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General Introduction

Why Any World At All?

Why does there exist *anything*? Why a world with its stars, its planets, its humans, its atoms – why these or any other such items? Why couldn't they all vanish, one after another, and why have there ever been any of them instead of utter emptiness? The puzzle can make our minds dizzy, can fill us with awe. Suppose, for example, that God explains everything else. Could God be *self-explaining*? And if God could be self-explaining then why not the entire cosmos, the sum total of all existing things? Might the cosmos be self-explaining, self-creating, completely inevitably and for reasons that quantum theory has revealed, as some physicists now suggest? Or could it "just exist" for no reason whatever? Would reasonless existence be no mystery, or less of a mystery, if there always had existed at least one thing, throughout infinite time?

Such questions interact with ones about what the world is really like. Might it consist of many huge regions each worth calling "a universe"? Perhaps it might, for many physicists offer to explain why many such regions could have come to exist. Again, people have argued that we, together with all the other things in what we call "our universe," could be patterns of activity inside one of the gigantic computers that a technologically advanced civilization might be expected to use for "simulating" universes. Well, might it be better to picture our universe in the way suggested by Hindu and Islamic writings, as a structure or pattern of activity inside an infinite divine being? Might existence inside such a being be easier to explain than existence outside it? Or would even the gigantic computer be a reality more plausible than any infinite being? Many atheists have argued that *being infinite* would make a divine being *infinitely implausible*.

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A volume about these matters might feature as few as a dozen writings by ancient authors, or else by contemporary writers discussing medieval ideas, or by philosophers with newly coined ideas, or by religious leaders, theologians, or physicists. The present volume instead reprints some fifty authors from Plato onwards. They were chosen not because they fitted any particular label such as "philosopher" or "physicist," but because they discuss "*Why the World?*" intriguingly. Not all of them think it a sensible question. Several insist that the sole possible answer is "That's just how matters are – the world exists, and that's that."

It could seem that no other answer would make sense. For a start, it is hard to see how a thing could be self-explaining. Couldn't this be like lifting yourself by tugging on your own hair? So when trying to explain any one thing, aren't we forced to point to another that we think explains it, and doesn't this mean we could never explain why there hadn't been an absence, always, of all things? Sure enough, some realities can be called too abstract to be *things*. It can be a reality that there are at least two people in a room, and another slightly less abstract reality that between sixty and seventy people are crammed into it. These two realities are not *things* unless in the very wide sense that makes even round squares and married bachelors into "*things* we can discuss," but don't they depend on the existence of the room and the people? Realities like those might explain various affairs – the reason, for instance, why John left the room is that it was so crowded – but not why there exists even a single thing. And what realities could there possibly be except ones which were *either* existing things *or else* abstractions which depended on existing things for their reality?

Well, the right answer to that last question might be that all sorts of realities, infinitely many realities, are not existing things or dependent on existing things – the reality, for instance, that two and two make four. Absolute Nothingness, the absence not just of existing things but of absolutely all realities, could be absolutely impossible. And if so, then one or more of the realities that made it impossible could perhaps explain the world of existing things.

What might any world-explaining realities be? We need to look hard at whether Absolute Nothingness truly is impossible, and if so, then at just what makes it impossible.

Why Not Absolute Nothingness?

Like infinitely many other mathematical affairs, the fact that two and two make four could surely be called something *real*, but must it therefore *exist*? Couldn't it be an eternal reality, showing that Absolute Nothingness will forever be impossible, while not being an existent of any sort?

You might use those words the other way round. You might say that two and two making four "*exists*, yet isn't anything *real*." [Sherlock Holmes: "My dear

Watson, you see everything that I see, but you *observe* nothing." Why not instead "You observe everything that I observe, but you *see* nothing"? It's the distinction that is important, not the language!] Let us just agree that there seem to be many facts, for instance the fact about two and two, which in no way depend on anything existing in the way that stars, planets, and humans do. The reality of such facts – or, if that's your preferred word, their "existence," or their "subsistence" as some prefer to say – could be in some need of explanation. Believe it or not, a truly firm proof of Two And Two Make Four can fill several pages. Nevertheless, two and two making four may quickly convince you that Absolute Nothingness is impossible. If all *things* were absent, would Two And Two Make Four be *a non-reality*, remaining like that until at least four things had come to exist? Presumably the answer must be No.

Again, in the absence of all existing things – *a blank*, let us call it – might it not be *a fortunate reality* that a cosmos consisting only of people in agony *didn't* exist? And couldn't it be a pity, *an unfortunate reality*, that the blank hadn't been replaced by a good cosmos?

In the blank, wouldn't it at least be a reality that there might have existed a cosmos instead, since this would have involved no logical absurdity? It can seem clear enough that our cosmos couldn't have existed unless it had *first* been real that no absurdity was involved. Not first through being earlier in time, but first as a prerequisite, and as a prerequisite which wouldn't have depended on the actual existence of any thing or things – on the actual existence of experts on Logic, for instance. What is more, there are presumably countless distinct ways in which, instead of our cosmos, there could have been a different one that wasn't logically absurd – as absurd as a round square, a husband without a wife, a lion with three heads but only two heads. Now, this appears to give us a very crowded field of realities. Ways of being a cosmos that are available logically – ways not condemned to unavailability of the kind to which being a round square is condemned – presumably form vastly many distinct realities, none of them depending on the actual existence of any thing or group of things. Simply having no properties that conflict with their other properties seems enough to make these cases of *what's logically possible* into items that are *real*, even if not in quite the way in which stars, planets, and humans are real.

People would sometimes reject some of those points. They are philosophical points, and in philosophy conclusive arguments are very rare. What strike some people as ridiculous positions are fully defensible in the eyes of other people. Trying to base all facts on existing things, one very clever philosopher wrote that all facts about the past, such as that Napoleon reached Moscow, are facts only about what we call memories, records, and traces. Other philosophers of equal brainpower have reasoned that Einstein must certainly have been right in believing (as he emphasized when writing to the relatives of his dead friend Michele Besso) that the dead are not absent from the cosmos. Einstein's cosmos has what he described as "a four-dimensional existence." The dead do not live in

the cosmos *of today*, but the cosmos that we of today call "the cosmos of today" is only a slice of Einstein's four-dimensionally existing whole, just as what you yourself call "here" is only the region of the world that is near you. In agreeing with Einstein, the philosophers reason that if past events weren't in existence "back there along the fourth dimension" there would be *no facts* about them. Most folk, however, would say that if the entire cosmos vanished – "cosmos" meaning the sum total, four-dimensional or otherwise, of all existing things, so that absolutely nothing existed to show that things had once been there – then it would still be a fact that Napoleon had reached Moscow and that they themselves had existed. They reject the idea that every fact, every reality, must depend on some existing thing or group of things.

It may, though, come as a surprise that Time of one type might be real when no cosmos existed, Time of a kind that flowed because of *the mere possibility of alterations*, the sheer fact that changes might in theory be taking place. Time of that type could be important when a physicist suggested that universes "quantum-fluctuate" into existence out of nothing, then picturing the "nothing" as obeying laws of quantum physics that make things spring into being by chance and from time to time. Could such Time indeed be real? Imagine a cosmos initially composed of many billion motionless particles and nothing else. It is changeless except that the particles start fading away at random moments. The period that each takes to fade away is brief compared with the "half-life" of the particles, the period it is most likely to take for half of them to have faded away. The particles are at first so numerous that many thousand are fading at any one moment. Eventually, however, so few remain that there are short periods, and then longer periods, during which no particles are fading. Short and longer stretches of time, that is to say, during which nothing alters. Time that really passes because changes really could be happening. Time of that variety could continue to flow even after all the particles had vanished, for the coming to exist of new particles, one after another, would at least be logically possible, unlike the arrival of more and more round squares. It would be a species of Time in which even a four-dimensionally existing cosmos – a sum total of all existing things, with a time dimension and clocks which measured distances along that dimension – might suddenly come into existence.

In short, it does seem that not every reality depends on the existence of things. When we try to explain why there is a cosmos, it is something to bear in mind. Existing things might be born not from absolutely nothing but from "nearly nothing" – from one or more factors abstract enough to be beyond all existing things. From Time of a sort that did not itself depend on the existence of things; from laws of quantum physics that managed to be real beyond all actual events; from the sheer need for a good cosmos to exist, which is what Plato thought; from some other abstract requirement that made the existence of the cosmos as a whole, or of a divine being in particular, into something that was absolutely necessary; from the mathematical fact of there being *only one possible way* of there existing nothing, *infinitely many possible ways* of there existing something. And so on.

A Genuine Problem?

"Even if there were nothing, you'd still be complaining!" – It's a joke, attributed to a philosopher reacting to the alleged puzzle of existence. Yet what is the actual point of the joke? Is the philosopher laughing at Leibniz's idea that the absence of all existing things would have been "simpler and easier"? [Simpler for sure, and maybe easier since the situation would then have contained no item whose creation might have been difficult.] Or was the point of the joke that something has to exist – *your own self, for a start* – for you to be able to "complain" about anything, to wonder why, and that this makes it silly to ask why the cosmos isn't empty of all things? That point could be an interesting mistake. If a nuclear bomb had exploded near your parents when they met for the first time, you'd have every cause to wonder *why you existed* so as to be able to wonder why about anything.

Trying to imagine a blank – defined, remember, as an absence of all existing things – would you succeed only in imagining yourself looking at empty space? The right reaction to this might be "Yes; but *so what?*". It wouldn't at once prove that a blank would be logically impossible – that like a spherical cube or a bachelor with seven wives it would contain a contradiction. Still, clever people have argued that it would in fact contain one. The idea of any situation, some folk declare, assumes that there somewhere exists some conscious experience of that situation, or some act of thinking about it. This shows, they say, that there cannot fail to be at least one mind or at least one case of free-floating consciousness. Other folk say "at least one thing," claiming that thing-hood is so fundamental to reality that things could not vanish one by one until at last there *really was* a situation empty of all things. Might they be right? It would have strange implications for cosmology. Cosmologists sometimes think that the cosmos contains many completely independent universes, and that each came to exist in a chance-governed way. There is no conflict with mass-energy conservation, they maintain, because the gravitational energy that holds each universe together must be counted as *negative energy* which balances all the energy tied up in the universe's material particles. Having quantum-fluctuated into existence, each universe might at any moment vanish, much as in the case of the particles that are for ever fluctuating into existence and vanishing throughout what we call "empty space." If, however, the absence of all existing things would be an actual contradiction, then at least one of those universes would have to continue to exist! Yet how would any last remaining universe know it no longer had a right to vanish? How could its physics suddenly have changed? It can certainly seem that the vanishing of even a very last atom would involve no contradiction, and that therefore the existence of the cosmos could present a puzzle.

Could we argue, though, that we ought to be puzzled only by matters that are in conflict with past experience? Obviously we have never experienced an absence of all things.

Some people have given precisely that argument. A variant is that the world's existence must be "natural" because, after all, that is what we find in Nature. And a popular theme among philosophers of recent times, and among many scientists as well, is that things can be explained only by earlier things plus the laws of nature governing how each existing group of things leads to the next. When this is challenged, its supporters ask in disgust whether we should instead explain things by pointing to *fictions*: to imps and dragons, for example. But remember, pointing to affairs which aren't fictions might not mean pointing to any existing thing or group of things. It looks altogether questionable to assume that realities, if they are not themselves existing things, must at least be somehow dependent on existing things and hence Couldn't possibly explain why there isn't a blank. For how about *abstract facts* of various types, such as the fact that a blank can be a blank in only one way whereas there are infinitely many possible ways of being a cosmos, and how about *requirements* based on the natures of various possible things, and how about *physical laws* that made emptiness somehow impossible or at least "unstable"? All of these might be items that did not owe their reality to any existing thing, and that might perhaps have acted as Explainers. Admittedly, things never come with labels saying "Needs explanation." We lack evidence against the idea, even, that for an infinitely long period there was a blank, and then a cosmos started to exist for no reason at all. But it is today widely recognized that we cannot begin to make sense of the world – to experience it as more than buzzing confusion – unless we use principles whose correctness cannot be shown by any evidence. Without such principles, nothing could even look like evidence. The whole idea of one fact as evidence of another would be meaningless. Now, one such principle could be that existing things always need to be accounted for. Or at least, that we shouldn't quickly give up on trying to account for them.

Ways of Explaining Existence

Attempts to answer *"Why Existence?"* overlap in many intricate ways. They strongly resist being forced into tidy little boxes. We editors have provided boxes of a sort, grouping various writers into separate sections. Every section has a heading – *Chance*, for example – that tries to give some rough idea of what will be found in it. At the start of each section, one or two sentences try to make that rough idea just a little less rough. Yet the process of picking the correct section for a particular writer was often little better than tossing a coin, so please attach no great importance to the section headings.

In this General Introduction there is no room for summarizing the contents of the various sections. You might, though, like to hear something about some of the arguments scattered through the volume. Here, for a start, is one way of trying to make existence unproblematic. Simply deny the distinction between *being a mere*

logical possibility, something involving no contradiction, and *existing in point of fact*. The suggestion is that every single logical possibility exists somewhere. There are infinitely many separately existing "worlds," all equally real. If a thing's existence is logically possible then it exists in at least one of the worlds. This theory, known as Modal Realism, was developed by David Lewis, perhaps the most formidably intelligent philosopher of recent times.

Modal Realism could be judged a particularly grotesque product of the idea that there are no facts without existing things – that only existing things can be "truthmakers." The existence of unicorns is said to be logically possible; can that really be true? "Indeed it can," may come the reply, "yet only because there are, *as truthmakers for it*, all the worlds where unicorns exist." Still, advocates of Modal Realism are not forced to talk of truthmaking. A more attractive way of presenting their position could be as follows. The distinction between *really being possible* and *really existing* can be surprisingly hard to make. Now, if all logically possible things really exist somewhere then there is no need to make it – except, that is, by saying that many of the things fail to exist in *our* world. "What, no unicorns?" is then like "What, no beer?" – meaning that there is none in the house.

In addition, the real existence of all logically possible worlds, though it could seem a fantastically complex situation, would be in a way simplest and least arbitrary. It could be very simply described, in very few words. ["The real existence of all logically possible worlds" is eight words only.] It would avoid such questions as "Why only one world?" or "Why exactly forty-two?".

All the same, Modal Realism has few supporters. More widespread is this theory: that the existence of the cosmos is no problem because it has been a fact for infinitely many years. True, our universe can appear to have started off in a Big Bang about 13.7 billion years ago. Yet maybe the cosmos contains countless Big Bang universes and has never been empty throughout past eternity. Or maybe the Bang only reversed an earlier Big Crunch that was preceded by another Bang, and so on backwards forever. The idea that each situation was preceded by an earlier situation, in an infinite chain, is occasionally viewed as *providing an explanation* for the chain as a whole. Each situation is explained by the one before, so the chain in its entirety is explained! Often, though, people think that's nonsense, and that they can do better. To their way of thinking, the fact that each link in the chain has its explanation in the link that preceded it *removes all need to explain* the chain as a whole: "The infinite chain is simply there, and that is all" strikes them as an adequate answer to why the cosmos exists. Among those who accept this answer, however, a few think that it is adequate only because thoughts or conscious experiences are cosmically fundamental. The eternal existence of Mind or of Consciousness seems to them less of a problem than the eternal existence of protons and electrons.

Occasionally, wanting to avoid an endless regress of situations explained by earlier situations, people have made a *finite* chain go round and join up with itself. It involves a circular kind of Time, but this perhaps isn't absurd. Yet could there

truly be *an explanation* here? Imagine a time machine which nobody invented. It existed in the year 2012 because it had remained in existence since the year 1950. And why did it exist in the year 1950? Answer: It had traveled back from the year 2012. A preposterous answer, we might well feel, no matter how we felt about time machines.

An eternal chain might feature a law that material particles, hydrogen atoms for example, come into existence entirely reasonlessly, at an extremely slow rate. This could look quite as sensible as having everything spring into existence in a Big Bang. But some physicists urge us to see a Bang as particularly unproblematic. They say there was no Time before it, this making it wrong to seek earlier events by which it could be explained.

Alternatively, any need to explain might perhaps be reduced or removed by making everything start off featureless or almost featureless, perhaps as a "dust" of mere points. One philosophical theory makes the original featureless situation into an utterly simple Ocean of Being, *infinite* in the strong sense of having no limitations whatever. Some of it then splits off to form a cosmos which, even if infinitely large, is limited in all sorts of ways. But sometimes it is suggested that words like "infinite," "featureless," "Being" themselves do too much to limit the ultimate source of everything. Sometimes this starting point, this Ultimate Beyond, is called "God."

Then there is belief in God in any of several other forms. Some have argued that God is a Person whose perfection includes the property of *existing*, which means God must exist. A currently more fashionable idea is that God's perfection is crowned by the property of *existing necessarily*. The necessity is sometimes viewed as *logical*: a situation without God would be somehow self-contradictory, even though every proof of God that human logicians could construct would have at least one controversial premise. At other times the talk is of a requirement not of Logic but of Value, *a need* for God to exist – a ground or reason for God to exist, lying in the infinite worth of any situation that included God. Whether this was responsible for God's existence might be utterly unknowable. If, however, it was responsible, then God could never have failed to exist. The contents of God's mind being supremely wonderful in a way that God could eternally experience and enjoy, the need for God's existence would be eternal. Aristotle apparently thought this was why God always had existed and always would exist, and people have thought it ever since.

There might be an interesting alternative. God, instead of being an existing thing, a divine mind, a Supreme Being, could be the Principle suggested by Plato, that the sheer need for a good cosmos can exert creative power without the aid of anybody or anything. Would this truly be *an alternative*, though? Couldn't it take us straight back to belief in *God as a Being*? For the very first thing the Platonic Principle generated might be God as a Being, a Being ruling supreme over any other things that the Principle generated. Note that the Being might be thought to have created all other things, or else all so-called other things could be pictured as

numerous pantheists picture them, as elements in the Being's own existence. In Islamic thought it is standard to view Allah as containing all lesser things.

Then again, God might perhaps be Pure Being, the mysteriously simple unity described by Aquinas in which God's goodness *just is* God's knowledge, which *just is* God's power, which *just is* God Himself. [Aquinas believed that this made God's reality absolutely inevitable, but that humans could not prove it.] Or possibly God's infinitude would make God's existence more plausible even though it remained a brute fact, totally without an explanation. For God's infinitude, some have argued, would make God's existence simple, and therefore easy to believe in, since infinitude is particularly easy to describe. [What, for instance, does God know? Short and simple answer: All the infinitely many facts that are knowable.] Or finally there is this. God might be easier to believe in because nothing outside God could possibly have created God, or could have stood the slightest chance of preventing God's existence.

Once God had been reached, any things that existed outside God might be readily explained.

In this edited volume you will find details of such answers to why there isn't a blank. There are more answers out there in the world's libraries, in the spoken words of mystics, in vague ideas running through the heads of all the millions who find the world's existence puzzling. Focusing on various answers that seem to us outstandingly interesting, we editors might never have heard of others which we could have found equally intriguing – for the field is enormous. Probing it to any great depth would have required several fat volumes. Even with only fifty or so authors to be reprinted, it has been necessary to cut many words which were not central to their arguments. In several instances reprinting hundreds more words would in any case only have made the waters muddier. Hegel provides a prime example. Hegel struggled to express ideas so difficult that he never claimed to have understood them fully. In the volume he is represented by mere snippets – but snippets that people knowing little about Kant, his predecessor, might hope to understand.

The volume's Suggestions for Further Reading are extremely wide-ranging. Although you can sometimes guess what various authors discuss when you see the titles they gave to their articles and books, the survey article "Why Not Nothing?", reprinted near the end of the volume, will give you further guidance. It introduces numerous writings, many of them recent. Thanks largely to the physicists, the topic is starting to attract much new attention.

Why Ask Why?

The right answer to "*Why Existence?*" could be that things exist for no reason whatever. After all, a situation containing one or more things must have been every bit as possible as a situation empty of all things, and Logic required that either the

one situation or the other would be real, these being the sole alternatives. Hence there can be no entirely clear need for any factor that selected what there would be, a non-empty world or an empty one. Even if selected by nobody and nothing, one of the alternatives would be the winner.

All the same, there could be some factor that made the world non-empty. While we may perhaps have little chance of finding it, searching for it could be worthwhile. It might show something very sad about the human race if none of its members could be bothered with this. And although science can discover a great deal about the world without answering why it is there at all, most of us have some preferred answer and can reasonably let it influence our ideas about what science has discovered. It can be schizoid thinking, "doublethink" as in George Orwell's *Nineteen Eighty-Four*, to imagine that a preference for such and such an answer *hasn't* influenced your own ideas about what the world is like. Here are just a few examples of how they could be influenced:

(a) If you think some physical mechanism brought our universe into existence, then you could well conclude that the cosmos contains infinitely many universes which came to exist through that same mechanism. It could be odd to think the mechanism operated only once, or only thirty million times.

(b) If thinking that everything "just exists," you are unlikely to accept that we have immortal souls and that there is such a place as Heaven. And if you instead think that our universe was created by God then, whether or not you have hopes of a heavenly afterlife, this may well affect whether you believe that some situations *are really better than others* in basically the same way as Africa is really larger than India. You will be virtually certain to believe it, even if rejecting the idea that God's arbitrary choice made some situations really better. Of course atheists, too, do very frequently believe it. When, though, they are professional philosophers, crowds of them *don't*. They instead teach that when you call situations of one type better than those of another type, you are just issuing to everybody, yourself included, instructions to favor those situations, and that calling those instructions better than other possible instructions is issuing yet another instruction, an instruction to follow the instructions.

(c) How about Plato's suggestion that the cosmos exists *simply because this is good*? Influential for well over two thousand years, the suggestion still has its defenders today among theologians and philosophers. [Of us two editors, one finds it remarkably attractive: in this volume, see the section "Value/Perfection as Ultimate."] If accepting the suggestion, you might theorize that Reality consists of infinitely many minds each fully aware of everything worth knowing or experiencing; for wouldn't this be *best*? The patterns of infinitely many universes could be among the things experienced. They could

exist in the experiences of them and nowhere else. Now, it might be impossible for us to refute this startling world-picture. It might be as much immune to evidence as the theory that our universe is simply a pattern inside a gigantic computer, very expertly programmed by members of an advanced civilization. But if requirements of Value Couldn't possibly explain the existence of anything, then the chance that the world-picture was right would presumably have to be called zero or almost zero. Some world-pictures can be outrageously weird until placed against the background of *"Why Does Any World Exist?"*.

(d) Treatments of Fine-Tuning can reasonably be influenced by ideas about why there is a cosmos. Physicists are now often convinced that our universe is "fine-tuned for life" in the following sense: that very minor changes to its physics – for instance to the strength of forces such as electromagnetism and gravity – would have made it a lifeless universe. This was at first resisted by many physicists. Seeing a divine Fine-Tuner as the sole possible explanation of the alleged tuning, they treated it as illusory. But it subsequently became clear that plausible physical mechanisms could generate many huge cosmic regions, "universes" largely or entirely separate from one another, which differed in their physics. The strength of electromagnetism, the mass difference between the proton and the neutron, whether there were even any particles recognizable as protons and neutrons, and numerous other factors *might vary* from universe to universe. It could then be likely that at least a few universes would have life-permitting properties. Obviously living beings would find themselves only in such universes. Problem Solved, without bringing in God? Perhaps yes, if the number of variations was sufficiently high.

String Theory, now our main hope for a Final Theory or "Theory of Everything," at first seemed to predict only about a million variations. Leonard Susskind (a leading string theorist) judged this far from sufficient for explaining the fine-tuning of even just one factor, the one called "the cosmological constant," for this appears to have needed tuning with awe-inspiring accuracy, equivalent to throwing a dart to hit a microscopically tiny target positioned at the far edge of the observable universe. Yet it was later found that the true number of variations predicted by String Theory could be ten followed by four hundred and ninety-nine zeros. When universes existed in that gigantic number of varieties, this could render it probable that a universe or two would be life-permitting.

The disappointing side to any solution along those lines was that it would mean abandoning the search for the Holy Grail of physics, the ability to derive everything from fundamental theoretical principles. Force strengths, particle masses, the cosmological constant, etcetera would not be predicted by the Final Theory. They would instead be like the mass of our planet, the atmospheric pressure at its

surface, the strength of its magnetic field. But it would now be reasonable for atheists to accept Fine-Tuning as a reality.

However, what about the physicists who believe that God created all other things? Well, they also could accept the existence of multiple universes. But they might picture God as choosing physical principles that made all of the universes life-permitting. They could therefore retain high hopes of finding the Grail.