Dear Lynn,

You asked me about the interpretation of Genesis Chapter One that my father mentioned to you. It is something that occurred to me as I was pondering the whole area of design and implementation from my computer programmer's point of view. A computer program, or what is commonly called software, is a peculiar thing. It really isn't a thing at all in the sense that it exists in time and space—because it really doesn't exist like that. A copy of it is encoded in some physical medium, but the program itself is independent of particular storage media: there can be a lot of copies, and still there is only one program; it can be encoded in many different forms, and still there is only one program. The same is true of any information, but some kinds of information are both a design and a creation rolled into one: there is no definitive design for it outside of itself, and it is the creation. Most books do not qualify because they are merely part of a communication process, but software does. The peculiar thing about software is that it can cause all sorts of things to be done automatically. What it does when the computer is instructed by it is not the creation: that is what the creation does.

I'm sure you know that there has been a lot of speculation about that which we call reality being a simulation within some higher reality. I like that. To me it seems a natural way to view the comparative reality of what we call the physical universe and what we call Heaven. I like the simulation idea because it makes Heaven the ultimate reality with Earth being like a shadow in comparison. To me it very clearly sets God and his original domain above everything we know while at the same time explaining how He is intimately involved with everything. I guess you would have to be a programmer to understand

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how intimately you can become involved with your program. But if we are talking about a software program that simulates something, the possibilities do not stop there. At the level of the simulation you have another world, and the programer has a number of ways he can become involved at the simulation level. Others can too, of course, to a lesser extent, which for a certain type of software is its entire purpose.

You were asking about Genesis One, not computer programming. But really I have not gone far afield in this introduction because if you look at Genesis One as a design statement, it fits nicely with the work that would go into making a computer program to create our world. I'm told that in the old days of computers, the term "word" was used a lot. In a computer, the "word" is a unit of information. And so the programmer's work is literally putting forth a series of words.

Lynn, I hope my little essay below is along the lines of what you expected. My father did mention the interview you had with him, and he said he enjoyed it very much. I understand you intend to post a transcript of it on your essay site. Let me know when it's ready. I'm looking forward to reading it.

All the best in Him,

Sonny Elam

Genesis One: A Different Interpretation

God had in mind to make man in His image, a free and creative being but limited in power and knowledge and master only within a limited universe. The man being created in God's image, the world of man would naturally be an image of His world: an

image of Heaven is what He had in mind.

A suitable host would be required because an image cannot stand on its own. What was needed was a platform having the ability to model a world and perhaps an entire universe, and they just happened to have one. It was as yet void of any form, deep and still like a pristine sea. The Spirit of God hovered over it, preparing the way for the Word of God who would "speak," laying down instructions needed to implement the underlying models. The models would then yield every feature of the physical universe, including man and other living beings.¹

There was much to be done. Foundational mathematics had to be formulated, for nothing could be modeled without such basic principles. Also, the host needed to be configured for massive parallelism in order to represent so many things simultaneously. The result was still formless in the sense that no particular thing had been specified; but the foundational capability to support the expression of images of any kind had been distributed throughout the host during the configuration. The host remained still and quiet, like a deep, boundless sea, but its waters were ready to support specific images of Heaven.

First God spoke of light, and the Word wrote the law of light in

¹ For creation to have been carried out in this manner, it would require something like a computer in Heaven. Impossible? No one would believe what Ezekiel saw if he had not reported it—not that it was a computer; only that it was startlingly strange. How can a computer host a universe? With suitable programming, computers can create and display virtual worlds such as the images that appear on a digital TV screen. Physicists tell us that if you look closely at matter, you encounter limits of reality. There are otherworldly mechanics, and there is a fundamental graininess—like looking at a TV screen close up and finding that the picture is made of little elements controlled by numbers originating in a computer somewhere behind the screen. Of course these analogies are only attempts to make as much as we can out of the data we are presented with, not that we expect to fully understand anything.

the language of the host. This was not as simple as it sounds because light needs space and time; hence the principles underpinning the physical universe were designed and the code was written to bring them forth. Also magnitudes had to be planned in advance so that the discrete, digital nature of the host would not limit the full expression of what they had in mind; therefore, the principle of cycles as in light waves (cycles would be involved in a myriad of mechanisms) had assigned to it a vast array of factors. One of them set the duration of a "day" to be marked by cycling the magnitude of light at a frequency well suited to the man for whom the universe was being designed. It was patterned after the day in Heaven, and all of this was a day's work in Heaven. God looked over the equations that had been written for light and saw that they were pleasing. The day of man would begin in the evening as it did in Heaven.

Next God said, "Let there be forces to separate the Waters above and to hold them together below, making a basis for matter and its organization."² So the Word spent the day hammering out the procedures for space and the generation of matter.

If I may indulge in yet a further flight of fancy, I will suppose that a checkout run was made just before the end of the second

^{2 &}quot;Firmament" in the biblical text has been rendered "expanse" and "canopy" as translators try to avoid the implications of the unscientific concept of the "heavens" being supported by (the ancient idea of) a platform or arch. Alternatively, the creation account in the first chapter of Genesis can be approached as a richly inspired metaphor providing both the substance of a religious document meaningful within the author's culture and a set of timeless principles that find application within various other systems. The principle in the "firmament" of Genesis 1:6 is that provisions for maintaining the heavens is an essential aspect of creation. That the text would recognize this need and express it in a way that would be particularly meaningful at the time of its writing does not make it obsolete. It is well worth pondering the primitive root of what is translated "firmament" (See Strong's Hebrew definition #7554).

day, and it produced a majestic show for the angels. They thought it so good that they named the expanse it produced "heaven" after Heaven. Someone suggested that "new heaven" would be more appropriate, but God did not want the men and women who would gaze upon it to think of it as replacing the original Heaven. It was only an image of it from afar, a rather austere simulation of the real thing at that. (Also He had in mind making a new heaven someday.)

In any case, God obviously liked it. He said it was good enough and to go ahead and set up the procedure to designate the best of the worlds it would yield to be the place in which the man He would make in His image would dwell.

At the start of the next day God said, referring to the dynamics He wanted to include in the simulated world, "Let the waters [that is literal water] have a means of being separated and gathered together, making a way for flooding and for maintaining dry land. The land shall be called earth, and the bodies of water shall be known as seas or oceans."

It was easy to envision, but the Word and the Spirit had their work cut out for them. They conferred with the Father as they designed the principles of planet dynamics to govern the development of land masses suitable for civilizations and nations. It was more complex than the programming that had been done so far, and it took until morning to bring it all to light.

No sooner had they finished that than God said, "Also, we will be needing vegetation on the earth: plants and trees yielding seed to reproduce their kind." This was a pleasant task for the remainder of the day. The Spirit conceived and the Word wrote the code for the generation, reproduction, and diversification of

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plant life. It was very cool, and they all three agreed that it would be good. That finished the third day and brought them to the beginning of the fourth.

God gave themselves an easier task that evening: fine tune the mechanics of the evolution of the simulated heavens in such a way that the inhabitants of the earth would be amazed and inspired by their perception of it, leading them to recognize and remember the majesty of their Creator/Programmer. For the record, He said, "Let there be lights in the heavens to support the marking of time in days and years and signs for seasons; also to energize the surface of the earth with light. Two main lights will do, one greater to rule the day and the lesser to rule the night. Of course they will have the stars to look at too."

They carefully arranged and tuned the initial conditions, providing for times when the sun as seen from Earth would be precisely eclipsed by the moon. When they ran the simulation forward to check that out, God saw that it was good. Thus ended the fourth day of writing the code and setting the constants that would produce the universe they wanted. If we liken it to developing software for a massively parallel computer, it might take a team of a thousand programmers a hundred years to make a limited, miniature, and faulty version of it. The three of them did it in four days. But they were God, and those were Heavenly days, which might have been as a thousand years to us. (And He never needed to sleep.)

Now the best part began. On the fifth day God said, "Let the seas swarm with all manner of creatures, and let birds be made to fly above the earth, each kind having the ability to reproduce and develop."

So the code of life was written to generate a multitude of variations. The possibilities were fascinating and practically endless, and the Spirit got carried away at the end of the day and worked with the Word to develop special codes for classes of very unlikely creatures that would be marvels when discovered and certain to delight the intelligent inhabitants of Earth. Nevertheless, God added his blessing to all the models, ensuring that they would be fruitful and multiply as they found habitat in waters of the seas and the trees and bushes and fields of the land. This completed His work on the fifth day.

Finally, on the sixth day, God said, "Let there be many kinds of creatures to live on the land. See how many viable forms we can bring forth out of our models: not only livestock for the man but all manner of creeping things as well."

The same model that generated aquatic and aviary kinds of creatures was replicated with different parameters in order to arrange the genes for four-limbed beasts suited to various climes and smaller creatures with any number of legs or none at all.

Then God said, "We shall make man after our own likeness, male and female, and they shall be like gods, having dominion over the other creatures."

This time there was no need to invent new kinds; the parameters in the model would simply be set to unity, but that was not entered into the host's library, for it would be introduced by God Himself at the appointed time in simulated time. Now get this: The platform on which this grand simulation is hosted accommodates virtual-reality stations at which citizens of Heaven can participate in the simulation and appear on earth as men would appear. "Of course!" you say. "What else would one expect of a

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reality simulator?"

Now you see why God had to rest on the seventh day. He did a lot more than speak the few English words of the King James Bible on those six days of creation. Nor is He like the lazy man who does not work at designing things and whose unthinking efforts sometimes produce results that happen to hold together but more often ones that fall apart (that's akin to what the naturalistic evolutionist thinks happened). No, the Creator is at least as intelligent and motivated as his creatures who make and program one machine which in turn makes many things automatically.

The smartest man-made designs are not for the end product and not for the machine to make the end product but for the procedures and methods that enable a machine to make any of a whole class of products. That requires a lot of careful and creative work! But it pays off. Being made in the image of God, we tend to do things as He does them—when we are using the minds he has given us.

What did God do on the eighth day? He didn't tell us, but due to the fact that we are here it could well be that on the eighth day He pushed the button and the simulation began with ... a bang? Perhaps, but not necessarily so. A simulation could start at any point in its time. But why would He not start it at the beginning? (That would be the easiest initialization.) Would it be because He would have to wait a long time before the important developments took place? We don't know how fast the host processes our time in Heaven's time. A billion years of simulated time might take only an hour or a minute by Heaven's clock. Then billions of years of simulation would all be observable simultaneously from a higher dimension. So what the cosmogonists suppose to be the

span of time from their mysterious "big bang" until now might have taken scarcely any time in Heaven's time yet be always present and viewable at any desired rate. But regardless of how quickly the simulation can proceed in Heaven's time, there is no reason why it cannot be variously slowed down and sped up without our knowing it. The simulation clock could even be stopped and resumed without changing the course of the simulation. Talk of hibernation! *Nothing* happens when the calculations pause.

If in six days, in his own time, God designed not the universe directly but the methods to create the universe-before there was the time that we know as time-how long did it take to actually create the universe from that? It was done already!-because the design was the creation. If you want an image to grasp, think of an ordinary computer game: There is nothing until the player starts it up, and even then specific aspects of the virtual world in which the game is played are not generated until needed. There was a programmer somewhere who wrote the program that does it all, and his work was done before the player ever thought of playing the game. A thousand players can be experiencing adventures in worlds created by the same software, and the world explored by each player is different, yet there is only one program. The programmer created all there is, yet he did not-because he does not know what any one of the players sees. It is his program that generates the virtual worlds; he created it, and there is no intelligence to be found in all of this except in the cleverness of the programmer.

We speak in metaphors because God speaks to us in metaphors. Metaphors that work well are treated as being almost lit-

eral because we have nothing better. If we have found a metaphor that helps us think about the bridge between Heaven and Earth and one that does not violate sound principles but glorifies the Creator and seems to lift Heaven higher yet brings it nearer than it is commonly supposed to be—is that not a good thing?

If Genesis One is interpreted as a description of creating the creation of the universe in the Creator's time frame, it would solve the following problems:

Verse 2: Why the preexistence of the deep and the waters and the hovering? (This is the host being prepared for the simulation.)

Verse 3: Speech being the cause of the creation. (The emphasis is on the transmitting of information—not direct action or emanation.)

Verses 4-5: How can light be good or bad? (Maxwell discovered the mathematics of light; the equations are wonderfully elegant. The math—the method—of light is very good.)

Light appears before the source of light. (Because the principle precedes the application in the design sequence.)

The necessity of making a dark/light day in order for creation to proceed. (Clearly indicates a creation time independent of created time and its markers.)

Little work was done on day one if things were being created directly. (Creating/designing of mathematics and methods goes on behind the scenes, and such work is not easily described.)

Verses 6-8: Firmament = heaven (v. 8) separating waters = stuff. The etymology of firmament suggests a solid, pounded-out structure, not space. (This sounds like the work of hammering out a program for generating stars and planets.)

Verses 9-10: Land to be separated horizontally from water—a

command that may not have been executed until the Flood.

Verses 11-12: Vegetation before sun. (Of course! The characteristics of the sun will be determined by the needs of the vegetation. All sorts of suns are hanging around just waiting to be used for something—speaking of a class of objects in a programming sense.)

Let the earth sprout ... after its kind: a statement about future development. (Clearly this is about a method for creating, not about creating all vegetation in one day.)

Verses 14-18: Sun, moon, and stars after "waters" above were established. (Indicates that all creation was designed for the benefit of Earth; other celestial bodies were secondary although they would come into being first. Again, it was a command, an instruction, not a direct making. The time-order in which a complex design is developed is never the same as the order in which it is executed.)

Verses 20-22: Fish and birds *not* spoken into being. (The time-frame in view is when life on earth is unfolding according to plan —as in a checkout run. But creation time is still Day Five.)

Verses 24-25: Beasts being brought forth from Earth. (The secondary means suggest a prearranged method.)

Verse 26: Let us make man, created in our own image, male and female. (Unique design contrasting with the beasts, which seem to be the result of an algorithm that was set up to yield a great variety of creatures in created time.)

Verse 27: A quotation, evidently a short poem or saying passed down to Moses summarizing the object of the creation. Hence it is not necessary to fit this verse into the creation-of-creation interpretation.

Verses 28-30: Instructions, instructions. (All creatures had to be instructed—programmed, initialized—in the fundamentals.)

Day Seven: resting. (God is ever active in the mechanics of this universe; Christ holds all things together. When did his day of rest occur? Not in created time!)

The Lord rested on the seventh day because his work was done. Yet there was more work ahead not mentioned here. There was an aspect of this creation that would require his entering the time frame of his own creation, descending into the created world and becoming an actor on his own stage.³ At that point the Word takes an active role in the simulation, stepping into the image Himself, like Alice stepping into the image in the looking glass, and the Word becomes a perfect reflection of Himself, made in His own image yet locked for a time in simulation time. But that is another story, and how it came about fills the rest of the chapters in the sixty-six books of the Book.

The week! Archeological evidence does not support there being the seven-day cycle from earliest antiquity, though ancient customs existed which forbade certain activities on certain days involving sevens. Was Moses trying to justify his establishing the Sabbath? Was this the underlying purpose of his creation narrative? Is Genesis One a Levitical document reflecting the design of the Tabernacle? Apparently it is! But the Tabernacle is a pattern of something in Heaven. The principle of sevens exists in Heaven. Earth is patterned after Heaven, for Earth needed to support the incarnation of God. (Seven must be the basis for units of time by which the acts of God are measured. The 70 x 7 years of Daniel is

³ Virtual-reality gamers will recognize this as a player becoming a character in the simulated world.

an example.)

Chapter Two in Genesis appears to be an incongruous detailing of certain events from chapter one. Not incongruous! This is how it worked out in created time.⁴ God appeared as a character in the simulation and, yes, man (but not woman) appeared before the beasts. Chapter One is about the design work in a different time frame where the sequence is quite properly different.

I will detail this further, since we have come this far without too much difficulty. At one point the simulation was stopped. The Word sat down at the Master's virtual-reality station and set the location in the Garden of Eden. He took the model for the generation of mammal kinds with its parameters set to unity, the one that had been set aside, the image of God in the image of Heaven. He initialized it as a young man and introduced it into the simulation like planting a plant in the garden. Then the simulation was resumed, and the man materialized, drawing the necessary elements from the soil to compose his body, and a Heavenly spirit "player" made from the very breath of God was assigned to him.

If Genesis Chapter One fits well with the programming paradigm, and the universe is fundamentally mathematical programming, Moses was far ahead of his time. Or does his quaint tale of creation just happen to be interpretable this way?

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⁴ Most biblical Commentators take Chapter One as being the more literal. But if you are willing to completely reject the presuppositions of naturalistic evolution and have man appear before beast, Chapter Two can be taken as a straightforward, serious narrative. The simulation paradigm permits this.