

**A Universe From Someone:  
Against Lawrence M. Krauss' *A Universe From Nothing*:  
*Why There Is Something Rather Than Nothing* (Free Press, 2012)**

**- Peter S. Williams (MA, MPhil); Philosopher in Residence at the Damaris Trust;  
Assistant Professor in Communication and Worldviews at Gimlekollen School of  
Journalism and Communication in Norway.**

*A Universe From Nothing: Why There Is Something Rather Than Nothing* (Free Press, 2012), by cosmologist Lawrence M. Krauss, has been lauded to the skies by fellow atheists such as A.C. Grayling, Sam Harris and Neil deGrasse Tyson. According to Richard Dawkins: 'The title means exactly what it says. And what it says is devastating.'<sup>1</sup> I agree that what this book says on the subject of why something exists rather than nothing (which isn't a lot) is devastating, but only to the intellectual credibility of Krauss and his supporters. Krauss spends most of his book redefining 'nothing' in terms of increasingly incorporeal somethings (from 'empty space' to reified 'laws of physics'), as if this justified the conclusion that literal nothingness could be the cause the cosmos. That's like arguing that since its possible to live on less and less food each day it must be possible to live on no food.

Krauss admits that he is 'not sympathetic to the conviction that creation requires a creator'<sup>2</sup> (a conviction he states is 'at the basis of all of the world's religions'<sup>3</sup> – although this would come as a surprise to Buddhists who don't believe in God). It is of course true by definition that a *creation* requires a *creator* (to be a creator is to create a creation, and to be a creation is to be created by a creator). What Krauss *means* to say is that he isn't sympathetic to the idea that the cosmos is a creation, because that would entail a Creator: 'I can't prove that God doesn't exist, but I'd much rather live in a universe without one.'<sup>4</sup> This sort of confusion is symptomatic of Krauss' dismissive attitude to philosophy, a self-confessed 'intellectual bias'<sup>5</sup> that has led him to create a best-selling book riddled with red herrings, circumscribed by circular argumentation and undercut by self-contradiction.

Krauss acknowledges that 'no one but the most ardent fundamentalists would suggest that each and every [material] object is... purposefully created by a divine intelligence...'<sup>6</sup> and that 'many laypeople as well as scientists revel in our ability to explain how snowflakes and rainbows can spontaneously appear, based on simple, elegant laws of physics'<sup>7</sup> However, even giving maximum due to the inherent causal capacities of the natural world, there remains an open question: *why does the natural world exist?* Indeed, as Krauss acknowledges: 'one can ask, and many do, "Where do the laws of physics come from?"'<sup>8</sup> Pursuing this line of thought, Krauss acknowledges that 'many thoughtful people are driven to the apparent need for First Cause, as Plato, Aquinas, or the modern Roman Catholic Church might put it, and thereby to suppose some divine being: a creator of all that there is...'<sup>9</sup> As Dallas Willard argues: 'the dependent character of all physical states, together with the completeness of the series of dependencies underlying the existence of any given physical state, logically implies at least one self-existent, and therefore nonphysical, state of being.'<sup>10</sup>

There are, of course, several independent versions of the ‘First Cause’ or ‘cosmological’ argument. The most relevant in the context of Krauss’ book is clearly the Leibnizian form of the argument, defended by contemporary philosophers such as Bruce R. Reichenbach<sup>11</sup>, Richard Taylor<sup>12</sup> and William Lane Craig.<sup>13</sup> This type of argument might be put as follows:

- 1) Everything that exists has an explanation of its existence, either in the necessity of its own nature or in an external cause.
- 2) The universe exists.
- 3) Therefore the universe has an explanation of its existence.
- 4) If the universe has an explanation of its existence, that explanation is God.
- 5) Therefore, the explanation of the universe’s existence is God.

Since this is a logically valid deductive argument, and since the universe obviously exists, non-theists must deny premises 1 or 4 to rationally avoid God’s existence. However, many philosophers think that Premise 1 – a version of the ‘principle of sufficient reason’ - is simply self-evident. Imagine finding a translucent ball on the forest floor whilst hiking. You’d naturally wonder how it came to be there. If a fellow hiker said, ‘It just exists inexplicably. Don’t worry about it!’ you wouldn’t take him seriously. Suppose we increase the size of the ball so it’s as big the planet. That doesn’t remove the need for explanation. Suppose it were the size of the universe. Same problem. As for premise 4 – ‘If the universe has an explanation of its existence, that explanation is God’ – this is synonymous with the standard atheistic claim that if God doesn’t exist, then the universe has no explanation of its existence. The only other alternative to theism is to claim the universe has an explanation of its existence *in the necessity of its own nature*. But this would be a *very* radical step (and I can’t think of any contemporary atheist who takes it). After all, it’s coherent to imagine a universe made from a wholly different collection of quarks/fields/strings than the collection that actually exists; but such a universe would be a different universe, so universes clearly don’t exist necessarily. Indeed, Krauss invokes the possibility of other universes (‘theorists have estimated that there are perhaps  $10^{500}$  different possible consistent four-dimensional universes that could result from a single ten-dimensional string theory’<sup>14</sup>) and this possibility entails that universes doesn’t exist by a necessity of their own nature.<sup>15</sup>

Suppose I ask you to loan me a certain book, but you say: ‘I don’t have a copy right now, but I’ll ask my friend to lend me his copy and then I’ll lend it to you.’ Suppose your friend says the same thing to you, and so on. Two things are clear. First, if the process of asking to borrow the book goes on *ad infinitum*, I’ll never get the book. Second, if I get the book, the process that led to me getting it can’t have gone on *ad infinitum*. Somewhere down the line of requests to borrow the book, someone *had* the book *without having to borrow it*. Likewise, argues Richard Purtill, consider any contingent reality:

‘the same two principles apply. If the process of everything getting its existence from something else went on to infinity, then the thing in question would never [have] existence. And if the thing has... existence then the process hasn’t gone on

to infinity. There was something that had existence without having to receive it from something else...'<sup>16</sup>

A necessary being explaining all physical reality can't itself be a physical reality. The only remaining possibilities are an abstract object or an immaterial mind. But abstract objects (even granting their existence) are by definition causally impotent. Therefore, the explanation of the physical universe is a necessarily existent, transcendent mind.

In the face of the cosmological argument, Krauss reaches for the tired old objection at the top of the neo-atheist playbook:

the declaration of a First Cause still leaves open the question, 'Who created the creator?' After all, what is the difference between arguing in favour of an eternally existing creator verses an eternally existing universe without one?<sup>17</sup>

First, even supposing that the *deduction* (no mere 'declaration') of a First Cause did leave open the secondary question of 'who created the creator?', this wouldn't provide any grounds upon which to object to the cosmological argument. The implicit assumption that an explanation can't be the best explanation of a given data-set *unless one has available an explanation of the explanation* (and so on) clearly entails an actually infinite regress of explanations that can never be satisfied. Adherence to such a regressive explanatory assumption would make science impossible; which is one reason why the first-cause argument is justified in rejecting the notion of an actually infinite explanatory regress. Second, the First Cause argument *doesn't* leave open the secondary question of 'who created the creator?' Krauss simply begs the question against the concept of an uncreated *First Cause*, a being that (unlike the physical universe) has an explanation of its existence in the necessity of its own nature.

Krauss goes on to conflate the contrast between caused realities on the one hand and the First Cause on the other hand with a vague contrast between an 'an eternally existing universe' and 'eternally existing creator' (Does Krauss mean to embrace the possibility of an actually infinite temporal regress for the cosmos? Is he mindful of current debates concerning the various models of God's relationship to time? One suspects not). Then he muddies the waters still further by noting that 'An infinite regress of some creative force that begets itself... doesn't get us any closer to what it is that gives rise to the universe.'<sup>18</sup> Of course such a kluge of incoherencies isn't going to help us here; but this kludge bears no relevant resemblance to the notion of an *uncaused* First Cause who created the universe a finite time ago!

Krauss objects that 'Defining away the question [of origins] by arguing that the buck stops with God may seem to obviate the issue of infinite regression, but here I invoke my mantra: The universe is the way it is, whether we like it or not.'<sup>19</sup> Note that 'arguing that the buck stops with God' is *by definition* not a matter of merely 'defining away the question' of origins. Arguing and defining are not synonymous activities. Note too that the first-cause argument *does* 'obviate the issue of infinite regression'. Note, finally, that Krauss' appeal to his mantra that 'the universe is the way it is, whether we like it or not'

is a disastrously misguided attempt to sidestep the logic of the cosmological argument by casting supposedly scientific aspersions upon logic!

In typical neo-atheist fashion, Krauss has little time for philosophy.<sup>20</sup> Krauss even states that: ‘the only knowledge we have is from experiments... the only knowledge we have about the world is empirical’<sup>21</sup>! As atheist philosopher of science Massimo Pigliucci muses:

I don’t know what’s the matter with physicists these days. It used to be that they were an intellectually sophisticated bunch, with the likes of Einstein and Bohr doing not only brilliant scientific research, but also interested, respectful of, and conversant in other branches of knowledge, particularly philosophy. These days it is much more likely to encounter physicists like Steven Weinberg or Stephen Hawking, who merrily go about dismissing philosophy for the wrong reasons, and quite obviously out of a combination of profound ignorance and hubris (the two often go together, as I’m sure Plato would happily point out). The latest such bore is Lawrence Krauss, of Arizona State University.<sup>22</sup>

Krauss’ disrespect for philosophy undergirds and thus undermines his entire project. For example, he argues that while the question of ultimate origins ‘is usually framed as a philosophical or religious question, it is first and foremost a question about the natural world, and so the appropriate place to try and resolve it, first and foremost, is with science.’<sup>23</sup> But this is to conflate all questions about the natural world with *scientific* questions about the natural world. In point of fact, there can be philosophical questions about the natural world, and the question of ultimate origins is one such. Trying to answer this philosophical question whilst sidelining philosophy leads to predictable results.

For example, and returning to Krauss’ mantra, *of course* the universe ‘is the way it is, whether we like it or not’. However, one of the ways in which the universe is (‘whether we like it or not’) is that *it conforms to the basic laws of logic*. One might desire a square-circle, one might very much like 1+1 to equal 7, but we know that the universe isn’t going to oblige because these concepts are self-contradictory. Indeed, one cannot issue a denial of the proposition that ‘reality conforms to the basic laws of logic’ without relying upon reality’s conformity to the basic laws of logic in the very process of issuing one’s denial. One certainly can’t base such a denial on the claim that ‘The universe is the way it is, whether we like it or not’; for *this claim is itself simply a substitution of the logical law of the excluded middle*. To argue against the proposition that reality is logically coherent by appealing to the logically coherent statement that ‘The universe is the way it is, whether we like it or not’ is logically incoherent.<sup>24</sup>

Krauss opines that ‘without science, any definition is just words.’<sup>25</sup> After briefly bewailing the fate of our ancestors trying to talk before the invention of science, one might point out that Krauss has reinvented the wonky wheel of logical positivism (complete with its defunct verificationist theory of linguistic meaning) and that his claim that ‘without science, any definition is just words’ falls fowl of its own strictures. Such

logical incoherence is one among many reasons why, as Bruce R. Reichenbach commented back in 1972: ‘The era is past when all metaphysical statements or arguments can simply be dismissed as silly or senseless, since they do not meet a preestablished criterion of verifiability.’<sup>26</sup>

Krauss has been spotted in the embrace of verificationism before. Randy Everist observes that ‘the [March 2011] debate between Lawrence Krauss and William Lane Craig brought out some of the claims of scientism in the New Atheist community. In a way, it is highly reminiscent of Logical Positivism with A.J. Ayer and the old-line atheists of the early-to-mid 20th century.’<sup>27</sup> During the ‘Question and Answer’ time Krauss stated that ‘*science does what it does, and it determines nonsense from sense by testing.*’<sup>28</sup> An astonished Craig responded that Krauss:

seems to hold to an epistemology which says that we should only believe that which can be scientifically proven, and... that itself is a self-contradictory position, because you can’t scientifically prove that you should only believe that which can be scientifically proven. So when he says it ‘distinguishes sense from nonsense’, that’s old-line verificationism, isn’t it, and positivism, which went out with the 30’s and 40’s. It’s a self-defeating position.<sup>29</sup>

As Craig commented afterwards: ‘I am still amazed... when I enter into a debate with someone like a Lawrence Krauss, at how the epistemology of old-time verificationism and logical positivism *still* casts its long shadow over Western culture.’<sup>30</sup>

In the verificationist tradition Krauss complains that ‘religion and theology... muddy the waters... by focusing on questions of nothingness without providing any definition of the term based on empirical evidence’<sup>31</sup> – but of course *Krauss cannot provide any definition of this criterion of meaning based on empirical evidence!* Neither is Krauss’ criterion of meaning tautologically true (in stark contrast to the tautological principle that ‘from nothing, nothing comes’, to which Krauss objects). Thus Krauss falls foul of his failure to attend to philosophy when it comes to defining terms, and this failure turns the vast bulk of *A Universe From Nothing* into a wild goose chase in which he spends all but 4 pages (cf. p. 174-178) addressing questions *besides* the fundamental question of whether one can get a universe from nothing. As atheist scientist Jerry Coyne complains: ‘much of the book was *not* about the origin of the universe, but dealt with other matters, like dark energy and the like, that had already been covered in other popular works on physics. Indeed, much of Krauss’s book felt like a bait-and-switch.’<sup>32</sup> This objection slides off Krauss like water off a duck’s back:

nothing upsets the philosophers and theologians who disagree with me more than the notion that I, as a scientist, do not truly understand ‘nothing.’ (I am tempted to retort here that theologians are experts in nothing.) ‘Nothing,’ they insist, is not any of the things I discuss. Nothing is ‘nonbeing,’ in some vague and ill-defined sense... But... surely ‘nothing’ is every bit as physical as ‘something,’ especially if it is to be defined as the ‘absence of something.’ It then behoves us to

understand precisely the physical nature of both these quantities. And without science, any definition is just words.<sup>33</sup>

Interviewed by fellow neo-atheist Sam Harris, Krauss embarrassingly asserts:

the famous claim, ‘out of nothing, nothing comes’ [is] spurious [because] science has made the something-from-nothing debate irrelevant. It has changed completely our conception of the very words ‘something’ and ‘nothing.’... ‘something’ and ‘nothing’ are physical concepts and therefore are properly the domain of science, not theology or philosophy.<sup>34</sup>

Unfortunately for Krauss, the famous claim that ‘out of nothing, nothing comes’ (a claim that goes back to Parmenides of Elea in the 5<sup>th</sup> century B.C) is clearly true *by definition*. To exist or to *be* is to be a something or other, having one or more properties. ‘Nothing’, which is a term of universal negation, is ‘no thing’ - i.e. not a something of any kind at all. ‘Nothing’ does not have any properties (since there’s nothing there to have any properties). By definition, then, ‘nothing’ *doesn’t have any properties capable of doing anything* – certainly not creating something. Hence, nothing can come ‘out of’ (i.e. be caused by) nothing. Contra Krauss, there’s nothing ‘vague and ill-defined’ about this (and not even the self-contradictory verificationist criterion of meaning will avail Krauss at this juncture).

Furthermore, if Krauss means to deny the self-evident principle of sufficient reason and claim that things can just exist or pop into being with no cause or explanation of their existence, then he has abandoned serious metaphysics (indeed, he explicitly rejects metaphysics in the name of scientism). On such a theory there’s literally no reason why the universe exists *rather than just a tea set* (and, contrary to empirical observation, no reason why tea sets don’t fluctuate in and out of existence randomly for no reason at all)!

As for Krauss’ claim that ‘surely “nothing” is every bit as physical as “something.”’ - on the one hand this is so drastically idiosyncratic that one hardly knows where to begin; whereas, on the other hand, this claim reveals why *A Universe From Nothing* is a veritable school of red herrings. Faced with the philosophical question of ultimate origins, *Krauss simply changes the subject* to discuss the scientific question of how one natural thing (e.g. the big bang) might possibly have been caused by some other natural thing (e.g. a multi-verse). Krauss may complain that ‘religion and theology... muddy the waters... by focusing on questions of nothingness without providing any definition of the term based on empirical evidence’<sup>35</sup> – but any definition of nothing ‘based on empirical evidence’ would be a definition of ‘nothing’ that has nothing to do with the philosophical questions of why there is something rather than nothing, or whether or not the existence of an empirical realm entails or is best explained by a non-empirical (metaphysical) order of reality. Hence page 149 of *A Universe From Nothing* contains the candid admission that the kind of ‘nothing’ Krauss has been discussing thus far is:

the simplest version of nothing, namely empty space. For the moment, I will assume space exists, with nothing at all in it, and that the laws of physics also

exist. Once again, I realise that in the revised versions of nothingness that those who wish to continually redefine the word so that no scientific definition is practical, this version of nothing doesn't cut the mustard. However, I suspect that, at the times of Plato and Aquinas, when they pondered why there was something rather than nothing, empty space with nothing in it was probably a good approximation of what they were thinking about.<sup>36</sup>

Of course, it's Krauss who is redefining terms here (moreover, the only way in which 'something' and 'nothing' could be 'physical concepts', as Krauss claims, is on the assumption of a physicalist metaphysics – an assumption that makes Krauss' argument against the need for a Creator question begging). In what philosophers call 'ordinary language' the poor student's fridge may indeed be 'full of nothing', containing 'nothing but empty space'; but it is extremely naïve to expect precise metaphysical debate to be conducted wholly in 'ordinary language'. As William E. Carroll writes: 'The desire to separate the natural sciences from the alleged contamination of the "word games" of philosophy and theology is not new; now, as always, it reveals an impoverished philosophical judgement.'<sup>37</sup>

Every discipline (including science) has its own technical terminology with its own history of usage that needs to be understood by anyone who wishes to be part of the ongoing conversation within that discipline. Krauss' antipathy towards philosophy means that he blunders into the metaphysical debate about origins as an ill-prepared layperson. Krauss may 'suspect that, at the times of Plato and Aquinas, when they pondered why there was something rather than nothing, empty space with nothing in it was probably a good approximation of what they were thinking about,'<sup>38</sup> but these suspicions are informed by his own anti-philosophical prejudice rather than by the historical facts. Aristotle wittily defined nothing as 'what rocks think about.'<sup>39</sup> The point being, of course, that rocks don't think about anything at all. Robert J. Spitzer notes that:

Parmenides and Plato... use the term 'nothing' to mean 'nothing' (i.e. 'that which there is no such thing as'). Nothing should not be thought to be a vacuum or a void (which is dimensional and orientable – where you can have more or less space); and it is certainly not a physical law. Inasmuch as the laws of physics have real physical effects, they must be considered to be something physical.<sup>40</sup>

Paul Copan reports:

Augustine argued that since God alone is Being, he willed to exist what formerly did not exist. So he is not a mere shaper of formless and eternal primordial matter: 'You did not work as a human craftsman does, making one thing out of something else as his mind directs... Your Word alone created [heaven and earth].'<sup>41</sup>

Likewise, when Thomas Aquinas writes about 'nothing' in his 'third way' argument he certainly seems to have the traditional concept of absolute nothingness in mind:

that which does not exist begins to exist only through something already existing. Therefore if at one time nothing was in existence, it would have been impossible for anything to have begun to exist; and thus now nothing would be in existence - - which is absurd.<sup>42</sup>

Indeed, *Krauss himself* refers elsewhere to ‘the classical ontological definition of nothing as “the absence of anything”...’<sup>43</sup> Krauss admits on page 152 of *A Universe From Nothing* that ‘it would be disingenuous to suggest that empty space endowed with energy, which drives inflation, is really *nothing*.’<sup>44</sup> On page 172 Krauss acknowledges: ‘All of the examples I have provided thus far indeed involve creation of something from what one should be tempted to consider as nothing, but the rules for that creation, i.e. the laws of physics, were pre-ordained. Where do the rules come from?’<sup>45</sup> Thus Stephen Hawking asks:

Even if there is only one possible unified theory, it is just a set of rules and equations. What is it that breathes fire into the equations and makes a universe for them to describe? The usual approach of science of constructing a mathematical model cannot answer the questions of why there should be a universe for the model to describe. Why does the universe go to all the bother of existing?<sup>46</sup>

Hawking’s question – sidestepped by Krauss (cf. p. 142 & 172-174) - itself sidesteps the question of what ontology can be attributed to physical laws *in the supposed absence of any physical reality for them to describe or any mind/s to conceive of them*. As atheist Peter Atkins comments: ‘You have to realize that physical laws, which are summaries of observed behaviour, come into existence as a universe comes into existence...’<sup>47</sup>

By page 174 of *A Universe From Nothing* Krauss still hasn’t gotten round to addressing the million dollar question: ‘I have focused on either the creation of something from preexisting empty space or the creation of empty space from no space at all... I have not addressed, directly, however... what some may view as the question of First Cause.’<sup>48</sup> None of the venerable philosophers mentioned by Krauss would have mistaken any of his speculations about the cosmos arising from some pre-existent naturalistic reality or other as addressing what Leibniz called ‘the first question’ of ‘why there exists something rather than nothing.’ Neither does Sam Harris, who in the course of an interview with Krauss commented:

You have described three gradations of nothing - empty space, the absence of space, and the absence of physical laws. It seems to me that this last condition - the absence of any laws that might have caused or constrained the emergence of matter and space-time - really is a case of ‘nothing’ in the strictest sense. It strikes me as genuinely incomprehensible that anything - laws, energy, etc. - could spring out of it.<sup>49</sup>

David Albert, an atheist philosopher of physics at Columbia University, is devastating in his review of *A Universe From Nothing*:

The fundamental laws of nature... have no bearing whatsoever on questions of where the elementary stuff came from, or of why the world should have consisted of the particular elementary stuff it does, as opposed to something else, or to nothing at all. The fundamental physical laws that Krauss is talking about in *A Universe From Nothing* — the laws of relativistic quantum field theories — are no exception to this. The... elementary physical stuff of the world, according to the standard presentations of relativistic quantum field theories, consists (unsurprisingly) of relativistic quantum fields. And the fundamental laws of this theory... have nothing whatsoever to say on the subject of where those fields came from, or of why the world should have consisted of the particular kinds of fields it does, or of why it should have consisted of fields at all, or of why there should have been a world in the first place. Period. Case closed. End of story... Krauss seems to be thinking that these vacuum states amount to the relativistic-quantum-field-theoretical version of there *not being any physical stuff at all*. And he has an argument — or thinks he does — that the laws of relativistic quantum field theories entail that vacuum states are unstable. And that, in a nutshell, is the account he proposes of why there should be something rather than nothing. But that's just not right. Relativistic-quantum-field-theoretical vacuum states — no less than giraffes or refrigerators or solar systems — are particular arrangements of *elementary physical stuff*. The true relativistic-quantum-field-theoretical equivalent to there not being any physical stuff at all isn't this or that particular arrangement of the fields — what it is (obviously, and ineluctably, and on the contrary) is the simple *absence* of the fields! The fact that some arrangements of fields happen to correspond to the existence of particles and some don't is not a whit more mysterious than the fact that some of the possible arrangements of my fingers happen to correspond to the existence of a fist and some don't. And the fact that particles can pop in and out of existence, over time, as those fields rearrange themselves, is not a whit more mysterious than the fact that fists can pop in and out of existence, over time, as my fingers rearrange themselves. And none of these poppings... amount to anything even remotely in the neighborhood of a creation from nothing.<sup>50</sup>

In a telling display of intellectual hubris, Krauss publically responded to Albert's review by saying 'he is a philosopher not a physicist, so I discounted it'<sup>51</sup> (in point of fact, while David Albert is the Frederick E. Woodbridge Professor of Philosophy at Columbia University, he has a PhD in Theoretical Physics from Rockefeller University).

When Krauss finally turns his attention to the question the title of his book, he recognizes 'two possibilities. Either... some divine being who is not bound by the laws or they arise by some less supernatural mechanism.'<sup>52</sup> On the one hand, any naturalistic 'mechanism' must involve some physical law or other (and thus, one would think, some physical reality described by that law), which provides nothing but a new way to raise the ultimate question of origins: 'Why does this law exist?' On the other hand, if the 'mechanism' Krauss has in mind is non-naturalistic, then Krauss is self-confessedly left with only one remaining option: *A Universe From Someone*. On the horns of this dilemma, Krauss's

escape hatch is a self-contradictory attempt to use the authority of science to deny the authority of logic:

The metaphysical ‘rule,’ which is held as an ironclad conviction by those with whom I have debated the issue of creation, namely that ‘*out of nothing nothing comes,*’ has no foundation in science.<sup>53</sup>

Indeed, none of the laws of logic (all of which science must pre-suppose on pain of incoherence) has a ‘foundation in science’; but so what?! ‘Arguing that it is self-evident, unwavering, and unassailable [that ‘from nothing, nothing comes’],’ alleges Krauss, represents ‘an unwillingness to recognize the simple fact that nature may be cleverer than philosophers or theologians.’<sup>54</sup> Not at all! Rather, it represents a willingness to recognize the simple fact that logic is undeniable and that incoherent propositions are necessarily false. As William Lane Craig says: ‘If the alternative to theism is to deny logic, well, it seems to me that the non-theist is in really serious trouble there - they can never again say that theists are irrational for believing what we do.’<sup>55</sup>

Grasping at one last logical straw (note that he thus engages in the double standard of holding theists to account by logic whilst accepting atheism from the same duty), Krauss makes an objection that only serves to reveal his failure to grasp what is meant by the doctrine of creation ‘*ex nihilo*’:

Those who argue that out of nothing nothing comes seem perfectly content with the quixotic notion that somehow God can get around this. But once again, if one requires that the notion of true nothingness requires not even the *potential* for existence, then surely God cannot work his wonders, because if he does cause existence from nonexistence, there must have been the potential for existence.<sup>56</sup>

Those who argue that ‘out of nothing nothing comes’ are *not* content with the incoherent notion that ‘God can get around this’. While true nothingness does of course require that not even the *potential* for existence exists (since any potential must be grounded in something actual), theists do *not* believe that God’s creating the universe is an instance of something coming from nothing, since they do of course believe that God exists (necessarily) and that the potential for the existence of everything besides God exists *in God*.

Krauss is obviously labouring under the false impression that creation *ex nihilo* means ‘creation out of nothing’, as if ‘nothing’ were a sort of something somehow used by a non-existent God in the creation of the cosmos. However, to create *ex nihilo* is by definition not a matter of re-arranging pre-existing things, and certainly not of re-arranging a pre-existent ‘nothing’, but rather of *arranging for there to be things* of some sort or other (beside God) *in the first place*. In other words, the doctrine of creation *ex nihilo* distinguishes between creating *by re-arranging pre-existent ‘stuff’* (e.g. the sort of creation envisaged by Plato for his ‘Demiurge’), and creating a new form of reality (like a universe) *without using pre-existing ‘stuff’* (e.g. Genesis 1:1).<sup>57</sup> Philosophers call the second type of creation ‘*creatio ex nihilo*’, meaning ‘creation [by a creator] not out of any

pre-existing stuff'. Belief in a necessarily existent being who grounds the potential for the existence of contingent things and who actualises that potential via a freely chosen act of omnipotence is a logically coherent answer to the question of why the physical universe exists. Moreover, this answer is supported by the cosmological argument.

In the face of the logically coherent answer supported by the Leibnizian cosmological argument, Krauss would dearly like to change the topic: 'what is really useful is not pondering this question...'<sup>58</sup> As a result, he produces a book that's overwhelmingly devoted to questions besides the one on the front cover. Krauss's anti-philosophical prejudice leads him to embrace a verificationist stance long ago abandoned by philosophers as self-contradictory and to toy with rejecting the ultimate question of origins as meaningless. Despite this, Krauss spends a handful of pages attempting to explain why there is something rather than nothing. The attempt leads him to beg the question against theism, to reject logic in the name of science and to embrace a double standard. This kludge of fallacies convinced Richard Dawkins to put his name to the incoherent assertion that 'nothingness is unstable: something was almost bound to spring into existence from it';<sup>59</sup> which only goes to show just how intellectually unstable the foundations of neo-atheism are.

### **Recommended Resources**

(Video) William Lane Craig, 'Why Does Anything at All Exist?'

[www.reasonablefaith.org/media/why-does-anything-at-all-exist-nflc-north-carolina](http://www.reasonablefaith.org/media/why-does-anything-at-all-exist-nflc-north-carolina)

(Video) William Lane Craig, 'Who Designed The Designer?'

[www.reasonablefaith.org/media/who-designed-the-designer](http://www.reasonablefaith.org/media/who-designed-the-designer)

(Video) William Lane Craig vs. Lawrence M. Krauss, 'Is There Evidence For God?'

[www.reasonablefaith.org/media/craig-vs-krauss-north-carolina-state-university](http://www.reasonablefaith.org/media/craig-vs-krauss-north-carolina-state-university)

(Audio) Justin Brierley, 'Unbelievable: A Universe From Nothing? Lawrence Krauss vs. Rodney Holder'

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- <sup>17</sup> Krauss, op cit.
- <sup>18</sup> *ibid.*
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