Theism

John Stuart Mill

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[Brackets] enclose editorial explanations. Small ·dots· enclose material that has been added, but can be read as though it were part of the original text. Occasional •bullets, and also indenting of passages that are not quotations, are meant as aids to grasping the structure of a sentence or a thought. Every four-point ellipsis . . . indicates the omission of a brief passage that seems to present more difficulty than it is worth.—The division into five Parts is Mill's; the further subdivision is not.

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Part 1: Introduction and Arguments

The contest that has gone on for ages between believers and unbelievers in natural and revealed religion has varied considerably in its character from age to age, as permanent contests always do. The way the debate is conducted these days, at least in the higher regions of controversy, makes it look very different from how it was in the 18th and early 19th centuries. One feature of this change is so obvious that everyone agrees about it, namely the gentler spirit in which the debate is conducted on the part of unbelievers. The intolerance of the believers had provoked a reaction in the other side, a violence of tone and spirit; but that has pretty much exhausted itself. Experience has lessened the non-believers' ardent hope for the regeneration of the human race by merely negative doctrine—by the destruction of superstition. [Mill is about to use 'philosophical' to mean something like 'scientific', with this understood in a broad sense.] The philosophical study of history, one of the most important creations of recent times, has enabled us to evaluate impartially the doctrines and institutions of the past, looking at them from a relative instead of an absolute point of view—seeing them as incidents of human development that it's no use grumbling about and that may deserve admiration and gratitude for their effects in the past, even if we don't think they can render similar services to the future. And among people who reject the supernatural, the better educated ones now regard Christianity (or theism) as •something that used to be of great value but can now be done without— rather than, as they did formerly, as •something that was misleading and noxious from the outset.

Along with this change in the moral attitude of thoughtful unbelievers towards the religious ideas of mankind, a corresponding difference has shown up in their intellectual attitude. The war against religious beliefs was conducted in the last century principally on the ground of common sense or of logic; in the present age it is conducted on the ground of science. The progress of the •physical sciences is thought to have established, by conclusive evidence, matters of fact that can't be squared with the religious traditions of mankind; while the •science of human nature and history is thought to show that the creeds of the past are natural growths of the human mind at particular stages in its development, destined to be replaced by other convictions at more advanced stages. As the debate has progressed, this last class of considerations—•i.e. the view of religious beliefs as matters of psychology and history•—seems to have gone so far as to push aside the issue about whether such beliefs are true. Religions tend to be discussed, at least by those who reject them, less as intrinsically true or false than as products thrown up by certain states of civilization—products which, like the species of organisms produced in a given geological period, eventually die out because the conditions are no longer right for their survival.

This tendency in recent thought to look on human opinions (not only religious ones) primarily from an historical point of view, as facts obeying laws of their own and requiring, like other observed facts, an historical or scientific explanation, is a very good thing; not only because it draws attention to an important and previously neglected aspect of human opinions, but also because it has a real though indirect bearing on the question of their truth. If you have an opinion on some controversial subject, you can't be completely sure that you are right unless you can explain why some people hold the opposite opinion. (I am assuming here that you are a cautious thinker.) You won't be satisfied with the 'explanation' that the opposing opinion is a product of •the weakness of the human understanding, because you won't comfortably assume that you have a smaller share of •that infirmity than the rest of mankind so that \cdot in any disagreement \cdot your opponents are more likely to be wrong than you are. As you examine the evidence, one of the data of the case—one of the phenomena to be explained—is the fact about what other people, and perhaps even mankind in general, do in fact believe. [We are about the meet the word 'presumption', which is used often in this Essay in the sense of 'weight of evidence'.] The human intellect is weak, but it isn't essentially perverted; so when many people hold a certain opinion there is a certain presumption that it is *true*; and someone who rejects it needs to propose some •other real or possible cause for its being so widespread—·I mean, •other than its being true·. This matter is specially relevant to the inquiry into the foundations of theism, because the argument for the truth of theism that is most commonly invoked and confidently relied on is *the general assent of mankind*.

But while we should give full value to this •historical treatment of the religious question, we oughtn't to let it push aside the •theoretical approach, •i.e. the issue of religion's truth•. The most important issue about an opinion on a big subject is *whether it is true or false*; and for us that comes down to the issue of *whether it is supported by strong enough evidence*. The subject of religion *must* sometimes be treated as a strictly scientific topic, with the evidence for and against it being tested by the same scientific methods, and on the same •scientific• principles, as are involved in testing any theory in physical science. So I shall take this to be granted:

The legitimate conclusions of science are entitled to prevail over any opinions that conflict with them, however widely those opinions may be held; and rules and standards of scientific evidence that have become established through two thousand years of successes and failures are applicable to all subjects on which knowledge can be had.

On that basis, let us now consider what place there is for religious beliefs on the platform of science; what scientifically respectable evidence they can appeal to, and what basis there is for the doctrines of religion considered as scientific theses.

In this inquiry I shall of course begin with natural religion, the doctrine of the existence and attributes of God.

Theism

Though I have defined the problem of natural theology as the question of the existence of God or of a god, rather than of gods, there is abundant historical evidence that the belief in •many gods is much more natural to the human mind than the belief in •one author and ruler of nature; and that the latter more elevated belief is a relatively artificial product that can't be reached without a

good deal of intellectual development, except in those who had it drummed into them by early education. For a long time it seemed forced and unnatural to suppose that the variety we see in the operations of nature could all be the work of a single will. To the untaught mind, and to all minds in pre-scientific times, the phenomena of nature seem to be the result of utterly different kinds of forces, each going its own way quite independently of the others. It was entirely natural to attribute these to conscious wills, .but that wasn't a step towards monotheism, because. the natural tendency is to a *separate* independent will for *each* force that is important enough to have been noticed and named. Polytheism as such has no inherent tendency to transform itself spontaneously into monotheism. It's true that in most polytheistic systems the god whose special attributes inspire the most awe is usually supposed to be able to control the other gods; and even in Hinduism, which may be the most degraded [Mill's word] of all polytheistic systems, the worshipper piles monotheistic-sounding descriptions—ones customarily used by believers in a single God onto the god who is the immediate object of his worship at that moment. But there's no real acknowledgement of one ·divine· governor. Every god normally rules his particular part or aspect of the world, though there may be a still stronger one who could, if he chose, frustrate the purposes of the inferior god. There could be no real belief in one creator and governor until mankind had begun to see the apparently confused phenomena surrounding them as a system that could be viewed as the working out of a single plan. This conception of the world may have been anticipated (though less frequently than is often supposed) by individuals of exceptional genius; but it couldn't become common until after a long-drawn-out development of scientific thought.

There's no mystery about *how* scientific study operates to put monotheism in place of the more natural polytheism. The over-all effect of science is to show, by accumulating evidence, this:

> •Every event in nature is connected by laws with one or more facts that preceded it, i.e. depends for its occurrence on some antecedent; but not so strictly on *one* antecedent that it couldn't have been blocked or modified by *others*. •These distinct chains of causation are entangled with one

another; the action of each cause, though it conforms to its own fixed law, is interfered with by other causes in such a way that every effect is truly the result of the totality of *all* the causes in existence rather than of only *one*.

(If the mention of all the causes in existence seems to you extravagant, consider this ·: Nothing takes place in the world of our experience without spreading a perceptible influence of some sort through a greater or less portion of Nature, and . for all we know to the contrary it may make every part of the world slightly different from what it would have been if that event hadn't occurred. If that is so, then *each* place has events that affect what happens at each other place, from which it follows that what happens at any place is affected by events at every other place.) Now, when men have acquired the double conviction •that every event depends on antecedents, and •that the occurrence of any event required a working-together of many antecedents, and perhaps of all the antecedents in Nature, they are led to believe that no one event-let alone all the events of some one kind-could be absolutely preordained or governed except by a Being who held in his hand the reins of •all Nature and not merely of •some part or aspect of it. Or, anyway, if a plurality of gods is still supposed, they must be assumed to be so collaborative in their actions and so agreed in their wills that there is no significant difference between this kind of polytheism and monotheism.

The reason, then, why monotheism may be accepted as the representative of theism in general is not so much that •it's the theism of all the more developed portions of the human race as that •it's the only theism that can claim to have any scientific basis. Every other \cdot religion, i.e. every other \cdot theory of the government of the universe by supernatural beings, is inconsistent with one or other of the two most general results of science—that •the world is governed through a continual series of natural antecedents according to fixed laws, and that •each of these series depends on all the others.

So if we start from the scientific view of nature as a single connected system, held together not •like a web composed of separate threads passively lying in certain relations to one another, but rather •like an animal body, an apparatus kept going by perpetual action and reaction among all its parts—the question to which theism is an answer is at least a very natural one, and arises from an obvious lack in the human mind. So far as our means of observation permits, we are accustomed to finding for each individual event y a beginning, and where there's a beginning we find an antecedent event x that we call a 'cause', an event such that if x hadn't occurred y wouldn't have occurred either. Given this finding, the human mind was absolutely bound to ask itself a question about •the whole system of which these particular phenomena are parts:

Did •it also have a beginning? If so, did that beginning have something antecedent to it, and thus antecedent to the whole series of causes and effects that we call 'Nature'—something such that if *it* hadn't existed *Nature itself* wouldn't have existed?

From as far back as we can trace the history of thought, this question has always been answered by some hypothesis or other. The only answer that has given satisfaction for long periods is theism.

Looking at the problem merely as a scientific inquiry, it breaks down into two questions. (1) Is the theory that explains the origin of all the phenomena of nature in terms of the will of a creator consistent with the established results of science? (2) If it is consistent with them, how will the case for it stand up to being tested by the principles of evidence and rules for belief that we have found, through our long experience of scientific inquiry, to be indispensable guides?

There is one version of theism that is consistent, another that is radically inconsistent, with the most general truths that we have learned through scientific investigation.

The one that is inconsistent is the conception of a god governing the world by •acts of a variable will. The one that is consistent is the conception of a god governing the world by •invariable laws.

Primitive people have thought, and common people still do think, of God as ruling the world by special decrees, tailored to individual occasions. Although he is supposed to be omniscient as well as omnipotent, they think of him as not making up his mind until the moment of an action; or at least not making it up

so conclusively that his intentions can't be altered by appropriate prayers right up to the very last moment. It will be hard to reconcile this view about how God runs the world with the foreknowledge and perfect wisdom that he is credited with having; but I shan't pursue that problem. The point I want to make here is that the view in question contradicts what experience has taught us about how things actually happen. The phenomena of Nature do take place according to general laws. They do originate from definite natural antecedents. So if their ultimate origin is derived from a will, it must be a will that established those general laws and willed those antecedents. If there is a creator, his intention must have been that events should depend on antecedents and be produced according to fixed laws. But once this is conceded, nothing in our scientific experience is inconsistent with the belief that those laws and sequences are themselves due to a divine will. And we don't have to suppose that the divine will exerted itself once for all, •putting into the system a power that enabled it to go on by itself and then •leaving it alone. Nothing in science clashes with the supposition that every actual event results from a specific act of the will of the presiding power, provided that this power conforms its particular acts of will to general laws it has laid down. It has commonly been held that •this hypothesis tends more to the glory of God than •the supposition that the universe was made so that it could go on by itself. But some very eminent thinkers (of whom Leibniz was one) have protested against downgrading God by likening him to a clock maker whose clock won't go unless he puts his hand to the machinery to keep it going. We aren't concerned here with any such issues. We are approaching the subject from the point of view not •of reverence but •of science; and with science both these suppositions as to the mode of the divine action are equally consistent.

But now we must pass to the next question. There is nothing to *disprove* the thesis that Nature was created and is governed by a sovereign will; but is there anything to *prove* it? What is the evidence for it like? and weighed in the scientific balance what is its value?

The evidence for theism

The things that have been cited as evidence of a Creator are of several different kinds, and they are so different that they are adapted to minds of very different descriptions; it's hardly possible that any single mind should be equally impressed by them all. The familiar division of them into $\bullet a$ priori proofs and $\bullet a$ posteriori ones indicates that when they are looked at in a purely scientific way they belong to different schools of thought. [A priori arguments for the existence of God wouldn't ordinarily count as parts of 'natural religion' or 'natural theology', which is how Mill labels his topic (see page 2). Those phrases are usually taken to refer to the support that theological beliefs can get from observing how things go in the natural world; Mill evidently understands them more broadly, as referring to any support other than what comes from divine revelation.] Unthinking believers whose belief really rests on authority give an equal welcome to all plausible arguments in support of the belief in which he has been brought up; but philosophers \cdot and scientists. who have had to choose between the *a priori* and *a posteriori* methods in general science, nearly always speak disparagingly of the other •method, i.e. the one they haven't chosen, when it appears in arguments for the existence of God. What we have to do here is to maintain complete impartiality, giving a fair hearing to both. At the same time I am strongly convinced that one of the two types of argument is in its nature scientific, while the other is not only unscientific but is condemned by science. The scientific argument is the one that reasons from the facts and analogies of human experience, as a geologist does when he infers the past states of our planet, or as an astronomer does when he draws conclusions about the physical composition of other planets and stars. This is the *a posteriori* method, the principal application of which to theism is the so-called 'argument from design'. The type of reasoning that I call unscientific, though some thinkers regard it too as a legitimate mode of scientific procedure, is the one that infers external •objective factual conclusions from •ideas or convictions of our minds. In calling this unscientific I'm not relying on any opinion of mine about the origin of our ideas or convictions. Indeed the question of where our idea of God comes from is irrelevant to my present point ; whatever its origin, it is just an *idea*, and all you can prove from an idea is an

idea, not an objective fact. (Unless we suppose—in line with the book of Genesis—that the objective fact has been handed down by tradition from a time when there was direct personal contact with God; and in that case the argument is no longer *a priori*!) The belief that an idea or a wish or a need proves the reality of a corresponding object—·something that the idea is an idea *of*, something that satisfies the wish or meets the need·—derives all its plausibility from one's *already* believing that we were made by a benign Being who wouldn't have given us a groundless belief or a want that he didn't give us the means of satisfying. So it's an obvious *petitio principii* to present the belief or want etc. to support the very belief that this argument presupposes. [The Latin *petitio principii* used to be rendered in English as 'begging the question', until recently when that phrase came to mean 'raising the question'. However labelled, it is the fallacy of presenting an argument for the conclusion that P when some

step in the argument doesn't work unless P is true.]

Still, it must be admitted that all a priori systems, whether in philosophy or religion, do profess to be based on experience, because although they claim to be able to arrive at truths that go beyond experience, they start from facts of experience-and where else *could* they start? They are entitled to consideration to the extent that experience can be shown to give any kind of support either to them or to their method of inquiry. Many arguments that are offered as a priori are really of a mixed nature, being to some extent a posteriori. Often they can be said to be a posteriori arguments in disguise, with the *a priori* considerations acting chiefly to make some particular a posteriori element in them count for more than it should. This is emphatically true of the argument for theism that I shall first examine, the *·*argument from the supposed · necessity of a first cause. For this really has a wide basis in experience, our experience of the universality of the cause-effect relation among the phenomena of nature, yet theological philosophers haven't been content to let it rest on that basis but have affirmed causation—·by which I mean the thesis that whatever is the case is caused to be the case — as a truth of reason, something one can see to be true just by thinking about it.

Argument for a first cause

The argument for a first cause is presented as a conclusion from the whole of human experience. Everything that we know (it is argued) had a cause, and owed its existence to that cause. So how can it *not* be the case that •the totality of everything we know, which we call •'the world', has a cause to which it owes its existence?

But the fact of experience is not that •everything we know gets its existence from a cause, but only that •every event or change does so. Nature has a permanent element, and also a changeable one: the changes are always the effects of previous changes, but so far as we know the permanent existences are not effects at all. Admittedly we often say not only of events but of objects that they are produced by causes—e.g. 'Water is produced by the union of hydrogen and oxygen'. But all we mean by this is that the object's *beginning to exist* is the effect of a cause; and a thing's beginning to exist is not an •object, but an •event. You may want to object: 'The cause of a thing's beginning to exist can properly be called the cause of the thing itself.' I shan't quarrel with you about the form of words, .but my point still stands. What begins to exist in an object is what belongs to the •changeable element in nature-the outward form and the •properties depending on mechanical or chemical combinations of its component parts. Every object also has another element that is permanent, namely the specific elementary substance or substances of which it consists and their •inherent properties. [Mill is contrasting •the properties of a thing that result from how its parts are put together with •the properties a thing has as its *basic* nature, not derived from, or an upshot of, anything.] These are not known to us as beginning to exist: within the range of human knowledge they had no beginning, and therefore no cause; though they themselves are causes or collaborating causes [Mill says 'causes or con-causes'] of everything that happens. So experience offers no evidence—not even ·suggestive· analogies-entitling us to take a generalization based only on our observation of the changeable and extend it to the apparently unchangeable.

As a fact of experience, then, causation can't legitimately be extended to the material universe itself, but only to its •changeable

phenomena; there is no exception to the generalization that •*these* all have causes. But what causes? The cause of every change is a previous *change*; and it has to be a change, because if there were no *new* antecedent there wouldn't be a *new* consequent. If the state of affairs that brings the phenomenon into existence had existed always or for the past year (say), the effect would also have existed always or been produced a year ago. It is thus a necessary part of the fact of causation as we experience it that the causes as well as the effects had a beginning in time, and were themselves caused. So it would seem that our experience, instead of providing an argument for a first cause, conflicts with it, and that the very essence of causation—as it exists within the limits of our knowledge—is incompatible with a first cause.

But we must look into this matter in more detail, and analyse more closely the nature of the causes that mankind have experience of. For it might turn out that although all causes have a beginning, there is in all of them a permanent element that had no beginning. In that case, this permanent element might fairly be called a 'first cause' or 'the universal cause'---the cause of *everything*.—because without being able to be the whole cause of anything, it enters as a collaborating cause into all causation, *·i.e.* as a partial cause of everything *·*. Now it happens that the latest conclusion that the scientists have reached, on the basis of converging evidence from all branches of physical science, does point to a conclusion of this sort so far as the material world is concerned. Whenever a physical phenomenon is traced to its cause, that cause turns out under analysis to be a certain quantity of *force* combined with certain collocations—·i.e. combined with certain facts about how particles of matter are spatially inter-related. And the last great generalization of science, the •principle of • conservation of force, teaches us that •the variety in the effects depends partly on •the amount of the force and partly on the •variety of the collocations. [By 'the last great generalization', Mill may mean that there will never again be any new physical doctrines with such scope: but may instead mean merely that the conservation-of-force thesis is the latest such doctrine.] The force itself is essentially one and the same, and nature contains a fixed quantum of it, which (if the theory is true) is never increased or lessened. So we find here, even in the

changes of material nature, a *permanent* element that seems to be just the thing that we were looking for. If we have to award the role of first cause (or cause of the material universe) to anything, we'll apparently have to award it to this quantity of force. For all effects can be traced back to it, whereas so far as our experience can tell us *it* can't be traced back to anything. We can trace back its transformations, and the cause of any transformation of a force always includes the force itself-the very same quantity of forcein some previous form. [This use of 'quantity' requires care. The statement 'I poured into the flask the very same quantity of water that I had taken out' could mean (1) that I poured in the same amount—a pint, or gallon or what-not—that I had taken out or (2) that I poured into the flask the very same water-the same aggregate of water-molecules-that I had taken out. Mill is here using 'very same quantity' with meaning (2). Since force doesn't consist in anything like molecules, there may be a problem about how to distinguish (2)-same-force from (1)-same force; but right now the point is that (2) is what Mill means. He earlier called it not a 'quantity' but a 'quantum', and he will soon speak of a 'portion' of force.] So it would seem that if we are to look to experience for support for the doctrine of a first cause—i.e. of a primeval and universal element in all causes—the first cause will have to be force.

But that doesn't bring us to the end of the question-far from it. The crucial part of the argument is the one we have just reached. For it is maintained that *mind* is the only possible cause of *force*, or rather perhaps that mind is a force, and that all other force must be derived from •mind because •it is the only thing capable of originating change. This is said to be the lesson of human experience. In the phenomena of inanimate nature, the force at work is always a pre-existing one—a force that isn't *originated* ·in the event in question, but only transferred. One physical object x moves another y by giving to y the force by which x itself has first been moved. The wind passes on to the waves, or a windmill, or a ship, part of the motion that it has received from some other agent. Only in the voluntary action \cdot of a thinking being \cdot do we see a start of motion, an origination of motion; all other causes appear incapable of thus originating motion. So experience is in favour of the conclusion that every episode of motion that ever occurred owed its beginning to this one ·kind of · cause, voluntary agency—if not the agency of man then the agency of some more

powerful being.

This is a very old argument. It occurs in Plato; not (as might have been expected) in the *Phaedo*, where the arguments are ones that would now be dismissed as having no weight, but in his last work, the *Laws*. And metaphysicians who defend natural theology still regard it as one of the most telling arguments they have.

The first point to be made is this: if there is truth in the doctrine of the conservation of force—i.e. the constancy of the total amount of force in existence—this doctrine doesn't change from true to false when it reaches the field of voluntary agency! The will doesn't create force, any more than other causes do. It does originate motion. but its only way of doing that is to •take a portion of force that already exists in some other form and •convert it into motion. [(1) In the next sentence, the words 'evolved' and 'liberated' are Mill's. (2) What he says about a 'fund' of force on which bodily processes write 'drafts' is a banking metaphor. The portion of force liberated by nutrition is put into a bank account, and bodily processes write cheques on it.] We know that the main and perhaps only source from which this portion of force is derived is the force evolved in the processes of chemical composition and decomposition that constitute nutrition; the force so liberated becomes a fund upon which every action of the muscles (and even every action of the nerves, such as what happens in the brain when a person thinks) is a draft. According to the best lights of science, it is only in this sense that volition is an 'originating cause'. So volition doesn't qualify as a first cause, because force must in every instance be assumed as prior to any volition; and our experience doesn't convey the slightest hint that force itself is ever created by a volition. As far as we can tell from our experience, force has all the attributes of something that is eternal and uncreated.

But this still doesn't close the discussion. Our experience leads us to judge that •will never originates •force, but what about the thesis that •force never originates •will? If we become sure that *that* is true, we'll have to regard will as an agency that is eternal along with force. Furthermore, if these two things are true:

•will can originate (not force itself, but) the transformation of force from some other of its forms into mechanical motion, and •human experience doesn't show us any other agency that can transform force in this way, then we still have an unrefuted argument for the conclusion that a *will* was the originator (not of •the universe, but) of •the cosmos, i.e. the order of the universe.

But the basis laid out for that argument doesn't fit the facts, ·because the second of the two displayed propositions is false. Anything volition can do in the way of creating motion out of other forms of force, and generally of evolving hidden force into something visible, can be done by many other causes as well. For example:

chemical action, electricity, heat, the presence of a gravitating body

-all these cause mechanical motion on a much larger scale than any volitions that we know about from our own experience. (I repeat. for emphasis. when any of these things causes motion. it is hardly ever a mere passing on of motion from one body to another, but rather a transforming into motion of some force that existed in some form other than motion.) This means that volition's privilege of originating motion is shared with many other things. It's true that when any of those other agents •give out force in the form of motion, they must first have •received that force from elsewhere—but that is equally true of the force that volition transforms into motion. We know that this force comes from an external source, namely the chemical action of the food and air. The force by which the events of the material world are produced circulates through all physical agencies in a never-ending though sometimes interrupted stream. Our topic here, of course, is how volition affects the material world; we aren't concerned with the will itself as a mental phenomenon, as in the much-debated question: 'Does the will determine itself (which would mean that it is "free" or is it determined by causes •other than itself ?' Our present question concerns only the •effects of volition, not its •origin. •There is, however, one way in which a proponent of freedom of the will might try to make his view about that relevant to the issue we are now discussing, as I shall now explain. We are confronting the assertion that physical nature must have been produced by a will, because will is the only thing we know that has the power of originating the production of phenomena. I have pointed out that on the contrary any power over phenomena that

will has is shared—as far as we can tell—by other and much more powerful agents, which therefore also 'originate' in the only sense in which will originates. Thus, our experience gives us no basis for claiming that volition has a special role, not shared by other natural agents, as a producing cause of phenomena. Someone who strongly believes in the freedom of the will •might try to get into the act at this point: he• might say that volitions are themselves uncaused, which makes them—•or a special *one* of them•—uniquely fit to be the first cause, the cause of everything. But even if we grant that •volitions are not caused, •the properties of matter are also uncaused (so far as our experience discloses), and have an advantage over any particular volition, namely that they are eternal (so far as our experience can show). I conclude that theism, in so far as it rests on the necessity of a first cause, has no support from experience.

Some people, lacking support from experience, will say that the necessity of a first cause is known by intuition—•meaning that when you think about it accurately you'll find it self-evident that there must have been a first cause•. Well, I say that in this discussion there is no need to challenge their premises; because even if we grant that there must have been a •first cause, I have shown that several agencies other than will can lay equal claim to •that title. Of the things that might be said at this point •by someone wanting to defend the unique claim of *will* to be the first cause•, there is just one that I ought to discuss. It is the claim that among the facts of the universe that need to be explained there is the fact of *mind*; and it is self-evident that the only thing that could have produced mind is mind. •This is an attempt to put the spotlight back on volition, sidelining its rivals such as chemical action, electricity and so on•.

What are the special features of mind that indicate that it must have arisen from intelligent planning? That question belongs to a different part of this inquiry [starting at page 11], \cdot and needn't be gone into here \cdot . Our present topic simply isn't advanced by the thesis that the mere existence of mind requires, as a necessary antecedent, another greater and more powerful mind; this merely pushes us one step back, because the •creating mind needs another mind to be the source of its existence just as much as the •created mind does. Bear in mind that we have no direct knowledge (at least apart from ·divine· revelation) of a mind that is even *apparently* eternal, in the way that force and matter are eternal; as far as the present argument is concerned, an eternal mind is simply an hypothesis to account for the minds that we know to exist. Now, an hypothesis shouldn't be accepted unless it at least removes the difficulty and accounts for the facts. But one doesn't account for mind when one says that it arose from a prior mind. The problem remains unsolved, the difficulty not lessened but increased.

Here is something that might be said in objection to this:

It is a matter of *fact* that every human mind is caused to come into existence, because we know that such minds have beginnings in time. We even know—or have the strongest grounds for believing—that the human species itself had a beginning in time; for there is a vast amount of evidence that •our planet was once a place where animal life was impossible, and that •human life began much more recently than animal life. So we should face the fact that there must have been a cause for the start of the first human mind, indeed a cause for the very first germ of organic life. No such difficulty exists in the supposition of an eternal mind. If we didn't know that mind on our earth began to exist, we might suppose *it* to be uncaused; and it is still open to us to suppose this of the mind that we invoke to explain the existence of mind on earth.

Someone who argues in this way is shifting back into the territory of human experience, which makes him subject to its rules; so we are entitled to ask him 'Where is your proof that nothing can have caused a mind except another mind?' It's only from *experience* that we can know what can produce what—what causes are adequate to what effects. That nothing but mind can *consciously* produce mind is self-evident, because it's involved in the very meaning of the words; but we aren't entitled to assume that there can't be *unconscious* production, for that is the very point to be proved. [Mill is talking about what might be done by a being that isn't conscious, not about what might be done unconsciously by a being who is conscious.] Apart from experience, and arguing on the basis of what is called 'reason', that is on supposed self-evidence, the idea seems to be that

•no causes can give rise to products of a more precious or elevated kind than themselves.

But this conflicts with the known analogies of nature. How vastly nobler and more precious, for instance, are the higher plants and animals than the soil and manure out of which, and through the properties of which, they are raised up! All recent ·scientific· theorising tends towards the opinion that the general rule of nature involves the •development of inferior kinds of being into superior ones, the •substitution of greater elaboration and higher organization for lower. Whether or not this is right, there are in nature ever so many facts that look that way, and this is sufficient for the argument.

Now \cdot at last \cdot this part of the discussion can stop! What emerges from it is that the 'first cause' argument does no work towards establishing theism; because •no cause is needed for the existence of anything that has no beginning; •both matter and force, whatever metaphysical theory we may give of either of them, have had no beginning (so far as our experience can teach us), and •this can't be said of mind. [This is first time Mill has brought in matter in this way, though he did remark a page back that the properties of matter seem to be eternal.] The phenomena or changes in the universe have indeed each of them a beginning and a cause, but their cause is always a previous change; and the analogies of experience don't give us any reason to expect, from the mere occurrence of changes, that if we could trace the series back far enough we would arrive at a primeval volition—•a volition that was the start of all the other changes. The world's mere existence doesn't testify to the existence of a god; if the world gives indications of a god, they must come \cdot not from its mere existence but \cdot from relatively detailed facts about what goes on in the world-the details that resemble things done for a purpose—which I'll discuss later. If, in the absence of evidence from experience, the evidence of intuition \cdot or self-evidence \cdot is relied on, we can answer that if it is intuitively evident that

•mind, as mind, must have been created,

then it must also be intuitively evident that

•the Creative Mind, as mind, must have been created;

and so we are no nearer to the first cause than we were before. But if nothing in the nature of mind as such implies a creator, the minds that have a beginning in time—including all minds that are known to us through our experience—must indeed have been caused, but their cause needn't have been a prior intelligence.

Argument from the general consent of mankind

Before proceeding to the argument from marks of design, which I think must always be the main strength of natural theism, we can quickly deal with some other arguments that don't have much scientific weight but have greater influence on the human mind than much better arguments. Why? Because they're appeals to authority; and it is by authority that the opinions of most people are principally and not unnaturally governed. The authority invoked is that of *mankind generally*, especially of some of its wisest men—and most especially ones who in *other* respects conspicuously broke away from commonly accepted prejudices. Socrates and Plato, Bacon, Locke, and Newton, Descartes and Leibniz, are examples commonly cited.

For someone who in matters of knowledge and cultivation isn't entitled to regard himself as a competent judge of difficult questions, it's good advice to content himself with regarding as true •anything that mankind generally believe, and believing it for as long as they do; or •anything that was believed by the people who are regarded as the most eminent among the minds of the past. But to a *thinker* the argument from other people's opinions has little weight. It is merely second-hand evidence; all it does is to tell us to look out for the reasons on which this conviction of mankind or of wise men was based—to look out for them and then to evaluate them for ourselves. Accordingly, those who make any claim to philosophical treatment of the subject bring in this general consent mainly as evidence that the mind of man has an intuitive perception, or an instinctive sense, of deity. From the premise that

(1) the belief \cdot in God \cdot is very widespread they infer that

(2) the belief is built into our nature;

and from this they draw the further conclusion that

(3) the belief must be true.

This inference of (3) from (2) is very shaky, though it's of a kind often used by those who philosophize in terms of what is 'intuitive' or self-evident. Anyway, as applied to theism this argument begs the question [see note on page 5], because the only support it has \cdot for the move from (2) to (3) \cdot is the belief that the human mind was made by a god who wouldn't deceive his creatures.

But \cdot before that there is the inference of (2) from (1). What ground *does* the general prevalence of •the belief in God give us for inferring that •this belief is something we are born with, something built into us and not depending on evidence? Is there so little evidence-even seeming evidence-for the proposition that God exists? Is this belief so far from seeming to be based on facts that the only way we can explain it is by supposing it to be innate? We wouldn't have expected *theists* to hold that the appearances of designing intelligence in nature are not only insufficient but are not even *plausible*, and can't be supposed to have convinced either people in general or the wiser minds among them! If there are external evidences of theism, even if they aren't perfectly conclusive, why do we need to suppose that the belief in theism was the result of anything else? The superior minds to whom theists appeal, from Socrates onwards, when they professed to give the grounds of their belief in God, didn't say that they found the belief in themselves without knowing where it came from; rather, they ascribed it either to revelation or to some metaphysical argument or to those very external evidences that are the basis of the argument from \cdot the marks of \cdot design.

This may be said by way of objection: 'The belief in a god or gods is universal among (a) barbarous tribes, and among (b) the ignorant portion of civilized populations; and none of *these* people can be supposed to have been impressed by the marvellous adaptations of nature—•the apparent marks of design•—most of which are unknown to them.' I answer that (b) ignorant people in civilized countries take their opinions from the educated, and that (a) in the case of savages, if the evidence is insufficient so is the belief! Savages don't believe in the God of natural theology; *their* theism is merely a version of the crude generalization that ascribes

life, consciousness and will to all natural powers of which they can't perceive the source or control the operation. And the gods believed in are as numerous as those powers. Each river, fountain or tree has a divinity of its own. This is a blunder of primitive ignorance! To see it as the work of the supreme being, implanting in his creatures an instinctive knowledge of his existence, is a poor compliment to God! The religion of savages is fetishism [= 'the worship of trivial idols'] of the grossest kind, ascribing life and will to individual ·inanimate· objects, and trying to win their favour by prayer and sacrifice. We won't be surprised by this when we bear in mind that there's no sharp boundary line separating conscious human beings from inanimate objects. Between •such objects and •man there is an intermediate class of objects....that do have life and will, namely the •lower animals. In primitive societies •these play a very big part in human life, which makes it unsurprising that men should at first be unclear about the line separating the animate part of nature from its inanimate part. When they have observed more of nature, they come to see that the majority of outward objects have all their important qualities in common with entire classes or groups of objects that behave exactly alike in the same circumstances; and in these cases the worship of visible objects is replaced by worship of an invisible Being who is supposed to preside over the whole class. This move from the particular to the more general is made slowly, with hesitation and even with terror. We see this even today, in the case of ignorant populations—how hard it is for their experience to clear them of the belief in the supernatural powers and terrible resentment of a particular idol! It is chiefly through these terrors that the religious thoughts and feelings of barbarians are kept alive....until the theism of cultivated minds is ready to take their place. And the theism of •cultivated minds, if we take •their own word for it, is always a conclusion reached either •through arguments they regard as reasonable or •from appearances in Nature.

There's no need for me to emphasize the problems of the hypothesis of a •belief that is natural to human beings though they don't all have it, or of an •instinct that isn't universal. Of course it is conceivable that some men might be born without a particular natural faculty, as some are born without a particular sense—•it

might be that some men lack the natural instinct for religion just as some men are born blind. But when this is \cdot thought to be the case, we ought to be very careful about the evidence that it really is a *natural* faculty. •Don't think that it must always be easy to know whether some ability is natural or not, as it is indeed easy to know that our eyesight is natural. If the thesis that men can see were not a matter of observation but of theorizing; if they had no apparent organ of sight, and no perceptions or knowledge except what they could conceivably have acquired in some round-about way through their other senses, the fact that some men don't even think they can see would be a considerable argument against the theory of a ·natural· visual sense.... Anyway, not even the strongest believer in innate, natural ideas and knowledge will claim an *instinctive* status for any belief that could—this being uncontroversial-be explained by real or apparent evidence for it. In our present case \cdot of the belief in a god or gods \cdot , we have in addition to the

•force of evidence,

these other factors tending to cause men to have and retain the belief:

•various emotional or moral causes that incline men to the belief;

•the way the belief seems to answer the questions about the past that men persist in tormenting themselves with;

•the hopes that the belief opens up for the future; and also •the fears that it causes,

because fear as well as hope encourages belief. And for people with very active minds, the belief must have been supported by their perception of

•the power that belief in the supernatural provides for governing mankind, whether for their own good or for the selfish purposes of the governors.

So the general consent of mankind doesn't provide a basis for accepting, even just as an hypothesis, the status of something inherent and natural and instinctive for a belief that is so very easy to explain otherwise.

The argument from consciousness

There have been many arguments, indeed almost every religious metaphysician has one of his own, to prove •the existence and attributes of God from so-called •truths of reason that are supposed to be independent of experience. Descartes, who is the real founder of intuitional metaphysics [= 'metaphysics based on propositions claimed to be known by intuition, i.e. known as self-evident'; that's not what 'intuitional metaphysics' means these days], draws the •theistic• conclusion immediately from the first premise of his philosophy, the celebrated assumption [Mill's word] •that whatever he could very clearly and distinctly apprehend must be true. The idea of a god who is perfect in power, wisdom, and goodness, is a clear and distinct idea, so by •this principle it must correspond to a real object. This thesis:

•Any conception of the human mind proves the existence of the thing it is an idea *of* '

is a bold generalization! \cdot In fact, it is too bold \cdot , and Descartes is obliged to make it safer by cutting it back to

•Any conception of the human mind, *if it includes existence*, proves the existence of the thing it is an idea of,

·but this still leaves Descartes with his theistic conclusion ·. The idea of God implies the combination in one thing of all perfections, and existence being a perfection, the •idea of God proves his •existence. This very simple argument....is not likely to satisfy anyone these days. Many of Descartes's successors have made more elaborate though scarcely more successful efforts, trying to derive knowledge of God from an inward light, making it out to be a truth that doesn't depend on external evidence, something known by direct perception or (as they usually say) by consciousness.... It would be a waste of time to examine any of these theories in detail. While each has its own particular logical fallacies, they have one weakness in common, namely that one man can't convince other people that *they* see an object by proclaiming with great confidence that *he* perceives it! If he claimed to have a god-given faculty of vision that no-one else has been given, enabling him to know things that can't be seen by people who don't have his gift, the case might be different. Men have made such claims, and have led people to believe them; all that other people can do in such a case is to demand to see the credentials \cdot of the claim or

the person who makes it. [In the next sentence, the phrase 'the prophet' is a joking reference to the person who offers the argument to God's existence from facts about the idea of God. Actually, Mill's point here is that the person in question does *not* set up as a prophet—i.e. someone with special knowledge of God that others can't have—but maintains that the basis for his argument is available to everyone.] But in our present case no claim is made to any special gift; we are told that we are all as capable as the prophet of seeing what he sees, feeling what he feels; indeed we are told that we actually *do* see and feel what he does—and yet our utmost efforts don't make us aware in our own minds of what he says we perceive. This supposed universal faculty of intuition is merely

The dark lantern of the Spirit

Which none see by but those who bear it;

and 'those who bear it' may fairly be asked: 'Isn't it more likely that •you are mistaken about the *origin* of an impression in your mind than that •the rest of us are ignorant of the very *existence* of an impression in theirs?' [The 'dark lantern' lines are from Samuel Butler's *Hudibras*.] The logical weakness of all arguments from •the subjective notion of God to •the objective reality of God was well seen by Kant, the most discriminating of the *a priori* metaphysicians, who always kept questions about •the origin and composition of our ideas sharply separated from questions about •the reality of the corresponding objects. According to Kant,

the idea of God is 'native to' the mind in the sense that it is constructed by the mind's own laws and not derived from anything outside the mind; but this idea....can't be shown by •any logical process, or perceived by •direct apprehension, to have a corresponding reality outside the human mind.

To Kant, God is neither an •object of direct consciousness nor a •conclusion of reasoning, but a *necessary assumption*—not logically necessary, but practically necessary because imposed by the reality of the moral law. Duty is a fact of consciousness: 'Thou shalt' is a command issuing from the depths of our being, and can't be explained through any impressions derived from experience; and this command requires a *commander*, though it isn't perfectly clear whether Kant means (1) that accepting a law involves believing in a lawgiver, or only that (2) it is very desirable

that there should be a being whose will is expressed by the law. If (1) is right, the argument is based on an ambiguity in the word 'law', which may refer to •a rule to which we feel it a duty to conform or to •a law as commonly so-called, a law of the state. The two kinds of 'law' have something in common, namely that they both claim our obedience; but it doesn't follow that the rule must originate, as the laws of the land do, in the will of a legislator or legislators external to the mind. We may even say that a *feeling* of obligation that is merely the result of a command is not what is meant by 'moral obligation'. On the contrary, 'moral obligation' presupposes something that the *internal* conscience bears witness to as binding in its own nature. If God also commands it, he is conforming to it and perhaps declaring it, but he isn't creating it. Well, then, let us for purposes of argument concede that the moral sentiment is •purely of the mind's own growth, the obligation of duty •entirely independent of experience and impressions acquired from outside ourselves—as •purely and •entirely as Kant or any other metaphysician ever contended. This doesn't require us to believe in a divine legislator merely as the source of the obligation. Indeed this feeling of obligation seems to conflict with that belief rather than implying it; and as a matter of fact many people who have no positive belief in God (though they may have a habit of referring to him as an ideal conception) fully •accept the obligation of duty as a matter of moral truth and also •strongly feel it in their practical lives. (2) But if the existence of God as a wise and just lawgiver is not a necessary part of the feelings of morality, it may still be maintained that those feelings make his existence highly desirable. No doubt they do, and that is the main reason why we find that good men and women cling to the belief in God, and are pained by its being questioned. But surely it isn't legitimate to assume that the universe is organized in such a way that whatever is desirable is true! [The 'optimism' that Mill is about to mention is not a cheerful look-on-the-bright-side •attitude to the future; it is a •theory about how good the universe is.] Optimism is a thorny doctrine to maintain, even for someone who already believes in God. Leibniz had to take it in the limited sense that the universe, being made by a good Being, is

•the best universe possible

-not that it is, absolutely and without qualification,

•the best universe.

His view, in short, was that God's power isn't up to making the universe more free from imperfections than it is. But optimism *prior* to a belief in a god, and as a *reason* for that belief, seems one of the oddest of all theoretical delusions! And yet I think it is one of the main contributors to keeping up humanity's belief in God—this *feeling* of its desirableness, •this *wanting* it to be the case that God exists•. It is often produced in the form of an argument, but its argumentative value is nil. It's merely a naive expression of the human mind's tendency to believe what is agreeable to it.

Without spending longer on these or on any of the other *a priori* arguments for theism, I shall now turn to the far more important argument \cdot that makes use \cdot of the appearances of design in nature.

The argument from marks of design in nature

We now at last we reach an argument of a really scientific character —one that doesn't shrink from scientific tests, and claims to be judged by the established rules of induction. The argument from design is based entirely on experience. It goes like this:

> Certain qualities are found to be typical of things that are made by an intelligent mind for a purpose. The order of nature, or some considerable parts of it, exhibit these qualities in a remarkable degree. From this great similarity in the effects we are entitled to infer similarity in the cause, and to believe that things that it's beyond the power of man to make but that resemble the works of man in everything except the power \cdot needed to make them \cdot must also have been made by intelligence, armed with a greater power than human beings have.

I have stated this argument in its fullest strength, as it is stated by the most thoroughgoing of its supporters. But it doesn't take much thought to show that although the argument has *some* force, its force is very generally overrated. Paley's 'watch' example puts the case much too strongly. If I found a watch on an apparently

deserted island, I would indeed---as Paley says---infer that it had been left there by a human being: but I wouldn't be inferring this from marks of design \cdot in the watch \cdot ; rather, I would be going by my knowledge-based on direct experience-that watches are made by men. I would just as confidently infer 'That was left there by a human being' if I saw a foot-print, or anything else, however insignificant, that experience has taught me to attribute to man. In the same way, geologists infer the past existence of animals from coprolites [= 'pieces of fossilised dung'], though no- one sees marks of design in a coprolite. The evidence of design in creation can never reach the height of direct induction; it amounts only to the inferior kind of inductive evidence called analogy. Analogy agrees with induction in this: they both argue that a thing known to resemble another in certain respects A and B will resemble it in another respect C. But the difference is that in induction A and B are known, by a previous comparison of many instances, to be the very features that C depends on or is somehow connected with. When this has not been established, the argument amounts only to this:

•Since we don't know which features C is connected with in the known case, they may as well be A and B as any others. Therefore there is a greater probability of C in cases where we know that A and B exist than in cases of which we know nothing at all.

It's hard to make *any* estimate of the force of this argument, and a *precise* estimate is impossible. It may be very strong, when the known points of agreement—A and B etc.—are numerous and the known points of difference are few....but it can never be equal in validity to a real induction. There are considerable resemblances between some of the arrangements in nature and some of those made by man, and even as mere resemblances they provide a certain presumption [see note on page 1] of similarity of cause; but it's hard to say how great that presumption is. All we can say for sure is that these likenesses make creation by intelligence considerably more probable than it would have been if there had been fewer likenesses or none at all.

This way of stating the argument, however, doesn't do full justice to the evidence for theism. The premise of the argument from design is not merely

•the fact that some things in nature resemble *somehow* the works of human intelligence,

but rather

•a proposition about *how* things in nature resemble things designed by man.

The respects in which the ·natural· world is said to resemble the works of man are not taken at random; they are instances of something that experience shows to have a real connection with an intelligent origin, namely the fact of working together towards an end. So the argument is not one of mere analogy. As mere analogy it has some weight, but it is more than analogy. It surpasses •analogy exactly as induction surpasses •it. What we have here *is* an inductive argument.

This can't be denied, I think; so we have now to test the argument by the logical principles that are appropriate to induction. I can do this best by tackling not the argument as a whole but just some one of the most impressive cases of it. I'll take the structure of the eye (I could as well have taken the structure of the ear). It is claimed that the structure of the eye proves a designing mind. What *kind* of inductive argument is this? and how much force does it have? [The inductive methods that Mill is about to mention have been famous as 'Mill's Methods of Induction': he presented and discussed them in his *System of Logic*, which appeared about forty years before the present Essay.] The species of inductive methods—the methods of

- •agreement,
- •difference,
- •residues, and
- •concomitant variations.

The argument we are considering now involves the first of these, the method of agreement. This is the weakest kind of the four (inductive logicians know why), but our particular argument is a strong one of that kind. It can be logically analysed as follows:

The parts of the eye have something very remarkable in common, and so do their various positions that add up to their arrangement. The common property is this: *they all contribute to enabling the animal to see.* Because the

parts are as they are, the animal sees: if any one of them were different from what it is---different in its nature or in its placing in relation to the others --- in most cases the animal either wouldn't see or wouldn't see as well as it does. And this is the only notable resemblance that we can find among the different parts of this structure, apart from the very general features of make-up and structure that they share with all other parts of the animal--i.e. the features of the eye that mark it off as animal. Now, every particular array of organic elements of the sort we call 'an eye' had a beginning in time, and must therefore have been brought together by a cause or causes. The principles of inductive logic require a large number of instances for an argument of this form, so as to •rule out the possibility that what we have is a merely *chance* co-occurrence of features that are not causally connected with one another. But in our present case the number of instances is immeasurably greater than anything inductive logic can insist on. So we are justified by the rules of induction in concluding that what brought all these elements together was some cause common to them all; and because the elements agree in the single feature of working together to produce sight, there must be some causal connection between •the cause that brought those elements together and •the fact of sight.

I regard this as a legitimate inductive inference; it's the sum and substance of what induction can do for theism. The natural way to go on with it would be this:

> We are explaining •the putting together of the organic structure of the eye in term of •sight. But sight comes after the structuring of the eye, not before it; so we can't say that sight causally produces the structuring of the eye; so we'll have to say that the *idea of sight*, the *plan to create sight*, is what caused the structuring of the eye. [Mill expresses this by saying that sight can't be the 'efficient cause' of the structuring of the eye, and can only be its 'final cause'.] And that means that an intelligent will was involved in the structuring of the eye.

I'm sorry to say that this second half of the argument is more vulnerable than the first half. The origin of the wonderful mech-

anism of the eye *may* be connected with the fact of sight in the way claimed here, i.e. through the mechanism's being caused by creative forethought; but this is not the only possibility. [What comes next is presumably a reference to Darwin's *The Origin of Species*, which was published in 1859, about ten years before Mill wrote this Essay.] Recent scientific theorizing has called attention to another connecting link; there's no room for doubt that it is real, though there is (and probably will long continue to be) questions about whether this link is adequate to account for such truly admirable combinations as some of those in nature, .e.g. the structure of the animal eye. The 'link' I am talking about comes from the principle of 'the survival of the fittest'.

This principle doesn't claim to account for the origins of sensation or of animal or vegetable life. We start by assuming the existence of one or more very low forms of organic life, in which there are no complex adaptations and no notable appearances of design. Now, experience justifies us in thinking that many small variations from those simple types of organism would be thrown out in all directions and would be passed on to the variant organism's offspring. Some of these variations would help the creature in its struggle for existence while others would hinder it; the forms with helpful variants would always tend to survive, and those with disadvantageous ones would tend to perish. And thus the type of organism in question would constantly though slowly *improve* as it branched out into many different varieties, adapting it to different environments and ways of life, until-perhaps-it eventually reached the level of the most advanced examples that now exist.

Admittedly there's something very startling and *prima facie* improbable in this hypothetical history of nature. For one thing, it requires us to suppose that the primeval animal—whatever sort of organism it was—couldn't see, and was only very slightly prepared to become able to see, perhaps by having cells that were structurally affected by some chemical action of light. One of the accidental variations that are liable to take place in all organisms would at some time or other produce a variety that could see, in some imperfect manner; this feature would be passed on by inheritance, while other variations continued to take place in

other directions; so that eventually a number of races [Mill's word] with evesight would be produced, whose power of sight (even if imperfect) would have a great advantage over all other creatures that couldn't see, and would in time wipe them out everywhere except perhaps in a few very special locations underground. Fresh variations adding themselves to the previous ones would give rise to races with better and better seeing powers, until we might at last reach a combination of structures and functions as impressive are found in the eyes of men and of the more important animals. When theory is pushed to that extreme point, the most we can say in its favour at present is that •it isn't as absurd as it looks, and that the •analogies that have been empirically discovered and are favourable to its being possible far exceed what anyone could have supposed beforehand. Whether it will ever be possible to say more than this is at present uncertain. If the theory is accepted, that would be in no way whatever inconsistent with ·divine· creation, but there's no denying that it would greatly weaken the evidence for it.

Leaving this remarkable theory to whatever fate the progress of science may have in store for it, I think it must be accepted that in the present state of our knowledge the adaptations in nature provide a large balance of probability in favour of creation by intelligence. It is equally certain that this is no more than a probability; and that the various other arguments of natural theology that I have discussed •throughout Part 1 of this Essay• add nothing to its force. Apart from .divine. revelation, any reason there is to believe in an author of nature is derived from the appearances in the universe. Their mere resemblance to the works of man, or to what man could do if he had the same power over the materials of organisms as he has over the materials of a watch, has some value as an argument by analogy; but the case is greatly strengthened by the properly inductive considerations which establish that there is some connection through causation between •the origin of the arrangements of nature and •the ends they fulfill. This line of thought carries little weight in many cases, but in others, and chiefly in the precise and intricate structures involved in plant and animal life, it has considerable strength.

Part 2: Attributes

Having shown in Part 1 where we have come to on the question looked at in a purely scientific way—of the existence of a god, I now turn to the question: given the indications of a god, what *sort* of god do they point to? This is a question about the evidence that nature gives us of a creative mind: what attributes does that evidence entitle us to ascribe to that mind?

Omnipotence

It doesn't need to be *argued* that the power if not the intelligence of God must be greater than man's—*so much* greater that we have no measure for the difference. But there is a big gap between this and God's being omnipotent and omniscient, *·i.e.* his being able to do anything and his knowing everything. And the gap has immense practical importance.

It's not too much to say that every indication of *design* in the universe is evidence against the omnipotence of the designer. For what do we mean by 'design'? Contrivance—the devising of means to an end. But the need for contrivance—the need to use means—is a consequence of the limitation of power. Who would use means to an end that he could achieve just by saying the word? The very idea of *means* implies that the means have an effectiveness that the direct action of the being who employs them doesn't have. Otherwise they aren't means, but merely clutter [Mill's word is 'encumbrance']. A man doesn't use machinery to move his arms! If he did, it would be because paralysis had deprived him of the power of moving them by volition. And if •the use of contrivances is in itself a sign of limited power, •the careful and skillful choice of contrivances is even more so. Can any wisdom be shown in the selection of means if the means owe all their effectiveness to the will of him who employs them, and when his will could have made any other means equally effective? •Wisdom and •contrivance are shown in overcoming difficulties, so there is no place for them in a Being for whom no difficulties exist. So the evidence of natural theology distinctly implies that the author of the cosmos worked

under limitations—that he had to adapt himself to conditions that were independent of his will, and to attain his ends by whatever arrangements—•whatever *contrivances*•—were possible in those conditions.

This hypothesis agrees with what we have seen to be the tendency of the evidence in another respect. We found that the appearances in nature •point indeed to an origin of the cosmos, i.e. of order in nature, and •indicate that the origin involves design. but they *don't* point to any beginning—still less any *creation*—of the two great elements of the universe, the passive element matter and the active element force. Nature gives us no reason whatever to suppose that either matter or force or any of their properties were *made* by the Being who was the author of the physical layout by which the world is made suitable for what we think to be its purposes, or that he has the power to alter any of those properties. It is only in the light of •this negative supposition—i.e. •the supposition that God did not create matter or force or any of their properties.—that we see any need for wisdom and contrivance in the order of the universe. On •this hypothesis, God had to work out his ends by combining materials of a given nature and properties. Out of these materials he had to construct a world in which his designs would be carried out through given properties of matter and force, working together and fitting into one another. [The two uses of 'given' are Mill's. Matter etc. are 'given' in the sense of being something that God finds or confronts, not something he makes.] This did require skill and contrivance, and the means by which it is brought about often arouse our wonder and admiration; but just because it requires wisdom, it implies limitation of power, or rather 'wisdom' and 'limitation of power' express different sides of the same fact.

You might want to say: 'An omnipotent creator, though he didn't *need* contrivances such as man must use, thought fit to use them in order to leave traces that would enable man to recognize his creative hand.' I answer that this equally implies a limit to his omnipotence. For if he wanted men to know that •they and •the world are made by him, he in his omnipotence had only to *will* that

they should be aware of it. Ingenious men have looked for reasons why God might choose to leave his existence to some extent a matter of doubt-so that men wouldn't be absolutely compelled to know it, as they are compelled to know that three and two make five. These imagined reasons are very unfortunate specimens of special pleading; but even if we admit their validity, they don't help the case for God's omnipotence. If an omnipotent God didn't want man to have a complete conviction of his (God's) existence, nothing hindered him from making the conviction fall short of completeness by any margin he chose to leave, \cdot doing this by a simple act of will rather than through any contrivance. Arguments of the present kind are usually brushed aside by giving the easy answer that 'we don't know what wise reasons the omniscient ·God· may have had for leaving undone things that he had the power to do'. Someone who says this doesn't see that this reply itself implies a limit to omnipotence! When a thing is obviously good, and obviously in accordance with what all the evidence of creation implies to have been the creator's design, and we say we don't know what good reason he may have had for not doing it, we mean that we don't know to what other still better objective-to what objective still more completely in line with his purposes—he may have seen fit to postpone it. But the need to postpone one thing in order to do another belongs only to limited power. An omnipotent Being could have made the objectives compatible. Omnipotence doesn't need to weigh one consideration against another. If the creator, like a human ruler, had to cope with a set of conditions that weren't of his making, it would be unphilosophical and out of line for us to •challenge him regarding any imperfections in his work, to •complain that he left anything in it contrary to what (judging by all the indications of design) he must have intended. He must at least know more than we know, and we can't judge what greater good would have had to be sacrificed, or what greater evil allowed, if he had decided to remove this or that particular blot. [Throughout this Essay, the noun 'evil' is used to mean merely 'something bad'. On page 38 Mill contrasts •'the evils of life' with •its meannesses and basenesses', where the latter phrase refers to bad behaviour by people while the former does not.] But this doesn't hold if he is omnipotent. If he is that, he must himself have willed that the two desirable objectives should be incompatible; he

must himself have willed that the obstacle to his supposed design should be insuperable. So it can't be what he wanted, after all. It won't do to say that it is what he wanted but that he had other designs that interfered with it; for no one purpose puts necessary limitations on another in the case of a Being who \cdot is omnipotent and who therefore \cdot isn't restricted by conditions of possibility.

Omniscience

So the creator can't be said to be omnipotent on the strength of natural theology. The basic principles of natural religion, as inferred from the facts of the universe, negate his omnipotence. They don't in the same way •exclude omniscience: God's having only limited power doesn't contradict his having perfect knowledge and absolute wisdom. But there is nothing to •prove omniscience either. Someone who plans and carries out the arrangements of the cosmos certainly needs much more •knowledge than humans have, just as he needs much more •power. And the skill, the subtlety of contrivance, the ingenuity (as it would be called if this were a human work) is often marvellous. But nothing obliges us to suppose that either the knowledge or the skill is *infinite*. We don't even have to suppose that the contrivances were always the best possible. If we venture to judge them as we judge the works of human skill, we find plenty of defects. The human body, for example, is a striking example of artful and ingenious contrivance, but we may well ask whether a complicated machine like this couldn't have been made to last longer, and not to get out of order so easily and so often. We may ask why the human race should have been so constituted as to grovel in wretchedness and degradation for countless ages before a small portion of it was enabled to lift itself to the state of intelligence, goodness and happiness that we enjoy-still a very imperfect one. Perhaps God hadn't the power to do better; the obstacles to a better arrangement of things may have been insuperable. But it is possible that they were not. We can't tell whether the skill....that produced the world as we see it reached the extreme limit of perfection compatible with the material it employed and the forces it had to work with. I don't know how we can even satisfy ourselves, on natural-theology

grounds, that God foresees all the future, knowing in advance all the effects that his contrivances will have. There may be great •wisdom without the power of •foreseeing and calculating everything; and human workmanship teaches us that the following can happen:

A workman's knowledge of the properties of the things he works on enables him to make arrangements that are admirably fitted to produce a given result, yet he has very little power to foresee how forces of some other kind may modify or counteract the operation of the machinery he has made.

It may be that if we had the same power over the materials and the forces involved in organisms as we have over some inanimate things, we wouldn't need a vastly increased knowledge of the laws of nature on which organic life depends—not much greater than the knowledge we do have of some other natural laws—to be able to create organisms that were as wonderful and as well adapted to their conditions of existence as those in nature.

What limits god's power?

Assuming then that while we confine ourselves to natural religion we must settle for a creator who is less than omnipotent, the question arises—what limits are there to his power? Does the obstacle at which God's power stops, the obstacle that says 'You may go this far, but no further', lie in •the power of other intelligent beings, or in •the inadequacy and stubbornness of the materials of the universe? Or must we resign ourselves to accepting that the wise and knowing author of the cosmos was not all-wise and all-knowing, and may not always have done the best that was possible under the conditions of the problem? The first of these suppositions has until quite recently been the prevalent theory even of Christianity, and in many quarters it still is. People who accept it say-and in a certain sense they say it sincerely-that God is omnipotent, but they also hold that for some inscrutable reason he tolerates the perpetual thwarting of his purposes by the will of another Being of opposite character and of great though inferior power, namely the Devil. The only difference on this matter

between •the plain person's form of Christianity and •the religion Persian religion --- is that Christianity pays its good creator the bad 'compliment' of having made the Devil and of being at all times able to crush and annihilate him and his evil deeds and counsels, and yet not doing so. But, as I have already remarked, all forms of polytheism-this one included-are hard to reconcile with a universe governed by general laws. Obedience to law is a mark of a settled government, and not of a conflict always going on. When powers are at war with one another for the rule of the world, the boundary between them is not fixed but constantly fluctuating. This may seem to be the case on our planet—a conflict between the powers of good and evil—when we look only at the •results; but when we consider the •inner springs we find that both the good and evil take place in the common course of nature, by virtue of the same general laws-the same machinery turning out now good, now evil things, and oftener still the two combined. The division of power may appear to be variable, but really it is so regular that if we were speaking of human rulers we would be quite sure that the share of each must have been fixed by previous consent....

But when we come to consider not •what hypothesis can be conceived and possibly reconciled with known facts, but •what supposition is *pointed to* by the evidence of natural religion, the case is different. The indications of design point strongly in one direction, the preservation of the creatures in whose structure the indications are found. Along with the preserving agencies there are destroying agencies, which we might be tempted to ascribe to the will of a different creator; but there is little evidence of intricately contrived means of destruction (except when the destruction of one creature is the means to the preservation of others). And it can't be supposed that the preserving agencies are wielded by •one Being and the destroying agencies by •another. The destroying agencies are a necessary part of the preserving agencies; the chemical compositions by which life is carried on couldn't take place without a parallel series of decompositions. The great agent of decay in both organic and inorganic substances is oxidation, vet it is only by oxidation that anything stays alive for even a minute. When there is evidence of a purpose that hasn't been

fully achieved, the imperfections don't look as though they were designed. They are like •the unintended results of casual events that weren't sufficiently guarded against, or •a bit too much or too little of some of the agencies by which the good purpose is carried on, or •consequences of the wearing out of a machine that wasn't made to last for ever. They point either to shortcomings in the workmanship as regards its intended purpose, or to external forces not under the control of the workman, but not to forces that show any sign of being wielded and aimed by some other rival intelligence.

So we can conclude that there is no basis in natural theology for attributing intelligence or personality to the obstacles that partially thwart what seem to be God's purposes. Two other possible sources of the limitation of his power are more probable. (1) They result from the qualities of the material: the substances and forces of which the universe is composed don't admit of any arrangements by which his purposes could be more completely fulfilled. (2) God's purposes could have been more fully attained, but he didn't know how to do it: his creative skill, wonderful as it is, wasn't perfect enough to accomplish his purposes more thoroughly.

God's moral qualities

I pass now to the moral attributes of God, so far as they are indicated in his creation. Stating the problem in the broadest manner: *What indications does nature give of the purposes of its author*? This question looks very different to •us from how it looks to •the teachers of natural theology who carry the burden of having to accept the omnipotence of the creator. We don't have to tackle the impossible problem of reconciling •infinite benevolence and justice with •infinite power in the creator of such a world as ours! The attempt to do so •is doubly disgusting•: it involves absolute contradiction in an intellectual point of view, and presents the revolting spectacle of a jesuitical [here = 'slippery, tricky'] defence of moral atrocities.

On this topic I needn't add to the illustrations I gave in my essay on *Nature*. At the present stage of the present argument

there is none of this moral perplexity. Grant that creative power was *limited*, by •conditions of whose nature and extent we know nothing at all, and the goodness and justice of the creator may be all that the most pious believe; everything in the work that conflicts with those moral attributes may be the fault of the •conditions that left God with only a choice of evils.

But a conclusion's being consistent with known facts is not the same as there being evidence to support it; and if our only basis for judging the design is the work actually produced, it's rather risky to speculate that the work designed was of a different quality from the result achieved. Still, though the ground is unsafe we may cautiously journey a certain distance on it. Some parts of the order of nature indicate contrivance much more than others do: and it isn't going too far to say that many parts show no sign of it at all. The signs of contrivance are most conspicuous in the structure and processes of plant and animal life. If it weren't for these it would probably never have seemed to thoughtful people that the appearances in nature provide any evidence of the existence of a god. But when a god had been inferred from the organization of living things, other parts of nature (such as the structure of the solar system) seemed to provide more or less strong evidence in confirmation of the belief. Thus, granting that there is design in nature, we can best hope to be enlightened as to what that design was by examining it in the parts of nature where its traces are the most conspicuous.

Well, then, what about those the devices in the construction of animals and plants that arouse the admiration of naturalists? •What purpose do they appear to have? Or, to put the same question in another way•: to what end do they seem to tend? We have to face the fact that they tend principally to a rather lowly objective—merely to make the structure remain alive and in working order for a certain time, the individual for a few years, the species or race for a longer but still limited period. And the same is true for most of the similar though less conspicuous marks of creation that are recognized in inorganic nature. For example, the adaptations that appear in the solar system consist in placing it under conditions that enable it to maintain a stable system of causal inter-relations rather than flying apart. And even that •modest state of affairs• holds for only for a period of time; it's a vast period if measured against *our* short span of life, but even we can see that it is nevertheless limited; for even our feeble means of exploring the past provide—according to those who have examined the subject by the most recent lights—to yield evidence that the solar system was once a vast sphere... of vapour, and is going through a process which in the long run will reduce it to a single not very large mass of solid matter, frozen up with more-than-arctic cold. If the machinery of the system is adapted to keep itself at work only for a time, still less perfect is the adaptation of it as a place where living beings can exist; because it is adapted to them, for each planet, only during the relatively short period between the planet's being too hot to permit life and its being too cold for that (judging by our experience of the conditions under which life is possible)....

Thus, most of the design of which there are indications in nature, however wonderful its mechanism, is not evidence of any moral attributes because the end to which it tends—this being our only evidence that it is *directed* to any end at all—is not a moral end. It isn't •the good of any sentient creature, but merely •the qualified permanence for a limited period of the work itself, whether living or not. If we want to infer the character of the creator from *that*, all we get is that he doesn't want his works to perish as soon as he creates them; he wants them to have a certain duration. Nothing follows from this about his feelings or attitudes towards his animate or rational creatures.

After we set aside all the many adaptations that have no apparent purpose but •to keep the machine going, there remain some provisions •for giving pleasure to living beings, and some •for giving them pain. Perhaps all these should be included among the contrivances for keeping the creature or its species in existence; for both the pleasures and the pains have a conserving tendency, the pleasures being generally disposed to attract the creature to the things that will maintain the existence of itself or its species, the pains to deter from things that would destroy it.

When all these things are considered, it's clear that ever so many bits of evidences of a creator *are not* evidence of a benevolent purpose in him—so many, indeed, that you may wonder whether

there are any that are. But trying to look at the question without partiality or prejudice, and not letting our wishes influence our judgment, it does seem that on the assumption that there is design at work in the universe, the balance of evidence indicates that the creator wanted his creatures to have pleasure. This is indicated by the fact that pleasure of one sort or another is provided by almost everything. •The play of the faculties, physical and mental, is a never-ending source of pleasure; •even painful things give pleasure by the satisfaction of curiosity and the agreeable sense that one is acquiring knowledge. There is also the fact that when we experience pleasure, it seems to result from the normal working of the machinery, whereas pain usually arises from some external interference with it.... Even in cases where pain results, like pleasure, from the machinery itself, it doesn't seem that the pain-causing contrivance was brought into play so as to produce pain; the pain points rather to a clumsiness in a contrivance that is employed for some other purpose. The maker of the machinery is no doubt responsible for having made it capable of pain; but this may have been a necessary condition for it to be capable of pleasure— a supposition that won't work •if the creator is omnipotent, but is extremely probable •if the creator works under the limitation of unbreakable laws and unchangeable properties of matter. Given that the susceptibility .to pain. was part of the design, actual pain itself usually seems undesigned-a casual result of the organism's collision with some external force to which it wasn't intended to be exposed.... So there is much evidence that pleasure is agreeable to the creator, and very little (if any) evidence that pain is so. There is, then, a certain amount of justification for inferring, purely on grounds of natural theology, that benevolence is one of the creator's attributes. But to jump from this to the conclusion that •his sole or chief purposes are those of benevolence, and that •what the creation was for was the happiness of his creatures and nothing else, is not only not justified by any evidence but conflicts with such evidence as we have. If God's motive for creating sentient beings was the happiness of the beings he created, we have to judge, taking past ages and all countries and races into account, that on this planet at least he failed utterly; and if he had no purpose but our happiness

and that of other living creatures, it's not credible that he would have brought them into existence with the prospect of being so completely thwarted. If man wasn't able through the exercise of his own energies to improve both himself and his outward circumstances, doing for himself and other creatures vastly more than God did at the outset, he would owe God something very different from *thanks* for bringing him into existence! Of course it may be said that •the sufferings and wasted lives of entire geological periods are not too high a price to pay for the changes that man will eventually be able to bring about in human existence, and that •man's ability to improve himself and the world was given to him by God. This may be so; but the supposition that God couldn't have given man these blessings at a less frightful cost—isn't that a very strange thing to suppose concerning God? It amounts to supposing that God couldn't at the outset create anything better than a Bushman or an Andaman islander or something still lower, and yet was able to give the Bushman or Andaman islander the power to raise himself into a Newton or a Fénelon. We certainly don't know what the barriers are that prevent God from being omnipotent; but it is a very odd notion of them to suppose that they enable God to give to an almost bestial creature the power of producing by a succession of efforts something that God himself had no other means of creating!

Such are the indications of natural religion regarding God's benevolence. If we look for any other of the moral attributes that philosophers of a certain type distinguish from benevolence—justice, for example—we find a total blank. Nature offers no

evidence whatever of divine justice, whatever standard of justice our ethical opinions may lead us to recognize. There is no shadow of justice in the general arrangements of Nature; and the imperfect instances of justice that there are in any human society (*very* imperfect so far) are the work of man himself, struggling upwards into civilization. He does this against immense natural difficulties, making for himself a second nature that is far better and less selfish than the one he was created with. But I have said enough about this in my essay *Nature*.

So here are the net results of natural theology on the question of God's attributes. A Being

- •of great but limited power, and we can't even guess at how or by what he is limited;
- •of great intelligence, perhaps unlimited but perhaps more narrowly limited than his power;
- •who desires, and pays some regard to, the happiness of his creatures, but who seems to have other motives of action that he cares about more, and who can hardly be supposed to have created the universe for that purpose alone.

Such is the god indicated by Natural Religion; any idea of God more charming than this comes only from human wishes, or from the teaching of either real or imaginary revelation.

I shall next examine whether the light of nature gives any indications concerning the immortality of the soul, and a future life. [In Mill's time and for centuries before that, the word 'soul' could be used with no religious overtones to it, as meaning 'mind' or 'whatever it is in a man that does his thinking and feeling'.]

Part 3: Immortality

We can divide indications of immortality into two groups: •those that are independent of any theory concerning the creator and his intentions, and •those that depend on an antecedent belief about God. •I shall discuss the former group first; my treatment of the latter group will begin on page $25 \cdot$.

Theorizing men down the centuries have put forward a considerable variety of arguments of the former type, •i.e. arguments that don't presuppose anything about God•. The arguments in Plato's *Phaedo* are examples of that sort. But most of those arguments have no supporters now, and needn't be seriously refuted. They are generally based on •preconceived theories about whatever it is in man that does the thinking, considered as something distinct and separable from the body, and on •other preconceived theories concerning death. For example: Death or dissolution is always a separation of parts; the soul is simple and indivisible, and therefore doesn't have parts; so it can't undergo this separation. Curiously enough, one of the speakers in the *Phaedo* brings against this argument just the point that would be brought against it today, namely:

Although thought and consciousness are mentally distinguishable from the body, they may not be in a substance that is separable from the body. Rather than that, they may be a *result* of the body, relating to it (the illustration is Plato's) in the way a tune relates to the musical instrument on which it is played. And if that is the case, the arguments used to show that the soul doesn't die with the body would equally show that the tune doesn't die with the instrument, but survives its destruction and continues to exist apart.

In fact, modern philosophers who dispute the arguments for the immortality of the soul don't generally •believe the soul to be an independent substance, but regard 'the soul' as the name of a bundle of attributes— feeling, thinking, reasoning, believing, willing, etc.—and •regard these attributes as a consequence of the organization of the body. They infer from this that the supposition

•the soul can survive when the organization of the body is

dispersed,

is as unreasonable as the supposition that

•the colour or aroma of a rose can survive when the rose itself has perished.

Thus, anyone who wants to infer the immortality of the soul from its own nature has first to prove that feeling, thinking, etc. are attributes not of •the body but of •a separate substance. Well, what is the verdict of science on this point? It isn't perfectly conclusive either way. In the first place, science doesn't prove experimentally that some mode of organization has the power to produce feeling or thought. To conduct such a proof, we would have to be able to make an organism, and then test to see whether it could feel; and we can't do this, because there's no human way to make an organism from scratch; an organism has to be developed out of a previous organism. On the other hand, there is pretty well conclusive evidence that •all thought and feeling occurs along with or just after some event in the bodily organism; that •differences in the organization of brain and nerves, especially differences in how complex they are, correspond to differences in the development of the mental faculties; and though we have no positive evidence that mental consciousness ceases for ever when the brain stops working, we do know that •diseases of the brain disturb the mental functions, and that •decay or weakness of the brain weakens them. So we have good enough evidence that for us in our present state of existence brain-activity is, if not the cause of mental operations, then at least a necessary condition for them to occur. Combine that with the view that the mind is a distinct substance and you get this: the separation of the mind from the body would not be, as some have liked to think, a liberation from shackles and a return to freedom; rather, the separation would simply put a stop to the mind's activities and send it back into unconsciousness....

But it's important to point out that these considerations only amount to lack of evidence *for* immortality; they provide no positive evidence *against* it. We must beware of giving *a priori* validity to the conclusions of an *a posteriori* philosophy. The root of all *a priori* thinking is the tendency to transfer to external •things a strong association between the corresponding •ideas in our own minds; and the thinkers who try hardest to limit their beliefs by experience, and honestly believe that they do so, aren't always sufficiently on their guard against this mistaken transfer. Some regard it as a truth of reason that miracles are impossible; and similarly there are others who, because their experience always associates in their minds •the phenomena of life and consciousness with •the action of material organs, think it intrinsically absurd to think that those phenomena could exist under any other conditions. But they should remember that the uniform coexistence of one fact with another doesn't make the one fact a part of the other, or identical with it, .and that's what is needed for them to be connected in a way that is absolutely or metaphysically necessary. Thought isn't tied to a material brain by metaphysical necessity; it's simply a going-together that we have always found in our experience. And when things are analysed to the bottom on the principles of associative psychology, it turns out that the brain-like any material thing-is merely a set of actual or believed-possible human sensations, namely the ones the anatomist has when he opens the skull, and the impressions of molecular or other movements that we think we would receive when the brain was at work if there were no bony covering and our senses or our instruments were sufficiently delicate. Experience doesn't provide us with any examples of a series of states of consciousness that doesn't have this group of contingent sensations attached to it, \cdot and thus that doesn't have a brain attached to it \cdot ; but it is as easy to imagine such a series of states without this accompaniment as to imagine them with it, and we don't know any reason in the nature of things why these two shouldn't be thus separated. We are free to suppose that the same thoughts, emotions, volitions and even sensations that we have here may continue or start again somewhere else under other conditionsAnd in entertaining this supposition we needn't be embarrassed by any metaphysical difficulties about a thinking substance. 'Substance' is merely a general name for the lastingness of attributes: wherever there is a series of thoughts connected together by memories, that constitutes a thinking substance....

Thus, the only evidence science provides against the immortality of the soul is negative: it consists in the fact that there is no evidence for it. And even that negative evidence is not as strong as negative evidence often is. In the case of witchcraft, for instance, the fact that there is no unflimsy evidence that it ever existed is as conclusive as the most positive evidence of its non-existence would be; for if witchcraft exists, it exists on this earth, and if it had existed here the factual evidence would certainly have been available to prove it. But it's not like that with the soul's existence after death. That the soul doesn't remain •on earth and move about visibly or interfere in the events of life is proved by the same weight of evidence that disproves witchcraft. But there is absolutely no evidence that it doesn't exist •elsewhere.... Some may think that there is an additional and very strong presumption against the immortality of the soul from the analysis of all the other objects in Nature. All things in Nature perish, and, as philosophers and poets complain, the most beautiful and perfect are the most perishable. A flower of the most exquisite form and colouring grows up from a root, comes to perfection in weeks or months, and lasts only a few hours or days. Why should it be otherwise with man? Why indeed? But why, also, should it not be otherwise? Feeling and thought are not merely different from what we call inanimate matter, but are at the opposite pole of existence, and analogical inference has little or no validity from the one to the other. Feeling and thought are much more real than anything else; they are the only things that we directly know to be real, all other things being just the unknown conditions on which these depend. All matter. ... has a merely hypothetical and unsubstantial existence: it's a mere assumption to account for our sensations; we don't perceive it, we aren't conscious of it, but only of the sensations that we are said to receive from it. In reality, 'matter' is a mere name for our expectation of certain sensations when certain other sensations give signs of them. In the light of this analysis, we can see that •the fact that the things in Nature perish is really just the fact that • certain contingent possibilities-of-sensation eventually come to an end and are replaced by others. Does that imply that the series of our feelings must itself be broken off? . No, it does not .! Drawing that

conclusion is not reasoning from •one kind of substantive reality to •another, but reasoning from •something that has no reality except in reference to something else to •something that is the only substantive reality. From a philosophical point of view, *mind...* is the only reality of which we have any evidence; and no analogy can be recognized or comparison made between it and other realities, because there *are* no other known realities to compare it with. That is quite consistent with its being perishable; but the question of whether it *is* perishable stands on its own, untouched by any of the results of human knowledge and experience. This is one of those very rare cases where there is really a total absence of evidence on either side, and in which the absence of evidence for the affirmative does not, as so often it does, create a strong presumption in favour of the negative.

But the belief in human immortality, in the minds of mankind generally, is probably based not on any scientific arguments, whether physical or metaphysical, but on foundations that in most minds are stronger than such arguments would be. I mean the foundation of •the disagreeableness of giving up existence (at least for those to whom existence has so far been pleasant) and •of the general traditions of mankind. The natural tendency of belief to follow these two inducements—•our own wishes and •the general assent of other people-has been reinforced in this case by the utmost exertion of the power of public and private teaching. Rulers and teachers, wanting to increase people's obedience to their commands (either from selfish motives or in the interests of the public good), have always done their utmost to encourage the belief that there is a life after death, a life in which we'll have •pleasures or •sufferings far greater than on earth, depending on whether in this life we •do or •don't act as we are commanded to in the name of the unseen powers. As *causes* of belief these various circumstances—•the desire not to go out of existence, and the force of indoctrination - are most powerful. As reasons they carry no weight at all.

The pleasure it would give us to believe that P is called the 'consoling nature' of P. The view that an opinion's consoling nature can be a reason for believing it is a doctrine that •is irrational in itself and that •would endorse half the mischievous illusions

that have messed up private lives or been recorded in history. When it is applied to the belief in the immortality of the soul, the irrational doctrine is sometimes wrapped up in quasi-scientific language. We are told that the desire for immortality is one of our instincts, and that corresponding to every instinct there is a real object that can satisfy it: where there is hunger there is somewhere food, where there is sexual feeling there is somewhere sex, where there is love there is somewhere something to be loved, and so on. Similarly (they say), since there is the instinctive desire for eternal life, there must be eternal life. We can show what is wrong with this without digging deeply into the subject; we don't have to go into intricate and obscure considerations concerning instincts, or discuss whether the desire in question is an instinct. Let us admit \cdot for purposes of argument \cdot that wherever there is an instinct, there exists something of the sort that this instinct demands; how do we get from that to the conclusion that this 'something' exists in an unlimited quantity that is sufficient to satisfy the infinite craving of human desires? What is called 'the desire for eternal life' is simply the desire for *life*; and what this desire calls for does exist. There is life! To suppose that the desire for life guarantees to us personally the reality of life through all eternity is like supposing that the desire of food assures us that we shall always have as much as we can eat throughout our lives (and for as much longer as we can conceive our lives being stretched out to).

The argument from tradition or the belief of the human race in general, if we accept it as a guide to our own belief, must be accepted in its entirety; so it will commit us to believing that the souls of human beings not only •survive after death but •show themselves as ghosts to the living; for everyone who has •one belief also has •the other. Indeed it is probable that the former belief came from the latter, and that primitive men would never have supposed that the soul doesn't die with the body if they hadn't fancied that it visited them after death. Nothing could be more natural than such a fancy; it seems to appear in perfect detail in dreams, which in Homer and in all ages like Homer's are supposed to be real apparitions. To dreams we have to add not merely waking hallucinations but the delusionsof sight and hearing. Actually, these 'delusions' are really misinterpretations of those senses: sight or hearing supplies mere hints, on the basis of which the imagination paints a complete picture and fills in the details that make it 'real'. These 'delusions' .as they occurred in ancient times \cdot should not be judged by a modern standard: in early times the line between imagination and perception was not at all clearly defined; there was little if any of the knowledge we now have concerning the actual course of nature, which makes us distrust or disbelieve any appearance that conflicts with known laws. At a time when men were ignorant about what were the limits of nature and what was or wasn't compatible with it, no one thing seemed to be much less probable-less like 'how the world goes'-than any other. So when we reject (as we have excellent reason to) the tales and legends about actual appearances of disembodied spirits, we deprive mankind's belief in a life after death of what has probably been its chief ground and support. The fact that people in primitive times all believed in life after death never had much force as evidence for the truth of that belief, and now it has no force at all. It may be objected that this belief has maintained itself in ages that •have stopped being primitive and that •reject these superstitions that used to go along with it; to which I reply that the same can be said of many other opinions of primitive times, and especially opinions on the most important and interesting subjects, because those are the subjects on which the prevailing opinion, whatever it may be, is the most carefully drilled into all who are born into the world. This particular opinion, moreover, even if it has on the whole held its ground, has done so with a constantly growing number of dissentients, and those especially among people with developed minds. Finally, those mentally developed people who still have the belief presumably base it not on the belief of others but on arguments and evidence; and those arguments and that evidence are what we need to estimate and judge.

I have presented a sufficient sample of the arguments for a future life that don't presuppose an antecedent belief in the existence of God or any about his attributes. Now let us consider what natural theology does for that great question—what arguments are supplied by the light it throws or by the bases for conjectures it provides. We have seen that the light it throws is very faint! Natural theology provides only a balance of probability in favour of existence of a creator, and a considerably smaller balance of probability in favour of his benevolence. It provides some reason to think that he cares for the pleasures of his creatures, but emphatically *not* that this is all he cares about, or that other purposes don't often take precedence over this one. His intelligence must be adequate to the contrivances apparent in the universe, but needn't be more than adequate to them; and his power is not only not proved to be infinite, but the only real evidence in natural theology tends to show that it is limited, because any contrivance is a way of overcoming difficulties, and always presupposes that there are difficulties to be overcome.

Now, what inference can we legitimately draw from these premises in favour of a future life? It seems to me that, apart from explicit revelation, we can't draw any. The common arguments are:

- •the goodness of God;
- •the improbability that he would ordain the annihilation of his noblest and richest work, •man•, after most of his short life had been spent acquiring faculties that he didn't have time to use properly; and
- •the special improbability that God would have implanted in us an instinctive desire for eternal life, and doomed that desire to complete disappointment.

In a world where one could without contradiction accept 'This world is the work of a Being who is both omnipotent and benevolent', these 'arguments' might be *arguments*. But they aren't arguments in a world like ours. God may be perfectly benevolent, but because his power is subject to unknown limitations we don't know that he *could* have given us what we so confidently assert that he *must* have given—I mean, could have given it without sacrificing something more important. However sound the evidence is for God's benevolence, it doesn't indicate that benevolence is his only motivation; he may have other purposes as well, and we can't tell to what extent those may have interfered with the exercise of his benevolence; so we don't know that he •would have granted us eternal life even if he •could have done so.

And the same thing holds for the supposed improbability of God's having given us the wish for eternal life without enabling it to be gratified. The limits on his power, or conflicts among his purposes, may have compelled him to adopt a scheme requiring that we should have that wish even if it weren't going to be gratified. One fact about God's government of the world is quite certain, namely that he either couldn't or didn't want to grant to us everything we wish. We wish for life, and he has granted some life; some of us wish for a boundless extent of life, and that is not granted; and this is perfectly in line with God's ordinary ways of governing the world. Many a man would like to be as •rich as Croesus or as •powerful as Augustus Caesar but has his wishes gratified only to the moderate extent of •a pound a week or •the Secretaryship of his Trade Union. Thus, natural religion provides no basis whatsoever for confidence that we shall have a life after death. But if you feel that hoping for a future state will make you either more satisfied or more useful, there is no reason why you shouldn't go on hoping. There is empirical evidence for •the existence of a Being who has great power over us—all the power implied in the creation of the cosmos, or at least of the organisms in it—and for •his being good. though not for •that's being his predominant attribute; and as we don't know the limits either of his power or of his goodness, there is room to for us to *hope* that he may be powerful enough and good enough to grant us this gift, provided that it would really be beneficial to us. •There is also the question of what the after-life.

if there is one, will be like. The same reasons that permit the hope justify us in expecting that if there is a future life it will be at least as good as our present life, and won't be lacking in the best feature of the present life, namely improvability by our own efforts. Every estimate of probability that we know how to make flatly opposes the common idea of the future life as a state of rewards and punishments, except in the sense that the effects of our actions on our own character will follow us in the after-life as they have done in this life. Whatever the probability is that we shall have a future life, all the probabilities about what such a life will be like are in favour of this: whatever we have been made to be like, or have made ourselves to be like, before our death, that is what we'll be like when we enter into the life hereafter. The fact of death won't make any sudden break in our spiritual life, or influence our character differently from how any important change in our mode of existence can always be expected to modify it. Our soul-the thing that thinks in us-has its laws which in this life are invariable, and any analogies drawn from this life must assume that the same laws will continue. To imagine that at our death a miracle will occur by the act of God making perfect everyone whom he wants to include among his elect might be justified by a properly authenticated explicit revelation, but it is utterly opposed to every presumption that can be deduced from the light of Nature.

Part 4: Revelation

In discussing evidence for theism I have so far restricted myself to evidence derived from the light of Nature. What addition has been made to that evidence, and to what extent have the conclusions obtainable from it been strengthened or modified by the establishment of a direct communication with God? That is a different question, •which I shall now address•. My purposes in this Essay •don't require me to discuss claims about revelations that are specifically Christian or of any other religion in particular, but they •do require me to consider revelation *generally*. If I don't do that, the results I have reached up to here may lose much of their practical bearing, •because it will be open to people to ignore the weakness of the natural evidence for theism and pin everything on what they claim to be divine revelation•.

First point: the indications of a creator and of his attributes that we have found in Nature, though much fainter and less conclusive •as to his existence than the pious mind would like to think they are, and even less informative •about his attributes, still suffice to give to the supposition of revelation a standing point that it wouldn't have had otherwise. The alleged revelation isn't forced to build up its case from the foundation; it doesn't have to prove the very existence of the Being from whom it claims to come. It claims to be a message from a Being whose existence, whose power, and to a certain extent whose wisdom and goodness, are at least *indicated* with more or less probability by the phenomena of nature. The sender of the alleged message isn't a sheer invention; there are grounds independent of the message itself for believing that he is real. The grounds don't amount to proof; but they do suffice to take away all antecedent improbability from the supposition that a message may really have been received from him. And the following point is important to my present project. The very imperfection of natural theology's evidence regarding God's attributes removes some of the main obstacles to believing in a revelation. Any objections grounded on imperfections in the revelation itself, even if they are conclusive against it if it is considered as recording the acts or expressing the wisdom of a

Being with infinite power, wisdom and goodness, are no reason whatever against its having come from a Being such as the course of nature points to—one whose wisdom may be limited, whose power is certainly limited, and whose goodness, though real, is not likely to have been the only motive that actuated him in the work of creation.

(The argument of Butler's *Analogy of Religion* is, from its own point of view, conclusive:

- •the Christian religion is open to no objections, either moral or intellectual, that don't count at least as strongly against the common theory of Deism [a thin belief in a higher power, one that doesn't intervene in human affairs and may not even be a person];
- •the morality of the Gospels is far higher and better than the morality that appears in the order of Nature; and
- •what is morally objectionable in the Christian theory of the world is objectionable only when combined with the doctrine of an omnipotent God; and doesn't count at all against the moral character of a Being whose power is supposed to be restricted by real though unknown obstacles that prevented him from fully carrying out his design.

Butler's grave error was that he shrank from admitting the hypothesis of limited powers; so that his appeal amounts to this: 'The belief of Christians is neither more absurd nor more immoral than the belief of Deists who acknowledge an omnipotent Creator; so let us believe both, despite their absurdity and immorality.' He ought to have said: 'Let us trim our belief in either Christianity or Deism down to what doesn't involve absurdity or immorality, to what is neither intellectually self-contradictory nor morally perverted.')

Returning now to the main subject: On the hypothesis of a god who made the world and in making it had regard for the happiness of his sentient creatures (however that regard may have been limited by other considerations), there is no antecedent improbability in the supposition that his concern for their good would continue, and that he might sometimes give proof of it by communicating to them some •knowledge of himself beyond what they could discover by their unaided faculties, and some •knowledge or precepts useful for guiding them through the difficulties of life. Also, on the hypothesis that God's power is limited (which is the only tenable hypothesis), we can't object that these helps 'ought to have been more helpful' or 'ought to have been . . .' different in some way from what they are. The only question to be considered, and we can't let ourselves off from considering it, is about *evidence*. Can any evidence suffice to prove a divine revelation? If so, what sort of evidence—and how much of it—must there be? I shan't consider directly the different question of whether the special evidences of Christianity, or of any other alleged revelation, come up to the mark. The questions I intend to consider are:

•What evidence is required?

•What general conditions ought it to satisfy?

•Given what we know of the constitution of things, can those conditions be satisfied?

Evidence of revelation is commonly divided into 'external' and 'internal'. External evidence is the testimony of the senses or of witnesses. By 'internal evidence' is meant the indications that the revelation itself is thought to provide of its divine origin indications supposed to consist chiefly in the excellence of its precepts, and its general suitability to the circumstances and needs of human nature.

It's very important to consider this internal evidence, but its importance is mainly negative; it may provide conclusive grounds for rejecting a revelation, but it can't unaided entitle us to accept •a supposed revelation• as divine. If the moral character of the doctrines of an alleged revelation is bad and perverting, we ought to reject it, whoever it comes from, for it can't come from a good and wise Being. But the excellence of the morality of an alleged revelation can never entitle us to credit it with a supernatural origin; for we can't have conclusive reason for believing that human beings couldn't •discover moral doctrines that human beings can •perceive and recognize as excellent. So if a revelation is to be proved to be divine it must be by external evidence—i.e. by the exhibition of supernatural facts. Well, then, is it possible to prove supernatural facts? If it is, what evidence is required to prove

them? As far as I know, this question has been seriously raised only on the sceptical side, by Hume. It is the question involved in his famous argument against miracles, an argument that goes down to the depths of the subject. It may be that that great thinker didn't perfectly grasp •the exact scope and effect of his argument, and •they have been utterly misconceived by those who have tried to answer him. [Mill briefly cites the example of a Dr. Campbell, and refers to writings of his own in which Campbell's error is corrected. Then: Let's start from the beginning. It is obviously impossible to maintain that if a supernatural fact really occurs, human beings aren't equipped to have proof of its occurrence. The evidence of our senses could prove this, as it can prove other things. To put the most extreme case: suppose that I actually saw and heard •a Being—either of the human form or of some form previously unknown to me-commanding a world to exist, and •a new world actually coming into existence and starting to move through space, at his command. This evidence \cdot of my senses would certainly convert the creation of worlds from a •speculation into a •fact of experience. You may say: 'But you couldn't know that such a singular appearance was anything more than a hallucination of your senses.' True; but the same doubt exists at first concerning every unsuspected and surprising fact that comes to light in our scientific researches. Our senses have been deceived \cdot and may be deceived again \cdot ; that is a possibility that has to be met and dealt with, and we do deal with it by several means. If

•we repeat the experiment, and get the same result again;

or if

•at the time of the observation the impressions of our senses are in all other respects the same as usual, making it extremely improbable that they have been defective regarding this one matter;

or if-above all-

•other people's senses confirm the testimony of our own; we conclude, with reason, that we can trust our senses •with respect to the unusual experience that we have just had•. Indeed our senses are all that we have to trust to. Even when we are reasoning •in a strictly logical way• we depend on our senses for our ultimate premises. The only appeal there can be against the decision of our senses is an appeal •from the senses without precautions •to the senses with all due precautions. When the evidence on which an opinion rests is of a sort that we base the whole conduct and safety of our lives on, we need ask no further. Objections that apply to *all* evidence are valid against *none*. All they prove is the abstract proposition that our senses are fallible.

But these days the evidence of miracles isn't of this persuasive kind-at least to protestant Christians. It isn't the evidence of our senses, but of witnesses, and even this we don't get at first hand but have to rely on the testimony of books and traditions. And even in the case of the original eve-witnesses, the supernatural facts they are supposed to have testified to are not of the utterly elevated kind supposed in my example (.in which I actually see a Being bring a world into existence merely by his command.). There could be little room for doubt about the nature of *that*, or about the impossibility of *its* having had a natural origin. But the ·supposed· miracles of which we have records are not like that. For one thing, they have generally been such that it would have been extremely difficult to verify them as matters of fact; also, it has nearly always been within the bounds of possibility that they were brought about by human means or by the spontaneous agencies of nature. This is the sort of case that Hume was talking about in his argument against the credibility of miracles.

His argument is this (•though not in his exact words•):

The evidence of miracles consists in testimony. We rely on testimony because of our experience that under certain conditions testimony is generally truthful. But that same experience tells us that even under the best conditions testimony is frequently false, whether intentionally or unintentionally. So when someone testifies to something the occurrence of which would be more at variance with experience than the falsehood of this testimony, we ought not to believe it. All prudent persons conform to this rule in their everyday lives; and any who don't are sure to suffer for their credulity.

Now, a miracle is in the highest possible degree contradictory to experience: if it weren't, it wouldn't be a miracle! The very reason for regarding it as a miracle is that it breaks some law of nature, that is, some otherwise invariable uniformity in the succession of natural events. So there's a strong reason for disbelieving it—the strongest reason that experience can give for disbelieving *anything*. •Whereas, on the other side of the equation•, lying or error on the part of witnesses— even when they are of good character, and there are many of them—is quite within the bounds of common experience. So *that* is the supposition that we ought to prefer,

There are two apparently weak points in this argument. One is that the evidence of experience that it appeals to is only negative evidence, which is not so conclusive as positive; since ·apparent· facts of which there had been no previous experience are often discovered, and proved by positive experience to be true, .i.e. to be genuine facts. The other seemingly vulnerable point \cdot in the argument \cdot is this. The argument seems to assume that the testimony of experience against miracles is undeviating and indubitable; and so it would be if the whole question concerned the probability of future miracles with none having taken place in the past. But the position of those on the other side is that there *have* been miracles, and that the testimony of experience is not wholly on the negative side. All the evidence that has been brought forward in favour of any miracle ought to be reckoned as counter-evidence against the basis for the assertion that •reports of miracles ought to be disbelieved. If the question is to be stated fairly, .it mustn't be imply that there is some evidence against miracles and none in favour of them; rather. it should be stated as depending on a *balance* of evidence: a certain amount of positive evidence in favour of miracles, and a negative presumption [see note on page 1] from the general course of human experience against them.

In order to support the argument when it has been doubly corrected in this way, it has to be shown that •the negative presumption against a miracle is very much stronger than •the negative presumption against a merely new and surprising fact. This, however, evidently *is* the case. A new physical discovery, even if it clashes with a well established law of nature, is only the

discovery of another law that wasn't previously known. There's nothing in this that isn't familiar to our experience: we were aware •that we didn't know all the laws of nature, and •that one such •apparent · law is liable to be counteracted by others. When the new phenomenon comes to light, it is found still to depend on law; it is always exactly reproduced when the same circumstances are repeated. So its occurrence is within the limits of variation in experience, which experience itself reveals to us. But a miracle, in the very fact of being a miracle, declares itself to be *not*

•one natural law superseding another $\cdot seeming \cdot$ natural law,

but rather

•something that supersedes the law that includes all other laws, the law that experience shows to be universal for all phenomena, namely *that they depend on some law*, i.e. that they are always the same when there are the same phenomenal antecedents—they don't occur in the absence of their phenomenal causes, or fail to occur when the phenomenal conditions are all present.

[In this context, 'phenomenal' means 'empirically detectable'.] We can see that this argument against belief in miracles had very little to ground to stand on until a fairly late stage in the progress of science. A few generations ago, the universal dependence of phenomena on invariable laws not only •wasn't recognized by mankind in general but •couldn't be regarded by educated people as a scientifically established truth. Many phenomena seemed quite irregular in their course, and apparently didn't depend on any known antecedents. No doubt a certain regularity in the occurrence of the most familiar phenomena must always have been recognized, but even these regularities had frequent exceptions that hadn't yet been studied in enough depth to be reconciled with the general rule. From ancient times onwards, the heavenly bodies were the most conspicuous examples of regular and unvarying order; yet even among them •comets were a phenomenon apparently starting without any law, and eclipses were a phenomenon that seemed to occur in violation of law. For that reason both comets and eclipses continued through many centuries to be regarded as miracles, intended as signs and omens

of human fortunes. It would have been impossible in those days to prove to anyone that this supposition—•that comets and eclipses were miraculous•—was antecedently improbable. It seemed to fit appearances better than the •rival• hypothesis of an unknown law.

But now, with the progress of science, all phenomena have been conclusively shown to be amenable to law; and even in the cases where the laws haven't yet been exactly ascertained, delay in discovering them is fully accounted for by the special difficulties of the subject. So the defenders of miracles have adapted their argument to this altered state of affairs, by maintaining that a miracle needn't necessarily be a violation of law. It may, they say, take place in accordance with a law that we don't know.

There are two ways of taking this. (1) It may mean only that when God is using his power to interfere with and suspend his own laws, he guides himself by some general principle or rule of action. This, of course, can't be disproved, and is in itself the most probable supposition. (2) But it may mean that a miracle can be in accordance with a law in the same sense in which the ordinary events of nature are in accordance with laws. If that is what is meant, it seems to indicate an imperfect grasp of what is meant by a 'law', and of what constitutes a 'miracle'.

When we say that an ordinary physical event E always takes place according to some invariable law, we mean •that it is connected—either by following or by accompanying—some definite set S of physical antecedents; •that whenever S is exactly reproduced, E will occur unless it is counteracted by the similar laws of some other physical antecedents; and •that whenever E occurs it will always be found that S has existed beforehand (or some other set of antecedents, if E could be caused in more than one way). Now, an event that happens like that isn't a miracle. To be a miracle it must be produced by a direct volition, without the use of means; or at least, without the use of any means which if simply repeated would produce it again. For there to be a miracle, •properly so-called•, one or other of these must be the case:

•an event E occurs without having been preceded by any antecedent phenomenal conditions that would be sufficient to produce E again if they were repeated; or

•an event E, for the production of which the antecedent

conditions exist, is delayed or prevented without the intervention of any phenomenal antecedents that would delay or prevent E in a future case.

The test of a miracle is this: Were there present in the case external conditions such that whenever these conditions or causes reappear the event will be reproduced? If there were, it isn't a miracle; if there were not, it is a miracle, but it doesn't happen according to .any. law- it is an event produced without any law or even in spite of some law. [Mill calls these external causes 'second causes'. That phrase is a technical term in theology. It refers to any causal mechanism that God might make use of, between his will and the desired upshot.] You might want to say: 'A miracle doesn't necessarily exclude the intervention of second causes. If God wanted to raise a thunderstorm by miracle, he might do it by means of winds and clouds.' Undoubtedly; but ·let us break this down into two cases, and look at them separately. (1) The winds and clouds *were not* sufficient to excite the thunderstorm without other divine assistance. In that case, the storm is not a fulfillment of law but a violation of it. (2) The winds and clouds were sufficient to excite the thunderstorm. In that case, there is a miracle, but it isn't the storm; it's the production of the winds and clouds, or whatever link in the chain of causation it was at which God first made use of physical antecedents. If

•there wasn't any *first*-physical-antecedent, i.e. if

•the event called 'miraculous' was produced by natural means, and those in turn by others, and so on back to the beginning of things; in short, if

•the event is an 'act of God' only in the sense that he foresaw it and ordained it as a consequence of the forces he set going at the creation;

then there is no miracle at all. There is only the ordinary working of God's providence.

Here is another example: Someone who claims to be under orders from God cures a sick person by rubbing some ointment on him. Would this treatment have cured the patient if it were administered by someone who wasn't specially commissioned by God? If so, there is no miracle; if not, there is a miracle, but there is also a violation of law. Here is a line of argument that some will use:

If these events are violations of law, then law is violated every time a physical event is produced by a voluntary act of a human being. Human volition constantly modifies natural phenomena, not by *violating* their laws but by *using* them. Why can't divine volition do the same? The power of volitions over phenomena is itself a law-known and acknowledged as such before most other laws of nature. It's true that when the human will exercises power over any object, it does so through the direct power it has over the human muscles and not over anything else. But God has direct power over everything that he has made. So the supposition that events are produced, prevented, or modified by •God's action doesn't involve supposing any violation of law, any more than this is involved in the supposition of that events are produced or modified by •man's action. Both are equally parts of the course of nature, equally consistent with what we know of the government of all things by law.

Those who argue like this are mostly believers in free will, who develop the argument along these lines:

Every human volition *starts up* a new chain of causation. It is the *first* link of the chain, not connected by invariable sequence with any previous state of affairs. So even if God's intervention did constitute a breaking-in on the connected chain of events, by introducing a new originating cause that has no root in the past, this would be no reason for discrediting it, since every human act of volition does precisely the same. If God breaks laws, then so does man. In fact, \cdot neither does, because \cdot the start-up of volition is not governed by any laws.

Those who dispute the free will theory, and regard volition as no exception to the universal law of cause and effect, may answer:

Volitions don't •interrupt the chain of causation; they •carry it on, because the connection of cause and effect is of just the same nature between motive and act as between a set of physical antecedents and a physical consequent.

But this, whether true or not, doesn't really affect the argument— •i.e. doesn't do any harm to the proposed likening of human volition to divine volition. If anything saves the human will's interference with the course of nature from being an exception to law, it is our including among laws the relation of motive to volition; and by parity of argument interference by the divine won't be an exception to law either, because we can't help supposing that God, in every one of his acts, is determined by motives.

So the alleged analogy holds good: but what it proves is only what I have maintained from the outset—that divine interference with nature could be proved if we had the same sort of evidence for it as we have for human interferences. The question of antecedent improbability arises only because we don't have direct perceptual evidence of divine intervention ·as we do of human volitions ·. That God has intervened in the world is always matter of inference, and somewhat speculative inference at that. And we don't have to think hard to see that in these circumstances the antecedent presumption against the truth of the inference is extremely strong.

When the human will interferes to produce some physical effect other than the movements of the person's own human body, it does so by using *means*, and it has to employ means that are by their own physical properties sufficient to bring about the effect. Divine interference is stipulated as proceeding in a different manner from this: it produces its effect without means, or with means that aren't in themselves sufficient to produce the effect (.so that God's part in this is to make up for the insufficiency \cdot). In the •human case, all the physical phenomena except the first bodily movement are produced in strict conformity to physical causation; and that first movement is traced by positive observation to the cause—the volition—that produced it. In the •divine case, the event is supposed not to have been produced at all through physical causation, \cdot or anyway not through physical causation that is sufficient to account for it, and there is no direct evidence to connect it with any volition. The grounds for ascribing it to a volition are only negative, because there is no other apparent way of accounting for its occurrence.

But in this merely speculative explanation there is always another hypothesis possible, namely that the event was produced by physical causes in some way that isn't apparent to us. It may be due to •a law of physical nature that we don't yet know, or to

•the unknown presence of conditions necessary for producing it according to some law that we do know. Take a case where an event that is supposed to be miraculous reaches us not through the uncertain medium of human testimony but through the direct evidence of our own senses. And assume, of course, that we don't have direct evidence that the event was produced by a divine volition, like the direct evidence we have that movements of our bodies are produced by human volitions. As long as the miraculous character of the event is merely an inference from the supposed inadequacy of the laws of physical nature to account for it, so long will the hypothesis of a •natural origin for the phenomenon be entitled to preference over that of a •supernatural one. The commonest principles of sound judgment forbid us to suppose for any effect a cause of which we have had absolutely no experience, unless we have discovered that all those of which we have had experience are absent. Now consider this kind of situation:

> A physical state of affairs occurs which our knowledge doesn't enable us to account for, because it depends either on •laws that empirical science hasn't yet brought to light, or on •unsuspected facts about this particular case.

There aren't many things of which we have had more frequent experience than we have of *that*! Accordingly, when we hear of an amazing event we always (in these modern times) believe that if it really did occur it wasn't the work of God or of a demon, but a consequence of some unknown natural law or of some hidden fact. And each of these suppositions is still on the cards when (as in the case of a miracle properly so-called) the amazing event seemed to depend on the will of a human being. It's always possible that

there is at work some undetected law of nature that the wonder-worker has become able to call into action; or that
the wonder has been brought about (as in the truly extraor-dinary feats of jugglers) by the applying ordinary laws in a way that we don't notice.

In each of those cases, the person in question may not be aware of just what he is doing, so that neither case necessarily involves voluntary deception. And there is a third possibility. It may be the case that: •The event had no connection with the volition at all; the coincidence between them was a result of craft or accident, the 'miracle'-worker having seemed or claimed to produce by his will something that was already about to occur—e.g. 'commanding' an eclipse of the sun at the moment when he knows through astronomy that an eclipse is on the point of taking place.

In a case of this third sort, the miracle might be tested by a challenge to repeat it; but it should be noticed that recorded 'miracles' were seldom or never put to this test. No miracle-worker seems ever to have made a *practice* of raising the dead! The most notable 'miraculous' operations—including 'raising the dead'—are reported to have been performed in only a few isolated cases, which may have been cunningly selected cases, or may have been accidental coincidences. In short, there is nothing to exclude the supposition that *every* alleged miracle was due to natural causes: and as long as that remains possible, no scientific observer—and no man of ordinary common sense—would conjecture a cause, ·namely a divinely caused miracle·, which there is no reason to think real, except its ability to account for something that is sufficiently accounted for without it.

If we stopped here, the case against miracles might seem to be complete. But when we look into the matter further, you'll see that the considerations I have presented don't entitle us to conclude without qualification that the 'miracle' theory of the production of any phenomenon ought to be summarily rejected. The most we can conclude is that no extraordinary powers that have ever been alleged to be exercised by any human being over nature can be evidence of miraculous gifts to anyone to whom the existence of God and his intervention in human affairs is not already accepted as a settled fact. The existence of God can't possibly be proved through miracles, for unless a god is already recognized the apparent miracle can always be explained through an hypothesis that is more probable than the hypothesis that it is an interference by a Being of whose very existence it is supposed to be the sole evidence. Up to this point, Hume's argument [see page 29] is conclusive. But it is less conclusive if we

accept as a fact—or even as a probability resting on independent evidence—that a Being exists who created the present order of Nature and, therefore, may well have power to modify it. Once we admit a god, the thesis that some effect was directly produced by his direct volition is no longer •a purely arbitrary hypothesis to account for the given fact, but must be reckoned with as •a serious possibility. So now the question changes its character, and our answer to it should depend on what we know or reasonably guess concerning *how* God governs the universe. The options are:

- •the event in question was brought about by the agencies through which God's government of the universe is ordinarily carried on;
- •the event in question is a result of a special and nonordinary interference by God's will, over-riding those ordinary agencies.

Our question is: which of those two is more probable, given what we know or guess about how God governs the universe? Let us start here: Assuming as a fact the existence and providence of God, the whole of our observation of Nature gives us incontrovertible evidence that •he governs the universe by means of second causes [see note on page 31]; that •all facts—or at least all physical facts follow uniformly upon given physical conditions, and never occur except when the appropriate collection of physical conditions is realized. (I limit the assertion to physical facts so as to leave the case of human volition an open question; though actually I needn't do so, for the following reason. If the human will is free, it has been left free by its creator, and isn't controlled by him either directly or through second causes; it isn't governed at all, so it isn't an example of God's way of governing.) Whatever God does govern, he governs by second causes. This wasn't obvious in the infancy of science, but it came to be increasingly recognized as the processes of nature were more carefully and accurately examined, until it is now positively known for almost every class of phenomena. The exceptions are some obscure and complicated cases that our scientific processes haven't vet been able completely to clear up and disentangle; a complete proof that *these* also are governed by natural laws can't be given in the present state of science. Still, these cases also contribute something to the evidence that all

physical events are governed by second causes; their contribution is negative, •consisting in evidence that nothing other than second causes is at work•; but even that will count as conclusive evidence except in contexts where religion is the topic under discussion. When someone inquires into an event—whether for scientific or for practical purposes—he asks himself 'What is its cause?' and not, 'Does it have any natural cause?' A man would be laughed at if he took seriously the possible answer 'The event's only cause is the will of God'.

Against this weight of negative evidence we have to set whatever positive evidence there is for the occurrence of miracles. And I have already admitted that this evidence could conceivably have been strong enough to make the exception as certain as the rule-i.e. to make it just as certain that •some events *don't* fall under natural laws as it is that •most events do. If we had the direct testimony of our senses to a •supernatural fact, it might be as completely authenticated and made certain as any •natural one. But we never do have that testimony. The supernatural character of the fact is always, as I have said, a matter of inference and speculation, and the mystery is always open to the possibility of a solution that isn't supernatural. To someone who already believes in supernatural power, the supernatural hypothesis may seem more probable than the natural one; but only if it fits with what we know or reasonably guess concerning •how the supernatural agent goes about doing things. Well, everything we know about •this from the evidence of nature fits with the natural theory and clashes with the supernatural. So there is a vast preponderance of probability against a miracle; to counterbalance it we would need a case where a supposed miracle and its circumstances had a very extraordinary and indisputable *fit* with something we think that we know, or have grounds for believing, regarding God's attributes.

This *fit* is supposed to exist when the purpose of the miracle is extremely beneficial to mankind, e.g. when it offers support for some highly important belief. Why? Well, God's goodness is supposed to make it highly likely that for such an excellent purpose he *would* make an exception to his general rule of government. But for reasons that I have already discussed \cdot in Part 2 of this Essay \cdot , any inference that we draw from \cdot the goodness of God to •what he has or hasn't actually done is utterly precarious. If we reason directly from God's goodness to positive facts, there ought to be no misery or vice or crime anywhere in the world. We can't see in God's goodness any reason why

> •if he deviated once from the ordinary system of his government in order to do good to man, he shouldn't have done so on a hundred other occasions;

or any reason why

•if the benefit aimed at by some given deviation •from natural laws• (such as the revelation of Christianity) was transcendent and unique, that precious gift should have been granted only after the lapse of many ages;

or any reason why

•when the gift was at last given, the evidence for it should have been left open to so much doubt and difficulty.

Bear in mind that God's goodness doesn't create a presumption in favour of a departure from his general system of government unless his good purpose in this couldn't have been achieved without going against any natural laws. If God intended that mankind should receive Christianity, or any other gift, it would have agreed better with everything we know about his government if he had arranged, in his initial scheme of creation, for it to arise at the appointed time by natural development. To which I would add that everything we know concerning the history of the human mind indicates that that's how it actually *did* arise.

In addition to all these considerations there is another, namely the extremely imperfect nature of the testimony that we have for the miracles (real or supposed) that accompanied the foundation of Christianity and of every other revealed religion. At best it is merely testimony, given without cross-examination, of people who were

•extremely ignorant,

- •credulous, as ignorant people usually are,
- •honourably credulous when the excellence of the doctrine or a proper reverence for the teacher makes them eager to believe,
- •not used to distinguishing the perceptions of sense from what is floated in on top of them by the suggestions of a

lively imagination, and

•unpractised in the difficult art of deciding between appearance and reality, and between the natural and the supernatural.

Furthermore, their testimony was given at a time when no-one thought it worthwhile to contradict any .story about an. alleged miracle, because it was generally believed at that time that miracles in themselves proved nothing because they could be worked by a lying spirit as well as by the spirit of God. [Mill is not referring to 'lying' testimony about the occurrence of a miracle, but about the possibility that a reported miracle really did occur but came not from God but from some devil.] Such were the witnesses; and we don't have the direct testimony even of them. The only history we have of these .supposedly miraculous. events is in documents that •were written much later (even orthodox believers agree about that), and often •don't even name the supposed eye-witnesses. It is only fair to admit that these gospels include the best and least absurd of the wonderful stories that were so plentifully current among the early Christians; but on the rare occasions when they do name someone as a subject or spectator of a miracle, they doubtless draw on this tradition, mentioning the names the story was connected with in the people's minds. And that connection may have been accidental. Anyone who has observed how, even these days, a story grows up from some small foundation, taking on additional details at every step. knows very well how a story can begin as anonymous and then get names attached to it. For example, the name of someone who •told the story gets brought into the story itself, first as a •witness and still later as a •participant.

We should remember the very important point that •stories of miracles only grow up among ignorant people, and aren't adopted by educated people until •they have become the belief of multitudes. The miracle-stories that Protestants believe started up at times and in places where there was hardly any understanding of probability, and miracles were thought to be among the commonest of all phenomena. The Catholic Church, indeed, holds as an article of faith that miracles have never ceased, and new ones continue to be, now and then, brought forth and believed, even in the present incredulous age— yet if in an incredulous generation certainly not among the incredulous portion of it, but always among people who, in addition to the most childish ignorance, have grown up (as does everyone who is educated by the Catholic clergy) trained to believe that

- •it is a duty to believe and a sin to doubt;
- •it is dangerous to be sceptical about anything that is offered for belief in the name of the true religion; and
- •nothing is so contrary to piety as incredulity.

No-one but a Roman Catholic, and by no means every one of them, believes in these latter-day 'miracles'. Yet the testimony in their favour often gives much better evidence than we have for any of the early miracles—better especially in one of the most essential respects, namely that in many cases the alleged eye-witnesses are known, and we have their story at first hand.

So that's how the balance of evidence stands regarding the reality of miracles, assuming that the existence and government of God has been proved by other evidence. On one side:

> •the great negative presumption arising from the whole of what the course of nature reveals to us of how God governs, namely through second causes and by invariable cause-effect regularities.

On the other side:

•a few exceptional cases, supported by evidence of a sort that wouldn't justify belief in anything that was even slightly unusual or improbable; the eye-witnesses

•in most cases unknown,

- •in no case competent by character or education to examine the real nature of the appearances that they may have seen,¹ and
- •always having a combination of the strongest motives that can inspire human beings to persuade themselves, and then persuade others, that what they have seen was a miracle.

Furthermore, even if the reports of supposed miracles

¹ There is in fact one—only one—known exception to the ignorance and lack of education of the first generation of Christians. It is St Paul. But the only miracle he reports is that of his own conversion •on the road to Damascus (Acts 9:3-8)•; and of all the miracles of the New Testament this is the easiest to explain by natural causes.

are entirely accurate, it is always on the cards that they were either mere coincidences or were produced by natural means—even when we can't (and usually we *can*) suggest what those means might have been.

I conclude that 'miracles' have no claim whatever to the status of historical facts, and are utterly worthless as evidences of any revelation.

What can be said with truth on the side of miracles amounts only to the What can be said with truth on the side of miracles amounts only to the following. Considering

•that the order of nature provides some evidence of the reality of a creator, and of his having good will to his creatures though not for his being motivated, in his conduct towards them, solely by good will;

•that all the evidence of his existence is also evidence that he is not all- powerful; and

•that in our ignorance of the limits of his power we can't positively decide that he was able to provide for us, by his initial plan of creation, all the good that he intended us to have, or to give us any part of it earlier than he in fact did; —considering these things, and considering further that an extremely precious gift came to us which

- •was helped but apparently not necessitated—•not outright *caused*•—by what had gone before, but
- •appears to have been due to the particular mental and moral endowments of one man, who openly declared that it didn't come from himself but *from* God *through* him,

then we are entitled to hope that what that man declared may be true. Such a hope isn't disqualified by its being inherently impossible or absolutely incredible that the gift came from God through the man. I speak of *hoping*, no more than that, because I don't think that any human testimony about this has any value as evidence. Not even the testimony of Christ on this subject, because he is never reported as offering any evidence except his own internal conviction; and everyone knows that in prescientific times men always supposed that any unusual abilities that they found themselves with were an inspiration from God; the best men always being the readiest to ascribe to that higher source, rather than to their own merits, any honourable special gift that they had.

Part 5: General result

The upshot of my examination of the evidence for theism, and of the evidence (assuming that theism is true) that there have been divine revelations, is this:

The rational attitude of any thoughtful person towards the supernatural, whether in natural or in revealed religion, is that of •scepticism—as distinct from •belief on the one hand and from •atheism on the other.

In this context I take 'atheism' to include not only •positive atheism, i.e. the dogmatic denial of God's existence, but also •negative atheism, i.e. the denial that there is any evidence either for or against God's existence, which \cdot I call a form of atheism because

for most practical purposes amounts to the same thing as if the existence of a god had been disproved. If I am right in the conclusions I have been led to by this inquiry, there *is* evidence, but not enough to count as a proof, and amounting only to one of the lower degrees of probability. What evidence there is points to the creation (not of the universe but) of the present order of the universe by

an intelligent mind •whose power over the materials was not absolute, •whose love for his creatures wasn't his sole active motive, but •who nevertheless wanted them to thrive. We should entirely reject the idea that the universe is under the providential government of an omnipotent Being who rules for the good of his creatures. Does the creator still exist? We have no guarantee of even that much, except that he can't be subject to the law of death that affects living things on this planet, because he himself created the conditions that produce the mortality of any creatures that we know to be mortal. Consider the idea that this Being, not being omnipotent, may have produced a machinery that falls short of what he aimed at, so that he sometimes has to intervene \cdot to make corrections \cdot . This is in itself neither absurd nor impossible, though in none of the cases in which God is thought to have intervened is the evidence anywhere near conclusive. It remains a mere possibility, to occupy the minds of those who find it comforting to suppose that blessings that ordinary human power is inadequate to attain may come not from extraordinary human power but from the generosity of a better-than- human mind which continuously cares for man. The possibility of a life after death has the same status: such life is a favour that this powerful Being, who wishes well to man, may have the power to grant; and indeed he has actually promised it—if the message alleged to have been sent by him really was sent by him. The whole domain of the supernatural is thus removed from the region of •belief into that of simple •hope; and it's likely to remain there for ever, as far as we can see; for we can hardly expect either •that we'll ever get positive evidence for the direct agency of God's benevolence in human destiny, or \cdot on the other hand \cdot •that we'll ever find any reason to think that it's quite impossible that human hopes on that subject should be realized.

Next question: Is it irrational to have hopes in a region of mere imagination, where there is no prospect that we'll ever have a basis for thinking it probable that the hopes will be realized? Ought such hopes to be discouraged because they depart from the rational principle of regulating our feelings as well as our opinions strictly by evidence? Different thinkers are likely, for a long time at least, to give different answers to this, depending on their individual temperaments. What are the principles that ought to govern the development and management of the imagination? We don't want our imagination to \cdot be \cdot so active that it can \cdot confuse the intellect or mislead actions and the will, or \cdot \cdot so inactive that \cdot no use is made of

its power for increasing the happiness of life and improving one's character. Philosophers have never seriously considered what principles would be best for achieving this double result, though some opinion on it is *implied* in almost all kinds of thinking about human character and education. I expect that in the future this will be regarded as a very important branch of study for practical purposes, and all the more so when the weakening of positive beliefs about higher-than-human states of existence lessens the imagination's intake of material from that domain of supposed reality. My view about it is based on my belief that human life is a small and confined thing, and judging by the present it is likely to remain small and confined even if the progress of material and moral improvement eventually frees it from the greater part of its present calamities. I think that this human life greatly needs any help the imagination can give it in aiming further and higher—any help, that is, that doesn't run counter to the evidence of fact. So I think it is a part of wisdom to make the most of any probabilities on this subject, even small ones, that give imagination any ground to stand on. I'm convinced that the development of such a tendency in the imagination, provided it stays in step with the development of severe reason, need not pervert the judgment. It is possible to form a perfectly sober estimate of the evidence on each side of a question while preferring to let one's imagination dwell on the •most comforting and •most improving possibilities, without even slightly overrating the solidity of the grounds for expecting that these possibilities, rather than any others, will be actually realized. Though this is not one of the practical maxims handed down by tradition and recognized as rules for the conduct of life, a great part of the happiness of life depends on its being silently observed. Consider for example the phenomenon of a *cheerful disposition*. It is always regarded as one of the chief blessings of life, but what does it mean? It is just the tendency, either from constitution or from habit, to dwell chiefly on the brighter side of the present and the future. If every nice or nasty aspect of everything •ought to occupy exactly the same place in our imagination that it •does in fact occupy and therefore •ought to have in our practical planning, what we call a cheerful disposition would be merely one kind of folly, on a par with (though not as unpleasant as) the opposite

disposition in which the gloomy and painful view of all things is habitually uppermost. But we don't find in practice that those who take life cheerfully are less alive to real risks of evil or danger, and less careful to provide against them, than other people. The tendency is rather the other way, for a hopeful disposition gives a spur to the faculties and keeps all the active energies in good working order. When imagination and reason are developed, each in the appropriate way, they don't take over one another's work. For us to keep up our conviction that we must die, we don't have to be always brooding over death. It's far better for us to think no further about this inevitable event than is required for •observing the rules of prudence in regard to our own life and that of others, and •fulfilling whatever duties we have with regard to our death. The way to secure this is not to think perpetually about death, but to think perpetually about our duties and the rule of life. The true rule of practical wisdom is not

•In your habitual thinking, make all the aspects of things equally prominent;

but rather

•In your habitual thinking, give the greatest prominence to the aspects of things that depend on, or can be modified by, your own conduct.

In things that don't depend on us, it is desirable to choose to look at things and at mankind on their pleasant side. Why? Not just because it makes life more enjoyable, but also because it helps us to love mankind better and to work with more heart for their improvement. After all, why should we feed our imaginations with the unlovely aspect of persons and things? Some dwelling on the evils of life is *necessary*—either in the sense that it can't be avoided or in the sense that it is needed for the performance of our duties and for preventing our sense of the reality of those evils from becoming speculative and dim. I say, though, that any dwelling on the evils of life that isn't necessary in one of those two ways is at best a useless expenditure of nervous energy. But if it is often a waste of strength to dwell on the •evils of life, it is worse than waste to dwell habitually on its •meannesses and •basenesses. [See note on 'evil' on page 17.] One has to be aware of them; but living with active thoughts of them makes it almost impossible to maintain in

oneself a high tone of mind. The imagination and feelings become tuned to a lower pitch: the daily objects and incidents of life come to be associated in one's mind with degrading rather than elevating things, and these associations give their colour to one's thoughts, just as associations of sensuality colour the thoughts of those who indulge freely in that sort of contemplation. Men have often experienced having their imaginations corrupted by one class of ideas, and I think they must have felt with the same kind of pain how mean associations can take the poetry out of the things that are most full of poetry—for example when a beautiful tune that had been associated with highly poetical words is heard sung with trivial and vulgar ones. I am saying all this just to illustrate the principle that in the management of the imagination literal truth of facts is not the only thing to be considered. Truth is the province of reason, and it is by the development of reason that one provides for truth's being always known and often thought of —as often as is required by duty and the circumstances of human life. But when reason is strongly developed, the imagination may safely go its own way, doing its best to make life pleasant and lovely inside the castle, trusting to the fortifications that reason has built and still maintains around the perimeter.

On these principles it seems to me that it is legitimate and philosophically defensible to allow ourselves a hope concerning how the universe is governed and the destiny of man after death, while we recognize as a clear truth that we have no basis for anything more than a hope. The beneficial effect of such a hope is far from trifling. It makes life and human nature a far greater thing to the feelings, and gives greater strength as well as greater solemnity to all the thoughts and feelings that are awakened in us by our fellow-creatures and by mankind in general. It reduces our sense of nature's irony—that painful feeling we have when we see the exertions and sacrifices of a person's life culminating in the formation of a wise and noble mind, only to disappear from the world right at the time when the world seems about to begin reaping the benefit of it. [In the next sentence, 'art' is used first in something like our present sense of it, and then in the sense of 'skill or technique or set of rules'. Mill may have thought of this as a mild pun.] The old truth that life is short and art is long is one of the most discouraging things about

our condition; this hope ·for an after-life· admits the possibility that the art used in improving and beautifying the soul itself may do some good in some other life, even when it has seemed useless for this life. But the benefit consists less in •the presence of any specific hope than in •the enlargement of the general scale of the feelings; the loftier aspirations won't be so much inhibited and cut down to size by a sense of the insignificance of human life—by the disastrous feeling of 'not worthwhile ·because time is so short.' It is obvious that there will be a great gain—I needn't go into the details—from the increased inducement to work on improving one's character right up to the end of life.

There's another use of imagination-a most important onethat until now has been kept up principally by means of religious belief, and that is infinitely precious to mankind; so much so that human excellence greatly depends on how well this has been provided for. It involves the imagination's •familiarity with the conception of a *morally perfect being*, and the •habit of taking the approval of such a being as the norm or standard to by which to judge our characters and guide our actions. This idealization of our standard of excellence in a *person* is quite possible even if the person is thought of as merely imaginary. But religion, ever since the birth of Christianity, has taught that our highest conceptions of combined wisdom and goodness exist in actual reality in a living being who has his eyes on us and cares for our good. Through its darkest and most corrupt periods, Christianity has still raised this torch on high—has kept this object of veneration and imitation before the eyes of man. Admittedly the image of perfection has been most imperfect, and in many respects it has had a perverting and corrupting tendency, not only from •the low moral ideas of the times, but also from •the mass of moral contradictions that the deluded worshipper was compelled to swallow because of the supposed necessity of

what Mill wrote next: complimenting the Good Principle with absolute power.

he may have meant: rounding out (completing) his account of the source of goodness by crediting it with absolute power.

or perhaps he meant: paying to the source of goodness the compliment of crediting it with absolute power.

[Two comments. (1) In Mill's day the spelling 'complimenting' could be used in the manner of the first suggestion, for which we would now use 'complementing'. (2) For several centuries up to Mill's time, 'principle' very often meant 'source'.] But human beings are capable of overlooking any amount of either moral or intellectual contradiction, and accepting propositions that are utterly inconsistent with one another, not only without being shocked by the contradiction but even allowing each of the contradictory beliefs to produce at least a part of its natural consequences in the mind. (This is one of the most universal as well as of the most surprising characteristics of human nature, and one of the most vivid proofs of the low level to which the reason of mankind in general has so far risen.) Pious men and women have gone on ascribing to God particular acts and a general course of will and conduct that are incompatible with even the most ordinary and limited conception of moral goodness; and many important parts of their own ideas of morality have been totally warped and distorted; and despite all this they have gone on conceiving their God as clothed with all the attributes of the highest ideal goodness that they have been psychologically able to conceive, and have had their own aspirations towards goodness stimulated and encouraged by that conception. And it's beyond question that a complete belief in •the real existence of a Being who exemplifies our own best ideas of perfection, and in •our being in the hands of that Being as the ruler of the universe, gives to these feelings a force that they can't get from reference to a merely ideal conception.

This particular advantage can't be had by those who take a rational view of what and how much evidence there is for the existence and attributes of the creator. On the other hand, those people aren't burdened with the moral contradictions that infect every form of religion that aims at giving a moral justification for how the universe is governed. This enables them to form a much truer and more consistent conception of ideal goodness than is possible for anyone who thinks he has to find ideal goodness in an omnipotent ruler of the world. Once the power of the creator is recognized as limited, there is nothing to disprove the supposition that his goodness is complete, and that the **ideally** perfect character—one that we would like to model ourselves on, and to whom we look for approval when we act well—may have a **real** existence in a Being to whom we owe all such good as we enjoy.

Above all, the most valuable part of the effect on the character that Christianity has produced by presenting a divine person as a standard of excellence and a model for imitation •is available even to the absolute unbeliever and •can never more be lost to humanity. For it is Christ, rather than God, whom Christianity has presented to believers as the pattern of perfection for humanity. It is the God incarnate [= 'God made flesh', referring to the man Jesus of Nazarethl, more than the God of the Jews or the God of Nature. who upon being idealized has taken hold of the modern mind to such a good effect. Whatever else may be taken away from us by rational criticism, Christ is still left; a unique figure, unlike all his precursors and at least as much unlike all his followers, even those who had the direct benefit of his personal teaching. It's no use saving that Christ as exhibited in the Gospels isn't historical. and that we don't know how much of what is admirable .in his reported doings and savings. has been added by the tradition of his followers. The tradition of followers suffices to insert any number of marvels, and may have inserted all the 'miracles' Christ is reported to have performed. But who among his disciples or among their pupils was capable of inventing the sayings ascribed to Jesus, or of imagining the life and character revealed in the Gospels? Certainly not the fishermen of Galilee; equally certainly not St. Paul, whose character and idiosyncrasies were of a totally different sort; still less the early Christian writers, whose most obvious characteristic is that all the good that was in them was derived, as they always said it was, from the higher source. What could be inserted into the story by a disciple we can see in the mystical parts of the Gospel of St. John-ideas borrowed from Philo and the Alexandrian Platonists, and put into the mouth of Christ in long speeches about himself. The other Gospels contain not the slightest hint of these speeches, though they are claimed to have been delivered on occasions of the deepest interest, with all Christ's principal followers present; most prominently at the

last supper. The East was full of men who could have stolen any quantity of this poor stuff, as the many Oriental sects of Gnostics afterwards did. But about the life and sayings of Jesus there is a stamp of personal originality, combined with profound insight. that must place the Prophet of Nazareth, even in the judgment of people who don't think he was divinely inspired, in the very first rank of the men of sublime genius of whom our species can boast. (You won't think so if you are looking for scientific precision in his utterances: but it's not sensible to look for that when something very different was being aimed at.) When this pre-eminent genius is combined with the qualities of probably the greatest moral reformer, and martyr to that mission, who ever existed on earth, religion can't be said to have made a bad choice in picking on this man as the ideal representative and guide of humanity. And it wouldn't be easy-even now, even for an unbeliever-to find a better translation of the rule of virtue from the abstract into the concrete, . from the ideal into the real., than to try to live in such a way that Christ would approve our life. And then there is this fact:

In the thoughts of the rational sceptic it remains a possibility that Christ actually was what he supposed himself to be—a *man* charged with a special, explicit and unique commission from God to lead mankind to truth and virtue.²

When we bear that in mind, we may well conclude that •after rational criticism has done its utmost against the evidence for religion, the influences of religion on the character that will remain—•the ones that survive the critical attack•—are well worth preserving, and that •what they lack in direct strength as compared with those of a firmer belief is more than made up for by the greater truth and rightness of the morality they sanction.

[In this paragraph the word 'impressions' presumably stands for the imaginings, hopes, aspirations and strivings that Mill has been talking about.] Impressions such as these, though not in themselves amounting to what can properly be called a 'religion', seem to me excellently fitted to aid and strengthen the real though purely human religion that sometimes calls itself the 'Religion of Humanity' and sometimes the 'Religion of Duty'. [Mill presents the 'religion of humanity' in the closing

² 'What about his supposing himself to be God?', you may ask. He didn't. He never made the smallest claim to divinity, and would probably have thought such a claim to be as blasphemous as it seemed to the men who condemned him.

pages of his essay The Usefulness of Religion; and a knowledge of that seems to be presupposed in what he says in this present essay.] This religion offers inducements for developing a religious devotion to the welfare of our fellow-creatures as •an obligatory limit to every selfish aim, and •an end for the direct promotion of which no sacrifice can be too great; and the impressions I have been describing add to this the feeling that in making devotion-to-the-welfare-of-our-fellowcreatures the rule of our life, we may be co-operating with the unseen Being to whom we owe everything that is enjoyable in life. This form of religious idea allows one to have the feeling that one is *helping* God—repaying him for the good he has given, by a voluntary co-operation •that he *needs* and •that may enable him to get a little nearer to the fulfillment of his purposes. (This elevated feeling isn't possible for those who believe in the omnipotence of the source of good in the universe!) The conditions of human existence are highly favourable to the growth of such a feeling, and here is why:

There is a battle constantly going on between the powers of good and those of evil. Even the humblest human creature

can take *some* part in this battle, and even the smallest help to the right side has value in promoting the very slow progress by which good is gradually gaining ground from evil. That progress is often so slow as to be almost undetectable; but when we compare the state of the battle at two times that are far apart, the progress of good over evil becomes visible to us, and that gives us a promise that the good will win the final victory—quite certainly, though not very soon.

The most animating and invigorating thought that can inspire a human creature is the thought of doing something, on even the humblest scale if nothing more is within reach, towards bringing this final victory a little nearer. And I am perfectly sure that it—•the religion of humanity•—is destined to be the religion of the future, whether or not supernatural sanctions are brought into it. But it appears to me that supernatural hopes, of the sort that rational scepticism (as I have called it) is willing to endorse, may still contribute quite a lot towards giving this religion the ascendancy it ought to have over the human mind.