

PERSONAL AND SUB-PERSONAL: A DEFENCE OF DENNETT'S EARLY DISTINCTION

Jennifer Hornsby

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Daniel Dennett introduced the term 'sub-personal' into philosophers' vocabulary thirty years ago.¹ Dennett's uses of 'sub-personal' are of interest in connection with the development both of his own views and of the subject of philosophy of mind in the recent past. I have a particular reason for focusing on Dennett: his original distinction between personal and sub-personal levels of explanation is lost sight of in much recent work, with the result that a position that I should want to defend is lost sight of too. I shall present an argument designed to show that a satisfactory philosophy of mind must respect the distinction Dennett first made (§2), and that this distinction is widely ignored nowadays (§3). Even Dennett has deserted it,² so that the position I want to defend is kept invisible (§4).

People lose sight of Dennett's personal/sub-personal distinction because they free it from its philosophical moorings. A distinction that serves a philosophical purpose is typically rooted in doctrine; it cannot be lifted out of context and continue to do its work. So I shall start from Dennett's distinction as I read it in its original context. And when I speak of 'the distinction', I mean to point not only towards the terms that Dennett first used to define it but also towards the philosophical setting within which its work was cut out.

1: The Distinction in Dennett

In *Content and Consciousness* (1969), Dennett argued that the identification of mental entities with physical entities was rested in confusion. He maintained that mental entities³ belong only in non-mechanistic explanations, and that their identification with entities whose home is mechanistic explanation—with brain states, say—makes no sense.⁴ Dennett thought that those who accepted the identities wrongly supposed that rejecting them would lead to dualism—to an 'asymmetrical scientific picture which includes, in one small corner of the universe, basically *different*, non-physical entities' (1969, 7). His claim has always been that we do not have to opt either for the physicalists' identities or for dualism. To suppose that there is no non-dualist anti-physicalistic⁵ position is to forget that explanations involving putative mental entities and explanations involving physical entities are adduced at different levels. Thus Dennett insisted on a distinction between

the explanatory level of people and their sensations and activities

and

'the sub-personal level of brains and events in the nervous system (1969, 93).

Dennett told us that 'in one respect [this] distinction was not at all new', having been implicit in the work both of Ryle and of Wittgenstein (1969, 95). Ryle and

¹ In *Content and Consciousness*.

² I represent Dennett as having changed his mind in the 1970s. It may be possible—and might seem required by a principle of charity—to interpret Dennett's 1969 account with the benefit of hindsight and find it consistent with his subsequent views. But since the earlier account strikes me as exactly right as I read it, my approach is not intended uncharitably [albeit that the service I mean to do Dennett is probably not one that would delight him].

³ Mental entities—at least insofar as there are such things as intentional states, say, or pains. The qualification is necessary, because the terms on one side of physicalists' putative identities have no references according to the tough ontological line taken by Dennett in 1969. In later work, when Dennett introduces ideas of *illata* and *abstracta* as objects of reference, his views about the ontology of the mental soften somewhat.

⁴ Many will respond that Dennett used a bad argument: they not only reject Dennett's tough line in ontology (see previous note), but also believe that a single item can, so to speak, have two explanatory roles. The response raises many questions, some of which I revert to briefly at the end of §2. In Hornsby 1997, I attempted to show that the right answers would enable us to reinstate Dennett's argument: see especially Chapter 10 there.

⁵ 'Anti-physicalistic' here and throughout means opposed to what is usually defended in the name of physicalism. I mean by a 'physicalistic' position one that is physicalist according to current orthodoxy. I introduce 'physicalistic', because 'non-dualist, anti-physicalist position' seems absurd to some people. Perhaps these people understand 'physicalism' in such a way that, with idealism ruled out and other things equal, non-dualism guarantees physicalism. On such an understanding of 'physical', physicalism denies the distinctive doctrine of substance dualism and asserts that persons are ("wholly") physical beings. Physicalism in this sense is not in dispute. The physicalistic theses that *are* in dispute differ from the physicalism that is not in dispute inasmuch as (a) they employ a sense of 'physical' (sc. of the physicalistic) different from that employed when an intuitive distinction between mental and physical is made, (b) they speak of the physical character of other things than persons themselves (they speak of states or events, or whatever).

Wittgenstein both thought that philosophers were prone to misconceive certain questions—questions which ask about persons, but which, when misconceived, are supposed to be answered by speaking about internal machinery. In their different ways, both held there to be a range of personal-level facts no further illumination of which can be got by digging deeper. By making a distinction between levels of explanation, one allows that explanations come to an end sooner than is supposed by those who press the misconceived questions, and one ensures that the kind of explanation distinctive of people and their sensations and activities is not confused with explanation of a different kind.

The distinction may seem out-of-date when introduced by reference to Ryle and Wittgenstein. At the time that those philosophers wrote, the alternative to mentalistic accounts was thought of mechanistically; there was no such subject as Cognitive Psychology. It is possible to think that the last fifty years have shown that Ryle's and Wittgenstein's insistence on a self-standing personal level of explanation depended upon their ignorance. Computers have provided us with new ways of understanding things; and in physics itself a Newtonian materialist mechanism has been gradually relinquished. It might be said that there is no longer any need to choose between accounts that are either unacceptably mentalistic or unacceptably mechanistic (on the one hand) and (on the other hand) accounts of the kind which Ryle and Wittgenstein said we are confined to at the personal level. Well, it is certainly true that Cognitive Psychology has introduced new styles of explanation. But this can hardly show that the personal/sub-personal distinction has been superseded: the existence of new styles of explanation cannot undermine the idea of a kind of explanation which is not at all new and is suited to the understanding of persons.

Dennett relied upon a distinctive kind of explanation for persons when he introduced the personal level. He wrote:

When we've said that a person's in pain, that she knows which bit of her hurts and that this is what's made her react in a certain way, we've said all that there is to say within the scope of the personal vocabulary.... If we look for alternative modes of explanation, we must abandon the explanatory level of people and their sensations and activities and turn to the sub-personal level of brains and events in the nervous system. (*Ibid.*)

Although Dennett here hits on *being in pain* as his example of a personal-level property, the point of insisting on a personal level of explanation can be grasped in a context in which persons are seen as (among other things) *rational agents*.⁶ Just as a person may understandably move her hand because she feels pain, so she may understandably move her hand because that is something she has a reason to do. Dennett said that 'it is only on the personal level that explanations proceed in terms of the needs, desires, intentions and beliefs of an *actor* in an environment', (1969, 164). Persons' sentient aspects—their being such as to feel pain, etc.—and their rational aspects—their being under the influence of practical and theoretical reason—are confronted from a single point of view.

A couple of years after *Content and Consciousness*, Dennett introduced his idea of the intentional stance, as a stance adopted towards something which is understood normatively and taken to be moved by reasons in its thought and action. The stance evidently brings with it sorts of explanation found at the personal level. The import of the distinction between personal and sub-personal levels might then be conveyed by saying that what is visible from the intentional stance is both explicable in personal terms, and is inexplicable in sub-personal terms—in the terms in which (as Dennett put it) 'sequences of events can be subsumed under general causal laws' (38).

The 'sub' of 'sub-personal' and the definition of the sub-personal by reference to 'brains and events in the nervous system' makes one think of the personal/sub-personal distinction of levels as a sort of part/whole distinction. That is right in one way. Sub-personal accounts are accounts of proper parts of persons; and the personal level can only be marked out by reference to (whole) beings of a certain kind.⁷ But it would be a

⁶ Even though *pain* cannot serve on its own to introduce the personal level, Dennett's discussion of *pain* is very much to the point. It is aimed at showing that, using sub-personal terms, we cannot understand the *compulsion* attaching to genuine pain behaviour: the compulsion is not nomic necessity, see 1969, 84.

⁷ Reference to beings of a certain kind is essential to marking off the personal level. One might think to define the personal level by reference to a distinctive subject matter—to folk psychology, so-called. It is true that the intentional stance is the point of view from which folk psychological concepts are exercised. But the difficulties of defining "folk psychology" should not be underestimated. And even if the subject-matter of folk psychology could be defined, it would be wrong to

mistake to suppose that the difference between sub-personal and personal levels could be fully caught in part/whole terms. On the one hand, explanation of kinds which the distinction contrasts with explanation at the personal level is not confined to dealing with parts of *persons*: some such explanations might be used by anyone who takes an impersonal view of what goes on anywhere.⁸ On the other hand, there can be distinctions between explanatory levels which correspond to part/whole distinctions but which play no role analogous to that of the *sub-personal/personal* distinction. Consider masses of gas and the molecules that compose them: the latter are parts of the former, and one might distinguish between levels of explanation here. They can be different levels, inasmuch as the predicates of motion that apply to molecules of gas serve a different explanatory task from the predicates of volume, pressure and temperature that apply to masses of gas. But explanations appropriate at the two levels are of course equally impersonal. (It is equally inappropriate to adopt the intentional stance towards gas masses as towards gas molecules.)

An advocate of the personal/sub-personal distinction thinks of persons very differently from masses of gas. It is a commonplace that the behaviour of masses of gas which the gas laws explain is explained in turn by kinetic theory in application to gas molecules. But it seems to have been part of Dennett's point that what is explained at the personal level *cannot* be explained over again at a lower level. As he said:

when we abandon the personal level in a very real sense we abandon the subject matter of [persons' mental states] as well. (*Ibid.*)

So when we contemplate the states of a person's brain and the events of her nervous system, the person is out of the picture. And it is not that we have to wait for scientists to discover some analogue for persons of the kinetic theory for gases. For there is no prospect of finding a person intelligible in terms of physical goings on inside her. If one speaks impersonally, one is barred from the sort of normative account that might show a person's doing something to be understandable.

Descartes intended to make space in his philosophy for a normative account that might show a person's doing something to be understandable. Descartes believed that there was a special 'way in which our reason causes us to act', and thus endorsed an idea of 'personal-level explanation'.⁹ Why then, as Dennett says, is the personal/sub-personal distinction of levels *anti-dualist* in its import, as well as anti-physicalistic?

I want to answer this question now, by offering a different diagnosis from the usual one of Descartes's problems about psychophysical interaction. I believe that an aspect of the mind-body problem which we've inherited from Descartes will not go away until the distinction between personal and sub-personal levels of explanation is respected.

2: Human Action vs. the Sub-Personal

We seem to have inherited from Descartes a problem about how there can be such psychophysical interaction as human action provides cases of.¹⁰ Philosophical publications in the last twenty years have made us all too familiar with this: we are often

suppose that there could be a level of explanation which relied on the idea of beings whose properties are exhausted by their folk psychological properties. One understands the personal level only by allusion to a properly personal style of explanation. But there is no need to think that all explanations at that level are in that style.

⁸ Dennett's allusion to causal laws provides a good way at gesturing towards the sub-personal level, but the sub-personal level need not be defined by allusion specifically to laws. When personal-level explanation is treated as *sui generis*, sub-personal styles of explanation might be understood in the first instance simply by reference to a contrast with personal styles.

In a final account, of course, more than two kinds of explanation have to be recognized: Appreciation of the personal/sub-personal distinction can be part of a pluralism, rather than any dualism, about explanation. One may think, for instance, that biology brings a distinctive kind or kinds of explanation. Then one will want an animal/sub-animal distinction, and one will need an account of the sub-animal which can subsume the sub-personal. Still, so long as it is accepted that explanation of non-human animal behaviour does *not* 'proceed in terms of the needs, desires, intentions and beliefs of an *actor* in the environment', a general animal/sub-animal distinction is bound to have a different point from the personal/sub-personal one. Though the personal/sub-personal distinction is to be treated as a case, it is a quite special case, of an animal/sub-animal distinction. See McDowell 1994b.

⁹ On my reading of Descartes (see my 1990), Descartes's principal reason for his dualism was the belief that physical explanation could not possibly be adequate for the understanding of persons. It seems undeniable that this was at least a reason for his dualism.

¹⁰ Dennett writes about action in 1969, where he is critical of a Cartesian notion of willing. His criticisms there focus on the putatively conscious character of volitions.

told that there is a “problem of mental causation”, a problem of explaining how mind¹¹ can make a difference. ‘How can the mental affect the physical?’, it is asked. ‘How can what we do depend upon what we think?’

The Rylean/Wittgensteinian point—that explanation may come to an end sooner than might be supposed—equips us with an answer to these questions. We can take them to be misconceived. And indeed the question how mind *can* make a difference doesn’t actually seem to be a good question. Unless one supposes that something interferes with understanding a person’s doing something for a reason (of “mind’s making a difference”), there doesn’t even seem to be any question here. There is after all no problem about saying what differences mind *does* make. Often enough what we do depends upon what we think, and we aren’t ignorant about the difference that thinking makes. When your thinking that that ’bus goes to Westminster leads to your getting on that ’bus, we may know that you would have got on a different ’bus if you had thought differently. There is nothing immediately problematic here. A problem might arise for a philosopher, though—if his account introduced an obstacle to understanding how your thinking makes the difference that actually it does.

Ryle thought that Descartes’s account introduced such an obstacle. Descartes thought of souls as separate from bodies, and of souls’ volitions therefore as separate from those movements of bodies that they bring about. So Descartes incurred an obligation to tell us *how* souls made a difference. Descartes said that ‘the machine of the body is [so] made’ that

the gland [in the middle of the brain]’s being moved by the soul drives the surrounding spirits into the pores of the brain, which conduct them through the nerves into the muscles, by means of which it causes them to move the members [of the body]. (1649, Article 34.)

Ryle’s paraphrase of this was: ‘mental thrusts, which are not movements of matter in space, ... cause muscles to contract’. And he said that ‘mental thrusts’ work ‘in some way, which must remain forever mysterious’ (1949, 62). Ryle didn’t know how any perturbation of the soul—any volition in Descartes’ sense—*could* have a causal influence on muscles and bodily parts. He thought that Descartes confronted a problem of mental causation.

In the literature of the last fifteen years, where the problem of mental causation looms large, it is presented as a problem specifically for physicalism. Many physicalists tell us that mental things have to be identified with physical things in order that the facts about mental things having physical effects can be reconciled with the principle that physical causes completely suffice for physical effects. The trouble, though, has seemed to be that if physical causes really did completely suffice for that which we think mind makes a difference to, then mental properties would not bear any causal responsibility: mind wouldn’t make any difference after all; epiphenomenalism would be established. Whereas Descartes faced a problem of mental causation because he rendered it unintelligible how mind could make a difference, it seems that many physicalists face a problem because their treatment ensures that mind actually makes no difference.¹²

Descartes for his part did not think that there was a problem. He had a reply to the objection that a soul was not the right kind of thing to have a causal influence in the world of bodies: he said, ‘if “corporeal” is taken to mean anything that can in any way affect a body, then soul too must be called “corporeal” in this sense’ (at 112 in Kenny [trans.] 1970). We aren’t likely to be impressed by this from Descartes, of course. But the possibility of Descartes’s using such a claim in his defence shows that the Rylean objection to Descartes says only that the events in which souls participate are not of a suitable kind to cause contractions of muscles. If one doesn’t believe in souls, then one has no need to call anything corporeal in order to avoid causal transactions between disparate kinds. A philosopher who doesn’t believe in souls might say, for instance, that when mind makes a difference, personal-level things depend causally upon other

¹¹ I use ‘mind’ as we all do, loosely, so that ‘Mind makes a difference’ is shorthand for ‘Facts about what people do depend on what they think, want, try to do, etc.’. I reserve the word ‘soul’ for its use as standing for substances of a certain sort—in which Descartes believed.

¹² Many dozens of journal articles and chapters in books in the last twenty years are concerned with this problem. See e.g. the Introduction to Heil and Mele (edd.) 1995. The problem is usually stated as a problem about causation by thought and/or desire. For Descartes, volitions were a species of thoughts. And for physicalists who talk of beliefs and desires as causes of actions, the problem extends to the area where I locate it in Descartes: see note 14 below.

personal-level things. This is enough to avoid thinking that mental causation involves transactions across a boundary that is present at the sub-personal level.

The Cartesian boundary is characterized by a difference between soul and body, so that it strikes us as a positive barrier to causal transactions. Physicalists intend to remove the barrier: they instruct us to view mental causation as requiring transactions only between physicalistic things and other physical things. Their assumption is that the soul's presence, on one side of the boundary, creates the whole difficulty with Descartes's account. But we shall see now that it is not the whole difficulty.

When Descartes tells us (in the passage quoted above) about the gland's driving the animal spirits when moved by the soul, this must be meant to help us to understand the active powers of the rational soul—sub-personally, as it were. The goings on around the pineal gland need to be related to the phenomenon of human agency in order that the soul's action should be found intelligible. Well, granting that the Cartesian soul is a rational being, having intentional states, we can ask Descartes 'What does it will, when its volitions are responsible for movements?' The answer cannot be that the pineal gland moves. Just as ordinary active people need not concern themselves with neural transmission, so a rational soul need not concern itself with the gland. A soul, then, must be supposed to will (say) that a hand moves. But then the soul seems to have a magical capacity—the sort of capacity that we should attribute to a person if we could believe that she could directly move something remote from her. This is why Descartes's account of ordinary physical agency has been said to involve psychokinesis (e.g. by Williams 1978, 288–292). The only thing that a soul can move directly is the pineal gland. But we can't understand a rational being's capacity to move *x* indirectly, except by thinking of it as having knowledge of how *x* can be affected by something that it can move directly.¹³ Rational beings, though, do not have knowledge of how glands have to be affected for body parts to move. So we lack any understanding of how something placed as the Cartesian soul is could be in a position to move (say) the right hand of a certain body.

The problem here depends upon the soul's sub-personal situation. And there will be the same problem for physicalism. Consider an occasion on which the explanation why a person's hand is moving is that there is something she is *trying* to do.¹⁴ The physicalists, when they encounter a "mentally" described event, of 'trying to', will tell us that it can be physicalistically described; they suppose that the causes of movements of hands (say), in cases of human agency, are events in which a bit of the physical brain participates. We can ask them then whether the bit of the brain moves the hand directly or indirectly. If directly, then its achievement is perplexing, given the distance between mid-brain and hands. But in order to move the hands indirectly, this bit of brain would have to know how the hand is affected by something that it can move directly; and little bits of brain don't have such knowledge. The physicalists appear to face the same dilemma as Descartes. Of course they will reply that they never supposed that there are any isolable bits of brain to which can be applied those predicates that Descartes applied to souls and that we apply to one another. It may seem outrageous to suggest that there are any philosophers today who involve themselves in little bits of brain having psychokinetic powers. Perhaps so.¹⁵ Still, the point of the comparison with Descartes is to reveal the difficulty for his account as arising not only out of the presence in it of something by

¹³ To use the terminology of "basic acts": everything (or every act) that an agent has it in her power to do is either something basic, or requires knowledge of how something non-basic is done. The relevant notion of *basicness* here is a teleological one: see Hornsby 1980, Ch. 6. (I put the matter slightly differently from Williams 1978, thinking as I do that a teleological notion of basicness is different from a causal one.) Teleologically basic things are things that a person 'just can' do, or can do 'just like that' (see below).

¹⁴ In the usual formulations the problem of mental causation is a problem about the causation of movement by "beliefs and desires"; and "beliefs and desires" are probably thought of as further back in the causal pathway leading to an action than the events—of agents' trying to do things—on which I focus now. Presumably, though, the physicalists who are afflicted by the problem of mental causation allow that the bodily movements there are in case of human agency are immediately caused by events, and they presumably think of those events as causally explicable by reference to beliefs and desires. I introduce 'try to', then, because it can play a role like that which Descartes assigned to 'will' when he spoke of volitions. But for the purposes of the argument here, there is no need to introduce any *general* thesis about 'trying to' such as Descartes held about 'volitions': the assumption need only be that there can be occasions on which someone's hand's moving might be explained by saying what she is trying to do. (It is controversial whether a person tries to do something *whenever* she intentionally does anything. I gave a slightly more elaborated version of the argument of the present section in my 1998, in the course of showing that acceptance of the controversial thesis does not commit one to a volitionism anything like Descartes's. But in the present context, one can focus on a particular case, and leave the controversial thesis to one side.)

¹⁵ It isn't, however, outrageous to suggest that philosophers sometimes write as if a person's properties had to be properties of her brain. Nowadays one often encounters the question 'how a brain can be conscious'.

reference to which mental causation is unintelligible: it arises out of the absence from it of anything by reference to which mental causation is intelligible.

Thus a difficulty for Descartes, which twentieth century philosophers are apt to blame on the soul's not being physical, arises because the account lacks anything having the properties on view at the personal level from which we see persons as agents. This difficulty will persist as long as one attempts to account for the phenomena called mental causation without mentioning beings with the relevant causal powers. Physicalists will retain the difficulty so long as they think that they encounter mental causation at the sub-personal level.

We may conclude that the problem of mental causation issues from attempts to account for agency in terms that prescind from the presence of persons. The problem is easily avoided. It is avoided simply by allowing that the causal dependencies which are actual examples of mental causation are discoverable only at the personal level: they cannot be recognized without finding a certain sort of psychophysical being which is able (for example) to move its hands when it wants to. When this is acknowledged, we cannot be put under any pressure to find events of disparate kinds when people intentionally move bits of their bodies. Accepting that there are personal-level facts no further illumination of which can be got by digging deeper, we do not confront any questions about internal happenings. As Ryle and Wittgenstein might have said, the correct answer to the question 'How can she move her hand when she wants to?' or 'How does she move her hand?' is 'She just can'.

Dennett was right, then, to think that there is a position in philosophy of mind which his personal/sub-personal distinction equips us to recognize. The phenomenon called mental causation is on view only at the personal level; and a person's trying to do something or her believing something, cannot be thought of either physicalistically or as something that is mental in Descartes's sense and alien to the world of causes. A non-dualist anti-physicalism of the kind that Dennett espoused in 1969 seems to be the only tenable option if we are allowed to think of ourselves as agents. (No doubt there will continue to be philosophers of mind who think that any piece of causal understanding corresponds to an operation of natural law. And more must be said of course, if late twentieth-century orthodoxy is to be resisted. One finds reasons to reject the orthodox treatment of causation in philosophy of mind in Steward 1997.¹⁶)

3: *The Distinction in Philosophy of Mind and Philosophy of Psychology*

Persons' possession of causal powers is presupposed to everyday psychological explanation. And such powers are out of sight when sub-personal facts are adduced. So one incurs two commitments if one uses Dennett's distinction between levels of explanation. First one must take the personal level seriously, as a level of genuine explanation. Secondly one must not think of sub-personal facts as such as to provide answers to those questions which demand and receive explanations at the personal level—explanations which (to put it Dennett's way) 'proceed in terms of the needs, desires, intentions and beliefs of an *actor* in an environment'. Descartes wanted to adhere to the first of these commitments: one might say that his conception of a rational soul was intended to make room for explanation given at the personal level.¹⁷ But the soul's sub-personal size (so to speak) ensures that Descartes breached the second.

Today's philosophers often ignore the first commitment. They use phrases like 'the movement of an arm', which make no allusion to any person, even when they mean us to be thinking about a person's doing something. These philosophers, who tell us that the things referred to by such phrases are 'caused by beliefs and desires', talk of propositional attitudes as 'states whose occurrences and interactions cause behaviour'. Talk of this sort occurs pervasively, and not only in discussions of agency. So we find 'two beliefs producing a third' standing in for a person's arriving at a conclusion. We find 'an experience causes a belief' in place of the idea that a person believes something because things look to her to be a certain way. We find 'pains result in avoidance reactions' substituting for a conception of a person's conduct as intelligible in the light of the fact

¹⁶ Steward's suspicions encompass both the ontology introduced by those who say that beliefs and desires are "token states" (see Ch. 2 of her 1997), and the model of causality that is brought to the philosophy of mind (see Ch. 7 of her 1997).

¹⁷ Many philosophers are most familiar with Descartes's *Meditations*, in which, it is supposed, a certain introspective line of thought leads to Descartes's soul/body division. In other works, Descartes is led to the division by a distinction (in effect) between two kinds of explanation: cp. note 9 above.

that she suffers pain. In all of these examples, causal explanatory claims about people are assumed to be statable over again as claims about one item's causing another. The effect of the re-statements is to exclude understanding at the personal level, of someone's thinking this or doing that.

By ignoring the first commitment, today's philosophers ensure that they also ignore the second. When the impersonal language, which has no use for the idea of a rationally motivated sentient being, is in play, personal-level facts come to be conceived impersonally. A question about the explanation of 'the movement of a hand' (say) directs one to the sub-personal level, so that a person's action is thought about as something that might have occurred even though there was no person whose action it was. And then states and events at the sub-personal level come to be thought about as if they could cast the sort of light that is cast by explanations at the personal level (since it isn't forgotten that 'the movement of a hand' had been *meant* to be an event on view when a person was seen as an agent). Even before any explicitly physicalist, or naturalist, premises are introduced into philosophical discussion, then, sub-personal events are apt to be confused with personal-level ones. The aberrations of contemporary philosophy of mind are such that Dennett's distinction may be renounced before the subject even gets under way. (The prejudice inherent in the very language of contemporary philosophers of mind ensures that there is the work to be done in connection with which I cited Steward (at note 16 above).)

The philosophy of mind is reflexive in a certain sense: answers to its questions are meant to cast some light on ourselves (on persons), and on our place in the world. The personal/sub-personal distinction ensures that these are distinctive questions, and thereby keeps one sort of philosopher in business. But the personal/sub-personal distinction has consequences also for the philosophy of psychology, a subject which asks, not the reflexive questions, but questions about 'the conceptual foundations and problems of the sciences of the mind' (Dennett 1979, 154). The psychological sciences are trained on questions that arise out of the facts of humans' and other animals' mentality. And many of these questions, which philosophy of psychology may elucidate, arise *because* explanations at the personal level come to an end when they do.¹⁸

Even if a study of the mechanisms of neural transmission won't help in understanding what a person's intentionally doing something consists in, it will of course help in knowing what goes on sub-personally when a person does something intentionally. And even if philosophers' usual question about mental causation is misconceived, there remains a perfectly good question about how it is that persons have the aptitudes and capacities which we take for granted when we see mental causation at work. These are capacities to move one's arm when one wants to, to understand another's words and say some of one's own, to see and to hear, to recognize faces and expressions, to think and to calculate, to suffer pain, to experience anger and jealousy, and so on and on. How can we do such things? What properties are there of our brains and nervous systems in virtue of which, as beings with such brains and nervous systems, we can do them? If the personal/sub-personal distinction is ignored, then these may be confused with properly personal-level questions, and sub-personal psychology will be credited with explanatory work that it cannot do. When the distinction is in place, sub-personal psychology has plenty of tasks of its own. It addresses '*How?*'-questions which proceed from empirical ignorance, rather than from the metaphysical mystification that provokes such questions as 'How is mental causation possible?'.¹⁹ (There is more on the nature of sub-personal psychology's tasks in §5).

4: Dennett post-1969

Dennett is the philosopher who more than any other has made empirical findings in psychology accessible to philosophers over the years. His work has been in the philosophy of psychology as much as in the philosophy of mind. And he has retained a personal/sub-personal distinction. But Dennett no longer embraces the doctrine which

¹⁸ See the footnote in Dennett 1979, 170 on a Rylean lapse. Dennett's suggestion there is that Ryle departs from his usual strictures about the personal level as a result of discovering a question that a sub-personal theory can address. Philosophers who are disposed to think that sub-personal theory addresses personal-level explananda decline the Rylean strictures.

¹⁹ Cp. McDowell 1994b, 199. McDowell uses a distinction between (on the one hand) what enables and (on the other hand) what constitutes facts at the personal level.

the personal/sub-personal distinction sustains (according to my argument). So more needs to be said about Dennett's later views. If the anti-dualist, anti-physicalistic position in philosophy of mind I have defended here stands or falls with Dennett's distinction, as I should maintain, then it is a question why this is not still Dennett's position. I need to say what (from my point of view) has gone wrong in Dennett.

The appearance of something's going wrong can be seen in this quotation.

Sub-personal theories proceed by analyzing a person into an organization of subsystems ... and attempting to explain the behaviour of the whole person as the outcome of the interaction of these subsystems. 1979, 154.

Here Dennett denies his earlier claim that when 'we turn to the sub-personal level of brains and events in the nervous system', 'we must abandon the explanatory level of people and their sensations and activities'. He seems to have reneged on the second commitment of the personal/sub-personal distinction—the commitment not to conceive sub-personal facts as such as to explain personal-level ones. If the 'behaviour' of 'the whole person' includes the facts about what is done by 'an actor in an environment', then *Why?*-questions which arise about such behaviour are asked and answered at the personal level. Dennett's project here, of treating persons as organizations of subsystems, implements a kind of reductionism: sub-personal cognitive psychology is now to be used to show how 'a system described in physiological terms could warrant an interpretation as a realized intentional system' (1987, 68). This surely marks a change: in 1969, Dennett did not contemplate the possibility that physicalistic descriptions should justify ascriptions made at the personal level. (Notice that Dennett used 'sub-personal theories' for theories got from the study of the subsystems: they belong in cognitive psychology, and not in the theory of intentional systems within which the 'analysis of persons' is conducted.)

Well, Dennett has often made a compelling case for the fruitfulness of a certain strategy in sub-personal matters. Employing this strategy, one attempts to see a collection of homunculi as subserving a person's capacities; one treats subsystems as if they had the properties of rational agents, bringing intentional explanation to bear on them. 'Each homunculus in turn is analyzed into *smaller* homunculi, but, more important, into *less clever* homunculi' [1978, 80]. When this 'homuncular functionalism' is used, persons are treated as systems; they and their subsystems are treated alike—from the intentional stance—and explanation of a sort that adduces intentional states straddles the two levels. It is not surprising, then, that continuity between the sub-personal and the personal should be present now, creating an impression that Dennett thinks that sub-personal facts do personal-level explanatory work.

Whether or not that is a correct impression, Dennett has certainly reneged on the first commitment incurred by his distinction: he no longer takes the personal level fully seriously, as a level of genuine explanation. As I saw things, the idea behind his personal/sub-personal distinction was not merely that we cease to understand one another in the usual ways when we abandon the personal level, but that when we speak in sub-personal terms, we cease to have understanding of that kind at all. This cannot any longer be Dennett's idea. For Dennett treats the intentional stance as a stance adopted towards any object that we can usefully 'decide to treat ... as a rational agent' (1987, 17). It can be adopted towards persons, towards their subsystems, towards any living thing, towards computers, and even towards simple alarm clocks and thermostats. 'We need not take seriously the claim that the [chess-playing] computer *really* has beliefs and desires' in order to make use of the intentional stance in explaining and predicting its moves, Dennett says (1979, 59). And so it is with persons. For Dennett, *belief* is predicated in exactly the same sense of a person as of any other, low-grade intentional system.

Dennett's continued insistence on the importance of his personal/sub-personal distinction becomes hard to fathom when properties visible at the personal level are meant to be the products of a stance that is equally appropriately adopted towards sub-personal things. Of course we all want to avoid confusing persons with homunculi; but insofar as a distinction of levels can protect us against that confusion, it will now be a distinction merely between wholes and parts. It had seemed that persons being rational agents gave a reason for keeping the personal level separate from any level at which explanation is impersonal. But Dennett, who now thinks that adoption of the intentional stance always

issues from the *usefulness* of the treatment that the stance makes possible, has no such reason. By treating subsystems *as if* they had intentional properties, we are to explain why it should be that systems comprised from them should be as if *they* had such properties, Dennett says. But since, for Dennett, it is only ever *as if* persons had such properties, we have now explained the personal-level facts themselves in sub-personal terms.²⁰ The impression that Dennett has reneged on the commitment not to think of sub-personal facts as doing personal-level explanatory work appears to be confirmed. Explanatory continuity between sub-personal and personal levels results from his instrumentalism about the intentional stance.

Yet Dennett himself has never suggested that he wants to go back on his original distinction between levels of explanation. Despite the continuity he finds between the two levels, Dennett wants to allow some difference between adoption of the intentional stance towards people and its adoption towards other, less ‘clever’ things. Here he has hoped to exploit our feeling that our adopting the stance towards one another is indispensable. Intentional properties of people are properties that we cannot help but discern and grant explanations in their own right, whereas, towards systems other than persons, the intentional stance may be adopted relatively rarely and seems to be optional. This gives Dennett a difference between personal-level intentional explanation and intentional stance explanation of systems that aren’t persons. But it is now a difference stemming merely from our ‘narcissism’—from the fact that our theories of intentional systems are constructed to account, in particular, for ourselves. And the truth is, in Dennett’s view, that, from the perspective of nature, our own intentionality, like that of our subsystems, is ‘derived’ intentionality.²¹

At one point, Dennett says that for us, ‘constituted as we are ... it is *easy* to perceive the patterns that are visible from the intentional stance’. So although the intentional stance is supposed to be something that one ‘decides’ to adopt, Dennett doesn’t really think that a *decision* is involved when one person adopts it towards another. Dennett thinks that biological evolution has thrown up creatures who are naturally disposed to adopt the stance towards one another. This, however, only adds to the puzzling character of Dennett’s view that persons are fundamentally on a par with low-grade intentional systems. For one might want to allow us to think of ourselves as simply suited to personal-level understanding (given that it is a kind of understanding that comes naturally to us in our natural situation). And this is different from thinking of ourselves, as Dennett tells us we should—as beings whom it suits to adopt towards others of our own kind a stance that we can adopt just as well towards things of all sorts of other kinds. Ordinarily we think that intentional predications made of persons are non-derivative, and are often enough plainly and simply true. Our attitude to one another is all of a piece with our giving of personal-level explanations; and we suppose that the attitude brings with it a whole range of concepts applicable to persons. This attitude, though, cannot be ‘the intentional stance’ in Dennett’s sense. For Dennett’s ‘intentional stance’ is adopted perfectly appropriately even when nothing like the full range of concepts can be brought into play. (Consider thermostats.) If Dennett continues to think that properly personal-level explanations have any weight of their own to pull, then that is now only because he thinks that persons are so very amenable to being viewed from the intentional stance.

I have considered Dennett’s instrumentalism here only as it bears on his change of mind about personal/sub-personal relations. But Dennett’s work has for a long time been shot through with the thought that the difference between persons and other systems tractable from his intentional stance is a difference only of degree. The consequences of that thought run very deep.²² One consequence is to rule out any position like the one I

²⁰ In speaking of personal-level *facts* here, I credit Dennett with the realism that he shows himself as wishing to endorse (e.g. in Dennett 1991). It is not surprising, however, that Dennett has been understood as irrealist in the philosophy of mind. His treatment of personal-level statements—as true ‘only if we exempt them from a familiar standard of literalness’—seems to be an inevitable consequence of endorsing the same instrumentalism in respect of persons as is appropriate in respect of ‘systems’. When Dennett tries to make light of the irrealist tendency of his view, he sometimes makes it seem as if it resulted from a claim in ontology: cp. note 3 above. In fact the tendency has more than one source: see next note.

²¹ Here Dennett’s thoroughgoing instrumentalism grounds his claim that *all* intentionality is of the derived sort. In his ‘Evolution, Error and Intentionality’, in 1987, Dennett attempts to make the claim of the derivativeness of our own intentionality (and thus the thoroughgoing instrumentalism) seem independently reasonable by using a Mother Nature story. I criticized the attempt in Hornsby 1992.

²² Consider for instance his various remarks about ‘our revealing our sphexish streak’ in Dennett 1984 (e.g.46-47). A simplistic way of putting my disagreement with Dennett would be to say that, unlike him, I think that persons are different in kind from wasps.

argued is opposed to dualism and to orthodox physicalism. I claimed that difficulties for Descartes, which twentieth-century philosophers are apt to blame on the soul's being immaterial, arose out of the absence from his account of any bearer of the properties on view when we see persons as agents. No bearer of such properties is present in Dennett's account. When the intentional stance is adopted, only 'a system' that can be 'treated as rational' is in view; and the behaviour of any such system belongs to the 'objective, materialistic, third-person world of the physical sciences' (Dennett 1987, 5).²³

If we acknowledge that persons are simply suited to personal-level understanding, then we can say that when everyday psychological explanations are given, the stance that is taken (if we want to call it a "stance") is one from which intentional bodily action is visible. This is something that we must say if we refuse to allow that there is a *problem* of mental causation, and accept that the causal dependencies that constitute agency are not discoverable without finding a certain sort of psychophysical being. It is a perfectly natural thing to say if we think—as John McDowell has encouraged us to think—that 'exercises of agency are elements in ... our careers as living ... beings' (McDowell 1994a, 111).²⁴

It had seemed that the point of Dennett's personal/sub-personal distinction was to protect the personal level from things that don't impinge upon it (§1). Thus could the phenomenon of 'mental causation' be recognized for what it is, and not be thought of as in competition with 'physical causation' (§2). But when nothing more is present at the personal level than the product of a stance that is equally appropriately taken to things that aren't persons (§4), there is not much left to protect. We see the extent to which Dennett's 1969 claim that 'we abandon the personal level' by descending to things sub-personal is in tension with his subsequent thoroughgoing instrumentalism about the intentional stance. What we shall see next is that we can renounce the thoroughgoing instrumentalism and still have ambitions for sub-personal psychology much like Dennett's own.

5: *Personal and Sub-personal Reinstated*

One can retain the commitments incurred by Dennett's early personal/sub-personal distinction without interfering with the projects of sub-personal psychology. To see this, suppose, as I have suggested, that there is a real difference between adopting the intentional stance towards persons and adopting it towards other things. Adopting the stance towards persons is a matter of bringing a full range of commonsense psychological and other concepts to bear on beings to which it is suited; adopting the stance towards other things—towards subsystems, thermostats or whatever—is a matter of treating them *as if* they had some of the intentional properties that persons have. This difference introduces a distinction—between actual attributions and 'merely as if' attributions of intentional states. And the distinction makes good sense. (It is as if my computer, running the current version of my word-processing program, believed that I wanted a capital letter after each and every fullstop sign; but of course, unlike a person, it doesn't really believe anything.) But equipped with this distinction, one can see how 'as if'-attributions made of intentional properties to subsystems could help in showing how a person can have some of the capacities that she does.

Dennett's thoroughgoing instrumentalism prohibits any distinction between (on the one hand) a person appearing to be Φ when a certain stance is taken towards a certain collection of subsystems and (on the other) the person actually, literally being Φ .²⁵ But if it can be accepted that the concepts brought to bear when persons are found intelligible belong in explanations at the personal-level, a personal/sub-personal distinction within the theory of intentional systems will be a distinction between actual and 'as if' attributions. A pretended intentional stance towards subsystems can then be, as Dennett

²³ For Dennett, realism is supposed to be secured by the premise that what the stance reveals is 'there to be detected' (1987, 39); the 'patterns' discernible by one who adopts the stance are 'real' (1991). But then I should say that insofar as Dennett has a claim to realism, its basis is a false view of what is confronted when a person is seen to be a rational agent (see further Essay 10 in Hornsby 1997.) However, the arguments here are not meant to turn on any question about when we should reckon a position "realist".

²⁴ Here one encounters an aspect of McDowell's relaxed naturalism, which exploits the notion of second nature. Dennett is a bald naturalist in the sense of McDowell in *Mind and World*, and the baldness of Dennett's naturalism is arguably the deep source of his irrealist tendency.

²⁵ Like an 'as if'/actually distinction, the distinction of McDowell mentioned at note 19 above would be threatened if instrumentalism were extended to the personal level in Dennett's way.

thinks it is, a useful one to adopt in sub-personal psychology. Since the stance yields ‘only if’ attributions when it is adopted there, its adoption can do nothing to undermine the idea of the personal level as a separate explanatory level. One is now in a position to answer questions about persons’ capacities without a person’s status being literally assimilated to the status of her various subsystems.

Many people will want to place less emphasis on intentional systems theory than Dennett himself has done. Dennett makes great play with the intentional stance, because he connects the stance with the notion of ‘content’ quite generally, and because he thinks of the stance as adoptable towards a very wide range of kinds of system, ensuring that the method of homuncular functionalism is extensively applicable. But it may be doubted whether sub-personal findings can all be connected with the method for sub-personal psychology that Dennett once advocated. There are two points here. First, scientists may posit states with representational content without assuming that they have the *intentional content* characteristic of states of persons. Secondly, scientists may posit systems of very great computational sophistication without positing anything tractable from the *intentional stance*.²⁶ To accommodate these points, we need a variety of treatments of systems studied at the sub-personal level. And to that extent, a methodology that requires us always to take the intentional stance may strike us as procrustean. Still, Dennett himself has come more and more to allow for a multiplicity of sorts of explanation that can help in building up accounts proceeding from the sub-personal level. So there may be no actual quarrel with Dennett here.²⁷

We saw earlier that philosophers ignore the distinction between explanatory levels with unhappy results. And it may be that scientists as well as philosophers ignore it. But here the results need not be unhappy. Since much empirical work can proceed without any great self-consciousness about its exact explanatory objectives in the grander scheme of things, an insistence on the distinction need not be an obstacle to progress in the sciences of mind. Indeed, inasmuch as the distinction ensures that appropriate explanatory ambitions for the sub-personal do not extend all the way to explaining things explained at the properly personal level, imposing the personal/sub-personal distinction lessens the constraints that a sub-personal theory has to satisfy. Consider, for instance, questions about cognitive architecture. When sub-personal facts are taken to explain personal-level ones, ‘classical’ architectures may seem compulsory.²⁸ But when it is agreed that sub-personal facts do not recapitulate answers to everyday questions about personal-level states of mind, there is no reason to suppose that the systematic nature of persons’ thinking can be descried at the sub-personal level; and the connectionist programme for modeling sub-personal “cognitive” processes cannot then be in tension with our commonsense conception of ourselves as thinkers.²⁹ The effect of the personal/sub-personal distinction is more to open than to close avenues of exploration in sub-personal psychology.

Since progress in sub-personal psychology does not require Dennett’s instrumentalism at the personal level, no empirical cost attaches to retaining Dennett’s personal/sub personal distinction in its original, 1969 version. No doubt there will be many philosophers, and others with a physicalistic mindset, who place interpretations upon the scientific findings which relinquish the commitments of the original

²⁶ When homuncular functionalism is premised on the idea that cleverer systems can be understood in terms of less clever ones, one gets the impression that persons are supremely clever. But in one sense at least, many of the subsystems that subserve person’s capacities are much cleverer than persons: subsystems of our visual systems, for instance, can carry out in micro-seconds tasks that persons unaided by computing equipment would take years to carry out. (The question how ‘clever’ a system is seems different anyway from the question how appropriate it might be to take the intentional stance towards it: cp. note 22 above.)

²⁷ The effect of Dennett’s having come to take the design stance (in biology) to be continuous with the intentional stance (in psychology) has been to extend the kinds of explanation that are admissible at the sub-personal level. But the effect has been more to reinforce than to modify what I have called Dennett’s thoroughgoing instrumentalism, which was put in place in 1979 and which I have made the focus of my criticism. (I don’t have space to comment on Dennett’s recent views about method in sub-personal psychology.)

²⁸ See e.g. Martin Davies 1991 for an argument from the character of commonsense psychology to a classical architecture for sub-personal psychology.

²⁹ Philosophers who take classical architecture to be compulsory but who think connectionism is sure to yield the best accounts of brains’ functioning are sometimes led to eliminativism about the propositional attitudes. (Cp. Dennett’s ‘The Language of Thought Reconsidered’, in his 1987, though Dennett himself thinks about the matter rather differently from me of course.) More generally: when realism in philosophy of mind is a doctrine about a *sui generis* personal level, scientific findings cease to threaten it. The personal/sub-personal distinction can protect one against eliminativism.

personal/sub-personal distinction. Retention of the distinction requires a different mindset, but not of course rejection of any of the findings.

6: Conclusion

Dennett retains a distinction between persons and their proper parts, and a distinction between kinds of explanation—intentional and physicalistic—; but when sub-personal systems are to be understood (among other ways) in the characteristic way that persons are, these two distinctions no longer go hand in hand. Dennett's claim that the stance from which explanation of persons proceeds can equally well be adopted towards a sub-personal system ensures that he ceases to treat the explanation of persons at its own level. He excludes the idea of a point of view which is properly taken only towards something properly understood as moved by reasons in its thought and action.

Philosophers today who look to Dennett for a sub-personal/personal distinction do not find any style of explanation proprietary to the personal level. The distinction then comes to seem like a distinction simply between parts and wholes. ('An organization of subsystems' is taken to stand to subsystems rather as a mass of gas stands to its component molecules.) Thus it is no wonder that the position in philosophy of mind which I have taken the distinction to be embedded in has vanished from philosophers' sights; and it is no wonder that the distinction itself has come to be used very loosely.³⁰

If we prefer Dennett's earliest published self to later ones, on the subject of the personal/sub-personal distinction, then we leave plenty of scope for sub-personal psychology in its many varieties. And we can recover a non-dualist anti-physicalistic position. It takes personal-level states and powers to be part of our natural endowment as sentient and rational animals. Ryle said (in 1949):

Man need not be degraded to a machine by being denied to be a ghost in a machine. He might after all be a sort of animal, namely a higher mammal.

If he had had the later Dennett to contend with, Ryle might have said 'A person need not be degraded to an *intentional system* by being denied to be a ghost in a machine'. Fifty years on from Ryle's *Concept of Mind*, we have still to 'venture the hypothesis' that perhaps the thing to be rescued from degradation and from ghostliness is actually a human being.³¹

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³⁰ In his 1992 (55 & 240, n.10) Christopher Peacocke makes a distinction between levels, citing Dennett and quoting the passage I quoted above, about 'analyzing persons into subsystems'. But this quotation, although it puts Dennett's thoroughgoing instrumentalism in place, cannot define the distinction between personal and sub-personal as it occurs even in Dennett's later work. Peacocke's talk of properties that *a person* possesses *sub-personally* appears to assume that sub-personal predications are made at the personal level—an assumption that seems foreign even to Dennett's post-1979 thought.

³¹ I thank those who participated in the Stirling Workshop (April 1996), and especially Matthew Elton, whose comments on a talk I gave there saved me from errors in §4 below. He and Jose Bermudez said useful things about the first draft of the present paper, and Dan Dennett provided some generous comments. At a later stage, I was helped by discussions in a seminar at the University of St. Andrew's, and with friends and colleagues in Oxford and at Birkbeck, especially Sarah Patterson and Barry Smith.

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