

Levels of Nothing

There Are Multiple Answers to the Question of Why the Universe Exists

BY ROBERT LAWRENCE KUHN

NOTHING, OF LATE, IS SOMETHING OF A SCANDAL. Physicists and philosophers debate the efficacy of quantum physics, and the value of philosophical analysis, to explain why there is Something rather than Nothing.¹ In the Vol. 13 No. 2 (2007) issue of *SKEPTIC*, I confronted my life-long obsession with Nothing. Entitled “Why This Universe: Toward a Taxonomy of Ultimate Explanations,” the article described my existential angst and offered some 27 possible “ultimate explanations.” I suggested that while “Why Not Nothing?” may seem impenetrable, “Why This Universe?”, energized by remarkable advances in cosmology, may be accessible. While they are not at all the same question, perhaps if we can begin to decipher the latter, we can begin to decrypt the former.

After the article was published, *SKEPTIC* editor Michael Shermer encouraged me to expand the article into a book. I approached the philosopher John Leslie, who for decades had focused on Something/Nothing and whom I had come to know through our discussions on *Closer To Truth*, the PBS television series that I created and host, and we set about to co-edit a book of readings and commentaries on the ultimate question.

The Mystery of Existence: Why is there Anything At All? (Wiley-Blackwell, 2013), long in gestation, presents the ideas of contemporary thinkers as well as some others throughout intellectual history, grouped under five possible “solutions” to the “Why-is-there-Something-rather-than-Nothing?” puzzle: (1) a blank is absurd; (2) no explanation needed; (3) chance; (4) value/perfection as ultimate; and (5) mind/consciousness as ultimate.

In this article I shall explore the essence of Nothing, or what I call “Levels of Nothing,” especially in light of recent debates and public interest.² Why “Levels” of Nothing? That’s where the confusion lies.

What is it About Nothing?

Lump together everything that exists and might exist—physical, mental, platonic, spiritual, God, other nonphysicals. As for the physical, include all

matter, energy, space and time, and all the laws and principles that govern them (known and unknown); as for the mental, imagine all kinds of consciousness and awareness (known and unknown); as for the platonic, gather all forms of abstract objects (numbers, logic, forms, propositions, possibilities—known and unknown); as for the spiritual and God, embrace anything that could possibly fit these nonphysical categories (if anything does); and as for “other nonphysicals,” well, I just want to be sure not to leave anything unclassified. Lump together literally everything contained in ultimate reality. Now call it all by the simple name “Something.” Why is there “Something” rather than “Nothing”?

Why Not Nothing? What guides me here is gut feeling, not clever reasoning, which is why no argument has ever dissuaded me from continuing to think, following Leibniz,³ that Nothing, no world, would be simpler and easier than any world, that Nothing would have been the least arbitrary and “most natural” state of affairs.

As I have continued to think about Nothing, I have continued to think that Nothing “should,” in some sense, have obtained, and the only reason I accept the fact that Nothing does not obtain is not because of any of the arguments against Nothing,⁴ but because of the raw existence of Something—because in my private consciousness I am forced to recognize that real existents compose Something. In other words, an *a priori* weighing of Nothing v. Something (from a timeless, explanatorily earlier perspective) would, for me, tip the balance heavily to Nothing, but for the fact of the matter.

Thus, since I have no choice but to recognize that there is Something, I have no choice but to conclude that there is foundational force, selector, productive principle or type of necessity—some deep reason—that brings about the absence of Nothing. I cannot rid myself of the conviction that Nothing would have obtained had not something special somehow superseded or counteracted it. Yes, I know that seems circular—and many well-regarded philosophers say, “So there’s a world not a blank;

what's in any way surprising about that?" But I just can't help feeling that they are passing right over the problem most probative of ultimate reality.

Levels of Nothing

Defining "Nothing" may seem simple—no thing, not a thing. But what's a "thing"? I invoke the term "thing" in the most general possible way, and therefore, given some possible notions of Nothing, it is no contradiction to find "things" that compose these different kinds or levels of Nothing. Teasing apart these constituent things, as if scaffolds or sinews of Nothings, may help enrich understanding of the nature of Nothing, yielding a taxonomy that arrays opposing kinds of Nothing that could be conceived and might have existed.

This taxonomy is structured as a deconstruction or as a dissection, as it were, a reverse layering, a peeling, a progressive reduction of the content of each Nothing in a hierarchy of Nothings. As such, this taxonomy takes its heritage from the so-called Subtraction Argument, which seeks to show that the absence of all concrete objects would be metaphysically possible. (Stated simply, the Subtraction Argument works by imagining a sequence of possible worlds each containing one less concrete object than the world before, so that in the very last world even the very last object has vanished. It is no surprise that complexities emerge.⁵)

Developing this way of thinking, there might be nine levels of Nothing, with a general progression from Nothing most simplistic (Nothing One) to Nothing most absolute (Nothing Nine). There are criticisms of each of these Nothings. My point here is not so much to argue the legitimacy of any one kind of Nothing but rather to construct an exhaustive taxonomy of all potential or competing Nothings, and perhaps a taxonomy in which those Nothings are mutually exclusive. Following are nine levels of Nothings.

1. Nothing as existing space and time that just happens to be totally empty of all visible objects (particles and energy are permitted)—an utterly simplistic, pre-scientific view.
2. Nothing as existing space and time that just happens to be totally empty of all matter (no particles, but energy is permitted—flouting the law of mass-energy equivalence).
3. Nothing as existing space and time that just happens to be totally empty of all matter and energy.⁶
4. Nothing as existing space and time that is by necessity—irremediably and permanently in all

directions, temporal as well as spatial—totally empty of all matter and energy.

5. Nothing of the kind found in some theoretical formulations by physicists, where, although space-time (unified) as well as mass-energy (unified) do not exist, pre-existing laws, particularly laws of quantum mechanics, do exist. And it is these laws that make it the case that universes can and do, from time to time, pop into existence from "Nothing," creating space-time as well as mass-energy. (It is standard physics to assume that empty space must seethe with virtual particles, reflecting the uncertainty principle of quantum physics, where particle-antiparticle pairs come into being and then, almost always, in a fleetingly brief moment, annihilate each other.)
6. Nothing where not only is there no space-time and no mass-energy, but also there are no pre-existing laws of physics that could generate space-time or mass-energy (universes).
7. Nothing where not only is there no space-time, no mass-energy, and no pre-existing laws of physics, but also there are no non-physical things or kinds that are concrete (rather than abstract)—no God, no gods, and no consciousness (cosmic or otherwise). This means that there are no physical or non-physical beings or existents of any kind—nothing, whether natural or supernatural, that is concrete (rather than abstract).
8. Nothing where not only is there none of the above (so that, as in Nothing 7, there are no concrete existing things, physical or non-physical), but also there are no *abstract objects* of any kind—no numbers, no sets, no logic, no general propositions, no universals, no Platonic forms (e.g., no value).
9. Nothing where not only is there none of the above (so that, as in Nothing 8, there are no abstract objects), but also there are no *possibilities* of any kind (recognizing that possibilities and abstract objects overlap, though allowing that they can be distinguished).

Nothings 1 through 7 progressively remove or eliminate existing things, so that a reasonable stopping point—a point at which we might well be thought to have reached (what I hesitatingly call "Real Nothing", the metaphysical limit—would be Nothing Seven, which features no concrete existing things (no physical or non-physical concrete existents) of any kind.

Nothings 8 and 9 go further, eliminating *non-concrete* objects, things, existents and realities. Do they go too far? Many philosophers assert that neither Nothing 8 nor Nothing 9 is metaphysically possible, arguing that the claimed absence of abstract objects and/or possibilities would constitute a logical contradiction and hence abstract objects and/or possibilities exist necessarily. This could be important because, as John Leslie points out, among the realities which aren't concrete things, or which do not depend on the existence of concrete things, and thus cannot be eliminated, there may be some realities that are plausible candidates for explaining the world of concrete things.⁷ In this way of thinking, the crucial distinction is between realities that seemingly can be eliminated and realities that seemingly cannot be eliminated, rather than any particular way of distinguishing between levels of nothingness or particular ways of defining nothingness.

Note that among all these levels of Nothing, one of the "lesser Nothings"—that is, a kind of Nothing with more "things" in it—is the Nothing of physicists. What physicists contemplate—the sudden emergence or "tunneling" of universes from "Nothing"—is fascinating and indeed may be cosmogenic, but the tunneling process or capacity is not Nothing.⁸ The Nothing of physicists is thick with the complete set of the laws of physics, and so between physicists' Nothing and Real Nothing lies a vast, unbridgeable gulf. On this taxonomic scale, physicists' Nothing is Nothing Level 5, barely half way to utterly Nothing. If physicists' Nothing were in reality Real Nothing (i.e., ultimate reality), the laws of quantum physics (or whatever might turn out to be the most fundamental physical laws underlying quantum physics) would have to be either impossible to remove (meaning that eliminating them would involve logical contradiction) or a brute fact about existence beyond which explanation would be meaningless. I doubt I could ever get over the odd idea that something so intricate, so involved, so organized and so accessible as the laws of physics would be the ultimate brute fact.

As a separate consideration, some philosophers of religion argue that God is a "necessity"—meaning that it would be impossible for God not to exist—thus precluding Nothing 7 (which has no non-physical concrete things such as God but still has abstract objects) and crowning Nothing 6 (which has no space-time, no mass-energy, no laws of physics but still has God and other nonphysical things) as the metaphysical limit of what is to be explained.⁹ I find the move challenging. Moreover, based on the levels of Nothing in this taxonomy, it would seem less of a

leap to imagine a world without God (Nothing 7) than to imagine a world without abstract objects (Nothing 8). For the traditional God, that won't do.¹⁰

Why Not Nothing?

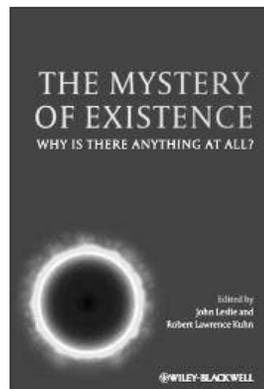
Cosmic visions are overwhelming, but I am sometimes preoccupied with another conundrum. How is it that we humans have such farsighted understanding after only a few thousand years of historical consciousness, only a few hundred years of effective science, and only a few decades of cosmological observations? Maybe it's still too early in the game. Maybe answers have been with us all along. This is a work in process and diverse contributions are needed.

Setting aside my taxonomy and consulting my gut, I come to only two kinds of answers. The first is that there can be no answer: Existence is a brute fact without explanation. The second is that at the primordial beginning, explanatorily and timelessly prior to time, some thing was *self-existing*. The essence of this something necessitated its existence such that non-existence to it would be as inherently impossible as physical immortality to us is factually impossible.

Various things or substances could conceivably contain this deeply centered self-existing essence, from the most fundamental meta-laws of physics to diverse kinds of consciousness, one of which could be God or something like god. Perhaps even these explanations are so mundane and bedrock is so bizarre that abstract objects or pure possibilities somehow harbor generative powers.

Why is there Something rather than Nothing? Why Not Nothing? If you don't get dizzy, you really don't get it. **S**

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The Mystery of Existence: Why Is There Anything at All? by John Leslie and Robert Lawrence Kuhn (co-editors). Wiley-Blackwell, 2013. 328 pages. \$29.95 Paperback. ISBN-13: 978-0470673553

REFERENCES

1. Why is there Something rather than Nothing?, the ultimate question, is a continuing theme of *Closer To Truth*, the public television/PBS series that I created and host (www.closetotruth.com).
2. Holt, Jim, *Why does the World Exist: An Existential Detective Story* (New York: Liveright, 2012). Shermer, Michael, "Much Ado About Nothing," *Scientific American*, May 2012. Krauss, Lawrence, *A Universe from Nothing: Why There Is Something Rather Than Nothing* (New York: Free Press, 2012). Albert, David, "On the Origin of Everything," *The New York Times*, March 23, 2012. Andersen, Ross, "Has Physics Made Philosophy and Religion Obsolete," *The Atlantic*, April 24, 2012.
3. Leibniz, Gottfried. 1714. *The Principles of Nature and Grace*.
4. Arguments against Nothing include saying that Nothing is unimaginable, nonsense, meaningless or absurd, or as soon as something is possible it must exist somewhere. Some would have God's necessary existence as proscribing Nothing.
5. For the Subtraction Argument, see the following. Baldwin, T. 1996. "There might be nothing", *Analysis* 56, pp. 231-8. Rodriguez-Pereyra, G. 1997. "There might be nothing: the subtraction argument improved", *Analysis* 57, pp. 159-66. Rodriguez-Pereyra, G. 2002. "Metaphysical nihilism defended: reply to Lowe and Paseau," *Analysis* 62, pp. 172-80. Paseau, Alexander. 2006. "The Subtraction Argument(s)," *Dialectica* 60(2), 2006, pp. 145-156. For the opposing view, that it is metaphysically not possible that there would be no concrete objects, see the following. Armstrong, D.M. 1989. *A Combinatorial Theory of Possibility*. Cambridge: Cambridge University Press. Lewis, D. 1986. *On the Plurality of Worlds*. Oxford: Blackwell. Lowe, E. J. 1996. "Why is there anything at all?" *Aristotelian Society Supplementary Volume* 70: 111–20. See also, Sorensen, Roy. 2009. "Nothingness," *Stanford Encyclopedia of Philosophy*.
6. As an example of an objection to a kind of Nothing, some would resist the idea that there could be space and time that had been emptied of existing things. The "relational" theories of space and of time assume that emptying space and time of existing things is impossible, because space is the system of spatial relations between things, and time is the system of temporal relations between things.
7. See sections 3.7, 3.8, and 3.9 in the taxonomy of "Why This Universe?" (*Skeptic*, Vol. 13 No. 2, 2007, p. 36).
8. That the universe may have popped into existence via some sort of cosmic spontaneous combustion, emerging from the "nothing" of empty space (i.e., vacuum energy generated by quantum fluctuations, unstable high energy "false vacua"), or from "quantum tunneling" (Vilenkin, Alex. 2006. *Many Worlds in One: The Search for Other Universes*. New York: Hill and Wang), may be the proximal cause of why we have a universe in the first place, but cannot be the reason, of itself, why the universe we have works so well for us. Universe-generating mechanisms of themselves, such as unprompted eternal chaotic inflation or uncaused nucleations in space-time, can only address the fine-tuning problem of our universe by postulating innumerable universes, perhaps an infinity of universes, a vast multiverse, in which the laws of physics must reset randomly in each universe, and must be, in some sense, primordial and foundational. Nor can vacuum energy or quantum tunneling or anything of the like be the ultimate cause of the universe, because, however hackneyed, the still-standing, still-unanswered question remains "from where did those laws come?"
9. The question of whether God, assuming God exists, would be "necessary"—which means that God would exist in all possible worlds—has beset philosophers and theologians for centuries. The much-debated Ontological Argument for the existence of God, which defines God as "a being than which no greater can be conceived," leads to the claim that God is necessary because necessity is a higher perfection than contingency. Richard Swinburne asserts that God is a "factual necessity" but not a "logical necessity" in that the non-existence of God would introduce no logical contradiction (*Closer To Truth*). Timothy O'Connor defends God's necessity in his monograph on the topic. O'Connor, Timothy. 2008. *Theism and Ultimate Explanation: The Necessary Shape of Contingency*. Oxford: Blackwell.
10. The relationship between God and abstract objects is particularly troublesome for those who believe that God created and sustains *all* things and who privilege above all else God's absolute sovereignty (aseity). The reason is that abstract objects, many philosophers believe, exist necessarily, which means that it is impossible for abstract objects not to exist, which further means that it makes no sense for even God to have created them. What would it take to create the idea of the number 3 or the truth that 1+2=3 or the reality that squares are not round? How could such ideas, truths, realities even conceivably be created? Peter van Inwagen calls abstract objects "putative counterexamples" to the thesis that God has created everything. But if abstract objects do exist necessarily, then wouldn't God's mental life be encompassed by swarms of infinities of infinities of abstract objects, not only which God would not have created but also over which God could exercise no control? The problem posed by abstract objects for a God whose sovereignty must be absolute is complex and requires metaphysical analysis. Consider two of the more general ways to defend God's sovereignty (aseity): 1) Deny that abstract objects are real, in that numbers, universals, propositions and the like are mere human-invented names with no correspondence in reality (nominalism); and/or 2) claim that abstract objects are thoughts in the mind of God. Van Inwagen rejects both ways; he must therefore defend the position that there are besides God other uncreated beings and thus prefers to restrict God's creation of "all things visible and invisible" to "objects that can enter into causal relations" (which excludes abstract objects). Van Inwagen, Peter. 2009. "God and Other Uncreated Things," in *Metaphysics and God*, ed. Kevin Timpe. London: Routledge. On the other hand, William Lane Craig rejects the view that "there might be things, such as properties and numbers, which are causally unrelated to God as their Creator." Craig says that "Abstract objects have at most an insubstantial existence in the mind of the Logos," adding, "If a Christian theist is to be a platonist, then, he must, it seems, embrace absolute creationism, the view that God has created all the abstract objects there are." However, Craig himself resolves the conundrum by espousing nominalism, by judging platonism to be false—so that those pesky abstract objects no longer exist and thus no longer undermine God's sovereignty. Craig, William Lane. 2011. "Van Inwagen On Uncreated Beings." Richard Swinburne argues that abstract objects, which seem to contradict his concept of God, are fictions; the only things that are true or false are human sentences (*Closer To Truth*). Also, Davidson, Matthew. 2009. "God and Other Necessary Beings," *Stanford Encyclopedia of Philosophy*.