



BS"D

To: parsha@parsha.net  
From: cshulman@gmail.com

INTERNET PARSHA SHEET  
ON **BEREISHIS** - 5778

In our 23rd year! To receive this parsha sheet, go to <http://www.parsha.net> and click Subscribe or send a blank e-mail to [parsha-subscribe@yahoogroups.com](mailto:parsha-subscribe@yahoogroups.com) Please also copy me at [cshulman@gmail.com](mailto:cshulman@gmail.com) A complete archive of previous issues is now available at <http://www.parsha.net> It is also fully searchable.

---

Sponsored anonymously in memory of  
**Chaim Yissachar z"l ben Yechiel Zaydel Dov**

---

To sponsor a parsha sheet (proceeds to tzedaka) contact  
[cshulman@parsha.net](mailto:cshulman@parsha.net)

---

**DO NOT FORGET TO MAKE AN ERUV TAVSHILIN**

---

from: Destiny Foundation/Rabbi Berel Wein <[info@jewishdestiny.com](mailto:info@jewishdestiny.com)>  
reply-to: [info@jewishdestiny.com](mailto:info@jewishdestiny.com)  
subject: Weekly Parsha from Rabbi Berel Wein

**Parshas Bereishis**

**Rabbi Berel Wein**

**A Meaningful Life**

Dedicated by Ephraim Sobol in loving memory of his father, Shlomo Mordechai ben Yaakov a"h.

The Torah covers quite a bit of ground in a very short period of writing in this week's first parsha of the Torah. The ten generations from Adam to Noah are dispatched of without too much detail or description. The Torah in its entire narrative does not spend effort to inform us of the particularities of the lives of many of the people that it mentions. The Torah instead concentrates on detailing the lives of the people whose lasting moral impression on humankind was so great that they live on throughout the generations.

The Torah in fact comes to teach us the great lesson of opportunities granted and either frittered away or positively exploited. The Torah obliquely mentions our father Avraham already at the beginning of its narrative even though he will not appear in real life for another twenty generations. The Torah thereby points out to us the truism that our rabbis in Avot stated, that Avraham exploited his opportunity for spiritual greatness and received the reward of all of the preceding generations while those people preceding him did not, either out of passivity or willfulness.

The lesson here is obvious. In every generation, each and every person has an opportunity to enhance spirituality and morality in the world. It is those that exploit this opportunity that the Torah details and expands upon. They are the true builders of civilization and goodness in God's world. The Torah slows down, so to speak, to enable us to analyze their lives and deeds and to draw conclusions from this to apply to our own lives.

The length of life of the people that the Torah mentions in this week's parsha is also astounding. Centuries on end did they live and yet apparently they had very little accomplishment to show for all of those years. Though length of life is certainly an important factor in one's own life, apparently it is not the most important factor.

There are those who accomplish much in a relatively short time and those who leave little inspiration behind them after living many decades. King Solomon in

Kohelet makes note that even if a person lived a thousand years that would not be a guarantee that a productive and meaningful life took place.

We are bidden by Moshe in his famous psalm to "count our days in order to bring forth a wise heart." The phrase can certainly be understood to mean that one should attempt to make one's days count as well. Our father Avraham is described as having come to his old age with his days in his hand. Time is a precious commodity and squandering it is one of our foolish and self-defeating habits.

Adam is criticized by the Midrash not only for his original sin and expulsion from the Garden of Eden but for withdrawing morosely from life for so many long decades thereafter. Avraham is complimented for being active and vital even till his last days on earth. The attitude of Judaism towards life is to make it meaningful and elevating, productive and noble. It is for this purpose that we were in fact created.

Shabat shalom.

Rabbi Berel Wein Rabbi Berel Wein- Jewish historian, author and international lecturer offers a complete selection of CDs, audio tapes, video tapes, DVDs, and books on Jewish history at [www.rabbiwein.com](http://www.rabbiwein.com)

---

from: TorahWeb <[torahweb@torahweb.org](mailto:torahweb@torahweb.org)>

to: [weeklydt@torahweb2.org](mailto:weeklydt@torahweb2.org)

date: Wed, Sep 25, 2013 at 11:09 AM

**Rabbi Yaakov Neuburger**

**Finding the Words and Maintaining Connections**

The brothers, kayin and hevel, were already distanced and Hashem's encouraging words of caution and heartening attention to kayin was to no avail. The mounting tension is now described with intriguing brevity: (4:8) "Kayin said to Hevel, his brother. And it was as they were in the field, Kayin rose up against Hevel his brother and killed him."

What did Kayin say to Hevel? Why is the conversation worthy of record but its substance of little significance? There are many suggestions. Whereas Targum Yonasan details a philosophical debate about G-d, the afterlife, and providence, Rashi says that indeed there was no conversation of substance. According to Rashi, Kayin was merely setting the stage for the murder. A contrived conflict and heated confrontation would provide the pretext for what would follow.

In a not dissimilar approach, Ramban and Ohr Hachayim understand that the conversation was a strategy mean to draw Hevel into the field, have him relax his guard and make him vulnerable.

Ibn Ezra suggests that Kayin related Hashem's message to him. According to Tosafos Kayin sensed some joy in Hevel and that riled Kayin further.

Yet after all the suggestions are studied, the question remains: if the conversation was indeed noteworthy, as Targum Yonasan indicates, why is it not recorded? If the conversation was merely a strategy, then why mention what adds so little to the storyline?

It seems to me that the Torah is alluding to a sad but instructive truth. Two brothers are distanced. It may be that one has suffered a crushing and devastating disappointment and he sees his brother as having a role in that; it may be about finances; it might be about philosophy. Their arguments and confrontations may be very sad and the volume may become deafening, but their brotherhood is still promising because they are still talking.

It is only when they stop talking to one another, when there is no common language or when they simply cannot be bothered to find it...

Copyright © 2013 by The TorahWeb Foundation. All rights reserved.

---

from: Shabbat Shalom [shabbatshalom@ounetwork.org](mailto:shabbatshalom@ounetwork.org)

subject: Shabbat Shalom from the OU

[www.ou.org/torah/parsha/rabbi-sacks-on-parsha](http://www.ou.org/torah/parsha/rabbi-sacks-on-parsha)

Britain's Former Chief Rabbi Lord Jonathan Sacks

**The Faith of God – Rabbi Jonathan Sacks**

**Bereishit 5778**

In stately prose the Torah in its opening chapter describes the unfolding of the universe, the effortless creation of a single creative Force. Repeatedly we read, "And God said, Let there be ... and there was ... and God saw that it was

good” – until we come to the creation of humankind. Suddenly the whole tone of the narrative changes:

And God said, “Let us make man in our image, according to our likeness, and let them rule over the fish of the sea, and over the birds of heaven, and over the cattle, and over all the earth, and over every moving thing that moves upon the earth.”

So God created man in His image,

In the image of God He created him,

Male and female He created them. (Gen. 1:26-27)

The problems are obvious. First, why the preface, “Let us make ...”? In no other case does God verbally reflect on what He is about to create before He creates it. Second, who is the “us”? At that time there was no “us.” There was only God.

There are many answers, but here I want to focus only on one given by the Talmud. It is quite extraordinary. The “us” refers to the angels with whom God consulted. He did so because He was faced with a fateful dilemma. By creating Homo sapiens, God was making the one being other than Himself capable of destroying life on earth. Read Jared Diamond’s *Guns, Germs and Steel* or *Collapse* and you will discover how destructive humans have been wherever they have set foot, creating environmental damage and human devastation on a massive scale. We are still doing so. This is how the Talmud describes what happened before God created humankind:

When the Holy One, blessed be He, came to create man, He created a group of ministering angels and asked them, “Do you agree that we should make man in our image?” They replied, “Sovereign of the Universe, what will be his deeds?” God showed them the history of mankind. The angels replied, “What is man that You are mindful of him?” [in other words, let man not be created]. God destroyed the angels.

He created a second group, and asked them the same question, and they gave the same answer. God destroyed them.

He created a third group of angels, and they replied, “Sovereign of the Universe, the first and second group of angels told You not to create man, and it did not avail them. You did not listen. What then can we say but this: The universe is Yours. Do with it as You wish.”

Then God created man.

When it came to the generation of the Flood, and then to the generation of the builders of Babel, the angels said to God, “Were not the first angels right? See how great is the corruption of mankind.”

Then God replied (Isaiah 46:4), “Even to old age I will not change, and even to grey hair, I will still be patient.” (Sanhedrin 38b)

This goes to the core of the dilemma even God could not escape. Were He not to create humanity there would be no-one in the universe capable of understanding that he or she was created and that God exists. Only with the birth of humanity did the universe become self-conscious. Without us, it would be as if God had created billions of robots mindlessly doing what they been programmed to do for all eternity. So, even though by creating humans God was putting the entire future of creation at risk, God went ahead and made humankind.

This is radical theology indeed. The Talmud is telling us is that the existence of humankind can only be explained by the fact that God had faith in man. As the Sifre explains the phrase in Moses’ song, “the God of faith” – this means, “the God who had faith in the universe and created it.”[1] The real religious mystery, according to Judaism, is not our faith in God. It is God’s faith in us.

This is the extraordinary idea that shines through the entire Tanakh. God invests his hopes for the universe in this strange, refractory, cantankerous, ungrateful and sometimes degenerate creature called Homo sapiens, part dust of the earth, part breath of God, whose behaviour disappoints and sometimes appals him. Yet He never gives up.

He tries with Adam, Noah, Abraham, Isaac, Jacob, Moses, Joshua, a string of judges and kings. He tries with women also, and here succeeds much better. They are more faithful, less violent, less obsessed with power. But He refuses to give up on men. He has His most passionate relationship with the prophets. They understand Him and become bearers of His word. Yet most of the prophets end up as disappointed with people as God is.

The real subject of the Torah is not our faith in God, which is often faltering, but His unfailing faith in us. The Torah is not man’s book of God. It is God’s book of man. He spends a mere 34 verses describing His own creation of the universe, but more than 500 verses describing the Israelites’ creation of a tiny, temporary, portable building called the Mishkan, the Sanctuary. God never stops believing in us, loving us, and hoping for the best from us. There are moments when He almost despairs. Our parsha says so.

The Lord saw how great the wickedness of the human race had become on the earth, and that every inclination of the thoughts of the human heart was only evil all the time. The Lord regretted that he had made human beings on the earth, and He was grieved to His very core.

But Noah, good, innocent, upright, consoles Him. For the sake of one good man God was prepared to begin again.

Of course, all of this is a matter of faith – as is all belief in the thoughts and feelings of persons other than myself. Do I really know whether those closest to me – my marriage partner, my children, my companions, my friends – love me or have faith in me, or is that just wishful thinking on my part? Atheists sometimes think that belief in God is irrational while belief in other people is rational. That is simply not so. The proof is the failure of the man who, at the dawn of the Enlightenment, sought to put philosophy on a rational basis: Rene Descartes. Descartes famously said, *Cogito ergo sum*, “I think, therefore I am.” All he was sure of was his own existence. For anything else – the existence of physical objects, let alone other minds – even he had to invoke God.

I for one do not have enough faith to be an atheist.[2] To be an atheist you have to have faith, either in humankind as a whole, or in yourself. How anyone can have faith in humankind after the Holocaust defies all reason. The single most calculated, sustained crime of man against man happened not in some benighted third world country but in the heart of a Europe that had given birth to Kant and Hegel, Bach and Beethoven, Goethe and Schiller. Civilisation utterly failed to civilise. Humanism did not make men humane.

When I first stood at Auschwitz-Birkenau the question that haunted me was not, “Where was God?” God was in the command, “You shall not murder.” God was in the words, “You shall not oppress the stranger.” God was saying to humanity, “Your brother’s blood is crying to Me from the ground.” God did not stop the first humans eating forbidden fruit. He did not stop Cain committing murder. He did not stop the Egyptians enslaving the Israelites. God does not save us from ourselves. That, according to the Talmud, is why creating man was such a risk that the angels advised against it. The question that haunts me after the Holocaust, as it does today in this new age of chaos, is “Where is man?”

As for believing only in yourself, that is hubris. Every serious thinker since the dawn of history has known that this ends in nemesis.

There are only two serious possibilities to be entertained by serious minds. Either the one put forward by the Torah that we are here because a Force greater than the universe wanted us to be, or the alternative: that the universe exists because of a random fluctuation in the quantum field, and we are here because of a mindless sequence of genetic mutations blindly sifted by natural selection. Either there is or is not meaning to the human condition. The first possibility yields Isaiah, the second, Sophocles, Aeschylus and Greek tragedy. The Greece of antiquity died. The Israel of Abraham and Moses still lives.

I respect those who choose Greek tragedy over Jewish hope. But those who choose Judaism have made space in their minds for the most life-changing idea of all: Whether or not we have faith in God, God has faith in us.

There may be times in our lives – certainly there have been in mine – when the sun disappears and we enter the cloud of black despair. King David knew these feelings well. They are theme of several Psalms. People can be brutal to one another. There are some who, having suffered pain themselves, find relief in inflicting it on others. You can lose faith in humanity, or in yourself, or both. At such times, the knowledge that God has faith in us is transformative, redemptive. As David said in Psalm 27:

Even were my father or mother to forsake me,

The Lord would still receive me. (Ps. 27:10)

We may lose heart; God never will. We may despair; God will give us hope.

God believes in us even if we don’t believe in ourselves. We may sin and

disappoint and come short again and again, but God never ceases to forgive us when we fail and lift us when we fall. Have faith in God's faith in us and you will find the path from darkness to light. Shabbat shalom and Chag sameach,

[1] Sifre, Ha'azinu, 307.

[2] Of course an atheist might say – Sigmund Freud came close to saying this – that faith is simply a comforting illusion. That really is not so. It is far more demanding to believe that God summons us to responsibility, that He asks us to fight for justice, equality and human dignity, and that He holds us accountable for what we do, than to believe that there is no meaning to human existence other than ones we invent for ourselves, no ultimate truth, no absolute moral standards, and no one to whom we will have to give an account of our lives. Fifty years of reflection on this issue have led me to conclude that it is atheism that is, morally and existentially, the easy option – and I say this having known and studied with some of the greatest atheists of our time. That is not to say that I am critical of atheists. To the contrary, in a secular age, it is the default option. That is why now, more than at any other time in the past two thousand years, it takes courage to have and live by religious faith.

LIFE-CHANGING IDEA #1

God believes in us even if we don't always believe in ourselves. Remember this and you will find the path from darkness to light.

---

from: Shema Yisrael Torah Network <shemalist@shemayisrael.com>

to: Peninim <peninim@shemayisrael.com>

date: Tue, Oct 7, 2014

Peninim on the Torah

by Rabbi A. Leib Scheinbaum

Parshas Bereishis

In the beginning of G-d's creating the heavens and the earth. (1:1)

The Torah is the charter of man's mission on this world. It is the "book of directions" which guides us how to live a life of commitment to Hashem. In the Talmud Chagigah 11b, Chazal teach that it is prohibited to expound upon maaseh Bereishis in a class of two students, which means the teacher and one other person. The Talmud presents many Aggadic teachings related to this topic. Literally, maaseh Bereishis means "account of Creation." Ramban interprets maaseh Bereishis as the wisdom of the natural world. The most widely accepted opinion is that maaseh Bereishis pertains to the wisdom of Kabbalah, mysticism. In any event, the issues pertaining to maaseh Bereishis go beyond the grasp of our natural minds. To delve into areas to which the brain is neither accustomed nor prepared sets a person up for failure to understand the profundity of the subject correctly.

When a person begins to think that he is capable of theorizing and understanding G-d's hidden ways and the manner in which He created the world, he is already on a serious collision course with the teachings of Judaism. He will end up rejecting the true beliefs of Torah and setting course on a journey to infamy.

The result of this philosophical journey will invariably be heresy, compelled by beliefs which undermine the very underpinnings of our faith. Darwin's theory of evolution is based upon such erroneous conjecture. When a human being believes that he can understand G-d, he can fall to such a nadir as to believe that man, the b'chir ha'yetzurim, chosen one of all creations, has descended from a monkey, such that there is no difference between animal and human.

A Jew should believe one thing: Hashem created heaven and earth, and that He is behind everything which occurs in life. Once one accepts Hashem as Creator, he immediately understands that understanding Creation is beyond his ability.

Every story, every issue, everything which has taken place and how Hashem has responded, are all part of maaseh Bereishis. The problem is that we cannot leave well-enough alone; thus, we feel compelled to postulate and interpret occurrences which are beyond our grasp, thereby making egregious mistakes. Horav Yosef Segal, zl, relates that a maggid (preacher who often earned his living by traveling from city to city lecturing and inspiring the populace) once came before Horav Chaim Volozhiner, zl, and narrated to him the contents of a recent derashah, lecture, that he had given in a large city. The man was very impressed with his ability to explain the pasuk homiletically to fit the objectives

of his lecture. In the piyut, prayer, "Hashem, Hashem," which is recited during the Neilah, Closing service, of Yom Kippur, we lament the fact that, B'reosi kol ir al tilah bunayah, v'ir haElokim mushpeles ad sheol tachtiyah, which is translated as, "When I see every city built on a hilltop, while the city of G-d is degraded to the nethermost depth." The payton, author of the prayer, bemoans the degradation of our Holy City. This is the simple interpretation of the prayer. This maggid suggested a new meaning. Rather than comparing Yerushalayim to other large metropolises, he felt the author was lamenting the fact that people are always striving to satisfy their physical/material desires, but, when it comes to the requirements of the soul/spirituality, they are satisfied with as little as they can get. Thus, kol ir, "every city," is a reference to the physical material dimension of one's life, and ir haElokim, "city of G-d," refers to one's spiritual needs. While it is a nice p'shat, exposition, it is clearly not the payton's intended meaning.

Rav Chaim asked this maggid, "Tell me, have you ever been to a large metropolitan city, such as London or Paris?" "Yes," he answered. "My travels take me everywhere. I have been to many large cities. I have rarely seen such advanced development and esthetic beauty as is found in some of these large cities. It is truly impressive." "Perhaps you also have had occasion to visit the holy city of Yerushalayim?" "Yes," he replied, "I certainly did, and I must add that the contrast is glaring. The Holy City is bereft of its spiritual beauty, its supremacy as the holiest site on the earth."

"If, in fact, you see the contrast between Yerushalayim and Paris," Rav Chaim asked, "why is it that you feel compelled to deviate from the simple explanation of the prayer? Every city is built up beautifully, advanced technologically and esthetically appealing. Yerushalayim is a city that once was yefei nof mesos kol ha'aretz, 'Fairest of brides, joy of all the earth,' and now it is desolate of all its inherent beauty. Is this not something to lament? Why not adhere to the prayer's intended meaning?"

A similar idea applies to all of the would-be philosophers and self-proclaimed thinkers. With all of their hypotheses -- based upon meaningless conjecture-- that have yet to be ratified, they have succeeded in doing nothing but creating confusion in the minds of those who otherwise would believe in Hashem as G-d of Creation and G-d of history. They miss the most important verse in the Torah, the one that speaks directly to us, saying that the world of Creation is beyond us, because Bereishis bara Elokim. It was G-d Who created the world. Man is unable of comprehending G-d. He lacks the perception, because he is human - G-d is not. That is all one must know. Sadly, so many of us are not prepared to accept this concept. We think that we know more. The result of such erroneous speculation is that some believe that they have descended from monkeys. How very sad.

Two people can view the very same object and have two discrepant perspectives. One sees with clarity of vision, while the other has blurred vision which is either the result of shortsightedness, or self-imposed myopia. A well-known analogy demonstrates this idea. A brilliant artist was endowed with a special ability to create images that, to the naked eye, appear real. He painted a beautiful painting, depicting a man carrying a basket of fruit on his shoulder. He entered this painting in an outdoor art show, to be viewed by major art critics. The painting appeared so realistic that birds flying nearby saw the "grapes" on the man's shoulder, and they began to peck at them. A group of art critics saw this phenomenon and were amazed by the lifelike art which this master artist had created. The critics were standing around, staring in amazement as bird after bird swooped down to peck at the grapes.

One critic, who was obviously a perceptive individual, looked at his colleagues and said, "I do not believe that men of such intelligence could be so shortsighted as to err so foolishly!" They looked at him in astonishment. How dare he speak to them so! Anyone with a modicum of intelligence should be impressed by the graphic imagery captured by the artist. The critics, of course, dismissed their colleague's tirade. He spoke up again, "My friends, you base your assumption concerning the realistic nature of this artwork upon the fact that the birds are prepared to eat the grapes. The mere fact that the birds are prepared to risk eating the grapes indicates exactly the opposite. Have you ever seen a bird eat off the shoulder of a living human being? Indeed, the fact that the birds are attempting to eat the grapes demonstrates that the artist is not as skilled as you perceive him to be. Yes, he succeeded in creating lifelike grapes; the person,

however, still looks like artwork. He did not fool the birds at all. The artist is good, but not that good."

Let us apply this analogy to our own misguided perspectives concerning the advanced development and refinement of mankind. On the one hand, we have made immense strides in science, medicine, and other disciplines. Man is capable of advances that even a decade ago had been considered impossible. One would conjecture that the human being has certainly progressed by leaps and bounds from his primitive roots. This is truly how modern society views itself and its achievements. They think that they are far removed from their crude beginnings. Let us now take a penetrating look at the base revulsions, the criminal activities of, not only the uneducated, but that of the highly cultivated and distinguished leadership of today's elite; the plunder and moral depravity of these select leaders, the carnage they create, or permit to ensue as a result of their egos and political affiliations. Indeed, they use the very scientific advancements that so demonstrates their refinement to wreak havoc on an unsuspecting and gullible world. So, is the artist that good?

It is all a question of perspective. Does one recognize that Bereishis bara Elokim? The only reality in this world is Hashem and, unless we remain focused on Him, nothing else is real. Whatever we see can be interpreted to suit our needs, but is that what we really want? When we begin a cycle of Torah study, we begin with one presumptive preamble. Hashem created the world. We must see the Almighty in everything. Otherwise, we see nothing.

And Elokim saw the light that it was good. (1:4)

The Talmud Yoma 38b states: "Rabbi Elazar says: it is worth for the world to be created even for (the benefit it derived from) one tzaddik, righteous person." This is derived from the above pasuk, "And Elokim saw the light that it was good." There is no "good" like a tzaddik. We also find in Mishlei 10:25, V'tzaddik yesod olam, "A righteous person is the foundation of the world." We now have some inkling of the great merit that a tzaddik has in this world. One tzaddik - not a world of tzaddikim - only one, single, righteous person makes the entire world's creation meaningful! The entire world with all its creatures and all humanity are all here because of the tzaddik. He is the purpose of creation. With this compelling statement fresh in our minds, we may begin to understand the overarching importance of reaching out to unaffiliated Jews, to bring them closer under the kanfei haShechinah, wings of the Divine Presence. Horav Gamliel Rabinowitz, Shlita, observes that if the world could have endured six thousand years just for the sake of one tzaddik, certainly we should expend every possible effort to reach out to Jews of all stripes and persuasions. Furthermore, man is a microcosm of the world. He is an olam katan, tiny simile of the world. Thus, he must view himself in a similar perspective. As the entire world is worthy of creation just for the benefit of one tzaddik, so, too, should a person take great joy and feel a tremendous sense of accomplishment for every positive action which he executes. That one activity quite possibly makes "him" worth the effort.

Rav Gamliel quotes Horav Nota Freund, Shlita, who explains the pasuk, Kasis la'maor, "Crushed for the purpose for lighting" (Shemos 27:20), which is a reference to the olive oil used for the Menorah. Chazal derive from here that only maor - the oil used for the Menorah, for illumination, must be extracted from olives by crushing them, using the first oil that emerges for the Menorah. Concerning Menachos, the oil mixed with flour for the Meal-offering, one may use oil that has been ground up. Applying a homiletic twist, Rav Freund interprets the pasuk: kasis la'maor - "crushed for illumination." One who is struck by Hashem, who is subject to a difficult challenge, should be la'maor; it should serve as a source of inspiration that elevates him. He should never allow the kasis, the crushing effect, to cause menachos, pain, sadness, and menachos, "resting," whereby one disappears into a cocoon of hopelessness, going into emotional hibernation.

As Chazal posit that the world could likely have been created for one person, so, too, should a person believe that his own entire existence was worthwhile as a result of the good deeds which he carries out.

Concerning the meaning of Tzaddik yesod olam, I recently came across the following statement attributed to Horav Shlomo Zevihler, zl. Two great Admorim, who were both very righteous, distinguished leaders who devoted their lives to shepherding their flock: Horav Yisrael, zl, m'Huseitin; and Horav

Shlomo, zl, m'Zevihl. Rav Yisrael was blessed with great wealth, while Rav Shlomo lived a life of abject poverty. Rav Shlomo once commented, "There are two types of tzaddikim. The tzaddik hador, righteous leader of his generation, does just that, guide his generation. There is also the tzaddik yesod olam, who acts very much like a yesod, foundation, who goes unnoticed, sort of buried in the ground - like a foundation." We must remember, however, that without the foundation, the entire edifice comes crashing down.

One cannot write concerning the importance of reaching out to every Jew without making mention of the Ponevezer Rav, Horav Yosef Kahaneman, zl. He was a Torah giant in whose heart burned a fiery love for every Jew. He would say excitedly, "Of course, I want whole-hearted sincere Jews - one hundred percent perfect Jews - but I also want all one hundred percent of all of the world's Jews, that none of them go lost; I am not giving up on a single one! Just as a Jew may never give up hope, so, too, are we also forbidden to give up on a simple Jew, no matter who he is."

A close student of his related, "I once saw the Rebbe in the middle of a throng of irreligious, assimilated Jews, who surrounded him with loving and admiring looks. Burning with curiosity, I went over to him and asked what approach he used to reach out to them. Smiling, he replied, 'I told them that they are Jews, more precious than anything else, and that they were just disguising themselves to the point that they are even maintaining their disguise towards themselves.' Thus, I told them, 'Remove your masks! Taire briderlach, beloved brothers, cast off your foreign garb. In time, many of them, indeed, shed their masks and reverted to being traditional Jews.'"

And Elokim saw all that He had made, and behold it was very good. (1:31)

We have read the above pasuk countless times; it is reiterated a number of times in the parsha about Brias ha'Olam, Creation. Yet, do we ever stop and ask ourselves: If the world is so good, why does Shlomo Hamelech begin his Sefer Koheles with the famous phrase - Haveil havalim ha'kol hevel, "Futility of futilities - all is futile!"? If all is futile, then it really cannot be tov meod, very good. How are to understand this? The Melitzer Rebbe, Shlita, explains that it all depends on one's religious experience. If he carries out the will of the Almighty, if his life is filled with mitzvos and maasim tovim, good deeds, then it is tov meod, very good. If, however, his life is characterized by abandon, with no relationship with Hashem, then it is all futility of futilities. His life is a waste. This explanation is accompanied by a meaningful analogy. The king of the land had a son who was outstanding in his ability to absorb everything to which he set his mind. Among the many disciplines which he had mastered proficiently was medicine. He was a brilliant diagnostician and was able to prepare the exact remedy that would cure just about any disease. One day, the prince took a stroll on the king's vast grounds. He wanted to get away from the hustle and bustle of the palace, soak up some fresh air and relax amid the quiet of the surrounding forest. Carried away with his "freedom," he lost track of the palace boundaries and wandered off onto the property of the duke, who was no friend of the king. As a result, he was taken captive by the duke.

Overnight, the prince went from royalty to servitude. His new job was working in the stone quarry, breaking up large stones. Such work takes its toll on even the hardest workers. The prince was far from hardy. In no time, he would become a broken person. One day, the duke became gravely ill. Since the man was quite wealthy and money means nothing to a dead man, he sent out messengers to all areas of the country in search of a doctor who might save him. Money was no object. Various physicians were brought in - all, to no avail. The duke was rapidly wasting away. Soon, he would be nothing more than a memory.

At this point, the prince came before the superintendent of the prison and asked for an audience with the duke. "I can save him," he said. Both the jailor and the duke could not believe the prince's insolence. How could a lowly slave succeed where everyone else had failed? The prince reiterated his earlier request: "Allow me to leave, and I will heal the duke." The prince was released from the dungeon, and, after diagnosing the duke's ailment, prepared a powerful potion which cured the duke in a matter of days.

"Why did you not inform me that you were proficient in medicine?" the duke asked the prince. "You never asked me," replied the prince. "Instead of inquiring about my abilities, you immediately incarcerated me in the dungeon and put me

to work chopping stones. I figured if you are a fool, it was your loss. In any event, sooner or later, my father and his armies would have located me and liberated me from this dungeon."

The lesson is very simple. The Jewish People are Hashem's children. Our goal and purpose in life is to study and master the Torah - which is the remedy for every ill known to mankind. If, however, Klal Yisrael deviate from their mission in life, and, instead of delving into Torah, revert to other disciplines which only succeed in distracting and turning them away from their source of life, they will fall captive to the futilities of life. Sadly, some Jews only discover their holy mission in life after they have fallen captive to the secular culture surrounding them. When the gentiles discover the beauty and value of Torah, when they see the way of life experienced by the observant Jew, they change. They are cured from their illnesses. Life is futile when it has no direction. It is meaningless when one has no purpose. When a Jew lives a life of purpose, with goals and objectives that spiritually elevate him, then it is *to'v meod*, very good.

We might suggest another interpretation for the Torah's emphasis on the underlying meaning behind *to'v meod*. I think the Torah was intimating the perspective we should adopt upon viewing a person who manifests good and bad, behavior that is, at times, praiseworthy and, during other instances, iniquitous. I recently came across a thesis delineating the *ahavas Yisrael*, love for each Jew, as manifest by each of three great chassidic leaders: Horav Zushia, zl, m'Anapole; Horav Levi Yitzchak, zl, m'Berdichev; the Baal Shem Tov, zl. Rav Zushia embodied Shlomo Hamelech's maxim, *Al kol peshaim techaseh ahavah*, "Love conceals all iniquities" (Mishlei 10:12). He did not notice the iniquities that the average man saw. People saw sin; he saw nothing. People perceived iniquity; he saw nothing of the sort. When others saw evil; he saw nothing. He was a person who was simply incapable of noticing anything negative about his fellow Jew. Whenever he did hear about someone's egregious behavior, he would find some way not to allow it to jaundice his perception of the person. He literally saw no evil.

The Berdichever was the Jewish People's consummate advocate. He always found some way to justify a person's behavior - regardless of its nefarious nature. He always provided some excuse. Unlike Rav Zushia, the Berdichever was well-aware of a Jew's failings and shortcomings, but he always found a way to justify his actions, to extend a positive spin to the man's misdeeds.

Rav Zushia saw no iniquity; the Berdichever more or less white-washed it. The Baal Shem Tov's love, however, superseded even that of his two disciples. To him, *ahavas Yisrael*, loving every Jew, extended beyond a refusal to see his evil, or endeavoring to cleanse his iniquity. The Baal Shem Tov's love for each and every Jew was unequivocal, incontinent; it was consummate love in its totality. This means that he was aware of the person's evil, his transgressions, his mean streak, but it did not matter - he loved him all the same - sin and all! The Baal Shem Tov loved the wicked sinner with the same degree of boundless love that he harbored for the greatest *tzaddik*. Why? They were all Hashem's children. A father loves all of his children the same - regardless of who they are and what they have done.

I think this is what the Torah is teaching us with the words *to'v meod*. Hashem saw the world and its creations, mankind. They were all His. He knew that some would be imperfect, but they were still His! He taught us that everything is good. We should not make the distinction between bad and good when it comes to loving a fellow Jew.

Kayin brought an offering to Hashem of the fruit of the ground... and as for Hevel, he also brought. (4:3,4)

We note from the *pesukim* that Hevel was a righteous person. The mere fact that Hashem acquiesced to Hevel's sacrifice serves as a barometer of His approbation of Hevel. If so, why was he taken so soon? Hevel's life was cut short due to his brother's irrational jealousy. He did not live long enough even to establish a legacy of offspring. Kayin, on the other hand, lived seven more generations, from which was established the future of the world. To the average spectator, the disparity between the subsequent history of Kayin, the murderer, and Hevel, the innocent victim, is glaring. Furthermore, Kayin did not simply kill Hevel in one swoop. Chazal teach us that it was an extremely painful experience for Hevel, since Kayin did not know how a life is taken, from where the

*neshamah* leaves. He stabbed Hevel many times all over his body until he struck him in the neck.

Horav Gamliel Rabinowitz, Shlita, explains that such questions plague the minds of those who have recently embarked on a life of Torah observance.

Apparently, prior to their "rebirth," their material/physical lifestyle had been wonderful. Now that they have eschewed their life of abandon, nothing seems to go right. They are financially challenged, emotionally misunderstood, and physically vulnerable.. So they ask: Why? Is this what we have to look forward to now that we have become *frum*, observant?

We have no acceptable reply to these questions. Every Jew suffers in one way or another. Those who think that the fellow who is wealthy, has *yichus*, pedigree, and lives in an ivory tower has it better, is very *na've*. We all have *pekelech*, "parcels" of situations, troubles, issues - any name that you want to call it. Why? Ask Hashem. This is the way in which He guides the world. A believing Jew knows this; thus, he maintains his deep conviction despite the challenges to his faith.

Therefore, right from the onset, from the moment the Torah commences to relate the story of mankind, we are confronted with the first protrusive question to our faith - why Hevel? Why not Kayin instead? Why do bad things happen to good people? This question, which has apparently been around for quite some time is based upon the misconception that we mortals have been able to accurately determine the meaning of good/bad. We do not know the correct definition of good people - or bad things. We are not made aware of the reward and punishment in this world, in order that it not preclude our ability to choose wisely between good and evil. If the reward were to be immediate and the punishment likewise, what challenge would there be to being an observant Jew? We must reiterate constantly in our hearts and minds that we are clueless concerning the way in which Hashem runs the world. We have no idea what is involved; even if we were to know what has been factored into Hashem's decisions, our mortal minds could not even begin to grasp it. So, it is best that we do what is asked of us and leave the "decision- making" to Hashem.

Va'ani Tefillah

*u'zchartem es kol mitzvos Hashem, - vaasisem osam v'lo sasuru Acharei levavchem v'acharei eineichem.*

That you may see it and remember all of the commandments of Hashem, and perform them, and not explore after your heart and after your eyes.

*Tzitzis* are part of a Jew's uniform. They are the stamp that attests to one's relationship to Hashem. This is why looking at the *Tzitzis* brings to mind all of the *mitzvos*. When one sees the *Tzitzis*, he realizes what they represent. When one wears the uniform of the king's legion, it leaves a powerful impression on him. That is the way it is supposed to be, but is this truly the way it is? Are we really dissuaded from sin simply because we see the *Tzitzis*? Do *Tzitzis* really remind us and spur us on to perform *mitzvos*?

Horav Baruch Sorotzkin, zl, explains that actually the Torah adds a critical condition which must be taken into consideration in order for the reminder of *Tzitzis* to take effect. *V'lo sasuru acharei levavchem v'acharei eineichem*, "And not explore after your heart and after your eyes." Simply, this means that the *Tzitzis* prevents the individual from following the blandishments of his heart and eyes. If this would be the case, the sequence of the following *pasuk* - *L'maan tizkeru* - "So that you remember" - does not fit. Why would the Torah reiterate that *Tzitzis* causes one to remember the *mitzvos*? Thus, the Rosh Yeshivah explains, the Torah is teaching us specifically that if one does not explore following his heart and eyes, he will succeed in remembering the *mitzvos*. The individual for whom the reminder of *Tzitzis* does not work is the one whose heart and eyes are in the wrong place. Once one strays, the reminder is no longer effective.

Sponsored by Etzmon and Abigail Rozen and children in loving memory of their Father and Zaide NATHAN ROZEN Harav Nosson Meir ben R' Yechiel z"l niftar second night of Succos (16 Tishrei) 5748  
t.n.tz.v.h. Peninim@shemayisrael.com

<http://www.aish.com/ci/sam/48951136.html>

## Age of the Universe by Dr. Gerald Schroeder

How old is the world? Ancient commentators propose that the world may be simultaneously young and old.

One of the most obvious perceived contradictions between Torah and science is the age of the universe. Is it billions of years old, like scientific data, or is it thousands of years, like Biblical data? When we add up the generations of the Bible, we come to 5700-plus years. Whereas, data from the Hubble telescope or from the land based telescopes in Hawaii, indicate the age at about 15 billion years.

Let me clarify right at the start. The world may be only some 6000 years old. God could have put the fossils in the ground and juggled the light arriving from distant galaxies to make the world appear to be billions of years old. There is absolutely no way to disprove this claim. God being infinite could have made the world that way. There is another possible approach that also agrees with the ancient commentators' description of God and nature. The world may be young and old simultaneously. In the following I consider this latter option.

In trying to resolve this apparent conflict, it's interesting to look historically at trends in knowledge, because absolute proofs are not forthcoming. But what is available is to look at how science has changed its picture of the world, relative to the unchanging picture of the Torah. (I refuse to use modern Biblical commentary because it already knows modern science, and is always influenced by that knowledge. The trend becomes to bend the Bible to match the science.) So the only data I use as far as Biblical commentary goes is ancient commentary. That means the text of the Bible itself (3300 years ago), the translation of the Torah into Aramaic by Onkelos (100 CE), the Talmud (redacted about the year 500 CE), and the three major Torah commentators. There are many, many commentators, but at the top of the mountain there are three, accepted by all: Rashi (11th century France), who brings the straight understanding of the text, Maimonides (12th century Egypt), who handles the philosophical concepts, and then Nachmanides (13th century Spain), the earliest of the Kabbalists.

This ancient commentary was finalized long before Hubble was a gleam in his great-grandparent's eye. So there's no possibility of Hubble or any other modern scientific data influencing these concepts.

### Universe with a Beginning

In 1959, a survey was taken of leading American scientists. Among the many questions asked was, "What is your concept of the age of the universe?" Now, in 1959, astronomy was popular, but cosmology ? the deep physics of understanding the universe ? was just developing. The response to that survey was recently republished in *Scientific American* ? the most widely read science journal in the world. Two-thirds of the scientists gave the same answer:

"Beginning? There was no beginning. Aristotle and Plato taught us 2400 years ago that the universe is eternal. Oh, we know the Bible says 'In the beginning.' That's a nice story, but we sophisticates know better. There was no beginning."

That was 1959. In 1965, Penzias and Wilson discovered the echo of the Big Bang in the black of the sky at night, and the world paradigm changed from a universe that was eternal to a universe that had a beginning. After 3000 years of arguing, science has come to agree with the Torah.

### Starting from Rosh Hashana

How long ago did the "beginning" occur? Was it, as the Bible might imply, 5700-plus years, or was it the 15 billions of years that's accepted by the scientific community?

The first thing we have to understand is the origin of the Biblical calendar. The Jewish year is figured by adding up the generations since Adam. Additionally, there are six days leading up to the creation to Adam. These six days are significant as well.

Now where do we make the zero point? On Rosh Hashana, the Jewish New Year, upon blowing the shofar, the following sentence is said: "Hayom Harat Olam ? today is the birthday of the world."

This verse might imply that Rosh Hashana commemorates the creation of the universe. But it doesn't. Rosh Hashana commemorate the creation of the Neshama, the soul of human life. We start counting our 5700-plus years from the creation of the soul of Adam.

We have a clock that begins with Adam, and the six days are separate from this clock. The Bible has two clocks.

That might seem like a modern rationalization, if it were not for the fact that Talmudic commentaries 1500 years ago, brings this information. In the Midrash (Vayikra Rabba 29:1), an expansion of the Talmud, all the Sages agree that Rosh Hashana commemorates the soul of Adam, and that the Six Days of Genesis are separate.

Why were the Six Days taken out of the calendar? Because time is described differently in those Six Days of Genesis. "There was evening and morning" is an exotic, bizarre, unusual way of describing time.

Once you come from Adam, the flow of time is totally in human terms. Adam and Eve live 130 years before having children! Seth lives 105 years before having children, etc. From Adam forward, the flow of time is totally human in concept. But prior to that time, it's an abstract concept: "Evening and morning." It's as if you're looking down on events from a viewpoint that is not intimately related to them.

### Deeper into the Text

In trying to understand the flow of time here, you have to remember that the entire Six Days is described in 31 sentences. The Six Days of Genesis, which have given people so many headaches in trying to understand science vis-a-vis the Bible, are confined to 31 sentences! At MIT, in the Hayden library, we had about 50,000 books that deal with the development of the universe: cosmology, chemistry, thermodynamics, paleontology, archaeology, the high-energy physics of creation. At Harvard, at the Weidner library, they probably have 200,000 books on these same topics. The Bible gives us 31 sentences. Don't expect that by a simple reading of those sentences you'll know every detail that is held within the text. It's obvious that we have to dig deeper to get the information out.

The idea of having to dig deeper is not a rationalization. The Talmud (Chagiga, ch. 2) tells us that from the opening sentence of the Bible, through the beginning of Chapter Two, the entire text is given in parable form, a poem with a text and a subtext. Now, again, put yourself into the mindset of 1500 years ago, the time of the Talmud. Why would the Talmud think it was parable? You think that 1500 years ago they thought that God couldn't make it all in 6 days? It was a problem for them? We have a problem today with cosmology and scientific data. But 1500 years ago, what's the problem with 6 days for an infinitely powerful God? No problem.

So when the Sages excluded these six days from the calendar, and said that the entire text is parable, it wasn't because they were trying to apologize away what they'd seen in the local museum. There was no local museum. The fact is that a close reading of the text makes it clear that there's information hidden and folded into layers below the surface.

The idea of looking for a deeper meaning in Torah is no different than looking for deeper meaning in science. Just as we look for the deeper readings in science to learn the working of nature, so too we need to look for the deeper readings in Torah. King Solomon in Proverbs 25:11 alluded to this. "A word well spoken is like apples of Gold in a silver dish." Maimonides in *The Guide for the Perplexed* interprets this proverb: The silver dish is the literal text of the Torah, as seen from a distance. The apples of gold are the secrets held within the silver dish of the Torah Text. Thousands of years ago we learned that there are subtleties in the Text that expand the meaning way beyond its simple reading. It's those subtleties I want to see.

### Natural History and Human History

There are early Jewish sources that tell us that the Bible's calendar is in two-parts (even predating *Leviticus Rabba* which goes back almost 1500 years and says it explicitly). In the closing speech that Moses makes to the people, he says if you want to see the fingerprint of God in the universe, "consider the days of old, the years of the many generations" (Deut. 32:7) Nachmanides, in the name of Kabbalah, says, "Why does Moses break the calendar into two parts ? 'The days of old, and the years of the many generations?' Because, 'Consider the days of old' is the Six Days of Genesis. 'The years of the many generations' is all the time from Adam forward."

Moses says you can see God's fingerprint on the universe in one of two ways. Look at the phenomenon of the Six Days, and the development of life in the universe which is mind-boggling. Or if that doesn't impress you, then just

consider society from Adam forward ? the phenomenon of human history. Either way, you will find the imprint of God.

I recently met in Jerusalem with Professor Leon Lederman, Nobel Prize winning physicist. We were talking science, and as the conversation went on, I said, "What about spirituality, Leon?" And he said to me, "Schroeder, I'll talk science with you, but as far as spirituality, speak to the people across the street, the theologians." But then he continued, and he said, "But I do find something spooky about the people of Israel coming back to the Land of Israel." Interesting. The first part of Moses' statement, "Consider the days of old" ? about the Six Days of Genesis ? that didn't impress Prof. Lederman. But the "Years of the many generations" ? human history ? that impressed him. Prof. Lederman found nothing spooky about the Eskimos eating fish at the Arctic circle. And he found nothing spooky about Greeks eating Musika in Athens. But he finds something real spooky about Jews eating falafel on Jaffa Street. Because it shouldn't have happened. It doesn't make sense historically that the Jews would come back to the Land of Israel. Yet that's what happened. And that's one of the functions of the Jewish People in the world. To act as a demonstration. We just want people in the world to understand that there is some monkey business going on with history that makes it not all just random. That there's some direction to the flow of history. And the world has seen it through us. It's not by chance that Israel is on the front page of the New York Times more than anyone else.

What is a "Day?"

Let's jump back to the Six Days of Genesis. First of all, we now know that when the Biblical calendar says 5700-plus years, we must add to that "plus six days."

A few years ago, I acquired a dinosaur fossil that was dated (by two radioactive decay chains) as 150 million years old. My 7-year-old daughter says, "Abba! Dinosaurs? How can there be dinosaurs 150 million years ago, when my Bible teacher says the world isn't even 6000 years old?" So I told her to look in Psalms 90:4. There, you'll find something quite amazing. King David says, "One thousand years in Your (God's) sight are like a day that passes, a watch in the night." Perhaps time is different from the perspective of King David, than it is from the perspective of the Creator. Perhaps time is different.

The Talmud (Chagiga, ch. 2), in trying to understand the subtleties of Torah, analyzes the word "choshech." When the word "choshech" appears in Genesis 1:2, the Talmud explains that it means black fire, black energy, a kind of energy that is so powerful you can't even see it. Two verses later, in Genesis 1:4, the Talmud explains that the same word ? "choshech" ? means darkness, i.e. the absence of light.

Other words as well are not to be understood by their common definitions. For example, "mayim" typically means water. But Maimonides says that in the original statements of creation, the word "mayim" may also mean the building blocks of the universe.

Another example is Genesis 1:5, which says, "There is evening and morning, Day One." That is the first time that a day is quantified: evening and morning. Nachmanides discusses the meaning of evening and morning. Does it mean sunset and sunrise? It would certainly seem to.

But Nachmanides points out a problem with that. The text says "there was evening and morning Day One... evening and morning a second day... evening and morning a third day." Then on the fourth day, the sun is mentioned. Nachmanides says that any intelligent reader can see an obvious problem. How do we have a concept of evening and morning for the first three days if the sun is only mentioned on Day Four? There is a purpose for the sun appearing only on Day Four, so that as time goes by and people understand more about the universe, you can dig deeper into the text.

Nachmanides says the text uses the words "Vayehi Erev" ? but it doesn't mean "there was evening." He explains that the Hebrew letters Ayin, Resh, Bet ? the root of "erev" ? is chaos. Mixture, disorder. That's why evening is called "erev", because when the sun goes down, vision becomes blurry. The literal meaning is "there was disorder." The Torah's word for "morning" ? "boker" ? is the absolute opposite. When the sun rises, the world becomes "bikoret", orderly, able to be discerned. That's why the sun needn't be mentioned until Day Four. Because from erev to boker is a flow from disorder to order, from chaos to cosmos. That's something any scientist will testify never happens in an unguided

system. Order never arises from disorder spontaneously and remains orderly. Order always degrades to chaos unless the environment recognizes the order and locks it in to preserve it. There must be a guide to the system. That's an unequivocal statement.

The Torah wants us to be amazed by this flow, starting from a chaotic plasma and ending up with a symphony of life. Day-by-day the world progresses to higher and higher levels. Order out of disorder. It's pure thermodynamics. And it's stated in terminology of 3000 years ago.

The Creation of Time

Each day of creation is numbered. Yet there is discontinuity in the way the days are numbered. The verse says: "There is evening and morning, Day One." But the second day doesn't say "evening and morning, Day Two." Rather, it says "evening and morning, a second day." And the Torah continues with this pattern: "Evening and morning, a third day... a fourth day... a fifth day... the sixth day." Only on the first day does the text use a different form: not "first day," but "Day One" ("Yom Echad"). Many English translations make the mistake of writing "a first day." That's because editors want things to be nice and consistent. But they throw out the cosmic message in the text! Because there is a qualitative difference, as Nachmanides says, between "one" and "first." One is absolute; first is comparative.

Nachmanides explains that on Day One, time was created. That's a phenomenal insight. Time was created. You can't grab time. You don't even see it. You can see space, you can see matter, you can feel energy, you can see light energy. I understand a creation there. But the creation of time? Eight hundred years ago, Nachmanides attained this insight from the Torah's use of the phrase, "Day One." And that's exactly what Einstein taught us in the Laws of Relativity: that there was a creation, not just of space and matter, but of time itself.

Einstein's Law of Relativity

Looking back in time, a scientist will view the universe as being 15 billion years old. But what is the Bible's view of time? Maybe it sees time differently. And that makes a big difference. Albert Einstein taught us that Big Bang cosmology brings not just space and matter into existence, but that time is part of the nitty gritty. Time is a dimension. Time is affected by your view of time. How you see time depends on where you're viewing it. A minute on the moon goes faster than a minute on the Earth. A minute on the sun goes slower. Time on the sun is actually stretched out so that if you could put a clock on the sun, it would tick more slowly. It's a small difference, but it's measurable and measured.

If you could ripen oranges on the Sun, they would take longer to ripen. Why? Because time goes more slowly. Would you feel it going more slowly? No, because your biology would be part of the system. If you were living on the Sun, your heart would beat more slowly. Wherever you are, your biology is in synch with the local time. And a minute or an hour where ever you are is exactly a minute or an hour.

If you could look from one system to another, you would see time very differently. Because depending on factors like gravity and velocity, you will perceive time in a way that is very different. The flow of time varies one location to another location. Hence the term: the law of relativity.

Here's an example: One evening we were sitting around the dinner table, and my 11-year-old daughter asked, "How you could have dinosaurs? How you could have billions of years scientifically ? and thousands of years Biblically at the same time? So I told her to imagine a planet where time is so stretched out that while we live out two years on Earth, only three minutes will go by on that planet. Now, those places actually exist, they are observed. It would be hard to live there with their conditions, and you couldn't get to them either, but in mental experiments you can do it. Two years are going to go by on Earth, three minutes are going to go by on the planet. So my daughter says, "Great! Send me to the planet. I'll spend three minutes there. I'll do two years worth of homework. I'll come back home in three minutes, and no more homework for two years."

Nice try. Assuming she was age 11 when she left, and her friends were 11. She spends three minutes on the planet and then comes home. (The travel time takes no time.) How old is she when she gets back? Eleven years and 3 minutes. And her friends are 13. Because she lived out 3 minutes while we lived out 2 years. Her friends aged from 11 years to 13 years, while she's 11 years and 3 minutes.

Had she looked down on Earth from that planet, her perception of Earth time would be that everybody was moving very quickly because in one of her minutes, hundreds of thousands of our minutes would pass. Whereas if we looked up, she'd be moving very slowly.

But which is correct? Is it three years? Or three minutes? The answer is both. They're both happening at the same time. That's the legacy of Albert Einstein. It so happens there are literally billions of locations in the universe, where if you could put a clock at that location, it would tick so slowly, that from our perspective (if we could last that long) 15 billion years would go by... but the clock at that remote location would tick out six days.

Time Travel and the Big Bang

But how does this help to explain the Bible? Because anyway the Talmud and Rashi and Nahmanides (that is the kabala) all say that Six Days of Genesis were six regular 24-hour periods not longer than our work week!

Let's look a bit deeper. The classical Jewish sources say that before the beginning, we don't really know what there is. We can't tell what predates the universe. The Midrash asks the question: Why does the Bible begin with the letter Beit? Because Beit (which is written like a backwards C) is closed in all directions and only open in the forward direction. Hence we can't know what comes before ? only after. The first letter is a Beit ? closed in all directions and only open in the forward direction.

Nachmanides expands the statement. He says that although the days are 24 hours each, they contain "kol yemot ha-olam" ? all the ages and all the secrets of the world.

Nachmanides says that before the universe, there was nothing... but then suddenly the entire creation appeared as a minuscule speck. He gives a dimension for the speck: something very tiny like the size of a grain of mustard. And he says that is the only physical creation. There was no other physical creation; all other creations were spiritual. The Nefesh (the soul of animal life) and the Neshama (the soul of human life) are spiritual creations. There's only one physical creation, and that creation was a tiny speck. The speck is all there was. Anything else was God. In that speck was all the raw material that would be used for making everything else. Nachmanides describes the substance as "dak me'od, ein bo mamash" ? very thin, no substance to it. And as this speck expanded out, this substance ? so thin that it has no essence ? turned into matter as we know it.

Nachmanides further writes: "Misheyesh, yitfos bo zman" -- from the moment that matter formed from this substance-less substance, time grabs hold. Not "begins." Time is created at the beginning. But time "grabs hold." When matter condenses, congeals, coalesces, out of this substance so thin it has no essence ? that's when the Biblical clock of the six days starts.

Science has shown that there's only one "substance-less substance" that can change into matter. And that's energy. Einstein's famous equation,  $E=MC^2$ , tells us that energy can change into matter. And once it changes into matter, time grabs hold.

Nachmanides has made a phenomenal statement. I don't know if he knew the Laws of Relativity. But we know them now. We know that energy ? light beams, radio waves, gamma rays, x-rays ? all travel at the speed of light, 300 million meters per second. At the speed of light, time does not pass. The universe was aging, but time only grabs hold when matter is present. This moment of time before the clock begins for the Bible, lasted about 1/100,000 of a second. A minuscule time. But in that time, the universe expanded from a tiny speck, to about the size of the Solar System. From that moment on we have matter, and time flows forward. The Biblical clock begins here.

Now the fact that the Bible tells us there is "evening and morning Day One" (and not "a first day") comes to teach us time from a Biblical perspective. Einstein proved that time varies from place to place in the universe, and that time varies from perspective to perspective in the universe. The Bible says there is "evening and morning Day One".

Now if the Torah were seeing time from the days of Moses and Mount Sinai ? long after Adam ? the text would not have written Day One. Because by Sinai, hundreds of thousands of days already passed. There was a lot of time with which to compare Day One. Torah would have said "A First Day." By the second day of Genesis, the Bible says "a second day," because there was already the First Day with which to compare it. You could say on the second

day, "what happened on the first day." But as Nahmanides pointed out, you could not say on the first day, "what happened on the first day" because "first" implies comparison ? an existing series. And there was no existing series. Day One was all there was.

Even if the Torah was seeing time from Adam, the text would have said "a first day", because by its own statement there were six days. The Torah says "Day One" because the Torah is looking forward from the beginning. And it says, How old is the universe? Six Days. We'll just take time up until Adam. Six Days. We look back in time, and say the universe is approximately 15 billion years old. But every scientist knows, that when we say the universe is 15 billion years old, there's another half of the sentence that we never say. The other half of the sentence is: The universe is 15 billion years old as seen from the time-space coordinates that we exist in on earth. That's Einstein's view of relativity. But what would those billions of years be as perceived from near the beginning looking forward?

The key is that the Torah looks forward in time, from very different time-space coordinates, when the universe was small. But since then, the universe has expanded out. Space stretches, and that stretching of space totally changes the perception of time.

Imagine in your mind going back billions of years ago to the beginning of time. Now pretend way back at the beginning of time, when time grabs hold, there's an intelligent community. (It's totally fictitious.) Imagine that the intelligent community has a laser, and it's going to shoot out a blast of light, and every second it's going to pulse. Every second ? pulse. Pulse. Pulse. It shoots the light out, and then billions of years later, way far down the time line, we here on Earth have a big satellite dish, and we receive that pulse of light. And on that pulse of light is imprinted (printing information on light is called fiber optics ? sending information by light), "I'm sending you a pulse every second." And then a second goes by and the next pulse is sent.

Light travels 300 million meters per second. So the two light pulses are separated by 300 million meters at the beginning. Now they travel through space for billions of years, and they're going to reach the Earth billions of years later. But wait a minute. Is the universe static? No. The universe is expanding. That's the cosmology of the universe. And that does not mean it's expanding into an empty space outside the universe. There's only the universe. There is no space outside the universe. The universe expands by its own space stretching. So as these pulses go through billions of years of traveling, the universe and space are stretching. As space is stretching, what's happening to these pulses? The space between them is also stretching. So the pulses really get further and further apart.

Billions of years later, when the first pulse arrives, we say, "Wow ? a pulse!" And written on it is "I'm sending you a pulse every second." You call all your friends, and you wait for the next pulse to arrive. Does it arrive another second later? No! A year later? Maybe not. Maybe billions of years later. Because depending on how much time this pulse of light has traveled through space, will determine the amount of stretching of space between the pulses. That's standard astronomy.

15 Billion or Six Days?

Today, we look back in time. We see 15 billion years. Looking forward from when the universe is very small ? billions of times smaller ? the Torah says six days. They both may be correct.

What's exciting about the last few years in cosmology is we now have quantified the data to know the relationship of the "view of time" from the beginning, relative to the "view of time" today. It's not science fiction any longer. Any one of a dozen physics text books all bring the same number. The general relationship between time near the beginning when stable matter formed from the light (the energy, the electromagnetic radiation of the creation) and time today is a million million, that is a trillion fold extension. That's a 1 with 12 zeros after it. It is a unit-less ratio. So when a view from the beginning looking forward says "I'm sending you a pulse every second," would we see it every second? No. We'd see it every million million seconds. Because that's the stretching effect of the expansion of the universe. In astronomy, the term is "red shift." Red shift in observed astronomical data is standard.

The Torah doesn't say every second, does it? It says Six Days. How would we see those six days? If the Torah says we're sending information for six days,

would we receive that information as six days? No. We would receive that information as six million million days. Because the Torah's perspective is from the beginning looking forward.

Six million million days is a very interesting number. What would that be in years? Divide by 365 and it comes out to be 16 billion years. Essentially the estimate of the age of the universe. Not a bad guess for 3300 years ago.

The way these two figures match up is extraordinary. I'm not speaking as a theologian; I'm making a scientific claim. I didn't pull these numbers out of a hat. That's why I led up to the explanation very slowly, so you can follow it step-by-step.

Now we can go one step further. Let's look at the development of time, day-by-day, based on the expansion factor. Every time the universe doubles, the perception of time is cut in half. Now when the universe was small, it was doubling very rapidly. But as the universe gets bigger, the doubling time gets longer. This rate of expansion is quoted in "The Principles of Physical Cosmology," a textbook that is used literally around the world.

(In case you want to know, this exponential rate of expansion has a specific number averaged at 10 to the 12th power. That is in fact the temperature of quark confinement, when matter freezes out of the energy: 10.9 times 10 to the 12th power Kelvin degrees divided by (or the ratio to) the temperature of the universe today, 2.73 degrees. That's the initial ratio which changes exponentially as the universe expands.)

The calculations come out to be as follows:

- The first of the Biblical days lasted 24 hours, viewed from the "beginning of time perspective." But the duration from our perspective was 8 billion years.
- The second day, from the Bible's perspective lasted 24 hours. From our perspective it lasted half of the previous day, 4 billion years.
- The third 24 hour day also included half of the previous day, 2 billion years.
- The fourth 24 hour day ? one billion years.
- The fifth 24 hour day ? one-half billion years.
- The sixth 24 hour day ? one-quarter billion years.

When you add up the Six Days, you get the age of the universe at 15 and 3/4 billion years. The same as modern cosmology. Is it by chance?

But there's more. The Bible goes out on a limb and tells you what happened on each of those days. Now you can take cosmology, paleontology, archaeology, and look at the history of the world, and see whether or not they match up day-by-day. And I'll give you a hint. They match up close enough to send chills up your spine.

Click here to purchase Dr. Schroeder's book, Genesis and the Big Bang. This article can also be read at: <http://www.aish.com/ci/sam/48951136.html>