribing to him; and indeed "being in an irritable condition" would seem to be a plausible candidate for a condition we are saying he is "actually in now." What is needed to make the putative distinction clear is some general conception of "actual" state that will clearly exclude what is implied by the attribution of a purely dispositional predicate. We can think of various particular kinds of states that would count as "actual" states, rather than as dispositional states. These include, e.g., the spatial arrangement of material parts and the possession of phenomenal qualities. However we would be ill advised to place any confidence in the completeness of any list of specific types of "actual" states; and in any event the *general* distinction between *dispositional* and *actual* requires some general characterization of each side of the distinction. Perhaps in the end we will be forced to make the distinction in terms of a simple negation. An "actual" state is one that can be identified by some predicate other than a (purely) dispositional predicate; and to identify a state as "actual" is to identify it by means of a non-purely dispositional predicate.

There is much more to be said on the above topic, but we cannot pursue the issue in this paper. Let us take it that we have at least a workable distinction between dispositional and "actual" states, whether set out in the way just mentioned or in some more penetrating fashion. On that basis we can consider whether it is possible for a state to be both dispositional and actual.

V

Clearly in order to resolve this question one thing we have to do is to decide on a principle of individuation for states

of a thing. And the same sort of question is equally crucial for the question of whether a disposition may also be an occurrence, event, or whatever. There has recently been a flurry of discussion of criteria of identity for events,[10] but even there the subject remains quite obscure. As for states, there is no obvious way of splitting up a human being or other substance into its constituent states, as there *are* usually obvious ways of drawing boundaries between the various substances that occupy a certain volume. Is the momentary position of each of Jones' red corpuscles to be considered a distinguishable state, or should we regard the momentary configuration of the whole set of red corpuscles a single state? Is my being on the sofa now one state, and my sitting now another state, or should we regard my sitting on the sofa now a single state? The particular issue of this sort with which we are specially concerned in this section has to do with the relation between a disposition and its basis. Let's say that a substance has the disposition to break when struck in certain ways with a certain minimum degree of force, by virtue of possessing a certain crystalline structure. It is because its constituent crystals are formed in this way that it will break under those conditions; and if its crystals were formed in some quite different way, it would not be so disposed. Again, let us suppose that a person is disposed to get depressed when someone criticizes him, because of some structural modification of some part of his brain and only so long as that part of his brain is so modified. In these cases should we think of the disposition and its basis as one and the same state, or should we think of them as distinct, though intimately related states?

In the light of what I have just said about the absence of any unambiguous objective basis for dividing a substance up into states, we should not expect a simple yes-or-no resolution of this question. Instead of straining after a conclusion of that order, let us examine some alternative bases of individuation.

The simplest and "cleanest" method of individuating states would be one based on the individuation of predicates. Any two non-synonymous predicates truly predicated of a substance

[10] See, e.g., D. Davidson, "The Individuation of Events", and J. Kim, "Events and Their Descriptions: Some Considerations", both in N. Rescher *et al.*, eds., *Essays in Honor of Carl G. Hempel*, Dordrecht: Reidel, 1969.

determine different states of the substance.[11] Applied to our present problem this would clearly yield the conclusion that a disposition and its basis are different states. For the predicate we use in ascribing a certain potential to something and the predicate we use in ascribing to it what is in fact the basis of that potential are by no means synonymous. 'Is fragile' and 'possesses _____ crystalline structure' (where the blank can be filled in any way you like) are by no means synonymous. If they were synonymous, then by merely reflecting on the meanings of our terms, we could discover the basis of a given disposition; but that is never the case. It always takes empirical research to identify such bases, and we are still largely in ignorance on this point, especially in psychology. Thus on the present principle of individuation, the fact (when it is a fact) that a disposition has some "actual" state as its basis does not imply that the corresponding dispositional state *is* also an "actual" state.

However there are substantial objections to this principle. First, it would saddle us with an unlimited plurality of states of a given substance. It would seem that no limit can be put on the number of non-synonymous predicates that are true of a given substance. For one thing, any substance is related in an indefinite number of ways to everything else in the universe; the relations of similarity and difference, in one or another respect, would be sufficient to yield that conclusion. Hence there will be an indefinite number of relational predicates that are true of a given substance. Moreover many of the "states" corresponding to relational predicates do not strike us as properly so-called. If it is true of Schmidt that he is as intelligent as a certain Persian of the 6th century B.C., of whom Schmidt has never heard, it rings unplausibly to speak of this relationship as part of Schmidt's current condition, over and above his having the degree of intelligence he has. Of course, we might try to avoid these difficulties by excluding relational predicates from the group of those predicates that determine states. But there are well-known difficulties in drawing a line between relational and non-relational predicates. If we want to have a way of describing substances that will give us a manage-

[11] We might make an exception for those pairs of non-synonymous predicates that uncontroversially connote the same property, e.g., 'blue' and 'the color of a cloudless sky'. Such an exception would not affect any of the issues with which we are concerned here.

able representation of the condition of a substance at a particular time, we will not want to deal with such a boundless plurality of contemporary states as the present principle of individuation would yield.

There is also a more specific objection to taking *dispositional* predicates as determining states distinct from their bases. Each basis of a disposition has associated with it an indefinitely numerous class of dispositional predicates that can be truly ascribed to the substance. Let us go back to fragility and the crystalline structure that is its basis. We tend to think of 'fragile' as a single dispositional predicate, but it is only at a very low level of precision that it appears to be homogeneous. Actually, by virtue of having the crystalline structure it does have, the window pane is disposed to shatter in some distinctively different way in response to each of an indefinitely large number of distinguishable blows, distinguishable in terms of the amount of force applied, the angle of incidence, the portion of the pane to which it is applied, and so on. In fact, wherever continuous magnitudes are involved in the specification of condition and/or response, there is an infinite stock of truly applicable dispositional predicates, each of which involves some definite value of each of the relevant continuous magnitudes.

To illustrate the same point closer at home, if we think of a belief as being, or even involving, dispositions to behavior, it will once more seem impossible to put a definite limit on the number of such dispositions. By virtue of having a certain belief a person is disposed to one or another of many lines of action, depending on the particular desires, other beliefs, and other psychological states that are associated with this belief. Thus if I believe that a certain airplane is leaving for Paris at 11:30 A.M., then by virtue of having that belief any number of subjunctive conditionals will be true of me. (1) If my dominant desire at the moment were to go to Paris and if I believe that I could only get to Paris by boarding that plane, then I would (at least try to) do so. (2) If, on the other hand, my dominant desire were to prevent all planes from going to Paris, and I believed that this would be done by planting bombs in them, then I would (try to) plant a bomb in that plane. And so on, through all the conceivable desires and beliefs that might link up with the belief in question to produce action tendencies. Here again there seems to be no limit on the number

of such subjunctive conditionals, though we are not in a position to prove that the number is infinite, as we are in the case of quantified dispositions involving continuous magnitudes. The basic point here is that the desires and beliefs involved in the antecedents of such conditionals do not have to be ones that I actually have. They do not even have to be ones that only a sane person would have. No matter how far-fetched a desire, provided that it, together with other psychological factors, would link up with the belief in question to yield some reaction tendency, then by virtue of having that belief it will be true of me that *if* I had that desire and the other factors, then I *would* react in this way. Now it would be sheer hypostatization to suppose that for each of these indefinitely many dispositions there corresponds some distinct state of mine. It is surely misguided to think that when I acquire the belief in question I come into as many distinguishable new states as there are subjunctive conditionals that thereby come to be true of me. My actual constitution is just not that complex, and, if the conditionals are infinitely numerous, could not possibly be that complex.

I take the above considerations to show that a move from the conceptual-linguistic level to the ontological level requires something more than a mere reduplication of the former. If that move is to have any real significance—that is, if speaking of the window's fragility, *instead of* speaking of the truth of the statement that the window is fragile is to be anything more than an idle gesture—we will not be able to individuate the states in terms of which we are speaking in the former idiom, in tandem with the predicates in terms of which we are speaking in the latter idiom. Some other principle of individuation is needed. I am unable within the confines of this paper to embark on a treatment of this problem for its own sake. I can only aspire to exhibit the plausibility of a certain alternative to the predicate-identity principle. My candidate is the principle of causal relevance. According to this principle, two state-designations refer to different states of a substance if and only if the states referred to have different bearings on the causal interactions into which the substance might enter. If the states referred to make exactly the same contribution to any causal interactions into which the substance might enter, then we should regard them as one and the same state under different descriptions. This would seem to be a reasonable and useful way of analyzing a substance into states, one that con-

nects with the most important motivation for such analysis, viz., the discovery of lawful connections in which various aspects of a thing stand, so that we can use our knowledge of such general laws as a basis for the explanation and prediction of the conditions and changes of that thing. For these purposes we will have occasion to distinguish two states of a thing only if they enter into different nomological connections. Moreover this principle avoids the objections to the predicate-identity principle. On the present principle Schmidt's having an intelligence of 123, and Schmidt's having the same intelligence as the ancient Persian in question, would not count as different states of Schmidt, for there would be no difference in the way in which they would influence Schmidt's causal interaction with anything; e.g., the second predicate's being true of him would have no implications for how Schmidt will perform on the job over and above the implications of the first predicate's being true of him. Again the infinitely many specific dispositions determined by a given basis would not count as distinct states of the substance over and above the state constituted by the basis. If it is by virtue of having a certain crystalline structure that the window is disposed to shatter in various ways on various sorts of impact, its being so disposed does not bestow on it new causal potentialities over and above those bestowed on it by the crystalline structure; rather its being so disposed constitutes the causal potentialities bestowed by the structural basis. Likewise, if it is by virtue of possessing some structural modification somewhere in the brain that a person has the multifarious dispositions associated with a certain belief, his being so disposed does not carry with it reaction tendencies over and above those determined by the brain structure. Rather they *are* the reaction tendencies determined by the latter.

The bearing of these considerations on the Exclusiveness Principle is clear. On the predicate-identity principle of individuation for states, the exclusiveness of dispositional and actual holds for states just because it holds for predicates. If a belief predicate, like 'believes that the plane is about to leave' is purely dispositional, then the state which consists of having that belief is *pari passu* purely dispositional; it is just a tendency, or set of tendencies to react in certain ways to certain conditions. The actual modification of the brain that constitutes the basis for these dispositions is a *different* state of the person. But on the more acceptable causal relevance principle of individu-

ation the opposite conclusion follows. If, in fact, some structural feature of the brain[12] serves as the basis for those dispositions, then the belief which involves those dispositions *is* that basis. That is, the state of the person which we conceptualize by means of one or more dispositional predicates is the same state as one which could be conceptualized by means of a certain neuro-physiological predicate. In using the dispositional predicates we do not specify what that brain state is; in fact we don't know. The predicates are certainly distinct; no belief predicate, no predicate attributing any psychological disposition, is synonymous with any neuro-physiological predicate. Nevertheless, according to the mode of individuating states we have defended, the actual state of the person, the possession of which makes a certain dispositional statement true, is the very same state that would make a certain neuro-physiological attribution true.

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[12] We speak in terms of brain features being the basis for psychological dispositions, for that seems to be overwhelmingly the most plausible hypothesis. However the contentions of this paper by no means require that assumption. All we need assume is that (some) psychological dispositions have some basis in the actual structure of the person, whether this be the structure of the nervous system, of a Cartesian immaterial substance, or whatever. This is, we only need assume that psychological dispositions, or some of them, are not ultimate irreducible features of a person, but are rather possessed because of certain features of the structure of the person. This assumption would seem to be amply warranted for the dispositions of any entity that has an internal structure.

This would be an appropriate juncture at which to relate the contentions of the present section, and of this paper more generally, to D. M. Armstrong's not dissimilar criticism of a "phenomenalist" account of dispositions in his book, *A Materialist Theory of the Mind* (London: Routledge & Kegan Paul, 1968, Ch. 6, sec. 6). There Armstrong is also objecting to the Rylean supposition that if a certain mental state is dispositional it cannot also be, e.g., a neuro-physiological state of the brain. However he bases his attack on the "realist" account of dispositions, according to which, "to speak of an object's having a dispositional property entails that the object is in some non-dispositional state or that it has some property (there exists a 'categorical basis') which is responsible for the object manifesting certain behavior in certain circumstances, manifestations whose nature makes the dispositional property the particular dispositional property it is. It is true that we may not know anything of the nature of the non-dispositional state. But, the Realist view asserts, in asserting that a certain piece of glass is brittle, for instance, we are *ipso facto* asserting that it is in a certain non-dispositional state which disposes it to shatter and fly apart in a wide variety of circumstances". (p. 86) I cannot go into the matter properly in this paper, but, briefly, I have two objections to this. First, we cannot claim that a dispositional attribution *entails* the existence of a basis; it is not necessary that *every* disposition have a basis. In particular, if there are atomic substances with no internal structure (and this would seem to be at least logically possible), they will undoubtedly have dispositions, for they will undoubtedly react in characteristic ways to certain conditions. But since they lack any internal structure, there can be no question of various features of their structure serving as the basis for various dispositions. *Their* dispositions will be ultimate properties. Second, since this is so it opens up the possibility that the basis for some dispositions of complex entities may be at least in part the ultimate dispositions of their elementary constituents. Thus if gas molecules were atomic particles, then at least part of the basis of the disposition of a gas to increase in temperature when compressed would be the ultimate dispositions of its constituent molecules to move in a certain way on impact. It is the first objection that is crucial for relating my position to Armstrong's. Armstrong directly opposes Ryle on the conceptual level. Where Ryle holds that it is *logically impossible* for a disposition to be an "actual" state, Armstrong maintains that such an identity is *logically necessary*. They both think that the issue can be settled by reference to generic features of dispositional concepts. But since I reject Armstrong's entailment claim, as well as Ryle's position, I do not think that the identity issue can be settled on any such basis. I am contending, rather, that dispositional concepts are such as to leave open the possibility of such an identification. Whether this possibility is actualized in any particular case, or any given class of particular cases, will have to be decided on other grounds, such as those I have just been presenting.

Thus on the causal principle of state-individuation, the Exclusiveness Principle fails to hold for dispositions and actual states. And although I can hardly claim to have *shown* the causal principle of state-individuation to be clearly preferable to *all* alternatives, I have at least exhibited it as a not unreasonable choice. And that should be enough to break down the prevalent uncritical confidence in the Exclusiveness Principle.

VI

We have to some extent strayed from our original problem as to whether dispositions and *occurrences* are mutually exclusive classes. The detour was necessitated by the fact that Ryle and other parties to the discussion have actually been contrasting *disposition* with a number of other categories, some of which require separate treatment. Having determined how matters stand with *states,* we can return to a discussion of the relation of dispositions to occurrences (events, happenings) in a distinctive sense of the term. The conclusion of the previous section, that a disposition may be identical with some actual structural feature or arrangement, by no means implies that it is possible for a disposition to be an occurrence. What can be said on this score?

First, let us concede that a state which is identifiable as the having of a disposition cannot include an occurrence within itself. That is, it cannot (even in part) *consist* of a transition from one state to another. It seems intuitively obvious that

(2) a state which can be identified dispositionally must be a static condition.

A more discursive support of this point can be constructed on the basis of our causal relevance principle. In identifying a state via a subjunctive conditional, we have thereby fixed a certain unambiguous causal potentiality; to *have* that disposition is to be fitted to enter into just those causal interactions, and to be so fitted for just so long as one has the disposition. But to undergo a change of state is to shift from one causal potentiality into another. Hence *having* a certain disposition cannot be identical with passing from one state to another.[13]

Nevertheless there is an important sense in which a psychological phenomenon, e.g., keeping one's mind on one's tennis

[13] In the next section we will introduce certain qualifications on this conclusion, and will formulate a new principle (3), which is more adequate than (2) since it takes account of those qualifications. In the present section we are concerned to show that even if the unqualified principle (2) be accepted, there is still a sense in which a disposition can be an occurrence.

stroke, may be an occurrence ("something happening," "something going on"), even if the statement "*X* is paying attention to his tennis stroke" can be given a purely dispositional analysis in terms of one or more subjunctive conditionals. Even if *being in the state of* paying attention to a certain tennis stroke is a purely static state, identifiable in terms of a purely dispositional predicate, it still may be true that this bit of heeding can be termed an occurrence in the perfectly good sense that it is a state of relatively brief duration. That is, in order for a phenomenon to be termed an "occurrence" or "happening" it does not have to involve internal change; it can be completely unvarying so long as it lasts. It is enough that its onset and termination are separated by a relatively brief temporal interval. Thus a flash of light, a clear case of an occurrence, may be quite steady as long as it lasts; it doesn't have to flicker or waver or go on and off during its existence. It is enough, for its status as an occurrence, that it last for a brief period. By the same token a short-lived bit of attention can be properly termed an occurrence, even if there is no process, no succession of different states, within its span. It is enough that it pass into and out of existence in short order. And this can be the case even if a statement attributing that bit of heeding to someone (where the statement abstracts from its coming to be and passing away, and catches it so to speak in mid career) can be wholly analyzed in terms of one or more subjunctive conditionals. This way of being an occurrence is sufficient to accommodate such claims as that of Penelhum to the effect that enjoyment "occurs," that it is an "episode."

It is interesting to note that Ryle's paradigms of psychological occurrences, viz., feelings and sensations, need not be occurrences in any sense other than the one we have just made explicit. Feelings and sensations do not necessarily involve any internal change. They *may,* as with a throbbing pain that is constantly waxing and waning, but they need not. A sensation of tightness in the throat, e.g., may be steady; it may persist in unchanging form during its entire tenure. In that case the only sense in which it is an occurrence is just the sense in which we have seen that a disposition may involve an occurrence; viz., it is of relatively brief duration.

It may be thought that the present point, unlike the previous point about "actual" states, does not really exemplify the general thesis that what a purely dispositional concept is a concept *of* may be more than a disposition, For, it may be

claimed, in order to show that a bit of attention can be considered an occurrence, I have, in effect, enriched the concept of attention in such a way that it can no longer be purely dispositional. That is, it may be claimed that I have arrived at my conclusion only by enlarging the concept of, e.g., attending to one's tennis stroke, so that it includes the onset and termination of that bit of attending, as well as the attending itself. As so construed the concept is only impurely dispositional. However, I do not think that the matter has to be viewed in this light. The concept of attending to one's tennis stroke may be "purely dispositional" in the sense specified, i.e., the statement '*X* is attending to his tennis stroke' is adequately analyzable in terms of one or more subjunctive conditionals. While at the same time it is *in fact* the case that the period during which the predicate 'is attending to his tennis stroke' is true of him is quite short. In that case attending to his tennis stroke would *in fact* be correctly termed an occurrence, but not because the concept contained any requirement for a brief tenure. The predicate, 'is attending to his tennis stroke' could be truly applied to him in just the same sense even if he were so attending for a long time.[14] In other words, we do not have to build any conditions concerning onset and termination, much less any requirement of a brief interval between them, into our *concept* of attending to *x*, in order for it to be in fact true that a case of attending to *x* is an occurrence in the sense specified.

VII

The third category we extracted from the melange with which Ryle contrasts dispositions, was *process*, defined as a sequence of transitions from one state to another. Can a disposition be a process? There are two ways in which we can see such a possibility. First, there is an analogue of the point just made about occurrences. It would be stretching the category of process to construe the acquisition and loss of a disposition as itself a process, however short the period of possession. However there are states which Ryle wants to interpret in dispositional terms, but which, in order to do so, he must construe as a temporal series of dispositions, rather than a single disposition (even a multi-track one). This will certainly be true of any case

[14] Presumably this would require a tennis stroke to go on for a long time, and *that* may be impossible; but that does not have to do with the concept of attention. We could, instead, have chosen an example of attending to something that can go on for a long time, e.g., the rise and fall of the waves.

of attention where the object attended to is itself a process or activity—a horserace, building a bookcase, etc. In such a case the specific dispositions the attender possesses at different stages will not all be the same, though they might all be of the same general type. Thus at one stage of building the bookcase with his mind on what he is doing, the builder is disposed to steady a certain board with his left hand if it begins to slip; at another stage he is disposed to adjust the position of the hammer if he does not strike a certain nail squarely. Since the complex psychological unit, "having his mind on what he is doing (during a several hour stretch)" has to be construed as a temporal series of dispositions, if it is to be construed as dispositional at all, it is clearly being construed as a process, a process of acquiring and losing many specific dispositions.

A second point stems from the thesis of section III, that it is both possible and desirable to individuate dispositional states in such a way as to include the basis of the disposition. This being the case, the question as to what sorts of things dispositions can be is intimately related to the question of what sorts of things bases of dispositions can be. In section III we followed the most initially plausible tack in thinking of the basis as some static structural feature of the substance in question, e.g., a certain condition of a synapse in the brain. However there is no *a priori* reason why the basis for a given disposition should not be a very rapid cyclical process. The only *a priori* requirement would seem to be that the process be rapid enough so that there is no question of the disposition being actualized at different stages of the process. This constraint stems from the obvious principle that

(3) any state of *x* by virtue of which *x* is invariably disposed to react to *S* by *R* (invariably so long as *x* possesses the state in question) has to be a state that is always the same at any moment at which *x* might react to an *S* with an *R*.

For if the state were different at different times at which *x* were so disposed, then either we have two different bases rather than one, which is quite possible, or else the basis is more properly identified as what two slices of the state in question have in common, the differences between them being irrelevant to the possession of the disposition. It may seem obvious that this consideration rules out the possibility that a process should be the basis of a disposition. However to draw that conclusion

is to overlook the possibility that a cyclical micro-process might occupy such a small duration that its stages would not be distinguishable from the perspective of a gross molar reaction. That is, if the micro-process should occupy only 1/10,000th of a second, and the gross molar reaction in question (from stimulation to the consummation of the response) should require 1/10th of a second, the micro-process would provide the same basis for the molar reaction wherever it occurs, even though it is in fact a sequential process. Whether or not there are actual examples of this I do not know. But the fact that it can be consistently envisaged shows that there is no *a priori* bar to the basis of a disposition's being a process, and hence no bar to a disposition's also being a process.

The final category from our list of Rylean contrasts to "disposition" was "activity." I do not feel that any new substantive points are required here over and above those already presented. We may take a single action to differ from an occurrence that is not an action only by virtue of the fact that in the former case the change of state in question is due to some agent. Thus it follows without more ado that an action can be a dispositional state in the same way an occurrence can unless there is something about the nature of agency that would prevent a state, a change into which was due to an agent, from being conceptualized in dispositional terms. But it is clear that there is no such bar. I may actively put myself into a state of readiness for a blow, where the state which is thus brought about by an agent can be conceived dispositionally, as a state of being disposed to duck away from a blow I see coming. Hence particular actions can be related to dispositions in just the same way as other occurrences.

An *activity* may be thought of as an organized sequence of individual actions. Therefore it differs from any other process just by the fact that each individual item in the sequence differs from other occurrences in the way we have just noted, viz., by virtue of the fact that it is due to an agent. Hence if, as we just saw, an individual occurrence brought about by an agent can be the initiation of a disposition, then a sequence of such occurrences can be a sequence of disposition acquisitions and losses. Hence an activity can be dispositional in the first way in which we saw above that a process can be dispositional, viz., by just consisting in a sequence of disposition acquisitions and losses. The second way in which a process could be a disposition involved the possibility that a very rapid cyclical

process might constitute the basis of a disposition. Here it might be doubted that a sequence of actions could be sufficiently rapid for this purpose. However even if there is some *nomological* impossibility here, at least where human agents are concerned, it would certainly not seem *logically* impossible for a sequence of human actions to be executed with any given degree of rapidity. Hence I would suppose that there is no *a priori* bar to even a human activity being a disposition in this way.

VIII

The upshot of the foregoing discussion is that the categories of *disposition* and *occurrence (state, process, activity)* are not mutually exclusive on the ontological level. Hence even if it should be true that our concept of belief, enjoyment, heed, or whatever is purely dispositional,[15] it by no means follows that the psychological states we grasp by means of these concepts are not "actual" states, occurrences, processes, or activities *as well as* dispositions. Even if it is true that what we are saying of a person when we say that he is enjoying playing tennis can be spelled out purely in terms of subjunctive conditionals (except for the claim that he is currently playing tennis), it still may be true that the enjoyment itself (i.e., the state which is such that it is by virtue of that person's possessing that state that the statement in question is true of him) is an "actual" state, occurrence, or activity. These results have the important implication that Ryle's enterprise is fundamentally misguided insofar as it involves the attempt to destroy the "dogma of the ghost in the machine" (i.e., show that various psychological states of affairs do not consist of inner, private "episodes") *by way of* showing that our concepts of those matters are purely dispositional. Moreover our results imply that much of the criticism of Ryle is equally misguided insofar as it proceeds on the assumption that in order to show that various psychological states of affairs do involve inner private episodes one must show that Ryle is mistaken about the corresponding concepts.

There can be no doubt, I think, that the authors we have been discussing have been misled in those ways just because they have failed to make a clear distinction between claims

[15] I am, of course, not claiming that these concepts, or any others, are in fact purely dispositional. In fact I believe that virtually none of the psychological concepts treated by Ryle have this status, but I am not going into those matters in this paper.

about our psychological concepts and claims about the nature of psychological states. It would seem that in these contexts they have not kept the differences between these problems before their minds, and hence have not seriously considered the possibility that a purely dispositional concept might not be a concept of a purely dispositional state of affairs. This failure is no doubt partly to be explained by the influence of the dogma of "linguistic analysis" to the effect that any question about the nature of so-and-so (at least any such question that is properly dealt with by philosophers) can amount to nothing other than a question about the meaning or use of certain terms.[16] But I feel that the assimilation in question has also been encouraged by the confusion of meaning and reference, which has wreaked so much havoc throughout philosophy since ancient times. It is noteworthy that both Place and Penelhum, especially the former, frequently formulate the issues in terms of the *reference* of psychological terms.

> Do the words and expressions which the subject uses when he makes his introspective report, refer to internal events going on inside him?... He (Ryle) does not deny that some of the statements which we ordinarily make about people, refer to states and activities of the individual that are 'private' or 'covert' in the sense that only the individual himself can report their occurrence. He would maintain, however, that such statements constitute only a small minority of the statements we make about our own and other people's minds. (Place, p. 206)
>
> The traditional or, as Ryle calls it, the 'contemplative' theory of heed or attention and consciousness in the form in which I wish to defend it, may be stated as follows. The expression 'paying attention' refers to an internal activity of the individual presumably of a non-muscular variety whereby he.... The expression 'being conscious of something' refers to a peculiar internal state of the individual which normally accompanies any reasonably intense stimulation of his receptor organs.... (Place, p. 208)
>
> He (Ryle) supposes that mental concepts, or at least most of them, refer to what may be called behavioural dispositions, i.e. capacities, tendencies or temporary dispositions to behave in a certain way. (Place, p. 211)
>
> On this view 'consciousness,' 'attention' and 'observation' refer to a temporary state of readiness for something. (Place, p. 219)
>
> On the view which I wish to defend, when we use what Ryle calls a 'heed concept,' we are not merely referring to the disposition to respond in a manner appropriate to the presence of the thing in question and specifying how that disposition is brought into being, we are also referring to

[16] This principle is often justified. Quite often when philosophers ask about the nature of causality, knowledge, or truth, what they are after can best be provided by developing sound views as to how words like 'cause', 'know', and 'true' are, might be, or should be used. However it is not everywhere justified. In particular, philosophical questions about the nature of the mind or stretches thereof, are not identical with questions about the meaning, use, or "correct analysis" of mental or psychological terms.

> an internal state of the individual which is a necessary and sufficient condition of the presence of such a disposition. (Place, p. 220)
>
> In *The Concept of Mind* and elsewhere Professor Ryle has attempted to establish the thesis that most mental-conduct words are used to refer not to private episodes, but to dispositions which manifest themselves in predominantly public performances . . . . (Penelhum, p. 225)

On which side of our conceptual-ontological divide do these formulations fall? If the word 'refer' is not being abused, they clearly belong to the latter. It should be a familiar story by now, thanks to the labors of Frege, Strawson, and others, that reference is a very different matter from meaning. What I refer to by the use of some linguistic expression is by no means a unique function of the meaning of that expression, though it is undoubtedly limited in ways by that meaning. When I use a definite description like 'the banker who lives next door,' the meaning of that expression leaves many questions unresolved as to the nature of the entity to which I am referring. First it leaves open the possibility that I fail to refer to anything, in case there is no banker living next door to me. Second, if there is such a person, he may be fat or thin, young or old, intelligent or stupid, married or unmarried, etc., etc. However penetrating an understanding I have of the meaning of the phrase 'the banker next door', that will not in itself suffice to resolve these issues. In other words the entity referred to by a linguistic expression may have many properties not reflected in the meaning of that expression, and such that an account of the meaning of that expression will afford no basis for anticipating them.

Applied to the case at hand, this means that a psychological referring expression like 'Jones' belief that Smith will win the election' may have a purely dispositional meaning, i.e., its meaning may be completely explicated in terms of subjunctive conditionals, and yet, for all that, what it refers to may have a variety of features that we could not anticipate from a consideration of the meaning of the expression, including the property of being an internal, private occurrence. When we move from talking about what an expression means (the concept it expresses) to talking about *what it refers to,* we have stepped beyond the bounds of what we are saying, what it is we are committed to in wielding our terms and concepts; we are making claims that are subject to falsification in terms of how things are in fact, regardless of how we presently happen to be construing them. Thus when the word 'refer' is uncon-

fusedly used in its ordinary distinctive sense, to say that psychological terms do not refer to private episodes amounts to the same thing as saying that psychological states are not private episodes; it is far from just saying that our psychological concepts do not commit us to any private episodes.

However it is not at all clear that our authors are using the term 'refer' in a straightforward, unconfused fashion. In fact, there are many indications that they are not. In the passages cited above Place and Penelhum speak of various sorts of terms as standing in the referring relation—"words and expressions which the subject uses when he makes his introspective report," the specific terms, 'paying attention,' 'consciousness,' 'attention,' and 'observation,' "statements which we ordinarily make about people," "mental-conduct words," and "mental concepts." This is a very mixed bag. More particularly, with the exception of the abstract nouns like 'attention,' it is dubious that any of the items on this list 'refer' to *anything* in any clear, distinctive sense of that term. When Place speaks of "the words and expressions which the subject uses when he makes his introspective reports" he is presumably thinking of the sorts of predicates one attributes to oneself in such reports, such predicates as 'feel frightened,' or 'seem to be seeing a grey cloud.' But one doesn't use predicates to refer to anything; one uses them to attribute something to that to which one is using some other expression to refer. Still less is one using the whole statement to refer to something. When we speak of concepts referring to something, we are still further from any primary clear sense of 'refer.' I am not, of course, suggesting that it is impossible to refer to the psychological states one attributes to a person (but doesn't refer to) when one uses psychological *predicates* to make psychological *statements*. It is just that in order to refer to a psychological state, one will not employ a predicate, statement, or common noun, but some noun phrase suited to be used as a referring expression, like 'Jones' belief that Smith will win the election.'

It seems likely then that Place and Penelhum are using 'refer' in the sloppy manner typical of philosophers to cover a wide variety of semantic properties and relations. In this usage, or misusage, to speak of what a word, phrase, sentence, or "concept" "refers to" is to say something (just what is left quite indeterminate) about the meaning, content, import, ... of the expression in question, the only restriction being that the

specification will involve mention of some thing, or some type of thing, in "the world" to which the expression is related in some semantically important way. The impression that they are really talking, albeit in a confused fashion, about *meaning* rather than *reference* is reinforced by the way in which they fail to distinguish formulations like those quoted above from others that seem on the face of it to be concerned, rather, with meaning. Thus shortly after Place has said of Ryle that "he supposes that mental concepts, or at least most of them, refer to what may be called behavioural dispositions," he goes on to spell out Ryle's view of attention as follows: "Ryle contends that to say that someone is paying attention to what he is doing entails that he has at least two important dispositions,. . . ."

But although I do not feel that we can interpret Place and Penelhum as using 'refer' in the straightforward distinctive sense in which their formulations would clearly be on the ontological side, it does seem plausible to suppose that the features of reference I pointed out above have had some influence, though perhaps an unconscious one. Even if one is not clear about the distinctive features of reference, and even if he uses 'refer' in ways that involve riding roughshod over those features, it is difficult to completely strip the word of those associations. The very fact that one is speaking in terms of what expressions *refer to* is likely to give one a sense that what one is saying has import for the way things are in themselves, not just for the shape of our (perhaps misguided and certainly incomplete) ways of grasping them. The reference-formulations, then, are ideally suited to form a bridge between the conceptual and the ontological. Since they are claims so to what *words* and *concepts* refer to, they seem to have to do with the content or import of what we say and how we construe things. But since they are claims as to what words and concepts *refer to,* they may also appear to have to do with the nature of the extra-linguistic realities to which our sayings and thinkings are directed. Thus a preference for such conveniently ambivalent formulations can reinforce a tendency to blur the conceptual-ontological distinction, and to suppose that one and the same thesis can be formulated indifferently in either the conceptual-linguistic or the ontological idiom.

IX

Our results point up the necessity for more careful attention to the distinction between the conceptual and ontological

orders in the philosophy of mind (as well as elsewhere) and, along with this, more attention to what it takes to establish conclusions on each of these levels. The neglect of these distinctions has adversely affected the treatment of a number of topics in the philosophy of mind, e.g., the discussions of logical behaviorism (apart from the Rylean literature) and of the allied view that mental terms have public "criteria" in the Wittgensteinian sense (whatever that is). Both these positions are essentially views about psychological concepts or terms; and their treatment, especially the consideration of the bearing of these views on traditional theories of the "mind-body relation," has been infected with false assimilations of the conceptual and the ontological, analogous to the ones we have been criticizing in this paper.[17] And for lack of a just appreciation of the distinction between analyzing our mental concepts and determining the nature of mental states, philosophers have found it easy to ignore such issues as that of the individuation of mental states, issues that, as we have seen, are fundamental to the determination of the bearing of conceptual analysis on ontological problems.[18] It is a clear implication of this paper that the investigation of such issues has a high priority in the philosophy of mind.

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[17] Thus it is often uncritically assumed that behaviorism is a form of materialism. A notable exception is the discussion by J. A. Fodor in his book, *Psychological Explanation* (New York: Random House, 1968). There he clearly brings out that logical behaviorism is logically compatible with Cartesian dualism.

[18] Another body of discussion where this issue is both crucial and neglected is the controversy over the "identity theory". Clearly the way in which we individuate states is going to powerfully influence our decision as to whether a thought or sensation can be the *same state* as a certain neuro-physiological occurrence in the brain, especially if we have agreed that the mentalistic and the neuro-physiological concepts are distinct.