

## How to Read the Biblical Creation Story, Part 1

### Transcript

This recording had some audio issues in the first ten minutes of the recording. The following transcript begins ten minutes in, but you shouldn't have a problem following along. Enjoy!

*[but if you have the audio, you can hear the first few minutes, if you turn it up loud]*

[12:25]...questions I want to put out there, which I'm not going to get back to you tonight, but we will get back to next week and the following week. But these, I would say, are kind of baselines questions.

Question number 1, just when you read the text, would you say that the Torah is describing creation ex nihilo or not? In other words, is the Torah describing - we're fond of normally saying that the Bible describes the creation of something from nothing; that first there was nothing and then all of a sudden there was something. Now the problem is does the Torah, as we know it, actually describe the creation of something from nothing?

The answer to that is decidedly, I think, sort of fuzzy. It certainly depends on which of the Rishonim you adopt in reading the very first sentence or two. But the problem just on the most simplest of Pshat levels is if you read these words; Bereishis barah Elokim et ha'shamayim v'et ha'aretz - now if I stop there, you might say that's the creation of something from nothing; In the beginning G-d created the heavens and the earth. Maybe that means that in the beginning there was nothing and all of a sudden G-d created the heavens and the earth.

But then the problem is how you read the next verse - especially say, according to someone like Rashi. See, the way Rashi reads the next verse is that Rashi is going to interpret the next letter which is a Vav, as instead of meaning 'and', meaning 'when'. So the way Rashi is going to actually read this verse, it's; Bereishis barah Elokim et ha'shamayim v'et ha'aretz, he's going to read it not as; In the beginning G-d created the heavens and the earth, but rather as Artscroll Stone translation will, to have you know; In the beginning of G-d's creating in the heavens and the earth; V' - now is going to mean 'when' - V'et ha'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim - when...

*[Aside discussion]*

When the earth was; Tohu vavohu - formless and void, when there was darkness on the face of the deep, when the wind of G-d hovered over the waters, when all of that was happening in the very beginning of creation, so; Vayomer Elokim yehi or - so then G-d said let there be light. Now according to that interpretation the very first thing that G-d creates is? Light. Let there be light. That's really the first creation.

So the great question really according to a Rishon like Rashi is if that's how you're going to read the verse - well it's not really a question it's just an observation - it sounds like we're not really describing a creation of something from nothing, because it sounds like before Or - before light, what was there? A very mixed up world, but a world there was - V'et ha'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim. And yet, you wouldn't expect Rashi to believe that that's really true.

That would seem like a startling thing to say, that - I mean, nobody believes that; the Rambam doesn't believe this is true, none of the Rishonim will go on record as saying that G-d is not the author of everything in creation. So how does Rashi understand this then?

The real question if you really want to get prickly about it, or nitty-gritty about it, is what is there that seems to precede light? Listen carefully to the verse. *Veha'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim*. What's the only thing you can really point to that's there? Everything is chaotic; *Veha'aretz haytah tohu vavohu*, whatever the Aretz is it's Tohu Vavohu. *Choshech al pnei tehom* - darkness on the face of the deep. *Ruach Elokim* - the spirit of G-d is hovering over the waters. What's the only thing you really know is there?

[Response from audience member: Water.]

Water. Leading to the question, where did all this water come from? So that would be like question number 1, what's the deal with all this water?

And really, no matter what Rishon you are, you sort of have to deal with that, what's the deal with all the water. The reason why it's an internal question is because as you go through the six days of creation you will find almost without exception that whenever anything gets created the text says it gets created. So in other words, G-d makes birds, so it says, G-d made bird. G-d makes animals, so it says G-d makes animals. Normally, when G-d makes things it says G-d makes them, so the question is how come the water never gets made? You never find G-d making water; it's just, there was water. Don't you think it would be good to say, one day that G-d thought it would be good for there to be water, let there be water? So how is it that we understand all of this pre-existing water?

By the way, that brings us, in a way, to this week's Parsha - to Parshat Noach. Because if I actually asked you to conceptualize these first - this first verse of Bereishit or the second verse of Bereishit, if I ask you where else in the Torah do we meet scene like this? A scene where the only element that exists is water, a scene where it's dark and a scene where it's very, very chaotic - Tohu Vavohu. So if you imagine a world that's just water, that's very dark, that's very chaotic, would have waves crashing all over the place in the darkness, sure sounds like a lot like a flood to me. So it sounds like the Torah is pictorially - is giving you this vision of pre-creation, as it were, but it's using the idea of a flood. So you'd say, well that's weird, the flood was after creation, so how come pre-creation is being described as a flood-like world? That seems really odd.

Okay, so this would be sort of my first set of questions I would have, which is that you don't have to know any science for this, it's just a basic question, just trying to understand the text, where did all the water come from before - or how come it never got created? And, more broadly, how come the Torah seems to be setting up a kind of flood picture to describe this sort of pre-creation world, before G-d created light? Okay, that's question number 1.

Question number 2 in our list of non-scientific questions about Bereishit, questions that you do not need to be a [Groya 19:28] scientist Chacham to ask. Question number 2 is going to revolve around Day 3 and Day 4 - at least, these are my questions, maybe you have other questions, but this is my sort of shortlist of questions.

Day 3, last thing that happens on Day 3 you will find if you consult Perek Aleph, Pasuk Yud Aleph and things like that, is that G-d makes plant life. All sorts of wonderful plant life; *Tadshei ha'aretz desheh eisev mazriah zerah eitz pri oseh pri lemino asher zaro bo*

al ha'aretz vayehi kein - all sorts of great plant life, grasses. Vatotzei ha'aretz desheh eisev mazriah zerah lemeneihu v'eitz oseh pri - not just grasses; trees, all sorts of trees; fruit bearing trees. Vayar Elokim ki tov. Vayehi erev vayehi boker yom shelishi. Okay that's very good for Day 3.

Day 4, what happens on Day 4? Yehi me'orot bi'rekiyat ha'shamayim lehavdil bein hayom u'bein ha'lailah vehayu l'otot ul'mo'adim ul'yamim v'shanim. Vehayu li'me'orot birkiyah ha'shamayim le'ha'ir al ha'aretz vayehi kein. Vaya'as Elokim et shnei ha'me'orot ha'gedolim et ha'me'or ha'gadol l'memshelet hayom v'et ha'me'or ha'katan l'memshelet ha'lailah. The creation of the sun and the moon.

Okay, now how exactly does that work? You don't need to be much of a scientist to realize that vegetation doesn't seem like it has much of a fighting chance before the sun gets made. So if you would imagine a world in which there's blooming trees doing just fine, producing fruit, without literally the sun. We're not talking about without - without much sunlight, we're talking about no sun, like, how exactly does that work? How could the Torah with a straight face want us to believe that there was this day of creation in which there's this vegetation that precedes the advent of the sun itself? It just seems mindboggling that that would be true.

Again, you would assume that people at any stage of scientific development would have understood this, it's not - that's why I'm calling it an internal question, not an external question. It's not like you have to have seen the data from the Mars Rover to get a question like this. Anybody would know - you don't even have to know about the words photosynthesis but you know from basic observation that sunlight is crucial to the development of vegetation, so how could the Torah have said such a thing. Question 2.

Question 3 is going to be another [unclear 22:14] like before, which is if I would ask you, leaving the Torah behind for a moment, about your top 10 reasons that you were happy to live in a solar system with a sun, as opposed to a solar system without a sun? Or even your top three reasons why you were happy that there is a sun in the universe or a sun in our solar system, what would you say? Reasons why you're happy that the sun exists? Anyone want to take a stab at that?

[Response from audience member: Light and warmth.]

Right, wouldn't you say that?

I would say in order of - in no particular order of importance - my top three reasons would be, as you said: warmth, light and gravitational force that keeps everything together. I mean, without that everything is just off - off to the races. And if you think about this, this is really important stuff, without the sun how cold would it be?

[Response from audience member: Too cold.]

Pretty cold. Like zero Kelvin. I mean, that's really cold, like minus 235 - like the cold of deep space. That's very cold. I mean, we're talking about much colder than - you know the dry ice that you pack things with, like much colder than that. That's really, really cold. Just so you understand how cold that is, dry ice burns you when you touch it, do you know what I mean? We're getting to much colder than that. So it would really be bad to live in a world where it's that cold or that dark for that matter. There would be - no conceivable light means no conceivable life. So you're talking about a world which is utterly impossible to live upon without the sun.

Okay, listen how the Torah describes why it's so great to live in a world with the sun. Vayomer Elokim yehi me'orot bi'rekiyat ha'shamayim lehavdil bein hayom u'bein

ha'lailah vehayu l'otot ul'mo'adim ul'yamim v'shanim. Here's why it's really great to live in a world with a sun, because the sun is going to help us distinguish between day and night and is going to be a sign for festivals and for days and for years. Because you're going to be able to keep a calendar once you have a sun because - and if you think about it, if you actually read a book like *The Discoverers* by Daniel J. Boorstin, you'll see that historically this is true. In early history one of the ways that the sun was useful was that it was the first device that allowed for a calendar and even for sundials.

Just think about all the ways in which the sun helps you mark time. So for example, a day is going to be one day and night cycle on the earth, so we're going to call that a day. That's a function of the sun. A month, what about a month? What's that going to be a function of? One day and night cycle that's visible in the moon. So that's going to be a month, more or less. Then a year, what's a year going to be? A year is going to be another day and night cycle, when the days get shorter and the nights get longer and then the days - and then it reverses, and then you get back to the same part of the year when the days are just as long as they used to be, then that is a year.

So day and night cycles with regards to the sun and the moon are the bases of almost all calendrical cycles that we have - with the exception of weeks. But months, years, and days, are all functions of those. So it's really great because one of the first things that man had to master was time actually. Clocks weren't around for a long time so to have any sense of where you were with time you took note of these cycles and that's really important. But, nowhere near as important as not freezing to death. Nowhere near as important as having life because there's a little bit of light in the world.

So the question is why does the Torah cast the creation of the sun with, like, the fifteenth most important aspect of the sun? Why not tell - why doesn't it say G-d made the sun so that there would be light, G-d made the sun so that it would be really warm, G-d made the sun so that people could survive? Instead we get calendar as THE significance of the sun, which seems strange. So that's going to be kind of question number 3.

Yes?

[Question from audience member: (Unclear 23:17)]

What was that? You were saying how do we get V...

[Response from audience member: Vayehi erev vayehi boker - (unclear) of the sun according to the Torah is to have the day and night, (unclear)...]

Right, okay, good and that's maybe another question you can ask, which is what do the words Vayehi Erev Vayehi Boker even mean as they're used before the creation of the sun? We seem to be having days that don't seem to have much of a connection to days as we know it. So it seems like the Torah at the very least is - I don't know if the word is anthropomorphizing, it's probably not the word, but is borrowing from the language of post-creation to describe things within creation itself. Okay, good.

So we'll keep that idea in there, but let's throw that into the mix in our questions, what does Vayehi Erev Vayehi Boker mean when there's no sun? Because remember the sun just shows up on Day 4, so you've got a lot of Vayehi Erev Vayehi Boker before the sun, so how is it that we're going to understand that too?

Okay, yeah?

[Response from audience member: On Day 1 you had light. So there was light (unclear 28:09)...]

Yes, so you had - so therefore what? So you're saying the sun really wasn't so important for light, because you had that original light? I mean, it could be, if that light provided just the right amount of warmth that could approximate sunlight, then maybe we'd be in good shape. It's not clear that it does, but perhaps. Okay.

All right, so these are some of the questions I want to get back to with you. Again, just a brief review; where did all the water come from? How could there have been vegetation without the sun? How do we understand the sun's importance in terms of calendar? And what does Vayehi Erev Vayehi Boker mean before that?

Let me back up now and provide the beginnings or sort of a path towards developing a theory with you which I'm going to follow the implications of over the next weeks. In a way, everything that I'm going to do over the next couple of weeks is going to be an exercise in what I call - what I'm going to call - perspective shifting. Really that's all this is going to be about. So it's shifting perspectives, and the importance of shifting perspectives. Let me explain what I mean. Pulling back the zoom lens a little bit one can imagine three great questions about the beginning of the Torah, three sort of modern-ish, kind of questions about the beginning of the Torah. And I'm going to talk to you about these questions in terms of the lifecycle of the average child. You're sending your kid to day school and let's talk about three possible crises of faith that your kid may go through in his average, or her average, experience of a day school kid, graduating day school and going on into high school and to college.

Crisis of faith number 1 takes place somewhere around say, Fifth Grade or so, on the kid's first visit to the American Museum of Natural History. You go to the Museum of Natural History and you're greeted in the foyer with a very impressive set of bones from the Paleolithic era. There is a - what seems like - some relative of a Tyrannosaurus rex battling a Stegosaurus, and these are fossils, and you think well that's a very creative thing they put together. But then you go to other rooms in the American Museum of Natural History and you see there's many, many of these fossils, they've been found all over the place, and there are these fossilized bones and there are these dinosaurs.

So your little Fifth Grader kid comes to you and says, but my Rebbe didn't teach me anything about dinosaurs, I'm reading Bereishis, there's no dinosaurs, what happened to all the dinosaurs? There's a lot of dinosaurs here, how come the Torah doesn't talk about dinosaurs? That's possible crisis of faith number 1 in little Jimmy.

Let's talk about crisis of faith - now these are very important, by the way, because we spend a lot of money on tuition, do you know what I mean, and it's like you add it up over the ages it's a good 500,000 - I mean I don't know how much money it is, but it's a few hundred thousand dollars at least. It's just a shame to get that all thrown away on a couple of crises of faith and have Jimmy out the door. So that's crisis of faith number 1.

Crisis of faith number 2 happens at a later stage, at about Eighth Grade, little Jimmy is learning biology. He's learning about Darwin and the Beagle and the Galapagos Islands and this whole process of evolution by which everything seems to have evolved, the survival of the fittest, natural selection, all those good things. He's stuck because again I'm looking at the Torah and I just don't see any of this, how come evolution isn't in my textbook? What exactly is this?

Again, I had a story with a kid - I may have related this story to you once before, I don't know - but when I was in Baltimore there was this lady by the name of [Sylvia 33:02] who was a non-Frum lady who was a tutor, who was in one of my classes. But she



described a situation where a boy that she was tutoring had this very question; was studying evolution in school, was very pained by it. He said - she said - like why can't my science teacher come to my Rebbe's class and why can't my Rebbe explain to him why he's wrong? Or something like that. So she didn't know what to answer him so she said, well why don't you talk to your father about this - his father was an important, Frum doctor in the community. So why don't you talk to your father about this and see what he says? She didn't want to break any eggshells herself.

The boy went to talk to the father about it, the next day she says, so what did your father say? So the boy said, well my father said that what I learn in the morning with my Rebbe I put in one box and what I learn in the afternoon with my science teacher I put in another box and those are two different boxes and you just keep the boxes separate. So she said, okay, so what do you think? He says, well my father was talking about two boxes but I only have one life. That was his issue. You can talk about two boxes but you only have one life.

So that's crisis of faith number 2. Kid is learning biology, struggling with evolution, what do you do with that?

But then there's crisis of faith number 3. Crisis of faith number 3 comes when little Jimmy has now graduated Yeshiva High School, somehow weathered his first two crises of faith and is now off in Penn - or for that matter he could just as easily be in Yeshiva University. But crisis of faith number 3 happens when little Jimmy is in Western Civilization 101 and they're doing a unit on the Bible, and the professor who is talking about the Bible is talking about the authorship of the Bible. He says, it's all very well known and everybody agrees that the Bible is compiled by a number of authors and you can actually trace it through, you can see that there's a J author and there's an E author. Little Jimmy says, what are you talking about a J author, and an E author?

The professor [gently 35:25] explains that if you look in Chapter 1 of Genesis so you'll see that G-d is called by one name and you see in Genesis Chapter 2 G-d is called by another name. And if you look carefully at Genesis Chapter 2 and Genesis Chapter 1; Genesis Chapter 2 seems to repeat all the information in Genesis Chapter 1, just differently. It seems to be a whole different story, it's like the Torah has two creation stories, why would you need two different creation stories?

Then the professor gently explains to little Jimmy about a fellow by the name of Julius Wellhausen who is the father of the Documentary Hypothesis - going back in Germany - who looked first at that, at this kind of major discrepancy in the Torah and then some others. But basically on the basis of - almost on the basis of that - came to the conclusion that there must be two authors to the Torah, or at least more than one author to the Torah, and that's why you have these contradictory events, and these two different stories that don't seem to mesh with each other. Then a redactor came and kind of threw it all together, but didn't really realize that there were a whole bunch of contradictions in it. But there are contradictions and brilliant people, such as Wellhausen, can come and sort of forensically deconstruct the different strands in the Torah and arrive at this author said this, and this author said that. So the J author was author of Chapter 1, and an E author was the author of Chapter 2.

Poor, little Jimmy says, but my Rebbe said that the Torah was given to Moses at Sinai and there was one author. By this time Jimmy has had it with - this is his third crisis of

faith - and at this point it's like all of your tuition dollars are down the drain with little Jimmy. It's not a happy situation.

So if you're a parent and you get to interact with little Jimmy around these three questions, what should you say? What should you say when Jimmy asks you about the dinosaurs in the Museum of Natural History? What should you say when Jimmy asks you about evolution? And, if you're lucky enough for Jimmy to ask you about the Documentary Hypothesis, if you don't talk to him about it first, what should you say if Jimmy talks to you about that?

Let's start with that and - as a kind of introduction - before we even get to the Keruvim and their mysteries, which is a little bit more of a sophisticated take on things. But let me use my final minutes to begin with you tonight - to begin an approach to answering these three - or dealing with these three problems of faith.

The key to dealing with all of the problems, again, is really just going to be two words; perspective shifting. That's going to be the key, I think, and what I mean by that is the following. Mortimer Adler, who I've quoted to you before, I think - or may have quoted to you before - is a philosopher that died not too long ago, wrote a book. One of the books that he wrote was called *How to Read a Book*. This book, one of the things he says in it is that most books are not worth reading but there are about 100 or so books that are. And when you read a book that's really worth reading, a book that's hard to understand, a book that you have to struggle to understand, a book that you're going to come back to at any stage in life and see differently, depending on who you are and where you're at in life. When you read one of those books you need some sort of manual as to how to do it. To that end, he wrote this book called *How to Read a Book*. An attempt to give you the tools to read really difficult books.

He calls the Torah one of those books, and he says that one of the first things you need to do is you have to decide what genre of book that you are reading. You must understand the genre of the book that you are reading before you understand the book. Because if you are mistaken about the genre of the book, you will not ask the right questions as a reader about it. The example he gives, I think, is if you think that you're reading a chemistry book but you're really reading a book of poetry, or vice versa, you are not going to be able to properly ask the right questions about the book.

If you're reading a poetry book, and you're reading Carl Sandburg's poem; fog crept in on its little cat feet, and you say, I don't understand, the fog doesn't have feet, the fog can't creep, the fog isn't a cat. Those are questions that you can't ask about Carl Sandburg's poem; the fog crept in on its little cat feet. It comes from a misunderstanding of the genre; you don't understand you're reading poetry, you think you're reading something else. So you have to understand what genre you're reading before you read a book, otherwise you're going to be hopelessly lost.

Now the problem is, if you try to apply this question to the Torah, that - it's not going to be an easy question to answer. How are you going to answer that question, what genre is it? Now the Yeshivish - pardon the expression - but the answers which you'll sort of think you have from Yeshiva won't do you very well here. Because you might say, well the Torah is everything. Well is it really every - what does that mean? Are you saying the Torah has no genre? Every book has a genre. G-d decided to use literature as the way that He was going to communicate, He communicated by writing a book, books have

genres, there's places for things, it's got to be some kind of book. So if you press somebody what would they say?

So you then say well - if you're a Yeshiva guy and you're used to looking at the Torah as a law book - so you might say the Torah is a book of laws. As proof you might say it has 613 laws in it, that's a lot of laws, and basically the Torah is a book of Halacha, or it's a book of laws. Is that true? Well you would say, I don't know. If you actually look through the Torah, so it sure takes a long time to get to those laws, doesn't it?

I mean, you have to read - if you read the Sefer HaChinuch which is reading through those laws, the Sefer HaChinuch comes up with exactly two laws in Sefer Bereishis. You could zoom through all of Bereishis and half of Shemos without getting to most of the laws. It seems like the Torah is spending a lot of time on stories for a law book. And even once we get to the laws there's like these commercial interruptions all the time for more stories. It's like, enough with the commercials, just give me the laws already! Just give me the Sefer HaChinuch. Why can't I have that? So no, instead I have the Torah with all of these commercial interruptions for stories.

So you say okay, well maybe I was wrong, maybe it is a storybook after all; it's a history book, it's a storybook. But then the problem is there's many - much too much laws in it for it to be a good storybook, it doesn't seem like it is a storybook, there's a lot of laws in it. Why would you be punctuating all of your stories with laws?

So you'd say, all right, well forget the stories and the laws, maybe it's a philosophy book. There's some philosophy in the book, it's a spiritual book. So you say yes, there are some passages that deal with spirituality and soaring prose and things like that, but there's too many laws and there's too many stories for it to be a good philosophy book. What kind of book is it then if it's not a storybook, if it's not a history book, if it's not a philosophy book, what kind of book is it?

I'd like to suggest that the kind of book it is - a good way to think about it, just very practical, is to think about the Torah as a guidebook. The genre is guidebook. It's a guidebook, a practical book, for a nation and for members of that nation, Israel, to be able to deal with important beings of the universe, including G-d, and those around them, both on an individual and communal level. That's the genre of the book. Now in order to achieve that the Bible will make use of a number of different forms. The Bible is going to have some laws in it, it's going to have some stories in it, it's going to have some philosophy in it. What that means is, is that no one of these single genres is itself going to be enough to guide you. Just despite everything you may have learned in Yeshiva, as great as Halacha is, Halacha alone is not going to be a law alone, is not a broad enough discipline to be able to offer human beings all of the guidance that they actually need.

Leading to the Ramban's discussion, for example, of the idea of Menuval b'reshut haTorah. How could you have a Menuval b'reshut haTorah - someone who is an unethical person while following all of the commands in the Torah? The answer is, it's because law itself is not enough to guide you - it's part of the picture in guiding you but it's not the whole picture. If it was, that would be the only thing in the guidebook. You have stories too, what do the stories do? So the stories provide you with some kind of ethical guidance just on the basis of stories, they teach you in a way that laws never can about some of the less tangible but intuitively graspable ethical truths that underlie who



we are from our history. And there is some philosophy too. When you put it all together all of this sort of guides you.

But here's the key, if it's true that the Torah is a guidebook, that shifts perspective. In other words, that means that the Torah now is going to tell you everything that it's going to tell you, from the perspective of a guidebook. Every work of literature, no matter what it is, operates from a certain perspective. The perspective that the Torah is going to operate from is the perspective of guidebook; which means whether the Torah is talking to you about laws or whether it's talking to you about philosophy, or whether it's talking to you about stories, it's going to adopt the perspective of a guidebook. That means, when it talks to you about laws it's not going to be adopting the perspective of a legal treatise, when it talks to you about stories it's not going to adopt the perspective of a history book, and when it talks to about philosophy it's not going to adopt the perspective of a philosophy book. When it talks to you about all of these things it's going to adopt the perspective of a guidebook.

This is very, very crucial. In other words, if you're reading a philosophy book, so you can read Heidegger and existential stuff and all of the abstract stuff - the Torah is not going to couch philosophy in those terms. It's not going to couch stories in historical terms, nor even, law in legal terms - which explains by the way, why we have something called the Torah Sheba'al Peh. Do you ever wonder why you need a Torah Sheba'al Peh? Why can't the Torah Shebichtav just say what it means already? How come the Torah Sheba'al Peh has to explain all the laws and how come the explanations look so different from the laws?

So now is not the time to get into this in detail, but just by way of a very, very broad brushstroke, let me just say that the Torah Sheba'al Peh is devoted to actually elucidating to you in real life what it looks like to live by these laws. Which means, it's a legal book, it's giving you the legal details of how to abide by the laws. That's not the concern of Torah Shebichtav. The concern of Torah Shebichtav is something more basic, it's how to guide you, it's going to even talk to you about the laws, not in terms of their legal details of how - but in terms of even more ethical truths that it gives you.

I can give you some videos to watch on this. But let me give you maybe a bit of an easier example to understand what I'm talking about here. Let's talk about stories. Do you ever get flummoxed - as it were - by that Chazal, that famous statement that the Sages make; Ein mukdam u'me'uchar ba'Torah - there's no such thing as chronological order in the Torah? Do you say to yourself, come on guys, there's no such thing as chronological order in the Torah, really? Like, why would somebody write a book and pay no attention to chronological order? What's the deal with that? Plus, there is chronological order in the Torah; it starts in Bereishis, it ends with Moses' death, and it basically goes by chronological order, so what did Chazal mean when they said; Ein mukdam u'me'uchar ba'Torah? What they meant was is that in any given situation you can't trust chronological order in the Torah. You never quite know exactly when something happened, because it might just be the Torah put Event A before B. Even though generally the Torah will adhere more or less to chronological order, every once in a while it will switch things.

So you say, well why would it do that? The answer is, because it's not a history book. If it were a history book, the number one law that a history book has to hold by is, I'm going to give you chronological order. That's how [you events 48:11] in the order in

which they occurred. But if it's a guidebook, then what is my overall number one imperative? It's to teach you things. So if I can teach you more by taking two events that were not chronological and putting them together so that you see them side by side, and you see how they relate to one another, to give you a view of what this time period looked like, even though they weren't chronologically there, the Torah is going to do that, because it guides you better.

So the Torah will, when it tells you stories, it's going to tell you stories from the perspective of guidebook, not from the perspective of history book. That is the perspective that the Torah is going to adopt. Everything it says it's going to say from that perspective.

So now if I say, well what about science? So here's where it gets tricky. So the Torah does talk about science, it talks about events that happened and science talks about events that happened, like creation. The difference is that the Torah is going to talk about creation from the perspective of guidance; what it is that can guide you in creation. In other words, why does the Torah bother talking to you about creation? Well what do you learn about in creation? What is there in creation that would be important to guide you? Let me ask you that question. Why is it important that you should know anything about creation? What is it - how would that be important in terms of guiding you ethically? So you say it's a matter of fact, it's a matter of science, why do I even need to know it? Let me throw that question out to you. What do you say?

Yeah?

[Response from audience member: (Unclear 49:52)]

The answer is, is that creation - how creation happened is actually pretty important because it's going to give you a view of your place in the cosmos. I mean, that's a pretty important thing to know. How I developed is going to influence what I think I'm doing here. What am I doing in relationship with everything else, whether that's G-d, whether that's the world, whether that's the sun, the moon, and the stars, it's actually going to matter. So the Torah is going to talk to you about creation because it's important to guide you, for you to understand your place in the world. But it's going to talk to you from the perspective of guidebook, not from the perspective of chronological order or science book.

So for example, if you say, well how come the Torah didn't talk about any of the 39 years in the desert and it only talks about year 1 and year 40 and there's no years in between? Answer is the Torah doesn't see anything lasting during those years necessary to guide you. And that basically is going to be the answer to little Jimmy talking to you about dinosaurs, which is G-d didn't see anything particularly important in the Cretaceous period that was necessary for you to know in order to guide you in the twenty-first century, so He left it out. Now, you're interested in knowing what happened in the Cretaceous period anyway, great, that's why G-d created the American Museum of Natural History, go there and you can learn all about it. But if you want to get guided, so the Torah is not going to include it because that is not part of the guidance.

To give you one final example in this. So you say, but Rabbi it's a contradiction! I mean the Torah leaves it out and it's here, and what do you do about these great contradictions between science and the Torah? No! It's all a matter of perspective, it's really all a matter of - imagine for a moment - and you can try this out with little Jimmy. So imagine there's a burglary at your home, a terrible robbery, and you come home and

there's shattered glass outside, and there's police tape around your house and you say, what happened officer, what happened? It turns out that your daughter was home and she saw the assailant and she's sobbing to her friend on the cell phone and she's scared and she's shaken up. The guy went through all your precious stuff and you feel violated, it's really terrible.

Anyway, your daughter caught a glimpse of this guy and she's talking to her friend about how intimidated she is and all of that. It turns out the police actually catch the guy a few days later and there's a trial six months later, and the guy is on the stand and the evidence is overwhelming. But imagine he has a very crafty lawyer. So the lawyer gets up to the stand - the defense lawyer - and says, your Honor, the star witness in the case is Samantha over here, age 16, who claims that she saw my client the assailant. She describes him in a police report as a man of medium build, about 5'7", whatever race he was from, and she had a very clear description of him.

But [your Honor 52:58] I'd like to play you a tape of a cell phone conversation that we actually recorded of Samantha sobbing on the phone to her friend immediately after seeing this, and the description that she gives of this fellow is completely at odds with what she wrote in the police report just moments before that. She describes the person as having overwhelming strength and being an incredibly intimidating person. She describes herself as feeling - shaking in her boots at seeing someone - the picture of the man that we're getting here is a completely different picture of a person of medium build and - she's describing someone who is of overwhelming strength and power. I'd like to submit that she's lying.

So if you have an attorney who is worth his salt what will he say, or she say? What they'll do is they'll get up and say, both of these stories are true, but they're being told from different perspectives. When you write a police report you're telling a scientific story, you're writing just the facts. When you're talking to your friend, sobbing in the phone, what you're doing is you're describing how it felt, what did it feel like to you. It felt like there was a guy with overwhelming force who was confronting you. They're not two different - they're the same story, told through different perspectives. You have to understand the genre. I think that's true here with the Torah as well, it's true with Torah and dinosaurs.

Okay, let's move on though in our final moments, I just want to tease for you - and then I'll let you go - how we might take this further to talk about Jimmy's next two crises of faith; evolution and Biblical criticism, and we'll talk about this more next week. What I want to suggest to you is that perspective shifting is important not just to understand the genre of the Torah, but it's actually important to understand this idea of perspective shifting within the Torah itself - which is to say that the Torah itself will make use of perspective shifting as a literary tool now and then. The Torah will sometimes tell you the same story twice from two different perspectives in order to be able to give you a better understanding or to be able to pinpoint the experience more deeply or more richly.

The analogy which I'll give to you here is cell phones. Most of you who have a smartphone probably by now have thrown out your Garmin GPS receiver and you just use either Google Maps or Waze and you're very happy to have your cell phone around as a nice GPS device. Do you know how your cell phone works? How is it that your cell phone always just seems to know exactly where you are? Anyone know? No one

knows. How does it do that? It's like magic, how does my cell phone know where I am? It's a phone, how does it know where I am?

The answer basically is triangulation. Your cell phone just happens to be in contact with cell towers, that's how it gets its signal out there. But there are cell towers all over the place - there have to be cell towers all over the place otherwise you constantly lose your signal. So your cell phone is actually in contact with more than one cell tower at a time, which is why you get such a good signal. That happens to be really good in GPS terms too, by the way, that helps your phone understand exactly where you are. Why? Because if I know I'm in contact with cell tower x, so that cell tower can understand that my phone is somewhere along this line between me and the cell tower. But if my cell phone is also in contact with that cell tower, so it also understands I'm somewhere on the line between that cell tower and me over here. If you put those two pieces of information together, you can triangulate my location, you can pinpoint my location. By three cell towers I can actually pinpoint how high I am up as well. So if you put all that all together I get a three-dimensional view of my place in space.

Similarly, you can use the tool of perspective shifting as a literary device - what would happen if the Torah told a story, the same story, from more than one perspective? Maybe what the Torah is trying to do is triangulate that story for you. It's giving you two different perspectives on the same story and helping you understand more deeply what's really happening. So for example, if you have - and this gets to the Biblical criticism issue - if, for example, you have Bamidbar talking about Moshe is not getting into the land for one reason, for hitting the rock, you have Devarim talking about Moshe not getting into the land for a different reason, for the spies or something like that. Then you begin to see these two stories in relation to one another and you begin to filter them out and see how they triangulate, you begin to get a three-dimensional fix on what's happening. You begin to see things in different ways. So in very important stories sometimes you'll find this.

This actually is the key to a famous essay by Rabbi Soloveitchik. Rabbi Soloveitchik deals with the crux of modern Biblical criticism in an interesting way. He says that it's true that Genesis Chapter 1 and Genesis Chapter 2 seem to both tell the story of creation and they tell different stories. But the reason why they tell different stories, Rabbi Soloveitchik wants to argue, is because the accounts are not contradictory, Rabbi Soloveitchik argues, man himself is contradictory. Rabbi Soloveitchik argues in his famous essay in *Lonely Man of Faith*, that there is an inherent contradiction in the creation that we know as mankind. That there is a war between two parts of man; what he calls homo religiosus - religious man, and majestic man. I'm not going to get into the details of Rabbi Soloveitchik's theory, but he lays out an ingenious theory in which he argues that the reason why I have two accounts of the creation of man in Genesis 1 and Genesis 2 is because it's the Torah's way of describing these two different forces at war in man. So the literary device the Torah uses is to have two different creation of man stories, because there's two different ways of viewing the creation of man, both of which are legitimate.

It's a very cool theory, there's only one problem with it, I'd like to suggest with you - or there is at least one problem with it. The problem that I want to put for your consideration is if it's true that there are two different sides of man that are being described in creation 1 and creation 2, then why is it that if you look carefully at creation

1 and creation 2 we don't just have two different creation of man stories? If you look carefully at creation Chapter 1 and creation Chapter 2 we actually have two entirely different creation of the universe stories, of which creation of man is a part. Why would the Torah have to go and give me two entirely different accounts of the creation of the cosmos, which is actually what you have in Genesis 1 and Genesis 2, when all that we really should have is two different accounts of the creation of man if you want to tell me about a fundamental problem in the nature of man?

What I'd like to humbly suggest to you next week is an expansion of Rabbi Soloveitchik's theory. That to really understand Rabbi Soloveitchik's theory you have to ask the question why is there two different ways of viewing man? Where does this war inside of man's psyche come from? Why did G-d just willy-nilly decide to create two different men, so to speak, or two different beings in every one of us; the homo religiosus and the majestic man? Where did that come from? There's a reason for that, it didn't come out of nowhere.

The answer is the reason for it is there aren't really two different views of man; what there really are is two different views of creation itself. What the Torah is really doing is describing two legitimate but different - entirely different - ways of looking at creation itself. And based upon those two ways of looking at creation, you will look at the creation of man as a subset of each of those, and you would say creation of man looks this way over here because it's part of this story of creation, and the creation of man looks this way over here because it's part of that story of creation. Each creation story of man is a function of the larger creation story of which it's a part. What you really have is two legitimate ways of looking at creation itself. The Torah is telling you the creation story from two different perspectives in order to triangulate it.

What I want to leave you kind of for homework to think about is what this might mean - and I just want to show you why I think that's true and then we'll talk about the implications of this and what it really means regarding evolution and a lot of other things when we come back next week. But just to give you a little taste of what I'm talking about, if you open up your Chumash for a second and take a look very quickly at the first sentence of each of these creation stories.

Creation story number 2, by the way, begins in Genesis Chapter 2, verse 4; Eileh toldos ha'shamayim vеха'aretz behibaram. And by the way, it's very difficult to read Genesis Chapter 2, I mean here are some of the problems. Eileh toldos ha'shamayim vеха'aretz behibaram - these are the generations of heaven and earth as they were created; B'yom asos Hashem Elokim eretz ve'shamayim - on the day that G-d made heaven and earth. Have you ever heard of something crazier than this?

First of all just the first words; Eileh toldos ha'shamayim vеха'aretz - these are the generations of heaven and earth, what the heck does that mean? Would someone like to explain that to me? These are the generations of Noach, I get what that means; Noach was a guy he can have children. These are the generations of Yitzchak, I get what that means. These are the generations of heaven and earth, how do heaven and earth have generations? What is that even supposed to mean; these are the generations of heaven and earth? Then; These are the generations of heaven and earth as they were created, on the day that G-d created heaven and earth, what a convoluted sentence, how do you understand the whole sentence?



Then, as if that wasn't difficult enough look at the next sentence; V'kol si'ach hasadeh terem yiheye ba'aretz - before there was any vegetation; V'kol eisev hasadeh terem yitzmach - before there was any grasses. Parenthetical; Ki lo himtir Hashem Elokim al ha'aretz, v'adam ayin la'avod et ha'adamah - because G-d hadn't made it rain yet and anyway man wasn't there to work the land and make things grow, so nothing was growing. In that world - and then you have this verse; V'eid ya'aleh min ha'aretz - so there was a mist that came up from the ground; Vehishkah et kol pnei ha'adamah - and it watered all of the face of the earth, and then G-d made man. It just seems like a lot of irrelevant stuff; we learn about this mist, this introduction about no vegetation - and we could start with Pasuk Zayin; Vayitzhar Hashem Elokim et ha'Adam aphar min ha'adamah - G-d created man.

Plus, what's really weird is you've got right in the middle of the Gan Eden story, a few verses later, Pasuk Yud; V'nahar yotzeh m'Eden - by the way, there was a river that went out of Eden; Lehashkos et hagan - to water the garden; U'misham yipareid - and from there it diverged; Vehaya l'arba'ah rashim - and it became four headwaters. One headwater was called Pishon; Hu hasovev et kol eretz ha'Chavilah - that's the one that goes around the Eretz ha'Chavilah. Asher sham ha'zahav - and that's where the gold is, by the way. U'zehav ha'aretz hahi tov - really good gold there in that land; Sham ha'bedolach v'even hashoham - lots of jewels there too. By the way; V'shem ha'nahar ha'sheini Gichon hu hasovev et kol eretz Kush. You have this whole geography lesson with these rivers, like I care? Why do I need that interrupting the whole story of the Garden of Eden? Tell me about the trees, tell me about the Etz Hada'at Tov v'Ra'ah, but don't tell me about the gold and Eretz ha'Chavilah, what is that even doing here?

So Genesis Chapter 2 is very difficult to understand, but it becomes clearer once you begin to see perspective shifting, once you see that there's actually two different stories being told from two different perspectives. And just to see the beginning of those perspectives, compare the first three verses. First three verses of Genesis 1, first three verses of Genesis story 2.

What's the first verse of Genesis 1? Bereishis barah Elokim et ha'shamayim v'et ha'aretz - that's verse 1; in the beginning G-d created the heaven and the earth. Very simple verse; it's got a subject, it's got a verb, it's got an object. Who is the subject? G-d, G-d is the creator. What did He do? Verb - He created - Barah - in Pa'al form, He created directly. Object, what did He create? He created the heavens and earth. Got it? Very simple. So G-d is the subject, He created something, what did He create, He created heavens and earth. Now, look at the first verse of story 2, what do you find? Eileh toldos ha'shamayim v'ha'aretz - these are the generations of heaven and earth. Now if you just suspend this belief for a moment and just actually listen to what the text is telling you, and I now ask you the question, who is the creator, what would you have to answer? These are the generations of heaven and earth. Listen carefully. These are the generations of heaven and earth, who is the creator? Heavens and earth are the creator. The Torah is conceptualizing heaven and earth as parents that have generations.

Do you understand what is going on here? We're switching object and subject from story 1. In story 1 heaven and earth were the objects of creation; G-d had created them. Story 2 is going to tell you the same story from an equally valid but opposite perspective; don't look at heaven and earth as mere objects of creation, look at them as

subjects, as creators themselves. These are the generations of heaven and earth, these are the voyages of the Starship Enterprise, this is it, the five-year mission, this is the generation - this is what heaven and earth - and by the way what will heaven and earth create? Let's even talk about it. If - let's just play it out. If heaven and earth really are like parents, what would you say interaction between them looks like? Let's talk about this; what would their children be? What would the children of heaven and earth be? Vegetation. How do you get vegetation? Once they interact, heaven and earth. Through what medium?

[Response from audience member: Sunlight and rain.]

Rain and sunlight. Oh very interesting. Now you can actually read the verse.

Eileh toldos ha'shamayim vеха'aretz - these are the generations of heaven and earth; heaven and earth who used to be objects now they're subjects. Behibaram - notice that verb now used in reflexive; As they were created. That was the word before; G-d created heaven and earth, no, heaven and earth are the creators, but of course you should remember; Behibaram - they themselves were created - parenthetically - B'yom asos Hashem Elokim ertz ve'shamayim- on the day that G-d created heaven and earth.

So the Torah is saying, look, we're now going to switch perspectives, we're going to talk about this from the perspective of heaven and earth as if they were the creators. Don't forget that actually heaven and earth were also created by G-d in as much; Behibaram - as they were created; B'yom asos Hashem Elokim ertz ve'shamayim. But from here on in, in creation story 2, G-d is going to decidedly be in the backseat and Shamayim and Aretz are going to be in the front seat, as if they are creating everything with the help of G-d midwifing things along. So that's verse 1.

Look at verse 2. Verse 2 in creation story 1 is all about chaos, the way things were before creation really got started. Chaos, in creation story number 1, looks like what? Chaos looks like too much water, very dark. Vеха'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim. There's water everywhere - can't live in water. It's dark - can't live in darkness. That's chaos.

Look at chaos in creation story number 2. Verse "2" in each story is devoted to describing the chaos, what does the chaos look like? The chaos looks like this. Verse "2; V'kol si'ach hasadeh terem yiheye ba'aretz - there was no vegetation because vegetation is going to be the product of heaven and earth. There was no vegetation in the land; V'kol eisev hasadeh terem yitzmach - before there were any grasses. Why? Ki lo himtir Hashem Elokim al ha'aretz - because there hadn't been any rain yet; V'adam ayin la'avod et ha'adamah - there was no man to cultivate agriculture, so everything was barren and it was just a dusty world. And in that world - so imagine that world, a world in which there was no rain, not even trace of rain, do you know what that world would look like? A parched world with just sunlight beating down.

Compare that to the chaos world of story number 1, it's exactly the opposite. Story number 1 is a water world that's completely dark, too much water, very dark. This world, too much land, no water, very light, can't support life. Two entirely different views of creation, both true, from different perspectives.

Now look at verse 3. Verse "3" in each story is the first glimmer of order. The first glimmer of order in world number 1 is - in a dark world that's completely chaotic - Vayomer Elokim yehi or - let light come into the world. What does order look like in

world 2? V'eid ya'aleh min ha'aretz - the first thing that happened is a little bit of mist, a little bit of humidity rose up from that dusty ground. That humidity coalesced into clouds, obscured the sun for the first time, a little bit of darkness as the clouds coalesced; Vehishkah et kol pnei ha'adamah - and then came down as rain. And that's the beginning of life.

In world number 1 the key to everything is light, everything is going to be a child of light; light is going to be the producer of everything that happens. In world number 2 the key to everything that happens is going to be water; water is going to be the key. In world number 1 the darkness is obscured by a little bit of light and then order comes into the world. In world number 2 the light and the sunlight is obscured with a little bit of cloud causing rain, and rain and water comes into the world. These are the first three verses.

The Torah has set up two completely different stories, perspective 1 and perspective 2. Two different stories to guide you. If you want to understand your place in the cosmos, your place in the cosmos in world 1, your place in relationship to G-d, your place in relationship to land, your place in relationship to water, your place in relationship to everything in world 1 is going to look a lot different from your place in connection to everything in world 2. And guess what? Both of them are true. And you're going to have to learn as a human being to be able to navigate different relationships to G-d, different relationships to earth, different relationships to water, based upon where they are in relationship to you in the cosmos. It really is a guidebook, a complex guidebook.

But in answer to Jimmy's third question of faith it's not about two different authors, it's about one author weaving a very sophisticated story where things play off of each other. There's not a crazy redactor who took stories that had nothing to do with each other and threw them together in some sort of mishmash, these stories have everything to do with each other, they're playing off of each other in intricate, intricate, different ways. There is an elegant woven whole between the two of these stories, but it's guiding you in two very different ways. When we understand that we'll begin to understand, I think, the Torah's view on evolution as well. I'll see you next week and we'll pick up from there.

## Part 2

### Transcript

Okay, I want to welcome you back, thanks for coming back folks, a happy Motzei Shabbat to you. We're speaking actually here to two audiences at the same time; we have an audience here live in person at the Young Israel of Woodmere, and we also have an audience live over the internet - hi guys, so welcome to you as well.

We're going to pick up now, this is part 2, if you missed part 1 and have an interest in seeing it, you can find it, I believe, in the archive section at alephbeta.org, and you can pick it up there. But we were talking about a number of questions last week; specifically we were talking about the two creation stories which, for the purpose of simplicity tonight I'll be calling creation 1 and creation 2. Generally when I'm talking about creation 1 I'm talking about the first chapter of the Book of Genesis, and when I'm talking about creation 2 I'm talking about the repeat of the story of creation that begins about verse 4 or so in the second chapter of the Book of Genesis.

I mentioned to you last week that historically Biblical criticism, which is the Wellhausen school of Biblical criticism, the notion that the Bible is not the product of a single author G-d, but is the product of a number of different human authors and thrown together by a redactor. That that theory - initially popularized by Wellhausen - comes from or originally came from these two stories in Genesis; Genesis 1 and Genesis 2, and they seem like two different stories that provide radically different accounts of creation. What we began to do last week is to look at these stories and suggest that they are related to each other in very intricate and elegant ways. That they don't seem to be the kind of thing that was slapped together by one author happened to say this and then another author had an entirely different view and happened to say that. They are very, very closely coordinated with each other, even as they say different things.

I began to suggest a theory that I want to elaborate a little bit more with you. So the game plan tonight is I'm just going to elaborate the theory a little bit more, then I'm going to take a little bit of a closer look at creation 2, and then we're going to take a more significant look at creation 1.

But again to the theory; the theory is an elaboration of Rabbi Soloveitchik's theory that I mentioned to you last week. Rabbi Soloveitchik in his article Lonely Man of Faith, or his book - I think his book; Lonely Man of Faith - makes the argument that the reason why there are two creation stories, so to speak, is because there are two views of man that the Torah is giving us, and these two views of man are equally valid. The Torah is describing two kinds of - two ways of [unclear 3:28] - both are true and each is at war with the other and you can't understand what it means to be human without understanding that dialectic, without understanding how these two ways of thinking about a human being struggle with one another. The literary device that the Torah uses to describe that is creation 1 and creation 2.

Last week I began to suggest what I might call an elaboration or maybe a little bit of a different spin on Rabbi Soloveitchik's theory. The question I asked you is if in fact Rabbi Soloveitchik is right, in Lonely Man of Faith, that the Torah is trying to give you two views of man, so why tell us two views of creation? Why go through two whole creation stories? Just go through two creation of man stories. The answer that we began to suggest was that if Rabbi Soloveitchik is right, it may well be that the reason why there are two views of man is because something larger is going on. There are two competing views of creation, both of which are valid, but there's two different ways of looking at creation, and the creation of man is a subset of each. So depending upon how you look at creation you will have a different view of man. If you look at creation the way creation 1 looks at creation, man will look a certain way. If you look at creation the way creation 2 looks at creation, man will look a different way.

The idea behind all of this is again, the question of genre. Last week I suggested to you that before you read any book you have to understand the genre. The theory I suggested to you is that the genre of the Torah is guidebook and it's seeking to guide human beings in how to live their lives, in how to live - guide a nation and individuals within that nation as to how to develop relationships with each other, with G-d and with those around them. That's what the Book is about.

Because of that the Book will deal with a lot of things; it will deal with history, it will deal with a little bit of science, it will deal with philosophy, it will deal with a lot of things, but it's always going to deal with things from a certain perspective, from the perspective of

guidebook. Which is to say it's not interested in history per se, history as an end in and of itself, it's not interested in science as an end in and of itself, it's not interested in philosophy as an end in and of itself, the only thing it's really interested in is - as the word Torah suggests, Hora'ah - it's interested in guiding you. That's the only thing it's interested in. So it's going to use all of these disciplines for the purpose of guidance and it's going to give you a guidebook's perspective on all of these disciplines.

By the way, let me just say something - let me just elaborate on that a little bit. In order to do that the guidebook may have decided - the Torah may have decided - that the best way to describe - that it's important to talk about creation for you. The reason why it's important to talk about creation is because one of the most basic things that you need to do for man if you want to guide mankind, is they have to have some sort of understanding - the people need to have some sort of understanding - of what they're doing in the world, of what they're doing in the universe, of what they're doing in the cosmos. The most basic story you can tell them then is a creation story that gives them some sense - that gives humans some sense - of what they're doing here, of what their relationship to everything around them is.

If you would say to some extent that the question of what the meaning of life is, is the question of what am I doing in the universe, so one of the ways you would begin to deal with meaning of life is to try to understand your place in the universe and therefore the creation story is going to be a very, very important story. But it's going to be the way the Torah decides to tell you about the creation story. Again, because the Torah's interest is neither science nor philosophy nor history, but some sense of guidance as to what your place in the universe means.

Now, here's the interesting part - and this I where I plan to take you next week and kind of the week after that - but here is the kind of theoretical ground that I'm going to be working with here. What if you were a scientist and what if you were still to say - what if you were interested in the scientific account of creation? And you said the following thing. Fine, so the Torah is a guidebook, but the fact is it's still talking about creation, it is still talking about actual events that occurred in creation at some point in time. So there has to be some sort of relationship between those events that the Torah describes and what actually happened, right? I mean, it can't be that there's no relationship between them, you have to show me how you can - explain this to me, that the Torah is providing a guidebook's kind of perspective on those events, but I still should have some way of relating, of seeing, some sort of scientific basis for what the Torah is talking about. After all, we are talking about the same story, aren't we?

This is what I want to begin to talk to you about tonight and continue over the next couple of weeks. What would you say to that scientist? Fine, it's a guidebook's perspective of events, but show me something. The guidebook, does it relate to evolution, does it relate to the Big Bang, does it relate to 13.4 billion years, does it relate to the theory of relativity, quantum physics? I mean, something - is it at all related? Or is that - or if this is what happened, so does the guidebook refer to it at all?

The answer that I would give to that fellow, or the theory that I would suggest, is the following. And this is just a theory, it may be completely wrong. My personal theory, I take personal responsibility for this being wrong, it's just the way it seems to me, but I'm just going to share it with you, this is how it seems to me. It seems to me that that kind of question is kind of like going into the Metropolitan Museum of Art and going to the



Impressionist room, wherever that is, and taking a look at a beautiful Renoir. So here you are, you're looking at a Renoir and you have this beautiful picture of a Parisian park plaza in 1858 and there are these women with these very fancy hats and they're chatting under these tall oak trees. And the grass is sun dappled and it's very, very beautiful.

You find yourself entranced by the picture and you think, this is a gorgeous picture and lucky for you, as you are leaving the Metropolitan Museum of Art, you have to leave through the gift shop - that's the way they work these things. In the gift shop lo and behold there is this big, blown up poster of the very Renoir that you love, so you buy one, and you perch it above your bed and that way you could always look out upon this idyllic, bucolic scene painted by Renoir.

Now, what if you wanted to say - let's analogize this - Renoir is giving you one perspective upon that scene, an Impressionist perspective of that scene, but you can imagine different perspectives upon that scene. Asking about those different perspectives is almost like querying that painting and looking for a different perspective within it. So imagine you could do the following - this could never have been possible in Renoir's day and age, but now with computer science and computer technology you can imagine that something like this could be possible.

Would it be possible to create, using some sort of 3D animated software, to be able to input Renoir's painting into a program and be able to say, Renoir is giving you a particular perspective on this - and by perspective now I just actually mean an actual point of view. Let's just say that it's a point of view of an observer looking from a 70-degree angle through this particular trees. What if I said I want to understand what that scene would like from a different angle? I don't want to be the observer perched on the hill over here, I want to be the observer sitting on the rock wall over there. I want to know what this scene looked like from the rock wall. Do you think it would be possible - might it be possible - to imagine, or to be able to take all the data from this painting and then to re-create Renoir's painting from the perspective of the observer over there at 180 degrees, on the rock wall?

You can imagine a sophisticated computer program that might actually be able to do that. So you can have a new painting above your bed, which is the new version of the Renoir - what the painting would look like if it were painted from the perspective of the guy sitting over there on that rock wall.

Might we, if we were sophisticated enough, try something like that with the Torah? In other words, could we play a game - now again, don't try this at home, this is a dangerous game - but the game would look something like this. Could we say, fine Torah, you're a guidebook, I get that, I'm totally willing to accept your guidance, I'm willing to do all that, and as long as I read you as a guidebook, I'm doing what you want me to do, I'm playing your game, I'm trying to understand my place in the universe. I get all that. But what if I looked at your perspective that you're giving me in this guidebook like that Renoir? What if I then said, might it be possible for me to take what the Torah is giving me and factor out the guidebook, factor out that particular perspective of guidance, and somehow arrive at a different perspective - a perspective of these events from the rock wall? Or, a perspective of these events from the perspective of science? Would it be possible to input the data that we get from a particular perspective, the guidance perspective, and then factor out that perspective and adopt a different perspective on it,

and say, given what the Torah says, here's what it would look like from the scientific perspective?

You can imagine that if you had a sophisticated enough algorithm that might at least in theory be possible to do. Okay, believe it or not that's what I actually want to try to do with you over the next couple of weeks.

But first of all what I want to do is we're going to take this slowly and the game plan is the first thing I want to do is we're going to play the Torah's game. We're going to say okay Torah, you're guiding us, we're going to adopt your perspective, how are you trying to guide us? Give me some sense of how it is that you're talking to me about creation 1 and creation 2 intending to guide me and my people as a human being? What are you trying to say?

We'll try to play that game a little bit, that game of following the Pshat of the Torah in that way, as it were. But when we're done with that we're going to try something dangerous and somewhat sophisticated. Which is we're going to try to then say, okay, all of that had very little to do with science; that had to do with what you want me to understand about my place in the universe. However, you told me about some scientific happenings over there, is there a way I can read your story again and read it from the perspective of science? Can I somehow factor out the perspective that you've given me and adopt a different perspective?

How would we do such a thing? I'll even give you a little bit of an idea of how we might do such a thing. Almost again kind of like a mathematical equation, it would go something like this. If the Torah is guiding human beings it means that at the very least we would say this, that the Torah is going to talk to us about creation from an overly anthropocentric view. Anthropocentric means man-centered. The Torah is going to adopt a very man-centered view on creation. That would make sense because the Torah is talking to men, talking to humans, about our place in the universe, so because it's talking to us and it's trying to guide us, it's telling us what we need to know about creation. The difference between that and the scientific view of creation is that the scientific view is not man-centered. The scientific view is what happened.

If you think about creation in terms of not - in a non-man-centered way you're talking about hundreds of billions of galaxies, we live in a very ordinary galaxy in the edge of some sort of super cluster, the Milky Way. We're in a very ordinary solar system, one of a hundred billion stars, within that galaxy, is on the third rock from the sun, and not such a remarkable planet. We're really very tiny and very fragile and it's not all about us - from a scientific standpoint. But if you zoom in like Google Maps into that little third rock from the sun, and put mankind at the center and then say what's your place in all of this, so I'm going to talk to you about creation from that perspective, it's going to overly dramatize man's role in this. I'm going to get an overly anthropocentric view of things.

So the idea would be could you factor that out? In other words, could you say that the Torah equals what happened as a function of how I talk to man about this; man's own particular view of things. But if I can factor out the human perspective on things, could I arrive at a scientific perspective?

This all sounds very abstract, I don't expect you to really understand what I'm talking about right now. But it will just give you a basis that when I start to do this you'll see, oh that's what he's doing. It will actually make sense to you once we start. So with no

further ado let me jump in, let's - the game plan is; so here we are looking at the Torah, let's just let the Torah guide us. So Torah, what is it that you want to tell us?

The two words you have to keep in mind for this whole endeavor is what I called last week perspective shifting, it's all about shifting perspectives. The first thing the Torah does is says, you need to adopt two different perspectives simultaneously upon creation in order to really understand man. And both of them are true. The different perspectives can be summed up, I suggested to you last week, in the first three sentences of each creation story. Sentence 1 in each story corresponds to each other, sentence 2 in each story corresponds to each other, and sentence 3 in each story corresponds to each other.

Sentence 1 tells us who the creator is and what was created. Bereishis barah Elokim et ha'shamayim v'et ha'aretz, tells us - gives you the cast of players, tells you who is in the cast. There's a creator. In Bereishis barah Elokim et ha'shamayim v'et ha'aretz, who is the creator? The creator is G-d. Bereishis barah Elokim, G-d is the creator. What did He do? Barah - He created. What did He create? Bereishis barah Elokim et ha'shamayim v'et ha'aretz, He created heaven and earth. So sentence number 1 tells you three important things; it tells you who the subject is, what the verb is, and what the object is. There's a creator, the creator is G-d, what He did was create, and what He created was heaven and earth.

Interestingly, all of this gets inverted in the first sentence of creation 2. In creation 2 we have; Eileh toldos ha'shamayim v'ha'aretz behibaram b'yom asos Hashem Elokim eretz ve'shamayim. Eileh toldos ha'shamayim v'ha'aretz, if we translate it literally, again is; These are the generations of heaven and earth. So now if I ask you who was the creator now? The answer is heaven and earth. Heaven and earth are the new creators, which is mind-blowing, because it means what used to be the object in creation 1 becomes the subject in creation 2. In creation 1 G-d was the subject, G-d created heaven and earth, heaven and earth were things that were created, now heaven and earth themselves become creators. Heaven and earth - these are the generations of heaven and earth, as if heaven and earth were parents, a mother and a father, that could have children.

Eileh toldos ha'shamayim v'ha'aretz behibaram - as they were created, in as much as they were created. The Torah doesn't want you to forget that the heaven and earth, even according to creation 2, when we're looking at them as creators, they too were in turn created, they were created by G-d. Behibaram b'yom asos Hashem Elokim eretz ve'shamayim - on the day that G-d created heaven and earth. So we remember that they were created, but all of that is a parenthetical inclusio. The Torah is just saying yeah, remember that they were created but now forget about it. Now let's talk about them as creators.

So we're completely taking the cup and inverting it now. We're seeing it in a whole new way.

[Verse 2/Sentence 2 21:40] in each story tells you about the beginning, what did it look like before creation happened. So one way of looking at things is we said that there are three elements; V'ha'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim. Everything was very chaotic - element number 1. Everything was very dark - element number 2. There was a lot of water everywhere - element number 3. So a lot of water, very dark, very chaotic, that's the picture of pre-

creation according to Genesis 1. What's the picture of pre-creation according to Genesis 2? It's the exact inversion of this.

The picture of pre-creation is; V'kol si'ach hasadeh terem yiheye ba'aretz - before there was any vegetation in the land; V'kol eisev hasadeh terem yitzmach - and before there was any grasses; Ki lo himtir Hashem Elokim al ha'aretz - because G-d had not yet made it rain; V'adam ayin la'avod et ha'adamah - and man wasn't there to work the land. That's giving you a picture, what picture is that? So by implication the products of heaven and earth are what? Heaven and earth, their interaction is rain, their products is vegetation. So in the beginning there was just a void, what does the void look like now? No vegetation. That's why it says; Before there was any vegetation, before there was any rain. So what was there? There was just parched land. You can just imagine the sun beating down, it's exactly the inverse of the first picture. The first picture is it's too dark and there's too much water, the second picture is it's too light and there's not enough water. Do you understand? These are completely different views of things.

But from the view of heaven and earth [as 23:41] creators then it's all about water, that's the life-giving substance that heaven gives earth to start things off. And if there's no water then there's nothing. And that brings us to [verse 3/sentence 3].

Verse 3 in each story is the first glimmer of life. What is the first glimmer of life? So in story number 1 if you view G-d as the creator, and heaven and earth as objects, and then the first glimmer of life is verse 3; Vayomer Elokim yehi or. The problem was it was too dark, so the first glimmer of life is light. In world number 2, the first glimmer of life is actually the opposite. Instead of it was dark and now it's light, in world 2 is it was too light, too much sunlight, and then; V'eid ya'aleh min ha'aretz - a little bit of humidity went up from the ground, a mist went up from the ground, condensed as clouds, obscuring the sun, not quite as light anymore, Vehishkah et kol pnei ha'adamah - and came down as rain. That's the beginning of life.

What I suspect but cannot prove, is - this again is just my suspicion, and you'll see this as my bias as time is going to go on - is that one of the reasons why these two stories are opposed to one another is that they in a way are telling two different stories. Both of them are true but they're two different stories. One way to see it is a story told from the perspective of G-d as creator, the other story told from the perspective of heaven and earth as creator.

Why could there be those two perspectives? One clue might come from the question of what does the words heaven and earth mean in each story? I can't prove this but it just seems like if you're looking at story number 1 the first time heaven and earth are used what do you think the words - what do heaven and earth mean? In other words if you say; Bereishis barah Elokim et ha'shamayim v'et ha'aretz - in the beginning G-d created heaven and earth, and someone would ask you so what does that mean heaven and earth, what would you say it sort of means? What do you think it probably means? Everything, right?

In other words, heaven and earth together is the totality of everything. When you say everything you mean - what do you mean by everything? How big is everything? The universe, right? It sounds like in the beginning G-d created the universe; we're just using the words heaven and earth to describing the universe. And you're saying that in the beginning there was this cosmic void and it looked like this, and then; Vayehi or - there

was the beginning of some sort of cosmic light in the universe. Story number 1 is a cosmic story.

Look at story number 2, what does heaven and earth mean in story 2? Eileh toldos ha'shamayim voha'aretz - these are the generations of heaven and earth as they were being created, and; V'kol si'ach hasadeh terem yiheye ba'aretz - there was very little vegetation because G-d hadn't made it rain yet. But then all of a sudden there was a mist that went up into the heavens and came down onto the earth as rain and that was the beginning of life. Okay, now what does heaven and earth mean? Does it mean the same thing as story 1? Seemingly not. What does heaven and earth mean now? It means the third rock from the sun. You see what happened? There's a shift already between Genesis 1 and Genesis 2. Genesis 1 is everything, Genesis 2 is and now let's talk about the third rock from the sun. Let's take a more terrestrial view of things. Here you are man, you are on the world, you are looking up at the sky, you're wondering what happened, let me tell you what happened.

So one way of seeing the two different stories is a cosmic story on the one hand and a terrestrial story on the other hand. In the cosmic story, who is the creator? The creator is G-d. What did He create? Heaven and earth, those are objects. Light is the beginning of everything. In the terrestrial story; Eileh toldos ha'shamayim voha'aretz behibaram - these are the generations of heaven and earth, but don't forget, who created heaven and earth? B'yom asos Hashem Elokim eretz ve'shamayim - G-d created all that. Plus, G-d is going to continue to have a role. Let's talk about G-d's role.

So let's look at story number 2 now. Seeing this perspective on story number 2 you're going to see that once you understand that this is the perspective of creation from the perspective of heaven and earth as creators - literally the Toldot Shamayim va'Aretz, everything else in the story is going to start to make sense. Let's read a little bit more of it. Next verse; the fourth verse of the story, which is actually verse 7 in the chapter. So Chapter 2, verse 7. Vayitzhar Hashem Elokim et ha'Adam aphar min ha'adamah. Look at how man is created here and look at how different it is from man's creation in story 1. Man's creation in story 2 is; And then G-d took Aphar min ha'adamah - dirt from the ground, and; Vayipach b'apav nishmat chayim - and breathed into it the breath of life; Vayehi ha'Adam l'nefesh chayah - and made man into a living thing. Vayitzhar Hashem Elokim et ha'Adam aphar min ha'adamah - G-d created man dust from the earth, blew into him breath of life, and made him into a living thing.

Okay, look how different that is from story 1. Look at story 1's description of how man was created. Story 1, Genesis 1, verse 27; Vayivrah Elokim et ha'Adam b'tzalmo, b'tzelem Elokim barah oto - G-d created man in His image, in the image of man He created them; Zachar u'nekeiva barah otom - He created them male and female. Look at how different this is. Story 2 no mention of man being created in the image of G-d, it's just not there, it's only there in story number 1. Story number 1 no mention of man being created from the earth. Story 1, male and female, how are they created, they're created together. Story number 2, first being created? Man, male. Female does not yet exist, that's going to happen later in story 2. Very strange.

But you can begin to understand it if you understand that this is a story that Shamayim and Aretz are going to tell you about creation. It's creation, so to speak, from the perspective of heaven and earth. From the perspective of heaven and earth, how was man created, what was a crucial ingredient? Earth. Notice that everything is going to



come from the earth, that's why man is a Toldah of Shamayim va'Aretz. He's a Toldah of Shamayim va'Aretz because notice that something had to happen before G-d could take dirt from the ground and make man. What had to happen? The verse right before that tells you. What happened was rain came down. What did the rain do? The rain introduced an element of fertility into the earth. Until now you have dry dust, you can't make man out of dry dust, but out of clay you can make man, out of fertile earth you can make man.

So heaven and earth get together with rain, now there's soft, fertile earth, G-d then uses that - G-d midwives this creation; it's almost like G-d is the midwife of the creation of these two parents heaven and earth - and all of a sudden you have man.

What happens next? Verse 8; Vayitah Hashem Elokim gan b'Eden mikedem. The next thing that G-d does is G-d plants a garden - notice that this is all part of story 2 not part of story 1. Of course, from heaven and earth's perspective what is - why is man significant? The great significance of man from the perspective of heaven and earth is who is man? He's the guy who tills the earth and agriculturally helps to midwife its creativity. So man is the great gardener. But how did man learn how to garden? Who was the gardener who taught man how to garden? So the very first gardener was G-d; Vayitah Hashem Elokim gan b'Eden - so G-d creates this garden, makes this garden, G-d is the first one to cultivate the earth. And when He does He places man in this special garden, this special place that He's made.

Then; Vayatzmach Hashem Elokim min ha'adamah kol eitz nechmad lemareh v'tov lema'achal. Look at verse 9, again, look at the perspective of it. It's not G-d creates trees; Vayatzmach Hashem Elokim min ha'adamah kol eitz nechmad - out of the ground G-d causes all these wonderful fertile trees to sprout. You understand? Because this is the story of the Toldot of Shamayim va'Aretz, so it wasn't just man who was created out of earth, there were trees that were created out of earth, there was vegetation that was created. V'eitz hachaim - and then there were these two special trees; the tree of life, the tree of knowledge of good and evil.

Then all of a sudden we have this what appears to be a digression, but it's only a digression from your perspective; from the perspective of heaven and earth it's not a digression at all. Look at the next thing we hear about; V'nahar yotzeh m'Eden - there was a river that went out from Eden; Lehashkos et ha'gan u'misham yipareid vehaya l'arba'ah rashim - and from there the river diverged and became four headwaters. Shem ha'echad Pishon, hu hasovev et kol eretz ha'Chavilah - Pishon goes over here, that's where the gold is. And the gold over there is very good, lots of jewels over there also. So you think, why do I care about this? Who do I care - I need a geography lesson in the middle of this, that the rivers went over here and the gold is good and the jewels are wonderful? Why do I need to understand that?

The answer is, you might not need to understand that, but this is heaven and earth's story. So from the perspective of heaven and earth if life got its start through rain, how does life continue? If water is the great elixir of life, so what has to happen? At some point it's not just dependent upon rain, but water - water, rivers, is going to be what carries life through the whole earth and what makes the whole earth [fertile 34:42]. So we're going to talk rivers. So the rivers start from the garden and from there they diverge into four headwaters, and yeah, we'll talk about the gold and we'll talk about the jewels, because those are the mineral deposits in the ground. That's what makes the ground

wonderful, so the ground is going to talk about itself and it's from the ground's perspective. These are the parents and they're talking - they're Kvelling - they're talking to you about their young, they're talking to you about what they've made.

What is man's role? So here's an interesting question. Let's talk about man's role in story 1 and let's talk about man's role in story 2. In Bereishit Alef - in Genesis 1, what is man doing in the world? If you would have to define what is he here to do, when do we hear it? We hear about it right after man is created, on the blessing of the sixth day. What is man told on the blessing of the sixth day? Right after we hear that man is a Tzelem Elokim; Vayivrah Elokim et ha'Adam b'tzalmo, b'tzelem Elokim barah oto, zachar u'nekeiva barah otom.

So let's go back to world 1 for a moment, let's put on our world 1 glasses. Our world 1 glasses are very different. In world 1 when you look at the creator who do you see? You see G-d. That means that spirituality itself is going to look very different in world 1 than from world 2. Because in world 2 when I look at the creator who is the first creator I see? Heaven and earth, and I see G-d behind that.

And, by the way, I would argue that if the Torah is going to talk to you about evolution, how is a guidebook that's not really interested in evolution scientifically going to talk to you about evolution? It will talk to you like world 2; everything - of course there's G-d, but there's heaven and there's earth and there's all these products and then one thing leads to another and there's this and there's that and it all flows from heaven and earth. All these different products of heaven and earth.

Anyway, when you have - if you think about spirituality in world 1 and world 2, when I look at G-d as my creator so what is spirituality? If you would have to ask man 1 what does spirituality look to you? Give it to me in just a couple words. What would man 1 say? He would say look, I don't know much, but what I do know is I'm a Tzelem Elokim - I was created in the image of G-d, my spirituality has something to do with that. And that makes perfect sense in a world where I relate to G-d as my creator.

Because you see if I relate to G-d as my creator, and I want to connect to G-d, how exactly am I going to do that? Connecting to G-d isn't so simple. Why? I can't touch G-d, I can't feel him, I can't give G-d a hug, so how exactly do I connect to G-d? So Tzelem Elokim begins to give you an idea of how you might connect to G-d. Tzelem Elokim means I am created in the image of G-d; somehow, whatever G-d is, I am a little version of that. Which seems to indicate that my goal is to somehow imitate G-d and that could be how I could relate to G-d. I might not be able to touch G-d, I might not be able to feel Him, so I can't connect to Him that way. But one way I could connect to G-d is through imitation.

And in fact, if you look at the blessing of the sixth day, that's exactly what the blessing of the sixth day seeks to suggest. Vayivrah Elokim et ha'Adam b'tzalmo, b'tzelem Elokim barah oto, zachar u'nekeiva barah otom - G-d created man in His image, He created them male and female. So you say well what does it mean to be created in the image of G-d? Well if I don't know much about G-d in world number 1 because I'm not that much of a theology student yet, at the very least what's the most basic thing I know about this G-d? Day 1, Day 2, Day 3, what has this G-d been doing? He's been creating. So G-d is the creator. I look at myself and what do I see? The last thing He created was me, and guess what; Zachar u'nekeiva barah otom - male and female He created them, which means we have the ability to create too.

I am a little creator, I can create this being that G-d created too. It's amazing. G-d invested this power of creativity with me. And even though animals have it too, me and G-d were the only sentient beings, the only one who could actually think about what we're doing and control with mind what it is we're doing and know what it is we're doing and be self-conscious about it, and create these beings. And it's amazing, it's the most amazing thing in the world.

And G-d blesses man. What does G-d say? The first thing He says is; Vayevarech otam Elokim, Vayomer lahem Elokim pru u'revu - be fruitful and multiply. Use this gift of creativity that I've given you, you are a Tzelem Elokim, you can be like Me and create like I've created. Plus, use that gift in other ways too. How?

[Aside Discussion]

Pru u'revu u'mile'u et ha'aretz vekivshuha - and conquer the land. U'redu b'degas hayam - you have dominion over all of the fish and over all of the fowl and over all of the animals, you can have dominion over everything, you are the king of the animal world. How does that work? How does man have dominion over the animal world?

Interestingly, the answer is by being G-d-like. You see it's really problematic if you think about it. We have dominion over the animal world, exactly how does that work? So imagine, here you are, you're hiking up somewhere near El Capitan in Yosemite and it's all very beautiful and you're looking at the whole world, and then you see a bear. You notice that you've gotten between mother bear and her cub and mother bear is not very happy about this. Mother bear is about to maul you and attack you and you have three seconds to keep mother bear from destroying you at the top of El Capitan. Do you pull out your Bible and say, it says right over here that I am in charge of you, that man was given dominion over all of the animals and therefore I ask you, bear, to please stand down? That's not likely to be of much help, the bear is going to kill you.

But - so how does it actually work? Bears are so much more powerful than people, how do bears which can kill any one of us - in the end how did we get to master bears? I mean, this blessing actually took place, we have bears in zoos, we do not have people in bear zoos. How did that work, that we managed to put bears in zoos? The answer is...

[Response from audience member: (Unclear 42:05)]

No single man can master a bear, but the community of mankind getting together over ages can develop with technology tools that can master bears. We can develop things like bows and arrows and shotguns and cages and things like that which allow us to master bears. So with technology, as a group we can do it. And that's part of the implication of what G-d is saying.

What G-d is saying is, you really are like Me. I am creator - if you think about G-d as creator, G-d's creativity manifested itself in a biological way and in a technological way. Biologically, G-d created life, He created humans. Technologically, G-d [fiddled 42:47] with things and built the world by saying no, I want to change things, I want to add to it, I want to make it a little different. That process of mind working together with actions to make the world the way you want it to be, what G-d calls Melacha, is something that we do too. We do Melacha as well, and we build technologically and we call that a certain kind of creativity, and we build biologically like G-d does, we really are little creators like G-d. We have dominion over the earth, we have dominion over vegetation - which is the

next part of the blessing, it's all ours. We have to share it with the animals, but it's all ours.

This is all a world 1 picture. It's a world 1 picture of man's place in the universe. If you would have to summarize man's place in the universe according to world 1, say, man define yourself, what place do you have in the universe? I would say, I am amazing, I am a little G-d on earth. There's G-d up in the sky, my spirituality comes when I imitate Him, and when I do as little creator what G-d does as Big Creator, I am fulfilling my mission in the world. So, I have children and that's a great expression of my creativity. And I'm able to build technologically and build these tools and master the world; Vekivshuha - and that is an expression of my creativity. That is my role in the world.

So let's say, okay, man - imagine our interview with man number 1 from world 1. So we'd say okay, so explain to me your relationship to the land. What would man 1 say? The land? Excuse me? Yeah, the land, what do you think your relationship to the land is? What would man 1 say about his relationship to the land? I am there to dominate it. That's my role. The land is the sandbox in which I play, it's the thing that G-d has given me as a plaything, as - to be able to dominate and to build up and to express my creativity within. Because in world 1 - go back to the first sentence - what is Shamayim va'Aretz? They are things. They are objects. They are that which [G-d 45:13] has created and therefore I, little creator, relate to those things as things also. There's nothing sacred about land, it's just something that I use, that I exploit, that I build with.

Now, at a certain point, even world 1 has its limits because world 1 ends with a chilling thing, which is the Great Creator with a capital C stops and that's Shabbos, and calls it quits. The implication is that [little 45:46] creator with a small c at some point also has to stop and call it quits. And indeed there is a time when Shabbos is introduced to man also. So you - creativity ad nauseam gets you into dangerous places, and that's the Tower of Babel, that's atomic energy and nuclear war, I mean that's a lot of things. But man number 1, who am I? I'm Tzelem Elokim, I'm there to emulate G-d, that's my path to spirituality.

Man 2 has an entirely different way of understanding himself. The words Tzelem Elokim never appear with man 2. How would man 2 define spirituality? When man 2 in the third rock from the sun looks up what are the creators he most clearly sees? Heaven and earth. Which means that what is spirituality going to look like for man number 2? You see, land changes. If I ask man number 2 tell me your relationship to the land, what would man 2 start to tell me? Land is not the sandbox that I create in, that's not words that man 2 would relate to. Man 2 looks at land and sees what? A creator. Land is sacred. Land is something that I come from.

Now a very different creator than G-d, right? G-d is the creator behind land. How is land and heaven a different creator than G-d? It's different because first of all they are inanimate objects, so earth and sky even though it might be where I come from at some mineral, biological level, but I can't emulate earth and sky. I can't try to be like earth and sky. I'm a thinking, breathing human being; earth and sky are not thinking and breathing things. So that means that imitation is not going to be the way that man 2 is going to express his spirituality. You can't imitate your creator, earth and sky, in this kind of world. But there is one advantage I have with earth and sky over G-d in trying to relate to it, which is at least it's tangible. Now if I mess this up it becomes Avodah Zarah, but there is a non-Avodah Zarah-like way of relating spiritually to the sacred earth and sky, and

creation 2 gives it to you. If you ask creation 2 what does spirituality look like, look at creation 2's answer. It comes in the very next verse. Verse 15 in Chapter 2; Vayikach Hashem Elokim et ha'Adam vayanicheyhu b'Gan Eden l'ovdah ul'shomrah - man is placed in the garden to do what? To serve the land and to guard it. Now if you think about that it's a mind-blowing thing. We're used to thinking about man as the center of everything, but if you look at the very first description of man's purpose, man isn't really the center, what is the center? The earth. The garden is the center. Man is really there just to tend to the garden, that's what he's there for; to guard the garden and to tend to it, that's what he's there for.

Think about all the Mitzvot in world number 2. One set of Mitzvot is; L'ovdah ul'shomrah - you are there to guard the garden. What's the other set of Mitzvot? The other set of Mitzvot is how you relate to the trees. The trees are also the products of the earth, so your spirituality in world number 2, which is earth and sky, is going to come to how you relate to the products of earth and sky. So how do you relate to them?

So what does G-d do? So G-d says; Vayatzmach Hashem Elokim min ha'adamah kol eitz nechmad lemareh v'tov lema'achal. Look even to how the trees are described. When the trees are first created they're not described just as trees, they're described as how they're going to relate to man; as the gifts of the land for man. What did G-d create? He created trees. What kind of trees? Kol eitz nechmad lemareh - that are going to strike you as beautiful, you're going to yearn for connection with those trees. By the way, just recently, this past week, scientific studies come out which is that you will do better in life if you live with a room with a view. If outside your window you see nature and you see trees and you see G-d's world, your stress level drops. That's just the way it is. It's amazing, even if you just see murals of nature. But we're built that way, G-d made a world that's beautiful for us and that's enticing to us and its very existence and its beauty is itself a gift.

So the first thing that the earth gives us as gifts is these trees that are; Nechmad lemareh But they're not just Nechmad lemareh, they're; Tov lema'achal - they're delicious to eat. And if you think about all of the flavors that we experience as ice cream were initially fruit flavors. Vanilla, chocolate, strawberry, I mean just go one by one, all of them, and they're different plants, they're different fragrances that come from plants. So G-d says there are these different really delicious food experiences that G-d gives us with these trees. V'tov lema'achal.

And regarding those trees, G-d says, I give you all of those trees - and if you think the first Mitzvah is a Mitzvat Loh Ta'aseh - not to eat from the tree of knowledge, it's not true. If you actually look at the text the very first Mitzvah with relationship to the trees is; Mikol etz ha'gan - from all of the trees of the garden; Ochol tochel - you shall surely eat. Now, Ochol tochel is an imperative. Eat, yes eat! It's not even like if you'd like you can have some trees. G-d says no, I command you, I made this for you, it's a wonderful gift. So here, what do you have? You have G-d together with earth and together with sky have created this whole bouquet of things for man. This wonderful Smorgasbord of things for man. Together they lay it out for us and say here, all of this is for you. By the way, biologically that's how it works. I mean ask any evolutionary biologist, that's why fruits are delicious, the tree wants you to eat from the fruits so that it can scatter its seeds and that's the only way it works. The tree is supposed to be delicious for you. So



there are these delicious trees that are gifts that the earth gives for you, and in return the earth wants something back.

The earth wants something back and G-d wants something back and G-d demands that you give the earth something back. The first thing that you have to give back is; L'ovdah ul'shomrah - you're there to take care of it. So there's a reciprocal relationship between you and the earth. The earth provides all of this bounty for you, and you - you give back to it. There's a second thing that G-d wants, which is there's one tree I don't want you to eat from, the tree is the tree of knowledge of good and evil. It's G-d's own special tree, don't eat from the tree.

Now you might say, what a strange thing, if G-d really didn't want me to eat from the tree, why put it there in the first place? That seems like a nasty thing to do. Why would you do that? The answer would seemingly be that G-d wants man to understand something, which is that all of these trees and all of these things that your creator is giving to you, He's giving to you as gifts. Understand that these are gifts coming to you from the creator. What's the one dangerous thing? The one dangerous thing is that I might just accept all of these gifts and not understand that they're gifts coming from my creator. I might start to succumb to an illusion. What illusion is that? This is just the way the world is. It just is this way, there's no gifts, I just got lucky and here's my world. In which case I'm in charge, in which case I can have everything, I can have all trees.

That one tree that I can't eat is a constant reminder that I'm not the master of this world, there's another master. There's creators and the creators have given me this as gifts, and I need to understand that. That's all the creators want.

And by the way, it's all you want. As parents you would want the same thing. If you think about a parent what it is that you want from your kids? What do you want from your kids? You want to give to your kids, you want your kids to enjoy. So you have grandkids, so you buy your grandkids one of those Star Wars Lego battleships. So you give them the Star Wars Lego battleship, what do you want to see from your kid? Really you want to see two things; the two things you want to see - what do you want to see? Let's just play out the scene. I'm the grandparent, and I give my kid this wonderful Star Wars Star Destroyer, Lego thingy, it cost \$150 and it's like oh, Grandpa that's really great. So what do I want to see? I want to see two things. What do I want to see?

The first thing I want to see is I actually want to see the kid enjoy the gift. Do you understand? In other words, I don't want it, oh Grandpa thank you so much for the gift and then the gift stays on the shelf for the next three months, like I'm not impressed by that. I actually want to see you enjoy the gift, I mean that's - so that's; Mikol eitz ha'gan ochol tochel - eat all these delicious trees, I want you to enjoy these delicious trees.

But the other thing that I want you to do, is I don't want to just see you enjoy the gift, I'd also like a little thank you. Now it's not because I'm such an egotist that I have to have all of my thank-yous, it's just that when a kid is playing with the 'tree' or playing with the Lego, I want them to have some understanding that the tree came from me. And therefore the thank you will help with that. So G-d says, you know I've a better way to do it, I don't even need a thank you, just don't eat from that tree. As long as you stay away from that tree, that's how you show Me that you understand that you are in a world with all these gifts, so therefore I know that whenever you consume these gifts you do so with the consciousness that it came from Me.

And that's it. That's spirituality in world number 2. Very different than world number 1. If you would compare the interviews of world number 1 and world number 2 with man, they're telling you two different things. What is spirituality according to world number 2? Nothing to do with creativity. Spirituality according to man in world number 2 is what? It's how do I relate to these creators from which I've come? They give me these gifts, will I accept them properly? Will I guard - will I return the favor properly?

If we could boil down the spirituality of man number 1 into one word what would the word be? Two words. The words would be Imitatio Dei - imitating the creator, that's what it's all about; Tzelem Elokim - imitating the creator. G-d is the sentient being up there, I can't touch Him, I can't feel Him, I can only connect to Him by imitating Him. That's one view. World number two doesn't work like that. When I look to heaven and earth as my primary creators and G-d beyond that, I'm looking at tangible things, and they give me tangible things. What does spirituality look like to man 2? I want to suggest it looks like - in Hebrew the word would be, Deveikut - it would be clinging to. I can cling to my creator if it's physical, I can touch it, it's developing a relationship with. It's not that I'm going to imitate heaven and earth, but I'm going to have a relationship with heaven and earth, they are these sacred things. I'm going to have a relationship with G-d, and that relationship is going to be built out of me accepting the gifts that they have to offer and me reciprocating properly in kind.

Let's talk about one final relationship for man 1 and man 2. Relationship between man and woman. What is the relationship between man and woman in world 1? If you would ask Adam - if you would ask man in world number 1 who is this woman, what would he say to you? Think about it, if my Modus Vivendi - if everything I'm about in world 1 is creator - little creator imitating Big Creator, so who is she? She is my partner in creation, the one without whom I can't do this. We have a sacred ability to create but it only happens when we're together, and neither of us have the ability to create biologically on our own, I need her because the only way I can create is through her and she needs me. That is one view of creation, in that view of creation man and woman are created simultaneously, they're both equally Tzelem Elokim, they both equally share the power to create, neither can create unilaterally, both can create bilaterally. That is who they are.

That is not how man 2 would describe woman. Man 2 is not interested in creation, so he's not going to describe Eve as his co-creator, and in fact, when he names her, that's not what he names her. What does he name her? What happens? In world number 2 G-d puts man to sleep and says, it's not good for man to be alone - so the first thing G-d does is; Vayitzer Hashem Elokim min ha'adamah kol chayot hasadeh - so the first thing is G-d goes back to the ground, because everything comes from the ground, and creates all of these animals. And says, well let's see if Adam comes from the ground maybe he'd like some other things that come from the ground, so some cousins. No. Man doesn't feel completed with any of the animals. Okay, so then what will work for you? So what will work for you is this new creation. G-d puts man to sleep and takes a rib or a side from him and builds that into woman, and presents woman to him.

So in the Toldot Shamayim va'Aretz who is woman? If, in the generations of heaven and earth, man is a child of heaven and earth, who is woman? A grandchild of heaven and earth: These are the Toldot of Shamayim va'Aretz. Man feels that something is missing, that his feminine side is lost, and he wants to reclaim his feminine side and so he sees

woman and he wants her, and what does he name her? He names her Isha - Ki mei'ish lukchah zot. Isha literally means from man. I name her 'from man' because she was taken from man. So if you ask man number 2 what his impetus to come together with woman is, the answer you're going to get is very different from man 1's answer. Man 1 will definitively say, I come together with woman because it's the only way I can create. Man 2 says forget about creation, why do I come together with woman? Because I am seeking to become whole because I want to reclaim my lost feminine side.

Everything in world number 2 is really about becoming whole. I have a sense that I come from somewhere; heaven and earth may not have created me cognitively, but I come from heaven and earth and therefore I want to go back to earth, in some way I need to unify with earth. So how do I unify with earth? Well ultimately I die and my body goes back to earth, and that's one way to do it, but there's another way to do it, the right way to do it, which is mutual gift giving. The earth gives me wonderful things and I give wonderful things back and somehow I can feel connected to heaven and earth that way, I can feel connected to G-d that way. I came from G-d, G-d gave me all these trees, when I follow His laws, I do the right thing, so I work with these gifts the right way and I'm connected to G-d. I'm connected to my wife, she comes from me, I have the ability to give her pleasure, she has the ability to give me pleasure. And we come together without even thought of creation, creation is just the byproduct.

Both Adam 1 and Adam 2 are true. If you look inside of you each one of us has Adam 1 and Adam 2 in them. There's a part of us that says what is life about? Life is about being creative, life is about ambition, life is about me building the world and making it into a better place and that's what it's about and that is a very world 1 way of looking at what it's about. When I do so, I'm doing something sacred, I'm imitating G-d and all of that is wonderful, but it's not the whole story.

World number 2 has another story to tell and it's also true. World number 2 is I should be careful about how I deal with heaven and earth. Heaven and earth aren't just the sandbox that I get to be creative in, heaven and earth are sacred, they're part of what created me, I need to protect them, I need to take care of them. Hence, the environmental movement, a need to safeguard the environment, there is something sacred in these things from which I come. It's not just my sandbox. The way I relate to G-d is not just by imitating Him, the way I relate to G-d is by accepting gifts from Him and by connecting to Him. The way I relate to my wife it's she's not just my co-creator that I use, but there's a relationship there, I'm trying to achieve a certain kind of wholeness and we call that love.

Two completely different mandates, and to some extent we all need to balance both of them.

There's a new movie out this week - the last couple of weeks or so - I don't know if you guys see movies over here, but in case you do. It's a movie about Steve Jobs, I haven't seen it yet, the screenplay by Aaron Sorkin. But from somebody who did, who works with me in the office, he said if you want a metaphor for world 1 and world 2 and the conflict between them, watch the movie Steve Jobs. Because that's really what it's all about. The question is what does it mean - what does meaning in the world mean to you? So if you're Steve Jobs it's very easy to say meaning means if I can bring the iPhone to the world, if I can bring the iPad to the world, if I can bring the iPod to the

world, look how many lives I can change with my creativity, I'm making something that the world will be different for. That trumps everything and that's a very world 1 answer.

But then there are world 2 considerations. The problem is world 1 and world 2 have a very, very different language. And this is really the challenge; how do you balance these two kinds of language?

What if your daughter has her piano recital that she has worked so hard for and you want to be at the piano recital but it conflicts, it gets in the way of your ability to just be ambitious and be creative, do you do that? Or if you're a father who works in Apple or any technology company or any company that you're ambitious in and he's very successful. So imagine I'm a lawyer and I get \$1,000 an hour or whatever it is that I get in some white-shoe law firm. Imagine that my kid has a - what do they have those - bring-your-parent-to-school day. And there's a bring-your-parent-to-school day, where the parent comes in and talks about their job and makes a little presentation. So what if I'm the parent and what if my kid comes and says, Dad, will you come to my school and make a presentation on bring-your-parent-to-school day, about what it is that you do? I'm so proud of what it is that you do. And you say, well let me tell you something about what I do. I make \$800 an hour and it's going to take about four hours off of my day to come into school to make this presentation, if you do the math, that's about \$3,200. Do you think it's worth \$3,200 for me to come in and make that presentation?

What just happens to that little kid's heart? Do you understand? What have I just done? I have tried to quantify a world 2 value in world 1 terms. You can't quantify the value of coming and making a presentation in your kid's school in world 1 terms of the quantification of creativity that money gives to something. They are two entirely different systems of value; ambition, creativity and relationship, it's world 1 and world 2.

This is the Torah talking to you from the perspective of guidebook, telling you what you need to know about creation to have some understanding of what it means to be a human being. That you have to balance creativity with relationship as you go forward in life, it's all about that. That's the Torah talking to us as guidebook.

When we come back next week, what I want to do with you is to shift gears and play that little experiment that I talked to you about with the Renoir, and then say okay, that's very nice, that's the Torah talking to me as guidebook. Now what I want to do - what I want to then ask is okay fine, but what about the Big Bang? What about all this stuff that science talks about? You still are telling me the story of creation even though you're telling it to me from a certain perspective, is there a way for me to feed the data that you've given into the computer so I can factor out your guidance and see something of what science tells me? Is that there? Is that possible to do? I think the answer is a resounding yes, it is possible to do and that's what we're going to try to do next week. So I'll see you then.

### Part 3

#### Transcript

Okay, we had talked over the last couple of weeks about something that I had called perspective shifting - the ability to see something from one perspective or perhaps two perspectives. I had applied that idea in a couple of different ways; the notion that - last week - the Torah would tell the creation story itself from two different perspectives, from

the perspective of creation story 1 in Chapter 1, and creation story 2 in Chapter 2. Tonight, as I suggested I was going to do last week, I want to broaden that idea of perspective shifting and try something a little bit experimental, a little bit tricky - and don't try this at home. But what we're going to try to do is in a way play a game that the Torah is not playing. Last week, in a way, we played the Torah's game, now we're going to try to do something a little bit different. Let me explain to you what I mean by that.

I suggested to you that - and again this is a little bit of a review - but I suggested to you that the Torah is designed as a kind of guidebook, and it's giving us a perspective on creation from that point of view. That's pretty much the argument that I made to you last week. If you want to just sort of summarize what we talked about last week in just a sentence or two, you would say that the story of creation 1 and creation 2 together, those two dual perspectives, are designed to try to guide you in how you could live your life. It's important for you as a human being to understand something about where you came from so that you can understand the meaning of life, you can understand your place in the universe, your place in the cosmos, how you relate to the fundamental important things. How you relate to your spouse, how you relate to children, how you relate to land, how you relate to the environment, how you relate to G-d. All of those things will depend upon understanding creation and G-d is going to tell you about creation - again, because it's a guidebook, and He's trying to guide you.

I suggested in our first week that many of the difficulties that we often experience [and try/when trying 2:34] to reconcile science and Torah come from a certain delusion that there is a contradiction in the first place, and I think a more proper way of understanding is that science is one kind of book, and a guidebook is a different kind of book. The Torah is talking to you about scientific facts but from a different perspective, from the perspective of trying to guide you. To read creation the way we read it last week, is to buy into that game and to allow the Torah to guide us by talking to us about creation.

To play a different game is to sort of play the science game and to try to shift perspectives. Again, just to go back to that analogy I gave you last week, the question is could we possibly say the following? Look, I get it Fohrman, the Torah is trying to guide us and it's not really telling us a scientific narrative, and we shouldn't expect it to comport with science, and all of that. But, bottom line, the Torah is talking about events that happened - right? I mean we're talking about an actual event that happened, creation of the world happened, and if the Torah is talking about something real that actually happened is there a way to somehow infer from the Torah what the Torah thinks actually happened? In other words, can we play the science game? Granted the Torah isn't designed to tell you about it but what the Torah does say, it should be relating to that stuff somehow. Could we try to shift perspectives away from guidance and towards science and say so what are the events that the Torah is actually talking about? What does the Torah think that they are?

The analogy I gave you last week is kind of like if you would imagine going to the Metropolitan Museum of Art and looking at a Renoir, so the Renoir is painted from a particular perspective. Could you imagine feeding the data from the Renoir into a computer program, a sophisticated computer program, and asking the computer program to re-create the painting from a different perspective? So I'm looking over here from the perspective of the grassy knoll over here, but what if I was sitting on the park bench at a



70-degree angle, what would the same scene look like? So you could imagine a sophisticated program being able to take the data, factor out that perspective and show me what it would look like from this perspective. Could you do that with the Torah? Could you say, all right so the Torah is giving me this perspective on creation, could I factor out the guidance that the Torah is trying to give me and arrive at what actually happened?

And tonight we're going to try a speculative experiment designed to do just that. What we're going to try to do in a way is suggest that the Torah is, in trying to talk to human beings - in other words, let me put it to you this way. The main difference between a scientific perspective on creation and a guidebook perspective on creation is that a guidebook is going to look at it from the perspective of the particular interest of human beings, the particular interest that human beings have in creation in trying to figure out their lives. Science in terms of what actually happened doesn't care about a particular perspective of human beings, it's just what actually happened. So in order to arrive at a scientific definition of what happened, what you might do is go back to the guidebook perspective and try to factor out the human perspective.

The idea is that the Torah is going to give you an overly anthropomorphic perspective on events, it's going to emphasize a human perspective, it's going to be talking to you as a human being in terms of what you should know, is there a way to factor out the human perspective? And if we could factor that out - almost like an algebra problem, when you have an algebra problem and you want to solve for  $x$  and you factor out the things that aren't  $x$ , and there's things you can do, you can divide both sides of the equation by the same thing. There's rules of what you can do to factor something out so you arrive at  $x$ . Could you factor out the human element in the Torah's story, the human perspective, and arrive at what just actually happened? Tonight I want to try a speculative endeavor in trying to do just that.

One device I want to use to help us in this is intertextuality. For those who have been around the block with me, you know that every once in a while I will suggest that there's a particular section of Torah that sheds light on another section of Torah. I think something like that exists with creation; there is an intertextual pair to the creation story and I'd like to suggest to you what it might be, or the rationale behind this. You'll see what I'm talking about in a moment, but what I want to suggest to you is sort of something bold and it comes from the following fact of Jewish life.

You may know that all of Melechet Shabbos - all of the Melacha that we avoid on Shabbos, has its prototype in Melechet HaMishkan, which is to say the entire 39 categories of work that we stay away from, they are derived in the Gemara from the 39 categories of labor which human beings involved themselves in, in establishing the Mishkan - the Tabernacle, in the desert.

Now why is that? So the Gemara in Shabbos provides you with a rationale and the Gemara in Shabbos says it's because of a juxtaposition in text at the beginning of Parsha Vayakhel. In the beginning of Parsha Vayakhel the Torah talks about the laws of Shabbos and immediately thereafter talks about the laws of the Mishkan and from that juxtaposition the Torah says that - or rather the Gemara infers that there is a connection between the two and that Melechet HaMishkan is the prototype for the Melacha that we're supposed to stay away from on Shabbos.

Now that may be true in a legal sense - the technical, legal answer to the question why is it that Melechet Shabbos is patterned after Melechet HaMishkan might be the juxtaposition of text in the beginning of Vayakhel, as I just talked about. But what if someone said to you, but why should that be? That seems like such a crazy, arbitrary thing. You could have patterned Melechet Shabbos after anything, what in the world does Melechet Shabbos really have to do with the Melacha of constructing the Mishkan? Why should it be that way? Why should such a fundamental aspect of Judaism, as the entire nature of Sabbath law, be willy-nilly, randomly connected to some completely unrelated event just by the virtue of the happenstance of a juxtaposition of texts?

In order for that to be satisfying you would have to suggest that underlying that connection between texts...

[Aside discussion]

...it must be that underlying that juxtaposition of texts there is a basic thematic connection that makes sense. It has to be that there is a reason why Melechet Shabbos just obviously should follow Melechet HaMishkan. I want to just meditate upon that with you in a moment and see if we can discern the reason why. Why should it be that way?

It must be that it's just obvious that it's that way. Here's what I want to suggest to you. It is obvious in a certain kind of way. If you think about it the two really are two sides of the same coin; the Melacha that was used to create the Mishkan and, if you think about it, Melechet Shabbos originally comes from what? The idea of Melacha on Shabbos where is it that we first get the word Melacha used in connection with Shabbos? It's all the way back in creation. The Melacha of creation itself.

What if I told you - if we think about creation deeply and I asked you this question, how did the first act of creation, G-d making the universe, how did that change the status quo? So what would you say? What was the difference between before creation and after creation in just a couple of words? So you'd say well obviously you could imagine no greater change in the status quo than this; before creation there was nothing and after creation there was everything. I mean, like, that's the biggest difference that you could possibly imagine. It's crazy. But the craziest thing is - again talking about perspective shifting - that that's true only from a certain perspective. That's actually only true from our perspective, from man's perspective. But if you adopt G-d's perspective it wouldn't be true anymore.

Imagine you were talking to G-d and G-d asked you this question; so human being what do you think the difference in the status quo was from before creation to after creation? And what if gave that answer? What if you said to G-d, oh no problem G-d, You see before creation there was nothing and after creation there was finally something - what do you think G-d would say? Like He'd be a little miffed; what do you mean before creation there was nothing? Hello? What about Me? I existed before creation.

As a matter of fact, G-d's perspective would actually be the complete opposite. From G-d's perspective G-d would say, let Me tell you what actually happened. Before creation there was everything. Before creation there was Me, I was living in My majestic world, doing My own thing, I was fine, everything was good. You know what happened in creation? Creation wasn't the creation of something, creation was actually the inverse of that. It was the diminishment of everything. It was Me deciding that I actually wanted to hollow out this little space in everything, to sort of contract Myself, as it were - and this is

the Kabbalistic concept of Tzimtzum really. It sounds like a really fancy concept this idea of Tzimtzum - contraction, but if you think about it, all Tzimtzum really is, is creation from a different point of view, creation from G-d's point of view. From G-d's point of view G-d would say yeah, I just had to sort of contract Myself a little bit to make room for something that wasn't Me.

What happened? G-d wanted to have a relationship with a creature, a human being, that was separate and apart and independent from Him, a little creator - as we talked about last week - that would be similar to Big Creator. But the problem was that G-d knew that He couldn't create that human being in G-d's world, couldn't survive in G-d's world, so first He had to create an environment for him. So G-d had to go through the laborious process of creating a universe; He had to create this vessel, this universe, this nursery, as it were, where human beings could come into existence. It would require the creation of space and time itself. It would require the creation of all the laws of physics and those laws of physics would have to be held in perfect balance with one another in order for this whole thing to work.

I mean, the inverse square law of gravity has to actually always work. What if the inverse square law of gravity worked sometimes? It wouldn't be very fun living any more - do you know what I mean? So we depend upon the consistency of the myriad laws of physics: Planck's constant, the four laws of thermodynamics, the ratio of the nuclear weak force, nuclear strong force. All of that stuff has to actually work.

So G-d set up all these laws and interestingly, if you think about it from the philosophical standpoint, G-d's attending to those laws, making sure that those laws are consistent, is itself an act of love, an act of altruism. Because those laws are necessary for us in order to be able to live, they're not necessary for G-d in order to be able to live. G-d has no interest in the inverse square law of gravity Himself, He has no interest in any of these laws of physics. That which He keeps them is only to allow the environment to work so that human beings could ultimately exist and so that G-d can ultimately relate to us.

Interestingly, philosophers of science wonder about why these laws are even there. Why should it be that the inverse square law of gravity that exists here on earth applies the same way in the Andromeda Galaxy? Why should there be any laws of physics? Why can't it just be random? There really is no reason for it that we can discern other than - again from a religious perspective it's not such a question. From a religious perspective we say [no, there's a 17:01] lawgiver, the lawgiver isn't just G-d who gave the Torah, it's G-d who gave nature, and G-d who gave these laws of nature to allow existence to develop in such a way that it could support life. Develop in such a way that it could support human life.

At the end of this process G-d finally created human beings, this little creator, and this little creator looks at himself and sees himself as a Tzelem Elokim - as someone like G-d, who can create. And what I want to suggest to you now is that the idea of Tzelem Elokim as a descriptor of mankind, as man created in the image of G-d, may not just describe our potential in terms of what we can do, but may actually describe our destiny in terms of what we ought to do, or what we should do. Or where it is that we're going in order to truly become human.

What I mean by that is that if you take this idea that we talked about last week a little bit further, this notion that human beings are creators - little creators like G-d is a Creator, so that's one to see Tzelem Elokim. That's in terms of his potential. A human being has

the potential or the capacity to create (writ small), just like G-d can Create (writ large). But if you think about it you might say, well what was it that G-d actually did with His gift of creativity? G-d wasn't just creative, it wasn't just that He had a gift of creativity, G-d actually did something with that gift. Maybe man's potential is also not just to be creative but to do something with that gift? To do what G-d did with that gift. Man is truly Tzelem Elokim when he chooses to do what G-d did with that gift.

What did G-d do with the gift? G-d made the universe? But what does that mean? What that means is G-d took His everything, hollowed out this little place to create this apartment for a being that He could love. And then He did that; He created and He kept all of these laws in order to be able to have that being survive so that He could relate to him and love him. What is the destiny of that being? The destiny of that being is to do the exact same thing. That being, which we call man, he looks at his everything, but man's everything is different than G-d's everything. When man looks at everything what does man see? We're like fish in a fishbowl, you can't see out the fishbowl so everything is our universe, that's everything. All of space and time itself. We look at that little apartment that G-d created and that's our everything. So what is it that we do? What's our destiny?

Our destiny is to create what G-d created, a little apartment for the one that we love. What do we call that apartment? A little place that would be a summer home in our everything, that would be G-d's own little space, own little world? In order to make that world work, we would have to take upon ourselves to observe certain laws to make Him comfortable. Laws that are not really designed for us but laws that are designed to make comfortable the guests that we want to bring into this place. The apartment of course that I'm talking about is the Mishkan - is the Tabernacle. And the laws are all the things that you need to keep to, to be able to make the Mishkan work.

Laws of Tumah and Taharah, Kodesh and Chol - all of these laws, which if you think about it are godly laws, they're not focused on human beings, they're about the Divine, they're not really relevant to us. And if you say, why should I keep them because they don't seem to be relevant to me? The answer is you keep them out of love. You keep them for the same reason G-d keeps the laws of physics. G-d keeps the laws of physics so that your environment works, so you're going to keep the laws of Kodesh and Chol and Tumah and Taharah so that you can maintain an environment that G-d is going to be comfortable in. You don't understand it, fine, you don't understand it. It's not about you.

When we do that then we reach our human potential - which might explain the name of the guy who does it. Who is the artisan who constructs the Mishkan? It just happens to be named Bezalel. What if that were an acronym? Sure sounds like a lot like; B'tzelem Elokim - the one who is created in the image of G-d. Bezalel is the one who fulfills the destiny of humankind to actually create this place for the one that we love.

Now if that's true - if this whole idea is true - it might explain the centrality of the Mishkan for example, why the Mishkan takes up so much space in a story that seems to not really be about the Mishkan. If you think about the Torah as a whole you might say the Torah as a whole really is, in a way, about the Mishkan. The Mishkan is at the center of the story. The entire second half of Sefer Shemot, all of Sefer Vayikra, the entire first half of Sefer Bamidbar, they're all about the Mishkan. It literally is the center of the Torah.

What happens in between that? In between that G-d in creation makes a home for us, we get kicked out and eventually Avraham is told that his children are going to have a special time but then end up in Mitzrayim instead and the story of the Torah is really a homecoming story. A story where G-d is trying to bring people home and on the way the people try to make a home for G-d. Both stories end kind of almost done, and the question is where are these stories going to go? Will the Jewish people make it home? When they're home will they make a permanent home for G-d in the Beit Hamikdash? These are the stories.

Getting back to Shabbos and the Mishkan, it now should be self-evident why it is that the basis for Melechet Shabbos is the Melacha that we used to create the Mishkan - why? Because if you think about our Shabbos - our Shabbos is really just a reflection of the Creator's Shabbos. The very first one to keep Shabbos wasn't us, that which we keep Shabbos is just because G-d kept Shabbos. G-d was Shoveis - G-d stopped working, G-d let go of all of the Melacha that He did and that's what Shabbos is. So if I say what's the definition of Shabbos? The definition of Shabbos is a creator taking a break from all of the Melacha - the creative activity, that he used to create the apartment for the one that he loves. That's what - that's the definition of Shabbos, that's what G-d did. So that means that when human beings go and we make the Mishkan - the apartment for the one that we love, and we want to emulate G-d, that we too need to take a break from all the Melacha that we used to create for the apartment for the one that we love. So obviously we're going to take a break from Melechet Mishkan.

Our Melechet HaMishkan is analogous to G-d's Melacha of creating the universe. These are just the things you engage in when you're creating an apartment for the one that you love. G-d engages in His version of it when He creates the universe, we engage in our version of it when we create the Mishkan.

Okay, if we're willing to accept that general rubric for understanding Melechet Shabbos - why it is that Melechet Shabbos is patterned after Melechet HaMishkan; that no, it makes perfect sense, it's really the same thing. That suggests a deep connection between the Melacha that was used to create the Mishkan and the Melacha that was used to create the universe - in a way. In other words, it's not just that there is this juxtaposition of text and therefore we do it, no, they are the same thing and they're just mirror images of each other. G-d created the world, that was the apartment He made for us; we created the Mishkan, the apartment for Him.

Leading us to the tantalizing question might the construction of the Mishkan parallel in some way G-d's - in other words, is there something similar about these two construction projects? Are these two apartments related to each other in any way? Is there - could it be that if we are seeking to understand creation, that if we really want to understand how an intelligent person in the twenty-first century might go back and read the first chapter of Sefer Bereishis, the way we could get an insight into how to do that would be to look at the Mishkan and how it was constructed. It's a parallel building project; you can learn a lot from looking at parallel building projects.

To extend this idea a little bit further we might say that - or we might - let me put it to you this way - one might challenge the idea that I am suggesting to you now. One might offer the following challenge against it. One might say, okay Fohrman, let me just get this straight. So you're saying that there's this connection between us building the Mishkan and the universe, but this whole idea is a little bit crazy, because when G-d



builds the universe for the one that He loves, for human beings, He's G-d, so He understands what a human being is, and He understands the environment that He needs to build for a human being to work. So He gets it, so He knows what the laws are, and He follows all of those laws. But for G-d to ask us to create an analogous environment for Him, how does that work? Like how are you supposed to have any idea what kind of environment works for G-d? Like you would have to understand something about G-d's environment in order to actually make it work. How could you - you have no idea what G-d's environment actually is.

In other words, if someone said re-create G-d's environment on earth. So how would you go about doing that? You would have to know what it - where does G-d live outside of space and time? What is His environment really like? Now re-create it here. We have no idea, we're completely at a loss. So you might say, well all right, fine, we're at a loss, so that's why G-d gives us these laws. So He tells us exactly how to do it. But is that really true? We have, like, no idea what it is we're creating?

So I want to offer something - again - a little bit radical here, but here's the suggestion I want to argue. Let's say - let's take G-d out of the picture. Let's say you were creating an apartment for the one that you love. And it's very complicated if G-d is the one that you love because you have no idea how to create G-d's environment. But let's say - let's make it easier. You're creating an apartment for your Aunt Sadie. You really like your Aunt Sadie, your Aunt Sadie lives in Detroit; your Aunt Sadie decides she's going to move in for three months. So you're going to remodel your house because Aunt Sadie is a very special visitor and you figure you're going to give her your son Jimmy's room. So Jimmy is seven years old and you're going to give Sadie Jimmy's room for three months.

But, you want to make Aunt Sadie really comfortable, so if you understood a lot about Aunt Sadie so you could fill the room with Aunt Sadie memorabilia, you could paint it her favorite color and you could make it just right for Aunt Sadie. But let me ask you, what if you didn't know anything about Aunt Sadie? She's this long-lost aunt and you haven't seen her a long time, so you can't really do that. You can't make the room perfect by putting all those Aunt Sadie stuff in there because you don't know what Aunt Sadie is like. Kind of like us and G-d.

What's the least you could do if you wanted to give her little Jimmy's room and have Jimmy move up to the attic? You look at little Jimmy's room and what does it look like? It looks like little Jimmy's room. So there's a bunk bed there, there's Mets' paraphernalia, and there's this ratty rug with the New York Mets or something, like there's all this little seven-year-old stuff, there's boxing gloves, whatever there is, in that room. So you say at the very least what do you need to do to make this room work for Aunt Sadie? You at least have to expunge all the seven-year-old stuff. You at least want to give Sadie a nice, clean room. So you're going to pack up all of the stuff which makes this little Bobby's room or little Jimmy's room and you're at least going to give her an nice, clean room which she'll decorate the way she wants to decorate it.

Maybe that's what we're doing in creating the Mishkan. In other words, the least we can do is what? Now take the analogy to us. If we're going to create an apartment for G-d, what's the least we can do? If we look at our world, our apartment, what's wrong with the idea of inviting G-d into our apartment? We might not know what G-d's environment looks like but we know one thing for sure, it doesn't look like our room. There's a lot of

stuff in our room, in our apartment, that G-d doesn't need, that are extraneous; like all the little Jimmy paraphernalia.

Let's take stock of all the stuff that are extraneous in our apartment. Think about it. Everything G-d did in creation to make it perfect for human beings, all of that is extraneous for G-d because He doesn't need it, because that was just made for us. Which means all of creation, it means all of the stuff, it means vegetation, it means every - it's like you would have to get rid of it all. And by the way I don't just mean the stuff of creation, you'd have to get rid of all the laws, you'd have to get rid of space and time. You'd have to like take everything apart.

In a deep kind of way what I want to suggest to you is that constructing the Mishkan is nominally a construction project because we engaged in Melacha in order to make it, but what it really is, is a deconstruction project. What we're really doing in constructing the Mishkan is deconstructing creation. We're actually taking apart creation to try to bring it back to a pristine state, so all of the stuff that G-d made for us isn't there, so it doesn't clutter up G-d's space. Conceptually we're going backwards through creation. So I want to suggest that if we follow the construction of the Mishkan carefully you're going to see that the construction of the Mishkan is almost like a reversal of creation. Everything is being done to take apart creation. It's almost like a demolition project.

What does that mean? How would you demolish creation? Like how would you even do such a thing? Like that's like a crazy, crazy idea. How would you demolish creation to make it work for G-d? If we could answer that question, we would have ourselves a solution to a number of very puzzling things about the Mishkan. And, if we can answer that question, I believe we'll have a solution to a number of very puzzling things about creation itself. The two are going to shed light on each other, once we understand that constructing the Mishkan is deconstructing creation.

Let me give you a short inventory of problems with creation and problems with the Mishkan which I think will go away once you see this. Once you begin to see how constructing the Mishkan is deconstructing creation, these problems with creation on the one hand and the Mishkan on the other will evaporate. Here are the problems.

In week 1 with you, I referenced a few problems with creation. Just to go back and review, they were three. Here were the problems. Problem number 1, if creation is really creation ex nihilo, if creation is really about G-d creating the world from nothing, how come there was so much water everywhere? In the very beginning without even creating it we hear; Veha'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim - there's all this water. And the wind of G-d is hovering over the water. Whenever G-d creates stuff you hear Him create it; when He creates light, He creates light, when He creates vegetation, He creates vegetation, when He creates the sun and the moon and the stars, He creates the sun and the moon and the stars. The exception is water. Somehow there's just water there. Like where did all the water come from? Question 1.

Question 2, if you look at Day 3, Day 3 involves G-d creating all of this wonderful vegetation, but Day 4 involves G-d creating the sun. That means that all the wonderful vegetation seems to precede the creation of the sun. Now you don't have to be that much of a scientific Chacham to understand that trees don't do very well without light. How could you possibly imagine a world with flourishing fruit trees in which the sun had

not yet been created yet? That's like basic question number 2 that you have to ask about creation.

Basic question number 3. If I asked you your top three reasons for being glad that our solar system contains a sun, what would they be? So I suggested that you would say well, heat very important, light very important - like these would be the main things. If you wouldn't have a sun, life is impossible, there is no heat, life isn't that much fun at minus 297 Kelvin - or whatever absolute zero is in space - and life is not that much fun in absolute darkness. We know that these things would make life cease, so this is the reason the sun is important, and yet strangely, if you look at the Torah's commentary on the creation of the sun we get none of that.

It says that G-d created the sun so that it would be: Vehayu l'otot ul'mo'adim ul'yamim v'shanim - that it would be calendar markers for us. That G-d says, oh I know you guys, you're going to want to festivals and you're going to need days and months and years, so this is going to help you track time. And in fact the sun does help us track time because daylight cycles with the sun are the way we actually track time. A daylight cycle on the earth we call it day. A daylight cycle on the moon we call a month. A daylight cycle in terms of days that are darker and lighter we call a year. When the days come around and they're just as dark as they used to be so then we know that a year has elapsed.

So we actually do use the sun for calendar counting but if I had to ask you what's your top priority about the sun, that's like a distant third after heat and light. Heat and light is what the sun is about and yet, not according to the Torah. The Torah actually doesn't mention heat and light, the Torah says, oh the sun is there to help you count time. Very strange.

These are the basic questions about creation. Now I'm not talking about the fancy questions about creation; questions that you could ask if you are a twenty-first century physicist. I'm just talking about the basic questions that anybody at any time would ask about creation; these are some of the basic questions we would ask. These questions, I think, go away once we understand the connection between the Mishkan and creation, and once we understand that creating the Mishkan is deconstructing creation. These are some questions about creation that go away.

Let me talk to you about some questions about the Mishkan which are going to go away. Here are some strange things about the Mishkan. What's inside the Holy Ark - the Aron? We all know the Ten Commandments - the Tablets. But the Midrash tells us something strange about the Ten Commandments, it says that the Ten Commandments was written with black fire on white fire. Black fire on white fire is a very psychedelic thing, very weird to think about that, what does the Midrash want us to understand with such a strange image of words of black fire written on white fire? It's a strange thing.

Here's another strange thing in the Mishkan - a lot of psychedelic, really weird things in the Mishkan. We know that the Holy of Holies was a very special place. We know according to the Mishna that if anybody went there in an unauthorized fashion he would die. The Kohen Gadol was only allowed there one day during the year and if he went there in an unauthorized way or not wearing the right clothes he would die. So what if I was somebody who said, that's very nasty of G-d, here's G-d's very special place and He kills anybody who comes in, like isn't the whole point that He wants to hang out with us? Why would such a vengeful G-d be killing people? So you would say well I don't

know the answer to that, but let's just understand what the Kohen wears and how that really works.

So here's another question, what does the Kohen have to wear? So when the Kohein goes into the Holy of Holies on Yom Kippur it turns that he has to have very special clothes. They have to be what's known as Bigdei Lavan - they have to be white clothes. Now the Gemara wonders why they have to be white clothes? So the Gemara says well normally the Kohein Gadol on Yom Kippur is wearing what's known as Bigdei Zahav - golden clothes. So the Gemara says it wouldn't be appropriate for him to wear golden clothes when going into the Holy of Holies because; Ein Kateigor Na'aseh Saneigor - because golden clothes remind you of what nasty thing in Jewish history? The Golden Calf. The Golden Calf is not exactly the thing that you want to remind G-d of on Yom Kippur, so the Kohein Gadol divests himself of golden clothes and wears other clothes instead.

Great, that explains why we don't have golden clothes worn by the Kohein Gadol in the Holy of Holies, but it does not explain why the particular clothes that he wears just happen to be all white. So the question is why does the clothes that the Kohein Gadol wears have to be all white in the Holy of Holies? That's question number 3.

Question number 4 about the Mishkan. Here I am in the Holy of Holies and there is a math problem that the Gemara in Yoma talks about. The math problem basically is, is that there's not enough space for the Aron. So if you do the math there's 10 Amot to the side of the Aron to the wall of the Mishkan, and there's 10 Amot on the other side. The problem is, is that the whole Mishkan is only 20 Amot wide, which allows for absolutely no space for the Ark itself. The Gemara in Yoma when confronted with that problem says, ah no problem; Aron ein min ha'midah - the Aron just didn't take up any space.

Oh really? So you want me - like you expect - like the Gemara can say that with a straight face, like the Aron just didn't take up any space? And I'm just supposed to yeah, obviously the Gemara - right? And you're just supposed to nod your head and go on? What are you talking about? How can you expect me to take you seriously when you tell me that the Aron didn't take - the Aron is 10 Amot wide, what do you mean it doesn't take up - the dimensions for the Aron are given in the Torah and you're telling me that all of a sudden the dimensions aren't really there? It didn't take up any space? How could it have dimensions and not have dimensions? Crazy. How was the Gemara expecting me to take that and understand it?

By the way if you're a Harry Potter fan, it sounds like magic, like they actually have this in Harry Potter land, where there's this tent which is really small but when you get inside it's really big. Like it seems like something like that is going on here, how do we understand Harry Potter land in the Mishkan?

Okay, here's some other weird stuff in the Mishkan. If you look carefully at the stuff that the Parochet - that the curtain in the Mishkan is made out of, the stuff that the Yeri'ot - the curtains, are made out of, the stuff even that the Bigdei Kohein Gadol are made out of, you'll find that there's a common denominator in every last one of them. They're all made out of Shatnez. Couldn't - like you really had to do it that way? It's like we all know Shatnez is like the worst, right, so why would Shatnez be everywhere in the Mishkan? Like that's crazy. If you're really so anti-Shatnez, so at least in your very special place you shouldn't have Shatnez right? Okay next question.

The next question is a question of placement. If I told you where do you hear about the various vessels of the Mishkan? Where in the Torah do you hear about the various vessels of the Mishkan; what they are, how they're constructed, what their function is? Where do you basically hear about this? Come on guys? Right, it's in Shemot, in Parshiyot Terumah and Tetzaveh and Vayakhel and Pekudei, that's where you hear about it. With a little exception, the end of Emor. Turns out that if you go to the end of Emor - if you have a Chumash you can follow along, otherwise just listen to me, I'll just read you very quickly what I'm talking about.

The very end of Emor, after the Parshat of Mo'adim, you find something strange. The Torah goes through all the holidays from beginning to end and when you're done with the holidays, without any warning, this is what you get. Vayedaber Moshe et Mo'adei Hashem el Bnei Yisrael - that's the end of the holidays - G-d tells Moshe about the Mo'adei Hashem. Very next words; Vayedaber Hashem el Moshe leimor - and I'm reading now from Chapter 24 in Vayikra, verse 1. Tzav et Bnei Yisrael - command the Jewish people; Veyikchu eilecha shemen zayit zach katit la'ma'or le'ha'alot ner tamid - you should take pure oil to make the Ner Tamid - a light that never goes out. Where should you put it? You should put it on the Menorah. Mei'erev ad boker - from morning till night, on the Menorah; Lifnei Hashem tamid - it has to be all night long - it has to always be there. Chukat olam l'deroteichem. Al ha'menorah ha'tehorah ya'aroch et ha'neivot lifnei Hashem tamid - you have to have this light on the Menorah always.

Very strange. Out of nowhere, immediately after the Parshat of Mo'adim I hear about the light on the Menorah, which has nothing to do - trust me - it has nothing to do with any of the holidays, it's just a complete digression. And if that's not enough, we then go on to another implement of the Mishkan. V'lakachta solet - and then you take flour, and you make 12 loaves and you put them on the table and that should be there; Tamid - always before G-d. The loaves of bread on the table and it's there for 7 days and the Kohanim eat them. And then we have that story.

And then that's it, and this is - we just thought we'd let you know about these two implements in the Mishkan. What is this doing here? None of the other implements in the Mishkan are discussed; we have no discussion of the Mizbayach; the Mizbayach Ha'Ketoret, the Mizbayach Ha'Chitzon, nothing else. Two little implements of the Mishkan dropped out of nowhere in the middle of - at the end of Parshat Ha'Mo'adim, somewhere in the vast recesses of Vayikra, completely out of place, what is this doing here? That's question 5 or so.

All of these questions, I think, will go away once we understand, again, that the Mishkan is a deconstruction project. It's deconstructing creation.

How would you deconstruct creation? This brings us to one final question on the Mishkan, a question that brings us to the title of this series. I bet you were wondering when we would ever get there, the mystery of the cherubs. Let's talk about the mystery of the cherubs. Cherubs of course are Keruvim; Keruvim first appear guarding the little summer home that G-d makes for Himself in the Garden of Eden, and they then appear in the next summer home that human beings make for G-d in the Mishkan. If you think about it, that's kind of interesting, the only places in the entire Torah that we ever meet Keruvim are guarding the entrance to the Garden of Eden with the flaming sword, and the Keruvim in the Mishkan - the cherubs that appear in the Mishkan. I'll talk for a moment about where.



It turns out that the Keruvim actually most famously appear on top of the Aron - on top of the Ark, in three-dimensions. There are these Keruvim that are made out of gold that then go with their wings and shelter above the Ark. But it also turns out that that's not the only place that you have images of Keruvim in the Mishkan. It turns out that there's two other places that you have two-dimensional images of Keruvim woven into tapestry, and they are on the Parochet. The Parochet is the curtain that divides between the Kodesh HaKedoshim - the Holy of Holies, and the rest of the Mishkan - the Holy. And the other place you have it is on the Yeri'ot. And you can see this in the - if you look at Parshat Teruma - that this is so. You have it on the Yeri'ot. The Yeri'ot are the curtains of course that cover over the entire Mishkan.

Okay, now let me ask you a very basic question. Why? Why do you think Keruvim appear in the Mishkan at all? And, why would they appear precisely where they appear? In other words, if Keruvim are just a pretty decorative element, so I guess they're the kind of angels that are prettiest - like is that what it is? So we have pretty angels. So if the architect, G-d, thinks that it's really nice to have pretty angels, so put them everywhere, you should put them inlaid into the Table, you could have them on the Menorah - the Menorah has a lot of other decorations, why don't we have some images of the Keruvim there? No. There's three places for the Keruvim and that's it. The Keruvim are on top of the Aron on part of the Kaporet, they're part of the Parochet, and they're part of the Yeri'ot, why?

The answer to why is going to have to be - you're going to have to find a common denominator in those three implements of the Mishkan. What is common about the Kaporet - the covering for the Ark, out of which you have these three-dimensional Keruvim, and then the two places you have two-dimensional Keruvim; the Kaporet - the curtain that separates between the Holy of Holies and the Holy and the Yeri'ot - the curtains which are on the outermost layer of the Mishkan? What would you say is the common denominator of all three of those things?

[Response from audience member: Separate.]

They separate. They're separators. They are. Each one of those things separates. The Yeri'ot separate between the outside world and the Mishkan, they're the outermost barrier of the Mishkan. The purpose of the Parochet is - in the words of the text - Lehavdil - to separate between the Kodesh and the Kodesh HaKedoshim. The Kaporet separates between what's inside - the holiness of what's inside the Aron and what's outside. It's really three levels of holiness that you're separating from, three barriers.

And by the way holiness is just a fancy word for deconstruction - by the way - of creation. Think about what holiness is? What does holiness mean? Holiness just means separateness. It's the place where G-d is, it's G-d's environment. G-d's environment is holy; Kadosh, kadosh, kadosh Hashem Tzevakot meloh kol ha'aretz kevodo - so G-d's abode is holy, holy, holy. Interestingly three holinesses. So in the Mishkan you have three levels of holiness, three kinds of chambers leading you through these airlocks, closer and closer to G-d's world. It's almost like if you're going through these three airlocks, you're going through three crucial stages in the deconstruction of the universe, until you get to the primal stage at its very basis.

By the way, it's kind of interesting because if you look at the orientation of the Kaporet - the Kaporet, of course, the covering over the top of the Aron, has a horizontal orientation. If you think about the orientation of the Parochet - the Parochet which is that

curtain has a vertical orientation. By the way, think about the words. Do you ever wonder why the words had to be so confusing? When you were a kid in school learning about the Kaporet and the Parochet, didn't you always get them mixed up? And you could never remember which one is which because they sound so much - it's the same word just the Chaf and the Pei get switched, and Parochet becomes Kaporet. The answer is because they're the same thing. They're just two different kinds of separators; one is a vertical separator, one is a horizontal separator. So if you flip one you get the other. If I flip the Kaporet I get the Parochet. That's true physically, it's also true linguistically. If I flip the letters of Kaporet I get Parochet.

So if the Kaporet is a horizontal separator and the Parochet is a vertical separator, what kind of separator is the Yeri'ot - the curtains? If you think about the curtains, they're both. The curtains overlay the Mishkan horizontally and then drape down vertically on the sides of the walls. So I have horizontal, I have vertical, I have vertical-horizontal.

I asked you before the common denominator of all of these things and you said separators. That's true. Going back to the original Keruvim, the original Keruvim were also separator angels. You might think of Keruvim as barrier angels. When G-d needed to make a separation between the Garden of Eden and the rest of the world, the separation was achieved through the Keruvim. So the Keruvim had a flaming sword and that flaming sword kept us from going back into G-d's world, but it's as if G-d says, hey the only world that I'm keeping you back, that's My world, is My world that I created, that's the Garden of Eden. But if you guys want to make a world for Me, if you want to go on a construction project and make a special place, totally! Then let Me bring back the Keruvim and they will usher you into that world. Notice that the Keruvim in the Mishkan don't have swords, because the Keruvim in the Mishkan are not there to keep you away, the Keruvim in the Mishkan are there to usher you in.

As a matter of fact, not only do they not have swords, but what's the one thing that we know about swords and the Mishkan? They do not go together. The Torah says you cannot use any stone hewn by swords, because swords are anathema to the Mishkan. So it's like yeah, the Keruvim over there they're keeping you away - back to the Garden of Eden - that's the one with swords, but here, no swords allowed, the Keruvim are actually bringing you in.

Now let's go to this idea of separator angels, that's what they are, they're separator angels. The Hebrew word for separation; Lehavdil - that's the word the Torah uses to describe the Parochet; Lehavdil bein [hakodesh u'bein Kodesh Kedoshim 53:11]. Do you know that the word Lehavdil hasn't been used since when? In the Mishkan the word Lehavdil appears, but before that when is the last time you had the word Lehavdil in the Torah? In creation itself. Again, the Mishkan and creation.

Now here's the thing. How many separator points do we have in the Mishkan? Three of them. Go back to creation and ask yourself how many separator points do you have in creation? How many Havdalot are there in creation? It turns out that there's exactly three. And now the question is might the three separation points in creation be mirrored by these three separations of the Mishkan? Could one set of separations actually line up to the other, that they're exactly parallel to each other?

I think the answer to that is going to be yes. What are the three separator points in creation? What's the very first separation in creation, do you remember? The separation between Or and Choshech on Day 1 - the separation between light and darkness on

Day 1. What's the second great separation? On Day 2 the separation between Mayim l'mayim - G-d says; Vayavdel bein ha'mayim asher mitachat la'rakiyah - G-d makes sky to be Mavdil between water above and water below. And then, the next separation, number 3, it occurs on Day 4 with the creation of the sun and the moon and the stars. Sun and the moon and the stars are there; Lehavdil bein ha'yom u'bein ha'lailah - to separate between night and day.

Okay, now let's talk about these separations - the three separations in the Mishkan, the three separations in creation. Why are the Havdalot so crucial? Here's the theory I want to suggest to you. They're crucial in any deconstruction project, or any construction project. In any construction project or deconstruction project the Havdalot play a particularly crucial role and here's why.

Let's talk about deconstruction first. If I were involved in the business of demolition, that was my thing. Let's say my business was I demolish buildings for a living and you come and you say there's a skyscraper that I'd like you to demolish - not terrorism but it actually has to come down. So a skyscraper that needs to be demolished, it's 57 floors, the problem is it's in a residential area, it's a dangerous thing, how do you take apart - how do you demolish that? So a real expert in demolition would be able to take down that building very gently, just in its footprint. I don't want stuff flying all over the place and killing people, how do I demolish a building most quickly and efficiently and safely, that it simply collapses under itself? What is the strategy?

Imagine that I want to do this as efficiently as possible so I'm going to use explosives but I want to use the minimum number of explosives to create the minimum number of collateral damage, it's just going to fall. What do I do? Where do I put the explosives?

[Response from audience member: At the foundation level.]

The answer is I put it at key infrastructure points. Whenever you think of a building - any building - you can divide the building into two kinds of construction. The building has infrastructure and the building has what you might call superstructure, the stuff that gets built on top of infrastructure. Think about your house. You ever know when you want to remodel your house or move things around so the one thing you don't want to touch in your house are the load bearing walls. Because that's infrastructure - so you can't touch infrastructure. So first when you build you set up infrastructure and the infrastructure isn't like there because it's pretty or anything, it's just got to hold things up and then you can build things around that and you can build.

Similarly, if I want to take apart a building the first thing that I do is if I collapse the infrastructure. If I find three key places, three key infrastructure points and I put charges there, explosives there, the whole building is just going to collapse, because once the infrastructure is gone, the superstructure is just going to sink to the ground.

If you think about creation, I want to suggest to you that creation was done in exactly the same way. When G-d built creation there were infrastructure things that G-d did, and then there was superstructure creation that G-d did. How would you know the difference? Well think about the verbs in creation. You'll find that there's two different kinds of verbs in creation. The superstructure verbs are the kinds of creation that's visible to the eye, the kind of stuff that G-d is making new stuff. So those kinds of verbs are Barah - to create, Yatzar - to form, Asah - to make. Whenever you meet a verb like that; Barah, Yatzar, or Asah, you know that G-d is making superstructure, He's filling the universe with things.

But what are the infrastructure verbs? The infrastructure verbs are Lehavdil - the separations. In a separation you don't make anything new, whatever is there is there, you just setting things up in a way that the universe can hold something else. In order for the universe to be stable, G-d has to create the separation between these two things, in order to organize the universe better. Because a better organized universe is something that can allow for more stuff in it. So the Havdalot are really the infrastructure of creation.

Similarly, the Havdalot in the Mishkan are going to be the infrastructure of the Mishkan. The journey through the Havdalot in the Mishkan, I want to suggest to you, will look like a backwards journey through the Havdalot of creation. It's like I'm taking apart these infrastructure points to demolish creation, to get back to the essence of what was there before G-d started making things for us. In order to understand that we have to understand what the three Havdalot in creation are.

So what I want to do with you now is - in our remaining moments - is to take a very quick run-through - this talk by the way is going to run a little bit longer than the others because there's just no good way to stop it. So I apologize. But give me about 15 minutes and I'll be done with you. So the - what we're going to do is take a very quick run through creation and see the infrastructure developments. Here's how it goes.

Infrastructure development number 1, the very first infrastructure development. Let's read; Bereishis barah Elokim et ha'shamayim v'et ha'aretz - in the beginning G-d created the heavens and the earth. But everything was chaotic; Veha'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim. Now I want you to pay very good attention to that verse. That verse just happens to have three clauses in it. We talked about three different infrastructure points, three different Havdalot; you're actually going to see that the three different infrastructure points are actually all going to relate back to this primal verse that discusses the chaos of pre-creation. In a way, each of these infrastructure developments is going to be an attempt to do away with one element of the chaos. There's three elements of chaos; if I can get an infrastructure development that takes away all three of them I don't have chaos anymore. That's how I create the universe.

Let's take a look at the three parts of chaos. Part number 1; Veha'aretz haytah tohu vavohu - the world was chaotic, so element 1 of chaos is Tohu vavohu. Element number 2 of chaos is; Choshech al pnei tehom - utter darkness. Darkness is going to be our label for element 2 of chaos, another way of seeing chaos. A third way of seeing chaos is going to be; V'ruach Elokim merachephet al pnei ha'mayim - water.

In other words, if I would ask you - and just to make this very simple instead of making it like abstract; it's really not abstract, it makes sense, here's a way to make this concrete. If I asked you to look at the pre-creation world and describe to me why you don't think this world is inhabitable, what your problem with this world is? If G-d said, okay here is your world; Ha'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim - okay human being tell Me why you don't want to live here. You would give me three reasons.

The first reason you'd give me is too much water. I'm not a fish, I can't survive in this world, I have no habitable space. I can't breathe, I can't walk, just water everywhere, that's my first problem with this world. G-d says, that's it? So I say no, I have another problem, it's dark, I don't like living in darkness. Dark world doesn't do it for me, I can't

support life, I need some light over here. G-d says yeah, that's it, no other problems? So I say yeah, the chaos thing is really getting on my nerves, the whole Tohu vavohu thing, I'd really like a little bit of order here. Everything is all mixed up, I don't know what's going, what's coming, I can't figure it out. So G-d says fine, so if I got rid of those three things, you'd be happy? So I say, yeah. I don't want any chaos, I want some place to breathe, I don't like all the water, and give me some light and I'm pretty good.

So that's a very concrete way of understanding it; there's three elements of chaos here that need to go away. These infrastructure elements are going to address one of these; chaos, darkness and water. Let's watch how it proceeds.

First thing that happens; Vayomer Elokim yehi or - the first thing that happens is; Yehi or - let there be light. Vayehi or - and there was light. Vayar Elokim et ha'or ki tov - G-d saw the light and it was good. And then - now even before we get to 'and then' let me just play a little game with you. So going back to our three elements of chaos, imagine that the first thing G-d did is He turned on the lights. So now there's light; Vayehi or. So describe the scene. Before it was really chaotic, it was dark and there was water everywhere, now one of these problems has gone, darkness gone, G-d turned on the lights, excellent. Now describe the scene. So darkness has gone, but what does the scene look like? Still very chaotic, still water everywhere. So what does the scene look like if you could describe the scene? Brilliant light because darkness has gone; Vayehi or - there's light, it's like an overexposed photograph. But there's water all over the place plus it's all chaotic, the waves, it's all mixed up, very problematic, but it's very light, very light, I can see as far as the eye can see.

If that's the case the next words in the Torah seem to make no sense at all. Look at the next words in the Torah. Vayar Elokim et ha'or ki tov - G-d saw that the light was good; Vayavdel Elokim bein ha'or u'bein ha'choshech - and G-d divided between the light and the darkness. So what question should you be asking now? Where's the darkness? I thought we just turned on the lights, how come there's still darkness here?

Now the Mepharshim struggle with this and the common answer that's given among the Medieval Mepharshim is something that's very profound. What they say is, is that this kind of darkness that we're talking about here, can't be the same kind of darkness that we started with. The darkness that we started with if I would ask you to define conventional darkness, so give me a good conventional definition of darkness. The absence of light. If you define darkness as the absence of light, once I turn on the lights and there's a lot of light, what happens to the darkness? It's gone, because there is no longer any absence of light. So that was the first kind of darkness. But the Mepharshim say that it must be that the darkness that we are now talking about that still exists after you flood the world with light, is not a darkness that's defined by the absence of light, but a darkness that's defined by the presence of something. By the presence of darkness.

If you want an idea of what this is later on in the Torah think about Makat Choshech. Makat Choshech was a kind of tangible darkness. There's some energy here - in other words, it's that in the original creation of light - seemingly, the original creation of light included light energy and a kind of dark energy that was part of that creation such that the two were comingled with one another. The dominant feature was light but somehow there was a dark energy there too. And; Vayavdel Elokim bein ha'or u'bein ha'choshech



- the very first Havdalah was to create light as we know it which filters out dark energy from light and it just keeps us with light energy.

Now G-d then says, you know what that is you human beings? Vayikra Elokim la'or yom v'la'choshech karah lailah - we can call that just for shorthand Yom, the light energy, and the darkness we can call Lailah. Now that's a human way of relating to what we're talking about because human beings relate very well to night and day. But let's go back to our thing, we're going to factor out the human perspective. If you factor out the human perspective and you relate to what actually happened - what actually happened? The creation of light energy and dark energy and the separation between the two of them - enter science.

If you read science nowadays you will find that there's a strange thing about the universe, which is we can't figure out where most of it is. Here is the problem. We know that the universe is expanding and we know that the brakes on the expansion of the universe is the gravitational pull which is exerted by all of the galaxies and all of the matter and all of the energies in the universe, that creates gravitational force that slows down the expansion of the universe. The problem is, is that if you do the math you find that if you actually look at the rate at which the universe is slowing in its expansion, it doesn't actually add up to the amount of galaxies that are out there. There's hundreds of billions of galaxies that are out there but it's not enough gravitational force to account for the rate at which the expansion of the universe is slowing.

So scientists know mathematically that there must be more matter and energy out there than exists in the hundreds of billions of galaxies in the universe. Now it doesn't just mean that we haven't found the galaxies yet, it means that no, we know where the end is, and there aren't any more and we're off by a factor of five. Which means there has to be five times as many galaxies to account for the mathematics of the rate of the slowing of the expansion of the universe than there actually are.

So astronomers have been forced to conclude that there exists something in the universe known as dark energy. Dark energy and dark matter. And actually about 81 per cent of the universe is made up of it. The universe that we deal with, the light part of the universe, is only about 20 per cent of the universe. About 80 per cent of it is dark and what dark means is that it's completely - is that light is completely irrelevant to it. It does not reflect light, it does not emit light, it does not absorb light. The stuff is not detectable; you cannot see it because it doesn't really react with light.

The very first thing that the Torah seems to be saying is that the very first infrastructure development is at the very beginning G-d creates the stuff out of which the universe will be created; light itself, and takes light itself and divides it into dark energy and light energy and separates between the two of these, leading to the stuff out of which the universe will be created. Dark energy needs to be there, otherwise you don't have a universe, it's a stabilizing force that allows the galaxies to be able to exist as we know it, but other than that human beings don't interact with that, our world doesn't interact with it, it's just there. Infrastructure development number 1; the creation of light as we know it.

Now if I'm talking about that to human beings I'll call it day, I'll call it night, but what's really there is something much larger and more cosmic than simply day and night. Day and night are terrestrial terms for this.

Okay, what happens next? I'm just going to go through two of these really quickly and then I'll leave you and we'll do the rest next week. The next thing that happens is infrastructure development number 2, is the next thing that G-d says is, okay; Yehi rakiyah betoch ha'mayim - let there be sky in the middle of the water. V'hi mavdil bein mayim l'mayim - and let the sky divide between upper waters and lower waters. Now if I asked you - and then G-d did that; Vayavdel bein ha'mayim asher mitachat la'rakiyah u'bein ha'mayim asher me'al la'rakiyah vayehi kein - so G-d divided between that.

So now let's talk about this - and I said to you why, you human being, would you be so happy with the creation of sky? Sky divides between waters. So after this infrastructure development I'm going to have water up here that's going to be cloud vapor, and I've water down here that's going to be oceans, and I'm going to have sky in the middle. Before that what did I just have? I had water everywhere. Okay human being, why are you so happy with this infrastructure development? What does it give you? It gives you habitable human space. I'm not a fish, I can't live in a water universe. That was our other element of chaos, it wasn't just darkness that was my problem, there was too much water is my problem. Now I've gotten rid of that problem through infrastructure development number 2. Infrastructure development number 2 gives me habitable human space.

Okay, that's true - now let's go back to our Renoir analogy - that's true from a guidebook perspective, G-d is trying to describe something. Remember G-d is trying to describe a cosmic creation process in terms that are accessible to regular human beings at all moments in time. So G-d says, well let Me explain to you kind of what it's like. Imagine that there was all this water and you couldn't breathe because you didn't have any habitable human space, and then all of a sudden there was this sky and then there was water up here and water down there, and suddenly you had this space in which you could move around in, wouldn't you be happy? Now we say yeah, I'd be really happy. So G-d says good, that's what I did on Day 2 in the universe.

What does that mean when you take it out of the human perspective? Factor out the human part out of the following sentence. It wasn't that G-d created habitable human space - take out habitable human and what did G-d create on Day 2? He created space itself. The ultimate room in which we could live. It was more ultimate than just making habitable human space, G-d made space itself on Day 2. We'll talk about it in terms of habitable human space, that's what you humans understand, but what actually happened is infrastructure development number 2, is the creation of space itself.

What's infrastructure development number 3? Ah so G-d says, Day 4, let Me just tell you what happened on Day 4. Day 4, I created the sun and the moon and the stars. You know why that stuff was so good, you human beings? I know you guys, you like festivals, in order for festivals you have to have time markers because you human beings can't figure out how to mark time unless you have day and night cycles. So I'm going to give you your day and night cycles with the sun and the moon and the stars, that's why they're so important, to give human beings a way to mark time. So what did G-d create on Day 4? He didn't create something to allow human beings to mark time, that's the way He talks about it to human beings. Factor out human beings, what did G-d create? He created time.

Three great infrastructure developments; light, space, time. Everything that happens is built upon light and space and time - that's it, that's what G-d created. The infrastructure

for the universe, the environment exists of these three things. And think about what happened. What happened on each day is - if you're familiar with Gemara with Shabbos you know about Avos and Toldos - major categories and subsidiary categories. All that creation is, is subsidiary categories within these three great separators - and I'm going to just leave you with that thought. The idea basically is, is that the first category, the first great separation was light as we know it. Light as we know it actually makes possible everything else, it's the first great infrastructure development, it's even before space and time conceptually. Why? In the Big Bang theory all of this happens at once; space, time and light and energy all get created at once, but conceptually the Torah gives it to you in three levels because conceptually one builds upon the other.

Einstein's Theory of Relativity - you can go home and look it up on the internet - suggests that time and space as we know it are themselves dependent upon something. We think of time and space as the absolute elements in which we exist, and for a long time we thought that was true. Newton thought that time and space were absolute, that time from your perspective is the same as time from my perspective. Space from your perspective is the same as space from my perspective. Einstein comes along 100 years ago and says that's not true, and Einstein is right. Einstein says almost everything is relative; time depends, your perspective on time depends, your perspective on space depends, you have to measure it with reference to something. There's actually one absolute thing in the entire universe, only one absolute thing, and it's not time and it's not space, the only absolute thing that's the benchmark of everything else is light.

Light is the first great infrastructure development. The speed of light is the first great absolute barrier; 186,282 miles per second, nothing moves faster than that. And time and space itself are relative to motion relative to the speed of light. So it turns out that the faster you are moving, getting closer and closer to the speed of light, you know what happens to you? Space starts to contract for you. Space gets closer and closer. Until you're at the speed of light and guess what happens? No more space. And same thing with time; as you get closer and closer to the speed of light, time starts to slow down for you. And they've proved this with experiments. You have jet liners going round the earth and you compare the clocks on the jet liners to the clocks on the ground, and the clocks are not the same anymore, because one is moving and one isn't moving.

So light is the first great infrastructure development that time and space itself are dependent upon.

The next great infrastructure development is space. After I have space, what can G-d then create? Well think about after space, after the - division number 2, what does G-d then create? He creates what? Certain kinds of life. What kind of life? Vegetative life. All the sort of vegetative life. What does He do? Space or habitable human space, creates an environment that I can fill with stuff, so the next thing G-d does is He fills the environment with stuff. That's the superstructure that you can build once you have this thing called space.

Ah, but space is static. In order to really get going I need one more element. My next great [superstructure/infrastructure 77:26] element that rides on top of space is time. What does time do? Time is that which allows me to plot motion through space, it rides on top of space. If I have space I can have a fixed point in space, but if I want to go

anywhere I need time to get from here to there. Time allows for motion through space. After you have time, look what G-d creates next.

After Day 4, after you have time, what can G-d create? The next thing G-d creates is - look at the verbs; Yishretzu ha'mayim sheretz nefesh chayah - let the water swarm with life; V'ohf ye'ohfef al - let birds fly through the air, let animals creep through the ground. What's the common denominator with the creeping animals, the flying birds, and the fish swarming in the waters? It's a whole different kind of life. What's new about this kind of life?

[Response from audience member: Moving.]

It moves. It's animate life. It moves because time allows it to move. Now that I have time I can create stuff that moves. So G-d creates all of that.

Again, it's the conceptual development of the universe. It's not the chronological development in the universe. Chronologically all these three things happened at once, but G-d is saying, look human beings, do you want Me to explain it to you in terms you could understand? Okay, do you get it? You like having light around? Okay, you like having space to move around in? You don't like the chaos, you want to know exactly when things are? So I'm going to get rid of all those three elements of chaos with three great infrastructure developments. One that's going to get rid of the darkness, it's going to be light for you. One that's going to get rid of your habitable human space problem, we're going to get rid of the all the water - that's why water doesn't need to be created because water is just the absence of a place for human beings to live, it's the analogy to space itself, to just the void. So G-d says yeah, I'm going to give you human beings a place to live, you're going to actually have space. The next thing you're going to have is you're going to have time, and it's not going to be chaos anymore and Tohu Vavohu is going to go away. And you'll know what's first and what's second and what's third and you'll be able to live in an ordered universe. And then human beings can be happy and creation can exist.

When we come back next week what I want to show you is that the Mishkan is the deconstruction of this, and once you begin to see this all the problems that we had with how the Mishkan is constructed will go away. So I'll see you next week.

## Part 4

### Transcript

Okay, hi everybody, this is Rabbi David Fohrman and we are back. This is a make-up session for the fourth and final session of the mystery of the cherubs. We had audio problems with our first couple of sessions so we are here in the Aleph Beta offices with [Robbie and Helene 0:20] - thank you very much for coming, so I do not need to speak directly to an unfeeling camera, we have some real, live people here to kind of listen and interact with. Anyway, so I'm going to kind of go over what it was that I talked about last Saturday night and again, our audio didn't work that well, so we'll see if we have better luck this time.

Okay so pretty much what I wanted to do was - the structure here is I'm going to try to review part of what we did the week before and then take it a little bit of a step further. So you heard a quick version of this - what happened in week 3 is I did a kind of very

quick run-through of the six days of creation but it was kind of the end, I did it in about seven minutes, it needed a little bit more time. And there were a couple of questions which I left unaddressed which I - or didn't address fully - that I want to kind of talk about here today.

I put forward a theory which I'll review for a moment, but one or two of the loose ends were the following. One of the questions I had asked the first time around was how is it that we understand the non-creation of water? It looks like water is just there; everything else that gets created gets created, but the vision that we have of pre-creation is a world that's dominated by water that's itself un-created. *Veha'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim*. So the only thing that's there is this water - the wind of G-d is hovering over the water, the water is everywhere, it's dark, it's chaotic, but the dominant feature is water. Where did all the water come from?

Generally speaking, whenever anything happens in the six days of creation G-d creates it. When there's light it's not just that there's light; *Vayomer Elokim yehi or* - G-d creates light. When there's animals G-d creates animals, when there's people G-d creates people, when there's vegetation G-d creates vegetation, the exception is water that just seems to be pre-existent in this pre-creation world, where did all the water come from? So that was one question that I didn't quite get to explicitly the first time around, so I want to revisit that today.

The other question is a kind of a question about sequence which is according to the theory that I articulated, which I'll go over again in a moment, one of the last things that G-d created actually on Day 4 was time itself. [That was/wasn't 3:14] really my argument. And the question is - the question was posed at least in the questions that we get on Aleph Beta - is how can you say that? You've got Day 1, you've got Day 2, you've got Day 3, you've got stuff happening before Day 4, so if you tell me that time itself is created on Day 4, so there is no before, so how could you say that there's stuff that happened on Day 1, Day 2, and Day 3? It happened before the creation of time, that's nonsensical, creation of time is the beginning of everything, creation of time will have to be first.

So these were the questions that were raised and I want to try to articulate a response to them. But the way I'm going to do it is instead of just responding to these questions kind of out of nowhere, I'm going to try to lay out the theory again, to try to take into account these questions.

So here is kind of my theory. The basic idea we were working with is that there is kind of an intertextual linkage in a way between creation on the one hand and the construction of the Mishkan on the other hand. That these two things are linked. And what I established in week 3 is that there is a rationale - a fairly simple rationale for this linkage. And the rationale basically goes like this. What happened in creation? What happened in creation is that G-d started with His everything, which is wherever G-d lives, and then G-d hollowed out a little piece of that and said I'm going to contract Myself and take this little piece of it and build it into a world that is specifically designed for this being called mankind that I want to love and that I want to create. But I know that that being can't exist in My world, so I'm going to take this little piece of My world, I'm going to change its qualities; I'm going to build space, I'm going to build time, I'm going to put all the stuff in there, I'm going to keep all these laws - laws of physics, which I



don't really need in My world but I need it in man's world. That's going to be this little apartment for man to live in.

Then G-d creates man. But man's destiny - mankind's destiny - is to reciprocate that because man is going to do the exact same thing for G-d. So man is going to say okay what did G-d do? G-d took His everything and carved out a little piece of everything and made an apartment for the one that He loved. So I, man, I'm going to take my everything - now man's everything is different than G-d's everything; G-d's everything really is everything, man's everything is just a little apartment from G-d's point of view, but from man's point of view it's everything. We don't know anything outside the fishbowl. It's like you ask a fish what's everything? The fish says, the water in the bowl that's everything. That's all the fish knows. So we - what's our everything? It's the universe. We don't know anything more than that. From G-d's perspective it's very small, but from our perspective that's everything. So we take our everything and we carve out a little space for the one that we love which is G-d. And we keep godly laws in this little space and this is going to be a space we make for G-d.

So that's the rationale for arguing that there should be a correspondence between the act of creation on the one hand by G-d and the act of building the Mishkan on the other, because they really are similar things. They both are taking your everything and contracting yourself and creating this little apartment for the one that you love. That's what you're doing.

But even though there is a correspondence between them, there's also an inverse relationship between them. Because - and this is where I come back to my Aunt Sadie Mashal - analogy. Basically what I said it's like, look, let's say you wanted to make a place for G-d, so if G-d wants to make a place for you so it's very easy for G-d to do that because G-d knows what human beings need to live in, so G-d can create laws of physics and create a perfect environment for us. But we have no idea what G-d's world is, so if we want to make a little place in our world which is going to be a little G-d's world, so how does that make any sense? We've no idea what G-d's everything is, we don't know what G-d's native environment is like, so how can we re-create it in the Mishkan?

The idea was, and my theory is, is that what the act of building the Mishkan is, even though it's nominally a construction project that involves Melacha, but what it really is, is the use of our Melacha to actually deconstruct G-d's Melacha. In other words, if you don't know what G-d's world is actually like, the closest you can come to G-d's world is at least to deconstruct your world, to make it comfortable for G-d. And this is where my Aunt Sadie analogy comes.

If Aunt Sadie was coming to visit and you didn't know anything about Aunt Sadie but you wanted to give her a nice place to live for three months and you wanted to hollow out one of the places in your house for Aunt Sadie, and the only place you had was little Jimmy's room, and little Jimmy is seven years old. So the first thing you would do is you would say, look I don't know what kind of perfume Aunt Sadie likes, I don't know what color her favorite color is, but I do know that she doesn't need New York Mets paraphernalia all over the place. I do know she doesn't need a bunk bed with a little thing that makes sure that you don't fall of the bunk bed. Because those are what seven-year-olds need, those aren't what Aunt Sadie needs. So I at least clean out all the seven-year-old junk from Aunt Sadie's room, she at least has a nice clean room.

So that's what we want to do in [the Mishkan 9:05], we would say look, I don't know G-d what Your world is like, but the least I can do is to get rid of all this "junk" that You created for us that You don't really need. Which is why the construction of the Mishkan is analogous to the deconstruction of creation. We have to deconstruct creation. So that's why there's an inverse relationship. The idea is that that's an inverse relationship between these things and that's going to be the theory. The theory is, is that you can read creation going forward and it's going to correspond to the Mishkan going backwards. That's basically the idea. So that's one thing you need to know.

Now, another thing you need to know is that this whole project which is - in other words, if you accept this idea that G-d lives in a realm that's outside of our own in some way that we can't understand, and we, in essence, live in a fishbowl. We're living in a little created world and there's a much larger reality outside that which we cannot access because we live within the confines of the fishbowl and within its own special world. So the problem would then be if you were G-d how would you speak to humanity about that?

The issue here is, on the one hand I talked about how the Torah doesn't really have a scientific agenda, the Torah is just trying to guide you when it's talking about creation. So the Torah is really not interested in the science. But even to the extent that the Torah is, to the extent that the Torah doesn't want to, at least, lie to you, so to the extent that the Torah is trying to describe something here, if the Torah would ever touch on G-d's world, how would the Torah talk about this? Or how would the Torah talk about anything in creation? How would the Torah talk about something which is completely beyond man's ken, which is the world of G-d which we have no access to? How would you talk to a fish about that which is outside the fishbowl?

If all a fish knows is water, so it's like how are you going to describe a wedding ring to a fish? What are you going to do? So you'd say okay, the wedding ring is gold, you're a gold fish, so it's like that's a start. So you say, okay fish, look at yourself, now imagine - so what you'd have to do is you'd have to work with the fish's world and you'd have to take these dim sort of analogies from that world and say okay, now imagine that would be something else, so that's what - so G-d has to be doing something like that. If G-d is going to be describing anything it's going to be to try to use these dim sort of analogies, to try to [describe something else 11:46].

Similarly, if we want to talk - there's two aspects, one is to talk about the world which we cannot know, which is the world outside of space and time. You guys, by the way, if you think about creation according to the way astrophysics now understands it, we do understand that the Big Bang created space and time but that doesn't just mean that a long time ago space and time were created, 14 billion years ago there was this moment at which space and time was created. The explosion of the Big Bang creates space and time which means that in the continued expansion of the Big Bang, the continued expansion of the universe - which we can see nowadays in the expansion of the galaxies, the [redshifts 12:31] in the galaxies, the universe is still expanding - is the continued expansion of space and time. In other words, outside of that there is no space and time, that still exists, that's a reality even today. It's not like, well first there was nothing and then there was space and time - no, there is actually even today a realm outside of space and time, beyond all the galaxies. The universe is expanding and with it the dimensions of space and time are themselves expanding.

So when G-d - if the Torah is going to talk to us about stuff like that, it's put in the difficult position of having to use terrestrial metaphors to describe something which is ultimately extra-terrestrial. So that's one issue.

The second issue is even aside from that, even if we're just describing stuff in the universe itself, how would you describe to somebody who lived in 530 BC Einstein's Theory of Relativity? How would you talk about the creation of space and time and how would you talk about the Big Bang and energy? I mean, you just - modern vocabulary has these words, over time we've figured stuff out, but if you're dealing with stuff and you don't know about the speed of light and all, so how do you talk about these things? So again, the best you can really do is - how would you talk - even if you'd say, okay, so in the creation story we want to talk about the creation of the cosmos; G-d created the cosmos. How are you going to talk about that to somebody who doesn't even know there's a cosmos?

In other words, in 530 BC what does everyone think the cosmos is really? In other words, you look outside and you see, okay, what is there, there's like this, yeah, sky. Okay, so how big is the sky? I don't know, I mean, it's like, I don't know, maybe like 20 miles up or something? And then there are these stars - well what are the stars? Oh these little dots in this crystalline sphere. I mean for a long time that's what people thought. So there's some sphere, maybe 50 miles up or something, these little dots, you can see sun goes over the sphere, like that's the universe. I mean it's like it's basically 50 miles up, that's really it.

So G-d is saying no, no, no - it's something more than that. How are you going to even talk to people who don't know that - about more than that - in a way that's honest? Again, you're going to have to use terrestrial metaphors for what you know, what everyone knows, to describe something which is larger, so at least I'm not lying. So at least when humanity gets to the stage where they know about more they can extrapolate and say, okay that's what you were talking about. Again, the Torah is constrained in using a sort of terrestrial metaphors.

Now the question is what are the metaphors? Can we de-code what the metaphors are? So here's where we get to the analogy which I used before, back in week 3, which is the shifting perspectives analogy. Where I suggested like if you had a Renoir painting and you were looking at a Renoir painting, and the Renoir painting was painted from a certain angle, could you imagine a computer program that you could feed the painting through that would reconstruct the painting as seen from a different angle? So nowadays you can imagine there would be an app that would do that. That that's - it would be a nice, cool, technology app to take all the impressionist paintings and re-create them from different angles. You could imagine you could do something like that.

What I want to suggest now is that we can read creation in the same kind of way. We can actually read creation and say okay, the Torah is giving us one angle on this, the angle of guidance, which - of how to guide a human being by talking to them about creation. That's the perspective from which the Torah wants to talk about creation. But if we want to adopt a scientific perspective and say what's the science behind what the Torah is saying, we would have to shift perspectives. Shifting perspectives would mean we'd feed this through a computer and the computer would do some algebra, it would perform an algorithm.

The algebra would basically be to factor out the Torah's ethical guidance and the easiest way to think about that is that the Torah is going to talk to you - when the Torah talks to you about creation from the perspective of guiding you, it's really talking to you in an overly anthropocentric way. In other words, in a way which makes human beings the center of everything. Because the only interest that the Torah really has in talking to you about this is because it wants to talk about you, and your place in the cosmos. So I always feel like I'm the center of something. Right? Everyone thinks they're the center of everything, that yeah, here's my eyes and everything revolves around me. So the Torah is saying good, that's fine, let's just understand how everything relates to you.

But in fact it's not that way. It's true from one perspective that that's true, but from another perspective the earth is a rather insignificant place. It's the third rock from the sun and pretty ordinary solar system at the edge of a pretty ordinary galaxy called the Milky Way, a Supercluster among a hundred billion other galaxies. It's really not kind of the center of things. But the Torah is not talking about that, it's adopting an overly anthropocentric view.

So what you're going to do is that every time the Torah is going to talk to you in human terms, if you can factor out the humanness, so you can factor out that man-centered view, then you can arrive at what it is that we're really talking about. So that's kind of the background for how to read this.

Now, let's talk about the water. What's the deal with all this pre-existing water? So let's focus on what the central metaphors that the Torah is going to use to describe creation. So what I want to suggest is that the central metaphors actually appear in the second verse of the Torah. Bereishis barah Elokim et ha'shamayim v'et ha'aretz, is the first verse in the Torah, that in the beginning G-d created the heavens and the earth. The second verse is going to describe the pre-creation, the world as it was before that happened. Now the world as it was before that happened in the terms of what we've been talking about we could call G-d's world. In other words, before creation that was G-d's world. So the Torah is going to describe - the Torah's description in verse 2, the Tohu Vavohu, all of that, that's actually G-d's world. From man's perspective it's Tohu Vavohu. So from man's perspective looking at G-d's world we're going to find that there's going to be this verse that's going to describe it.

What does the verse say? Veha'aretz haytah tohu vavohu v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim - so the earth is chaotic, it's Tohu Vavohu, that's element number 1. Choshech al pnei tehom - there's darkness upon the face of the deep, that's element number 2. And; Ruach Elokim merachephet al pnei ha'mayim - there's water everywhere, that's element number 3. The key to keep in mind here is that there are three elements and just let's focus on what they are again. Element number 1 is characterized by chaos - Tohu Vavohu, there is ultimate chaos. Element number 2 is there's; Choshech al pnei tehom - there's darkness on the face on the deep, so we're going to call that darkness. And element number 3 is that there is water everywhere.

So when you put all of this together, all three together, and I say okay, what's your impression of this world? Would you like to live in this world? Would you like to live in a world that's very chaotic, that's completely dark, where there's water everywhere? Your answer would be a resounding no, I do not find that a very hospitable world to be living

in. G-d says, exactly, that's all I want you to understand. This is My way of describing to you a world in which you cannot live.

Now imagine an enterprising reporter would say, well exactly why can't you live in this world, what bugs you about this world, you human beings? So you'd say well really there's three things that bug me about this. I'd have to say I'm looking into this whole thing, first thing that bugs me is I can't stand the chaos; I'm an ordered kind of guy, when everything is completely chaotic I don't know what's going, what's coming, what's up, what's down, I don't want to live in a chaotic world. That's (a). Second thing that bugs me is the lack of light; it's very dark, I can't live in the dark, dark does not work for me, light is the source of all life and I can't live in the dark. The third thing that bothers me is water. If there's just water everywhere so water everywhere is completely [inhospitable 21:12], I'm not a fish, I cannot breathe in water, I cannot walk around in water, I don't like having water everywhere.

G-d said, exactly, that's what I want you to understand. Okay, there's too much water for you, it's too dark for you, and it's too chaotic for you, that's what's wrong with My world. Now, you know what I'm going to be nice about - G-d says? I'm going to take away all three problems to create your world, that's what I'm going to do when I create your world. I'm going to take away your darkness problem, I'm going to take away your chaos problem, and I'm going to take away your water problem, and you're going to see that happen in creation.

Now what I'm going to suggest to you is that - again, going back to the metaphors I was talking to you about before, there's two parts of creation that you're going to see, there's superstructure and there's infrastructure. Superstructure is the easy stuff, superstructure is the obvious things that G-d does. So whenever you have a doing verb, when G-d does something, you're going to see the creation of something new, we're going to call that superstructure. So whenever G-d creates animals, that's superstructure, whenever G-d creates people, that's superstructure, vegetation - superstructure. Before there was less and now I look and I see there's something new.

But that's not the only thing G-d does in creation, G-d does stuff where nothing new is created. So you say well You're involved in creation why would You do things where You're not creating anything? The answer is G-d is creating the predicates necessary for creation; He is involved in infrastructure work, making infrastructure in such a way that you can build superstructure on top of it. So nothing new is happening, but very crucial stuff is occurring. That's what I called the Havdalot last week. The Havdalot, nothing new is happening when G-d distinguishes between this and that, same stuff as was here before, but G-d has created an essential distinction which is like an infrastructure point, a foundational point that you can build upon, you can build upon these things.

In modern scientific terms a way of thinking about the difference between superstructure and infrastructure in the universe is to say that superstructure is the stuff that's in the universe, but infrastructure is the stuff that's necessary to support the stuff that's in the universe, which, is really, you might say, the dimensions or the environment. What supports the stuff? The environment supports the stuff. Environment isn't stuff, but environment is the background necessary for there to be stuff. The great environment for the universe is the dimensionality of the universe, which is to say space on the one hand, time on the other hand. And I'm going to also argue that there's another great infrastructure development which is light, which is actually even more basic than space



and time itself, for reasons which I'll try to argue to you. And what is going to happen is that each of these infrastructure developments correspond to the taking away of one of the reasons why we couldn't live in G-d's world.

So if you think about Tohu Vavohu, so Tohu Vavohu is chaos. I don't know what's coming, what's before, what's after. I'm going to argue that time takes away Tohu Vavohu. Because time allows for an orderly progression of events. Without time everything is chaotic, everything is all mashed together. So time creates order. Choshech is taken away obviously by light. And water - what is water? Water, I want to argue, is the - well you'll see, it's the terrestrial metaphor actually for lack of space. And I'll talk to you about why that in fact is the case, in a moment. But let's just walk through creation, you'll see how this develops.

So the first thing that happens is Day 1, is G-d says in this chaotic world; Yehi Or - let there be light. As I mentioned to you last time, the original light seems to have two elements in it. It seems to have a light energy and a dark energy. And the way you know that is because immediately after the creation of light, after G-d looks at the light and says, this is good, the first thing that happens is; Vayavdel Elokim bein ha'or u'bein ha'choshech - G-d separates between light and darkness. You and I would have said if there's light, if G-d created light, so then He turned on the light, so obviously there's no darkness anymore, so how come G-d has to separate the light from darkness, there's no more darkness? Answer is, according to many of the Mepharshim, that the light was created with the dark element in it. Or what it means is, is that there were two kinds of energies that were created that were mixed. When you looked at the whole thing the dominant energy was light, but that light was actually a compound of a dark energy and a light energy, and; Vayavdel Elokim bein ha'or u'bein ha'choshech, was the separating between them.

What I want to suggest that corresponds to is that - and then of course when G-d looks at this He says; Vayikra Elokim la'or yom - He calls the Or - day, and He calls the Choshech - night. Now that doesn't literally mean night and day as we know it. It can't literally mean night and day because remember this is before the sun, so there can't be night and day before the sun. So what does it mean? G-d says I'm going to give you a terrestrial metaphor to talk about what we're talking about. This mysterious light that I'm creating, let's just call it day. You know what day is? We'll call it day. The other stuff, you know what night is? Let's just call it night. That's what G-d is saying.

But, if we factor that out and we actually go to the essence of what was actually created I think modern science would say yeah, the very first stuff that gets created is - in the Big Bang, the very first thing you have is energy itself. So the first thing that happens is the creation of light energy and dark energy, modern science talks about dark energy, dark energy is a real thing. Dark energy and dark matter is this stuff that's out there, it's about 81 per cent of the universe as scientists tell us, we cannot touch it, we cannot feel it, we cannot see it, it's completely unresponsive to light, it doesn't reflect light, it doesn't absorb light, it's just there.

We know it's there gravitationally, we can detect it's there, the universe is expanding at the rate it's expanding because the expansion is being - what's the word for it? Is being tethered or being ameliorated, limited. The expansion is being - my English is going - it's a limiting force that is acting upon - a slowing, there you go! The expansion is slowing because of the gravitational force of all this dark energy. So it's an important element in

the universe - the universe doesn't get to be the way it is without this dark energy - but human beings don't interact with it, we can't interact with it, we cannot see it, we cannot know what it is directly, we can only know it indirectly. So that's called darkness.

What I'm going to argue is that the very first infrastructure development in the world was - in the universe - was the breaking apart of light energy from dark energy. So what was originally one energy force now becomes two. Dark energy becomes dark energy. Light energy, which is energy as we know it, what we might call refined energy, separate from dark energy, from which all subatomic particles come, electrons, all that, that is - it's going to be its own thing. That's what we relate to, that's what G-d calls light, and that's the beginning of the universe.

So the reason why it's the beginning of the universe is that - well let me put it to you this way, that's the first great infrastructure development in the universe. Now you might say, why is that the first great infrastructure development in the universe - that's the first great superstructure development in the universe? You're going to tell me that all the matter and energy that ever came from the whole world is a product of that light, of that original energy that is out there, and the original Big Bang, that that's where everything comes from, so that's the stuff of the universe, so why are you calling it an infrastructure development, described as one of these Havdalot?

The answer is it really is an infrastructure development because - and here you get to Einstein's Theory of Relativity. The basic idea is, is that all of the other infrastructure developments, all the other aspects of the environment, of the world, which is the dimensions that we know of; time and space, are themselves actually conceptually dependent upon light. Which means it's not possible to speak of time and space without first speaking of light. The speed of light it becomes the absolute standard of the universe to which everything else is relative; specifically time and space themselves are relative to light. So light is more foundational than time and space. Which means to say, you cannot talk about what time it is without reference to how fast you're going relative to the speed of light. You cannot talk about how big something is without how fast it's travelling relative to the speed of light. So for example, when something is travelling at the speed of light its space goes to zero. As the closer it gets to the speed of light the space that it takes actually contracts, when you actually get to the speed of light its space goes to zero.

I know that sounds crazy, don't - it's Einstein, it's not me. But it's the same thing with time; time contracts also. As you get closer to the speed of light, time slows down. So if you're on a spaceship and you're travelling really close to the speed of light time is going to slow down for you, you're going to start to age very, very slowly relative to the people who are on earth. If you're actually going at the speed of light time actually stops for you, so you don't age at all. So for example, any photon which is travelling from a distant galaxy actually doesn't age. From the perspective of the photon - from our perspective it took one hundred, billion years for the light to get from that galaxy over here, but from the photon's thing it's instantaneous, it didn't take any time at all.

So light is the predicate upon which time and space depend on, so that's why it's described as the first great Havdalah, because it's the most foundational infrastructure development in the universe. Aside from creating the stuff out of which the universe exists, that's small potatoes compared to the most basic environmental predicate of the universe, is the creation of light. So that is the first great Havdalah.

Now parenthetically let me just say something else - it sounds a little strange but I'm just going to say it very quickly. Which is that if I'm right about this it's possible - just possible - that this may solve a conundrum - that the Torah may be pointing to how a conundrum in physics is actually solved. Let me just tell you the conundrum. There's a basic problem in modern astrophysics that is called the smoothness problem and the flatness problem. Basically the way the problem goes is, is that the universe is too fine-tuned- I talked about this in one of the videos. But basically there's a lot of fine-tuning that happened in the universe specifically at the first moments of the universe's expansion. So for example, in those first moments you have all this energy coming out and it's all expanding at these huge speeds, but you also have - it's also very dense, there's a tremendous amount of gravity which is a gravitational force which is contracting it.

Now if the gravitational force is too strong then there's never a Big Bang, there was just a big crunch, it just crunches everything together. But if the gravitational force is not strong enough then it doesn't act as a limiting force and everything just spews all over the place and nothing ever contracts into stars or clouds or - clouds of hydrogen which can become stars. And you just have a universe of subatomic particles that never becomes anything. So it has to be a Goldilocks universe, which is not too fast but not too slow, just the right amount of ratio between the expansion of the universe and the force of gravity.

Similarly, there's what's called the smoothness - that's the flatness problem. The smoothness problem is that the original explosion of the Big Bang had to be just clumpy enough - again Goldilocks. Which is to say if it's too smooth then - everything spread apart smoothly - then gravity can't act to bring these things together into hydrogen clouds which eventually are going to become stars. But if the original explosion is too clumpy then the gravitational force of this stuff is too great and you don't actually get clouds of hydrogen which become stars, you get black holes, because it's too dense. And a universe of black holes doesn't do anyone any good.

So in order to have a universe where you actually have stars as opposed to black holes or nothing, you have to get around the smoothness problem and the flatness problem, which is there has to be a Goldilocks universe, just clumpy enough and just fast enough.

Now the problem is - so you might say, well what do you mean? What are the ratios? How much of a margin of error do you get? So if you would say, well you have a decent margin of error, so you might say we got lucky. But the problem is, is that there's a very small margin of error. The margin of error is not like one part in hundred, and it's not one part in a thousand, but it's actually - for the smoothness and flatness problem, it's more like one part in ten to the fifty-first power. So ten to the fifty-first power is an unimaginably large number. Ten to the sixth is a million, ten to the ninth is a billion, ten to the twelfth is a trillion, so you're talking about, no - like ten trillion is ten to the thirteenth. So the amount of leaves on trees in all the forests in North America is about ten to the twenty-first. But we're talking about ten to the fifty-first! So like, ten to the twenty-second is ten times the amount of leaves on all the trees in all the - so it's like imagine picking one leaf, and saying, okay but that's your margin of error. It's like the ultimate needle in a haystack problem.

So your chances of not having a universe are so much greater than your chances of having a universe, what are we doing here? This is like the smoothness problem and the flatness problem.

Now, scientists don't really have an answer to that, but what they do say is that however it works, the only way that the smoothness and the flatness problem could possibly work is - the only way that the universe can be just smooth enough is if in - what they suggest is in the first moments of creation, the first milliseconds of creation, there was a tremendous expansion of the infinitesimal universe. When the universe was just expanding, was just a little nothing-ness, to the size of a grapefruit, that expansion happened very, very quickly, much, much faster than the speed of light. So it was like a balloon expanding - so when your balloon expands so there's little clumpy things in a balloon but when you blow it up it gets nice and smooth. So the idea is, is that there was this - it's called hyperinflation. In the very little universe what - like a balloon, things are expanding very, very quickly, but in order for the math to work out it has to be many, many times the speed of light in the very early moments of the universe.

It still doesn't explain why the ratios are exactly the way they are, because the hyper-expansion itself has to be just hyper-expanded fast enough and not - right, so you solve those problems but the math says that's what had to have happened.

The problem of course is that Einstein says that nothing in the universe goes faster than the speed of light, so how could the early universe expand at many times the speed of light? The math says it had to have but we know that that doesn't work. Nothing can go faster than the speed of light. This, might answer that problem. Why? Because think about the first great infrastructure development. The first thing G-d does in the universe is He does what? He creates light - Vayehi Or. But that light was not light as we know it. Because that light was before light energy and dark energy separate. The next thing G-d does, He looks at the light and says that's really good, but then He goes and takes that unitary light and separates it into this huge fragmenting of light energy and dark energy, creating light and energy as we know it.

Now that's the first great infrastructure development, which means when is the - the speed of light as a limiting force is created when? It's created then. In other words we relate to light as we know it and clock that and say that's 186,282 miles a second, nothing moves faster than that, but that's only once you have refined light as we know it. Who says that before the great tearing of light energy and dark energy that light behaved the way it behaves now? Light was a different entity, it was combined with dark matter. So what I'm suggesting is maybe the speed of light as a limiting factor is only - doesn't happen at the beginning of the universe, it happens at the first Havdalah. But the hyper-expansion in the first milliseconds which occurs faster than the speed of light is before there is such a thing as the speed of light, because light as we know it really hasn't been created yet.

Okay, so that's just my little theory, speculative, just saying it's speculative, but maybe, you never know.

Anyway, but the theory is that's the first great infrastructure development. Whatever you say about hyperinflation, the very first infrastructure development is the creation of light as we know it. Now what happens after that - that's Day 1. Day 2 - and that solves one of the great problems from the first verse of creation. There's three great problems; there's the dark problem, there's the water problem and there is the chaos problem. So

the dark problem is solved by this light. So in other words the terrestrial metaphor is G-d says, see I turned on the lights for you, aren't you happy, now you have light. That's the terrestrial metaphor. What really happened? Much more than just turning on the lights, G-d is actually making the basic predicate for the universe itself, but how am I going to describe it to you, I don't want to lie to you, so I tell you something which is a little simpler, I'm oversimplifying it for you, but this is what is actually happening.

What's the next thing that happens, Day 2? So on Day 2 G-d says; Yehi rakiyah betoch ha'mayim - remember all that pre-existing water, so let there be sky in the midst of the water and let it divide between upper waters and lower waters. So now there's going to be upper waters which is going to be this water vapor, these clouds, there's going to be lower waters which are going to be seas. Now all of these are terrestrial metaphors, G-d is talking about something cosmic but He's talking about it in terms of our situation on earth where the upper waters is going to be these clouds and the lower waters is going to be these seas, and before that there was just water.

So now if I said to you why is it that you're so happy with the second great infrastructure development? So you'd say all right, well what was it before and what was it afterwards? So before there was a big water world, I certainly didn't like that, I'm not a fish, can't breathe, can't walk around, no good. Now I've got this sky, this place that I can actually - I can breathe, I can walk and I have water up there, I'm fine to have water up there and I can have water down there, that's fine, but at least where I live in this - so I've got a place to be. So I have what's called habitable human space.

So the metaphor that the Torah is talking about here is the creation of habitable human space, but that's a metaphor. To understand what's actually happening you have to factor out the human part, so instead of habitable human space what we're really talking about is the creation of space itself. This explains the water issue. What then was water a metaphor for? If the separation of waters was about the creation of space, three-dimensional space - not the creation of habitable human space, air, but actual space itself - in other words G-d's saying I'm not lying to you, but what I actually did was create something even more fundamental than habitable human space. That which habitable human space is based upon, actual dimensionality, so that there could be something called space. So if that's what the Havdalah created, then before the Havdalah what was there? There was no space. What is no space? So no space is utter void.

Now the problem is how do you talk to a human being about utter void? So G-d knows what utter void is, He lives in utter void. How do you talk to a human being who lives in a void? It's like how do you talk to the fish about - and here water is the wrong analogy because it's the opposite, but the fish lives in water how do you talk to him about a world without water? We live in a dimensionality, how do you talk to us about non-dimensionality? We totally cannot conceive of that.

So nowadays that we have spaceships, we can send something into outer space, we can say, oh maybe the utter void is space? So yeah the utter void is like sort of, kind of, like space, but it's not, because even in space there might not be air, but there's still dimensionality, there's still - like this is three feet and that's seven feet. But we're talking about no, somewhere where there is no dimensionality, that's the real utter void, you can't - there's no words for that, it's a non-human experience.

So what does G-d say? G-d says the best I can give you is, okay, let's go back to - and remember, again, if you talk about this verse; Veha'aretz haytah tohu vavohu



v'choshech al pnei tehom v'ruach Elokim merachephet al pnei ha'mayim, which is really this discussion of G-d's world with these three basic problems that make it uninhabitable for human beings; darkness, chaos and water, if you talk about it, it actually sounds a lot like the flood. It's this flood sort of imagery. In other words, in the Bible we have that image, a water world which is dark and chaotic. So what is G-d doing? He's just borrowing from the collective human unconscious and saying, guys remember when it was really hard to live? Like what was the time when it was worst for you, that you really don't want to live in? The flood, right? You all died. Okay, so I'm going to use that as the great metaphor for complete uninhabitable world, which is My world, I like that world, I live in the flood world, it's just not for you. So I'm going to describe it for you by calling it the flood. The flood really has three elements; it has a water element, it has a dark element, it has a chaos element, you put it all together, it's the worst.

So water is being used as a terrestrial metaphor to describe something which is much, much larger than that, which is the void. Water is for human beings - it's taking up my space, I can't breathe anymore, that's the metaphor for the void. Obviously the void doesn't need to be created, which is why the water doesn't need to be created, the void is just the way things were before dimensionality came into the world, just as darkness was the way things were before there was ever any light. Or Tohu Vavohu was the way things were before there was any time.

Okay, so that's why water doesn't need to get created. So second great infrastructure development is the creation of space in the division of upper waters and lower waters.

Now what happens after that? What happens after that is before you even get to the next great infrastructure development, stuff happens. So G-d says; Yikavu ha'mayim mitachat ha'shamayim el makom echad - let the water be over here, let the dry land be here. And then before you know it G-d says - you've got vegetation all over the place. Why?

Here's the deal. What is happening here - in real life if we think about the creation of light or the creation of energy, and the creation of dimensionality and the creation of space, when did all this happen? In reality, from science perspective when did all this happen? From science's perspective they happened simultaneously. They happened at the moment of the Big Bang. At the moment of the Big Bang you have this huge release of energy, which is going to be light and plus you have the beginning of dimensionality, you have the creation of space. Plus, you have the creation of time, which is actually going to be the next great infrastructure development.

The next great infrastructure development is going to be when G-d says; Yehi me'orot bi'rekiyat ha'shamayim lehavdil bein ha'yom u'bein ha'lailah - let there be luminaries to divide between night and day; Vehayu l'otot ul'mo'adim ul'yamim v'shanim - it's going to be for calendars, you're going to be able - you human beings, you can mark calendars. You're going to have days, you're going to have weeks, you're going to have years, it's going to be great, you're going to have this whole calendar thing, you're going to love it, with the sun and the moon and the stars, it's going to be the best for you. So why is it that G-d is describing these things in terms of calendar? In terms of - rather than heat and light? The answer is because G-d doesn't care about heat and light, that's not what they're about. What it's about is, it's a metaphor for - we're talking about the stuff that human beings use to mark time, but what we're really talking about, if you factor out

human beings is the creation of time itself. That's the third great infrastructure development.

Now here's the next metaphor. The next metaphor is that this stuff happens in days really. Because in reality G-d is describing to you a process of stuff that all happened together at one instant. Because in fact light, time and space happens together at the moment of the Big Bang. Why is the Torah then describing it to you this way? The answer is, the Torah is not describing to you - and this is my theory - is not giving you a chronological version of creation, it's giving you a conceptual version of creation. In other words what G-d says is let me outline to you what I did for you guys. I basically did three things for you. I created three dimensions, I created three basic infrastructure developments that allowed for everything else. And G-d is laying it out for you conceptually.

Because in fact even science would agree that there is a conceptual order to these things. Now they could happen simultaneously but the fact is, is that conceptually one builds upon the other and there's certain things that are inconceivable without other things. So for example, space is inconceivable without light. You can't talk about space without talking about the creation of light first - according to Einstein's Theory of Relativity light is more fundamental than space. So it's true that in fact they were created together but conceptually one is more fundamental than the other.

Similarly, if I talk about time and I talk about space, from our perspective one is more fundamental than the other, which is to say space is more fundamental than time. We even - and the proof of that is that when we talk about dimensions what are the first three dimensions? The first three dimensions are spatial dimensions. What's the fourth dimension? The fourth dimension we call time. Why do we call time the fourth dimension - time and space they are all simultaneous? The answer is because it rides on top of the three dimensions. What does that mean? It means the way we relate to time is that once you have time you can plot movement through space. The idea of movement becomes possible once you have time. But movement through what? Well space. Space has to be there before I can talk about movement through it. So first I have to have dimensionality, I have to have space. Once I have space I can at least isolate something. I can say there it is. Ah, once you know there it is, you want to say how does it get from there to here? Oh so you need time. But time rides on top - conceptually - on space.

So in other words basic thing is light, once you have light you can have space, once you have space you can have time. Similarly, conceptually, the superstructure gets filled in after I have the infrastructure. So what G-d says - and again, this is not chronological, but what G-d says is okay, let's imagine a world that you had light. So once you have a world of light what could you build on top of that? So G-d says I know what you can build on top of that, you can build space on top of that - and in fact you can. And that's what happened on Day 2.

So once you have a world of light and a world of space, what could you build on top of space? So you say space, what is space good for? So space is good for putting things in. I mean if you have space, look what you can fill things - you can put stuff in space. You can populate space with stuff. So G-d says that's exactly what happened. So on Day number - what is it - Day number 3, right after you have 2, G-d starts filling space with stuff. So that's what all the vegetative life is. Here's this vegetation and it's life and it

goes and it fills the world and creates the setting for what comes after. It creates the setting for history.

When does history begin? History is a story, it begins with motion. Vegetative things don't move, they just are, then the beginning of life that moves, or life that requires time, happens after the creation of time. Immediately after the fourth day, the very next thing you have is a different kind of life; not vegetative life but; Yishretzu ha'mayim - let the water swarm with life; fish life. But it's described as moving life in the waters. Let the animals crawl upon the earth. Let the birds Ye'ohfef - let them move through the sky. So on both - whether we're talking about sea, land or air, we're talking about movement life. Movement life is possible once I have time. Once I have time how do I populate movement? I populate movement with moving life.

So what creation is about - what the description G-d is giving you is a conceptual outline of creation. In fact, science is going to say all the Havdalot they happen simultaneously, in a single instance, and then over 14 billion years everything gets filled in. But G-d has only got - He doesn't have 14 billion years to tell you this story, He's got 30 sentences to tell you this story. So G-d says look, let Me cut to the chase, let Me just outline to you conceptually what happens. Like look the most basic thing I created was light, after that I created - the next most basic thing I created was space, the next most basic infrastructure development was time. And along the way I got to fill - you can fill in things. Okay that's what it is.

So you can't say how could time have been created on Day 4, what happened before then? It's not a chronological version of events, it's a conceptual version of events. And conceptually it all makes sense. Okay? You guys with me?

Now for the Mishkan. So much for creation. So now the Mishkan is the undoing of all of this. So how does that work? So let me just take you through that really quick. What we're going to do is a virtual reality tour of the Mishkan. So imagine that here's the Mishkan, and you're standing outside it and you're going to start going in through it. And the idea is, is that there's a one-to-one correspondence between the infrastructure developments in the Mishkan and the infrastructure developments in creation - the Havdalot in creation and the Havdalot in the Mishkan. The Havdalot in the Mishkan are the three great places where the Keruvim are. The Keruvim are barrier angels, they show up at the division places within the Mishkan.

So here you are, you're outside the Mishkan and there's going to be a one-to-one correspondence, so that means that the last great division in the Mishkan is going to correspond to the last great division in creation. The second great division in the Mishkan corresponds to the second great division in creation and the first great division in the creation corresponds to the first great division in the Mishkan.

Here you are, you're outside and imagine you go inside the Mishkan. So now you're in. You have now traversed the third and outermost Havdalah of the Mishkan, which is the Yeri'ot - the curtains that separate the Mishkan from the rest of the world. Now the world of course is going to be our world, but what we're doing really is we're trying to re-create G-d's world. So we're deconstructing our world by taking apart - the way we're going to do it is we're going to set the charges, the depth charges, the demolition charges at the three infrastructure points, which are basically going to be - going backwards - time, space and light. So the first thing is as I traverse that first one, so here I am, I'm inside the Mishkan, I'm looking up. I look up at the ceiling, what do I see? I see the Yeri'ot, I

see the Keruvim - I see these angels, I see these curtains. But what I don't see is the luminaries in the sky because I'm in indoors. So I've lost the luminaries. In essence I've lost time, I've lost those things that G-d allows me by which to keep time.

Now, how is time actually extinguished in the Mishkan? It's extinguished in another way too - and this gets to the idea in Emor. If you look at Emor you find a fascinating thing. That right after the Parshat Ha'mo'adim in Emor - and I spoke to you about this briefly in week 3 - but right after the Parshat Ha'mo'adim in Emor we go through all of the holidays. Okay, so here's what happens. We're here in Parshat Emor and we've just finished the Parshat Ha'mo'adim, we've gone through all of these holidays. The holidays are done and willy-nilly out of nowhere I hear about two implements of the Mishkan. I hear about the Menorah and I hear about the Table. And that's it. I don't hear about anything else, I don't hear about the Altars, I don't hear about nothing else, not the Aron. Why am I hearing about these things? Why am I hearing about them specifically where they are in Vayikra? They should have been somewhere else.

So here's the theory. As you listen to the Menorah, the Menorah gets told to you, we hear here's what you do with the Menorah. You take olive oil; La'ma'or - for light, and you make a Ner Tamid and you have this Ner Tamid, which is this light which lasts forever, which is constant, which means all night long. It has to burn all night long. Then it mentions it again; you have to; Ya'aroch oto Aharon mei'erev ad boker - it should be from night until morning; Lifnei Hashem tamid - you do it - again - Tamid. Chukat olam l'deroteichem - you do this forever. Al ha'Menorah ha'tehorah ya'aroch et ha'neirot lifnei Hashem tamid - you make it Tamid. So we hear about that three times. It just said the same thing three times. Three times you hear these things are Tamid.

Now here's the interesting things. This was right after the Parshat Ha'mo'adim. What does Mo'adim mean? So the word Mo'ed we translate as holiday but what it literally means is a meeting point, a meeting time. So if you think about it what a Mo'ed really means is a punctuated point in time, a point in time at which we meet. What would you say the opposite of a punctuated point in time is? The opposite of a point in time would be all time, which would be no points in time, just all time. That's Tamid. So Tamid is actually the opposite of Mo'ed. So right after we hear about Mo'ed we hear about Tamid. Now what do we hear about? So now here's the thing. Here you have the Mishkan, the Mishkan is the un-construction of creation. So in creation the very first - so right in the beginning G-d says - actually the last infrastructure development, the creation of time, G-d says, you know why I'm giving you the sun and the moon and these stars, these things which are so good at keeping time? Vehayu l'otot ul'mo'adim - they're going to be for you for Mo'adim, which is G-d is saying, look you human beings I know what you want, you like Festivals, you like holidays, but you like holidays at particular points in time. I'm going to let you have your particular points in time, I'm going to give you the sun and the moon and the stars, you'll be able to have a calendar, it's going to be so good for you, you're going to have holidays, you're going to love it.

So then what happens? Human history develops to a point where G-d says; Eileh hem mo'adai - here are My holidays, I'm giving you these holidays. At that point those things have come to fruition; the sun and the moon and the stars have done their thing. G-d says yeah, but you know what you're going to do? After you have your holidays that you make, you're going to make Me a Mishkan and you're going to undo everything, because you're going to make a world for Me. I made a world for you where you can

have these holidays, but you're going to make a world for Me. So what are you going to do? You're going to have to Tamid-ify everything. So what are you going to have to do? You're going to have to undo time, undo these punctuated points in time. So here's how you're going to do it.

In the Mishkan when you lose time, when you pass through the final Havdalah which takes away time, you're going to find there's going to be two implements there. There's going to be the Menorah and there's going to be the Table. Now the Menorah is going to be a thing that's going to help you take away time, because you humans, how do you experience time? You experience them as a function of the luminaries; the sun and the moon and the stars. Now what kinds of time does the sun and the moon and the stars allow you to count? In other words, now that you have a sun and moon and stars so what sorts of cycles can you start to count? Days. Well that's a very important thing. Months - by the lunar cycles of light and dark, and years - by when the days start getting longer and when the days start getting shorter. Those are all functions of light and dark cycles. There are three kinds of time, three kinds of cycles that you can count as a function of these luminaries; days, months and years.

But now you have to extinguish that symbolically in the Mishkan. How are you going to extinguish it? What you're going to do is you're going to go indoors where you don't have access to those things anymore and you're going to light light - when? In the evening when it's dark. What does that do? It evens out night and day so that there's a Tamid experience of light during the day - it's light because it's day, and then at night it's light because of the candles. So you're taking away the effect of the light and dark cycles created by the luminaries which allow you to get days, months and years. So you're going to have three kinds of Tamid now instead of three kinds of cycles. That's why there's three Tamids repeated over and over again in the thing.

What you're going to do, you humans, is that you're going to create a light - in other words, what did G-d do? G-d created these godly lights but you're going to cover over the effects of the godly lights by taking the night time and you're going to make human light and the human light is going to cover over god-darkness to even everything out, to take away the effect of the luminaries. And that's how you symbolically get rid of time.

But that only works for three out of four time cycles that human beings are used to. It works for days; you can get rid of days by artificial light, you can get rid of months by artificial light, and you can get rid of years by artificial light, because all of those things are a function of the luminaries of the light and dark cycles of the luminaries. And all you need to do is have artificial light and I can get rid of that. But there's one other type of cycle which we count that has nothing to do with light and dark cycles - and it's weeks. Human beings have an allegiance to weeks. Weeks are not a function of the sun and the moon and the stars. So what are weeks a function of and how do you get rid of those?

Enter the Table. So the Table is what? The Table - there's this bread and you leave the bread out how long? All week long. And at the end of the week the Kohanim come and they eat the bread. Now this was before there were stabilizers, before there were preservatives, and it's really fresh. Why was that bread so fresh after seven days? Answer is, no time. So what happens is the Table is going to extinguish the week part - the weeks - and get rid of that. How? The same way the Menorah did.



The Menorah used a human invention to cover over a G-d invention. G-d's invention were the luminaries, the human invention was artificial light, human-made light. So now we're going to do the same thing when it comes to weeks. Weeks are not a function of luminaries - how did weeks get there in the first place? Weeks actually got there because G-d made the world in six days, in six of these different epochs so to speak, whatever they were. And on the seventh day He rested. And that's how the whole concept of week got started. So weeks are a function of G-d's Melacha. G-d made stuff and made stuff and made stuff and at the very end He stopped, and the period that G-d made stuff and made stuff and made stuff and then stopped He called a week. And whenever we have weeks we commemorate that idea of G-d making stuff and making stuff and making stuff and stopping.

What did G-d make? So G-d made all this stuff. What do we relate to? We relate to all the stuff that G-d made. So G-d says great. So here's what I want you to do. I want you to cover over all the stuff I made. How are you going to cover over all the stuff I made? Well instead of eating the stuff I made which is like raw wheat and all of that, I want you to process everything, process the heck out of everything. And try to make My world as unrecognizable as possible and then eat it. So you say okay great, so here's what we're going to do, we're going to take Your stuff, Your wheat and Your wheat is nice, and green, and lush in the fields. We're going to kill it and then we're going to put it in the fields and make it all brown, and then we're going to get rid of most of it, we're going to take the seeds and we're going to chop those things into flour, so it's completely unrecognizable. Mix it with water, throw it into an oven for a while and bake it into this thing we call bread, and no one will ever know where the heck it came from. It's this big, refined thing that humans make.

G-d says exactly. You're going to make your Melacha on top of My Melacha and no one will see My Melacha anymore. That's how you get rid of My Melacha that created the week and what will happen? You're going to put it on this Table, and you're going to see, seven days are going to go by and it will be as fresh as before, because you've just gotten rid of My week.

So these are the devices - and by the way, how many times does the word Tamid appear with reference to the Table? Once. Why? Because there's only one cycle left to get rid of, the week cycle. Three cycles are gotten rid of by the Menorah, three Tamids; days, months and years, one cycle is gotten rid of by the Table; weeks. So two kinds of Tamid and before you know it, you're done with time. So that's how we get rid of time. You with me?

Okay, so here you are, your virtual reality tour of the Mishkan and I'm standing in the place with no time, and I'm facing the Parochet. The Parochet has the woven images of the Keruvim and I traverse the Parochet and I go from the Holy into the Holy of Holies. And I pass through another infrastructure development, I get rid of another infrastructure development. So I got rid of time before, which one am I getting rid of now? I'm getting rid of the second one; the second one was the creation of space. Which means now I'm in the realm without any space.

Okay, so now here's what happens. I'm in this realm and I'm looking at this Ark, and I'll be darned if the Ark doesn't take up any space! The Ark is 'spaceless', it doesn't take up any space. Why? Because I'm in - where am I? I am in the only thing left - there's no time anymore, there's no space anymore, the only thing that's still left that I haven't got

rid of yet is light - I mean actually the domain of light. But according to Einstein's Theory of Relativity if you're in the domain of light which is from light's perspective, what happens to time and space? From light's perspective time and space actually go to zero, that's basic Theory of Relativity. So in a realm of light actually it's true that time and space actually go to zero, from light's perspective. So I'm in light's realm, there's nothing else, and in this realm this Ark, from light's perspective doesn't take up any space.

So that's why you have this paradox where it fits perfectly even though it seems to take up space, it just doesn't take up any space.

Similarly, you're in this realm and if you aren't the Kohen Gadol on Yom Kippur you die. Now is that because G-d is mean and vengeful and kills anybody who tries to approach Him? Why would G-d do that? The answer is no, you're getting closer and closer to G-d's realm, you've just destroyed habitable human space, and you expect to live? So if you're in a place where there's no habitable human space obviously everyone is going to die. The only one who is going to live is one person, the Kohen Gadol, on Yom Kippur, if he wears a spacesuit. What does his spacesuit look like? All white. Why all white? Well where is he? He's in the domain of light. So if you're in the domain of light what do you have to wear to survive? You've got to wear light. If you wear light you can survive. So if you wear your white clothes you can survive in this realm.

Okay, so here you are, now in this realm there's only one thing that exists, the only thing that exists is the Aron, this little box. Strange, when you think about this little box, when you look at how the Aron is described it says that it's overlaid with gold and it says that it's overlaid on the inside with gold and on the outside with gold. The language is; Mi'bayit u'mi'chutz tetzapenu - you should overlay it on the inside and on the outside. Now here's a little question for you. The words Mi'bayit u'mi'chutz - on the inside and on the outside overlay it, those appear twice in all of Tanach. One time with reference to the Aron and one time with reference to one other box. What's the only other box that was supposed to be slathered with something on the inside and on the outside with the language of Mi'bayit u'mi'chutz? The answer is Noah's ark. Mi'bayit u'mi'chutz ba'kopher - with pitch.

Now what's interesting is that pitch is the exact opposite if you think about what the Ark was covered with. Pitch is like the [yichy 70:13] black stuff, it's all sticky. What is gold? Smooth, reflective, gorgeous stuff. So they're inverses of each other, the ark and the - what do you call it - [Aron]? What was the ark? Noah's ark was this little place for man in a sea of the world which he couldn't survive in, and the ark was going to be the protective thing that sealed off and made this Noah's world as opposed to this other world. What was that other world? The other world was the flood; the flood is also the metaphor from the beginning of creation for what? For G-d's world. So it's like you can't exist in that world, but you can exist in this. So what you have to do is make very careful that none of that outside world comes inside, so you have to have something that reflects the world that you don't want in here. What would that be? Pitch. Pitch is very good at keeping water out.

What is happening in this world, in the Mishkan? In the Mishkan the exact inverse is taking place. Except what's inside is not man but it's a place for G-d. So you can view the Holy Ark, as it were - the Aron Kodesh, as actually the inverse of Noah's ark. It's not a place for man in G-d's world, it's a place for G-d in man's world. G-d can't really

survive - G-d doesn't want to be in man's world, G-d is trying to get rid of all this stuff; space and time and light and all of these things. So we got rid of time with the Yeri'ot, we got rid of space with the Parochet, but here's there one other thing which doesn't work for G-d, which is there's light everywhere. Light doesn't exist in G-d's world, G-d's world was all dark. So light is the last remnant of man's world which you have gold here because what is gold? Gold is the reflector which is going to reflect off the light - Mi'bayit u'mi'chutz - to make sure that none of the light can get inside where it doesn't belong.

Fascinatingly, what is the top of the Ark called? The top of the Ark, the cover, is called the Kaporet. What was the stuff that the outside of Noah's ark was slathered with? Mi'bayit u'mi'chutz... V'chaparta ota - you should cover it, it's actually the same letters as Kaporet. It's its own kind of Kaporet. So there's this reverse imagery between these two - really kind of spooky.

Anyway, so here you are, you have one last partition to go through, your final partition to go through is the Keruvim themselves. The Keruvim themselves are now three-dimensional, they're in front of you, and what they are is man's version of G-d's Keruvim. So in other words, the original version of the Keruvim was God-created Keruvim. God-created Keruvim guarded God-created world, which is the Garden of Eden. But now there's a man-created world for G-d within this Aron. So what is man going to create? Man must create man-created Keruvim to guard this last refuge which is going to get rid of the final thing.

The final thing was the Havdalah which created light as we know it, which is that once you traverse that final thing what do you do? You get rid of the separation between the light and the dark and you get back to light not as we know it - which is the swirl of light energy and dark energy together, which is why the Torah says that inside the Aron, on the Luchot themselves, the Luchot were written with dark fire - black fire on white fire. It's these two energies, the black energy and white energy, together, and we say that's the closest we can get to G-d's world. We say to Aunt Sadie we've cleaned up our room, there's none of Jimmy's stuff; we've got rid of time, we've got rid of space, we've got rid of light, we've got rid of everything, all we have is the perfect void. We're taking You back to the world before You made it for us. The world of Tohu Vavohu - of chaos without time, the world of Choshech - without light as we know it or any kind of light, and the world of Mayim - which is the utter void, which is all we can do. We don't know what Your world is like but at least we've gotten rid of the stuff that You made specifically for us, so that way it can be Your pristine version of Your world, and that's how we re-create the world.

So basically what you have here is through creation and the Mishkan, the Torah talking to you in a way for generations. It's talking to you - right, this is a sort of forensic analysis of creation. It's not like G-d is trying to teach you this stuff. So if you say well, this is all very hidden - it is very hidden. It's not the purpose of the Torah to teach you this stuff. We're doing it by doing the Renoir experiment. We're taking what the Torah is actually saying, which is the Torah is not a scientific document, has very little interest in teaching you science, it just doesn't want to lie. So it's going to tell you the truth, it's going to talk to you in terms that are more or less what a fish would describe - the way you would describe to a fish in a fishbowl, and if you ever get to unpack it one day, so then you'll unpack it.

But it's not really designed for human beings to understand, it's designed for another purpose, it's designed to talk to man about his place in the cosmos - which it does in Pshat. World number 1, world number 2; we've talked to man about his place in the cosmos. Along the way, G-d doesn't want to lie, so He's going to talk about cosmic creation in terms that anybody can understand. And these are the terms that anybody can understand. But the Mishkan helps us unpack it when we have to get down to the business of actually creating G-d's world, we can begin to see what G-d had to do with creating ours.

So that's the end of this talk. I'm going to come back to the Keruvim in another series - this is really only half the story, there's a whole ethical side to the Keruvim. One way of looking at the Keruvim is how the Keruvim help us look at the past which is creation, but I think Keruvim also help us go forward and look at human destiny as well. So we'll get back to that in our next series, until then, have a good night and thanks for coming.