I don't have enough FAITH ______to be an ATHEIST

with Dr. Frank Turek **PODCAST**

Can Mathematics Be Used to Detect Design in Nature? | with William Dembski

(December 8, 2023)

FRANK:

Ladies and gentlemen, if you in any way suggest that some sort of designer is behind what we see in nature, some people are going to call you intellectually lazy to assert design. They're going to say, that's a science stopper. You just need to give science more time. And by the way, that's also an argument from ignorance. It's a God of the Gaps argument. You're plugging God into a solution that you just haven't discovered yet. We've done that before. Why would you ever suggest that God has done something in nature, when in fact, we've said that before and so many times we've walked away with egg on our faces saying, that really wasn't God. We found a natural cause for it. And by the way, isn't it just a religious position to assert there's a designer? That's what people will say, but today, we're going to see that none of those objections are true.

There's actually a mathematical way to discover whether something has been designed or just the result of a chance process of natural forces. And there's nobody better to talk about this than one of the founders of the modern-day intelligent design movement. His name is William A Dembski. And Bill has been on this program many moons ago. But after many years, he was in academia and went into the business world for quite a while. And now he's updated his first book called 'The Design Inference: Eliminating Chance Through Small Probabilities.' And before I bring Bill on, you just need to know his credentials because he has two PhDs: one from the University of Illinois at Chicago in philosophy, and one from the University of Chicago in mathematics.

He also has his Master of Divinity degree from Princeton Theological Seminary. He's taught at Northwestern University, the University of Notre Dame, the University of Dallas, and Baylor University. He's done postdoctoral work in mathematics at MIT, in physics at the University of Chicago, and in computer science at Princeton University. He is a winner of a Templeton award. I mean, the man has credentials. He's forgotten more than I'll ever know. I can tell you that. And it's a pleasure to have him back on the program to talk about the second edition of 'The Design Inference.' Bill, it's been too long. How have you been?

BILL:

It has been too long, Frank. So good to see you again.

FRANK:

Yeah, you as well. Now, I know you're in Dallas right now. You're about to move back to lowa. But what have you been doing for about 10 years? Because were right in the thick of the whole





intelligent design movement, and then you of kind of just went underground. Where have you been? What have you been doing?

BILL:

Well, there's a long story there. Let me try to cut it short. But I was hired by Baylor, and I wasn't liberal enough for them. And then I think I was teaching at some seminaries, and I think I was not quite conservative enough. There were there some theological things. It seemed like when there was this conservative resurgence among the Baptists, it got to the point where you couldn't be conservative enough. So, it seemed to me, I just didn't have a ready home there. And I thought, you know, let me try my hand in the business world. I had a research assistant who did very well with online businesses. That was over 20 years ago that he was my research assistant.

And so, he showed me the ropes, and I got into educational websites and technologies. And so, that's what I was doing. I still do that. But I had one business in particular, that was very successful, and I sold that. But about two to three years ago, I thought it was time to get that second edition of 'The Design Inference' published. And the problem was that my publisher, Cambridge University Press, made it clear that after it was published, initially, it did very well. But then they didn't like that I took these ideas in the direction of science and biology. It was one thing if you apply a design inference and can say, oh, Mount Rushmore is designed or oh, there's this forensic science CSI type stuff, you know, where you we can detect design. Or, you know, there's archeology or there's data falsification in science. We can use this to uncover that somebody was committing fraud.

I mean, for instance, just recently, the president of Stanford University stepped down. It was a classic case of the design inference because he had falsified data. And you could show that there were these statistical properties of what he was doing that, you know, that he was a fraud. But it was one thing to apply these methods in various areas where human designers were involved. But if you're talking biology, you know, there's a designer involved that ain't no human, you know, very quickly, you're forced in the direction of theology.

And the academic world, mainstream academic world, is overwhelmingly materialistic, and they just didn't want to go there. So, that's what happened. And, you know, for standing up for these ideas and saying, yes, they do apply to biology, my career and that of many of my colleagues took quite a hit. So, we weren't able to advance in the normal way, you know? So, we've had to be creative in how we keep bread on the table.

FRANK:

Well, the book, 'The Design Inference,' says this. I'm reading two lines from it, Bill, just to put this on the table. I think it's from the foreword. It says this. This book, 'The Design Inference,' is ideologically neutral. Its design inference logic is a tool for research, not an assertion of faith. Unpack that for us.



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BILL:

Well, that's right. I mean, what the design inference does is it says that there are some features that we're looking at, which can tell us that something is designed. And in particular, we can look at that in more detail as we talk. But you're looking for something that's a small probability event, and also something that matches up with a salient, independently given pattern. So, let me just give a quick example. Let's say I've got 1000 marbles and I roll them on the floor. Lots of marbles, lots of ways those marbles could be arranged. The precise arrangement they take is going to be highly, highly improbable. But if those marbles suddenly spell out, welcome to Frank Turek's CrossExamined.org program, you're going to say, wait a second. Those marbles didn't arrange themselves by purely brute, natural forces.

It wasn't just that there's a little earthquake or the ground was shaking in a certain way and that's how they arranged themselves. You're going to say, that pattern, the probability and that pattern together, will say that arrangement had to result from an intelligent cause. So, that's the basic idea. And so, the question is, you have this method of design inference. And as a method, a method is neutral. You apply it in different areas. You can say in some areas, okay. There's no design as far as we can tell, that those criteria have small probability and specification have not been met. And so, we cannot draw a design inference. On the other hand, in other areas, that method might say, yes. Those criteria have been met. So, the question is, the big question, the million dollar question is, what happens when we apply that method to biology?

When we look at the DNA, or the proteins, various complex systems that are there, the irreducibly complex machines that Michael Behe, for instance, considers, what happens then? What does that method tell us? And that method, insofar as we're able to apply it into biological systems, it suggests that we are dealing with design. So, the method is neutral. But even that's not enough for the materialistic scientists. They want to say, neutral or not, you can't apply it here. You can't go, because we know that no God, no designer was involved. Everything in biology is ultimately the result of a brute material process. That's where they want to go, and that's what they insist on.

FRANK:

So, they're begging the question from the get-go. But what is this design inference? And how can you use mathematics to detect design in nature? That's what 'The Design Inference' book is all about. You definitely want to pick up a copy of it. It's one of the few books I've seen that whether you're a scientist or a non-scientist, you're going to find it equally compelling. So, check it out. A lot more with Dr. Bill Dembski right after the break. You're listening to I Don't Have Enough Faith to Be an Atheist. Back in two minutes.

Blessings this Christmas season, ladies and gentlemen, from CrossExamined.org. The entire team here thank you for your support over the year. As you consider your year-end giving, don't forget CrossExamined.org. We have a new video out that we put out on our YouTube channel. And last week we talked about using AI, the Kingdom AI project to go and reach the world in the top 30 languages around the world, with much of our material and the material of other





apologists as well. If you want to learn more about that, go to our YouTube channel. It's probably easier just to go to our CrossExamined.org website and click on Donate. You'll see the video there. And we're doing that international project using Kingdom AI.

In addition to continually doing what we do here with the podcast, with the TV show, with going to colleges, high schools, churches, all the social media, we're adding that particular goal on. So, we need your help to do it. So, just go to CrossExamined.org. Click on Donate. You'll see it there. My guest today, Dr. William Dembski, one of the intellectual giants in the intelligent design movement. In the new book 'The Design Inference,' he shows you mathematically how you can have an inference to design. And the title of the book is called 'The Design Inference: Eliminating Chance Through Small Probabilities.'

As I mentioned just before the break, this is for scientists and non-scientists. There's math in it, but you don't need to understand the math, because he explains how the math arrives at design with some homespun kind of examples. Bill, give us an example of why you think biology is designed. And if you want to use an example from human activity to transition into that, go right ahead.

BILL:

Well, let me give an example that's made the news recently. I talked about it in the earlier segment. The president of Stanford University was recently ended up resigning. And it was because of a case of data falsification, actually multiple cases over the years. He had basically been recycling data from one experiment to another. And what would happen is the sort of thing is he might, he's a biologist. So, he would, let's say, do some sort of scatterplot or error plot. And then the same sort of plot would appear, the same sort of pattern of errors would appear in another article.

Now, here's the problem. If you know the right answer to something, that's something you can get objectively and independently. But to get the same pattern of errors, that becomes a problem. Let's imagine that you have two people taking a multiple choice test. Wherever they get the right answer, you can say, well, they may have known what they knew. But if they got the same pattern of errors over and over, that would say, wait a second. How could that be? Aristotle made the remark that there's only one way to get something right, but there are many ways to get something wrong. And it's that many ways of getting things wrong that gives you improbability. It would have been highly improbable for this president at Stanford to get the same pattern of errors between two separate experiments. And this sort of stuff has happened.

I mean, other researchers have done data falsification. It's the same sort of thing that's come up. There was a guy named Jan Hendrik Schon about 20 years ago who was fired from Bell Labs for the same thing. So, you've got an improbability. You know, it's very improbable that you're going to get the same patterns. But it's also the coincidence, that the patterns match. And that's what you need, right? If you think of, you know, shooting an arrow at a target. If you fix the target on the wall, and you keep hitting the bull's-eye with the arrow, that tells you you're dealing





with design. But if it's a movable target, if you keep shooting the arrow and then you draw a target around it so that the arrow's in the bull's-eye, you can't tell anything about that. So, it's got to be the right sort of pattern, and it's got to be improbable. And so, that's the basic criteria. And there's a lot of heavy lifting math that you've got to do there, because what does it mean to be an independently given pattern? We cash that out in computational terms, in terms of a minimum description length metric.

So, this ties into something that's called Kolmogorov complexity. That's one branch of information theory. Another branch is Shannon information, and we also use that. So, that's the basic method. We use these techniques. But then the question is, well, you know, we have this method. What happens when we apply it to biology? How do we apply it to biology? Cases like data falsification, those are actually pretty straightforward. But when you're looking at biological systems, the challenge always there is that you have to explain the evolvability of the systems. How is it that you can evolve from one to another? And it's not just brute chance that's going on there.

You have to factor in this Darwinian mechanism of natural selection. And as far as the Darwinist is concerned, natural selection is this probability amplifier that makes what seem to be small probabilities, big probabilities. And so, that's why Richard Dawkins wrote a book called 'Climbing Mount Improbable.' He realizes. I mean, he's got the design inference in the background and he's responding to it. But he takes it in a different direction. And he basically says the probabilities are never small, because the Darwinian mechanism makes them big. And so, the whole metaphor of climbing Mount Improbable is, yes, it would be highly improbable to get from the base of Mount Improbable to the top.

I mean, the idea is that you're evolving from some simple organism to something more complicated at the top. But even though you can't do it in one fell swoop, if you can find a serpentine path up the back of Mount Improbable, step by baby step, each step being probable, you can get up there. Okay, so that's the rationale. But the thing is, you have to actually do the probability calculation, you know? And just because something is at each step probable, doesn't mean that the entire thing is going to be probable. You can flip a coin 100 times. At any point, it's going to be probable, 50% probability that you're going to get heads. But now get 100 heads in a row. That's never going to happen. If all of humans throughout history did nothing else but flip coins, they would never have enough time to flip 100 heads in a row if they did it fairly. You know? Except at some outside chance event.

But that's the thing. We don't allow just unbridled uses of chance. And we've all heard about the God of the Gaps argument, but there's also a Chance of the Gaps. You can explain anything by chance. You know, there's this famous scene in the movie, 'This Is Spinal Tap,' where these members of this fake rock band are sitting around and saying, you know, how did these various drummers that they had die in mysterious circumstances? They said one of them spontaneously combusted. Well, I could spontaneously combust in front of your audience right now if all the fast-moving air molecules in this room suddenly converged on me.





That would be a highly improbable thermodynamic event. You know, it could happen by chance. But we don't allow that. And the reason we don't allow it is that our practical reason would grind to a halt if we allowed those sorts of inferences. So instead, you know, if something highly improbable that matches a pattern happens, this sort of specified pattern that's the basis of this design inference, then we draw a design inference. So, in biology, it seems that there are cases. They're not as easily handled as these data falsification examples. But when you do the analysis, it strongly suggests that you're dealing with design. And so, there are these probabilistic hurdles. Michael Behe has talked about them.

But you can imagine, for instance, you know, there are many of these which I discussed in the book. But for instance, interface compatibility. If you've got, you know, often what's said is you've got things that are evolving, and then you have a kluge that happens, and then two systems come together, and then they form a more complicated system. The problem is, these systems are evolving in separate paths. How do you get one protein to mesh properly with another? I mean, imagine you've got two manufacturers of cars. They don't talk to each other. One produces nut, another produces the bolt. What's the chance that the nut and the bolt are going to work together? If there's standardization, they will work together.

But standardization presupposes design. But if you don't have design, how do you get these proteins working together? So, there are probabilities of proteins, random proteins, coming together and working. So, there are all these probabilistic hurdles that come up. And so, in a sense, I'm laying out the mathematics, the logic of it. But then I'm handing this off to colleagues like Michael Behe and Doug Axe and saying, okay. Use this method and show that these systems are designed. And in fact, some of Doug Axe's key work was inspired by these design theoretic ideas that I developed.

FRANK:

Well, that's what I wanted to ask you. Because Doug Axe wrote the book 'Undeniable,' where he was pointing out that well, first of all, that even young children brought up by atheists, when they see a butterfly, or a hummingbird, or whatever, they say that's got to be designed. They have to be talked out of design by their parents who are atheists, because intuitively, they see design. But you're saying it's beyond intuition. You can mathematically show, if you know the probabilities involved, that at the biological level, systems are designed.

And if I'm remembering Doug's work correctly...I haven't gotten through every chapter of your book yet. And by the way, we're talking to Bill Dembski. The new book is called 'The Design Inference,' the second edition. And Winston Ewert is his co-author on it, who's also a PhD. If I remember Doug's work correctly, Bill, Doug, essentially found that if you took all of the molecules in the known universe, and had 13.8 billion years to mix them up, you wouldn't even get one protein.



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BILL:

Well, I mean, that's right. That's a standard argument. That's just a counting argument because there are just so many proteins that are out there, potentially are there. There's just not enough paper, as it were, to write down what all those sequences would be. But the argument actually goes well beyond that. Because what he's saying is, well, that would be just kind of a brute, randomness argument. But what he's saying is, I mean, he had a JMB (Journal of Molecular Biology) article back in 2004.

He says, if I try to evolve a protein fold from one to another, where I get some minimum antibiotic function, what's going to be involved with that? How improbable is that? And the sort of improbability that he calculated was on the order of 10 to the minus 70. So, it's that's one in 10, with 70 zeros behind the one. So, it's just extremely improbable. I mean, they're estimated to be about 10 to 16, 10 to the 18 grains of sand on planet earth. And so, the probability of getting just one particular grain of sand from all the rest, that's how improbable that is.

FRANK:

It's crazy. We've got a lot more with Dr. Bill Dembski. We're talking about 'The Design Inference,' how you can mathematically show that there's a designer of biology. That's what we're talking about. You're listening to I Don't Have Enough Faith to Be an Atheist with me, Frank Turek. Back in two minutes.

Ladies and Gentlemen, start January out right. We've redone the famous 'I Still Don't Have Enough Faith to Be an Atheist' online course. It's all brand-new and fully updated. It starts in January. If you want an early bird special 20% off, you need to sign up by December 15. Go to CrossExamined.org. Click on Online Courses. You'll see it there. Also, Shanda Fulbright's course that I teach with her for 6th-8th graders called "Let's Get Real," is also starting in January. A great homeschool course, or even if your kid isn't homeschooled, he or she would get value from it. It's basically I Don't Have Enough Faith to Be an Atheist for the middle schoolers, just prior to high school. Go to CrossExamined.org. Click on Online Courses. Again, December 15 is the deadline for the early bird special. You'll see it all up there.

We're talking to my friend Dr. Bill Dembski, whose second edition of the famous book called 'The Design Inference', which really laid the intellectual, mathematical basis for the intelligent design movement almost 30 years ago now. Actually, it's over 30 years now. It's 25 years. I think that book came out in 1998. But the brand-new edition just came out and it's again called 'The Design Inference: Eliminating Chance Through Small Probabilities.' And Bill, just before the break, we were talking a little bit about work of Doug Axe. But you also had mentioned Richard Dawkins. And if I remember his position correctly, when he was saying I'm climbing Mount Improbable, I believe he gave the illustration of monkeys typing out Shakespeare.

And he said, you would get monkeys typing out Shakespeare as long as you preserved every proper letter that they had typed out. They're not going to do it randomly. But as long as you've got the right letters and you selected the right letters, you'd ultimately get Shakespeare. But that





seems to be an argument for intelligent design, because you've got to have this intelligent head monkey who says, yeah, let's keep that letter and let's keep that letter. Am I missing something here? Doesn't he realize that he's actually proving intelligent design when he makes an analogy like that?

BILL:

Well, I mean, what he does is, he has a simulation where he evolves a phrase called "me thinks it is like a weasel," which is a phrase from Shakespeare's 'Hamlet.' And what he does, is he evolves it by taking a random sequence of letters. I put evolves in scare quotes. He has a random sequence of letters, and then he will bury them randomly. But every time a letter is closer to that target sequence, "me thinks it is like a weasel," it's going to be more likely to be preserved. And then as you keep going along, you evolve to that target sequence, actually, pretty quickly.

So, in his algorithm, he I think, typically evolves from a purely random sequence to "me thinks it is like a weasel in about 40 steps." The thing is, it would take you 10 to the 40 steps, if you were just doing it purely random. So, every time you just threw out scrabble pieces, does it spell out "me thinks it is like a weasel?" No. Do it again, do it again. That would take you 10 to the 40 times, and that's 10,000 trillion trillion. I mean, that's your waiting time. And waiting times are related to probabilities. The longer the waiting time, the less probable it is, you know.

So, if I flip a coin 10 times, if I want to get 10 heads in a row, I'll probably be flipping about an hour to get that. If it's a million coin, if I want to get 20 heads in a row, I'll probably be flipping for about eight years, or something like that. But anyway, that's sort of the argument. Yes, the monkeys are implicit. But to your point about the head monkey in Dawkins' example, the head monkey is this fitness landscape that he has just put in there that gets the job done. I mean, the teleology of the design is there. But then he pretends that it isn't there, you know? And this is actually an example of something we call a conservation of information. Basically, you slip in the information that you think you're getting out for nothing.

You know, one way I would illustrate this is, let's imagine you've got a large field and you've got an Easter egg hidden there. The field is so large, and the Easter egg is hidden so well, and it's so small, that it's going to be highly improbable that you're going to find that Easter egg by just random search. And you can't search the space exhaustively, because there just isn't enough time. You know, these are always needle in a haystack problem. So, how are you going to find it? Well, turns out, you're going to go to Rand McNally and you're just going to say, hey, sell me a map which tells me where the Easter egg is. They sell you the map, and then you say, okay, marks the X, and then you go there. So, has that solved the problem?

Well, now the problem is, how did you get the map with the X marked in the appropriate spot? Because the map could have been marked any number of ways. And there are more maps in there. And so, this is the problem with conservation of information. What you've done is you've shifted the problem, but you haven't solved it. And if anything, the problem has gotten worse.





This is what we call the search for the search. Initially, you were looking for the Easter egg. Now you're looking for the map, which will help you find the Easter egg. So, you've got to search among maps. But the space of maps is even bigger than the space that you're searching. So, that's the idea of conservation of information and ties right in with 'The Design Inference.' But it's a subsequent notion. And that's why we're writing this up in the sequel. But I think that's at the heart of Dawkins' misconception. And you see that over and over again. More to the point about monkeys typing Shakespeare. I had an exchange with Eugenie Scott, on the campus of Stanford. This was well over 20 years ago.

Peter Robinson was interviewing me and her for his program, 'Uncommon Knowledge,' which is still on to this day. And so, Peter Robinson raised this old trope about monkeys typing Shakespeare. And Eugenie Scott's point was, well, it's not just monkeys randomly typing. What you need to imagine is that there's a Labtech behind the monkey. And each time the monkey types a wrong letter, the Labtech has a big vat of white out and whites out the wrong letter. Okay? And that's how it works. And you listen to that and it's like, okay you've shifted the problem. But don't you see that you haven't really solved anything? Because then the question is, well, how did the lab tech know what was an error? I mean, the very notion of error presupposes the way things ought to be. And all our words for error, you know, sin is, according to the Greek is harmartano, missing the mark.

Deviation is, well, it's falling off the way. There's the via, the way, and then you've fallen off of it. So, all of our words for error presuppose a right way that things are supposed to be. So, how did this lab tech know the right way? And the whole point of this type of example is to explain Shakespeare without Shakespeare, to explain something that appears to be designed without actual design. And the Darwinists, they can never do that. They're actually bankrupt, but they don't realize it. And I think the materialistic science that so dominates the academy allows them to get away with things that in any other context, they wouldn't get away with.

FRANK:

You know, Bill, you write in the book, too. I love what you say here. And again, we're talking about the book 'The Design Inference.' You say this, "To ID proponents critical of Darwin's theory, the argument from ignorance objection, seem to apply more aptly to the Darwinists themselves for positing unsubstantiated Darwinian pathways that offered no nuts and bolts, no nitty-gritty, just hand waving." In other words, this is a perfect example of that, where they're trying to say that you could get a Shakespeare play by monkeys typing just randomly as long as there is a mind behind the monkey saying that's right, that's wrong, that's right, that's error correction. That's intelligent design. They don't have any.

But when they claim that Bill Dembski is arguing from ignorance, you're not arguing from ignorance. You're arguing from what you do know. And you know, based on certain mathematical equations, that when you see something in biology, it has to be designed. They're the ones arguing from ignorance, because they don't have any naturalistic way to get the kind of specified complexity we see in life. And that's the beauty of your book Bill.





And your contribution to this is, as the book says, rightfully so, this is not a faith position. This is a position of mathematics. We're just looking at math here going, there's no mathematical way, or the mathematical pathway to what we see in biology is so remote, that whenever we see this in any other field of study, we always say it was designed. Am I missing something here?

BILL:

No, I don't think you're missing something. I mean, that's this argument from ignorance objection. It keeps coming up. But I think the reason is, they know that no supernatural, theistic designer could have played any role. So, given that they know that, there has to be a naturalistic explanation. They can gesture at certain things that would have had to happen. They don't provide any detailed Darwinian pathway. But it's good enough just to gesture at the possibility of these pathways, because something like that had to be true. And of course, design is out of the question. So, if you can't look there, where there's design, you know, this is all you've got. And, of course, we have to be ignorant because there actually is a Darwinian pathway as far as they're concerned. It's just that we haven't found it.

So, you just need to get back in the lab and look for it. But it's like thermodynamics and perpetual motion machines. We don't tell physicists anymore, you know, go back in the lab and figure out how you can make a machine that on its own energy just goes on forever. You know, we say thermodynamics doesn't allow that and I believe the US Patent Office no longer will accept claims or patent proposals for that. But the Darwinists, I think, are in the same boat. But they continue to dilute themselves.

FRANK:

In other words, friends, when we're making the claim here that there's a designer behind life, we're not arguing from what we don't know. We're arguing from what we do know. And we know that in every other area of intellectual investigation, whenever you see the characteristics that we see in the biological world, when those same characteristics are in other areas, whether they're an archaeology, or whether they're in forensic studies, or whether they're in what Jim Wallace does, which is more forensic studies, you know, looking at a homicide investigation. Whenever you see those same kinds of characteristics in those areas, everyone goes, oh, it's got to be a designer. Yeah, there's a murderer there. There was an inscriber there, or there was some sort of intelligent being that created this.

But as soon as we get to biology, the scientists have already made up their minds, despite the fact they see those same characteristics in the biological world, they've already made up their minds it can't be an intelligence out there because we know there's no God. Really? Wow, begging the question here, aren't we? A lot more with Bill Dembski. You've got to get the new book, 'The Design Inference.' By the way, it's Christmas now. You got somebody who's really smart and really wants to know the truth, give them 'The Design Inference' by Bill Dembski and Winston Ewert. We're back in just two minutes. Don't go anywhere.





How do we know that life is designed? Well, you can actually figure it out mathematically. And that's what is done in the new book, the second edition of 'The Design Inference.' This second edition is 25 years newer than the first edition. And in a few minutes, we'll talk to Bill about what the difference is here. But I just want to try and give everyone a sense of the kind of improbabilities we're talking about here. Let me just give you an illustration. If you're walking down the beach and you see in the sand, John loves Mary, we immediately know the crabs didn't do that.

That wasn't a result of natural forces. It wasn't a result of the waves, or the wind, or the rain, or any of that. We say, that's intelligent design from an intelligent being. Well, in every living cell is a message that's 3 billion letters long. And the letters are in the right order. I mean, imagine if we're going to take John loves Mary, which is just a handful of letters, and say it's got to be intelligence, what about 3 billion letters in every living cell? And it's a lot more complicated even than that, Bill. What going on in a cell? How much information is there in just a single cell?

BILL:

Yeah, well, I think we don't even fully appreciate it. I'm not sure we've scratched the surface of how much information is there because I think often, we think in terms of, when we think of information, we think of bits or sequences of alphabetic type stuff. And there's a lot of that in the cell. So, when you have proteins, for instance, those are 20 amino acids that are strung together, or with the DNA, it's four nucleotide bases that get strung together. So, when you mentioned 3 billion, that's how many nucleotide bases there are. And so, there are four possibilities in each position. So, that's four to the 3 billion possibilities, which is just huge.

But the thing is, there are other sources of information inside the cell. I mean, there's the cell membrane and the various features of it. I mean, there's all sorts of 3D information. When you think of linear information of the sort that's in proteins or DNA, that's one-dimensional. And then the proteins, they do form into three dimensions. But, you know, I think my approach is to say, looking at various systems within the cell and then say, how much information is required for that, and can we get a good probabilistic estimate for the subsystems? And then the whole system is going to be even more improbable and have more information, more specified complexity in it. But you can think of, just for instance, a ribosome.

The ribosome is what takes messenger RNA and turns it into proteins. But the ribosomes themselves will depend on about 50. And it can be more. It can be 50 proteins; an average protein may have a few hundred amino acids. So, now you've got 50 times, let's say, 200 amino acids each. So, it's 10,000 amino acids precisely structured. So, I think, an estimate of 20 to the 10,000, often, various substitutions can be done. But I mean, even a conservative estimate would be something like 20 to the 2000 possibilities. I mean, those numbers are immense. I mean, we're looking at one in minimally, you know, I think one in 10, to the 1000 type improbabilities. Those are thousands of bits of information that are in just the ribosome, and these ribosomes are presupposed by life. You have to have these to build proteins. If you don't build proteins, you're dead. You're not a living system.





And so, all of these have to be there. And there's no good origin of life scenario that explains how you got these things in the first place. So, if you think Darwinism is bad, origin of life research is even worse. I would say, look at the work of James Tour. He recently took on a bunch of the origin of life researchers and basically said, if you can solve any of these problems (he listed five in particular), I will remove everything I've done on the origin of life. And, you know, they didn't do it. So, I think that the burden of proof is actually on the Darwinist materialist to say that these systems are not improbable. But I mean, all the best estimates...I stress this as a probabilist. It's one thing to assign probabilities to toy problems like coin tossing. But when you're looking at biological systems, the probabilities are actually very difficult.

Yes, you can just enumerate different ways that amino acids are sequenced. But then you have to look at how many of them are functional, how many can be where you can substitute amino acids that still preserve function. So, there are a lot of subtleties. These are difficult problems, difficult theoretical empirical problems to actually get precise estimates of the probabilities. And the Darwinists are forcing us to do these calculations, because otherwise, they're going to say, well, our theory says that it's highly probable. So, prove us wrong. So, they are making us do our work, you know? But I think at the end of the day, it's going to be all for the good. Because I think we continue to be vindicated that the evidence, the small probabilities, are on our side.

FRANK:

This is why, back in 2016, the Royal Society got together. The group of Darwinists met out there in the UK. And I know Steve Meyer went to that meeting. And the meeting was basically saying the current theory of Darwinistic evolution doesn't work. We need a new one. They know mathematically it doesn't work. And they didn't come up with a new one, there isn't a new one, as far as we know.

BILL:

Let me jump in. I mean, these are the serious biologists who, presumably, behind closed doors are willing to admit the warts on their theories. But for public consumption, when you have to convince high schoolers, and high school teachers that everything is fine with the materialistic ship of state, what do you have? All you've got is Darwinism or Neo-Darwinism. So, you have to put the best face on it and make it seem like it's a knockdown, slam dunk argument. So, there's just huge misrepresentation in the textbooks among people like Richard Dawkins, who is trying to convince people that God is a delusion that Darwin wrapped everything up, and that there's no reason to believe in God, or see any design in biology. So, that's the difference. You know, it's one thing if you're actually being honest about the problems with the theory. But it's another thing if you're an advocate, if you're basically a politician, pushing for these ideas.

FRANK:

Ladies and gentlemen, you know, because we've talked about it many times on this program. This is just one facet of reality that needs to be explained if you're an atheist: biology, life. But don't forget, you've got to explain where the universe came from, why it's fine-tuned, why there's objective moral laws, why there's consciousness? Why is the world so describable by





mathematics? Eugene Wigner asked that question like 60 years ago and we still don't have an atheistic answer. How about the laws of logic, the laws of mathematics, our ability to reason? Why is there evidence a man predicted and accomplished his own resurrection from the dead and now is the center of the human race? Why is that? There are so many other things that need to be answered if you're an atheist, not just biology.

But when we look at biology, as Bill Dembski and his co-author Winston Ewert will show you in the book 'The Design Inference', they will show you that mathematically, it's so extremely unlikely that all this happened by chance, biologically, and that there are ways to discover or detect design in other areas of life, and also biology. That you've really got to put your blinders on to say that somehow, all the biology that we know about has occurred without any intelligent intervention. Now, Bill, this book is a second edition. The first edition is still out there. The second edition the Discovery Institute has actually published. What's new about the second edition?

BILL:

Well, the second edition I mean, I was talking to an engineer friend yesterday. Actually, Hillary Morgan's dad, so John Ferrer's father-in-law. But he says yeah. He was telling me this is a completely new book because he's read the first edition. But the first edition was just under 90,000 words. This one's 180,000 words. Not much of the words of the actual first edition are there. So, it's completely rewritten, much extended. The arguments are much tighter. I think it's much clearer. But the thing is, the first edition was published by Cambridge University Press back in 1998. It was in a monograph series. So, it's basically the equivalent of a journal article but monographs are books that are too long to appear in a journal.

So, it appeared with Cambridge University Press. Initially, they were very happy with the book. But then when they saw that I was going to be using the ideas in it to attack Darwinism, undermine atheistic ways of looking at science, they were no longer behind it. And so, when I wanted to do a sequel, they basically told me, they didn't think they were going to be publishing, even though 'The Design Inference' had done very well with them. So, for bout 20 years, it was just in the back of my mind, nagging me that my publisher was not behind the book.

And so, even though I knew even 10-15 years ago that it needed a second edition, I just thought, but they're not going to get behind it. And so, on a whim, I think it was divine providence. I contacted the publisher in 2020 and said, can I get the rights back? And within a week, they gave me the rights back. I mean, they didn't ask for any money. You know, it was just, here they are. Maybe it was just like, you know, Dembski, there's the door. Use it and be on your way. Be on your merry way.

I was very happy that they gave me the rights because then, finally, I felt in the position I could do with the book and extend it the way it needed to be extended. First edition came in for a lot of criticisms. There are a lot of places where improvement was needed. So, this gestation time of 20 years, 25 years to do the second edition has vastly improved it. But it means that the first





edition is still out there. If you go on Amazon, for instance, you can still buy the first edition, but you don't want to buy the first edition. You want to buy the second edition, which is published with Discovery Institute Press.

FRANK:

Check it out friends, 'The Design Inference.' Also, go to BillDembski.com. Bill, as you can tell by this interview, knows his stuff inside and out. He's written 25 books; this is just the first one he wrote that has now been completely updated. If you're going to get one, get this one. But he's written many others, and you can check them out on Amazon. But also go to BillDembski.com. Bill, it's great having you on.

BILL:

Likewise, so good to see you again and talk with you, Frank.

FRANK:

That's Bill Dembski, ladies and gentlemen. Please check out the book 'The Design Inference.' Especially for your smart people at Christmas, you want to do this. Check it out. And Lord willing, we will be back here next week. God bless.

