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ABSTRACT

This study advances a refutation of Physicalism. It demonstrates that it cannot, coherently, be maintained. An alternative approach based on Husserl's 'transcendental ego' is developed. This is an account where the physical world is constituted by a freely acting self from a phenomenology that is ontologically neutral. By doing so, the, so-called, 'hard problem' of consciousness is dissolved. It will be shown that the self is compelled to attribute moral and aesthetic value to the world that it has constituted. The determinism that Physicalism engenders is shown to lead to a nihilism that makes all knowledge impossible. Genuine personal responsibility for action, is asserted within strict limits. A position is outlined that gives a role to the self in causation and one that entails the possibility of panpsychism.

(References are limited. The view taken is that anyone familiar with the subject matter and literature will not require them and that those who are not, can obtain the relevant information from an internet search, and will be far more comprehensive than anything that can be provided here.)

I PHYSICALISM

Suppose an observer "A" - call him a neuroscientist - observes a subject "B". And suppose that A observes B in an act of seeing. Further, suppose that A has enhanced powers of observation and can observe things such as photons and internal states of the body and processes that would not normally be subject to direct observation - which suppositions are made purely for the purpose of creating a simplified model and do not affect the principles under consideration.

Imagine that A observes B looking at an object in the world, like a ripe tomato. A sees photons reflect off the tomato and travel through space until some of these enter B's eye and impact upon the retina where they are converted into electro-chemical impulses that progress into parts of B's brain, activating neurons. Suppose that A repeats this observation on numerous occasions and always sees the same pattern, the same causal chain. From this, A not unnaturally concludes that this physical process is implicated in B's visual perception and then goes a

step further by concluding that B's seeing *simply is* the activation of a part of B's brain in the manner described. Additionally, we may suppose that A conducts the same observations on other subjects and obtains comparable results - A sees the same types of entities and processes previously described. Equipped with this, A inductively concludes that this physical process *constitutes* vision in all humans - there is nothing more to it than this physical process. A makes, what we might term, the "physicalist" hypothesis or conjecture. This final step is critical because A is now obliged to see *their own* perceptions as having been achieved by essentially the same means - give or take a little enhancement (the same result could be achieved by more circuitous observational means using instruments, scans, printouts and so on, in addition to direct observation.) A's observation has been connected to B's observation by exactly the same sort of causal chains witnessed in B's observation. There is a causal chain connecting A and, in particular, relevant parts of A's brain to the observed items relating to B - tomatoes, retinas, neurons and so forth. The whole procedure could be depicted by showing a single thread connecting B to the tomato and multiple threads connecting A to parts of B's thread. Thus, A stands in exactly the same type of relation to the items A observes as does B to the tomato, that is, a physical, causal relation. Is this in any way problematic?

The thesis that A has come to endorse requires that their own seeing is achieved or mediated by items not seen - photons, retinas, optic nerves and the like - the very items A *is* able to see where B and others are concerned. Logically, these causal intermediaries cannot be seen or they would be seen instead. And this is an important point: under this causal account of perception, it is not possible, in principle, to perceive everything existing at a given time. Even God could not instantly perceive everything physical that exists, because the mediating entities would have to be perceived by separate, causally mediated, acts of perception that would be subject to the same limitation, and so on. And there is a more general limit upon what can be perceived by physical means. An entire universe cannot be perceived, for the reason just given and because whatever physical thing was doing the perceiving or representing - being altered causally by other things - could not perceive itself (and not perceive itself, perceiving itself, perceiving... and so on) for logical reasons. A physical God could not be omniscient.

The physicalist thesis under consideration, here, requires that observation consists of a brain state at the end of a causal chain. Thus, when A observes B observing, A has a succession of brain states (while B has only one.) These items, however, are not at all like what is observed (as they are not for B), so how can they be observations; pieces of knowledge of those things? They have been *caused* by those objects in the world, of course, but they have been caused by many, perhaps an infinite number, of other things - all the things in the causal chains from objects to brain states. And, in addition, a causal chain does not terminate with a brain state; it flows on from there, indefinitely. Indeed, many who favour this account of perception also wish it to feature in an account of action; explaining the things a person *does* as a result of their perceptions. Why, then, would we single out any of the myriad items in such a chain as being *the*

perception or observation of a given object - be it a tomato, retina or neuron? What is special about the brain state? Furthermore, when we consider that the object of perception is not the beginning of the chain but the product of prior chains - like photons emanating from the sun - we must regard the brain state as being as much an effect of those things as it is of the something like a tomato. All we really have is a physical network of cause and effect. (Indeed, a network in which A and B threaten to dissolve entirely as definable entities.) To select observation and observed from amid this network seems arbitrary. What our example requires us to do regarding B, is to attribute a special significance to a brain state that is caused by a tomato, but also by many other things, and to give it a significance in relation to the tomato that it does not have in relation to all of the other causally relevant entities (photons, retinas, optic nerves and so on.) Crucially, we must assert a relation that is *representative* or *informative* regarding the tomato. Clearly, the tomato has had its part to play in the creation of the brain state (and all that flows from it) and the brain state would be different if, say, a banana had been substituted. But the puzzle remains: in what sense can a neuronal event represent or give information about something it is entirely unlike? If we thought that perception gave us direct access to things in the world, as they are in themselves, there would be no problem. But, here, as a result of the causal observational process postulated, perception is deemed not direct but causally mediated and consisting of having certain brain states; items that are unlike and separated from what is putatively perceived. The theory that arose from observation turns back upon itself and seems to render it problematic. A challenge arises as to how one part of the world - a brain state - can represent or be an observation of another part of the world - a distal object in space such as a tomato.

There is a physicalist route out of this difficulty. For the physicalist, observation is just a physical process like any other, but a targeted account can be given that exploits the particularity of the brain state and, specifically, the fact that it has the character it does as a result (in part) of the target perceptual item (the tomato.) It is this causal foothold that any account of representation or awareness must exploit. The standard and, probably, only plausible account is an evolutionary, dispositional one. We must consider that matter has evolved by purely physical means (according to physical laws) into living organisms that are physically sensitive to their environment; that respond physically to that environment in ways that ensure survival - at least up until the point where reproduction takes place. This means that such organisms must respond *appropriately* to their surroundings: they must, in effect, represent to themselves the way things are around them and do so accurately. But this 'accurate' representation must be understood as no more than an effect in the organism caused by an environmental situation and as a physical effect that perpetuates the organism or, more minimally, does nothing to bring it into existential conflict with its environment. Thus, in the case of B and the tomato, the tomato, together with the light that has reflected off it onto the retina and the electro-chemical impulses generated along the optic nerve into B's brain, has created a brain state that is 'survival-appropriate': one that has as its focus (in physical terms) a particular item in the world. (We can still puzzle as to why *this* brain state, as

opposed to the one immediately before that caused it or the one immediately after that it causes, is selected for this role, but I will put this important matter to one side.) One might expand and imagine that the brain state engendered by the tomato, coupled with a pre-existing brain state like hunger (the physical embodiment of what we call hunger) causes B to reach for the tomato and eat it, thereby obtaining life-sustaining nutrition. Had B mistaken the tomato for something inedible (an event also to be articulated in physical terms) - had, that is, an 'inaccurate' brain state arisen, one not regularly associated with a causal chain including a tomato - then the gesture might not have been triggered, with deleterious consequences for B. Thus, we can see the shape of an evolutionary account: the world changes parts of the brain and those changes lead to bodily responses to the world that are or are not appropriate in terms of the survival of the body and, ultimately, its genes. We might insert a significant caveat at this point, as not every 'observation' or physical encounter with the world will lead immediately or at all to some action or reaction. Many of the brain states wrought by experience will lie dormant; they will encompass a *potential* for action. Such changes will have simply the potential for certain effects in future physical situations - if they arise. This being the dispositional dimension to the theory.

So, we have in the above a rough outline of an evolutionary, physicalist approach to observation and other cognitive states. And, perhaps, completely different, non-evolutionary, accounts could be given of how observation is a purely physical process, all of them with an associated articulation of truth or accuracy in physical terms. We do not, however, need to consider matters further because there is a more fundamental and decisive issue to be addressed. How do we know that this foundational depiction of the way things are is correct? The, albeit simplified and idealised, account of how neuroscientist A arrives at their conclusions; one involving observation (perhaps following experiment) is, essentially, the method used in actual research. That the world is a certain way and that brains are involved in perception are not *a priori*, but a matter of discovery. Presumably, scientists and philosophers who endorse this physicalist account (it is the orthodoxy) want it to be true, but in what does that truth consist? From the outset, we must acknowledge that the theory is self-referential. Physicalism is an all-encompassing theory; it brooks no exceptions - even for itself. The observations or beliefs that form the basis of the theory must themselves be construed in terms of the theory. Specifically, this means that the observations upon which the theory rests and the articulation of the theory must be brain or other physical states. So, when A observes the sequence of events involved in B's perception, A must be undergoing a sequence of brain states. This is exactly what A has concluded as a result of observing B and others. But, how can a brain state, one physical thing, be a depiction or representation of another, different, physical thing? It can only be an effect of it, a response to it. If we believe that this causal state of affairs prevails, how do we know this? If we could somehow directly observe one thing causing another, we might have the germ of an account. But, *ex hypothesi*, any such observation would, itself, have to be a brain state and we would have to give an account of how *it*, faithfully, depicted the items *it* 'observed', in this case, the cause and the effect. The existence of each

brain state and its set of (survival-enhancing, or not) dispositions would have to be established by another such, and so on, until such layers of dispositional accounts were nested like an infinite series of Russian dolls. Also, importantly, we need to see that, on this account, we do not have direct access to our own beliefs: as they consist of brain states - which are not directly given to us - so, we must establish their physical character and the causal, dispositional profile they constitute. But this can only be done by the formation of a further brain state related to the original 'belief' state - one with its own character and causal profile... We see how the whole physicalist account unravels into a vicious regress. It leads to a kind of physicalist solipsism: we are all trapped within our brain states, unable to gain access to the existence of anything beyond them.

To further drive the point home, a related difficulty is that, if we have construed belief in terms of survival-relevant brain states, we have reconfigured truth (and falsity) into a kind of adequacy. Once the bearer of truth is a physical thing, this must be the case. We have surrogate or pseudo-truth. Consequently, the overall theory, the physicalist, evolutionary account must, by its own lights, be subjected to the adequacy test. Its truth must lie in its survival utility. In the first instance, it is not likely that there will be any impact upon survival (until the point of reproduction) by the holding of such a belief, as in its physical, dispositional embodiment. It is obvious that the vast majority of beliefs, especially higher order ones, do not face the stern tribunal of natural selection. It may even be the case that complex beliefs, such as the physical evolutionary one we are considering (with its associated commitment to determinism), complicate our behaviour in ways that are unhelpful to our survival. The real rub, however, comes when we consider that whether a belief is adequate or not, in the terms we have developed, is itself a *judgement* - a further belief - and one that must be subjected to the same test, thus triggering the now familiar regress. It is vital to realise that, once you say that everything is physical, you are committed to treating that very claim as a physical thing, and that has fatal logical consequences for it.

We should take stock. Where did the problem we have identified arise? Clearly, a significant moment was when the decision was taken to treat seeing or otherwise perceiving as a purely physical act. It was the physicalist turn. The error made by A was to lose sight (literally) of the fact that their knowledge of B's perceptual system was arrived at, not by having a set of brain states, but by having something more like a set of images. It was by having images - of the tomato, retina, neuron and so on - that A arrived at their conception of B's vision. A's mistake was to understand B's vision as being *just* the physical entities observed in B's act of seeing. A thus, stripped B of their image (of the tomato) and left them with a brain state. (And B may have disappeared as a meaningful entity in the process.) By doing this - via induction and generalisation - A went on to eliminate their own images: these too became simply physical; a collection of brain states, which proved incapable of being related to what was supposedly observed - except by further brain states, thus, creating the same problem. Consequently, knowledge became impossible, causing the theory to collapse.

Indeed, we can dig deeper into the foundational error. There is an equivocation hidden in the terms in which the example is couched. We speak of A observing B in an act of seeing but, for this to make sense, A already has to have a notion of what seeing is. A must have an investigative starting point and this is a prior notion of what seeing consists of - for B and for everyone else. That starting point is an understanding of seeing as a *conscious* experience. A does not come to the subject cold. Seeing is pre-theoretically or pre-scientifically understood. And, although there will be an awareness within this understanding that physical items, like the eye and perhaps light are significant - they being proto-scientific discoveries in the realm of common-sense - the importance of such physical entities will have arisen on the back of something already grasped, namely the experience of seeing. The significance of such items will have been established simply by their impact upon *seeing* - an act that is already understood just by having visual, non-physical experiences. Hence, B's purely experiential perspective cannot be eliminated. For A to establish the role that items such as retinas or neurons play in B's seeing, B's reporting of their phenomenal experience is indispensable. The equivocation involved here is widespread in neurological research which while touting itself as a physical science proceeds from ineliminable mental origins - these set up the ambit of study as comprising physical items that have a bearing upon conscious experience. While proclaiming things like "You *are* your brain", neuroscience relies upon an assumption of what 'You' consists of, that defies identification with the brain. The subject and their experience always creep back in as final arbiter. And, just as significantly, the researcher inescapably relies upon *their own* consciousness in the performance of their study.

If neuroscience were truly ingenuous, it would study the brain and our nervous system as science studies the rest of the physical world. The brain would have a status no different to that of a rock or a turnip. The brain would be studied either at the level of fundamental physics or, within the special science of biology as an organ like the heart or the lungs. The attempt to locate the physical basis of perception or reasoning in the brain would be entirely otiose and completely contrary to the ethos of physicalism. Just as there is no attempt to identify the physical correlate of imagination or emotion in plants, there should be no attempt to do so in humans. If physicalism is right and everything is just physical, what could be possibly left out by such an approach? In principle, we have the means to fully understand the brain in the same way we have any other physical thing; without reference to anything non-physical. In fact, true physicalism would confine itself to the physical unfolding of the universe at the level of fundamental existents, without imposing artificial demarcations upon it like bodies and brains and processes like perception and belief. Why become involved in such matters? We see this with functionalism which tries to identify physical states and events that are intermediaries between inputs and outputs like tissue damage and avoidance behaviour, where the intervening entity (a brain state) fulfils some sort of function or 'role' like pain. Attempts to dissect continuous causal processes into elements such as inputs, outputs and the like are artificial and baseless and, more importantly, betray an allegiance to the mental that is out of place in a supposedly physicalist theory. Neuroscience

constantly straddles the line between treating the mind as just a physical process and treating it as genuinely non-physical. This is because its subject of investigation – bodies and brains - has been determined by an attachment to a non-physical concept of mind. That is the non-physical starting point.

The physicalisation of perception, therefore, has a central role to play in this failed account and it would be tempting to think that, by simply making the bold metaphysical leap to the mental, to the introduction of dualism, the problem could be resolved. For, if we accept that the physical cannot perform all of the work involved in observation, then perhaps this can be achieved by correlating a brain state with something like a mental image. This has the immediate advantage of giving us a definite place in the causal nexus to identify as the point and moment of perception and it also gives us something that is not just another physical thing - with all the representational impotence that entails. Additionally, it gives us something that is like or qualitatively identical with the item it is taken to be representing: we have a congruity between the tomato and the image of the tomato. We are not, however, out of the woods with this move. A sceptical problem arises. It does so because there is no means of checking that the image in question is a true representation or likeness of its supposed object. For that to happen, there would have to be direct, unmediated access to that object, and the causal model precludes this. This is a significant result because it might otherwise have been assumed that a mental image or some other mental entity caused by the underlying causal nexus would *per se* extricate us from the epistemological predicament. We might have thought that, because what is delivered is a true likeness of what originally caused it, such as a tomato, we would have escaped the difficulty posed by one physical item representing a totally different physical item. In fact, we still have the difficulty of explaining why a particular physical item - a brain state - causes or brings about an accurate mental image of one particular item in the causal chain that it emerges from - as opposed to any of the others. This is our dilemma. How can we know that a brain state has given rise to a true mental image of a particular physical object, a single entity among its many causes? If I have arrived at a physical causal account of how mental perception arises, that very account requires that I have done so by causal means - by observations or images causally connected to items in the relevant causal chains - thereby re-stating the problem. Associating a mental image with a physical entity (a brain state) distinct from and causally distanced from an object in the world does not solve the problem.

It is worth noting that the foregoing is also a decisive argument against epiphenomenalism which is, of course, a causal doctrine (one-way causation - physical to mental.) If the physical causes the mental, including perhaps the (illusory) belief that the mental self is active in the world, then how is that to be established? Again, we face the challenge that to know such a thing we would have to be able to access the mental and the physical as they actually are in themselves and observe the causal link between them, to observe the act of deceptive representation, as it were. Given that, by definition, we are on the mental side of the divide, we only have the access to the physical that the physical allows us and we have no means of gauging its reliability. In addition,

our judgements, under a thorough-going version of the theory, will be epiphenomenal and, consequently, their truth cannot be established (a problem for determinism more generally.) It is every bit as possible that the images the physical generates bear no relation to how things are. For some, of course, it may be that the argument for epiphenomenalism rests upon the supposed incoherence of mental causation or agency and, as such, constitutes a kind of negative argument. But we cannot progress from the fact that one theory fails to the success of another. What we might call veridical epiphenomenalism, where the world is as it appears to be but our actions are not, has to be established in its own right.

The use of the mental to explicate the possibility of perception or understanding fails, then, if it is tied *causally* to physical events because we are left incapable of saying how the mental entity that has been generated - image or belief - faithfully represents something beyond itself (this is the Kantian dilemma of phenomena and noumena.) We cannot escape the circle of ideas. The mental does, however, hold the key to the possibility of knowledge (in a way that the physical does not) *if* it is freed from these causal chains. At the heart of our exploration of what an observer such as a neuroscientist does, is the notion of an image or representation - be it of a tomato or a brain (or a scientific instrument) - all of the beliefs and conclusions achieved are arrived at by taking that image *seriously*, as a true or, at least, genuinely informative depiction of an object. It is only when a causal account is generated from those objects and then re-applied to the observational process itself that a sceptical problem arises. Crucially, we need to recognise that the mental image *precedes* empirical, scientific endeavour: it is a presupposition of that enterprise and cannot be brought into question by it. Science must commit to the reality of the mental or, at least, to something that cannot be rendered as physical if it is to proceed at all, because that is the foundation that makes science possible - and not simply in the sense that knowledge or belief is intrinsically mental (sufficient though that might be for many.) The very fundamentals of knowledge, the raw materials upon which deliberation about the physical operate, are mental. We arrive at the physical *from* the mental. Significantly, if paradoxically, this does not make the physical mental: it is not, *per se*, the route to idealism; this is the metaphysical tightrope we must negotiate. What I am invoking is something that enters into our experience and which features in our unreflective or non-theoretical thinking about how the world is. It is what A takes as presented when A's investigation commences: an image of a tomato. Our only access to the world is via such images and, consequently, they cannot be eliminated: they are our epistemological foundation. This does not entail that the image is reified. It is required to retain a *role* in any theory of what exists, without necessarily being taken as, literally, the way things are. We are obliged to see what is delivered to us - red patches, or images of tomatoes - as *informative* about physical objects and indeed the only information that we have about them, yet do so without necessarily committing to what is delivered in naive-realist fashion. There may be nothing objectively existing that is the same as what enters our experience - nothing that is exactly as is experienced (although there may be.) The relation may have to be one that is, in some sense, structural or 'isomorphic'. We are not

at liberty to construe our experience in any way we choose. We are constrained by the nature of sensory material and principles of intelligibility.

The world must be a certain way precisely because it is constructed from what we experience; the nature of experience, in part, dictates the character of that construct. Experience is not made a certain way because of the way objects in the world are, in the sense that there is a contingent relation between the two – one where it becomes conceivable that the exact same objects could have given rise to a different experience. This persistent and fatal misconception arises from the belief that we can establish the physical world and our consciousness separately, with the result that the relationship between the two becomes perplexing and problematic. We puzzle over how one thing – a brain state or event – can give rise to another, entirely dissimilar thing – a conscious experience. We contemplate the two in conceptual isolation from each other and fail to see that they are intimately connected: the connection is *a priori*. Once we accept that our understanding of the physical world arises from our consciousness and that that consciousness is epistemically prior to the world, we are on a footing to resolve this tension. In the first instance we are able to see that the relationship is not contingent but conceptual and necessary. The world can never be a given. Only our individual consciousness or its contents can occupy such a role. This is the primary, foundational stage. Later, once we have become committed to physical objects, we must determine their relation to experience, to the consciousness that has conceptually and non-physically given rise to them or, as is preferable, revealed them, or from which they are inferred. This is undeniably challenging but the difficulties involved can never be resolved by denying either the existence of experience or its foundational role in establishing the physical. That would be a colossal absurdity. We do not work from physical objects to experience. We do not start with a commitment to certain objects and their relations and then determine how they make experience the way that it is. The puzzle of consciousness as it is often presented by those who have accepted physical objects as a given and who then wonder how they can give rise to consciousness - the 'hard problem' or the 'epistemic gap'- is based on a reversed logical priority. The pertinent question is, "How does consciousness give rise to the physical?" Any attempt to 'retro-fit' mind or consciousness into the physical must fail because it is fundamentally ill-conceived. Physical objects should not be taken as a given but, rather, the mind that arrives at them. It is hardly surprising that decades of neuroscience have failed to establish how mind 'emerges' from matter. Fundamentally, matter emerges from mind: from the operation of our understanding upon what enters our experience. Unless we accept this, we are doomed to roam forever in Leibniz's mill. We may say, without the ghost, there is no machine.

Of course, in terms of recent debate in this field, particularly as relates to consciousness, what I am invoking when I speak of an 'image' or some mental given that starts the process of informing a subject about their reality is essentially phenomenological. It is the 'what it is like' following Nagel's term in *What is it like to be a Bat?* (in e.g., *Mortal Questions*.) The significant difference, though, is that, where those who, when they speak of consciousness, really mean

no more than a kind of charming but inconsequential adjunct to physical processes, I mean something without which knowledge of those physical processes would be impossible. The re-appearance of the mental in recent times (in Analytic philosophy) has been a timid, unambitious affair. It is confined to a particular notion of consciousness - the 'what it's like': phenomenology or qualia. These items are tolerated because they do not, it is supposed, threaten the prevailing doctrine or dogma of physicalism. Their inoffensive nature is expressed in the title of J. Kim's book, *Physicalism or Something Near Enough*. The recognition of consciousness is a grudging concession - the thin metaphysical gruel offered to the orphan of Dualism. The difficulty is that any acknowledgement of the non-physical in our ontology is a fatal concession, because some account has to be given of its status, even if it appears, as here, in attenuated form. It is an anomalous phenomenon that threatens the whole edifice of physicalism. Those who tolerate 'consciousness' do so because it is thought of as bereft of agency. It is taken as having no bearing upon what the physical *does*. Physical events would unfold in the same way, according to laws and scientific principles, in the absence of consciousness. Consciousness is just some bizarre bi-product of material events. It is the gorgeous, but irrelevant, sheen on the rippling musculature of the physical. The impotence of consciousness is captured in thought experiments like those of the inverted spectrum. Consciousness is presented in such a way that its elements could be re-distributed around the physical world in any way whatsoever, without making any difference to what is or what happens. Critically, consciousness does not encompass belief. Belief continues to be construed along the lines we have previously visited. It is a physical thing: a disposition, a potentiality, a propensity. Beliefs are tight-wound springs, embedded in physical states, waiting to be triggered by physical events. The new ontological liberals do not see phenomenology as the logical foundation of the physical; they do not see it as the material from which we constitute the physical world. And, it goes without saying that, in such views, the self, the engine of this constitution, is all but absent.

Consequently, where the now philosophically iconic bat is concerned, many of those who are sympathetic to the notion of it having consciousness and of that being something over and above its physicality, nonetheless think that its negotiation of its environment is to be explained in wholly physical terms. I do not. If the bat has consciousness and specifically has a 'what it is like' experience as a consequence of its physical echolocation system then it is *that* experience that explains its skills. The bat operates with its images - unimaginable though they may be for us - just as Neuroscientist A does with theirs: they are fundamental to its epistemology. We could posit a zombie-bat, a bat whose flying and insect catching skills are to be explained in purely physical terms. But, any attempt to create epiphenomenal-bat by positing the addition of a phenomenology to that machine (which would mean nothing less than assuming, also, the existence of a bat self to be the recipient of that phenomenology) must fail. To do so would be to suppose that we ourselves could have epiphenomenal lives, which we have already discounted for logical and epistemic reasons. If the bat is given a phenomenology that corresponds in consistent fashion with its

physical environment – that is caused by it – then it has the resources to comprehend that environment. To assume randomly caused phenomenology would be to attack causality itself. Those who endorse the existence of bat phenomenology do so because they think it probable that the bat's echolocation system, causes that phenomenology. And, ultimately, they think this because they think that our phenomenology is produced by a comparable system operating in us. But in this structured phenomenology, that is aligned by causal means with the physical, resides the material for the bat to know the physical. It is possible for creatures to have different phenomenologies - ones so different that they are unimaginable for the creatures not having them - yet for all those creatures to have a knowledge of a shared physical world via those, very different, phenomenologies. Bat-neuroscientist is a completely coherent possibility. This is because physical objects are not simple confections of phenomenological items. They are not a fusion or amalgam of flashes and bangs but an abstraction from them. They transcend the given of experience, as I shall explore in Pt. II.

The logical priority of mentality can be demonstrated by approaching from other angles, in ways using different mental capacities. Memory is a significant field of investigation for neuroscience. The physical structures that are relevant to it are sought. This whole enterprise, however, could not take place without memory. And I do not mean in this case that we are dependent upon subjects' memories to lead or direct our study (although that will be the case.) Memory is presupposed in the very activity of investigation. It is only because results, data, conclusions, all separately acquired, can be assembled and held together in the minds of individual researchers that knowledge can be produced of what might be the relevant structures in the brain. If scientists lived in some sort of perpetual present, nothing could be achieved. And this cognitive foundation, cannot be eliminated or undermined by the results that are achieved by its use. What memory delivers is, effectively, presupposed by any scientific research: it is logically prior to science. The most disastrous thing would be to identify memories with parts of the brain, because the same problem would be generated as that arising from the identification of perceptions with parts of the brain (partly because memories are a species of belief.) Simply, the memories that were necessary for the construction of the identifications would, themselves, have to be identified with similar sorts of physical states. They would have, in their turn, to be discovered, given that they would not be revealed in the course of their deployment in the discovery of the first level memories (any more than the brain states supposedly involved in seeing a tomato are yielded up in that perception.) Such a discovery would rely upon further acts of memory, and so on. Discovering what is physically involved in memory requires, in the first instance, that we take seriously what enters into our experience - the mental image, if you will - as the basis of observational knowledge and, secondly, requires the accumulation or storing of such observations which itself involves memory, as a prior step and one that cannot be physicalised. Memory is a *presupposition* of scientific research and we can say *a priori* that there is no physical discovery that could be made that would cast any genuine explanatory light upon it. (It is necessary, also, to recognise that if memory were a physical thing, it would be

physically determined – a product of physical processes – and we would need an argument to establish why this produces genuine memories; true memories.) We may discover the structures in the brain that *support* or make memory possible but they can do nothing to illuminate what memory is - something that we understand prior to empirical investigation. Memory is not without its challenges, when considered purely as a psychological or mental phenomenon: problems such as how we distinguish a memory from a perception, a fantasy, a speculation, a dream, a hallucination, or how we distinguish memory from false memory - all of which are all fascinating and perplexing questions but which are *philosophical* questions. There is no scientific solution to them. We have a grasp upon memory that could never be improved upon by fixing its physical base. Identifying areas of the brain that must exist for memory to take place does not explain or capture what memory *is*. It does not supplant memory.

Similar considerations could be applied to a neuroscientific quest for the physical basis of reasoning or decision making. Reason is central to any study or theorising and cannot be the subject of attempts at physical reduction. Any such reduction or identification would be based upon a process that was informed by reason as pre-theoretically understood and not by some sort of physical surrogate. Where decision-making or will is concerned, it would have to be present in any *decision* to identify it with a physical thing. Every identification, every assertion is a species of decision.

The whole attempt to physicalise processes like memory or reason involves causally relating one part of the brain to another part, but such relations cannot be or embody memory or reason.

An epiphenomenal approach fares no better. There is a self-contained sphere of logic and meaning that cannot be battened onto the back of physical processes; made an adjunct to happenings in the brain. It has its own distinct, non-physical, reality and dynamic. And it is from this that the physical flows. Any attempt to subordinate the mental to the physical would run up against problems that are insuperable. Logical, rational, connected thinking cannot be made the product of physical events, because its nature, its progression and validity would be entirely dependent upon such events. Physical happenings would be the explanation for our inferences and not the independent and self-contained principles of logic and reason. We could imagine physical processes being 'scrambled' to produce irrational reasoning. Perhaps it might be suggested that the origins of ideas are irrelevant to their sense or coherence. But any such argument would, itself, have to be a product of the physical - its origins would not lie in prior ideas and their logical implications - and consequently the same question could be posed of it. We would require an argument like that for parallelism, for a pre-established harmony where the physical causal base produces only sound ideas. Apart from the fact that many ideas are unsound (how is it we know this?), any argument for parallelism would have to stand apart from the physically determined system of ideas, or else a further argument would have to be deployed in support of *it*. And, by standing alone, it would be in the self-contained, non-physically-dependent realm of concepts and logic.

It is a serious question why attempts are made to find a physical correlate of these cognitive capacities at all. Such attempts participate in the tendency, I noted earlier, of neuroscience to treat the brain as an object like any other but then to give it a privileged status. Much of the motivation comes from the false challenge of the epistemic gap; a sense that the mental is in some way incomprehensible until we can find a physical explanation for it. The physical is taken as being certain and unproblematic (even though science is incomplete) and our task is to find a way of locating within it something that is inherently mysterious and suspect. We must make the mental respectable by making it physical. The reality being, however, that the mental is always more secure, epistemically, than the physical. It has a conceptual or logical priority over the physical. And, as Descartes noted, it is our best candidate for indubitability and, in virtue of this, should always be our point of origin - if we seek to place belief on a sound footing.

The physicalist seeks to understand the physical world: to identify its objects and their relations and, having done so, declare that very understanding physical; to make it another object in the world. Frequently, the further step is taken and mind, being redundant, is declared non-existent. Everything is physical and everything that happens does so according to physical laws, including events in the brain. The problem that cannot be suppressed, however, is that any identifying or understanding is ineliminably mental or non-physical. The act of scientific observation is mental: it proceeds from the first-person, subjective perspective but it treats of the objective. Neuroscientist A uses their subjectivity to observe what is, ultimately, a subjective process in B but only appears to A in its objective aspect. This must be the case: the subjective process of observation taking place in B is only available to B and not to A. (Whereas, for B, it is the objective aspect of their observation that is not directly available.) The difficulty arises when A dismisses B's subjectivity and treats B's observation as simply an objective process and identifies it with its publicly available aspect and then goes on, fatally, to treat their own observation as just an objective, publicly available process. A suppresses the subjective nature of their own observation that has been the point from which they have proceeded and were obliged to proceed in order to understand anything at all. This is the insight we should rescue from Berkeley's musings in, for example, *The Three Dialogues between Hylas and Philonous* when he speaks of a tree or a house existing outside of conception stating, "it is a contradiction to talk of conceiving a thing that is unconceived" and "what is conceived is surely in the mind". Where he goes awry, as is generally recognised, is when he concludes that "you cannot possibly conceive how any one corporeal sensible thing should exist otherwise than in the mind". It is idealism that is not established, not the significance of mind in relation to establishing how things are. The nature of the world emerges from our mental lives.

The physicalist strives to 'see' how things are in the absence of mind - including themselves - and does so as a prelude to declaring mind non-existent or as explicable in non-mental terms. But this attempt is like trying to catch one's

profile in the mirror or to be in the empty forest when the tree falls. The world can be the way it is regardless of whether it is perceived but it cannot perceive itself. The clay cannot grow tall enough to see itself. This attempt, which can also be characterised as an attempt to generate the semantic – genuine meaning – from the syntactic – physical items or ‘bits’ – is powerfully criticised by John Searle; especially in *The Rediscovery of the Mind*. The physicalist project starts innocuously enough: by trying to understand the physical world, but then misdirects itself by trying to understand that *very* understanding as a part of the physical world; denying the existence of the mental or reducing it without remainder to the physical - which comes to the same thing. The physicalist's unacknowledged plea is always Augustinian: "Lord make me physical - but not yet!" One guilty, deniable glimpse of the way things are, is always craved.

The point I am making, that understanding is the preserve of persons or selves and not things, is, of course, incredibly trite yet has become one it is necessary to make. Although most people would recognise that understanding was inherently mental and performed by persons or selves, neuroscientists and philosophers constantly and confidently tell us things like 'you *are* your brain' or 'the immaterial is found nowhere in nature' - quite astonishing claims, given their mental origins. Such materialism is, as Galen Strawson says "the silliest view ever held". It arises, in part, from science's pretensions to the third person view - what Nagel invokes when he speaks of "the view from no-where" (in his eponymous book.) There can be no such view. A view is always from somewhere. A view cannot be anonymised. The best we could hope for is the view from everywhere; the aggregation of individual views from all perspectives. The objective is always and necessarily subjective in its origins. Our foundational recognition must be of the role of the self in the constitution of reality. This insight is at the heart of Husserl's mature philosophy - culminating, arguably, in *The Crisis of European Sciences and Transcendental Phenomenology* - and is encapsulated in his recognition of what he calls the 'transcendental ego', being that which logically precedes all knowledge and science and which constitutes them from phenomenological experience.

In executing such a radical and necessary shift of perspective, we are not obliged to deny our body of scientific understanding with its focus on the physical and the laws that govern it. Causality can reappear and find its place in nature but only in a world constituted by us and only *after* we have become committed to physical objects and their relations by other means: by conceptual rather than causal or empirical means. Once, in other words, objects have been constituted by us from our experience and constituted conceptually rather than empirically. And these non-causal origins must be retained in the construction of the causal structure. They cannot be subverted into incoherence by being re-absorbed into that physical structure as parts of it. They cannot be reduced to the physical entities and causal relations they logically precede. Let us consider this process of constitution.

II CONSTITUTION

Although I may have spoken of these foundational entities as being mental, I have done so for the convenience of distinguishing them from the physical. The use of the term is too loaded at this primary stage in our consideration of the genesis of the physical. The radical ontological divide is not between the physical and the mental but between the self and the non-self; between subject and object. "Object", naturally, not in the sense of an objectively existing item or an object in an external, independently existing world, but rather as an object of experience - that which the self confronts in consciousness. To give the two an ontological equivalence would be mistaken and would prevent us from understanding the process whereby the physical comes into being or, as is preferable, is revealed or 'uncovered' by the self. The self is not at liberty to construe matters in any way it chooses: it is constrained by the nature of the sensory evidence before it and rational principles - principles of intelligibility. To become committed to an objective world, a physical world, is to believe that experience is an experience of such a world. Such a commitment cannot arise arbitrarily or by whim, without an appropriate basis in evidence and reason, because belief is a holding something to be the case and that cannot be done without justification.

In part, the distinction here between given and self, subject and object is one between the active and the passive. What also lies at the centre of our examination is intentionality. What failed to emerge from a physicalist account was genuine intentionality as was evidenced by the failure of physical representation. One thing having an effect upon another does not engender understanding. The effect is not a representation of its cause (even if the effect is a minimal variation of the cause.) Response is not representation. A burnt-out building is not a representation of a lightning strike. It does not embody a claim or an assertion. Any significance it has is given to it by us, by our ability to witness and comprehend the causal process that has taken place. And that witnessing is not a physical, causal process taking place in us. By contrast, the self is able to enter into a representing relation with something other than itself; a relation that does not involve it being changed, ontologically, by that thing. The self retains its identity in its confrontations with the elements of its experience. It is not an effect. Critically, it does not become what it encounters or become in any way like it: its metaphysical otherness survives. By contrast, change is always of the essence of causation. Of course, we are all 'changed' by our experiences in a colloquial sense but not in the sense that we are changed as *selves*; in our essential identity. We are not changed as a physical item might be by contact with another physical thing, where it becomes something else, something metaphysically other than it was before that encounter. The self can go to what it confronts in experience, to all of, or elements within it, and can make them its own by the application of concepts. From there, intentional operations may be performed. This representational capacity is integral to the self.

The basis for the constitutional model, where the self brings forth objects and the world, is sensory input. There has to be some element of the simply given that forms the basis of all subsequent conceptualisation: something phenomenological; involving qualia or sense-data - with the key proviso that these are conceived of in ontologically neutral terms: any ontological allocation being applied to them later. These given items, canonically, come from the sense-modalities - as we subsequently come to conceive of them. If we do not have this starting point then we cannot have objectivity. The essence of objectivity being independence and, primarily, independence from the self. Our sensations intrude upon us: they come to us; we do not go to them. It is from this simple, brute presentation, this intrusion of sounds, smells, images and the like, that we begin to conceive of what is given to us as objective: this is the first necessary condition of any objectivity they might have: as items that come to us unbidden, non-self and non-will dependent. This property is required if they are to have the capacity to exist beyond our awareness of them. This is a necessary but not sufficient condition of objectivity. It does not give the sense of particularity that is a requirement of objectivity: a sense of strong identity between re-encountered items. A succession of qualitatively distinct objects (in the sense of objects of experience) would embrace the basic bifurcation of self and non-self, and the radical ontological distinction between the two would be manifest, but it would not take us to a world of independently existing objects. Among other elements required must feature repetition or reappearance: the sense of 'same again'. In the first instance, this is a repetition of qualities - for example, of shape and colour. But, without enduring relationships with other objects of experience, the full sense of particularity does not emerge. The importance of the repetition of relations as well as qualities resides in the necessity of postulating space in addition to objects: the two arise simultaneously and reciprocally. If we re-encounter objects, as in tokens with the same qualities, and they retain the same relations with other such tokens, we establish 'places' for them: a location for them to exist when they are not present to us in experience; they, thus, become objective particulars. Of course, items can move and occupy different 'positions' but such movement must be piecemeal and not wholesale: there needs to be enough stability, enough continuity in relations to generate or warrant a notion of space - to engender this sense of place or location.

One of the interesting conclusions to be drawn from this is that, far from the coming and going of objects from our experience being a source of scepticism, it is almost a precondition of objectivity. The persistent, unchanging object of experience gives no grounds for its independence of that experience - it does not exclude it as such but it leaves itself susceptible to scepticism. Whereas, the item that appears and disappears, *ipso facto*, gives evidence of its objectivity; its capacity to exist outside experience - it has, so to speak, the opportunity to *demonstrate* its independence. The Berkeleyan challenge which suggests that we need evidence of an object existing when unobserved is, in fact, met by the disappearance and reappearance of those objects: it is the fact that objects are not continuously observed that implies their existence unobserved. An objective item must be able to exist unobserved; it is a requirement of its objectivity. Of course, it could be argued, we cannot rule decisively between the hypothesis that

objects encountered in our experience persist outside of that experience and the hypothesis that they do not, but these competing accounts are, at least, epistemologically equivalent. Indeed, there is a difficulty for idealism in that it groups together items that fit the criteria I have sketched for objectivity - of qualitative repetition and stable relations - and those that do not - the fleeting and disconnected. Idealism is not more greatly supported by the evidence; on balance, it is less so and there is no reason to assert it in preference to realism. Moreover, there is a difficulty accounting ontologically for the status of the item that appears and disappears then reappears (where we are referring to something encountered on different occasions with the exact same set of qualities) if it is not to be a thing that has persisted unobserved. How is it to be considered when it is experienced on each occasion? Does it become a different particular or individual with each experience? Does it not require to be distinguished in some way from those fleeting, non-repeating items of experience? Any particularity or identity over time requires space. Such identity cannot be posited without space: space is what makes it possible. We can see the tight conceptual circle between particularity - between the enduring object - and space: they come together to form objectivity. There can be no particularity, no sense of recurring qualities constituting the same thing without space and space cannot come into and out of being with the arrival of each item of experience.

Space is an enduring entity albeit intimately bound up with enduring objects. It is not simply a collection of such objects but a particular in its own right. Space is implied by experienced items when they are taken as objective - a space is required for that objectivity - but the space implied does not reduce to those objects and is entirely compatible with being empty. Space is the negative counterpart of objects: its character and dimensions are dictated by objects but it is not reducible to those objects. Space could not be, for example, an assembly of visual objects. Space is by its nature necessarily imperceptible and yet knowable from what can be perceived. Space must be capable of being occupied by different objects - subject to dimensional constraints that have been dictated by the objects that have necessitated that space. Space is the possibility - as an actual, existing entity, as opposed to a modal fact - of an infinite number of objects. Consequently, it is not the sort of thing that can cease to exist, and certainly not do so along with the disappearance of one or all of its occupants. This is a distinctly odd implication. We have a sense that what spaces exist is a contingent matter. It depends upon what arises in the experience of actual experiencers - selves who have experience with phenomenal content. Yet once we consider that any space, once experienced, cannot be conceived of as ceasing to be and that it will always be there even if empty, it is a short step to consider that all possible spaces exist. We or anyone may be unaware of the existence of such spaces but this has no bearing upon their actuality. It seems a matter of happenstance that our space had anything in it and, in particular, us as beings conscious of its existence via those things that are, contingently, in it. And this objective space that is intimately conceptually related to, while not consisting of, physical objects is, in a certain sense, indestructible. It may become empty of objects and empty of events; empirically -if entropic 'heat death' comes about,

say - or simply on the grounds of pure conceptual possibility, but it cannot cease to be.

What is experienced at any time, the item with certain qualities, cannot be considered as an item in a space. Its existence must be restricted simply to what is presented. Its existence must always remain non-self. This primary duality or polarity (to use Husserl's term) must persist. Where an experienced item fails to fit the criteria for an object in space, a mental realm is often posited: it is the repository of everything that is experienced but not taken as being part of an external world. Often, it is the realm to which the, so-called, secondary qualities are banished (those features of our experience that are not deemed objective.) Prior to this discriminative act, there is no mental as opposed to physical: the two spring into existence together. As I have said, the self is not to be identified with this mental realm: it still occupies an ontological position that is significantly different from what it confronts in experience - whether that thing be considered mental or physical. The bifurcation of experience into mental and physical is a division performed by the self upon the simply given and according to rational criteria of the sort adverted to above. This allocation then gives rise to a tripartite ontology of self, objective (or physical) space and the mental. This may give rise to the question of whether the mental is just another species of space: mental space. But, given that the mental emerges as a kind of ontological residue - it being what is left behind when we construe objects and their space from what is given to us in experience - it fails the criteria for any kind of space: it lacks the experiential character that objects in space require. There is no persistence outside of experience for such items and, consequently no possibility of being an object for multiple observers or experiencers. Such items have a weak particularity: one defined by time. If I see a green after-image or have a toothache on one occasion and I experience the same things, qualitatively, on subsequent occasions, the items concerned are particulars on each occasion but they are not the *same* particulars: they do not have identity across these times. What particularity they have is entirely attributable to the occasions upon which they appear. This is not to deny that they share something phenomenologically with physical objects. They are perfectly good candidates for objectivity and had the circumstances of their occurrence been different, they would have been deemed such. (This is true of toothaches or after-images.) In the context of the divide between self and object, as in the self and what it experiences or is in confrontation with, such 'mental' items are objects in the same way that physical objects are: they are on the same side of the self/other, subject/object polarity. And it is this that is the truly significant metaphysical divide. Whereas, conventionally, the self and everything else that is not physical are considered together as mental. (There may be issues about abstract entities like numbers.)

This polarity starts to delineate the ontological status of the self or ego (I shall generally use "self" even though, as many have pointed out - while attaching differing levels of philosophical significance to it - talk of the self is unusual and ungainly in everyday English.) This is the distinction between subject and object. Although language encourages us to think of the self as a kind of object, as a thing, an entity, in the same sort of way that physical objects are, it is distinctly

not so. Where we see the significance of this divide is in relation to the issue of apprehension or representation. We saw that physical objects fail as perceptions or representations of other objects: they are not metaphysically equipped to perform such a role. Objects can only stand to other objects in spatial relations or causal relations and neither of these fulfil the role of depicting, representing or otherwise apprehending or understanding other objects - they can perform no cognitive function. The self succeeds by not being of the same order as what it understands. Moreover, the self, because of its unity and persistence can retain or 'span' a number of objects both at a time and over time and discern relations between them - it is the basis upon which it constructs or construes space. This means that it does not fall into the monadic mode of representation that the physical model would entail. We do not simply have a collection of individual states. Objects can be established and related to each other by the self, under the conceptual aegis of a space: a concept it has, in a certain sense, brought into being.

It is clear, then, that the self is conceptually active in these ontological distinctions and gradations. The starting point may be what is given to the self but what arises from there is not simply a collection of impressions - some sort of Humean heap or bundle - the self subsumes what is given to it under concepts. The self has access to these concepts and then judges that they apply to what is given to it in experience. These concepts can only be thought of as, themselves, simply given. A paradox would arise if they were understood differently. The self cannot be creative where concepts are concerned, because it would have to be in possession of them prior to creating them. It would have to know, in advance, what to create. Reason also has a critical role to play. It is required for the application of concepts. Reason itself, however, cannot be another concept or set of concepts. If it were, a further type of regress would occur. Reason would be necessary for the application of the concepts of reason: in the determination of whether their application was appropriate. (See G. Ryle on this point: *The Concept of Mind* Ch 2.) Reason is an inherent and defining power of the self.

I have spoken of big concepts like those of objects and space but there are concepts that precede these. These are such as the universals of colour and shape, pitch, loudness, sweetness and bitterness and so forth - qualities that precede the process of ontological allocation that is applied to the entities they qualify. These are the foundations of the process whereby the self takes its experiences to itself and makes of them intentional objects - objects that it can manipulate in memory, in imagination, in reason and desire.

I have said that there has to be pre-conceptual experience; a simple awareness that constitutes the material or stuff the self has to assimilate via a process of conceptualisation. This is, of course, an anathema to many: those who eschew anything that smacks of sense-data or qualia or that does not involve direct access to objects in so called 'transparent' or 'diaphanous' fashion. It is also contrary to any view that sees belief as the foundational stratum of perception. However, without something inchoate and conceptually undigested, we have no basis for objectivity. Also, what we normally and properly take as physical

objects are so complex and indeed theoretical that they could never be the object of direct awareness. I have addressed belief earlier and, in particular, as construed in physical terms but, suffice it to say, that, on any view, we cannot identify or individuate perceptual beliefs or beliefs that relate to the existence of physical objects without some form of content that has phenomenal character. This primal content is logically required. Beliefs cannot be mere structures; empty schema that are somehow asserted and that enter into logical harmony or confrontation with each other. There has to be something that breathes life into them; something that 'fills them out' and gives them their logical dynamic. The pre-conceptual is not without its challenges but we must take issue with any tendentious assertion that we cannot be aware of something without thereby conceiving of it. We must not make the mistake, at this juncture, epistemically, of thinking that anything of which we are aware is automatically mental and, ineluctably, a concept. At this point in their logical gestation these items are ontologically neutral: they are awaiting categorisation by us. We have to discern their qualities and relations. We confront them as we, at a later, objective, post-conceptual stage, confront and examine, explore and puzzle over physical objects. Their character is not immediately given even though they are, in a certain sense, before us – *there* and given as they are in themselves. Their nature is explored by our *attention* to them - the self's directed activity - an activity that is not creative but exploratory: the objects do not change or evolve under our scrutiny. What is given, inchoate becomes 'civilised' under our application of concepts.

The primary confrontation, then, is between these basic sensory items and ourselves. This is the pre-conceptual, pre-intentional encounter. We might say that it is logically necessary. If we are to have beliefs or intentional states, there has to be something for them to be *about*, some raw-material for them to be founded *upon*. The self has to have material to operate upon: to commence its transformational process; the generation of objects. This is the transcendental process of moving from the given to what lies beyond or behind it in the sphere of the objective. The sensory particulars, the items that press upon our awareness are taken as being informative of something that exceeds their given qualities in the here and now. This process, this activity manifests the essential ontological contrast between self and object. The whole nature of the self is exhausted by activity. The non-acting self is inconceivable. When not acting, the self is inexistent. It is this imperative to act that we feel in all our conscious moments. We cannot suspend our activity and exist in some passive state - a state of readiness or potentiality. Sartre said we are doomed to be free; certainly, we are doomed to act. We are not just another entity of the same order as the things that enter our experience or the objects that we construe from them. And it is in virtue of not being of the same order, not being the same, metaphysically, that we are able to have the intentional relationship that is the basis of understanding.

We have considered the constitution of objects by the self from experience, in broad, theoretical terms, in terms of the foundational categories of objectivity, particularity and space. Now we should, more specifically, consider the

generation of objects from the character of our *actual* experience, bearing in mind that other forms of experience are conceivable that would give rise to very different forms of objects and space.

Our first pass at objects consists of those things we are aware of in experience just as they appear to us: naïve realism and this was, in essence, what was at work in the sketch I provided above. We are pushed towards a less naïve realist view because of the complex nature of our actual experience and the fact that it resists simple reification. The simple taking of elements of experience at any moment and setting them up as independent objects, continuants in a space and as existing whether they are part of our experience or not, is inconsistent with the character of that experience. I cannot say that there is no conceivable form of experience that would support a naïve realist construction. But, *our* experience, what is delivered to us by our various senses is not conceptually compatible with such an interpretation. The difficulties for such a realist view are twofold: they arise within senses and across them.

To take a single sense, we can illustrate matters most easily with sight. The problem for realism, here, is, partly, temporal in nature. What we see changes over time and not simply in the sense that we see different objects - see them successively - which would be entirely compatible with direct realism, as such a successive presentation would involve clearly distinct objects following each other - one disappearing as another arrives (in its 'place' perhaps - invoking space.) What our visual experience presents us with, however, is a visual flow or continuum without clear divisions. The first such flow is one that, in principle, could prevail in a two-dimensional sensory situation and is the changing of colour: the visual object retains its shape but its colour changes. The second is the morphing of one shape into another. In these cases, we do not posit successive, distinct objects - fresh particulars. The colour situation corresponds to that where we say that an object has changed its colour because of a change in the light. The second corresponds to that where we say that an object has changed its shape because its orientation relative to our point of view has changed. Both involve transferring the observed change away from the object and to something else. There is a fundamental logic of objects and objectivity that requires an account of this change: without this, there would be an intelligibility problem. What we are trying to do by such conceptual manoeuvres is to preserve the notion of a single object through changes in appearance. This cannot be done without significant adjustments and the invocation of new metaphysical notions. One option with the colour change is to retain the object as a shape - it *is* its shape - and to have it taking on new colours; in a sort of chameleon-like fashion. Seen singly, this would function. But, once we consider the shape-object juxtaposed with other such objects, a difficulty arises due to colour co-variance or the lack of it. The reason for taking the chameleon to be actually changing colour is that everything around it stays the same. And, correspondingly, the reason that we take certain objects to remain the same colour is that everything around them changes in harmony with them. The maintenance of an unvarying colour is achieved in part by the postulation of something that does change, namely the light. Changes in the light have to be

given an independent basis, however: they cannot simply be, 'that which causes objects to appear a different colour' - that would be vacuous. Such variations in the light have to be independently characterised; and it may be that, for a period of history, the actual nature of such variations is unknown and must be separately, empirically discovered - as *is* the case for light - the necessity of making such discoveries being implicit in the postulation of a changing entity that preserves objects from colour variation. The other part of the metaphysical salvation of colour requires a changed conception of it as a feature of objects. Although the notion of light 'giving' colour to objects works up to a point, it only does so in conjunction with the concept of objects having no colour as an intrinsic property. The language of reality and appearance or primary and secondary qualities starts to appear. The actual or intrinsic nature of physical objects does not, then, include colour as a property. We begin to think of an uncoloured surface that has certain physical properties, reflective properties, that the falling light interacts with, causing us to *see* colours, where, in a deep, metaphysical sense, there are none. With this move, a distinction between reality and appearance is brought into being that appeals to an 'inner' world of the mental; a place to which the failures of naive realism are banished.

If we move on to the other visual aspect of objects, shape, a similar approach is followed. Because, frequently, what we see changes its shape seamlessly, we are unable to treat it as a succession of distinct objects, because no clear boundaries exist between the different shapes. What we are obliged to do is to invoke the notion of a single object in a three-dimensional space, such that the changes in appearance are attributed to changes in position or perspective. Again, we see that the move is a bold and metaphysically creative one. The whole concept of a particular type of space comes into play, that allows the subject to articulate or make intelligible the commitment to a single continuing object. But, again, as with the colour of the object, there is a price to pay in terms of a certain type of realism. The object that emerges from this interpretive process can no longer be understood or identified with any one of the shapes that enter into the experience of the subject. Nor is the object some collection or amalgam of its presentations. Partly, this is due to the fact that a physical object in three-dimensional space can give rise to an infinite number of appearances (at least if space is infinitely divisible or 'dense'.) But, mainly, it is that we are driven towards a more abstract or theoretical conception of objects (as we are with the idea of a reflective surface, where colour is concerned.) This is a conception that is not properly articulated by individual appearances: by the content of individual experiential encounters. The object becomes something that lies 'behind' and gives rise to the individual appearances of shape and colour and cannot be identified with any one or all of them. A striking expression of this is that, once we have conceived of and committed to an object, we are armed with a powerful predictive capacity, the power to anticipate not previously experienced aspects of objects. This may largely be manifested as a negative capacity: an ability to see what does not 'fit in' when it arises - the image that is incompatible with the presumed object - rather than an ability to imagine the unexperienced aspects - although that can and does take place. And, in passing, it is worth noting that this capacity engendered by acquaintance with a limited number of

images takes us beyond the skill postulated by idealism, that of simply accumulating images and remembering their relations and sequences. Under such a ruthlessly literal view, there would be no rational constraints upon what could enter into further experience. We would be bound strictly to what we had experienced. Rigidly understood, idealism gives no warrant to predict the character of future experience. There is no theoretical or postulated object that logically generates anticipations of future experiences. One could, however, assert that idealism is compatible with a non-ontological 'as if' stance, one where individual experiences were treated 'as if' they were of enduring, unexperienced objects, while remaining ultimately sceptical about their objective existence. But then one would be compelled to ask what the denied objectivity actually amounted to. The postulated objects I am advancing are already distant from any direct perception. They are not elements of our experience that are taken as existing as they are perceived. We have already embraced a certain kind of idealism, in that physical objects have become more ideas or concepts than items in our immediate experience.

Shape is meant to survive in the process we have alluded to, in a way that colour does not. It is standardly considered a primary quality. It is taken to be in the world just as it is in our experience. But is this actually the case? As we have noted, a three-dimensional object presents many shapes: all of them incompatible with each other. Incompatible, that is, without the postulate of a three-dimensional object, which cannot be identified with any or all of the shapes it may display in our experience. A rugby ball may, from a certain angle, present the same shape as a football, namely a circle, but they are different types of objects, as is evidenced by a greater sample of their appearances. Can we say then that, in seeing a circle, we are seeing an actual, real world quality of an object? Surely, the object transcends any of its aspects? One of the ways we capture the essence of an object is by measurement. We subject it to a procedure that does not consist of noting the many shapes it can yield. When we speak of the shape of an object, it is already a theoretical concept: it is not the perceived shape of an object - it has so many. Of course, we often refer to an object by shape - round, square and so forth - but that is mere convention: a selection from the myriad shapes of a three-dimensional object. The coin is spoken of as round but it could also be called square or elliptical. It goes without saying that supposed primary qualities like shape or hardness do not feature in our science, at least, not in the way they present in our experience: they are subordinated to measurement and formalised by number (even if perceptual processes are involved in effecting this translation.) Finally, the other glaring anomaly or inconsistency, which has not always gone unremarked, is that we can experience no shape without colour - an archetypal secondary quality.

The naive realist approach struggles, therefore, in the visual domain because of the character of the experience delivered: its complexity and recalcitrance to reification. And a similar theme could be developed where other senses are concerned, when considered individually. But what is of value at this stage is to consider the other impediment to the naive or direct realist view, namely, the

difficulties presented *across* modalities as opposed to within them. This is a problem of harmonising what is given by different senses into single objects.

The very fact that there are different senses or modalities gives us a reason, *a priori*, to deny that items from them could be united. That our sensory experience fractures so radically, prevents any unification. We might coherently be able to hold that a visual experience like that of a blue square could be elevated into an enduring object and we might think that a particular sound could be similarly reified – into a sound object existing in its own sound space. But such objects could not be fused together into a single object – one retaining the qualities of the items as they appear, phenomenologically in each sense. Our context here is naïve or direct realism and, consequently, the only resources available for the construction of objects is the directly given or, at most, sensory material that has gone through the elementary intentional activity of being conceptualised under particulars and universals. We are unable to have recourse to objects abstractly understood; as an ontological substratum that can support qualities from different modalities. As things have turned out in our experience, there are connections between the material delivered by the individual senses, but it might well have been that there were no connections. We might have had experience in separate modalities that supported independent spaces; spaces that discretely ‘slid past’ each other. We would, in such a sensory situation, be simultaneously occupying or perceiving separate worlds. This, however, is not the case and the material from all of our modalities can be united, after a fashion.

If we consider sound and vision, there are clear connections although there are ambiguities. What we see lends itself strongly to being considered as a static object, sound less so. Sounds considered in relation to objects we see, incline towards events: they are the sound that visual objects make when they are doing something – a bell ringing, a tree falling and so forth. But it is difficult to say what is the precise nature of the object, considered visually, that is being heard. Do we hear the whole of the bell or the hammer, both of them or just parts of them and what is the exact nature of their activity – again considered in visual terms? Simply contemplating the sounds, we hear and the images we have, does not resolve these matters. And this difficulty of correlation would be the case if the objects we saw were simple, rather than the complex, three-dimensional ones they are. Of course, empirically we can narrow matters down, although the precision that can be made in terms of precisely relating the visual to the auditory is debatable. We are not assisted by the fact that the sounds of things we hear – as we say – are not consistent in auditory terms. Sounds are louder the closer we get to the visible objects they are associated with. If the source is moving – like the bell on a train – then the pitch changes as well as the loudness (the Doppler effect.) We start to have a problem understanding how a continuously varying sound can be connected with a consistent visual object or its activity. This leads us to contemplate the strong tendency that we have to think of sounds as a sort of object occupying space. The sound may come from the radio or some part of it – its loudspeaker – but it also ‘fills’ the room. Yet, at the same time, in doing so it could never become visible and questions about its size or shape seem bizarre and inappropriate. This alternative ‘objective’

approach that we entertain towards sounds gives rise to puzzles like the old chestnut of the tree falling in the forest when no-one is there (chestnut tree?) We feel that when no-one is around, the tree is still falling and that it must be making a sound as it does so. Yet we simultaneously struggle with the notion that the distinctive sound we would hear if we were present is *there*, in that exact form, in space, when we are not. And this is compounded by reflecting upon the fact that there are multiple distinctive sounds to be heard depending upon where the listener would be standing. There is also the underlying difficulty based on the fact that sounds are strongly suggestive of events rather than objects. If a sound is 'out there' filling space, it does not seem like a static object but, rather, like the same sound, in terms of pitch and loudness, seamlessly repeating – something like a rapid succession of sounds. But that then raises questions about the nature of these individual sounds or the nature of the entities participating in the sound event.

There is a great deal more that could be said, but these reflections demonstrate that there is no obvious naïve realist method of uniting the experiential given - the phenomenological contents of senses like hearing and sight - into unitary objects, into objectively existing particulars. Similar considerations apply to other senses. Smells are thought of as both qualities of objects and occupants of space. Tastes are more clearly only capable of being qualities of objects but we are not at all tempted to think of them as being 'out there' in the orange or tomato when it is not being tasted.

Such issues push us in a theoretical, non-realist direction. Assisted by empirical research, we start to posit underlying physical structures that support or cause our sensory experiences within the different modalities. And these are not constructed directly from any of the items that enter our experience. Although there is the temptation to hold on to some hard core of qualities that are understood as being in the world as they are in experience, such as shape, I have, shown that this last bastion of the primary/secondary quality distinction must fall. We quickly and naturally, by this process, end up with a conception of the physical, of external reality, consisting of 'colourless' entities: entities along the lines of molecules or particles that can impact upon our bodies (that are also understood as collections of particles) and that give rise to our distinctive sensations.

It has become common to see the move from phenomenology to a scientific understanding of objects – one that is based on primary qualities and especially those that submit to measurement and quantification, as a relatively recent and historically dateable development, one that began with Galileo. But if we take the observations I have been making about the use of our experience seriously, then we can see that a complex, not strictly phenomenological understanding of physical objects is native to our thinking. It takes place in all individuals at all times. Even though that understanding is not formal to the degree normally associated with science, it is still conceptually sophisticated. And it goes beyond the primary qualities: they, too, are naturally displaced in favour of an

understanding that posits entirely non-phenomenological entities as the constituents of reality.

We can illustrate this conceptual sophistication that is endemic to our thinking with an example that draws upon the considerations we have just been entertaining. We can imagine walking towards a distant tree. Its size relative to our visual field will increase as we get closer and its shape will change if we move around it. More visual details will become apparent; it will take on different colours, especially if the light changes. We may start to hear sounds emanating from it: its boughs creaking or the susurrations of its leaves in the wind. When we are close up, we can touch its surface, feel its texture and outline (and make connections with its visual appearance on the basis of structural correspondences.) We can smell the bitter reek of its bark and, if it bears fruit, we can taste its flavour. There are any number of direct sensory experiences, in the different modalities, that we can enjoy but which are incapable of being brought together into a single sensory object. The phenomenological nature of what we experience does not allow unification into a harmonious 'image' within a single sense or across them. Different colours and shapes logically contradict each other and any particular visual item of a given shape and colour cannot have sounds and tastes and smells and touches added to it as further qualities. Connections can be made but not integrations: the phenomenological character of such experience which is the basis of the different modalities forbids this. Yet, despite all this discontinuity and, at one level, incompatibility, we are in no doubt that we are experiencing a single object. When we reflect upon the tree, we consider it to be a single entity that can give rise to all of these sensory experiences and many more, yet we do not identify it with any one of them or with any set of them. The tree has become a theoretical object for us. It has an objectivity in a space and one that is available to many percipients. Our conceptual grasp upon it gives us a predictive profile. We can anticipate the nature of future sensory encounters with it. These may have to be revised as they collide with actual experience – perhaps we think that the seen, front contour of an object continues round the back of it, but it does not and the object turns out to be a façade or hollowed out. Often these predictions are 'negative' rather than 'positive': we are unable to contemplate the potential presentations - we cannot form clear images of them - but know whether something 'fits in' or not. Many optical illusions exploit this aptitude; we become perplexed and disorientated when an initial image does not lead to the expected successor. And there is no doubt, reflecting on this, that our concepts or expectations are closer to dispositions than images. And, to this extent, our concepts bear an affinity with the physicalist account we have dismissed. As stated, forming a notion of an object from a collection of intrinsically incompatible images is not to simply possess that collection (and limitations of memory would not permit this): it is an abstraction from them. But, crucially, there is still the mental event of grasping, the moment of conceiving, which is a non-physical event in our conscious lives and cannot be reduced to a brain state or event and its physical dispositions, for reasons previously advanced.

Of course, in the case of the tree, we do not think of it, ultimately, as a single enduring object. We are driven by a quest for identity that is central to our cognising and our constitution of external reality. Objects can be slippery customers. They are subject to change. But change threatens our ability to make sense of our experience in objective terms. If we do not have fixed objects, then we do not have anything: everything slips from our conceptual grasp. This is illustrated by the philosophical fable of the ship of Theseus: the ship that is forever evolving or changing its parts such that we are unable to say with any certainty whether on different occasions we have the same ship or not. But the paradox is generated by an equivocation. It plays upon the very concept – identity – that it purports to undermine. The story is told by reference to the removal and substitution of various parts: spars, planks and so forth. But doing so, relies upon the strong identity of these parts. If they to are subjected to the same Thesian doubt, the puzzle cannot be set up. If we think of the spar in the hands of the shipwright changing from moment to moment; losing and gaining particles as it is ferried to or from ‘the ship’ (and the shipwright also evolving from moment to moment) then the spar and the ship and everything else shimmers into oblivion. Change can only be articulated by reference to something that remains the same: something with fixed spatial and temporal boundaries. This is the conceptual impetus that pushes us to ultimate particles as underlying physical reality. We shall see this principle reappear with physical states and events in the context of causality.

That individual phenomenological encounters trigger complex beliefs is the reality of our moment-to-moment experience. To refer again to visual illusions, specifically, of the ambiguous, Gestalt variety, these images engender dramatically different understandings, such that there is an almost palpable sense of the images in question being actually different under their separate interpretive guises. But, of course, what makes the situation interesting is the fact that we know them to be the same. The hinterland of belief and interpretation that we bring to these, often crude or simple figures (like the duck/rabbit image or the Muller lines), is so significant as to make them seem phenomenologically distinct – when they are not. The contribution made by our knowledge and experience to our perception can be illustrated in many, many ways. If I stand next to a small child on the deck of a ferry and the child points at a passing vessel, exclaiming “Boat!”, there is a clear sense in which we are both seeing the same thing. But there is also a sense in which we see different things. I am able to see, variously, a yacht, a trawler, a warship, a container ship or a tanker, whereas the child is not. And, no doubt, if we were joined by a seasoned mariner or a naval architect they would ‘see’ more than both of us. But this relativism can only make sense and be noteworthy if it is rooted in some element of experience common to all. Otherwise, we would be simply seeing different things – as by looking in different directions – which is of no interest whatsoever.

This cognitive situation plays out across the vast majority of our mature, adult life. It does so to the extent that, in many cases, it is impossible to strip away the accretions of interpretation – to ‘unsee’ certain things. I cannot look at words written in English without instantly and unstoppably apprehending their

meaning: they are no longer available to me as marks on a background - in the way that ones written in Arabic script would be. (This is why our minds are irresistibly polluted by advertising!) Nor am I able to 'hear' spoken English as a non-speaker would hear it - as a collection of sounds (or, more accurately, a continuous sound) - such that I genuinely do not know what English sounds like, in any pure sense. But none of these striking truths has any bearing upon the fact that, in a more fundamental way, I and the non-English speaker see and hear the same things.

Very occasionally in non-infant life, we encounter items that are phenomenologically raw to the point where we are completely discombobulated by them. We struggle even to focus upon them as they present to us, to form an understanding of them in basic terms like shape and colour. These are the moments that take us back to the primal confrontation of self and given, the confrontation that is, as I have said, both an actuality in our experience and a logical necessity if our beliefs are to be about anything at all. I can close my eyes and after a period, a fizzing, flashing furore of after-images appears to me and ontological allocation is all but impossible. Am I seeing parts of my eye or some sort of 'purely mental' entity or event? I have no means of resolving the matter on such an experiential basis. Even just attending to parts of what is presented to me is challenging - there is something undeniably *there* but trying to fix it, to form a concept of it, to which I might return later as a memory or speculation is a genuine struggle. In such moments, we are returned to the founding activity of understanding sensory experience. Crucially, we are reminded that it *is* an activity: a performance we make and to which we have become oblivious; sitting as it does below the overlay of interpretation and the automatic and reflex responses to our experience that dominate our mature thinking.

It is fitting, then, to focus in more detail upon the key elements that are central to the preceding account: the self and its activity.

III DETERMINISM

In Pt. I, the physicalisation of perception, and belief more generally, was rejected and, in Pt. II an account was outlined of how the self develops a commitment to an objective world from a phenomenological given. We saw the different layers of this process. In the beginning there is pre-conceptual awareness. This is the experience the self has but does not understand. At this point, what presents to a particular self could present to any self. Indeed, if we, ultimately, want to think that we live in a world that is perceived by others, we must have this primary, impersonal level. The basic material from which I construe an independent reality must be one others could possess and from which they could construe the same reality: form the same ontological commitments. The fact that I confront this material does not make it exclusively mine. This is why I stated that assuming that whatever enters into awareness is mental and thereby in a private realm is mistaken (although that status may subsequently be awarded to it.) Such material is ontologically neutral in its essence. What status is given to it is a matter for the self - not arbitrarily but according to rational principles. So, from

a neutral base of what is simply given in awareness, the self progresses in the way previously outlined. And it should be pointed out that, as in our consideration of the bat, it is possible for radically different phenomenological material to lead to an understanding of a single and shared world. In the broadest terms, the self takes this simply given to itself in the activity of intentionality. The most fundamental step is attention. The self attends to what is given and this attention is primarily a will to understand. From this most basic activity, concepts are elicited that 'offer themselves' for the task of comprehension. It is important to acknowledge that these concepts arrive in response to an act on the part of the self. They do not arrive randomly. The self is not in a situation where it simply receives such concepts and, then, must work out what they are or fathom what they are meant for. Such concepts arrive in the context of the self's directed activity; its desire to make sense of what is given to it in basic awareness. The self is compelled to understand and these concepts offer themselves directly in response to that impulse. This does not, however, guarantee that they are appropriate. As we see at a higher ontological level, when we ponder a problem, many solutions offer themselves, but not all are suitable – are correct. The suitability of a concept is a matter to be decided upon by the self through its inherent capacity of reason and judgement.

The most basic stage of intentionality is the application of concepts to experience that characterise it in elementary phenomenological terms. These are the concepts of quality like colour, shape, pitch, flavour and so forth. The subsequent phase involves notions of particularity and these lead to assertions of objectivity and space. Finally, we end up with an understanding of what objectively exists that transcends the basic awareness and its phenomenology from which it has arisen and to which it is logically connected. And we should acknowledge that that process is ongoing: we are still determining what ultimately exists. Objects are always provisional, there is always the potential for revision or rejection. We move from water to H₂O and from there to a quantum analysis, but that may not be the final metaphysical resting point. But we embrace the capacity to arrive at truth as a necessary presupposition, as a regulative ideal: we require it if we are to believe anything at all. We are always striving for ultimacy: to determine, finally, what actually exists.

In moving from a phenomenological given to objects that are not reducible to that given, significant activity is being performed by the self. It is not activity that could be performed by elements within awareness – colours, sounds, tastes – because that is what, in essence, was proposed by physicalism. Such elements are in principle no different to the physical objects that were meant to embody or encode understanding. All are objects, considered from the broad perspective of the subject/object, self/other divide. At the heart of objectivity is passivity and the essence of subjectivity is activity. This is why we often feel a sense of enigma concerning the nature or identity of the self. It arises from a conflation of subject with object. As an object, the self could understand nothing. If there were only objects, there would be no understanding. When we try to define the self by attributing qualities to it, we are, effectively, treating it as an object and that constitutes a denial of its essence: we strip it of its activity and, with it, its

capacity to understand. This could imply that the self has no identity and is unknowable. Rather, to have any understanding of the self, we must attend to what it does, not what it is. Its activities define it. This is only perplexing if we use objects as our paradigm for existents, because it compels us to look for qualities of the sort that define objects. Activity cannot be defined by such qualities: that would be a basic misunderstanding.

Yet, for many, the acting self is problematic. For the hard-line physicalist, it cannot exist, at all, in the sense that we have been proposing. For others, determinists, the self exists in some more substantial ontological form but it, ultimately, does not do anything. The source of its supposed agency lies elsewhere, usually in physical events, sometimes in our 'nature'. Agency for some determinists is an illusion – it could have been possible but, in fact, is not. For others it is an incoherence – we can simply make no sense of it. Without examining such doctrines in detail, we can consider their implications, which may suffice to refute them.

Once we get into the business of undermining the self as the ultimate source of its actions and transfer that responsibility elsewhere, we undermine the achievements of the self. The whole constitutive process I have narrated concerning the self and its experience is brought into question. Principally, what is advanced by such views is the notion that, when the self engages in the intentional process of bringing raw experience under concepts and judging it to be the experience of objects in a certain sort in space, it is determined to make that judgement. The self may make these distinctions but it does so as a consequence of something other than itself. (Naturally this true actor requires to be identified.) But the first thing we notice is that we are talking here about the very process of bringing the physical into being: this is the activity that the self is engaged in. Incoherence is not necessarily entailed by this. We can make the journey from experience to physical objects, and on from there to regarding that experience as being dependent upon or caused by those objects, without necessarily engaging in circularity or self-contradiction. Ultimately, we will want to postulate some sort of relation between physical objects and experience – the experience that has allowed us to become aware of those objects. But that relation cannot be one involving the determination of the self and its judgements. They must be autonomous. What must be generated by objects is the awareness that we have, the phenomenological given. Objects must impinge upon us. That they do is a presupposition of the objective construction we place upon what is given to us in awareness. But the judgements made, the ontological commitments entered into, must be wholly attributable to us. If they were not, their validity would be brought into question.

All judgement is brought into question if its coming to be is located outside of us and our agency, in any way whatsoever. We do not need to examine the actual mechanism supposed to be at work. The very fact that we are obliged to regard our judgements, our beliefs as having been caused by something over which we have no control (and that may have its origins prior to our existing) is sufficient to nullify those beliefs. It might be argued that a belief being necessitated does

not entail its falsity. Determined beliefs may be true, just as freely arrived at ones may be (and are also capable of being false.) The truth or falsity of a belief is not a function of its origins and, objectively, beliefs that we have been determined to hold may be true. The problem is, however, that under the determinist view, we can never know if any belief (or proposition) is true. To establish such a thing, we would have to be able to examine the relationship between the belief and its determinant. We would have to be able to establish that we had been provided with a true belief, and that cannot be done, because any process of establishing such would involve forming beliefs, and they themselves would be determined. If we embraced such a doctrine, we would have no basis for belief. Belief formation of any sort would be impossible because it is part of the logic of belief that we hold something to be the case. And we cannot both hold something to be the case and also hold that we have no basis for it. All beliefs would be equal: every belief and its negation. The fact that a belief *might* be true is not a basis upon which to hold it. The judgemental process proceeds upon a basis of justification. We cannot believe without reason. We can entertain ideas, propositions, states of affairs without having a justification for their truth or their actuality (they are mere speculations) but we cannot hold *beliefs* incorporating such items: we cannot hold that those ideas and the like are true. When we set out to determine what things are the case, we must believe that we are capable of establishing that truth; that there is no impediment to arriving at knowledge. We can understand, of course, that the beliefs we form may be mistaken. But there is no reason why we should not, *in principle*, arrive at truth. All belief involves the presupposition that truth can be arrived at: without this assumption, we cannot believe – it is a contradiction of the activity of believing. With a determinist view, we are incapable of establishing truth because it is inaccessible to us. What we are tempted to believe may, objectively, be true but we can never attain that objectivity because we are always within the determined sphere (and any temptation to believe would itself be determined.)

The final resounding problem generated by the determinist view is that it cannot, itself, be held to be true because, by its own lights, it must be determined. We can never arrive at a reason to believe in it. This relates to the issue I raised in Pt. I regarding epiphenomenalism. If we believe all of our thinking including belief has been determined by physical events then that belief, that commitment exists in that determined realm: we only hold it because we have been determined to hold it – and the observation I have just made would also be determined and its truth would be in question, as would *this* one, and so on. Some might, stubbornly, seek solace in the thought that even if we cannot know that epiphenomenalism or determinism, more generally, are true, we must still acknowledge that as a possibility. But even the assertion of a possibility is a categorical claim and exists – *ex hypothesi* – in the determined realm, thereby raising the sceptical problem again. We can only operate on the basis that we are able to arrive at truth; that we have a direct relationship with truth. We cannot think that our relationship with what is the case has been mediated by something that we are denied knowledge of. To do so would consign us to being unable to believe anything at all, *including* the belief that we could not believe

anything! (And no amount of Wittgensteinian 'showing not saying' would resolve this.) It is a position of complete nihilism.

It is worth noting that it has become commonplace in neuroscientific circles to assert the possibility of manipulating people's brains in such a way as to give them false beliefs. (The evil scientist of philosophical musings is now a living reality!) Experimental evidence, apparently, supports this, although, in fairness, the beliefs in question have been very basic sensory or perceptual ones based on sensations or sense-data, even. I think that this result has been allowed, however, to bleed into a more general assertion of determinism that embraces belief and which, as I have said, leads to incoherence, because it attacks its own foundations. That physical processes cause you to see blue where I see red is entirely innocuous and completely compatible with the position I am advancing. That physical events could cause us to have beliefs about the nature or significance of such basic experiences is a different matter.

The Matrix hypothesis another popular foray into this line of thinking. It states that we could all be living as brains in vats, unable to determine whether that was the case because our experience would be identical to that had in the 'real' world. What is ignored in such speculations, is the fact that the Matrix-hypothesis has to be Matrix-compatible: it has to be true even on the assumption that we are living in the Matrix. The problem is that all of the evidential resources that have gone into the construction of the hypothesis, must have been generated by the Matrix. Notions that machines can encode a physical world (like a state of affairs in 1998) and can somehow serve that up to brains that have people attached to them (like Neo) and then react to every decision made by that person in the generated 'reality', will have to have been generated by the Matrix. What permits any subject to think that such notions are true, given their deterministic origins? The only way I can arrive at speculations of the Matrix variety is by taking my experience seriously, but the Matrix hypothesis invites me not to do so.

But the difficulty goes deeper than that. We cannot entertain the idea that our experience is that of any other world than the one we naturally take it to be of. It leads uniquely to that world, by the rational constitutive processes I have invoked. I have stipulated a causal process that links my experiences to objects, but I have done so to make that experience intelligible, so I cannot contradict that constitution. David Chalmers in his essay on this topic – *The Matrix as Hypothesis* in e.g., *The Character of Consciousness* – says that if we had the experience the Matrix gives, we should regard it as an experience of a real world – the one it purports to be. Which is true, but we cannot simultaneously entertain the existence of a quite different world that, ultimately, produces it. The experience I have makes the postulation of a world containing certain objects and their relations legitimate. The experience conceptually entails those objects as what gives rise to that experience. There is a mutuality, a conceptual reciprocity between this experience and this world. I cannot, in addition to this, postulate a further world that stands behind this world and gives rise to it – I have no epistemic warrant for that. My experience can only be of these objects

and no others. It leads to only one world. In passing it is worth observing that the determinism in the Matrix of the film does not extend beyond basic phenomenological awareness and does not include belief and judgement. It is not suggested that Neo, as a subject, is determined. (Were it possible for the machines to do this, it would, surely, make him more compliant!) And, interestingly, if that were the premise of the picture, it would be one no-one would have any interest in watching – which is very telling.

To pause and take stock: behind determinism is a simple and tempting suggestion. Why could it not be the case that matter, arranged in a certain way, could give rise to a thinking, believing subject? Could it not be the case that brains, suitably stimulated, could give rise to everything we are familiar with in our experience. We have said that it is not just possible but necessary that physical objects give rise to sensations in us, so why can this model not be extended to encompass the acting self? What is the impediment to conceiving of ourselves or anyone else as being determined in all our aspects, including our actions, mental and physical? Will it not be possible for the neuroscientist who currently manipulates a subject's perceptions, to manipulate their beliefs in relation to those perceptions and many other matters besides? The primary reason for rejecting this insidiously seductive line of thinking is that it leads to incoherence. Our attempt to see ourselves as determined in this way fails, we cannot succeed because the doctrine undermines itself: the belief that we could be determined can only be held if we are undetermined, thereby negating the doctrine. But it is more fundamental than that. It is a plank of our construing our experience as that of an external world, a world of physical objects, that those objects give rise to an experience that is in some sense informative of them. I cannot both take my experience to be of the way things are 'beyond' that experience and hold that it does not represent things as they are. That is straightforwardly contradictory. The contradiction that causes so much difficulty for belief would be there from the very outset. We would be proceeding from inconsistent premises. This is fundamental but easy to lose sight of. We become so committed to physical objects that we award them powers they, logically, cannot have. We forget their origins and the direction of dependence – epistemologically. The physical world is our attempt to make experience intelligible *not* unintelligible

In addition, there is a fundamental unintelligibility to the determinist proposal on offer, one that does not just lie in its logical or epistemic consequences. It requires a conception of the self that does not make sense. The self is what does. When I act, my action comes from me. I feel the imperative to act and that imperative makes me aware of myself as an acting thing – that is my essence. If I cannot act then I am no-one. Once I deny that power to myself, I deny myself and I become nothing. Logically, I precede my action - I am there before it, as that which must do it - but not in any passive sense because I can never be passive: I can never just *be* I must *do*. I do not have the option to act or not. The imperative to act compels me to be aware of myself – it is what that exigency bears down upon – I am aware of myself and, simultaneously, as that which can and must act. To try to consider my actions as being brought about by something other than

me is impossible. Once I cease to be the thing that is performing the action, I cease to be. I am stripped of my action and there is no residue of existence left for me. I cannot both be the thing that decides and the thing that is caused to decide. Once ultimate causality or action is transferred away from me, all action is transferred from me: I cannot have conditional agency. I cannot be a causal intermediary – a link in a chain. I cannot see myself as the person who must act and does act and is at the same time determined to act, for that would be to assert my non-existence and make action impossible. How can I act and simultaneously believe that I am not acting? A physical object can be caused to act: it can be the link in a causal chain, like a domino. It can have effects but also itself be caused and, thereby, be caused to have those effects. We cannot be so because of our consciousness. We do not just act but we simultaneously are aware of our acting and needing to act. Embracing determinism compels us to be aware that that awareness is a false awareness; one that we are caused to have. But that awareness – of a false awareness - is also a false awareness, and so on. We can only make sense of awareness as an act we and only we perform: it cannot be imposed upon us, without logical absurdity. Consciousness is responsible for the feedback loop that makes belief in determinism impossible. Such cannot happen with physical objects which can coherently be conceived of as being determined. This, again, vividly demonstrates the radical difference between the physical and the mental. The only role I have is to make things happen, to be the source of action, which is conceptually incompatible with my being determined to act. If you like, I cannot be caused to be the source of action: that is a straightforward absurdity. At the moment where I am aware of myself and of the necessity to act, I cannot think of myself as determined to act and also as determined to have that awareness. There is nothing I can turn to, to relieve me of the responsibility to act. Even if, under the sway of a belief in determinism, I succumb to a kind of fatalism and allow action ‘to come to me’, I cannot do so and if I could, that decision would still be my decision. When I look back on my actions, I cannot see something that was invisible to me at the time, something that I did not feel, then, acting upon me, and that was the actual source or cause of those actions.

This is all a long way from saying that I cannot be brought into being as an autonomous self: that my existence and the autonomy that is bound up with it cannot be dependent upon circumstances I am not responsible for. As I need a body to act, I need a body to be, to exist. That is a necessary condition of my existence as a self, but dependence is not determination. I can spin a world out of my experience and find a physical place in it for myself, but only on the basis that I am undetermined in doing so.

We should not get too carried away with our autonomy, however. We must avoid giving ourselves powers we do not and cannot possess. The power of the self is executive not creative. Largely, it must operate with what is simply given. We saw this in the case of the concepts required for making the sensorily given intelligible, for construing a physical space from it or making it intentional to any extent at all. We pointed out that, for logical reasons, these concepts could be elicited by the self but not created by it. Creation requires knowing what to

create and, because to create a concept we would have to know what to create, we would already have to be in possession of that concept, thereby making the creation meaningless. This applies across the vast range of our mental lives. When I try to solve a problem, I must wait for the answer to come to me: I cannot look for an answer as I might look for a tennis racket – knowing what I am searching for as I look for it. Yet when I ‘receive’ a putative solution, I must know that it is one. That is a judgement that I must make and that judgement does not consist of having a further idea or concept – some sort of gauge that allows me to judge that the proposed solution is correct – because that would simply require a further judgement. It is in this act of judgement, that the self reappears, in what might be termed a creative way. Reason, the power to judge that concepts are appropriate or bring understanding to something we are contemplating – element of awareness or problem – is inherent in us as selves and an activity that defines us.

In all our conscious moments we are assailed by ideas: thoughts, images that simply come to us. Prominent among these are memories. And an intriguing question arises. When an image, let’s call it, comes to us, how do we know that it is a memory and not a fantasy? Does it bear the mark of memory; a sort of imprimatur or ‘watermark’ that allows us to declare it a memory? Clearly not. An image in itself, in its content, could be a memory or a fantasy - an imagining. An image of a bike could be of the one I received as a birthday present or of one I wish I had received. The difference between the two is a primitive judgement on my part and not something given as a feature of the image concerned. There is not a kind of sepia-tone to memories and glorious technicolour to fantasies. And, if there were, the significance to attach to each rendering would still be a matter of primitive judgement. Nor is the solution to be found in things being more or less vivid or ‘clear and distinct’. Undoubtedly, what becomes important, is our activity of exploration. I may start with simply a given memory of a birthday party which I have primitively identified as such, but from there I may explore the past event, searching for more details. I may wonder who was present and, in response to that, faces and names may appear. And in this instance, what comes to me does so in response to an activity on my part; the activity of remembering or trying to. This provides a meaningful context for the images and ideas. They do not come to me ‘cold’. As with the solution to a problem I may have been pondering, the putative memories ‘offer’ themselves to me in response to the past situation I am exploring. The character of my activity gives them meaning. Such images do not arrive randomly, requiring me to work out what they are – ‘is it memory or speculation?’ But our starting point is often, if not always, something that is simply given to us, which we *do* require to make sense of before we engage in our activity of exploration and development. This ‘making sense of’ is primitive. And that primitive judgement does not, ultimately, disappear when we are dealing with images generated by an activity like remembering. We still require to endorse such images, to deem them accurate, even if they have arrived as a result of our trying to remember. Did we really have jelly or was it just ice-cream? Undoubtedly, this makes matters somewhat uncanny. But there is no way around this. We simply have, and have to have, this irreducible capacity to recognise truth. Without it we cannot know or believe

anything. This is a faculty we cannot transfer elsewhere: we cannot palm it off on physical events.

The limitations of creativity are important. The constraints are logical and they would apply to any conscious being – even God. God may make the universe in any number of ways but those ways, those options must be simply given to God. They cannot be created by God or by anyone. We see this in other areas: the genius is simply someone who has more or better ideas than the rest of us. Admiration is a misplaced sentiment towards such a person, except insofar as their ideas are the fruit of a diligence, an effort they have chosen to make – whilst bearing in mind that this choice, this option to direct their thoughts in one direction as opposed to another, is simply given to them. Similarly, contempt for the so-called stupid is itself stupid except to the extent that it targets laziness or a wilful disregard for knowledge (and there must be limits upon how far we can, morally, require people to enlighten themselves.)

So, we are subject to many forms of the simply given. We have our basic perceptual or sensory awareness with its phenomenology from which we construe the physical world. We have the concepts that come to us in response to this endeavour. And we have the plethora of thoughts, images and ideas that come to us at all times when we are conscious (including when we are asleep.) These are also items we must attend to and understand. But, of course, we have our affective lives: our emotions, feelings and moods. Related to these, we have our sensations pleasurable and painful which are, perhaps, hybrid entities insofar as they are also perceptual: they alert us to states of the body and also the world. Something digging into my leg tells me about my leg, the thing digging into it and also it is painful. It is a single sensation but it encompasses these separate things. The aspect of pain is important because it has a bearing upon our action - beyond that of informing us of the existence of certain physical states. This is its affective element that connects it with emotions and the other affective states. These, like pain and pleasure, clearly have a bearing upon what we do. In fact, we exist as selves, selves who must and can act, in a landscape of entities – perceptual items, sensations, ideas, emotions - to which we must respond. Such entities enter into what we do and are a part of the explanation of those actions. And they may be said to account for our character. We are who we are because of the ideas and feelings and so forth that come to us. We do not exist and act in a vacuum: our agency must act with and upon something. But, by contrast with a determinist model, these elements, these givens, whilst necessary, are not sufficient for action. The self has to make its own critical contribution, whilst it is the case that, in many instances, the outcome will be inevitable - as when we are subject to strong emotions and desires and where reason dictates a particular course of action. A significant part of our decision-making is our inherent power of reason, our ability to make sense of what is given to us: a power which cannot be thought of as, itself, simply another given – because then we would need reason to decide whether to submit to its diktats – it is, rather, what we need to make sense of what is given.

The judgemental power of the self extends beyond the purely physical. And much of what is often presented as a simple given is, in fact, a product of our activity and our judgement. What I have in mind is the affective realm we have just mentioned. Much that is held up as being emotion or desire is, in fact, judgemental. When we consider feelings such as resentment, contempt, anger, annoyance, respect, admiration, betrayal, revulsion, love, grief and so on, there is a strong temptation to see them as an affective given because of their strong emotive content. We do not think they are the product of our agency. But they are beliefs we have formed. They are, firstly, beliefs about the way things are, factually, we may say. Standardly, they relate to other people and their actions and intentions. We see them as having done something physically and deliberately and for a reason. We often see their action as an expression of a judgement they have made about us and one which may have a moral content. And this determination made by us about other people and their actions may give rise to a moral judgement in us, about them. It is this judgement that engenders the affective aspect that we are tempted to fixate upon and which encourages us to think of the situation as simply comprising the having of an emotion - a something that happens to us, for no real reason, and for which we are not responsible and, importantly, that we cannot change. In fact, we change such 'emotions' by changing our beliefs. In particular by revising our conception of other people and the nature of their actions. We decide that they did not do something deliberately or that they did it for a different reason. The affective force of our moral judgements is intrinsic to them. It cannot really be thought of as some sort of contingent 'add-on'.

There is a parallel, here, with pain. A pressure on my leg gives rise to a sensation that tells me about my leg; what is digging into; and is painful. Pain is not anything over and above the perceptual sensation - it is just a perception that *hurts*. We can have an increasing pressure upon our leg that, through its various increases, is not painful but then at a certain point becomes so, and does so, without the pain becoming some new thing; some additional sensation such that we have both a perception *and* a pain. There is just a perception that is painful. We feel something that is informative of a physical state of affairs which, simply by its nature, we do not like. And it is like this with states of affairs or actions morally. They are just states of affairs like any others, but as they are, in themselves, they are wrong without that being some additional feature of them. To demonstrate that torture is wrong, I just have to show you torture. I do not have to point out an additional feature beyond the harm and the suffering. It is quite simply the way a thing is factually that makes it wrong and motivates us to avoid it. And, importantly, it is not about an emotion that occurs in us. We may have an emotional reaction to a situation that is wrong but that is not what makes it wrong. We have emotional reactions to many situations that have no moral status. We cannot transfer the source of the morality away from a state of affairs and to us. Anyone who has felt a painful sensation knows why one wants to avoid it - it is simply because of the way it is. And it is the same with situations that are morally wrong: we see that they are wrong - it is a judgement we make about them and not something we feel.

Just as I cannot genuinely believe without thinking that what I believe is true or the case, I cannot think that something is wrong without recognising the requirement to respond to it, to right the wrong. To suggest otherwise, would be to negate the status of the judgement as a moral judgement. This, sadly, does not mean that we always respond as our moral judgements dictate and it would be tempting to suggest that if we do not respond by action to such judgements, then we did not really hold them. Sometimes, this will be true – hypocrisy exists – but often we do not respond as we know we should and that becomes a moral failing, a wrong on our part. It does not negate the imperative that is intrinsic to the judgement; the call to action that we have recognised but failed to respond to. There is much that could be said here, but the critical point is that forming a moral judgement is not essentially to have a feeling or an emotion. If it were, it would be rational to ignore it or to try to eliminate it. As we might hold our nose in the presence of an unpleasant smell or take an aspirin for a headache, we would try to ‘hold our nose’ in the face of this ‘moral’ revulsion. But it would be a moral wrong to attempt this. Any such decision would be a moral one: we would be making a moral assessment in taking such a stance. This is why our action always takes place in a moral context. Emotions and desires exist but they are not the basis *per se* of our moral judgements although they are givens to be factored into those judgements.

It is important to see from the foregoing that action cannot be articulated using the simple combination of belief and desire in the way that is frequently proposed. This is because action is involved in belief: we do not have beliefs, we form or hold them – they are the product of our activity as selves, our will to understand and of the action we perform in asserting truths. And, in addition, belief is often a part of desire, in the way just been presented.

The imperative to act is always with us. It is an immediate consequence of our existing. We are that which can act and must act. At the most fundamental, we must attend to our immediate experience. We must try to comprehend it: to grasp its basic qualities (bring it under concepts that make it available to us in other mental actions) and we must go on to understand what it *represents* – what is its metaphysical significance. Having accomplished that latter task and having arrived at a world of physical objects, we also and necessarily arrive at ourselves as physical objects in that world; as bodies. We are compelled to recognise that the scope of the imperative extends beyond the realm of simple awareness and includes action in the physical world: the world that we have established by the use of our reason upon the resources given to us, experiential and conceptual.

Just as doing nothing is not an option mentally or in the realm of thought, doing nothing is not an option in the physical realm. We understand ourselves as physical beings and our presence in the physical world is not something we can opt in and out of. We are permanently there. And, our bodies being always present in the world, we are obliged to attend to what to do with them – in every conscious moment. Such decisions cannot be avoided. And, critically, such decisions, whether they concern what to do mentally (even the prisoner in his cell must decide what to think about) or what to do physically, are moral

decisions: they have a moral dimension which is ineliminable. This dimension arises to a certain extent because, for every action, there is always an alternative action, even if it is just the, so-called, 'doing nothing' option. This is not an obligation that can be shuffled off. All action exists in a moral space even if its location in that space may be difficult to determine. Anything we can do is an appropriate subject of moral evaluation. We cannot preserve or exempt our actions from this context. Any attempt to do so would be, itself, be a decision with moral significance: it would have a moral value. The same situation prevails where metaphysics is concerned – of which ethics is a sub-division. We cannot escape the making of determinations as to what there is – any denial being itself a metaphysical determination. It is hard to deny, also, that everything exists in aesthetic space also. Can we deny aesthetic value to anything? Does not everything have some such status either in itself or in relation to other things? One might think, that there is potential here for a kind of vacuity. The quality that applies to everything applies to nothing – like the quality of existence, perhaps. But we are not talking here of a single quality, but of a spectrum of qualities or distinctions. That everything has a metaphysical, moral or aesthetic status is an *a priori* matter.

A huge caveat has to be entered here in relation to automatic, habitual or reflexive action which is obviously a considerable part of what we do. Much of what we do, moment to moment, is 'unthinking' but that does not necessarily make it something for which we are not responsible or prevent it from being one of our actions. In the first instance, much of such activity takes place within a broader activity which we have willed: it is of the order of a 'sub-routine'. I drive a car without attending to the use of the controls. The experience of concentrating on the use of the clutch or accelerator is long lost to me, although I can always regain it if I choose to and, often, I am forced to do so, when in an unfamiliar vehicle. Yet, the decision to drive or to go to a certain destination is one I have clearly taken (even though I may get there on 'auto-pilot'.) Also, that a behaviour has been rendered habitual does not mean that it does not have its roots in the sphere of conscious action. (Bergson explores these issues with regard to memory as recollection and memory as habit – *Matière et Memoire*.) There is always a distinction to be drawn, as well, between the habitual and the reflexive. I may, reflexively, jump at a sudden loud noise but, habitually, take myself to a quieter part of the building.

Some of the recognitions made above in relation to morality, can be illustrated by considering the widespread tendency to explain everything in terms of evolution. This is a strong physicalist tendency as we have had occasion to demonstrate. Morality is expected to fall under the same paradigm. Roughly, random mutation has thrown up moral attitudes that have proved themselves useful for gene survival and consequently they have been favoured by natural selection. Our moral judgements are supposed to have their *real* significance in the contribution they make to survival. It is this brute imperative of gene perpetuation that underlies our moral attitudes. (Obviously, on any self-respecting physicalist account, these attitudes will be epiphenomenal and the real work will be going on in the physical, causal base.) Morality is, thus, a kind of

false-consciousness. We think that being altruistic is a good in itself and stands in no need of further justification but, in reality, its justification lies elsewhere: in the survival of our genes. This is problematic. In the hard-line epiphenomenalist case, we must ask why we are provided with this pointless illusion at all, although, that is a problem across the board for epiphenomenalism. In the case where our efficacy is respected, however, we need to ask how it is that moral considerations operate upon us as they do: how it is that they motivate us to act? A final problem is generated by the consideration that, once we have determined that moral attitudes are all in the service of some sort of physical survival, we appear to be required to re-calibrate our moral attitudes towards this goal. We should excise the intermediate step – altruism or whatever – and go straight to gene perpetuation. The difficulty with this is that, making that choice, is archetypally a moral decision. We would have decided that gene survival is morally desirable. Yet genuine debate is to be had in this area. If Camus can write on the imperative to suicide (*The Myth of Sisyphus*) then it is clear there is a moral issue here. Given our track-record as humans, especially with regard to our threat to other life, the desirability of our continuation as a species is a live moral issue. And the fact that we are unlikely to decide to terminate ourselves as individuals or a race is irrelevant to the validity of that debate. As I stated elsewhere, we cannot remove such possibilities from moral consideration. We cannot deny legitimacy to such deliberation. The decision to transfer our allegiance from helping others to looking after our genes is a moral decision. And, most importantly, it itself is not to be accounted for in terms of its utility for gene survival because that involves a kind of circularity. Nothing becomes good because of its evolutionary status, *per se*: that will always be a decision that exists apart from evolutionary theory. We are always left with these decisions to make as purely moral decisions. We cannot 'out-source' them to evolution or biology or physics or anything else. Such evaluations are free-standing; they do not require justification from beyond themselves. If kindness is a virtue, it is so on its own terms. It is a direct, irreducible moral assessment of a certain form of conduct. We recognise it as a fact and, in doing so, we are motivated by it. This is the logic for action, which the evolutionary story makes incomprehensible. It simply tells us that we have been given these moral attitudes but does not explain how they cause us to act. They cause us to act because of the internal logic of the judgements made. They cause us to recognise why the act *must* be performed. Once we have made the judgement, we see the reason to act and see no reason not to – none of which means that we do act in accordance with our judgement. But, when we fail to do so, we are involved in wrongdoing and that is why we feel guilt or shame – it is a logical extension of having identified the right course of action. It is a judgement we pass upon ourselves.

Gene perpetuation, as a potential goal, must go to the tribunal of moral evaluation in the same way as any other form of behaviour. What the evolutionary account fails to recognise, is the way in which our moral beliefs operate upon us. Their motivational power is conceptual: it flows from the evaluation we have made, an evaluation that is a form of belief and not some sort of emotion or impulse or desire. Noticing that our moral behaviour leads to gene perpetuation – if it does – has no bearing upon the issue of whether such

perpetuation *should* be a goal for us. If I see that altruistic conduct has, as a fact, been conducive to gene survival and, even if I take the deterministic view that such behaviour has (in some way to be explained) been the product of random physical mutation, I still have to decide how to act in future situations. It is I who act, not my genes. Acting, as I have said, is never something we can opt in and out of: it is a permanent exigency. It is an imperative that bears down upon us as long as we exist as conscious selves (it may even pursue us into the world of dreams.) Indeed, being and being obligated to act are really just two sides of the same thing where the self is concerned. We cannot conceive of existing as selves without being subject to this exigency – it flows from the essence of what it is to be a self. Our being able to act and our being required to act spring into existence together. So, the evolutionary epiphany really does not take us very far. Do I continue to act altruistically (if I do) or do I re-align my behaviour towards the goal of gene perpetuation; evaluating every situation in terms of its potential for this end (however difficult that would be)? This is a decision I am compelled to make and evolution cannot help me with it, because, patently, it is not a decision within the realm of evolution but outside of it. It is in the autonomous sphere of morality that encompasses all human activity. The need to act always forces these decisions upon us and they are always moral decisions.

In these considerations, we meet exactly the same type of insight we had regarding memory and reason. We saw the conceptual constraint upon our ability to investigate these activities in physical terms. We cannot find the physical basis for memory or reason without using those very abilities and any physical discovery we could make could cast no light upon them as they are, in their essence; as activities whereby we make sense of everything that is given to us in experience. The project of turning to the physical in the form of evolution to cast light on how we should behave is fundamentally flawed. In doing such a thing, we would demonstrate that we already understood morality: that we already understood the notion of being morally required or compelled to do something – the need to find the right action as opposed to the wrong one. We would be turning to nature to find out how we should act, betraying, thereby, the fact that we have embraced the need to make this determination – to make a normative decision about our action. Significantly, the morality on offer from evolution is morally bankrupt. It consists of an exhortation to the mindless perpetuation of physical life for its own sake. The only purpose of human existence is to create more of the same. It is a kind of ‘we’re here because we’re here’ account of our significance. There is no sense of human life, particularly our mental life, being an end in itself. Admittedly, in much of the animal kingdom there is little to see by way of meaning beyond the brute perpetuation of the species or its genes. But even there, with higher creatures, we get a glimpse of something that is significant in itself and does not require justification by reference to something beyond it and, in particular, by reference to something purely physical. What we see evinced in the behaviour of such creatures is akin to joy, to fascination, to a certain satisfaction in the moment and act of existence. I am thinking of the dog that runs with a kind of gusto in ever tightening circles or aligns itself with the wind, savouring its scent. But, inevitably, as I do so, I hear the dismal plod of the approaching physicalist, explanation of what is *really*

going on in hand. “It is merely developing its physical prowess, so essential for gene supremacy. It is honing its hunting skills, so that...” The approach is egregious with humble examples like the foregoing but applied to the ‘higher’ activities of humans, like writing philosophy or composing music it is almost contemptible and is, frequently, circular. “Ah, you are developing your mental agility, so essential for survival.” “You are making yourself more attractive to a potential mate” – an approach that can only be explicated by reference to the admiration that is engendered by the activity, intrinsically, by the recognition of its *value*. Everything has to be spun as a simple, brute desire which can then find its consecration or apotheosis in a brain state.

Critical to our moral deliberations in relation to our requirement to act, will be our commitment to other people and other sentient beings. These, perhaps can be considered our final achievement, the final fruit of our endeavour to constitute the world from experience. They may arrive after our commitment to an external world of objects in which we come to feature. But there may be strong reason to say that we constitute the world, ourselves and others simultaneously. We rely on others to make sense of the world and this can only be done once we have recognised others as co-constitutors of the world. We see them as beings like ourselves with a relation to the world and us. Their recognition of us, their engagement with us, causes us to recognise ourselves as beings in their world. In their actions, we see selves who have, through their efforts to understand, given a sense to the world, given it a certain meaning. They assist us to break experience down into an experience of objects with a particular character and value. We recognise in their interaction with the world and their manifest interest in parts of the world – parts that we may only dimly perceive – objects we did not possess, conceptually. The parent who attracts the child’s attention with various items that are presented, rotated, brought into contact with other items and, importantly, brought into contact with the child, is assisting the child to break down the fog of awareness (the ‘blooming, buzzing confusion’ of William James) into distinct entities. Of course, I do not need to attribute selfhood and mentality to the other person to have some of these achievements. Watching a machine like a robot in a factory or a stock-picking device in a warehouse would give me some of these insights: it would draw my attention to elements within a previously undifferentiated scene. But, to the extent that I want to engage with and manipulate my physical environment, I must give a status to the bodies of others that I do not give to things. I am obliged to ascribe to them, selves with intentions and, critically, feelings and beliefs – including normative beliefs. Very generally, the inanimate world is passive and yielding to my efforts at manipulation. Quickly, I must learn that a different approach is necessitated if I am to engage with that sub-set of the physical that is other people and animals. I cannot treat with them on a purely physical level. I must see them as autonomous selves with a network of sensations (especially pains), desires, intentions and beliefs. This is why it is so difficult to step back, as physicalism enjoins us to, and to see them as some species of machine, albeit highly complex. Following the premise of much science fiction with its postulation of the ‘android’ as an entity that mimics human behaviour - albeit, often, with enhanced physical powers and durability – is all but impossible. We

are invited to see them as 'programmed'. But, when they present a sophisticated facsimile of emotions, beliefs, ambitions, pain, distress and a will to survive, maintaining this stance is perverse. The hardened physicalist, of course, wants to see *us* as like this, at least in principle. Behind the physical, behind the organic circuitry, there is no mind, no self. We and the android can be the subject of a kind of 'as if' form of explanation (Dennett) - although it is not clear who or what is doing the explaining or how. The self and its images, sensations, emotions and judgements can be invoked as a sort of convenient fiction - we can appeal to 'folk psychology' (Churchland) - but they are not real, they do not actually exist and they are not the explanation for anything. The 'as if' approach seems necessarily parasitic, however, upon an 'as is' notion. It is hard to see how we could treat something as if it *were* something if nothing ever could *be* that something. For such thinkers, the absence of mind may be a purely contingent matter: its non-existence being a fact in our world but not in other possible ones. Other more radical determinists see the whole notion of causation by a self as incoherent and, consequently, it could not be used even as a heuristic or a metaphor.

But there is a simplification going on where people speak of adopting 'stances' or 'as if' positions with regard to other people. All the focus is upon physical behaviour, which the 'as if' position lends itself to. If we were only interested in a person's actions, their physical behaviour - what their bodies do - then treating them as if they were always carrying out intentions or plans would have some merit, but, most of the time, we are not. We are interested in what other people think and feel and, patently, the 'as if' approach is of no use here: we want to know what people really, actually think and feel. These thoughts and feelings may have physical consequences in another person's behaviour, but they are not, principally, what they are about or what we are interested in. We rely upon the beliefs of others in the formation of our own beliefs. And it is critical to any reliance we place upon those beliefs that they have been formed or arrived at by a process that we demand of ourselves, namely, the self striving, freely for truth. The business of justification and holding something to be true has to be performed by an undetermined individual and one who takes themselves to be free to form that belief and be capable of achieving knowledge. If I see another person as either a species of machine uttering noises, gestures and expressions or as a machine with a determined self attached to it (setting aside the conceptual barriers to doing so), they can be no source of assistance to me in the formation of my own beliefs - except insofar as I am able to scrutinise the beliefs of the persons who have made or 'programmed' them. I need to know about the affective states of other people. I need to know if they are in pain or distress, joy, satisfaction or regret or shame and many other such conditions; not because of the behaviour that might lead to (there may be none) but because of those conditions in themselves: for their moral significance. I must consider these things in shaping my behaviour towards other people, in making my behaviour towards them *moral*. Additionally, I must consider the attitude that others have towards me. I must consider whether I am liked, approved of, trusted, respected, admired, despised, reviled and so on. Not simply because there is some selfish, material benefit in it for me - although there may well be - but because, in the same way that I may turn to others for assistance in finding out about the way

the world is, physically, I turn to them to find out about the way I am as a moral entity. Their moral evaluation of me is important as a source of truth about me and my actions.

Ultimately, however, the buck always stops with me. The regard I attach to the views of others is a decision I must take. I cannot defer to them without rational grounds to do so. Frequently, I will not accept what others believe. And it may be, rarely perhaps, that the pain or suffering of someone else is not decisive in the formulation of my actions. This will be the case particularly where we are considering a person's emotional distress occasioned by a breach of some aspect of their belief system – a belief system we do not share: a person's hurt at an instance of blasphemy, for example. Occasionally, it is justified to countenance someone's physical pain where it is necessary for some greater good, especially sparing them or others more severe or longer-lasting pain. We can never submit completely to the beliefs of others, because doing so would still be a decision on our part. And that would be a reasoned decision because it would be a form of belief, a belief that it was the appropriate thing to do and we cannot randomly believe: we can only believe by holding something to be true which we are incapable of doing without a basis for it. This is the ultimacy, the responsibility that goes with the burden of agency; of always being obliged to act and being the source of that action. The notion that something outside of me can take precedence here, epistemologically, that there is a higher authority than me, is mistaken and it is of a piece with thinking that I am in thrall to the physical world – the thinking we were obliged to dismiss on grounds of coherence. This is why the epistemic priority given to others in arguments like the Private Language Argument are unsound. We always have to evaluate others. We have to understand their actions – including the fact that they *are* actions – and the rules they are following and whether our actions are in conformity with them or not. This is not a task we can delegate to others without circularity.

An important observation to make at this point is that, with regard to ourselves at times before the present, we are in a slightly similar situation to that with regard to others. Clearly a great deal of what we do is based upon beliefs we have formed in the past. Normally we accept these as truths: we do not revisit them and re-form them as beliefs. But in doing this, we are placing trust in, what we might call, earlier versions of ourselves and this resembles what we do with the beliefs of others; of other selves. Sometimes, we do not endorse our earlier beliefs and we revise or reject them. But we always have a greater confidence in what we have done as compared to what others have done. We know what we have done directly: we can remember it, and the way in which it was done. And we have an overall faith in our integrity: we know that we have formed our beliefs by the necessary procedure of justification – we could not think otherwise: we could not think that we have come to believe in bad faith because that is impossible as it involves both believing and believing one has no basis to believe. (I set aside here the psychological phenomenon of 'convincing oneself of something that one knows to be untrue' because it is not, at bottom, a genuine counter-example.) Our enhanced faith in our former achievements illustrates our commitment to our prior existence. We cannot think of ourselves as a succession

of ontologically different selves, fresh particulars – as some do. The fact that we are able to directly access these selves and their activities, in itself, militates against it. As we noted earlier, the ability to directly authenticate memory, as a primitive cognitive capacity, is central to our use of beliefs formed in the past.

When we go down the physicalist path, we are embracing a notion of ourselves as simply physical things that are plugged into a network of purely physical things, governed by physical laws. At best our mental lives are a sort of pointless adjunct (although, true physicalism is not even that generous.) I have already demonstrated that this approach, as well as being a contradiction of our immediate experience, is, ultimately, incoherent. But it is not simply our thought and belief that is attacked by such a view. Our action; our bodily action in the physical world is brought into question.

The threat to autonomy that is often put forward most vigorously is the causal closure of the physical. This essentially says that any physical event, if caused at all, has a purely physical cause. Given that much of what we take ourselves to do is physical, this is a significant challenge to our agency. Also, there are arguments that target our freedom in the purely mental field such as Kim's exclusion argument. This means that, when we decide to pursue a particular line of thought, as I am doing now, that decision – if it can be called that – and everything that follows from it, including logical thinking, following an argument, drawing inferences and so on are all a consequence, an effect of purely physical events; in the brain, proximately. This, of course has devastating implications for the nature of belief and our ability to arrive at truths about the world and is, ironically, a fatal undermining of the theory itself. Notwithstanding this knock-down argument, at least where thought and belief are concerned, it might be of value to consider other aspects of this determinist theory.

The first thing to consider is why one would hold such a view. The obvious answer would be that all physical events have, in fact, been demonstrated to have only physical causes (or none at all, perhaps, for probabilistic quantum events.) Clearly, this cannot be correct because we are in no position to examine all events. The claim can only be arrived at inductively. But even here, with a sample of all events, we need that sample to contain a number of the events we are concerned with, namely, human, bodily actions. This has not been done in any conclusive way, but some correlations have been made between brain events and muscle movements - of the sort that must underlie typical human actions like raising an arm. But this takes us nowhere. Any claim that the self via mental agency makes things happen in the body is compatible with this and, indeed, *requires* it. The fact that our decision to raise an arm does not directly raise the arm but does so via the preliminary of a brain event, is neither here nor there. To undermine this, we could elect to go for the approach of demonstrating temporal priority, where the brain event that consistently leads to the action in question – raising an arm – precedes the mental event – the decision. This is the approach exemplified by the Benjamin Libet experiments. Here, the suggestion is that there is a sequence of events, commencing with a brain event that leads to another brain event that is coincident with the mental event of a decision, and

that brain event leads on to events in nerves and muscles and so forth that cause or constitute raising an arm (in the Libet experiments, it was a finger movement.) But *any* decision to do something will be preceded by a contemplation of that decision and that is a prime candidate for the correlate of the first brain event. It might be countered that the contemplation is *caused* by the coincident brain event and that their correlation, their regular conjunction is causally significant, but it is equally suggestive of the mental event causing the physical event: in the same way that the later decision can be viewed as the cause of *its* corresponding brain event. Most people, I think, assume that, when there is mental activity, there is corresponding physical activity, activity in the brain. Decisions and their prior contemplations have their physical counterparts. But this assumption is not necessarily an assumption that the brain activity *causes* the mental activity, it is equally consistent with the opposite interpretation. Or it is consistent with a kind of equality or partnership. If we see the physical event and the mental event as participants in a single entity, then they are both part of the cause. They are both necessary; there is no overdetermination. Any attempt to suggest that the physical would have caused the (physical) effect *anyway* is without foundation. If the two – physical and mental – always arise together, we have no means of privileging one over the other, causally. And the epiphenomenal approach requires this conjunction, as, without it, there would be no sense to saying that the physical caused the mental. But once we establish an unbreakable connection, we are unable to favour one aspect over the other, causally. For the physical effect to happen, there has to be a decision or act of will as well as a physical entity. The two must conjoin. If something is necessary, it cannot be irrelevant.

A related line of consideration consists of examining what the physical items are, that are put forward as the causes of mental states or events. Often, brain states are referred to. But there is a metaphysical difficulty with states where action is concerned; and, here, we are primarily talking about action. While a state could sustain a mood or an emotion, perhaps, it could not be the cause of a decision or the formation of a belief, because they are clearly of the nature of events. My formation of a belief is instantaneous. We might also say, without duration. And a decision is the same. Perhaps, then, a mixture of states and events is required when trying to fix or specify the physical causes of mental entities. Both, however, present difficulties. States and events are hard to identify. What do they comprise physically and when do they begin and end? In a universe where time and space are infinitely divisible or 'dense' such issues cannot be resolved: boundaries in either dimension cannot be found. Consequently, if we target a particular mental entity for correlation with something physical, with a view to making that physical thing a cause of the mental entity, we will be unable to define that physical thing. That situation does not prevail where the mental entity is concerned. Mental entities do seem discrete: they are not infinitely divisible. They have an 'all or nothing' quality and their arrival is not gradual. This makes them difficult to pair with the physical, even if we could sift out discrete entities from the spatio-temporal continuum. But a pairing problem would equally affect the coherence of mental causation. We would have two realms that could not be connected with each other, in any fashion. Probably,

space and time require to be 'quantised' for the appropriate correlations to be made, definitively. The physical needs to resolve into ultimate, indivisible units of time and space. This might be required, in any event, where a conception of the physical is concerned. Unless we are able to break the world down into distinct entities, (even, in the limiting case, one single entity) we are unable to make it feature in any activity. This is a conceptual constraint upon our activity of constituting objects and events from our experience and it is the logical force that drives us, relentlessly, towards the ultimate particles and quantum events we currently endorse.

The physical is often held up as a paradigm of causation and the mental is seen, by contrast, as suspect. Yet trying to find genuine cause and effect in the purely physical is problematic. If space and time are dense, it is impossible. All we can really have is a continuous event – from the beginning of the universe to its end (its entropic stasis, perhaps.) There will be states within that flow, although their emergence from an event will be difficult to explicate, due to the potential for endless divisibility. States, classically considered, are causally ineffectual. At best an event can only arise from another event. A state is a set of physical qualities that has endured for some time and if it did not cause another state or event at the moment of its inception, then it does not have the physical (or metaphysical) resources to do so later. To give it causal efficacy, we would have to make time significant, but that is not a feature of the state. Events are equally problematic as causes because they cannot be defined. We cannot find the events to serve as cause and effect. One event – the cause – must flow into another – the effect: there are no boundaries between them. We just have the world as continuous event. There are no natural parts to an event, classically considered. Events must be seamless. If they stop for any time at all, they become states, which are causally impotent. From this, we are unable to specify events or states to serve as causal entities – of any sort. Hence the impetus to quantisation or making events a kind of state. These ultimate units of space and time will abut each other in chains but their causal status will only be a matter of their regular connection (including a probabilistic one.) The situation will still be entirely Humean – there will be no discernible 'force', no element that makes the effect necessary, no element of explanation. And causes and effects will be ontologically equivalent: causes will be effects and effects will be causes: they will have their Janus-like status. But we *will* have the potential, in principle, to link the physical and the mental. The quantised nature of the physical will afford the possibility of matching like with like. The discrete nature of mental entities with their all or nothing quality, will find its echo in the physical domain. This, crucially, is consistent with mental causation. It is another matter, whether we will, actually, be able to make the correlations. Linking brain events with infinitesimally small units of the physical world seems practically impossible. But all that matters is that we have an account of the connection between the mental and the physical that allows for the mental to affect the physical; that makes it *coherent*. And there are other considerations we can bring to bear. The putative mental causes do not have the blank, 'this then this' quality of physical causation. There is an intrinsic connection between the mental cause and the physical effect. The decision to raise my arm has something in common with the raising of my arm: it shares the

same content. The brain state or event has nothing in common with the raising of the arm that it precedes and is supposed to cause. It cannot do so because physical cause and effect have to be separate things, they have to be logically distinct: if they were not, they would become one thing not two and cause and effect would merge. The connection between the two is always entirely contingent and it is this that allows Hume to have his famous insight. The situation is otherwise with mental causation. There is the potential for real explanation: the cause is directed at the effect. The cause contains the effect as ambition or object. My arm rising is explicit in the desire or act of will that brings it about. This is why, in the pre-scientific era, explanation of physical events takes an animistic and teleological form. The form of explanation developed is natural and satisfying, both for the reason just given and because it accords with human experience; with our understanding of our own action. It is striking that it has been superseded by a form of explanation that, in a certain sense, *explains* nothing. Our contemporary science, could be captured in contemporary parlance 'stuff happens; nothing to see here; move on; get over it!'. In saying this, I am not proposing that we return to a primitive science of deities, spirits, wood-nymphs and the like. Our close scrutiny of the physical, of its microscopic structure and elements and our discovery of and, moreover, postulation of fundamental particles and forces and their law-like relations is critical to a grasp of what is actually *happening* (and it gives us an important capacity for control.) But, on its own, it is missing genuine *explanation*. It is a system lacking a dynamic. Its entities and relations are inter-defined in a way that can be considered circular. Many, certainly from Bertrand Russell onwards, have noted this feature and found modern science (essentially physics) wanting - unsatisfying, we might say.

In our activity as selves, we see a paradigm of genuine causality. We see it in our directed attention and its ability to bring forth sought-after responses – as in remembering or problem-solving. We see it in our ability to form concepts for the given of our experience. And, most pertinently of all, we see it in our ability to make our bodies do things: to make decisions and witness them carried out in the form intended. Clearly, this opens the door to panpsychism. And although we may never be in a position to discover the selves that are at work in the physical world and the entities they attach to, we are already in possession of an understanding of objects that is not basic and literal but abstract and theoretical: one that is not, in principle, inimical to the incorporation of the mental. Physical objects are already postulates and rational inferences from experience. And to add a mental dimension to them involves no more than extending this inferential process. Doing so, vitally, gives us a means of making sense of events, of giving them a genuine explanation, one that takes us beyond blank conjunction. And, at the same time, in the background we have the overarching incentive, the necessity to assert such an account because, without it, we are doomed to a situation where our mental lives are determined by the blind operation of matter; one that makes knowledge impossible and action unintelligible.

We can conclude with another important consideration. The very business of linking the mental with the physical or, indeed, of any form of scientific research, presupposes our ability to make things happen. We think we can construct

experiments to interrogate the world; to test our physical theories. We believe that we are able to do these things and that they do not just happen of their own accord. We do not have to wait around until our bodies perform such actions. And, even if we were mere observers, and our bodies were swept up in events outside our control, we would still have to perform the action of making those observations, understanding them, and then constructing theories to explain them and drawing out the implications of those theories to test in future observations of events that, 'just happened' to us. When, however, we take ourselves to have initiated the tests and experiments, the observations we make, arise in that context: they have meaning and significance because we were expecting them. We set up the experiments for a particular purpose and what happens is seen as a response to that purpose. None of that would be the case if we were just watching random events. It is quite extraordinary that from such a background, people routinely suppose that we are not and never can be responsible for anything. In fact, they are compelled to re-describe what are pre-scientifically thought of as deliberate actions. In the grip of such a deterministic understanding, we would have to consider a theory like Einstein's General Relativity in the following terms: Einstein was caused – proximately by events in his brain but, ultimately by events stretching back to the beginning of the universe – to contemplate his own theory of Special Relativity and to see its incompatibility with Newton's theory of gravitation, he was then caused to have certain insights and entertain certain solutions and undergo a thought process that led to the formulation of the theory of General Relativity. He was caused to expound it in words and numbers and symbols which others were caused to see and understand. One such was Arthur Eddington who was caused to see certain practical implications of the theory which caused him to see a means of testing the theory in an anticipated astronomical event and he was caused to set up and perform the relevant observations and caused to understand them as confirmation of General Relativity. (It goes without saying that this is the epiphenomenal account. The hard-core, eliminativist version simply asserts a succession of physical events including ones in the brain. Einstein and Eddington effectively disappear or become, purely, bodies and brains.) Any scientist who has embraced this deterministic account (most have) is obliged to see their theorising and testing in this light. It is caused by physical events that have their origins long before their coming into existence. Naturally, this account assumes that observations, insights, understanding and so on are caused and this, I have said, is unthinkable. People cannot be caused to have these cognitions; they cannot be imposed upon them. They are acts: things that people *do*. As I have already said, once we think of people like Einstein coming to have or being caused to have insights or beliefs, they disappear as people. They lose their identity and significance. There are no beliefs and there is no Einstein. It is not possible to do science whilst having the belief that one is having the illusion of doing science.

This very consideration would have a bearing upon any attempt to relate the mental to the physical: to find the neural correlates of consciousness. Some form of empirical research would have to take place and that would have to be conducted by us as conscious beings; as selves. And that threatens all the

circularity problems just set out. Currently, that there are such correlations is really no more than an assumption. Where determinism is concerned, a dogma. The prospects for finding them are not strong. Most decisions we take are unique. They take place in their own unique physical and temporal location. Of course, there are similarities, but these are largely ones that we define mentally and they are not likely to lend themselves to scientific study whereby strong regularities can be established. And such regularities are critical to any attempt to establish a causal connection. From the great swim of events both mental and physical, we need to sift out clear units on either side to correlate. Only unambiguous repetitions will allow us to do this and they are not likely to be found; partly for practical reasons in terms of experimentation but also because of the uniqueness of the events concerned. It will be said that this failure will be as damaging for mental causation of the physical as it is for physical causation of the mental, but it will not be. Physical causation, in these circumstances, will always remain an unsupported assumption, whereas assuming mental causation will be supported by our experience but, more decisively, by reason. By assuming it, we give ourselves the possibility of attaining knowledge and making our undeniable experience intelligible. Assuming physical determinism, does the opposite.

IV CONCLUSION

To attempt to draw matters together: I have challenged what I characterise as a physicalist account of what there is and what happens in the world. I have stated that our starting point must always be the self and its experience – ultimately, *myself* and *my* experience. They have primary epistemic significance. They have a certainty that physical objects can never achieve. What certainty those objects have, flows from the self and its agency directed at its experience; the simply given of basic awareness – phenomenology. The relationship between physical objects and our conscious experience is not contingent, as so many think - with disastrous consequences for our understanding of the world and ourselves. It is *a priori*. The physical world is a construct, a construal, an inference from our phenomenal experience: it is what makes our experience intelligible. Such intelligibility cannot be achieved by denying autonomy to the self in its judgement and reason. The self cannot be the creature of the physical. The physical is our creation and we cannot make it a Frankenstein's monster that comes back to terrorise us: to render us and our lives incoherent. We cannot allow it to make us strangers to ourselves. We are obligated by reason to understand our experience in ways that do not undermine or conflict with that understanding. We are not free to understand our experience in any way we choose. Primarily, we are constrained by the character of that experience and our reason. We cannot make of it what we wish. Our ongoing history is one of speculation and failure; of attributing properties, objects and relations to the world, that do not exist - that our experience goes on to contradict. But we make progress and it is a necessary presupposition of believing that we can arrive at truth, that it is not placed beyond our grasp – in the way that determinism would do. We are like Scott Fitzgerald's boats: we beat against the current, and we are borne back into the past – but not entirely so.

The self makes sense of what is given to it, by the senses, and it does so by autonomous means. What there is, is spun out of this realm of the self and its experience, by the self. It is not just the world of physical objects that is generated thereby. To that world, must be added, or found, moral and aesthetic value. And that attribution must take place because, as the physical beings we take ourselves to be, we are compelled to act and are thereby compelled to decide how to act. We must decide what *should* be done.

There is no reason why we cannot think that we exist in an autonomous realm of thought and belief that, nonetheless, meshes with an independent physical world, in a way that permits us, within limits, to act in that world in accordance with our will, values and desire. We do not have to think that we are causally determined by that world – to do so would be to deny ourselves as the real individuals we know ourselves to be and would nullify our rationality and, thereby, everything. We may be partners with the world. We may provide the dynamic that the physical lacks. Self and mind may supply genuine causality and explanation to nature.

Of course, our scope for freedom is profoundly limited. We are at the mercy of what is given to us in experience, in ideas, in emotion, in mood, in desire. But within these parameters we can and must act and we are responsible, ultimately, for that action. Who we are and the actions we take are mysterious. But they are not made less so by attributing them to anything other than ourselves. The reverse is true. Sometimes, it is asserted that we have a 'nature', some sort of given that accounts for the actions we take. But such a notion is vacuous. It can only be a summary of our actions; not an explanation of them. No account can be given of how it operates upon us as selves in all the myriad individual decisions we take. It substitutes an enigma for a puzzle. And we are a puzzle to ourselves. We know ourselves, instantly, intimately and certainly, yet struggle to know what we are. This arises from the constant tendency to see ourselves as another sort of 'thing', an object. We spend our whole conscious lives engaging with 'things' to the point where we come to consider it the only genuine mode of existence and we try to assimilate ourselves to it. But we must recognise that it is only in virtue of not being 'things', that we can have knowledge and control of them. Only with this recognition will we begin to have knowledge of ourselves. We are centres of action in the world and we have a kind of hard particularity, an individuality, objects cannot share. The world will, ultimately, under our scrutiny and our rational constitution, resolve into entities that are qualitatively identical, that are intrinsically the same – the ultimate particles of physics that are necessary for any understanding – and the only real individuality or identity that will remain and can be related to them will be that of selves.

What essence I have is elicited by my action; by the relentless pressure upon me to act. In a sense, I do not know who I am until I do something but, after, I always know that I am the person who did it and, to that extent, I am defined by it. What is remarkable and so telling is that we accept our responsibility (if only to ourselves.) We suffer terribly for it: in guilt, in shame, in embarrassment. And we

do so when there are so many avenues of denial and exculpation available to us in determinist doctrines. We accept responsibility, for all its discomfort, because we cannot conceive of how anyone or anything other than ourselves could possibly be responsible. Fundamentally, we must act and, necessarily, we must be that which *can* act. To suggest otherwise is senseless. And, in a way that is not without paradox, we make ourselves who we are by what we do. As, I suppose, Sartre told us in *Being and Nothingness*.

Philosophy, in the analytic tradition, has, in many ways, come to be dominated by someone akin to the self-doubting or even self-loathing philosopher. Someone who wishes they had tried harder in science. They attempt to assuage their sense of disciplinary inferiority by making themselves useful to science – typically, neuroscience. They offer their services in the form of that most trite and hackneyed occupation of the post-war, Anglo-Saxon philosopher, ‘clarifying concepts’ and, ‘clearing up confusions’. They are the theoretical lab-technicians: keeping the conceptual test-tubes sterile (in every sense.) They conspire in the enormous, overweening hubris of modern science with its claim to deal with everything that exists – ‘because everything is physical’. Surely, the time has come for all serious thinkers to reject the role of hand-maiden and to re-enthroned philosophy as the queen of all the sciences? The axis must tilt back to the mind and the self: the source from which all knowledge and science must flow. Perhaps, we need a Ptolemaic revolution.