**Can I Know what I am Thinking?**

An essay of many years ago asked the question “Am I Thinking?”[[1]](#footnote-1) To most of us, this question answers itself. Indeed, as we would say, following Descartes, it is a necessary condition for even considering the question “Am I thinking?” that I be a *res cogitans* – a being that could *not* think could not even so much as consider such a question, or any question whatsoever. Nor, presumably, could such a being engage in discursive reasoning or in theoretical inquiry, such as philosophy or natural science. If we can even raise this question, then, its answer is *obvious*, since to raise this question is to engage in the very activity, thinking, about which it raises the question to begin with.

 Most of us would also claim to *know* that we are thinking, and to know this fact with an incorrigible certainty that excludes all possibility of error. Augustine affirms that there are three items of knowledge – that he thinks, that he exists, and that he loves – of which “no Greek can dispossess him.” Descartes maintains that not even the Evil Genius could confuse or deceive him about this point. I stand with Augustine and Descartes on this point and presume that the reader does as well. However, reflection of this seemingly incorrigible fact has some surprising consequences for some of the more entrenched ideas dominating contemporary philosophy of mind. In this essay, I wish to call those ideas into question by reference to what I will call the standard model for self-knowledge of this sort, which I maintain is incompatible with those entrenched ideas. In particular, I shall claim that the standard materialist accounts of the nature of thinking makes our self-knowledge on this point extremely problematic and potentially illusory.

 To begin, then, I will consider the standard account of our knowledge of our own thoughts and thus of the fact that we are thinking on those occasions that we advert to that fact. I will then present an argument – which I have developed in more detail elsewhere – for the conclusion that, on materialist models of mind of whatever sort, we can have no such knowledge. I shall conclude that, since we do in fact have such knowledge, that theories of this sort must be false and that I can know my own thoughts, and thus the fact that I am thinking, only if I have an immaterial mind and access to its contents independently of the operation of the brain. This result, though unpalatable to many, is nevertheless so straightforward and obvious that I cannot conceive of any response to my argument that does not wholly undermine the very activity of making it. In conclusion, I shall say why I think this is the case.

**The Standard Account of My Knowledge of My Own Thoughts** Let me now proceed to the standard account of how we know our own thoughts. To begin with, we have many mental contents, e.g. sensations and feelings prompting us to act in various ways. There is a broad (and in some contexts useful) sense, used by Descartes, in which every mental content counts as a thought and every sequence of related mental events counts as thinking. However, not all mental contents have to be conceived of as either potentially or actually known to those conscious subjects that possess them. On a standard, traditional view of the kind of consciousness enjoyed by non-human animals, for example, such creatures are capable of thought in Descartes’ broad sense, but not in the more specialized sense in which we reserve that term for certain of our own mental contents. According to this traditional view, animals possess mental contents but neither a capacity for *reflective awareness* of those contents nor any *mental operations* over those contents. Rather, the mental contents animals possess and enjoy, being tied to non-conscious instincts and drives, simply exercise a direct causal influence over behavior. Not possessing any abstract concepts, the gazelle cannot say to itself “Heavens! That animal that has just come into view is a lion, a dangerous predator that may attack and eat me! Since I don’t wish to be eaten, I had better run away.” and then sprint away in an attempt to avoid that unhappy fate. Rather, the gazelle has evolved in such a way that whenever a dangerous predator comes into view, an instinctive reaction is triggered, adrenalin is released, the gazelle begins to sprint, and continues to sprint until the urge to sprint is relieved, after which it returns to grazing as though nothing had happened. Although a mental image, a feeling, and an overt behavior are all elicited by the presence of the lion, nothing like what we call “thought” in the human case come into it. Even though we cannot agree with Descartes that animals lack consciousness or souls altogether, it is quite easy to agree with him that animal behavior is so largely mechanical that there is no reason to attribute anything like selfhood, cognition or inference to non-human animals. Despite the fact that in some cases we use anthropomorphic language to describe an animal’s state of mind (“Fido believes that master is home,” “Puff knows that if she waits long enough, the mouse will emerge from its hole” and so on), few if any of us want to *literally* attribute occurrent mental states with propositional contents to their subjects.

 Indeed, modern evolutionary theory actually reinforces, rather than undermines, these traditional views, despite the fact that evolutionary biologists often help themselves to a question begging use of the term “intelligence” intended to paper over the massive discontinuities between animal and human minds. The medievals, for example, attributed a quasi-cognitive “estimative power” to animals in order to explain how the lion judges when to pounce to capture its prey and the gazelle to run away when the lion gets too close.[[2]](#footnote-2) We now suppose that lions and gazelles originally pounced and sprinted more or less at random and those whose pounces and sprints were successful in either capturing prey or avoiding predators eventually outbred those whose pounces and sprints did not, thus allowing those characteristics to become widespread in their species. Although it may seem as though the lion and the gazelle are carefully weighing and judging when to act, that is merely an illusion. It is all mere chance and necessity after all.

 What is missing in our literal depiction of animal behavior is the moment of *reflective awareness* of one’s mental states and their contents. By contrast, reflective awareness is a standard feature of the sort of consciousness that human beings possess, even if this reflective awareness does not extend equally to all mental states and their contents at all times. It is not simply the case that human beings possess mental states with experiential contents; it is also very often the case that human beings are aware of those mental states and contents *as such*. It is only in this way that I can know that I am thinking in the full and complete sense that involves what we call cognition. In such case, I am reflectively aware of what I am thinking, and thus (at least inchoately and implicitly) of the activity of thinking itself. This in turn allows me to be aware of and thus to accurately report what my mental states and their contents are and thus to know how I feel, what I sense, what I am thinking and what I believe. Without this capacity, no sort of sustained cognition would be possible, nor would the sort of discursive reasoning necessary for theoretical inquiry (e.g. philosophy and natural science) be either conceivable or possible as a going concern.

 All of the foregoing depends on my ability to *apprehend directly* my mental states and their contents by means of *attention*. For the most part, our attention is directed outwards, toward the external world of intentional objects to which our conscious states mysteriously motivate us to concern ourselves. As with other animals, the original disposition of objects in our intentional field of awareness determining what is central and peripheral or constitutes foreground and background in that field is non-voluntary. Those objects that present themselves as central to and in the foreground of consciousness naturally command the bulk of our attention and are thus that of which we are occurrently aware. In the human case, the lion comes into view and the human being *recognizes* that this is a lion, a dangerous wild animal, and immediately begins to *consider* how to get away from it. He is immediately aware of him- or herself as potential prey, as being in a state of fear and terror, feels the adrenalin coursing through his or her veins, and as desperately desirous of attaining safety. Having made a happy escape, he or she rehearses the events in his or her mind, remembers how he or she felt, what he or she thought, and is grateful to be alive. He or she apprehends all of this in a reflective, self-conscious manner. Other elements of the scene (such as the number of steps he or she took while running, or the size of the crushed rock in the asphalt path he or she travelled) may well fail to make an impression on the human being in this situation despite having passed through his or her perceptual field. Even so, there can be no doubt (at any rate, no coherent doubt) that reflective awareness is a standard part of the distinctive form of consciousness enjoyed by human beings.

 I can enjoy this sort of consciousness only because I directly apprehend my mental states and their contents by attending to them. Basic awareness of the sort we share with animals *plus* reflective attention *equals* direct apprehension of our mental states and their contents. More than this, it is only because I posses this power to directly apprehend my mental states and their contents that they are capable of becoming the *contents* and the *objects* of various sorts of mental acts, such as knowing and believing. Thus, due to the fact that I immediately apprehend my mental states and their contents that I am able to *know* those states are and thus *that* I have them in the first place. Through *voluntary control* of attention, I am able to alter foreground and background in my intentional field of awareness, concentrating on what would otherwise be peripheral elements thus bringing them into centrality, while relegating normally central elements to the periphery, thus further solidifying my grasp on the full range of my mental contents. Having focused on certain contents, e.g. propositional ones, I am then able to reason with and about them, deciding to assent to some, suspend judgment about others, and to positively dissent from still others, on the basis of reasons that seem to me sufficient to justify each of these propositional attitudes. In response to the promptings of curiosity or the challenge of new evidence, I may be driven to inquire into the truth of a particular matter, or seek the explanation for some surprising phenomenon, in which case I will initiate the search for theoretical truth for its own sake and do so engaging in theoretical inquiry. When successful, discursive reason used in this way allows us to arrive at further, well-confirmed beliefs as the product of our own intellectual activity. All of this, of course, requires that it be possible for me to directly apprehend my mental states and their contents and thereby become reflectively aware of them. Without this, thinking in the sense we ordinarily take ourselves to be capable of would apparently not be possible.

 Thus, I am able to *know* my mental states and their contents due to the fact *directly apprehend* them through the *reflective awareness* that naturally accompanies the distinctively human form of consciousness. This reflective awareness, in turn, can be directed voluntarily by me in such a way as to alter the constitution of my intentional field of awareness and increase my knowledge of, and appreciation for, its elements. More than this, I am able to *direct the course of my thoughts* in order to raise, investigate, and answer questions concerning the nature of things and thus arrive at substantive beliefs about reality by selecting, among the various lines of though and inquiry that occur to me, which to pursue or ignore. This is what we attempt to do through science, philosophy, and other forms of theoretical inquiry.

 More than this, such awareness is *necessary* if I am to have any knowledge of anything, whether subjective or objective. Even if it is possible for me to be *mediately* aware of certain objects by being aware of something else, it surely cannot be the case that I am aware of every object in this fashion. On this supposition, it would appear that in order for me to be aware of any object O would require that I am first aware of some prior object N, which would in turn that I first be aware of some prior object M, and so on *ad infinitum*. In that case, my conscious awareness of O would require an infinite, vicious regress of interposing objects, each of which was itself only indirectly apprehended through awareness of some further object. In that case, it seems that my awareness of O would not even be possible. In order for me to be aware at all, then, awareness must *terminate* in something that I grasp directly and immediately in consciousness, *just as such*, as the *immediate object* of awareness. In the simplest such cases, the *intentional content* of my awareness and its *intentional object* will coincide in such a way as to preclude any distinction between appearance and reality; in such case, the intentional content of my act of awareness *is* the intentional object of which I am aware. In those cases, limited to mental states, their properties, and their contents *just as such*, clear and distinct apprehension precludes all possibility of error and thus confers *certainty* on our judgments concerning those states, properties and contents. I can thus be said to *know*, e.g., my own thoughts, that I am thinking, and thus that I exist, in the strongest possible sense, one that exceeds that of any empirical, scientific claim, no matter how well verified it may appear to be.

 My direct and immediate, clear and distinct awareness or *apprehension* of my mental states, their properties, and their contents, is both necessary and sufficient for my *knowledge* of those states, properties, and contents, and thus to *justify* my claims concerning those states, properties, and contents with incorrigible, “demon-proof” Cartesian certainty. Furthermore, all of this is accomplished within consciousness itself in such a way as to neither require nor admit any further explanation or justification. All of this occurs within the charmed circle of my own ideas.

**Materialism and the Standard Account** For our purposes here, materialism about mind amounts to the thesis that all of our mental events, their properties, and their contents are, in the last analysis, either *nothing but* purely physical states, events, and processes occurring in the brain or are *wholly dependent* for their existence and character on states (etc.) of this kind. By calling these physical states, events, and processes *purely* physical, I mean to say that these states (etc.) consist *solely* of physical constituents (such as atoms, electrons, and so on), possess *only* physical properties and are related to other physical states, etc. only in ways that can be exhaustively described and predicted in accordance with the fundamental laws of force and motion. This, of course, is merely an idealization inasmuch as we currently have no way of modeling any of our mental phenomena in this way. Nevertheless, many people remain thoroughly convinced that there is nothing more to the matter than this, and remain confident that science will someday show this to be case, at least in principle.

 I contend that the widely accepted materialist position outlined above is incompatible with what I have been calling the standard view about my knowledge of my own mental states, their properties, and their contents. The standard view, as we have seen, holds that it is *sufficient* for me to know what I am thinking that I directly apprehend my own mental states, their properties, and their contents and that it is both *possibly* and on many occasions *actually* the case that I grasp those states (etc.) with incorrigible certainty. Thus, I need do no more in order to *know* what my mental states, their properties, and their contents are than to be directly aware of those states, properties, and contents. Further, given that my awareness of those contents is *immediate*, I grasp those subjective facts with greater certainty than I grasp any other facts, including those foundational for natural science.

 This view must surely be false if materialism is true. On that view, my putative apprehension, even if real, plays no role at all in constituting what my judgments concerning my present mental state, its properties, and contents happens to be – that is simply the consequence of the operation of my brain, and what brain state that operation has happened to produce. The basic problem is this: if materialism as I have characterized it is true, then what causally determines what my judgments concerning my mental states are, their properties and contents, will be is something purely physical (a brain state) which I do not apprehend *as such* at all. This being the case, any judgment concerning what I directly apprehend is wholly causally dependent on, and explained physical facts that lie beyond my putative apprehensions themselves and exercise their causal influence independently of them, so that no reference to them is needed in order to explain why I judge the way I do. It follows, then, that my reflective awareness or apprehension of my own mental states (etc.) does *not* play any essential role in forming my judgments concerning my mental states (etc.) after all. To the contrary, its influence has been preempted from playing any such role by physical brain states, which wholly explain the formation of our judgments in terms of physically necessary and sufficient causal conditions that transcend consciousness and exercise their causal influence independently of it.

 More than this – and for the same reason – those putative apprehensions will be powerless to *justify* those judgments considered as objects of *belief*. If materialism is true, my beliefs, no less than my judgments, will be the product of the necessary and sufficient causal conditions in my brain that produce them. Thus, my belief that my judgments concerning my own mental states, their properties, and their contents are true given the evidence provided by my putative apprehension of those states, their properties, and their contents is itself the causal product of the operation of purely physical brain states that in fact I do not apprehend *as such*. Further, the real (physical) explanation of why I hold this belief makes no essential mention of, hence excludes the influence of, those putative apprehensions in the formation of these beliefs. As such, the presence of those putative apprehensions in consciousness means little or nothing with regard to the beliefs that take them as their objects. These results will hold regardless of whether we actually do apprehend our mental states, their properties, and contents and regardless of whether those apprehensions would in fact justify those judgments and their associated beliefs.

 The can put this point, then, in the form of a dilemma. First, suppose that my apprehension of my mental states, their properties, and contents is knowable independently of the operation of my brain entirely on the basis of evidence drawn from conscious awareness. In that case, my brain states and their properties have no essential role to play in either explaining or justifying my judgments concerning my mental states, their properties, and contents and materialism as characterized above is false. On the other hand, suppose that my judgments and beliefs concerning my mental states, their properties, and contents are in fact fully and completely explicable in terms of my brain states in such a way that does not refer in any indispensible way to my putative apprehensions of those states in consciousness. In that case, my putative apprehension of my mental states, their properties, and their contents will play no role in the formation of those judgment and those beliefs, which have a complete, exhaustive causal explanation in terms of purely physical brain states. Nor will we be able to alter or decline any belief on the basis of the putative evidence provided by our putative apprehensions; we will have no choice but to believe what we have been caused to believe by purely physical states of our brain. On this alternative, neither will they play any role in explaining or justifying those judgments or beliefs.

 Nor does it seem that we could somehow confirm the truth of our beliefs about own mental states, their properties, and their contents through *comparing* them with the putative apprehensions that they apparently take as their objects. Again, either our doing so is the exercise of a purely mental power exercised independently of my brain or it is not. If it is, then materialism is false *so far forth*. If it is not, then both the fact that I make the comparison and the result I arrive at is the product some purely physical process occurring in my brain which makes no essential reference either to what is being compared or to the comparison itself, considered as mental acts or contents. Once again, these play no role in the process, which is wholly determined, from first to last, by purely physical events occurring in the brain.

 Supposing materialism to be true, then, it turns out, then, that I do not know what I am thinking after all, at least as the standard account has it. Indeed, even my claim that it *seems* to me that I am thinking such-and-such, since this reports the putative content of a mental state putatively directly apprehended by me, casually depends on some state of my brain that I do not apprehend as such. In that case, I do not know even so much as the fact *that* I am thinking, *even if* and *even when* I am. Neither, then, do I possess the certainty about these subjective facts that they appear to me to possess, or the immunity from error I suppose them to grant me when I apprehend them clearly and distinctly. On the other hand, it is *simply a fact* that I do know what I am thinking, and thus that I am thinking, with incorrigible certainty when I clearly and distinctly apprehend my own acts of thought, and thus know this with greater certainty than I could know *any* empirical, scientific theory no matter how apparently well-confirmed. Given this, any conflict between the standard picture I have sketched above and the supposed results of, say, neuroscience, have to be resolved in *favor* of the standard picture, given its greater certainty and evidence, and thus those results accommodated to the standard picture rather than taken as proof against it.

**Further Inconveniences of Materialism** I suspect that few committed to materialism are likely to agree with the conclusion I drew in the last sentence, and are likely to claim that, if the standard picture conflicts with the apparent results of neuroscientific investigation, it is the standard picture, not neuroscience, that must be put aside. What is it, after all, but a palpable bit of introspective “folk psychology” of the sort that a truly scientific approach to consciousness, the mind, and cognition is intended to supersede? Whatever difficulties appear to attend the materialist program at the current moment, we can continue to look forward to that day (which never seems to get any closer) when it will finally triumph. However, if the argument of this paper is correct, these sanguine hopes have no prospect at all of realization.

 First, a few home truths. If we are scientific realists, we suppose that natural science is concerned to investigate the natural world, a realm of real things existing independently of our awareness of it. The goal of natural science is to acquire substantive truths about this realm of objects. These truths are contingent truths, and so cannot be acquired *a priori*, through some sort of armchair reflection. Instead, we investigate the natural world through observation guided by something like the classic scientific method, formulating and testing hypotheses through guided observation and, when possible, controlled experiment. In this way, we arrive at knowledge of, or at least well-confirmed beliefs about, the natural world. Natural science, then, also involves the exercise of discursive reason, including constructive imagination, memory, and deductive and inductive inference. Since its results are not knowable in advance, natural science requires, and is an example of, theoretical inquiry and thus presupposes the cognitively necessary conditions for the possibility of such an enterprise.

 The role of the aforementioned cognitive faculties, especially sense perception, is crucially important in this project of theoretical inquiry. Science can neither proceed nor succeed without the use of these cognitive faculties. More than this, these faculties have to be *reliable*, i.e. have a general tendency, when properly employed within their proper limits, to lead to the goal of theoretical inquiry – objective truth for its own sake. Sense perception, memory, judgment and inference are all required for natural science and must be reliable if we are to be even so much as capable of theoretical inquiry, whether scientific or otherwise. Indeed, in a certain sense, we have to take the reliability of our cognitive faculties for granted. Further, we are justified in doing so, since any challenge to the reliability of these cognitive faculties would have to employ them, and thus suppose them to be reliable so far forth, which would thereby undermine any such challenge before it was even formulated. *Pace* Hume, it is not possible for there to be any rational argument that undermines reason since any such argument undermines itself in undermining the very faculties we have to use in order to evaluate it. Therefore, we cannot seriously entertain any such argument in any event, since to do presupposes that it might be the case that we are in no position to do precisely that. As such, we could never have compelling reason to accept its conclusion, even if the argument was sound and its conclusion true.

 Of course, it does not follow from this that this assumption is itself *substantively* true. A lunatic must make the same assumption if he is to think at all, yet in his case, because he is mad, this assumption is after all false and none of his substantive beliefs either justified or justifiable given that fact. Still, neither he, nor we, can do any better.

 Nor does it follow from this, however, that our cognitive faculties are thereby made immune from every possible challenge. In some cases, substantive beliefs, apparently confirmed by theoretical inquiry, are such as to make the required employment of our cognitive faculties impossible for us if taken to be substantively true. In those cases, it is those apparently well-confirmed beliefs, not our cognitive faculties, that must give way, and the evidence for them accommodated to the necessary assumption that our cognitive faculties are reliable. For, unless those faculties are reliable, then none of our beliefs can count as well confirmed, and thus neither can the substantive beliefs that, if true, would undermine the reliability of our substantive faculties. Unless we are to countenance the possibility that reason could undermine itself, by arriving at beliefs that would make its employment in the pursuit of truth impossible or otiose, which as we have seen cannot obtain, we have to draw the line whenever we discover any such tendency in thought, and reassess its putative foundations in the evidence. To persist in these beliefs in the face of the fact that, given their truth, no one could have reason at all for believing that they were so would be to commit the fallacy of *special pleading* – exempting a cherished belief from the sort of critical scrutiny that one would recognize to be perfectly legitimate in any relevantly similar case.

 We have already seen that materialism, as characterized above, is problematic in this regard. Where our putative apprehension of our individual mental states, their properties, and their contents are concerned, materialism severs the connection between those putative apprehensions and the production of our subsequent judgments and beliefs concerning their objects. This leaves them no role to play in explaining those judgments, this being fully accounted by the operation of purely physical causes operating in the brain. In the same way, it rules out our putative apprehensions from playing any role the justification of those beliefs as well, by leaving no room for those apprehensions to have any influence, as such, on the acquisition or retention of those beliefs through rational assent to judgment.

 More than this, it fragments what seem to be an extended series of related thoughts (such as those involved in making inferences or interpreting data and experimental results) into merely accidental collocations of such thoughts when taken in relation to their non-mental, purely physical causes existing in the brain. What we experience as content-relevant, logically structured, continuous, and internally related lines of reflection in thought turn out to be merely the correlates of non-mental, purely physical causes existing in the brain, related if at all by logically contingent, external relations of efficient causality governed solely by mechanical forces and laws of nature. If materialism as I have characterized it is true, the aforementioned experience is surely an illusion in relation to the proffered explanation. Our conviction, which forms a significant part of the standard account of what rational thought and theoretical inquiry consist in, i.e. it is the relations of content-relevance and logical relations between propositions that guide our thought toward the theoretical truth, must be regarded as false if materialism is true. The real, neurophysiological explanation of what is going on when we reason (etc.) involves only the operation of non-mental, purely physical causes existing in the brain (etc.) making no essential reference to anything else in its explanation of my line of thought. Given this explanation, none of those features of my thoughts that I take so seriously have any role at all to play in the explanation of my reasoning, or on what in the end I believe. Therefore, if materialism is actually true, no one ever has, or ever could, have a belief that was actually based in any significant way on any apprehension, judgment, inference, or empirical evidence. That is to say, no one ever has, or ever could, have a rational belief of any kind.

 The implications of these results for natural science, conceived of as a form of theoretical inquiry, are obvious and very serious indeed. Science recommends itself to us on the authority of its capacity to provide us with objective truth about the natural world. Yet, if materialism is true, we are at a loss to either know or justify that claim on the basis of any sort of proof or rational evidence. After all, our ability to know or justify *any* claim must ultimately depend on our ability to apprehend the presence or absence of the relevant sort of rational support on the part of any reasons that may be offered in favor of any claim and the claim they are intended to justify. Given the truth of materialism, however, such apprehensions can play no essential role as such in the production of any of our beliefs, this being wholly the consequence of the operation of purely physical causes existing in our brains. At best, they merely attend or supervene upon the brain states to which they are to associated and possess no powers of their own by means of which they could contribute either to the formation, direction, or justification of the beliefs we are thereby caused to acquire. This same account, of course, has to be applied to science itself and to neuroscience as well as one of the branches of science, if materialism is true. On that account, no scientist, or even neuroscientist, has ever held any belief on the basis of observation, reasoning, or the use of rational procedures such as experimentation. Instead, purely physical processes occurring in their brains, processes that have led to the production of certain brain states correlated with what the standard picture would call occurrent beliefs, have produced all of their scientific beliefs. However, neither these beliefs themselves, nor any of their conscious antecedents, owe anything to the putative apprehensions and mental processes of observation, inference, and experimental confirmation that preceded them in consciousness considered as such. Considered in relation to the purely physical causal processes occurring in the brain to which materialists suppose them to be either reducible or wholly dependent upon considered as such, that we experience these processes as episodes of scientific investigation and discovery is neither here nor there. Indeed, as far as we can know (or even have any reason to believe on the standard picture) the connection here is purely fortuitous and accidental.

 One might want to challenge this seemingly deadly conclusion on the ground that physical processes of this kind occurring in the brain could *physically realize* valid deductive reasoning or the proper scientific procedure for arriving at the objective truth about the natural world. While this is perhaps conceivable (if anything can count as conceivable if materialism is true – an difficulty I will not pursue here), this could only be a contingent fact about any brain process, one that could not be revealed by the investigation of the brain, its structures, or processes considered as such. Only some sort of correlation between certain kinds of brain processes and the corresponding mental processes could possibly establish this, and there are insuperable difficulties of an *a priori*, conceptual sort that prevent us from even making the attempt if materialism is true. First of all, in order for us to make these correlations, it is required that we both apprehend our mental processes and states as well as their properties and contents, and that this apprehension play some *independent* role in the formation of our judgments and beliefs about what those processes, states, properties, and contents are. As we have seen, however, the operation of purely physical causal processes in the brain preempts any such influence if determinism is true. So no such correlation could be securely established on the subjective side of the equation.

 Second, if materialism is true, the scientific project of attempting to investigate and confirm the existence of such a correlation, itself an example of theoretical inquiry must be physically realized by some purely physical process occurring in the brains of the researchers themselves. This purely physical process will have a complete description according to which each stage in the that process and each of its elements – the brain events and states composing it – will have been the product of previous stages in that process in accordance with the laws of physics. From the perspective of this description, its outcome will have been completely determined by, and thus predictable from, its antecedents, which provide the physically necessary and sufficient conditions for its occurring/existing. In that case, on the assumption that materialism is true, the relation of this process of inquiry (as understood in terms of the standard picture) will be just as accidental and fortuitous in relation to the physical process that supposedly realizes it as that of any other exercise of theoretical inquiry. Its putative results, regardless of how well confirmed they may appear to us to be (and this appearance, after all, will simply be the consequence of the operation of physical causes as well, rather than the exercise of reason as such) will be no more well-grounded than any other putative exercise of reason in theoretical inquiry. There will thus be no way to know that this example of theoretical inquiry “physically realizes” a rationally justified result.

 Thirdly and finally, we have no direct access to the physical world, its processes, states, or properties. All of our musings about the world of nature, understood as a realm of physical objects, is mediated by sense perception, imagination, memory, and reasoning. In turn, mental states and processes occurring in consciousness constitute each of these cognitive faculties. If we are even to investigate the brain, for example, we have to do so using the senses, imagination, memory, and reasoning, since these are the sources of our data and the very faculties that we must use in order to interpret and arrive at well-confirmed beliefs about the brain. However, as we have seen, if materialism is true, there is no role for any of these to play in the production or justification of any of our beliefs, including our scientific beliefs about the brain. Once again, the production of these beliefs will have a complete explanation in terms of the operation of purely physical causes existing in the brain wholly subject to the laws of physics. As such, if materialism is true, it will not be possible for us even to know anything about the brain itself, if knowledge is anything like what the standard account takes it to be. In that case, the correlation will not be possible even on the side of its supposed object.

**The Autonomy of Reason and the Need for an Immaterialist Alternative** Unless the apprehension of our own mental states, their properties, and their contents is able to play some role in the production of our judgments and the justification of our beliefs, rational belief and knowledge, including substantive knowledge of the truths about the natural world will not be possible. If materialism is true, however, it appears that there is no prospect of this; not even knowledge of the brain itself is possible if thought is nothing but, or wholly dependent on, purely physical processes occurring in the brain. The lesson we must learn, then, is that knowledge of substantive truth, of whatever kind, is only possible if my apprehension of my own mental states, their properties, and their contents *as such* are capable of contributing to the production of my judgments and the justification of my beliefs. In other words, materialism (as I defined it above) must be false if knowledge is to be possible. However, since knowledge, and in particular knowledge of my own mental states, their properties, and their contents is *actual*, so too is it possible. Therefore, materialism is actually false.

 To put it another way, one of the necessary conditions for knowledge is the *autonomy of reason* in theoretical inquiry, which rules out any sort of naturalistic, efficient causal explanation of its functioning, and in particular, in the explanation and justification of our beliefs. Instead, reason must be capable of directly apprehending our mental states, their properties, and contents. Among these properties are those logical properties by means of which mental states and their contents are related to each other in a manner relevant to their truth, evoking spontaneous judgment, deductive and inductive inference, and by means of these arriving at justified, true beliefs about substantive matters of fact. Since this autonomous use of reason requires that it operate, in its functioning, independently of the influence of non-rational causes, such as those involved in the production of brain states and processes considered as such, mind must be so conceived, at least in its cognitive operations. If that is so, mental states (etc.) cannot be conceived as either nothing but or as wholly dependent on the brain states with which they are associated. The mind, then, cannot be the brain, or something wholly dependent for its operations on the brain. It must be something more than this, something with its own characteristic operation that it exercises independently of anything going on in the physical world. In other words, if there is knowledge, then some form of mind/body dualism must be true. But there is knowledge. Therefore, some form of dualism, emergentism, or idealism must be true and, at any rate, materialism as characterized above must be false.

1. See the essay “Am I Thinking?” in *The Practical Cogitator*, edited by Charles P. Curtis, Jr. and Ferris Greenslet, Boston, Houghton Mifflin, 1945, p. 1. According to novelist Nathanial Benchley, when his father (humorist Robert Benchley) died suddenly, a copy of this book, which the elder Benchley had just begun reading, was found on his person with the following marginal note written next to the title of this essay: “No! – and what if you were?” Neither the essay nor comment was intended to be philosophical. Nevertheless, however unintentional, there is a sad commentary on contemporary philosophy of mind to be read in this brief exchange. [↑](#footnote-ref-1)
2. See Robert Pasnau, *Theories of Cognition in the Later Middle Ages*, New York, Cambridge University Press, 53-4. [↑](#footnote-ref-2)