

Why Naturalists Should Mind about Physicalism, and Vice Versa

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"Certainly science has difficulty in accounting for the appearance and nature of . . . self-conscious processes. . . It will be natural for the religious to interpret this emergence of . . . self-consciousness as revelatory of something deep in the universe, something inexplicable by physics, something behind the material face of the world" - Anthony O'Hear, *Beyond Evolution*, (Oxford, 1997), p27.

Metaphysical naturalism, also called materialism, holds that everything can be explained in natural, material terms and that these are the only explanations necessary or possible. The belief that humans are identical with their physical bodies, that mental states just are physical brain states, is called physicalism. [1] Physicalism is a natural result of a naturalistic world-view, because naturalism rejects the existence of anything besides the natural world. Physicalism is therefore a testing-ground for naturalism. If naturalism fails to account for the mind, then naturalism fails. [2] On the other hand, the falsity of naturalism does not logically entail the falsity of physicalism. Still, the falsity of naturalism would remove the need for holding physicalism to be true, making it an open question whether or not the human mind can be adequately accounted for in purely physical terms. Therefore, I will discuss physicalism within the context of a critical assessment of naturalism.

Physicalism is extremely counter-intuitive, for it holds that "My conscious mental life of thoughts, emotions, and pain are nothing but physical events in my brain and nervous system." [3] (It is this reductive 'nothing but' that is the most important feature of physicalism.) However, according to the naturalist Jerry Fodor, "Nobody has the slightest idea how anything material could be conscious." [4] Fellow naturalist Ned Block likewise writes that:

"We have no conception of our physical or functional nature that allows us to understand how it could explain our subjective experience. . . in the case of consciousness we have nothing – zilch – worthy of being called a research programme, nor are there any substantive proposals about how to go about starting one. . . Researchers are *stumped*." [5]

Consciousness is fundamental to our view of ourselves, but rather than explaining consciousness, physicalism ends up denying it by telling us that consciousness is 'nothing but' this or that physical state or property. Philosopher John Searl is surely right when he says that:

"I'm conscious, I AM conscious. We could discover all kinds of startling things about ourselves. . . but we cannot discover that we do not have minds, that they do not contain conscious, subjective, intentionalistic mental states; nor could we discover that we do not at least try to engage in voluntary, free, intentional actions." [6]

Yet physicalism seems to rule out all of these realities; hence the weirdness!

Just to take one example of the weirdness of physicalism: It is very strange to discuss whether my belief that I am hungry is to the left or the right of my belief that angel cake will satiate my hunger! Then again, what weight or mass should we attribute to the thought that an angel cake would be nice to eat?! How many thoughts about angel cakes will fit into the space of my brain?! If thoughts and beliefs were purely physical things one would expect such questions to be meaningful. Instead, they seem to be nonsensical.

Being counter-intuitive doesn't necessarily mean being false, but it does give us cause for scepticism in the absence of convincing evidence to the contrary. Given the weirdness of physicalism, we are driven to ask:

Why Would Anyone Believe Physicalism?

It is obvious that there is a close association between the mind and the brain. To do something to the brain through injury, surgery or drugs is to do something to the mind. Conversely, it seems obvious that my mental intention to scratch my nose causes my nose to be scratched, and this process operates through my brain:

"In some cases, we know how the brain affects the mind and how the mind affects the brain. We know, for instance, that the stimulation of certain brain cells near the back of the head produces visual experiences. And we know that when you decide to help yourself to another piece of cake, certain other brain cells send out impulses to the muscles in your arm." [7]

Mind and brain certainly go hand in hand, but this does not prove that they are the same thing, or that if they are the same thing it is mind that is reducible to matter rather than matter which is a manifestation of mind. [8] Nor does it prove that mind is unable to exist apart from matter: "Things that go together are not necessarily the same, any more than ideas expressed by these words are the same as the words themselves." [9]

Damage to the words in a statement damages *the expression of the meaning* that informs the statement, but it doesn't damage the original intended meaning incarnated by the words. Altering a statement might change the meaning *of the statement*, but it doesn't change the author's intended meaning. Indeed, that original meaning can be restored, or resurrected in other words - other words can express the very same/identical idea/concept! [10] To conclude from the fact that meaning and words go together that meaning *just is* the existence of certain physical shapes would be hasty to say the least.

Similarly, if I have an accident that means I can't move my body, my intentions to move remain, and the efficacy of my intentions might be restored by an operation. Damage to my body damages the *expression* of my character, but that expression might be restored. Perhaps after many years of disablement my character would alter somewhat; nevertheless, the restoration of my original capacities would permit the restoration of my character. To conclude that my character is 'nothing but' the characteristic movements of a certain body would be unwarranted. My character is what informs my characteristic movements, and as such my character is something over and above my movements. [11] As with meaning and character, so with mind.

A physicalist might think (one could hardly say 'argue') along the following lines: 'Many people consider belief in the soul or non-physical mind to be old fashioned and unscientific. Now, whatever many people consider to be old fashioned or unscientific is probably old fashioned and unscientific. Therefore, belief in the non-physical mind is probably old-fashioned and unscientific.' This conclusion only claims probability. Furthermore, what is wrong with old-fashioned or unscientific beliefs. The belief that 'Love is a good thing' is both old and non-scientific, but is it false? This argument assumes that old-fashioned ideas cannot be true. Apart from being obviously false, this premise is self-defeating because the idea that propositions such as 'old-fashioned ideas cannot be true' do not affirm their opposite and are either true or false is a very old one! This argument also assumes that unscientific ideas cannot be true, but this statement is itself unscientific!

A physicalist might more plausibly argue on the assumption of naturalism that there is no reason to think that the mind should not be identical with the brain. If there is no reason to think that the mind is not identical with the brain then we are justified in believing that the mind is identical with the brain. However, the fact that we are within our rights to believe something does not guarantee that our belief is true. The non-physicalist would question the first premise of this argument by putting forward reasons to doubt that the mind is identical with the brain. I will myself turn to this task momentarily.

It seems to me that the strongest motivation for physicalism is a commitment to a naturalistic world-view. If God exists He is non-physical. If non-physical *finite* minds can exist, then there is less reason to reject

the existence of a non-physical *infinite* Mind. Physicalism is thus part and parcel of the naturalist's rejection of God. Conversely, if one has reason to think that God exists, then one has less reason to deny that the human mind could be non-physical. [12]

Leibniz's law of the Indiscernability of Identicals

Arguments against physicalism depend upon Leibniz's law of the indiscernability of identicals. This law simply states the obvious fact that: "For any entities x and y , if x and y are identical (they are really the same thing – there is only one thing you are talking about, not two), then any truth that applies to x will apply to y as well." [13] This law suggests a test for identity; namely that if you find something true of x that is not true of y , or vice versa, then x cannot be identical to y .

For example: if I am over six feet tall but Napoleon is under six feet tall, then I am not Napoleon (and Napoleon is not me). On the other hand, given that you know the author of this paper is over six feet tall but think that Peter Williams is under six feet tall, that doesn't prove that the author of this paper is not Peter Williams! (What it proves is that you didn't know Peter Williams was over six feet tall.) In the first example there is a difference in the truth of a proposition as predicated of the author of this paper and as predicated of Napoleon, a difference that proves Napoleon didn't write this paper. In the second example, there was a difference in someone's *beliefs* about 'the author of this paper' and about 'Peter Williams'. To prove that the mind isn't just the brain via Leibniz's law, it isn't enough to find a difference between someone's *beliefs* about the mind and the brain; rather, we need to find a proposition that is true *of the mind* but false *of the brain*, or vice versa.

Cartesian Certainty

The French philosopher Rene Descartes argued that, since he could be absolutely certain that he was thinking ("I think, therefore I am"), and since he could not be absolutely certain that he had a body (an evil demon could be deceiving him about this, but not about the fact that he was thinking), he could be certain that his thoughts were not identical with his body. This argument does not deny the existence of the body, or that we can be sure that we have bodies. Rather, it seeks to show that because I can be certain of my own consciousness in a manner that I cannot be certain of the existence of anything physical, my consciousness cannot be physical.

If it is impossible to be certain about the existence of physical things in the same way that it is possible to be certain about the existence of consciousness, *then* consciousness cannot be physical. If mental entities (such as thoughts) *just are* physical entities (such as firing neurones), and if it is possible to be absolutely certain that I am performing mental acts ('I think, therefore I am'), then it should be possible to be equally certain that physical entities exist. Yet it is not possible to be equally certain that mental and physical entities exist. While it is self-contradictory to think to oneself 'I am not thinking', it is not self-contradictory to think to oneself 'I have no brain, I am in fact just a thinking substance'. This argument does not lead us to conclude that we have no brains or that we are nothing but thinking substances; rather, it leads us to conclude that as thinking beings there is more to our minds than our brains. [14]

The Distinction between First and Third Person

We each have unique access to our own mental-states, and this access is hard to explain on physicalist grounds. Someone other than myself could surely know more about the state of my brain than I do. A scientist can look at my brain with various measuring and imaging devices, whereas I might be totally ignorant about the state of my brain. Indeed, of all people I am in the worst position to know about my own brain. For example, I cannot know anything about it while I am sleeping, whereas a third party can.

On the physicalist's view that my mind just is my brain, it seems to follow that the person who knows most about my brain would know most about my mind. Yet however much a third party knew about my brain

they would not know the state of my mind in the special way that I know it: "A neurophysiologist can know more about my brain than I do, but he cannot know more about my mental life." [15]

Thomas Nagel argues that your *subjective* experience of tasting chocolate cannot be reduced to any *objective* physical event inside your brain because any such physical state is observable by a third party, whereas your experience is not:

"If a scientist took off the top of your skull and looked into your brain while you were eating the chocolate bar, all he would see is a grey mass of neurons. If he used instruments to measure what was happening inside, he would detect complicated physical processes of many different kinds. But would he find the taste of chocolate?

It seems as if he couldn't find it in your brain, because your experience of tasting chocolate is locked inside your mind in a way that makes it unobservable by anyone else. . . Your experiences are inside your mind with a *kind of insideness* that is different from the way that your brain is inside your head.

. . . Suppose a scientist were crazy enough to try to observe your experience of tasting chocolate by *licking* your brain while you ate a chocolate bar. . . your brain probably wouldn't taste like chocolate to him at all. But even if it did, he wouldn't have succeeded in getting into your mind and observing your experience of tasting chocolate. He would have discovered. . . that when you taste chocolate, your brain changes so that it tastes like chocolate to other people. He would have his taste of chocolate and you would have yours." [16]

Nagel concludes that "Physical science has progressed by leaving the mind out of what it tries to explain, but there may be more to the world than can be understood by physical science." [17]

Moreover, I know the contents of my own mental life incorrigibly; that is, I am incapable of being mistaken about the content of my self-conscious awareness. For example, it is impossible for me to mistakenly think that I am in pain. However, it surely is possible for other people, however well informed, to be mistaken about my being in pain:

"To summarize then, physical states/properties are not self-presenting, but mental states/properties are, as evidenced by the twin phenomena of private access and incorrigibility. Thus, physical states/properties are not identical to mental states/properties." [18]

I know my own mind, as it were, from the inside out. Minds are best known from the inside out, but brains are best known from the outside in; thus the mind and the brain cannot be identical.

Qualia

Gary R. Habermas and J.P. Moreland argue against physicalism from the 'qualia' of imagined sensory images. Qualia is the subjective feel or texture of conscious experience:

"Picture a pink elephant in your mind. Now close your eyes and look at the image. In your mind, you will see a pink property. . . There will be no pink elephant outside you, but there will be a pink image of one in your mind. However, there will be no pink entity in your brain; no neurophysiologist could open your brain and see a pink entity while you are having the sense image. The sensory event has a property – pink – that no brain event has. Therefore, they cannot be identical." [19]

To put this another way, the subjective feel of mental experiences such as the feeling of pain, the hearing of sound or the taste of chocolate seems very different from anything that is purely physical: "If the world

were only made of matter, these subjective aspects of consciousness would not exist. But they *do* exist! So there must be more to the world than matter." [20]

Beliefs, Thoughts and Intentionality

Consider what it is to have beliefs and thoughts:

"A belief is a person's view, accepted to varying degrees of strength, of how things really are. If a person has a belief (e.g., that it is raining), then that belief serves as the basis for the person's tendency or readiness to act as if the thing believed were really so (e.g., gets an umbrella). At a given time, one can have many beliefs that are not currently being contemplated. Beliefs are not the same thing as thoughts. A person has many thoughts he or she does not believe and many beliefs that are not currently being thought. Thoughts exist only while they are being contemplated, but we have many beliefs not currently being contemplated." [21]

To have a belief is to be prepared to take the proposition of that belief as a premise in reasoning and upon which to act. To have a belief is to have "faith" that something or other is the case. Beliefs have the property of being *about* things. For example, my belief that I am wearing my watch is *about* my watch. However, it is very difficult to see how matter can have the property of 'aboutness'.

Beliefs and thoughts have and require *intentionality*: "intentionality is the mind's *ofness* or *aboutness*. Mental states point beyond themselves to other things. Every mental state I have is of or about something - a hope that Smith will come, a sensation of the apple, a thought that the painting is beautiful." [22]

We do not include physical entities such as books or computers in the category of 'beings capable of having beliefs' and thus of knowing things (holding true beliefs about facts). But how could this line be drawn on a physical view of the mind? As Habermas and Moreland argue:

"Now intentionality is not a property or relation of anything physical. Physical objects can stand in various physical relations with other physical objects. One physical thing can be to the left of, larger than, harder than, the same shape as, or the thing causing the motion of another physical object. But one physical object is not of or about another one." [23]

C.S.Lewis hit the nail on the head when he wrote that, "to talk of one bit of matter as being true about another bit of matter seems to me to be nonsense." [24] What could possibly distinguish one state of matter from another such that one had the property of being true while the other had the property of being false?:

Since books and computers are merely physical objects, they are incapable of intentionality, and so incapable of having beliefs. Since having a belief is a necessary condition of knowing anything, merely physical objects such as books and computers *and brains* are incapable of knowing. [25]

The ability to believe in facts (that is, to have or adopt an attitude of trust or faith towards facts) is something linked to 'having a mental life', where this is something that cannot be reduced to 'nothing but' physical substances and relations: "mental states possess intentionality, while physical states do not." [26] A book contains propositions (encoded in a written language) - but a book has no attitude of trust or distrust towards those propositions or the purported objects of those propositions. A computer, like a book, can be said to contain propositions (but not beliefs, since it is incapable of having beliefs), and it can manipulate those propositions according to the laws of logic. However, a computer has no *opinion* of the propositions it contains and manipulates.

My focus here is upon human believing and knowing. I will therefore not trouble myself about where the line is to be drawn between those beings capable of believing (and hence knowing) and those which are incapable of believing (and so incapable of knowing), other than to say that merely physical things, being

incapable of intentionality, must be incapable of believing or knowing. That is, knowers must be rational beings: "One of the most venerable uses of the term 'rational' is to denote certain kinds of being: those with *ratio*, the power of reason. Such creatures are able to hold beliefs; they are capable of thought, reflection, intentionality." [27]

My intuitions on this matter suggest that germs and bacteria are certainly incapable of believing (and so knowing) anything; that at least some non-human animals (such as Chimps who have learnt sign-language) are capable of believing not only in *facts*, but in truths (i.e. propositions); and that somewhere in-between these two extremes there will come a cut-off point between those who can, and that which cannot have beliefs (and thus knowledge). As Alvin Plantinga says:

"Man is a rational animal, but certain other animals also appear to display some rudimentary powers of reason, and perhaps there are still other creatures (angels, Alpha Centurians) by comparison with whom, cognitively speaking, we humans pale into insignificance." [28]

Let us take a moment to consider what it means to be a "rational" being. . .

Being Rational

A computer can mimic certain aspects of what scholastic philosophy dubbed "the third act of the mind" [29] ; that is "reasoning, calculating." [30] This "third act" is the whole of what people today tend to mean by "reason", and this corresponds to the old French "*Raisonner*", meaning "to think connectedly or logically". [31] We can define "the third act of the mind", reason in the French sense, as:

'The manipulation in thought of beliefs and premises according to the principles of logic, by virtue of which they may be seen in their logical connections, and conclusions may be reached.'

Raisonner is subsumed under the broader Latin definition of "reason" (from the Latin '*ratio*, - *on*', meaning "reckoning, judgement, understanding. . ." [32]), which corresponds to the scholastic taxonomy of three "acts of the mind":

- a) "simple apprehension",
- b) judgement, and
- c) reasoning [i.e. *raisonner*]. [33]

It is the first act of the mind that constitutes *intellectus*: "intellect (*intelligere*) is the simple (i.e. indivisible, uncompounded) grasp of an intelligible truth, whereas reasoning (*ratiocinari*) is the progression towards an intelligible truth by going from one understood (*intellecto*) point to another." [34] Thus:

"We are enjoying *intellectus* when we 'just see' a self-evident [basic] truth; we are exercising *ratio* when we proceed step by step to prove a truth which is not self-evident. A cognitive life in which all truth can be simply 'seen' would be the life of an *intelligentia*, an angel. A life of unmitigated *ratio* where nothing was simply 'seen' and all had to be proved, would presumably be impossible; for nothing can be proved if nothing is self-evident. Man's mental life is spent labouriously connecting those frequent, but momentary, flashes of *intelligentia* which constitute *intellectus*." [35]

The first act of the mind, simple apprehension or understanding, contains a subset that has been termed the *sapiential* sense:

"It is our ability to know these indemonstrable but indisputable truths that, for want of a "cleaner" phrase, we call sapiential sense. Sapiential sense is the mind's ability to "see" the truths that constitute reality, grasp things as they are in themselves. The "seeing" of these truths transcends the scope of the scientific method (which is limited to the data of the senses) and of logic (which is limited to "unpacking" the conclusions already contained in premises). "Knowledge," writes Illtyd Trethowan, "is basically a matter of seeing things. . . arguments, reasoning processes, are of secondary importance and this not only because without direct awareness or apprehension no process of thought could get underway at all, but also because the point of these processes is to promote further apprehensions." [36]

Each act of the mind builds upon and includes the one before. For, "Knowledge supposes a judgement, explicit or implicit." [37] Judgement involves the "simple apprehension" [38] of understanding; and reasoning requires judgement, and thus understanding, which includes "apprehension, intellectual intuition, understanding, "seeing", insight, contemplation." [39] Rational beings are therefore beings capable of employing all three acts of the mind, for "What we cannot understand we cannot believe; and what we cannot believe we cannot know." [40] I therefore define reason, in its widest, Latin sense, as:

'The discerning apprehension of truths which may be manipulated according to the principles of logic, by virtue of which they may be seen in their logical connections, and conclusions may be reached.'

Reason is thus: 'the combined operation of understanding, judgement, and *raisoner* in search of truth.' It is my claim that all three acts of the mind are immaterial and that the human mind is therefore more than material.

While a computer manipulates propositions according to the principles of logic, it does not, I suggest, do this "in thought", as is necessary to the possession of the third act of the mind as defined above. Nor does it possess either the first act, "understanding", or the second act, "judgement". In other words, while computers undoubtedly possess part of the abilities *of* mind, it is my belief that they do not *have* mind. Thus I do not think a computer can have beliefs, or, consequently, knowledge. In this I agree with John Polkinghorne who writes that, "The human mind is indeed a computer. . . but it is much more than that - we can also "see", or understand.", and thus that, "The exercise of reason is the activity of persons and it cannot be delegated to computers, however cleverly programmed." [41] This means that it is impossible to view the human mind as nothing but a biological computer.

As Aristotle argued, "Seeing is an act of the eye, but understanding is not an act of our brain. It is an act of our mind – an immaterial element in our makeup that may be related to, but is distinct from, the brain as a material organ." [42]

Determinism, Free Will and Moral Responsibility

Physicalism implies determinism, in that the mind is seen as being identical with the brain, which is a natural, physical system running according to the laws of nature. As C.S.Lewis wrote:

"If Naturalism is true, every finite thing or event must be (in principle) explicable in terms of the Total System. . . If any one thing should be such that we see in advance the impossibility of ever giving it that kind of explanation, then Naturalism would be in ruins. . . For by Naturalism we mean the doctrine that only Nature – the whole interlocking system – exists. And if that were true, every thing and event would, if we knew enough, be explicable without remainder. . . *as a necessary product of the system.*" [43]

Reasons to doubt the truth of determinism are therefore also reasons to doubt the truth of naturalism and physicalism.

One reason to doubt determinism (and thus physicalism) is that it causes severe problems for our concepts of morality. It is not up to the stone whether or not it falls to earth if I throw it into the air. Given certain conditions (being thrown into the air, gravity, etc.) the stone *will* fall back to earth. The stone has no freedom to do anything other than what it is caused to do; its activity is determined by causes over which it has no control. If humans lack free will, then our actions fall into exactly the same category as the action of a falling stone. We would have no freedom to do otherwise than we are caused to do by causes outside of our control (indeed, we would have no 'control' at all). If we are thus determined, does it make any sense to retain belief in moral obligation? A moral obligation is something you *ought* to do, something you *should* do; but what use is there for concepts like 'he *ought* to do this' and 'she *should* do that' in a world where every human action is a 'has to do'? [44]

We face a choice: either to accept determinism and dump moral obligation, or to retain belief in moral obligation and dump determinism. If we dump determinism, then we must also dump naturalism and physicalism, because naturalism and physicalism entail determinism: "It is safe to say that physicalism requires a radical revision of our common-sense notions of freedom, moral obligation, responsibility, and punishment. On the other hand, if these common-sense notions are true, physicalism is false." [45]

Determinism and Rationality

Determinism destroys the possibility of rationality. If this is so and this fact is recognised, then it is impossible to *rationally* believe in determinism. Moreover, if determinism were true, it would be impossible for anyone to rationally believe anything:

"Given certain evidences, I "ought" to believe certain things. I am intellectually responsible for drawing certain conclusions, given certain pieces of evidence. . . If I ought to believe something, then I must have the ability to choose to believe it or not believe it. If one is to be rational, one must be free to choose her beliefs in order to be reasonable. . . But such deliberations make sense only if I assume that what I am going to do or believe is "up to me" – that I am free to choose and, thus, I am responsible for irrationality if I choose inappropriately." [46]

However, it is a necessary presupposition of rationality and rational pursuits (such as philosophy) that rationality is possible. Therefore, determinism, which rules out libertarian freedom, is necessarily false (just simply contingently false, i.e. not simply possibly true but actually untrue, but not even possibly true). If determinism is necessarily false, any world-view that requires determinism to be true must also be necessarily false. Naturalism and physicalism both imply determinism. Therefore both naturalism and physicalism are necessarily false: "It is self-refuting to argue that one *ought to choose* physicalism. . . on the *basis* of the fact that one *should see* that the *evidence is good* for physicalism. . ." [47]

Ground and Consequent

If determinism is true, what do we mean by saying that "we face a choice"? We would be determined either to accept or to reject determinism! If we are determined to believe whatever we believe, what could possibly make it the case that we are not determined to believe false or contradictory beliefs? If we have been determined to believe what we believe by impersonal physical forces, what reason is there to trust the truth of our beliefs? As H.P.Owen writes:

"Determinism is self-stultifying. If my mental processes are totally determined, I am totally determined either to accept or to reject determinism. But if the some reason for my believing or not believing X is that I am causally determined to believe it, I have no ground for holding that my judgement is true or false." [48]

This line of thought has proved a rich source of anti-naturalistic arguments. C.S.Lewis argued thus:

"the cause and effect relation between events and the ground and consequent relation between propositions are distinct. Since English uses because for both, let us here use *Because* CE for the cause and effect relation ('This doll always falls on its feet because CE its feet are weighted'), and *Because* GC for the ground and consequent relation ('A equals C because GC they both equal B'). . . If an argument is to be veridical the conclusion must be related to the premises as consequent to ground, i.e. the conclusion is there *because* GC certain other propositions are true." [49]

In other words, if the train of my reasoning is *merely* the result of a series of physical cause and effect, there is no room for my conclusions to be related to premises in the logical relation of ground and consequent. If naturalism is true I arrive at the conclusions I do *because* CE they are the natural effects of previous natural causes, however: "a train of reasoning has no value as a means to finding truth unless each step is connected with what went before in the Ground-Consequent relation." [50]

The outcome of a merely physical series of cause and effect *might* be true by luck, but never by judgement. Thus naturalism, and the physicalism to which it leads, cannot profess to give us any *reasons* to accept its truth: "unless our conclusion is the logical consequent from a ground it. . . could be true only by a fluke. . . Wishful thinkings, prejudices, and the delusions of madness, are all caused, but they are ungrounded." [51]

Atheist philosopher Anthony O'Hear agrees with Lewis that "decisions. . . demand a justification logically independent from anything we might discover in scientific accounts." [52] But once this is admitted, naturalism is out the window:

"Naturalism. . . offers what professes to be a full account of our mental behaviour; but this account, on inspection, leaves no room for the acts of knowing. . . on which the whole value of our thinking, as a means to truth, depends." [53]

Thus, concludes Lewis:

"acts of reasoning are not interlocked with the total interlocking system of Nature as all other items are interlocked with one another. They are connected with it in a different way; as the understanding of a machine is certainly connected with the machine but not in the way the parts of the machine are connected with each other. The knowledge of a thing is not one of the thing's parts. In this sense something beyond Nature operates whenever we reason." [54]

Naturalistic Evolution & Reliable Cognition

The naturalist may well want to bring evolution by natural selection into the discussion at this point. Our cognitive abilities may be 'nothing but' an uninterrupted stream of physical causes and effects, they may say, but this stream has been moulded by millions of years of natural selection. There may be no judgement (in the non-physicalist sense), but everything isn't left to luck.

But against this: If it can be shown that human cognitive abilities have been moulded purely by evolution (a hypothesis that seems hard to prove), this would point to the existence of 'fine tuning' in the universe that would constitute evidence for the existence of God, and thereby for the falsity of naturalism!

The evolution of self-conscious beings with reliable cognitive abilities is surely more likely given the existence of a self-aware, rational being who instigates the whole process and starting conditions of evolution, than it is on the naturalistic picture wherein humans are the unintended result of impersonal physical laws, plus time, plus chance.

On the other hand, it does not presently seem all that likely that natural selection alone can account for human cognitive capacities. Aside from the problems facing the physicalist in attempting to account for several aspects of the mind that have already been mentioned (such as intentionality), there is no absolute

link between the survival value and truth of beliefs, especially once we leave the realms of avoiding predators and so on. (Sometimes a lie 'works' in terms of survival value. . .) It would seem strange, for example, to justify confidence in the theorising of theoretical physics on the basis that some distant ancestor of the physicist in question luckily had the *nous* to recognise and avoid being eaten by predators before he could mate:

"Theoretical activity does not seem to contribute to survival value. And less theoretical activities (e.g. sensing the world) would not need to give true information about the world to aid an organism; such activities would need only to help the organism interact with the world consistently. An amoeba which consistently sensed a large object as small and vice versa would learn which ones to avoid without having true insights into the way the world is." [55]

Anthony O'Hear admits that: "There is a clear distinction to be drawn between the true and the useful" [56], such that "success in the evolutionary struggle considered on its own does not guarantee the truth or adequacy of a creature's beliefs" [57]. But as Alvin Plantinga argues in *Warrant and Proper Function* (Oxford, 1993), this is a self-defeating claim in that it gives one reason to doubt the naturalistic world-view upon which it is based (and hence some reason to accept a theistic worldview). As William C. Davis says:

"Humans have numerous features that are more easily explained by theism than by metaphysical naturalism, if only because metaphysical naturalism currently explains all human capacities in terms of their ability to enhance survival. Among these features are the possession of reliable faculties aimed at truth, the appreciation of beauty, and a sense of humor." [58]

Richard Taylor offers a similar argument, along the following lines, against the naturalism that underlies the naturalistic evolutionary account of human origins: Suppose you are travelling by train and, glancing out of the window, you see some stones on a hill-side spelling out the words 'Welcome to Wales'. On the basis of this observation you form the belief that you have entered into Wales (this belief may be true or false, it is immaterial to the following argument). It would be unreasonable of you, says Taylor, to continue in this belief if you also came to believe that the stones had not been arranged on purpose to accurately convey information, but had ended up in this formation purely through the operation of natural laws:

"you would, in fact, be presupposing that they were arranged that way by an intelligent and purposeful being or beings for the purpose of conveying a certain message having nothing to do with the stones themselves." [59]

(This is admittedly an unlikely occurrence, but it is logically possible. The wind and rain could have dislodged the stones so that they rolled down the hillside, coming to rest where the ground was pitted by natural erosion.)

The point is this: Supposing you did believe the sign to be the result of purely natural forces, it would be unreasonable of you to base your belief that you were entering Wales on this stone formation:

"it would be *irrational* for you to regard the arrangement of the stones as evidence that you were entering Wales, and at the same time to suppose that they might have come to that arrangement accidentally, that is, as the result of the ordinary interactions of natural or physical forces." [60]

Taylor now develops the argument by analogy, suggesting that if you came to believe the workings of *your own brain* to be the result of *purely* natural forces it would be similarly unreasonable of you to base your belief that this was so on the reasoning of that very brain itself:

"It would be irrational for one to say *both* that his sensory and cognitive faculties had a natural, nonpurposeful origin and *also* that they reveal some truth with respect to something other than themselves. . . If, on the other hand, we do assume that they are guides to some truths having nothing to do with themselves, then it is difficult to see how we can, consistently with that

supposition, believe them to have arisen by accident, or by the ordinary workings of purposeless forces, even over ages of time." [61]

If the mind just is the brain, and if the brain, like the 'Welcome to Wales' sign, is the result of a merely natural process, then anyone who trusts their brain while believing this is as unreasonable as someone who trusts the stone sign while believing it to be the result of purely natural forces.

One can add that the stone sign fortuitously happened to be correct, and that the inhabitants of Wales did not remove it *for this very reason*. The continued existence of the sign would then have passed through a process of *intentional* selection. However, someone who didn't know this, but who believed the sign was the result of natural processes, would be unreasonable to base their belief that they were entering Wales upon the sign. Likewise, evolution might be embedded in a wider, theistic context. Nevertheless, the person who believes their brain to be the outcome of a purely naturalistic evolution is as unreasonable as the person who believes a sign they think came about in a similarly natural manner. Thus evolutionary naturalism undermines itself. As Ronald H. Nash, who defends Taylor's argument, writes:

"Thus the naturalists seem to be caught in a trap. If they are consistent with their naturalistic presuppositions, they must assume that our human cognitive faculties are a product of chance, purposeless forces. But if this is so, they appear grossly inconsistent when they place so much trust in those faculties. But. . . if they assume that their cognitive faculties are trustworthy and do provide accurate information about the world, they seem compelled to abandon one of the cardinal presuppositions of metaphysical naturalism and to conclude that their cognitive faculties were formed as a result of the activity of some purposeful, intelligent agent." [62]

If naturalism is abandoned (an abandonment that need not include the abandonment of evolution), then there is no reason to think that the mind must be identical with the brain, and the physicalist argument from the assumption of naturalism loses all force.

Conclusion

Physicalism, and the naturalism in which it is embedded, both face severe philosophical problems when it comes to accounting for several aspects of the human mind, from the subjective qualia and certainty of first-person experience, through the intentionality and truth or falsity of beliefs, to the reliability of human cognition.

Physicalism may be a simple theory of the mind, but it is inadequate. A more adequate philosophy of mind will insist that the mind, while clearly related to the brain (and, indeed, to the human body) is far from 'nothing but' a complex arrangement of matter. At the very least, the mind has several immaterial properties, such as the intentional 'aboutness' of beliefs. It follows that no merely physical explanation of the mind is possible.

End Notes

[1] "According to physicalism, a human being is merely a physical entity." (Gary R. Habermas & J.P. Moreland, *Beyond Death*, Crossway Books, 1998, p42.)

[2] "Dualism supports belief in a transcendent realm of reality. Dualism breaks the stranglehold of scientism and physicalism and supports belief in God and a transcendent dimension of reality. . . The existence of at least one nonphysical, nonempirical reality opens up the door for the claim that there is an entire transcendent domain of reality [a domain that might include God and also angelic beings]." (Habermas & Moreland, *op cit*, p108.)

[3] *ibid*, p43.

[4] Jerry Fodor, 'The Big Idea: Can There Be A Science of Mind?', *Times Literary Supplement*, July 3, 1992, 5.

[5] Ned Block, "Consciousness", in *A Companion to Philosophy of Mind*, ed. Samuel Guttenplan, (Oxford: Blackwell, 1994), p211.

[6] John Searl, *Minds, Brains and Science*, (1984).

[7] Thomas Nagel, *What Does It All Mean?*, (Oxford, 1987), (p28).

[8] A position defended by 'Idealists'.

[9] Norman L. Geisler, 'Materialism' in *Baker Encyclopedia of Christian Apologetics*, (Baker, 1999), p445. Richard Swinburne likens the brain to a light socket and the mind to a light bulb. The bulb needs a socket to work, but it can exist apart from the socket and work when plugged into another socket or when attached to a power supply in other ways.

[10] By analogy, Christians believe that persons can be resurrected in a new form, the spiritual body.

[11] My body *limits* what movements can be characteristic of me (flying can't be characteristic of me, given the limits of my body), but it doesn't *determine* what movements are characteristic of me. It might likewise be said that the brain limits who a person can be, but does not determine who they are or who they become.

[12] "Any theist will have good reason to deny contingent materialism, since God is not a form of energy existing within this space-time, and theists typically claim that God can be known. It should be apparent that the existence of God cannot be ruled out by materialism, since materialism is now precisely the hypothesis that there is no God. . . Any hypothesis of that sort must be predicated on the facts. It would be absurd to use it to rule out any facts. . . If there is a God, materialism is false. So the truth of materialism must depend on whether or not there is a God. The existence of God cannot depend upon whether or not materialism is true – that would be to put things completely back to front. Materialism could only be asserted as a plausible hypothesis after it has been independently discovered that as a matter of fact there is no God." Keith Ward, *Religion & Human Nature*, (Oxford, 1998), p137.

[13] Habermas & Moreland, *op cit*, p47.

[14] In other words, Descartes went too far in concluding from his argument that he was "a substance, the whole essence or nature [of which] consists in thinking, and which, in order to exist. . . depends upon no material thing; so that this 'I', that is to say, the mind, by which I am what I am, is entirely distinct from the body. . . and moreover, that even if the body were not, it would not cease to be all that it is." ('Discourse Four', *Discourse on Method and the Meditations*, Penguin, p54.) This is not to say this conclusion is necessarily false, but that it does not follow from Descartes' argument for it.

[15] Habermas & Moreland, *op cit*, p50.

[16] Thomas Nagel, *op cit*, p29-30.

[17] Habermas & Moreland, *op cit*, p37.

[18] *ibid*, p51.

[19] *ibid*.

[20] *ibid*, p52.

[21] Habermas & Moreland, *op cit*, p70.

[22] *ibid*, p53.

[23] *ibid*, p53.

[24] C.S.Lewis, 'De Futilitate' in *Christian Reflections*, (Fount), p88.

[25] On intentionality, mind and matter see Peter Kreeft, *The Journey - A Spiritual Roadmap for Modern Pilgrims*, (IVP, 1996), Chapter Five 'The Materialist'.

[26] Habermas & Moreland, *op cit*, p54.

[27] Alvin Plantinga, (1993).

[28] *ibid*.

[29] Peter Kreeft & Ronald Tacelli, *Handbook of Christian Apologetics*, (Monarch, 1995).

[30] *ibid*.

[31] T.F.Hoad, *Dictionary of Etymology*. "When *ratio* is. . . distinguished from *intellectus*, it is, I take it, very much what we mean by 'reason' today; that is, as Johnson defines it, 'The power by which man deduces one proposition from another, or proceeds from premises to consequences'." – C.S.Lewis, *The Discarded Image*, (Cambridge), p157-158.

[32] *ibid*.

[33] Peter Kreeft & Ronald Tacelli, *op cit*.

[34] Thomas Aquinas, quoted by C.S.Lewis, *The Discarded Image*, p157.

[35] C.S.Lewis, *The Discarded Image*, p157.

[36] Roy Abraham Varghese, *Great Thinkers On Great Questions*, (OneWorld), Introduction, p5-6.

[37] 'Knowledge', *The Catholic Encyclopaedia* @ <http://www.knight.org/advent/cathen/08673a.htm>

[38] Peter Kreeft & Ronald Tacelli, *op cit*.

[39] *ibid*: "We just "see" (in a nonvisual sense of the term) that certain things are true, or that one thing follows from another." (Everitt & Fisher, *Modern Epistemology*, p4)

[40] Robert Audi, *Epistemology – a contemporary introduction*, (Routledge), p183.

[41] John Polkinghorne, *Reason and Reality*, (SPCK), p10.

[42] Mortimer J. Adler, *Aristotle for Everybody*, (Simon & Schuster, 1997), p183-184.

[43] C.S.Lewis, *Miracles*, (Fount), p16, my italics.

[44] The existence of objective moral obligations forms one premise of the moral argument for the existence of God as the only possible source of such obligations, a conclusion that contradicts naturalism.

[45] Habermas & Moreland, *op cit*, p60.

[46] *ibid*, p65: "If physical determinism is true, then that is the end of all discussion or argument; everything is finished. There is no philosophy. All human persons are caught up in this inexorable web of circumstances and cannot break out of it. Everything we think we are doing is an illusion." (Sir John Eccles, in Eccles & Popper, *The Self and Its Brain*, p546.)

[47] *ibid*.

[48] H.P.Owen, *Christian Theism*, (T&T Clark, 1984), p118.

[49] C.S.Lewis, 'Religion without Dogma?', *Compelling Reason*, appendix B, (Fount), p108.

[50] C.S.Lewis, *Miracles*, chapter three, (Fount).

[51] *ibid*.

[52] Anthony O'Hear, *Beyond Evolution*, (Oxford, 1997), p13.

[53] C.S.Lewis, *op cit*.

[54] *ibid*.

[55] J.P.Moreland, *Scaling the Secular City*, (Baker, 1987), p97.

[56] Anthony O'Hear, *op cit*, p57.

[57] *ibid*, p60.

[58] William C. Davies, *Reason for the Hope Within*, ed. Michael J. Murray, (Eerdmans, 1999), p37.

[59] Richard Taylor, *Metaphysics*, 2nd edition, (Prentice Hall, 1974).

[60] *ibid*.

[61] *ibid*.

[62] Ronald H. Nash, 'Miracles & Conceptual Systems' in *In Defence of Miracles*, (Apollos, 1997), p129-130.

Recommended Reading

Roger Forster & Paul Marston, *reason, science & faith*, (Monarch, 1999).

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Richard Swinburne, *The Evolution of the Soul*, (Oxford).

Roy Abraham Varghese ed., *Great Thinkers On Great Questions*, (OneWorld, 1998).

Keith Ward, *In Defence of the Soul*, (OneWorld), & *God, Faith & The New Millennium*, (OneWorld, 1998).

William Hasker, *The Emergent Self*, (Cornell University Press, 1999).

Alvin Plantinga, 'An Evolutionary Argument Against Naturalism' at <http://hisdefense.org/articles/ap001.html>

Victor Reppert, 'The Argument from Reason' at http://www.infidels.org/library/modern/victor_reppert/reason.html

Gregory Koukl, 'Dominoes, Determinism, and Naturalism' at <http://www.str.org/free/commentaries/evolution/dominosd.htm>

Dallas Willard, 'Knowledge and Naturalism' at http://www.dwillard.org/Philosophy/Pubs/knowledge_and_naturalism.htm

-----, 'A Non-Reductive and Non-Eliminative Physicalism?' at <http://www.dwillard.org/Philosophy/Pubs/non-reductive.htm>

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