

*Psychology in Perspective**

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If recent literature is to be our guide, the main place of philosophy in the study of the mind would seem to be to determine the place of psychology in the study of the world. One distinctive kind of answer to this question begins by noting the central role of intentionality in psychology, and goes on to argue that this sets psychology apart from the natural sciences. Sometimes to be thus set apart is to be exiled, or rejected, but more often it is a protective move, intended to show that psychology is properly insulated from the reductionist demands of natural science. I am interested here in the general issue as to how this move to insulate intentional psychology should best be characterised—how to make sense of the idea that there can be a legitimate enterprise of this kind. I shall concentrate on what is perhaps the best known version of such a view, that of Daniel Dennett. I think that my conclusions apply to other versions as well, but Dennett provides a particularly accessible example.

Dennett argues that intentional psychology is to be understood as a product of a particular way of viewing certain natural systems or structures; the view from what he calls the intentional stance. He has often compared the recognition of intentional states to the recognition of patterns.¹ He tells us that just as a pattern is only salient from a particular perspective—that of the pattern recogniser—so beliefs and desires are only salient from the standpoint of the intentional stance. This is a perspectival view of intentional psychology, then.

* To appear in M. Michael & J. O’Leary-Hawthorne, eds, *Philosophy in Mind*, Kluwer, 1994.

¹ See most recently his “Real Patterns”, Journal of Philosophy, **88**(1991), 27-51.

But perspectivalism comes in more than one flavour. In this paper I want to suggest that Dennett's perspectivalism is too bland, and to recommend a richer though less fashionable version. Among the advantages of this richer blend is the fact that it would provide Dennett with the best prospect of an answer to those of his critics who accuse him of wavering between realism and instrumentalism (the issue which motivates Dennett's return to the pattern recognition analogy in "Real Patterns"—he says for example that "it is this loose but unbreakable link to ... perspectives ... that makes 'pattern' an attractive term to someone perched between instrumentalism and industrial-strength realism."²)

This more strongly flavoured perspectivalism has much in common with that of Ryle, and hence ultimately of Wittgenstein. In my view Dennett is not the only one in the philosophy of mind who would benefit from a rather selective infusion of Rylean and Wittgensteinian themes. Embibed in the correct manner, they provide the most promising approach to the perennial problem of explicating the dependence of psychology on the physical sciences—that is, to reconciling psychology with naturalism. This may seem implausible. Contemporary Wittgensteinians are not friends of naturalism, by and large. But these contemporary writers have failed to notice the naturalistic character of Wittgensteinian reflections on language. "What does this part of language do for us; what is its function?" To ask such questions is to adopt an explanatory stance towards an aspect of one's own linguistic practice. The stance here is thoroughly naturalistic—that of a biologist, in effect. And yet it should come naturally to a Wittgensteinian, for of course one of the Master's main themes is that philosophy needs to pay close attention to the uses of language, in order to avoid its characteristic traps.³ (Later I shall argue that it is the naturalism of this explanatory standpoint that takes the mystery out of a non-reductive defence of intentional psychology.)

² "Real Patterns", p. 32.

³ Perhaps the reason this stance is so unpopular is that its naturalism offends Wittgensteinians, while its linguistic character offends post-Wittgensteinians. If so, then it is time for the two sides to adopt the Sprat family's approach to conflict-resolution: hard-nosed post-Wittgensteinians should embrace the stance for its lean naturalism, and Wittgensteinians should embrace it for its rich linguisticism.

The first task is to distinguish three different kinds of perspectivalism: the rather bland kind which Dennett seems to have in mind, an intermediate strain, and lastly the richer variety that I want to recommend.

THREE KINDS OF PERSPECTIVALISM

1. *Epistemic perspectivalism.* Many aspects of reality can only be seen from particular viewpoints. There are many trivial examples. The eyes of the Mona Lisa may follow you around the room, but they won't follow you into the next room, so if you want to see them you'd better stand in the right part of the building. For a less trivial example, suppose we identify colours with underlying physical properties. Redness is then perspectival in the epistemological sense. The property exists independently of any observer, and may be characterised by someone who lacks colour vision; but its instances are normally accessible only to an observer whose visual apparatus is attuned to physical properties of just the right kind. Much the same is true if redness is thought of as a disposition to affect normally sighted observers in a particular way. In this case the characterisation refers to normal observers—to be red is to be such as to evoke a particular response in a normal observer under suitable conditions—but one needn't be a normal observer to make sense of that characterisation. (One may grasp the concept without possessing normal colour vision.) But again, only a normally sighted observer occupies the perspective needed to detect such a disposition, at least in a direct way.

In these cases the perspectivalism is epistemic. The states of affairs in question exist independently of whether the perspectives in question are ever occupied; but are only directly detectable when and in so far as the perspectives are occupied.

2. *Conceptual perspectivalism.* A stronger form of perspectivalism is obtained if we deny that colour concepts can be grasped by someone who lacks normal (or near normal) colour vision. Thus it might be held that although redness itself is a physical property, just as the reductionist contends, the concept red is not the concept of that physical property. Rather the sense of the term "red" is one which can only be grasped by someone who experiences colour vision "from the inside". A creature without normal human colour vision could in

principle refer to the same elements of reality, but not by means of the human system of colour concepts. (This form of perspectivalism is a natural partner to the common view that at least some of the conceptual joints at which we carve the world are not absolute, but reflect our own interests and responses. Note that it is not incompatible with metaphysical realism. In one possible version, for example, it is the view that properties are simply classes, all of which are equally real, even though only a small number are picked out in any given system of concepts.)

3. *Functional perspectivalism.* Now think of a projectivist view of colour—the view that colour discourse projects our subjective colour experience. A creature without such experience wouldn't have a use for an element of language with this function. The basic idea here is a simple one: the tools a creature has a use for depend on its circumstances. Dolphins have no use for bicycles, and telepaths none for mobile phones or fax machines. If different parts of language serve different functions then presumably the same sort of thing may be true in linguistic cases. (Omniscient beings would have little use for the interrogative mood.) Similarly, if colour discourse serves the function of expressing and projecting the normally sighted observer's visual perspective, then unless a creature occupies that perspective, it lacks what it takes to make use of that discourse; the function of the discourse is one which simply has no place in such a creature's life. In such cases the dependence on perspective is not merely epistemic or conceptual—I call it functional perspectivalism.

Projectivism is normally an irrealist position—projectivists are typically either non-factualists or eliminativists. We might expect the same to be true of functional perspectivalism more generally. On the face of it, the view seems to involve a denial of the independent reality of whatever falls under the concepts in question. Later I want to argue that this impression is misleading. But for the moment we have three kinds of perspectivalism, epistemic, conceptual and functional.

Where does Dennett's position fit in? The fact that functional perspectivalism is *prima facie* irrealist gives us some reason for taking Dennett's perspectivalism to be of a non-

functional sort, for Dennett claims to be a realist (of sorts) about intentional states.⁴ More importantly, the pattern recognition analogy seems best read in epistemic (or perhaps conceptual) terms. Dennett himself tells us that “other creatures with different sense organs, or different interests, might readily perceive patterns that were just imperceptible to us. The patterns would be there all along, but just invisible to us.”⁵ This certainly sounds like epistemic perspectivalism. It is true that even a projectivist will allow that colour vision, moral sensibility, or whatever, involves what might be thought of as a pattern recognition mechanism—something in us that responds to particular conditions in the world. But the projectivist will deny that the discourse concerned—about colours, moral value, or whatever—should be understood as referring to the relevant physical patterns. Its function is to express our responses to these patterns, which is a different matter.

However, I think the most striking way to exhibit the epistemic character of Dennett’s perspectivalism is to contrast it with that of a philosopher whose perspectivalism about the mental is clearly non-epistemic, namely Ryle. The most crucial difference between Dennett and Ryle is simply this: Ryle is unashamedly a linguistic philosopher, whereas Dennett belongs to the generation for whom language became so to speak “unmentionable”, at least in the context of philosophical discussions of other topics. Accordingly, Ryle attempts to trace the Cartesian myth to a philosophical misunderstanding about the role of the language of psychological ascription. His central instrument is the notion of a category mistake—the Wittgensteinian idea that as theoreticians we may be misled by the grammatical form of an utterance, and hence misunderstand its logical function. Like Dennett, Ryle thinks that psychological language is distinctive; unlike Dennett, however, he thinks that its distinctiveness lies in its function, and not merely in the aspect from which it regards its subject matter. For Ryle failure to adopt a perspective is not simply like failure to stand in the

⁴ It is true that I want to suggest that functional perspectivalism is not necessarily unrealistic after all, but this is a rather unorthodox view, and Dennett certainly does not offer any argument to this effect.

⁵ “Real Patterns”, p. 34, Dennett’s italics.

right viewing position; it is failure to adopt a form of speech, failure to put language to use in a particular way.⁶

A number of aspects of Ryle's view fall flat for contemporary readers. One such aspect is the linguistic approach itself, of course, though here the fault may lie as much with the prejudices of the contemporary reader as with Ryle. But even modern readers not embarrassed to discuss philosophical problems in linguistic terms are likely to find Ryle's account of what is distinctive about talk of the mental a little quaint. Ryle tells us that mental talk is talk of behavioural dispositions. To modern ears this seems severely inadequate: first, because we are now so accustomed to dispositions in philosophy that it is hard to take seriously the claim that dispositional talk has any special logical status;⁷ second, because the dispositional brush seems hopelessly broad to capture what is distinctive about the mental; and third, because even when the focus is narrowed to behavioural dispositions the result is a position whose drawbacks have since been pointed out by a generation or so of functionalists.

All the same, there might well be room for a Dennettian version of Ryle's perspectivalism—a view which would take over Ryle's Wittgensteinian idea that beneath their surface similarities, different parts of language serve different functions, while incorporating Dennett's account of the function of the intentional stance. Thus we might

⁶ Why is this not simply conceptual perspectivalism? Because of Ryle's emphasis on logical function. A conceptual perspectivalist need not deny that the perspective-dependent concepts are all employed for the same single descriptive purpose.

⁷ This doesn't necessarily mean that Ryle is wrong, of course. It may simply mean that in ignoring the functions of language, contemporary philosophy has lost a sensitivity that earlier philosophers possessed.

abandon the behaviourism,⁸ but keep the notion of a category mistake, and the associated diagnosis of what was wrong with the Cartesian tradition.⁹

RYLE, QUINE AND EXISTENCE

Could Dennett justifiably resist this move to recast his views in Rylean form? An obvious thought is that he would see it as having unwelcome consequences concerning the existence of beliefs and desires—as leading to irrealism in some form. Dennett says he favours a “mild realism”, weaker than “Davidson’s regular strength realism”, but stronger than “Rorty’s milder-than-mild irrealism, according to which the pattern is only in the eyes of the beholders.”¹⁰

But is Ryle necessarily an irrealist? What does the issue of the existence of beliefs and desires look like from a Rylean viewpoint? At one point Ryle says

It is perfectly proper to say, in one logical tone of voice, that there exist minds, and to say, in another logical tone of voice, that there exist bodies. But these expressions do not indicate two different species of existence, for “existence” is not a generic word like “coloured” or “sexed”. They indicate two different senses of “exist”, somewhat as “rising” has different senses in “the tide is rising”, “hopes are rising” and “the average age of death is rising”. A man would be thought to be making a poor joke who said that three things are now rising, namely the tide, hopes and the average age of death. It would be just as good or bad a joke to say that there exist prime numbers and Wednesdays and public opinions and navies; or that there exist both minds and bodies.¹¹

⁸ Note that this would simply by-pass some of the major criticisms of Ryle, such as that of Fodor 1975, who accuses Ryle of being a functional reductionist. It is doubtful whether it is fair to term Ryle a reductionist of any sort—the point is nicely brought out in terms of a contrast between analysis and explanation—but even if he were, in ditching his behaviourism we would ditch what was problematic about his reduction base.

⁹ Dennett is not the only contemporary philosopher of mind whose view of intentional psychology might be given this Rylean flavour, of course—Davidson, McDowell, Pettit are others—but for present purposes let us continue to use Dennett as our example.

¹⁰ “Real Patterns”, p. 30.

¹¹ Concept of Mind, p. 24.

This might seem to give Dennett grounds for resisting Ryleanisation, namely that Ryle's appeal to "two different senses of 'exist'" falls victim to Quinean lessons concerning existence. As Quine himself puts it:

There are philosophers who stoutly maintain that "true" said of logical or mathematical laws and "true" said of weather predictions or suspects' confessions are two uses of an ambiguous term "true". There are philosophers who stoutly maintain that "exists" said of numbers, classes and the like and "exists" said of material objects are two uses of an ambiguous term "exists". What mainly baffles me is the stoutness of their maintenance. What can they possibly count as evidence? Why not view "true" as unambiguous but very general, and recognize the difference between true logical laws and true confessions as a difference merely between logical laws and confessions? And correspondingly for existence?¹²

Dennett elsewhere "Quines qualia", and in "Real Patterns" endorses Arthur Fine's rather Quinean attitude to ontological issues; so this invocation of Quine seems a move that might well appeal to him.

However, if (as Quine tells us) matters of ontology amount to little more than matters of quantification, then this objection to Ryle looks rather beside the point. Ryle would presumably not deny that we should quantify over prime numbers, days of the week and dispositions. The respect in which he takes the categories to differ must be some other one. Indeed, Ryle might say that in denying that there are "two species of existence" he is agreeing with Quine. Ryle simply needs to say that what we are doing in saying that beliefs exist is not what we are doing in saying that tables exist—but that this difference rests on a difference in talk about tables and talk about beliefs, rather than on any difference in the notions of existence involved. So far this is exactly what Quine would have us say. The difference is that whereas Quine's formulation might lead us to focus on the issue of the difference between tables and beliefs per se, Ryle's functional orientation—his attention to the question as to what a linguistic category does—will instead lead us to focus on the difference between the function of the talk of beliefs and the function of the talk of tables.

¹² Word & Object, Cambridge, Mass: MIT Press, 1960, §27.

This functional linguistic perspective does not appear to violate any hallowed Quinean doctrine. For one thing the issue as to the function of a particular part of language is a scientific one. It is the anthropologist who asks “What does this linguistic construction do for these people?” (Or even more basically, the biologist who asks “What does this behaviour do for these creatures?”) Moreover, Quine is in no position to insist that there is a common semantic function for the various indicative discourses in question, such as that of being descriptive, or fact-stating. For these are meaning categories, to which Quine’s irrealism about meaning would seem to prevent him appealing. It is no use Quine’s saying for example that the discourses in question are alike in aiming at truth; for the Rylean may agree, but counter that in view of Quine’s own minimalism about truth, this concession is quite compatible with the claim that they serve different functional roles. Truth, like existence as quantification, belongs to what Wittgenstein refers to as the “common clothing”, which overlays and masks the interesting differences between discourses.

To sum up: a position that combined Ryle’s explanatory linguistic stance with Dennett’s account of what psychological discourse is for, wouldn’t fall foul of Quinean ontological minimalism (nor apparently of the Finean version on Dennett himself claims to rely). On the contrary, the minimalist themes we find in both Quine and Wittgenstein appear to cut away the ground from someone who would argue that functional perspectivalism is necessarily irrealist. So we can enjoy this rich blend of perspectivalism without endangering our realist figures. Of course this sounds too good to be true, and in one sense it is; as I’ve argued elsewhere,¹³ the trick turns on the fact that minimalism also undermines the traditional (rather anorexic) conception of what a good realist figure looks like. That conception depends on the assumption that there is a single unifying semantic function properly served by indicative discourse—that of “stating the facts”, or “describing the world”. Given such a function, realism concerning a discourse can then be cast as the view that the discourse succeeds in performing this function; i.e., that the discourse in question is genuinely descriptive (as opposed say to expressive), and that the descriptions it offers are

¹³ “Metaphysical pluralism”, *Journal of Philosophy*, **89**(1992), 387-409.

not uniformly false, in virtue of the non-existence of that to which they claim to refer. But semantic and ontological minimalism undercut this conception at its foundation; for they entail that our notions of truth, factuality, existence and the like are simply too insubstantial to bear the metaphysical weight.

This is not the place to go over that argument in detail. However, I do want to try to give some impression of what sort of stance this functional perspectivalism will involve. In particular I want to distinguish it from two other positions advocated by contemporary Wittgensteinians. And I also want to argue, as promised, that it embodies the most plausible approach to old problem of making reasonable sense of the intuition that the mental depends on the physical.

THREE WAYS TO BE WITTGENSTEINIAN

A prominent theme in Wittgenstein's later work is that the surface uniformities of language hide an underlying diversity. Common syntactic forms and structures mask distinctions among a variety of different discourses or language-games. Wittgenstein combines this linguistic pluralism with a kind of quietism, saying that it is not the job of philosophy to try to remove this diversity. Hence Wittgenstein's anti-reductionism: the view that it is not the job of philosophy to try to reduce one discourse to another.

These themes have often been deployed in defence of varieties of non-reductionist realism. Simon Blackburn calls the resulting position "dismissive neutralism".¹⁴ Crucially, Wittgenstein is thus seen as denying that there is any external standpoint from which it makes sense to criticise a discourse for failing to correspond with the world, or to see it as reducible to some other discourse. As Blackburn elsewhere points out,¹⁵ this is a prominent theme late twentieth century philosophy, taken up perhaps most notably by Rorty, who finds it not only in Wittgenstein, but also in Sellars, Quine and Davidson.

¹⁴ See Blackburn's *Spreading the Word*, Oxford University Press, 1984, Ch. 5.

¹⁵ "The Message of Wittgenstein", typescript, p. 1.

Blackburn goes on to argue that the view is wrongly attributed to Wittgenstein. In particular, he argues that it is wrong to take Wittgenstein as “a writer bent on showing that reference to an objective reality is something that is aimed at by all indicative sentences, all of which express propositions, in the same way.”¹⁶ On the contrary, Blackburn makes a persuasive case to find in Wittgenstein something closer to his own quasi-realist position: the view that indicative sentences divide into those that genuinely express propositions (and have genuine truth values), and those that only appear to do so (and hence whose apparent truth values the quasi-realist needs to explain).

Our present concern is not to locate Wittgenstein on the philosophical map, but to sketch some elements of the map itself. The crucial point illustrated by the possibility of a quasi-realist reading is that Wittgensteinian non-reductionism is not incompatible with the viewpoint which asks, “What is this discourse for; what function does it serve?” (and hence “Why does it take indicative form?”) Questions of this kind come naturally to the quasi-realist. And they are not excluded by the neutralist’s insistence that there is no Archimedean standpoint from which to compare a discourse to an external reality. As I have emphasised earlier, the standpoint here is not Archimedean but simply scientific—it is that of the biologist, in effect, who wants to know what function this element of linguistic behaviour serves in the lives of the creatures in question. This scientific perspective does not deny anything that the neutralist says; it simply promises to say more. It promises to tell us about an aspect of the plurality that the neutralist simply remains mute about, namely the issues as to what different discourses are doing, and as to why there should be more than one (or even one, for that matter).

Blackburn’s neutralist opponents might reply that this scientific perspective may yield no basis for the quasi-realist’s distinction between those discourses that require the quasi-realist treatment—i.e. those with respect to which it is appropriate to ask “Why is truth used here?”—and those that have their truth values by birthright, as it were. It saying this they might of course claim Wittgenstein’s authority; they might argue, contra Blackburn, that Wittgenstein

¹⁶ “The Message of Wittgenstein”, typescript, p. 2.

thinks that there can be no distinction between the genuinely factual (or proposition-expressing) uses of language and the rest of the indicatives. Two responses will then be in order. First, in so far as it is an empirical matter, we shall just have to wait and see. But second, and more important, even if both points are conceded to the neutralists, the effect is not to take us back to their cosy quietism. For even if there is no factual–non-factual distinction, we can still ask the quasi-realist’s scientific questions about the functions of different bits of language. The only thing that changes is that the quasi-realism now goes all the way down.

In summary then, the linguistic stance admits at least three possible positions: the neutralists’ quietist realism, quasi-realism and the position I call “explanatory pluralism”. Whatever Wittgenstein’s own views on the matter, there seems to be no conceivable reason for favouring the first position over the latter two. (The explanatory issues that divide them are not ours to reject; we may choose not to engage with them, but that is a different matter.) The choice between quasi-realism and explanatory pluralism is more difficult, and really turns on the availability of a substantial distinction between genuinely factual uses of language and those which the quasi-realist wants to regard as merely quasi-factual. I have argued elsewhere that such a distinction isn’t available,¹⁷ but I don’t want to try to press the point here.

However, it worth noting that discourse pluralism is especially well placed to defend a position of Dennett’s kind against the charge that it offers an instrumentalist account of the mental. For the instrumentalist too relies on a distinction between full-bloodedly descriptive uses of language and those uses that call for an instrumentalist reading. In rejecting such a distinction the discourse pluralist thus rejects a fundamental presupposition of instrumentalism. This may seem a rather pyrrhic victory. After all, doesn’t the discourse pluralist defeat the instrumentalist by being anti-realist about everything? Again, I don’t think so, for the reason mentioned at the end of the previous section. As I have argued

¹⁷ See my Facts and the Function of Truth, Basil Blackwell, New York, 1989.

elsewhere,¹⁸ discourse pluralist supports minimal realism, and that in effect this is all the realism that anyone is entitled to, once we take on board the lessons of Quinean and Wittgensteinian quietism about truth and ontology. (In other words, I think that quietist minimal realists are right about realism, and only mistaken in ignoring the further explanatory issues.) This richer functional brand of perspectivalism thus holds out the prospect of a much more powerful response to instrumentalism than Dennett's epistemic variety. It does so, in effect, by taking up the question as to what is at stake in the issue between realists and anti-realists in such a case, and hence arguing that there is no valid basis for the instrumentalist challenge. Dennett's mistake—a mistake that flows from his failure to acknowledge the linguistic and functional dimension to an adequate perspectivalism—is to take uncritically on board too much of his opponents' conception of what is at issue between realists and anti-realists about intentional psychology.

Dennett's mistake is a very pervasive one, of course. There is a vast Flatland in contemporary philosophy, a land whose inhabitants simply fail to notice the dimension of linguistic complexity which is addressed from the explanatory perspective. Unable to direct their gaze in the required direction, they simply fail to ask the question, "What does this part of language do?" Even Wittgensteinians, who were once taught to ask questions of precisely this kind, have tended to lose the ability. Having rightly taken Wittgenstein's minimalism to provide a reason for not asking one sort of question, they wrongly take it to provide a reason for asking no questions at all—or else simply fail to notice that there is another question to be asked.

I want to emphasise again that the questions being overlooked here are of an empirical and naturalistic nature. Though in practice they may arise (or fail to arise!) in a philosophical context, their content is scientific. They belong to the study of language users as natural creatures. Two corollaries follow from this. The first is that the explanatory stance that takes such questions seriously is not to be dismissed by armchair philosophy, or not at any rate by any armchair philosophy that claims to respect the scientific perspective. To

¹⁸ See "Metaphysical pluralism", *Journal of Philosophy*, **89**(1992), 387-409.

illustrate the second, let us turn to the issue as to how intentional psychology may be reconciled with naturalism.

THE DEPENDENCE OF PSYCHOLOGY ON PHYSICS

How, if at all, are we to preserve psychology in the face of the naturalist intuition that in the final analysis, everything depends on the physics? Of all the distinctively philosophical questions about the study of the mind, this one is perhaps the choicest. A familiar range of answers are currently on offer in the philosophical literature. At the two extreme ends of the range, for example, we find on the one hand the eliminativist answer, that psychology—or folk psychology, anyway—has had its day, and shouldn't be defended; and on the other various anti-scientist positions which reject the naturalist intuition itself, claiming that psychology is not really under attack. (Some of the latter draw on the Wittgensteinian themes we have described above.) In between these extremes there is a group of compatibilist positions, which seek to save both psychology and naturalism. I want to suggest that explanatory pluralism not only has the credentials to join this group, but promises to become its most successful member.

Let us begin with three desiderata, one stemming from the desire to save psychology, one from the desire to accord priority to the physical, and one perhaps from more general philosophical sources.

1. We should respect Occam, avoiding (unmotivated?) ontological profligacy.
2. We should respect and account for the intuitive priority of the natural realm—i.e., justify the intuition that in some sense, everything else depends on physics.
3. We should respect psychological descriptions and explanations, both in principle, and (by and large, at any rate) in practice.

It is important to keep in mind that although we are here concerned with the relation between psychology and physics, similar issues arise elsewhere. Indeed, they arise both on the scientific hierarchy (e.g. concerning the relation between biology and physics) and elsewhere in philosophy (e.g. with respect to the status of moral or modal discourse). I don't want to prejudge the issue as to the relation between these two sorts of cases, or, in so far as they are

distinct, that as to in which camp intentional psychology should properly be located. All the same, if our treatment of the psychological case is not to seem ad hoc, it ought to meet a fourth desideratum along these lines:

4. If possible, the solution we adopt in the psychological case should be one which will generalise to other cases in which we are confronted with the task of reconciling modes of description other than those of physics with naturalist intuitions.

I shall come back to this requirement at the end of the paper.

Addressing the issue as to how we might defend higher-level explanation (including causal explanation) in the face of naturalism, Philip Pettit notes in a recent paper¹⁹ that there are three main compatibilist options currently on offer: the identity theory, the supervenience view, and Pettit's own preferred position, the Jackson-Pettit program explanation model. Of these, the identity theory has long been popular, particularly in the so called token identity version. It has obvious attractions, most prominent of which are that it is absolutely non-profligate in ontological terms, and yields a straightforward account of the priority of physics: higher-order states are identified with physical states, but not in general vice versa. But it also has defects. Some of these are identified by Jackson and Pettit, who argue in particular that the identity theory gives implausible results concerning higher-order causal connections. Other defects have recently been pressed by Mark Johnston²⁰ and in unpublished work by David Braddon-Mitchell and myself. In sum, I think it is fair to say that the causal reductionism that drives these theories turns out to be doubtfully compatible with requirement 3.

Jackson and Pettit have argued that the supervenience model also gives counterintuitive results concerning higher-order causal connections, and thus fails requirement 3. I want to suggest that it also does poorly on 1 and 2. For one thing, the ontological proliferation permitted by the supervenience model appears to be unconstrained. The model doesn't tell us where the multiplicity of levels comes from—it appears simply as

¹⁹ "The Nature of Naturalism", *Proc of the Arist Soc, Supp. Vol. 63*, 1992.

²⁰ "Constitution is not Identity", *Mind*, **101**(1992), 89-105.

a brute fact. Secondly, it is far from clear that the supervenience model provides a sufficiently substantial account of the priority of the physical. That is, the supervenience relation itself appears to be left as a brute fact about the world, not explained by the model.²¹ So the supervenience model describes the dependence of the higher on the lower—gives its logical form—but does not explain it.

I think the same is true of the program explanation model. Jackson and Pettit explicate higher level causal relevance in terms of the idea that higher level properties may “program” for the presence of causally efficacious lower level properties. Pettit describes the model as follows:²²

Suppose that there is no question about the causal relevance of properties at a given level L to the occurrence of an event E, of a given type. According to the program model, a property P at some other level will be causally relevant to that event just in case two conditions are fulfilled.

1. The realisation of P *makes it more probable* than it would be otherwise—at the limit, it may ensure—that there are certain properties realised at level L which are apt to be causally relevant to the occurrence of such an E-type event.
2. Properties of the probabilified kind are in fact causally relevant to the occurrence of E.

It seems to me that the program model faces a dilemma with respect to the relevant notion of probabilification (of lower level properties by higher level properties). On the one hand we might read this notion in a very thin frequentist, or associationist, sense. The claim will then be that the higher level property simply varies in parallel with the presence of a lower level property of the required kind. But this will leave the view vulnerable to the objection I just raised to the supervenience view, viz. that at best it is describing a regularity in the world, whereas what we want from account of the priority of the physical is an explanation of this regularity. A graphic way to make the point is to note that even a Cartesian event or property

²¹ A similar point against the supervenience approach has been made by Stephen Schiffer, in Remnants of Meaning, MIT Press, 1987, pp. 153-4. As Schiffer puts it, “Supervenience is just epiphenomenalism without causation.” (p. 154)

²² Philip Pettit, “The Nature of Naturalism”, pp. 10-11 in ts, my italics.

dualism will meet the condition, so long as the dualist allows that mental events run in parallel with physical events in the brain. In other words the condition might be met in a world in which psychology simply did not depend on physics in the way in which we take it to do so in fact.

The program model might of course reply that it has some stronger or more substantial notion of probabilification in mind. The difficulty is that the metaphysics needed to support a more substantial probabilistic connection between levels is likely to bring with it an independent account of the dependence of higher levels on physics; after all, what it has to exclude is precisely the case in which we have association without the right sort of dependence. So there is a dilemma here: the crucial notion of probabilification must be neither too weak nor too strong, but it not clear that we have been given any acceptable middle course.

How does an explanatory pluralism avoids these difficulties? The solution turns on the fact that the explanatory stance is itself naturalistic. In explaining a discourse our aim is to say what function it serves for the natural creatures who employ it, what responses, capacities or other features of these creatures it depends on, and so on. To take one of the simpler examples, consider colour. We take colour properties to supervene on a physical basis. On occasion we might take colour to be causally relevant—we say that it was the redness of the flag that enraged the bull, for example—and we might account for this in program terms. Why aren't these features of colours mysterious? Because both are readily explicable in terms of a naturalistic account of colour vision. It is in virtue of the fact that colour vision involves an interaction between physical states in the world and physical states in the visual system that so long as the latter is held fixed (and is reasonably deterministic), a difference in the colour judgements it outputs requires a difference in the physical state it inputs. (This is similar to a point long made by Blackburn in support of moral projectivism: Blackburn argues that only the projectivist can account for moral supervenience, since for the

realist it is simply a mystery.²³ Note that in both cases the force of the point is explanatory, not justificatory or normative; we are explaining why the practices of making colour judgements or value judgements normally exhibit supervenience, not demonstrating within colour or value discourse that they do so. Indeed, it seems that to attempt such a demonstration should properly be seen as involving a category mistake, on this view.)

Similarly, it is in virtue of the fact that colour vision involves an interaction between physical states in the world and physical states in the visual system that the physical circumstances which normally produce the output "That's red" are typically of the sort whose effect is to enrage bulls. In both cases it is the naturalistic explanatory standpoint that demystifies the bare logical relationship. Leave aside this illuminating standpoint and nothing stands in the way of interpreting supervenience or the program relation in terms of a brute parallel dualism about colour.

I want to emphasise that this explanatory standpoint is compatible with taking either supervenience or the program model to provide the appropriate description of the dependency of higher levels on lower levels. However, it is the explanatory background that demystifies the bare logical dependency, that explains the formal priority of physics. Thus explanatory pluralism provides the "cement" that prevents multiple discourses from floating free of one another. And the cement is only visible when we take the explanatory "step backwards"—when we disengage ourselves from the discourses in order to ask what they do, what features of speakers and the world they depend on, and so on. At the same time the explanatory pluralist acquires an answer to the identity theorist's original worry, namely that anything except the identity theory involves ontological profligacy. The plurality of discourses is not arbitrary and unconstrained; each is accounted for from the explanatory standpoint. (The plurality is one of linguistic functions or forms of behaviour.) Again, the supervenience view and the program model appear to have nothing to say here.

²³ See his "Moral Realism" in Casey, ed., Morality and Moral Reasoning (London: Methuen, 1971), 101-24; Spreading the Word (Oxford: Oxford University Press, 1984); and "Supervenience Revisited" in Hacking, ed., Exercises in Analysis: Essays by Students of Casimir Lewy (Cambridge: Cambridge University Press, 1985), 47-67.

Thus in explaining dependence of the psychological on the physical functionalist perspectivalism does better than the three main alternatives, namely the identity theory, the supervenience view, and the Jackson-Pettit program explanation model. The crucial points are (i) that the perspectivalism provides the respects in which discourses differ, thus countering the charge of ontological profligacy; (ii) that the functional perspective is itself naturalistic, which underpins the felt priority of physical explanation; and (iii) that the connection between discourses only emerges from the explanatory viewpoint adopted by the functional perspectivalist—these connections remain mysterious for supervenience views and for the program explanation model.

Finally, let us return briefly to the issues raised in my formulation of the fourth desideratum at the beginning of this section, namely that the solution adopted in the psychological case should generalise to other cases in which we face the task of reconciling a level or mode of description other than that of physics with our naturalist sympathies. I noted that there seem to be two sorts of cases to be dealt with, those which arise in the scientific hierarchy and those which arise elsewhere in philosophy. This distinction seems to me to be an important one. There seems to be an important difference between the relation between say chemistry and physics, on the one hand, and that between colour talk or modal talk and physics on the other. Roughly, the former distinction depends on levels of structure in the world, the latter distinctions more on functional differentiations in the sorts of things we humans do with language. Of course it doesn't follow that these categories are sharp. The cases mentioned might simply lie at the opposite ends of a continuum. But assuming for moment that the distinction is a sharp one, the question arises as to where intentional psychology lies—with science? Or with other projects?

I think it is the latter alternative that should appeal to Dennett, and others in contemporary philosophy who want to argue for the irreducibility of intentionality. Of course, it is widely believed that to detach psychology from the scientific hierarchy is to consign it to the anti-realist wilderness. What I want to stress in closing is that this is simply not so. To read a functional perspectivalism about the mental as an irrealist view is to commit a category mistake, to judge psychological discourse by a standard which ought never to

have been applied to it. As Ryle saw well, the place of philosophy in the study of the mind is to point this out.²⁴

²⁴ There is a powerful and somewhat Rylean card to be played against anyone who would exile psychology on these grounds, namely to point out that according to the philosophical view in question, where psychology goes modality goes also. To exile psychology would be to exile not only Ryle's dispositions, but also probability, causality, laws, and so on—and let science try to survive without that! This card needs to be backed by a defence of the pragmatist treatment of modality on which it relies, of course, which is a task for another time. All the same, one of the ironies of contemporary philosophy of mind is that hard-nosed physicalists make great use of appeals to causality, and in particular to the intuition that all causality is ultimately physical causality. Yet it is surely a conceivable view—indeed it is a view held, as well as conceived, both by Russell and by Ayer—that a really hard-nosed physicalism would regard causation itself as an anthropocentric adornment to the pure physical description of the bare four-dimensional lattice of the world. So contemporary physicalists are apt to build their case on foundations which are doubtfully compatible with their own exacting standards.