

Why is there something rather than nothing? –
Ultimate question or pointless diversion?
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Why is there something rather than nothing? That is, why does the world exist? Why is there anything at all? I assume that you, like me, don't know the answer to these questions. I assume that you, like me, haven't been losing sleep over them. Yet, is there any more basic question than why is there something rather than nothing?

My memory is – and this is more likely a memory of a memory, but I think it's based on something that actually happened – my memory is that I first posed this question when I was about eight years old, on my grandparents' farm in Connecticut, outside, in the pasture. “Why is all this here?” I thought to myself. I puzzled over this for not very long. I had no idea what the answer might be. I set aside the question. I didn't ask my parents or anyone else about it, perhaps sensing that they would have no idea either, perhaps fearing that they would not understand such a question coming from an eight-year-old, or perhaps concluding that they would just consider it silly. Why is there something rather than nothing?

In college, a philosophy major, I was introduced to the writings of Ludwig Wittgenstein, among the most influential philosophers of the 20th century. He wrote: “It is not *how* things are in the world that is mystical, but *that* it exists.” [Ludwig Wittgenstein, *Tractatus Logico-Philosophicus* (first German edition, 1921), §6.44] In other words, the existence of the world, that there is something rather than nothing, that is what is mystical. How things are in the world – scientists can deal with that. But what is mystical is that which is beyond what philosophers – or anyone else – can deal with. [see §7, “What we cannot speak about we must consign to silence.” “Wovon man nicht sprechen kann, darüber muß man schweigen.”]

About 25 years later, in Wednesday evening vespers at the Unitarian Church of Arlington – this was before the word “Universalist” was added to the church's name – Kerry, David – that's my step-son – and I presented a service we called “Celebrating the Mystery of Existence.” As our title implied, we were *celebrating* the mystery of existence, not unraveling it or dissolving it.

Then six and a half years ago, the author blurb for a New York Times book reviewer, Jim Holt, mentioned that his forthcoming book was on why there is something rather than nothing. I waited patiently, well, OK, impatiently, for that book, for six years. Every so often I would see another author blurb for Mr. Holt, indicating that his book was still forthcoming. And then, last fall, it came: Jim Holt, *Why Does the World Exist? An Existential Detective Story* (2012).

Over the centuries, over the millenia, a lot of people have thought about this. Not having any idea how to answer the question, they've made up stories. [see Creation Stories from around the World, <http://www.gly.uga.edu/railsback/CS/CSIndex.html>]

According to a Norse story, "In the beginning of time, there was nothing: neither sand, nor sea, nor cool waves. Neither the heaven nor earth existed. Instead, long before the earth was made, Niflheim was made, and, in it, a spring gave rise to twelve rivers." The starting point was Niflheim.

And here's the beginning of a story from the Kono people of Guinea. "In the beginning there was nothing: neither matter nor light existed. In this world lived only Death, whose name is Sa, and his wife and their only daughter. Needing a place for his family to live, Sa eventually used his magical powers to create a vast sea of mud."

"Long, long ago, when heaven and earth were still one, the entire universe was contained in an egg-shaped cloud." This one's from China. "All the matter of the universe swirled chaotically in that egg. Deep within the swirling matter was Pan Gu, a huge giant who grew in the chaos. For 18,000 years he developed and slept in the egg." You can guess where it went from there.

I could go on with many more creation myths, but what they seem to have in common is that they don't really start with nothing. They don't satisfy our desire, our need, for an explanation of why – of why there is something rather than nothing – and of how one could possibly get from nothing to something.

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Starting from scratch, starting from nothing – it's hard, that first step is a big one. And getting one's head around the idea of nothingness is a real challenge.

Let's see if we can get all the way to nothing.

Imagine that all the chairs, all the furniture, all the people around you – imagine that they're all gone. Indeed, Gettysburg is gone, Pennsylvania is gone, the whole planet earth is gone, our galaxy and all the other galaxies are gone. Eliminate space and time – that's hard, isn't it? No more dark matter, or waves, or fields, or black holes. Nothing with "Higgs" in its name. Eliminate all the laws of nature, cast out mathematics, all concepts. Do you still have an observer? Not allowed. Absolute nothingness. Is this a dead end? Are we stuck there?

Is nothingness hard to imagine? It's the point of view we had prior to our birth, or at least prior to our conception. There was no observer. From our point of view – and of course we didn't have a point of view – there was nothing.

Or here's a different perspective. Imagine a closed sphere of space-time, with a radius of zero. [Holt, pp. 50, 143]

It seems to me that nothingness is the default condition, that anything beyond nothing requires explanation.

Now, we could get diverted here by mathematical truths: $7 + 5 = 12$ whether there's anyone or anything around or not, so it would seem. [see Holt, pp. 171-85] Mathematics lives in a Platonic world beyond space and time, some would argue. But let's set that aside.

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Here are some ways to look at all this.

(1) The world is a brute fact – this is the language the philosophers use, brute fact. It's a given, it's here, we don't know why, get over it. [see Holt, pp. 25, 132]

(2) I was discussing all this with my barber not too long ago, and he had an explanation for me. Everything has to have a cause, and to avoid going back cause after cause, infinitely, there has to be a first cause, and that first cause is God. For support, he cited St. Thomas Aquinas. [Mark, at Charlie's, Paoli, PA, 1/4/13, see Holt, pp. 95-119]

(3) According to the physicists, even in a complete vacuum, there are quantum events, little particles pop into and out of existence, maintaining the total energy level at zero. One of these chance occurrences could have become the Big Bang, and the beginning of our universe, as we know it. [see Holt, pp. 128, 138-48; Lawrence Krauss, *A Universe from Nothing: Why There Is Something Rather Than Nothing* (2012)]

These are the three leading approaches; I'll talk more about them a little later. Here are four other approaches – I didn't make them up.

(4) Nothingness is impossible. If we can establish this, then we don't have to explain why there's something rather than nothing: something becomes the default. [see Holt, pp. 46-49, discussing Bergson, Bradley, Rundle] But why should nothingness be impossible? Nothingness is certainly a lot simpler than any alternative, isn't it?

(5) We have no basis for giving priority to nothingness over somethingness. By chance, we ended up with something. This could involve a multiverse. A multiverse is a collection of universes, zillions of them, possibly. Some could be somethingness universes, others could be nothingness universes. Naturally, we're on a somethingness universe, because nothingness universes are uninhabited. Nozick warned us that explanations could be "extremely weird." [Robert Nozick, *Philosophical Explanations* (1981), p. 116] But even if you can accept, at least for the sake of argument, the idea of multiple universes, what could it mean for one or more of those universes to be empty? After all, $7 + 0 = 7$. [see Holt, pp. 231-32]

(6) We assume that something and nothing are the only two options, but perhaps there's a third way. For example, having a color and transparency aren't the only options. The number five, for example, has neither. [see Nozick, p. 150] But does a third option get us anywhere? It would appear that nothingness would always win on simplicity, no matter how many options there were. And what if we are just a figment of the imagination of a young, not very clever god? It seems to be working.

(7) Finally, perhaps what we have now is nothingness, and what we think we perceive is illusion, and we're illusory ourselves. Again, if you can't tell the difference between illusion and reality, what's the problem? [I may have made this one up.]

There are, in fact, other approaches, but we have quite enough on our plate as it is. [see Holt, Nozick]

We're looking for an explanation. You may have had the experience, possibly on both sides of this, of a child asking a parent for an explanation of something. The parent gives the explanation and the child, again, asks "why?", going to the next level. The parent may be able to provide the second explanation, but very few would be able to go to the third level. Can you explain why the sky is blue, or why days have been getting longer, or why we're not allowed to divide by zero, or why it's better to give than to receive?

Chances are, you end up with the brute fact: "It just is." "Because I told you so." "Eat your dinner."

As I mentioned, my barber offered one way to get around the infinite regress, or avoid the brute fact approach, or at least to soften it: The First Cause, or God, the Creator God. [see Holt, 95-107] This explanation remains popular and vital today. But for some of us, it begs the question. Where does God come from? we ask. Are we back to a brute fact? Or do we have here a logically necessary truth, or a statement that is self-justifying? Is the existence of the Creator God as necessary as the truth of $7 + 5 = 12$? Is it like Descartes' "Cogito, ergo sum"? – "I think, therefore I am"? Is it self-authenticating the way the Pope's statement is when the Pope declares, "The Pope is infallible"? Let's leave these questions hanging and turn to physics.

Some very bright physicists have explained that empty space isn't really totally empty. Because of the laws of quantum physics – still too strange for most of us mortals to understand – the emptiness of empty space hides a lot of activity – particles popping in and out of existence – which can lead, on rare occasions, to a whole lot of stuff coming into existence, and thus, our world, our universe. On Thursday, by the way, physicists announced that they're just about almost absolutely sure that they've found the Higgs Boson, the particle crucial, so I'm told, for our understanding of why objects in the universe have mass.

[<http://www.npr.org/blogs/thetwo-way/2013/03/14/174287416/god-particle-update-scientists-think-theyve-pinned-down-the-higgs-boson>]

Now, I won't dispute the quantum physics of the vacuum – I can't, since I don't understand it. But the problem I see is that the physicists don't start from nothingness. They have two things. First, they posit empty space. I thought we got rid of that. Second, they appeal to physical laws. The laws of nature aren't nothing either. Where did they come from? [for a defense of the quantum physics approach, see Krauss, and see also discussion of Krauss, by Gary Gutting, "Can Physics and Philosophy Get Along?" New York Times website, May 10, 2012, 9:00 pm]

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Let's step back. As I see it, there are four basic miracles:

(1) The first miracle is that there is something rather than nothing.

(2) The second miracle is that the universe appreciates the first miracle. How does the universe appreciate the miracle of existence? Through us. That's our job. We provide the universe consciousness, awareness. Do we do this uniquely? We don't know. Probably not. Maybe we'll find out someday. It could happen in our lifetime. And someday, so it would seem, that awareness will disappear.

That the universe is sufficiently friendly to life – and thus, eventually, to consciousness – turns out, according to the experts, to be exceedingly unlikely. All sorts of variables have to be just so, and they are. It's like tossing a coin and coming up heads 100 times in a row, or 1000 times, you get the idea. [see Holt, pp. 97-98, 154-58, 166]

(3) The third miracle will happen when we (or someone) understands why or how there is something rather than nothing. This is on our to-do list for the future. Will we ever figure it out? I think so, I hope so. But, of course, we can't know for sure. That we cannot imagine what an answer would be like would seem to be a problem. But look at it this way. Do dogs understand internal combustion engines? Not likely – I don't understand them myself, really. But imagine someone whose intelligence is to ours, as ours is to the dog's. Such a being could understand things that are unimaginable for us. Will evolution lead to such a being? Will we create computers that are orders of magnitude brighter than we are? In other galaxies are there, or will there be, such super-intelligent beings? I think we'll get there someday. I hope so. As one person conjectured, we're five Einsteins away from an explanation. [Holt, quoting Martin Amis (a novelist, not a physicist), pp. 10-11]

Personally, I cannot imagine any explanation that would be satisfying. There would always be the question, "and where did *that* come from?" Still, my lack of imagination does not limit my hope. I mentioned that I cannot understand today's physics, let alone that of an Einstein five times removed.

And I can't understand how salmon navigate by magnetism or how bats navigate by echos, and they don't understand either, but they're able to do it. [see New York Times, editorial, 2/21/13, on magnetic navigation by salmon going back home; Thomas Nagel, *Mortal Questions* (1979), "What is it like to be a Bat?" pp. 168-69]

Some may feel that it's better for the mystery of existence to remain a mystery, and thus for this miracle – our figuring it out – not to occur. We should not attempt to enter this holy ground, they would say. I disagree, but, in any event, this miracle is one we'll never witness. And if, in a thousand years or so, humanity starts to get close to an answer, there will be no holding us back.

(4) Here's the fourth miracle. We – you and I – are here to witness the world. We are alive, alive now, we are aware of all this. Our time is brief. We missed the first 14 billion years; we'll miss the next 14 billion. [see Krauss, p. 87; his more precise number for the time since the Big Bang is 13.72 billion years] But here we are. How likely were we to have been born? Think of your parents – they could have missed each other. They could have been otherwise engaged on a particular evening. I'll leave out further inquiry into biology. And then there were your grandparents, and their parents, and on and on, further and further back. It's a miracle.

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I started with a few autobiographical sketches. Let me add another. I read several months ago that Ronald Dworkin, the leading legal philosopher of the last half century – I passed up taking a course with him at Princeton, by the way – that Dworkin had written a new book, on the possibility of religion without God. That idea is a comfortable one for me, but I was quite eager to see what Dworkin had to say on this topic. Alas, he is now the late Ronald Dworkin [see obituary, New York Times, Feb. 14, 2013], but, fortunately, his book, *Religion Without God*, is to be published [by Harvard University Press] later this year. [an excerpt from chapter 1 is published in New York Review of Books, April 4, 2013, p. 67]

When I was asked, last fall, to give a presentation on a religious theme at a retirement community in our area, my Dworkin-inspired topic was "Religion without God? God without religion?" My approach was not to give a lecture – how boring – but to break them up into small groups and give them a series of discussion questions – provocative questions for a group that included Quakers, UUs, people of a variety of other faith traditions, including, if I remember correctly, at least one Buddhist, and some "none of the aboves". One of the questions I posed was, "Why do we give thanks to God?" My unshared premise was that God – whatever God may or may not be – didn't need, wasn't interested in our thanks.

But in thinking about these questions, in living with them, over the past several months, I've begun to entertain the possibility that my skeptical premise might be just a little narrow. It's easy to conclude that God doesn't need our thanks, but perhaps the real question is, what do *we* need? Or,

more generally, how *do* we, how *should* we respond to the miracle of existence, the miracle of somethingness rather than nothingness?

At this point I could announce that this sermon is actually the first in a five part series, but it's not, so I won't. In any event, the topics of the four sermons I'm not going to write would be our four responses to the miracle, to the mystery, that there is something rather than nothing, and that we are here to witness to it.

The first response is one of *awe*. Now, I'm not exactly sure what awe is, but I think it has something to do with our sense of how small, how insignificant, how ephemeral, how ignorant we are, when we compare ourselves to the vastness, to the apparent eternity of all of creation. Stand out in the darkness of a star-filled night; stand before the Grand Canyon on a clear day; witness the birth of a child, or the death of a parent; listen to Beethoven's Ninth Symphony or Berlioz's Requiem.

The second response is *thanks*. We want to say thank you. We didn't create all this ourselves. It was here when we arrived; it is given to us. Whom do we thank? You can thank your parents, but that doesn't really go far enough, does it? This leads some of us to thank God – to send our thanks out into the universe, realizing that there may be no one out there to receive them, but with a desire to express gratitude that our rational side cannot suppress.

The third response is *joy*. We feel overwhelming joy that we can be a witness to all this, that we can be a participant in the world, and that we are here now, rather than a thousand years ago, or a thousand years from now.

And the fourth response is *love*. Let us love our neighbors as ourselves, let us love the whole interdependent web of creation. And that, to me, is what it means to love God. Let's take care of those who suffer, let us preserve our world for our grandchildren and their grandchildren, let us preserve our world for its own sake. Let us try to make it possible for everyone to feel the joy of creation.

As I've probably mentioned to you before, when asked about my view of God, my response has been that I'm a "post-humanist, metaphorical theist." Based on the experience of the past few months, I'm thinking now of expanding that to the assertion that I'm a "quasi-mystical, post-humanist, metaphorical theist."