

PETER BUSSEY

Guest Editorial

The myth of physicalism

In a recent book on the philosophy of the Social Sciences, the University of London philosopher David Papineau expresses himself in a remarkably forthright way. 'We are all physicalists now', he states. 'It was not always so. A hundred years ago most educated thinkers had no doubt that non-physical processes occurred within living bodies and intelligent minds...the point would have been happily agreed by most practising scientists of the time. Yet nowadays anybody who says that minds and bodies involve non-physical processes is regarded as a crank.' Now, this is extremely strong language! But much more importantly, I believe that the position set out here is seriously in error, and requires to be countered resolutely.

The central point to recognise, I would propose, is that belief in physicalism is in fact an example of a modern fashionable myth. It is to be found in certain intellectual circles as a kind of 'physicalist chic'. What I am asserting is that even though people may openly advocate physicalism with one part of their mind, in all other respects their attitudes and behaviour simply belie such a point of view. The myth of physicalism, despite its wide circulation, is one that almost nobody genuinely believes. It is given considerable publicity, and many of its advocates speak of it as a proven fact, but in their own hearts do they really accept it? I suggest not. As human beings, we certainly do not have any inward conviction that we are mere physical machines. It would be hard to find many truly honest believers in this doctrine – there is more than this to who we are.

As a physicist of many years standing, I certainly have a love and esteem for the science of physics, and a deep wonder at the fact that so much in the universe – nearly everything about it, one might say – can be understood in terms of the ideas physics has made known to us. But I do not believe that physics, as we define its content to be, can ever tell us everything about human nature. We are not mere physical beings; there are also mental and spiritual sides to our existence, and they require to be regarded in a non-physical way. I see no a priori justification for assuming that just one single intellectual discipline should be capable of accounting for everything that exists.

People who claim to be physicalists are in all other respects pretty well the same as everyone else. They display emotions, opinions, values and other human attributes, just as the rest of us do, corresponding not in the least to a viewpoint on life that they are no more than functioning machines – lacking therefore in free will and, at bottom, in all the other human qualities that physics knows nothing about. Such people may talk physicalism, but they do not act it or live it. The suspicion that it is an intellectual pose is hard to avoid.

Could it be though that the two sides of their brains have just got out of synch? The rational, logical half has come to act independently and dominate the warmer, emotional, artistic, personal human half. That is perhaps a possibility, but to be frank I believe that what is present is a serious case of double-think. All the indications are that physicalism is a very shallowly held concept.

A possible response to my accusations could be to say that 'human-oriented' language and attitudes are used by us all as a convenience, but they are no more than that. This appears to be the view of Richard Dawkins and Daniel Dennett, among others, but it surely will not do. It is one thing to say that Joe Smith thinks like a traditionally understood human being but is mistaken, for he is really a machine. It is quite another thing to claim to know this 'truth' about *yourself*, but to continue as if you did not. Hence my charge of double-think. Once the enlightened insight has been granted that all one's moral convictions, values, and so on, are nothing but a product of neuron activity, then the only honest thing to do is to demote all of these things to mere personal inclinations and preferences, and be open about it. But this is not what we normally observe. The so-called physicalists are usually just as sincere as everyone else about the authenticity of moral and ethical values, for instance. Should we suspect all this to be cynical play-acting? Conviction convinces others; so I will behave as if I really believe it? No – I think they do really believe it, and that it is the physicalism in which, at heart, they do not believe.

More alarming, though, are the logical implications of seeing other people as mere physical machines. Many people have commented on the dangers of dehumanising ourselves and others, and there is no need for me to elaborate on this. We are saved from the evils that are a natural consequence of physicalism by the fact that few people seriously believe in it, but remain human despite any physicalist pretensions they may have. The real fear is what would happen if people genuinely *did* believe in physicalism.

However if we suppose human existence to be more than physical existence, then we must be prepared to offer a few suggestions about how this can be. The obvious starting point is the conscious mind. This does not form part of the subject-matter of physics, because physics is simply not constituted to deal with this sort of thing. To escape from physicalism, then, we must be prepared to accept that certain physical systems – such as our own brains – have something about them, such as mentality, that is other than the merely physical, and there is the rub. We must be prepared to leave the cultured lands of physicalist chic and enter the wild country. A number of the contributors to the last edition of this Journal made cautious movements in this direction. Impressively phrased concepts were mentioned, such as dual-aspect monism, non-reductive physicalism, emergentism, and so on. However all this somehow resembles visitors pacing around the cage of a captured exotic animal and trying to invent biological nomenclatures for it!

At present we do not seem to have got very far. Does 'non-reductive physicalism' fit? Not really, because we could perfectly well imagine a well-pro-

grammed robot, whose electronic brain hosts various patterns of electrical activity that are able to generate their own development as well as the physical behaviour of the robot. This seems to me very much like non-reductive physicalism – for the design and the program must be given – but it is still physically deterministic, and so we will need to introduce some further factor when considering ourselves and our own conscious minds. That further factor, then, will *not* be physical as the latter word is understood. And what does the term ‘monism’ mean? One substance? The trouble here is that quantum physics nowadays has great difficulty in putting its finger on what ‘substance’ really is at all, which is precisely why ‘physicalism’ is now preferred to the older term ‘materialism’ – we are now just not so sure what matter is. Does electron substance exist? If so, is it different from photon substance? How many *physical* substances are there? Are there any at all, or does the definition of monism depend on whether or not there exists a unified quantum field theory? What are we actually attempting to say? There are philosophical quicksands here.

To make progress we will need a very open-minded approach. The philosopher Thomas Nagel is quoted as saying that a major conceptual revolution is required, and with this there are many such as myself who would agree. This paradigm change, however, like others that have occurred in science in the past, may not turn out to be comfortable for everyone. Meanwhile, I believe we must challenge the *soi-disant* physicalists on all fronts! We are *none* of us physicalists really; it is just that some people are reluctant to admit it.

Peter Bussey, a Member of the Editorial Board, was Reader in Physics at the University of Glasgow and continues to be active in research in elementary particle physics.
