

# Göbekli Tepe's Pillars and Architecture Reveal the Foundation of Religion, Metaphysics, and Science

## **Howard Barry Schatz**

Independent Researcher, New York, USA Email: howardschatz@yahoo.com

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# Abstract

Once the Luwian hieroglyphics for God "D" and Gate "W" were discovered at Göbekli Tepe, this author was able to directly link the site's carved pillars and pillar enclosures to the Abrahamic/Mosaic "Word of God", יהוה. Archaeologists and anthropologists have long viewed the Bible as mankind's best guide to prehistoric religion, however, archaeologist Klaus Schmidt had no reason to believe that the site he spent years excavating at Göbekli Tepe might be the legendary "Pillars of Enoch", carved by the first Biblical holy man and scribe. To make this connection, the author first had to decipher Judaism's Razah D'Oraytah (Secret of Knowledge) from the Sefer Yetzirah (Book of Creation). The Book of Creation is the only text to explain the Secret of Knowledge, and the only text attributed to the prophet Abraham within the rabbinical community. The Zohar, Judaism's most accessible Kabbalistic text, admits that it lacks knowledge of "deep and hidden things which issue from God's thought and are taken up by the Voice [of God] which are not disclosed till the Word [יהוה] reveals them". Abrahamic/Mosaic "Word of God" encrypts the mathematics of sound that emanates from God's "Voice" in terms of ancient string theory. Just as modern string theory defines a Theory of Everything (ToE) within theoretical physics, so too does this ancient string theory define the Theory of Everything that Abraham named the "Living God". The author's previous paper ties Jewish sources to Göbekli Tepe, while the current paper applies this sonic "God Table" to the textual exegesis and hermeneutics structuring all religious creation allegories, including the writings of Sumer, Assyria, Babylonia, Vedic India, pre-Dynastic Egypt, Ugarit, and Israel. This paper will apply Göbekli Tepe's structural template to archaeology's oldest legible cuneiform tablets, including the Kesh Temple Hymn, Sumerian King List, and the Akkadian Ark Tablet. It will also be demonstrated that Göbekli Tepe holds the key to the Rig Veda, Hinduism's oldest text, and defines the essence of Plato's metaphysics.

#### **Keywords**

Book of Creation, God Table, Göbekli Tepe, Sumerian King List, Kesh Temple Hymn, Ark Tablet, Rig Veda, Plato

### **1. Introduction**

The author has spent 45 years deciphering and authenticating the Sefer Yetzirah: Book of Creation (Kaplan, 1990) as the only Kabbalistic text attributed to the prophet Abraham. It is also the only text to explain the underlying mathematics of the holiest name of God, הוה (transliteration: Yahweh or Jehovah) that effectively defines Scripture's "owner's manual" (Schatz, 2007; Schatz, 2012: pp. 127-131). The Kabbalistic tradition of Jewish mysticism is based on Razah D'Oraytah ("Secret of Knowledge" or "Secret of the Torah") which articulates the notion that "The entire Torah is like an explication of, and commentary on, the Ineffable Name of God" (Scholem, 1974; p. 171; Gikatilla, 2011; p. 6). Once the author of this paper succeeded at deciphering אות as the most profound way to explicate Biblical allegory, it became possible to equate Abraham's Word of God יהוה with the Enochian Word of God "D" at Göbekli Tepe. This paper will demonstrate that during roughly 8000 years of religious history, from the time of Enoch to the time of Abraham, religious and metaphysical writings were shaped and structured by the mathematics and science of sound as documented by the God Table. The author took the liberty of renaming the Book of Creation's "231 Gates" to the "God Table", history's oldest conceptualization of ancient string theory, which laid the groundwork for religion, metaphysics, and science.

Since the Middle Ages, there has been a long line of unsuccessful attempts to decipher the Book of Creation by Judaism's most renowned Kabbalistic scholars, including R. Saadia Gaon, Abraham Abulafia, R. Eleazar of Worms, R. Moses Cordovero, and R. Isaac Luria, to name just a few. However, two renowned modern Jewish scholars, Leo Baeck (1873-1956) and Gershom Scholem (1897-1982), were both convinced that the Book of Creation could only be deciphered by applying the Pythagorean mathematical tradition (Scholem, 1974: pp. 26-27) better known as the "Harmony of the Spheres" or "Music of the Spheres" (Godwin, 1993).

Unfortunately, neither Baeck nor Scholem, were able to offer sufficient Pythagorean details to convincingly support their thesis. The great rabbi, philosopher, and physician, Maimonides (1135-1205 CE) was the most famous Jewish scholar to admit that he did not understand how to apply the Pythagorean "Music of the Spheres" to the "Secrets of the Law". The Greek mathematician Pythagoras is usually credited with being the father of ancient string theory (Cole, 1987), but that would imply that it was Pythagoras who developed the God Table, which is not true. In a previous paper (Schatz, 2022) we have seen exactly how the God Table's יהוה mathematics describes Abraham's original conceptualization of God and Creation that was encrypted within the Book of Creation's mathematical riddles. Does this then imply that Abraham invented or discovered ancient string theory? The author's previous paper also demonstrates that the ancient origins of string theory were carved into the pillars and pillar enclosures of Göbekli Tepe. In this paper it will be demonstrated that the Book of Creation's mathematical יהוה template can be applied to the theology of Sumer, Assyria, Babylonia, India, Egypt, Ugarit, as well as the metaphysics of Plato.

What follows is a list of the three main academic objections to the Book of Creation's authenticity, followed by the author's refutations of each objection.

## 2. Objections

1) The first and most significant objection is the fact that no direct connection has ever been established between the Book of Creation and the Hebrew Bible. If Abraham was truly the author then one would expect a substantial connection to the Bible. Judah ben Barzilai wrote a detailed commentary on the Sefer Yetzirah which best articulates this problem: "...it could not have been written by Abraham, since if it had, it should have been incorporated into the Bible, or at least mentioned in Scripture" (Judah ben Barlizai, 1885: p.100).

2) The second objection was put forward by philologists who tell us that this text was transcribed into Biblical Hebrew no earlier than 200 CE, roughly 2000 years after the timeline for Abraham. Any text written during the time of Abraham would have been written in a Semitic script more appropriate to the Old Babylonian period (ca. 2000-1600 BCE), such as proto-Sinaitic (ca. 1850 BCE).

3) The final objection is based on the lack of archaeological evidence to prove that Abraham was more than just a Biblical character.

# **3. Refutations**

1) A tight coupling does indeed exist between the Book of Creation and the Hebrew Bible, but to reveal that profound link one must carefully follow Abraham's step-by-step instructions to construct the "231 Gates" or "God Table" as the oldest extant Old Babylonian mathematical table to define ancient string theory. The God Table is encrypted directly within the Holy Tetragrammaton. Once the lost meaning of God's holiest name has been properly deciphered, this mathematical membratical exegesis and hermeneutics of history's various creation allegories, from the origins of religion at Göbekli Tepe to the metaphysics of Plato's Dialogues.

2) The history of the alphabet begins with the Semitic proto-alphabetic scripts of the Levant during the early  $2^{nd}$  millennium BCE (Sampson, 1990). The earliest of these scripts is proto-Sinaitic (ca. 1850 BCE), which developed from Semitic-speaking workers and slaves in Egypt (Simons, 2011). Philologists have convinced most academics that the Book of Creation was written in much too recent a Semitic script to be authentic. Surprisingly, scholars have failed to consider the existence of an Abrahamic oral tradition. "*According to a reliable tradition, it* 

was Rabbi Akiba who actually wrote the Sefer Yetzirah, even though its teachings are attributed to Abraham" (Kaplan, 1979: p.185). The Kabbalistic tradition of *gematria* is key to deciphering the Book of Creation's mathematical riddles. Philologists and Biblical scholars generally tend to ignore or minimize the importance of such esoterica. Within the 22 letters of the Hebrew alphabet, the letters are assigned a numerical value. Kabbalistic Gematria is based on these numerical assignments, but Hebrew is just one of several "Abjad" alphabets. The term got its name from the first four letters (A-B-J-D) of several different Semitic alphabets. For example, there are 28 letters in the Arabic alphabet, within which the first letter represents 1, the second letter, 2, etc., up to 9. Letters then represent the first nine intervals of 10s, and those of the 100s ending with 1000, for a total of 28 decimal alphanumeric characters (Chrisomalis, 2010: p. 162). The older Abjad alphabets, like Hebrew, Aramaic, paleo-Hebrew, and Phoenician have 22 letters. The numeric values for each 22-letter Abjad alphabet ranges from 1 to 9, 10 to 90, and 100 to 400. Once again, this critical piece of the religious puzzle has been missing throughout the centuries because philologists tend to stay in their linguistic lane, leaving the esoterica of applying gematria to Biblical exegesis to the rabbis. Unfortunately, the rabbinical community has stressed "linguistic manipulation" rather than the numeric ratios defining the "secret paths" that comprise the "231 Gates". As a result, the rabbis have been unable to grasp the Kabbalistic meaning of the "Oral Law" on Mount Sinai, which explains why Moses needed a sophisticated education to transcribe the Written Law into the Torah.

3) The lack of archaeological evidence to prove Abraham's existence does not necessarily mean that he did not exist in history. Based on the two refutations listed above, whoever "passed along the mathematics of the God Table to later generations" is the man that history has come to know as Abraham. No matter who wrote the Book of Creation, and no matter when the text was finally transcribed, the God Table embodies the earliest known treatise on ancient string theory that shaped and structured the original conceptualization of monothe-ism's God and polytheism's gods, with all of Creation emanating from a single divine vibratory source (Schatz, 2012: pp. 127-131). This demonstrable common ground renders this and all other objections to the text's authenticity entirely moot.

## 4. Discussion

As previously mentioned, Leo Baeck and Gershom Scholem were convinced that the only way to decipher the Book of Creation was the Pythagorean "Harmony of the Spheres", but neither scholar could support their speculation with mathematical details. In the following paragraph, Maimonides admitted that Judaism lost the metaphysical "Secrets of the Law" based on the "Harmony of the Spheres" (Maimonides, 1904, 2007):

"...it was but natural that no portion of 'the Secrets of the Law' (i.e., meta-

physical problems) would be permitted to be written down or divulged for the use of all men. These secrets, as has been explained, were orally communicated by a few able men to others who were equally distinguished. Hence the principle applied by our teachers, 'The secrets of the Law can only be entrusted to him who is a counselor, wise in crafts, and so on'. The natural effect of this practice was that our nation lost the knowledge of those important disciplines. Nothing but a few remarks and allusions are to be found in the Talmud and the Midrashim, like a few kernels enveloped in such a quantity of husk, that the reader is generally occupied with the husk and forgets that it encloses a kernel."

Since high school, my obsession with the Pythagorean "Harmony of the Spheres" led to additional Pythagorean studies with my mentor, Dr. Ernest McClain. This preparation enabled me to audit courses in a rabbinical seminary, where I discovered that the Book of Creation was filled with the Platonic numbers McClain was teaching me. Old Babylonian "Abrahamic" mathematics dates to about 1200 years before Pythagoras was born. Ironically, we might say that the last true Kabbalist to understand the God Table appears to be Plato. We know this because the same "Pythagorean" mathematics structured Platonic metaphysics (McClain, 1978).

Here are several passages cited from Plato's writings that underscore the Greek notion of ethos, and the profound effect of sound and music on all aspects of human life. Ernest McClain's thesis espoused the Pythagorean "Harmony of the Spheres" as the key to Plato's philosophical writings (Godwin, 1993: pp. 2-3). Plato believed that music and the mathematics of sound comprised the most potent force in the universe. Within Platonic metaphysics, music spoke directly to man's soul, while music's mathematical basis linked the microcosm of man's soul to the macrocosm of the cosmos as the foundation of all knowledge.

# On Creation:

"Moreover, as I have now stated several times, he who has not contemplated the mind of nature, which is said to exist in the stars, and gone through the previous training, and seen the connection of music with these things, and harmonized them all with laws and institutions, is not able to give a reason of such things as have a reason."

- Laws, III, 967e (Plato, 1961).

#### Ethos of Character.

"If one listens to the wrong kind of music, he will become the wrong kind of person; but, conversely, if he listens to the right kind of music he will tend to become the right kind of person."

- Republic 401e (Plato, 1961).

#### For the Soul:

"[The just man] will always be found attuning the harmonies of his body for the sake of concord in the soul. By all means, he replied, if he is to be a true musician."

- Republic 591d (Plato, 1961).

#### For Society:

"For a change to a new type of music is something to be aware of as a hazard to all our fortunes. For the modes of music are never disturbed without unsettling of the most fundamental political and social conventions..." - Republic, IV, 424c (Plato, 1961).

#### Power to Heal:

The power of music to heal was known to both the Hebrews and the Greeks. The shepherd David soothed King Saul's madness with his lyre. In the following passage, Rabbi Gikatilla references the mystic as "true physician" with healing power that derives from the Hebrew letters of God's holiest name:

"The mystic becomes the true physician who may find the appropriate remedy for every kind of malady. He activates the magic power inherent in the letters and operates with the dynamic energy thus activated by linguistic manipulation." (Morlok, 2011: p. 103)

In his book, "The Ark Before Noah", Assyriologist Irving Finkel expresses his dismay that the tablet known as Gilgamesh XI "gives no reason for the flood". According to Finkel, the operative Babylonian word is *rigmu* (noise). Finkel translates a passage from the Old Babylonian Atrahasis Epic, as Enlil addresses his fellow gods: "The noise of mankind has become too intense for me. With their uproar I am deprived of sleep." (Finkel, 2014: pp. 2-3)

Finkel comments: "To our mind, noise abatement as justification for the total annihilation of life looks a bit over the top. There can be no doubt however that this was the reason: seething human clamour had reached an intolerable point." (Finkel, 2014: p. 93)

The Biblical flood was brought about by mankind's lack of morality as justification for the destruction of mankind. Based on a modern historical perspective, few would have imagined that religion's focus on morality was originally a focus on the sound of harmony versus cacophony within the body, soul, and universe. In his second book, the Pythagorean Plato, Ernest McClain pointed out that the ever-increasing noise, clamor, and ultimate demise of Plato's Atlantis, occurred because of the non-musical *rigmu* evident in the souls of successive generations of Atlanteans (McClain, 1978: pp. 77-96).

"In the beginning..." the "Voice of God" uttered His own holy name, יהוה, bringing order to the primordial darkness and chaos with the inner vibrational essence (Hebrew: *pnimiyut*) of His holy name.

"<sup>1</sup>In the beginning of God's creating the heavens and the earth—<sup>2</sup>when the earth was astonishingly empty, with darkness upon the face of the deep, and the Divine Presence hovered upon the surface of the water. <sup>3</sup> God said, 'Let there be light', and there was light" (The Chumash, 2002).

"The One" (=1) utters the Hebrew letter/number Yod = ? = 10 which is the first letter of  $\pi\pi\pi$ ". This creates a harmonic progression along the "X" axis (Figure 1(a)). The integer ratios of the "X" axis define the inner vibrational essence of Divine Light that models all that is Good in the world (Kaplan, 1990: p. 203). Within this two-dimensional Cartesian-like diagram, the "Y" axis defines a descending arithmetic progression that is reciprocal to the "X" axis harmonic progression. Since the dawn of civilization, these reciprocal axes have mathematically modeled all "parting of the waters" allegories, symbolizing the dualism of one's spiritual essence versus one's material being. For example, in the Book of Exodus 14:21 (The Chumash, 2002), Moses leads Israel to the Promised Land through the divided waters of the Red Sea.

<sup>«21</sup>And Moses stretched out his hand over the sea, and the LORD moved the sea with a strong east wind all the night, and He turned the sea into damp land and the waters split. <sup>22</sup>The Children of Israel came within the sea on dry land; and the water was a wall for them on their right and on their left."

The reciprocity of the "X" and "Y" axes was created when God created Light on Day One. On Day Two of Creation, the mathematics of sound describes the *secret paths* that fill in the empty space between the "division of waters above from waters below". Genesis 1:6-8 (The Chumash, 2002) describes the "Voice of God" as the sonic essence of Day Two's "Heavenly Firmament" or "Heavenly Vault" (Figure 2), which integrates the reciprocal harmonic and arithmetic progressions.

<sup>"6</sup>And God said, 'Let there be a firmament in the midst of the waters, and let it divide the waters from the waters.' <sup>7</sup>And God made the firmament and divided the waters which were under the firmament from the waters which were above the firmament: and it was so. <sup>8</sup>And God called the firmament Heaven. And the evening and the morning were the second day."



Figure 1. (a) Genesis Day 1 mathematical model (b) Integer ratios of sound.

-	l:1=d	1:2=d	1:3=a	1:4=d	1:5=f#	1:6= <b>a</b>	1:7=c	l:8=d	1:9=e	1:10=f#	1:20=f#
R	2:1=d	2:2=d	2:3=a	2:4=d	2:5=f#	2:6=a	2:7=c	2:8=d	2:9=e	2:10=f#	2:20=f#
ITHMET	3:1=g	3:2=g	3:3=d	3:4=g	3:5=b	3:6=d	3:7=f	3:8=g	3:9=a	3:10=b	3:20=b
	4:1=d	4:2=d	4:3=a	4:4=d	4:5=f#	4:6=a	4:7=c	4:8=d	4:9=e	4:10=f#	4:20=f#
	5:1=bb	5:2=bb	5:3=f	5:4=bb	5:5=d	5:6=f	5:7=ab	5:8=bb	5:9=a	5:10=d	5:20=d
IC	6:1=g	6:2=g	6:3=d	6:4=g	6:5=b	6:6=d	6:7=f	6:8=g	6:9=a	6:10=b	6:20=b
SE	7:1=e	7:2=e	7:3=b	7:4=e	7:5=g#	7:6=b	7:7=d	7:8=e	7:9= <b>f</b> #	7:10=g#	7:20=g#
R	8:1=d	8:2=d	8:3=a	8:4=d	8:5=f#	8:6=a	8:7=c	8:8=d	8:9=e	8:10=f#	8:20=f#
Es	9:1=c	9:2=c	9:3=g	9:4=c	9:5=e	9:6=g	9:7=bb	9:8=c	9:9=d	9:10=e	9:20=e
	10:1=bb	10:2=bb	5	0 6	N	6=f		M/		-	10:20=d
	20:1=bb	20:2=bb	20:3=f	20:4=bb	20:5=d	20:6=f	20:7=ab	20:8=bb	20:9=c	20:10=d	20:20=d
-	30:1=eb	30:2=eb	30:3=bb	30:4=eb	30:5=g	30:6=bb	30:7=db	30:8=eb	30:9=f	30:10=g	30:20=g
	40:1=bb	40:2=bb	40:3=f	40:4=bb	40:5=d	40:6=f	40:7=ab	40:8=bb	40:9=c	40:10=d	40:20=d
v	50:1=gb	50:2=gb	50:3= <b>d</b> b	50:4=gb	50:5=bb	50:6=db	50:7=fb	50:8=gb	50:9=ab	50:10=bb	50:20=bb
	60:1=eb	60:2=eb	60:3=bb	60:4=eb	60:5=g	60:6=bb	60:7=db	60:8=eb	60:9= <b>f</b>	60:10=g	60:20=g
	70:1=c	70:2=c	70:3=g	70:4=c	70:5=e	70:6=g	70:7=bb	70:8=c	70:9=d	70:10=e	70:20=e
	80:1=bb	80:2=bb	80:3=f	80:4=bb	80:5=d	80:6=f	80:7=ab	80:8=bb	80:9=c	80:10=d	80:20=d
	90:1=ab	90:2=ab	90:3=eb	90:4=ab	90:5=c	90:6=eb	90:7=gb	90:8=ab	90:9=bb	90:10=c	90:20=c
	100:1=gb	100:2=gb	100:3=db	100:4=gb	100:5=bb	100:6= <b>db</b>	100:7=fb	100:8=gb	100:9=ab	100:10= <b>bb</b>	100:20=bb
	200:1=gb	200:2=gb	200:3=db	200:4-gb	200:5=bb	200:6=db	200:7=fb	200:8=gb	200:9=ab	200:10= <b>bb</b>	200:20=bb
	300:1=cb	300:2=cb	300:3=øb	300:4=cb	300:5=eb	300:6=gb	300:7=bbb	300:8=cb	300:9= <b>db</b>	300:10=eb	300:20=eb

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Figure 2. The "Heavenly Firmament" or "Vault" on days one and two of creation.

During Days Three through Six of Creation, the "Hand of God" metaphorically reaches down from His Heavenly abode in the upper left corner of the God Table (=1/1) to "engrave" the geometry of time and space as the inner vibrational essence of the material realm inhabited by man. The four lines that emanate from the upper left corner of **Figure 3** are not actually linear, they describe geometric progressions identified by common ratios 2:3, 4:6, etc., to form a pyramidic "World Soul" when taken along with their reciprocal ratios of 3:2, 6:4, etc. The World Soul is "contained" by a second pyramidic structure that defines the "World-Body" created from the geometry of reciprocal ratios 3:5, 6:10 and 5:3, 10:6, etc. In **Figure 4**, these four "lines" have been isolated from the God Table to graph the two Biblical "Trees" in the Garden of Eden. Those "Trees" get transformed into Holy Mountains or patriarchal "Tents" after Adam and Eve's Fall from Grace.

The completed God Table is responsible for modeling the entire matrix of religious and metaphysical symbolism since the dawn of civilization. For example, these pyramidic constructs model the world's Pyramids and Ziggurats, the Holy Temple, Holy Mountain, Tent of Meeting, Star of David, etc. The appearance of four two-dimensional lines might be better understood as "flattened out" versions of multi-dimensional, non-linear symbols of time and space. The God Table attempts to simulate four-dimensional space-time in a two-dimensional Cartesian-like coordinate system. This integration of harmonic, arithmetic, and geometric progressions defines ancient string theory. Sonic theology tells us that the spirit of man can spiritually "hear" the geometry of the "Hand of God" just as man spiritually "hears" the "Voice of God". To understand the two "Trees" we need to understand how they are "nourished" by primordial elements. Once we learn that the inverse of logarithms is exponentiation, then for any real number x:  $x = \log_2 n <=> 2^x = n$ . The primordial elements can therefore be written as: Earth =  $\log_2 n$ , Water =  $\log_3 n$ , Wind =  $\log_5 n$ , and Fire =  $\log_7 n$ (Schatz, 2022). This translates into the integer ratios of sound: 1:2<sup>w</sup> = Earth (a progression of musical octaves); 2:3<sup>x</sup> = Water (musical fifths); 4:5<sup>y</sup> = Wind (musical thirds); 8:7<sup>z</sup> = Fire (musical sevenths). The two sonic "Trees" in the Garden of Eden are metaphorically "nourished" by the vibrational essence of Earth, Water, and Wind as depicted in **Figure 4**. After Adam's sin, the Fires of Heaven became restricted to the domain of God and holy men.

After Adam and Eve's fall from grace, the spiritual "branches" of the two Heavenly "Trees" became truncated, leaving just the materialistic "roots" of these dualistic "Trees". The ubiquity of the God Table's sonic "roots" (Figure 5) mathematically models religion's most important pyramidic symbols, including the Egyptian Pyramids, the Mesopotamian Ziggurats, the Holy Mountain, the Tent of Meeting, the Star of David, and the Four-Horned Altar. In Figure 4, we should be aware of how the material essence of Adam's tiny "Tent" (Adam = 45) reflects into the reciprocal spiritual image of his soul (dotted lines).



**Figure 3.** God table marries the sonic "Voice of God" to geometric "Hand of God".



Figure 4. Two "Trees" in the garden transformed into ziggurats "After the Fall".



**Figure 5.** (a) Sonic integers that model religion's transformation from common man to holy man; (b) Mesopotamian ziggurat; (c) Biblical four-horned altar

Adam was not permitted to remain in Heaven because his "Tent" was not yet a musical "Tent". **Figure 5(a)** describes the four necessary steps that will transform a common man's "unsingable" inner vibrational essence (i.e., the soul) into the "singable" inner vibrational essence of a holy man and prophet. Sonically, "unsingable" progressions of musical thirds (quintuple progression) and fifths (triple progression) defines the geometry of pyramids and ziggurats that are transformable into a "singable" scale within the Four-Horned Altar.

The Four-Horned Altar in Step Four of **Figure 5(a)** is comprised of a 360:720 musical octave that contains all the notes of a "singable" chromatic musical scale. Step Two truncates the Pyramid's numbers less than 720 to form a Ziggurat. Step Three multiplies all numbers in the Ziggurat by whichever power of two transposes the Ziggurat's numbers into the 360:720 octave range. Step Four "burns away" the divine sparks that remain outside the Four-Horned Altar even though they might still exist within the Ziggurat. Only the souls remaining within the Four-Horned Altar stand to "inherit in the Promised Land". The Four-Horned Altar is a metaphor for the crucible of *Tardemah* (Hebrew: deep sleep or trance) as the priestly practice that burns away the divine sparks that don't belong there. One can observe from Step Four in **Figure 5** that a holy man must be trained in music, in much the same way that Plato ideally required the citizens of Greece to be educated in music. An important example of how Biblical allegory is shaped by ancient music theory can be found within the Tent of Abraham. It models the

allegorical details of who will "inherit in the Promised Land" to form Israel's sacred "Four-Horned Altar".

Just as there were 12 princes of Israel, there were 12 princes of Ishmael (The Chumash, 2002: Genesis 17:20), and all 24 princes were born within the Ziggurat-shaped "Tent of Abraham" (Figure 6(a)). In Genesis 32:28 (The Chumash, 2002), God gives Jacob the name Israel, but not all 12 princes of Israel received an inheritance in the Promised Land.

Biblical allegory was created to carefully sculpt the mathematics of holiness as Step Four of Figure 5. To begin, the first-born of Jacob's sons was Reuben. According to Hebrew law, the first-born is the son who inherits the birthright. In this case, however, when Reuben grew into adulthood he lay with Jacob's concubine Bilhah, the mother of Dan and Naphtali. When Jacob heard this, Reuben forfeited his birthright; and so, Reuben's pnimiyut are not included within the 11 tones of the Four-Horned Altar. As first born, Reuben (=1) forms the "cornerstone" of Figure 6(a) & Figure 6(b). In Figure 5 however, we must transpose Reuben's number into a 360:720 musical octave, multiplying by some unknown power of 2. In this case, we would have to multiply Reuben's vibrational essence (=1) by a duple progression of nine musical octaves  $(1 \times 2^9 = 512)$ , which we can see in Step Three, Figure 5(a). In keeping with our theory of mathematically modeled textual nuances, Torah commentary in Genesis 35:23 states: "Although the birthright was later transferred from Reuben to Joseph, our verse calls Reuben the firstborn, to indicate that he would continue to have certain privileges of his status" (The Chumash, 2002: p. 191). Reassigning the birthright implies that it was Joseph who was taught to pronounce יהוה, the core of the Abrahamic birthright, but Reuben would still be allowed to lead one of the 12 tribes.



**Figure 6.** (a) Tent of Abraham; (b) The Four-Horned altar as a subset of the tent of abraham names the 11 princes to inherit in the promised land.

Since Joseph received the birthright in place of Reuben, we can find Joseph in **Figure 6**, and then locate his vibratory essence in **Figure 5(a)** as 125. Since Joseph inherited the Abrahamic birthright in place of Reuben, we might wonder why Joseph's transposed vibrational essence in Step Three of **Figure 5(a)** ( $125 \times 2^2 = 500$ ) does not appear inside the Four-Horned Altar, even after musical transposition? The answer can be found in Genesis 48:5 (The Chumash, 2002), which cites God speaking directly to Joseph:

"And now, your two sons who were born to you in the land of Egypt before my coming to you in Egypt shall be mine; Ephraim and Manasseh shall be mine like Reuben and Simeon. But progeny born to you after them shall be yours: they will be included under the name of their brothers with regard to their inheritance."

As first-born, Reuben would have received a double portion in the land of Israel. Now it was Joseph who received the double portion through his two sons, Manasseh ( $225 \times 2 = 450$ ) and Ephraim (=675). So, although it seems that Joseph was excluded from his inheritance in Israel, he received a double portion through his two sons, just as the mathematics prescribes. With Reuben and Joseph now excluded from the inheritance of the 12 tribes, there were ten sons left. Jacob could now pay his 10% tithe to the priesthood by offering his son Levi ( $5 \times 2^7 = 640$ ) to be the servant of God. The great Kabbalist Isaac Luria is quoted in the Tanya, stating the following about the Levite priests:

"The service of the Levites was to raise the voice of melody and thanksgiving, with song and music, with tunefulness and harmony, in a manner of 'advance and retreat'..." (Zalman, 1973: p. 263)

As such, Levi's tribe was not given a portion of Israel to inherit and so were excluded from the *pnimiyut* of the Four-Horned Altar. **Figure 7** depicts the Four-Horned Altar formed within the Tent of Abraham, and the children of Abraham's ascent to the Chariot-Throne of Israel.



Figure 7. The holy mountain, tent of Abraham, star of David, and throne of Israel.

Plato's Dialogues, as previously cited, bluntly state that the key to metaphysics is training in music. The Bible's mystical tradition is a bit more subtle in articulating its foundational belief that musical training is the key to mysticism, magic, and healing. *Tardemah* is a sacred deep meditation practice that effectively reorders the harmonics of a human soul from "unsingable" to "singable". Within an Eastern context, that meditation practice is referred to as Moksha. The more sophisticated mantras are melodious incantations rather than just repetitive sounds. As both religious and metaphysical writings suggest, meditation and musical training are necessary to realize our potential as spiritual beings.

The inner vibratory sounds of a musician's soul ascend to God during *Tarde-mah/Moksha* like the divine souls of Israel that ascend within the crucible of the Four-Horned Altar to realize the Star of David's Chariot-Throne of Israel. *Tar-demah's* trance-like, hypnogogic meditation practice has always been history's transformative spiritual vehicle to enlightenment and holiness. Within Biblical allegory, *Tardemah* empowers man to ride in the "Mercy Seat" of Ezekiel's Chariot that defines the Throne of Glory.

The word *Tardemah* occurs only seven times in the Hebrew Bible. Within Jewish tradition this practice is referred to as "laying Tefillin" (i.e., performing the Abrahamic practice of "7 Circuits around the Sacred Cube") every weekday, culminating in Sabbath prayer. Seven years of Sabbath prayer is called a Sabbatical; seven Sabbaticals (49 years) is called a Jubilee year. The first indication of spiritual success is when a righteous man can liberate his soul as a *Golem*, which then stands before him and prophesizes the future (Scholem, 1974: p. 181). By the Jubilee year the liberated soul has been "polished" into a *Shechinah*, which fully realizes the "Image of God" or "Divine Presence". Jacob died after 147-year, which is the equivalent of three Jubilee years ( $49 \times 3 = 147$ ).

Once a holy man can liberate the *Shechinah* within him, God is able to metaphorically descend and "speak" to that holy man within his "Tent of Meeting". Similarly, the symbolism of Mount Sinai puts God at the peak of the Holy Mountain while Moses gazes into the invisible spiritual reflection of the Holy Mountain that is the source of Divine emanation (=1/1) in the upper left-hand corner of **Figure 3**.

In summary, there are two sides to history's theological "coin". The first of these is the sacred, trance-like, hypnogogic meditation practice known within the Biblical tradition as *Tardemah* and known within the Vedic tradition as *Moksha* (Sanskrit: "Liberation"). The flip side of this theological coin describes the lost meaning of ההוה as articulated in the mathematical/musical terms of the God Table. This marks history's earliest attempt to understand the mathematics and science of "liberation" in terms more empirical than the experiential phenomenon of enlightenment and liberation might suggest.

The writings of first century historian Flavius Josephus imply that Enoch, the first holy man and "Great Scribe" (Singer, 1901) carved the *Razah D'Oraytah* (Secret of Knowledge) into stone pillars to preserve both sides of this theological/scientific "coin" for posterity after the prophesied flood. There is also a Sumerian precedent for the Jewish mysticism of pronouncing the Word of God.

During the Sumerian Early Dynastic period, the Ensi of Lagash pronounced the holy name of *Ningišzida*, liberating that god as the caduceus of Gudea's Soul. On the Day of Atonement within a Biblical context, the High Priest "pronounces" לתוח to simulate death, thus liberating the caduceus of the High Priest's soul to enter the "Holy of Holies" in prayer to enable Israel to be inscribed in the Book of Life for another year. This Sumerian precedent does not invalidate the Jewish mystical tradition in any way; rather, it demonstrates that ancient Sumer shared the same spiritual tradition of deep meditation to liberate the soul.

The two reciprocal "lines" defining the pyramid of the "World Soul" also symbolizes a three-dimensional tree-serpent in Genesis, as well as the twin serpents within Mesopotamia's oldest cylinder seals, depicting how the primordial elements of Earth and Water are entwined within a man's soul as a caduceus (Schatz, 2022). The two reciprocal geometric "lines" depicting the "World Body" contain the "World Soul". In a caduceus, once the soul is contained by the body, it can be raised up to Heaven on the "Wings" of *YHVH* ( $\pi_1\pi_2$ ), as defined by the two Hebrew letter/numbers *Heh* (=5) = " $\pi$  -  $\pi$ ". Archaeologist E. Douglass Van Buren corroborates the antiquity of two intertwined Bašmu tree-serpents in her article entitled "Entwined Serpents" (Figure 8):

"In Sumerian art there are certain motives or compositions which must have been derived from very ancient prototypes. These motives flourished during the earlier phases of Sumerian culture but disappeared almost entirely... One such motive is that of two serpents entwined which is found as a fully developed design on stamp-seals. A seal impression came to light in the Uruk XII level, that is to say, in the Al-Ubaid period, a period of great antiquity in the use of seals." (Van Buren, 1935: pp. 53-65)

The oldest pre-Biblical alphabetic cuneiform tablets were discovered in Ugarit, an ancient Canaanite port city in modern Syria within the ruins known as Ras Shamra. Scholars know that these Ugaritic texts were transcribed during the approximate time of Moses (ca. 1350 BCE), but "Most scholars agree that they could have been composed two or three centuries before they were finally written down, having been transmitted orally until then" (Coogan, 1978: p. 11). This suggests that an Abrahamic oral tradition originated during Mesopotamia's Amorite period (2000-1600 BCE). Abraham's ancestors were believed to be Semitic Amorites who migrated east from Canaan to the city of Ur soon after the fall of the last Sumerian Dynasty of Ur III. If Abraham's Book of Creation was originally composed during this early Amorite period, it would have been written using a Semitic proto-Sinaitic cuneiform Abjad alphabet. If a proto-Canaanite Book of Creation appeared a few centuries later, then philologists would be more inclined to acknowledge Abraham's existence. Unfortunately, the mathematical structure of the Ugaritic pre-Biblical religious texts remained hidden until the Book of Creation was finally transcribed into Biblical Hebrew (ca. 200 CE) and deciphered by this author. Only then could the "God Table's" ancient string theory be applied to the textual exegesis of these recently discovered Ugaritic texts.



**Figure 8.** (a) Sumerian cylinder seal of entwined Bašmu serpents (b) Syrian entwined *Mušhuššu* snake-dragon cylinder seal resembles the leopard-serpent on the pre-Dynastic Egyptian Narmer Palette (ca. 3200 BCE) (c) God Table; Neo-Sumerian "Libation vase of Gudea" (ca. 2200 BCE) comprised of reciprocal entwined Bašmu serpents raised up on the wings of reciprocal *Mušhuššu* serpent-dragons. King-Priest Gudea would "pronounce" the Word of God *Ningishzida* to liberate the caduceus of the god that lived within him as his soul; Biblical Seraphim; Babylonian, Greek, & Roman Caduceus; Egyptian Sun-Disk Caduceus.

A French archaeological dig in 1928 unearthed a trove of pre-Biblical Semitic Canaanite cuneiform texts, including an Ugaritic clay tablet categorized as KTU 1.1 III. Old Testament scholar Richard J. Clifford cites this text to demonstrate the parallels between Moses' "Tent of Meeting" and the Canaanite "Tent of El". Clifford explains that both the Tent of Meeting and the Tent of El were tentdwellings of deities and oracles (Clifford, 1971: pp. 221-227). Parallel descriptions of El's tent-dwelling always mention it as the source of cosmic waters in the context of some deity or messenger asking El for something or taking orders from him. Their underlying sonic structure is defined by Figures 1-3. "Then they set face toward El at the sources of the 'Two Rivers', In the midst of the pools of the Double-Deep. They entered the tent of El and went into the tent-shrine of the King, the Father of Years"



**Figure 9.** (a) The Pyramidic Structure of the World Soul as Entwined Tree-Serpents. (b) The Old-Babylonian Abrahamic Caduceus marries (a) to (c) (c) The Pyramidic Structure of a Sanctified Body Raised Up on "Wings" to God.

A second description of El's dwelling describes it as a mountain. This description comes from the story of Baal and Yam (God of the Sea). The god Kothar (craftsman, architect, soothsayer, and magician) is summoned to El's Mountain dwelling to order Kothar to build Yam a palace.

"[Then] indeed he set (his) face toward El at the source(s) [of the rivers], [amid springs of the two oceans]; [he penetrated] the mountain(s) of El and entered the massif of the king, [father of years]" (Gibson, 2004: p. 37).

The Canaanite word for "Sea" is Yam, the Ugaritic god of rivers and the sea. He is also called Judge River, and his palace was in the Abyss, the Great Deep associated with primordial chaos. A third version of this scene finds us in El's dwelling as cited in the Ba'al Cycle. In this instance, Asherah is identified as the queen consort of the Sumerian god Anu and the Ugaritic El. She is also called Lady Asherah-of-the-Sea or "she who walks on the sea".

"Then she headed toward El at the source of the two rivers, In the midst of the two seas' pools, She opened El's tent and entered the shrine of the King, the Father of time" (Johnston, 2004: p. 418).

In each passage, the visitor turns his "face toward El" at the source of two bodies of water. The Greek word "Mesopotamia" translates as "between two rivers". The rivers in question are often referred to by their Greek names, Tigris, and Euphrates. They frame a "fertile crescent" that runs through the heart of Mesopotamia. The Numinous quality that defined these two rivers is based on the reciprocity principle of "as above, so below", which defines a material realm accompanied by its spiritual mirror-like reflection (i.e., mathematical reciprocity). The Harmonic Firmament structures the second line in each of these Ugaritic passages: "amidst pools of the Double-Deep", "amid springs of the two oceans", or "In the midst of two seas' pools". The architecture of the "Temple" appears as a pyramidic structure emanating from God (=1/1) in the upper left-hand corner of **Figure 3**, built from geometric progressions "amidst" the reciprocal waters of sound's harmonic and arithmetic "Heavenly Firmament" (i.e., the "Double-Deep").

Every letter/number in the God Table (Figure 3) can be found in the 22-letter Biblical Hebrew Abjad alphabet. The Book of Creation's God Table was therefore transcribed using the numerical terms found in an Abjad Biblical Hebrew alphabet, but there would have been no difference in its alphabetic/numeric construction if we were to substitute the terms of an Abjad proto-Sinaitic or proto-Canaanite alphabet. Ugaritic religious writings verify the plausibility of an underlying Abrahamic sonic oral tradition that was finally transcribed into the Book of Creation (200 CE). There is evidence that the God Table was invented long before the birth of Abraham, and even before the invention of the proto-Sinaitic alphabet (ca. 1850 BCE). Examining that evidence requires a deeper understanding of the earlier base-60 number system used in Sumer and Akkad before the invention of Semitic Abjad alphabets.

We know that the God Table's pyramidic structures antedate Abraham because there were Egyptian pyramids constructed to contain a pharaohs soul, long before the birth of Abraham. This implies that Abraham inherited his mathematics from more ancient sources and did not come up with it on his own. The Pyramid at Saqqara, Egypt, is considered the world's oldest pyramid. It is no coincidence that it was built by the legendary polymath Imhotep (ca. 2630 BCE). In Mesopotamia, this period was called Sumer's Early Dynastic Period (ca. 2900-2350 BCE).

In a previous paper (Schatz, 2022), we showed how DNA (Basal Eurasian Haplogroup E1b1b Y-DNA), distinctive cranial characteristics, expertise in farming, and other factors, contribute to our ability to identify the oldest highly evolved modern human culture as Ice Age proto-Afroasiatic Ethiopians who first migrated to the Levant about 15,000 years ago (Ehret, 2016). In 1928, British archaeologist Dorothy Garrod discovered 132 Epipaleolithic skeletons that date to approximately 15,000 BP. She found them at Shuqba cave in Wadi an-Natuf, so she named them Natufians. Once the Holocene period ended the Ice Age, Natufians emerged from the shelter of their Canaanite caves and began building the world's first religious temple at Göbekli Tepe, ca. 9600 BCE (Curry, 2008). As the area's first farmers, the Natufians first settled the Neolithic city of Jericho (ca. 9000 BCE), and then began a semi-nomadic migration west, settling numerous neolithic sites along the way in the Levant, Mesopotamia, the Indus Valley, and pre-Dynastic Egypt. When they reached the Zagros Mountains of Iran (ca. 7000 BCE), they established the Neolithic settlement of Susa, in the county of Elam, said to mark the beginnings of Iranian history.

Before DNA removed much of the guesswork from tracking the lineage of different cultures, pre-Sumerian Natufians had been misclassified as a superior Aryan sub-race of Caucasians. The DNA of ancient Persia's Aryan ancestors contradicts the Caucasian thesis. The Aryan genetic admixture establishes them as descendants of the Ethiopian/Natufian continuum of civilization's founders.

"Natufians, who share craniometric affinity with North Africans and were of the Y-chromosomal haplogroup E, are of Basal Eurasian ancestry, and the Basal Eurasian ancestry in Natufians is consistent with originating from the same population as Neolithic Iranians and Mesolithic Iranians. Mesolithic Iranians ( $66\% \pm 13\%$ ), Neolithic Iranians ( $48\% \pm 6\%$ ), and ( $44\% \pm 8\%$ or 63%) share Basal Eurasian ancestry" (Lazaridis et al., 2016).

The Sanskrit word Aryan (or Arya) generally means "noble" or "honorable", but it literally translates as "one who strives upward". In the Persian language, Aryan evolved to "Erān", and finally to "Irān" in modern Persian. Henri Frankfort tells us that the first Iranian settlers in Mesopotamia came from the "Land of the Aryans" in the Iranian highlands of the Zagros Mountains at the beginning of the Ubaid period [ca. 5500-4100 BCE].

The Semites left Africa during the Uruk period (ca. 4100-2900 BCE) (Sołtysiak, 2006: pp. 145-158), and headed for the Levant, while some migrated East toward Mesopotamia. Samuel Noah Kramer, a widely acknowledged authority on ancient Sumer, attributes the "material and spiritual heritage" of Sumer to a fourth millennium Irano-Semitic cross-fertilization (Kramer, 1981: p. 237). The earliest known pictograms carved into clay tablets appeared during the Uruk period, when the city of Uruk became the model of a cosmopolitan city, enriched by writing and mathematics. The Uruk model gradually spread throughout the Fertile Crescent. That said, however, this author's 2022 paper corroborates Kramer's belief that the pre-Sumerian Aryans had been "far more culturally advanced" than the Irano-Semitic Sumerians. This paper supports Kramer's argument by underscoring the cultural achievements attributed to the Ethiopian/Natufian/Aryan genetic continuum.

The Uruk period (ca. 4100-3100 BCE) was followed by the Jemdet Nasr Period (ca. 3100-2900 BCE). During this latter period, the earliest Sumerian cuneiform appeared as wedge-shaped markings in clay that were largely limited to various administrative lists of foods and animals. The first literary hymns and historical king lists appeared during the Early Dynastic Period (2900-2350 BCE). One of the oldest legible Sumerian cuneiform religious texts is called the Kesh Temple Hymn (ca. 2600 BCE). An ancient knowledge of vibrating strings (i.e., ancient string theory) can also be dated to this period, based on the Sumerian ability to craft musical instruments from a mathematical crosswalk between pitch and string length. This was confirmed in 1929, when British archaeologist Leonard Wooley discovered the oldest Sumerian musical harp (ca. 2600 BCE), called the *Silver Lyre of Ur* (Dumbrill, 2015). Before we can envision the earlier version of Sumer's God Table, we must first gain some insight into their sexagesimal base-60 number system, so we can better appreciate how the Abjad alphabet helped facilitate the transition from base-60 to base-10.

As we take a closer look at this numeric transition, a historical perspective will help put these developments into context. As already mentioned, the last Sumerian Dynasty was the Third Dynasty of Ur (Ur III). Abraham's Amorite parents spoke an ancient Northwest Semitic-language of Afroasiatic descent (like Enoch, Noah, etc.). The Amorites ruled Ur, as well as several other Mesopotamian cities. Abraham's education would have therefore included a rich legacy of Ur's writings and priestly practices that evolved during the Neo-Sumerian and Old Babylonian period (ca. 1800 BCE), which were highpoints of civilization. Joseph Campbell writes that "Babylon was, according to a consistent tradition, the home of astronomy, and there the science of the stars formed the basis of intellectual culture" (Campbell, 1964: p.149). This position is supported by Otto Neugebauer, a renowned authority on ancient astronomy, who states: "We know absolutely nothing about an earlier, presumably Sumerian, development" (Neugebauer, 1969: pp. 29-30). Neugebauer's focus is on the sophistication of the Old Babylonian period (Neugebauer, 1950: pp. 1-8). Nevertheless, there are important extant Sumerian documents that we are now able to examine through the powerful rediscovered lens of history's "God Table".

The Sumerian God Table. Within monotheism, one God created the universe in seven days, but in Sumerian polytheism, seven gods, known as the Anunnaki, created and controlled the 7 key aspects of creation. This includes the four primordial elements, as well as the Sun, Moon, and Venus. Whereas Semitic Abjad letters also correspond to numerals, in the Sumerian language, each of the 7 Anunnaki were assigned specific number names in addition to their linguistic names (**Figure 10(b**)). As a result, a harmonic progression "X" axis and its reciprocal arithmetic progression "Y" axis look very different in Sumer than they did in Babylonia. Just as there are nine unique digits in **Figure 11** culminating in the number ten within base-10, there are 59 unique digits culminating in the number 60 within Base-60.

Reciprocity works in both base-10 and base-60. When two reciprocal base-10 fractions are multiplied together the resulting product will always be 1. For example, 3/4 and 4/3 are reciprocals because  $3/4 \times 4/3 = 1$ . Similarly,  $5/6 \times 6/5 = 1$ , etc. In base-60, however, when two base-60 reciprocal numbers are multiplied together, the product is always 60, because the number 60 is analogous to the all-inclusive and transcendent "One". The first six factors of 60: 1, 2, 3, 4, 5, 6 have their reciprocal in the second six factors of 60: 10. 12, 15, 20, 30, and 60 (**Figure 10(a)**). Reflecting this reciprocity was the Sumerian word for universe,

1	* 60 = 60	Or d Norma	Nouverie Neuve	Fraction of Time,				
2	* 30 = 60	God Name	Numeric Name	Space, or Angle				
2	50 - 00	Anu (Heaven)	60	*	1	=	60	
3	*20 = 60	Enlil (Wind)	50	*	6/5	=	60	
	20 00	Enki (Water)	40	*	3/2	=	60	
4	* 15 = 60	Sin (Moon)	30	*	2/1	=	60	
5	5 * 12 = 60	Utu (Sun)	20	*	3/1	=	60	
•	12 00	Inanna (Venus)	15	*	4/1	=	60	
6	* 10 = 60	Ki (Earth)	5	*	12/1	=	60	
	(a)		(b)					

**Figure 10.** (a) Base-60 Reciprocals. (b) The 7 Sumerian Anunnaki Names & Numbers.

71	<b>₹7</b> 11	<b>*{7</b> 21	₩7 31	47 41	K 51
8 2	17 12	<b>497</b> 22	<b># 17</b> 32	1 A2	th 17 52
ញី 3	13	代刑 23	<b>****</b> 33	43 HT 43	€€ m 53
<b>9</b> 4	14	₩00 24	<b>****</b> 34	A 44	<b>1</b>
₩¥ 5	₹₩ 15	₩₩ 25	₩₩ 35	₩ # 45	<b>€</b> € \$\$ 55
<b>6</b>	16	₩₩ 26	₩₩ 36	₩₩ 46	<b>*** **</b> 56
# 7	17	₩₩ 27	₩₩ 37	₩₩ 47	<b>₩</b> ₩ 57
₩ 8	18	₩₩ 28	₩₩ 38	₩₩ 48	₩₩ 58
<b>#</b> 9	₹# 19	₩₩ 29	<b>₩</b> 7 39	♥冊 49	�� 冊 59
₹ 10	₹ 20	₩ 30	40	50	

Figure 11. Sumerian and Babylonian Base-60 Counting.

an-ki, a compound word meaning heaven-earth. An became the father god of Heaven, and Ki (later known as Ninhursag) became the Earthmother goddess (Campbell, 1964: pp. 7-9; Kramer, 1981: p. 76). In the Sumerian story Enki and Ninmah we read: "Namma, [was] the primeval mother who gave birth to the senior gods" (Enki & Ninmah, 2016). Namma (or Nammu) was the serpent-goddess of the chaotic primordial saltwater seas. Her mate Engur symbolized the freshwater reservoir and underground springs (Abzu) that would introduce order to the primordial chaos, through their children An (god of Heaven) and Ki (Earthmother). An and Ki became the parents of Enlil (En = Sumerian Lord; *lil* = wind, breath, or spirit). The multiple meanings of "lil" translates to spirit, wind, and breath. It is not coincidental that the Hebrew word ruach has exactly the same multiple meanings: Ruach Hakodesh (Holy Spirit), Breath of God, or the two letters Heh as the "wings" of יהוה that ride on the Wind. Within the Biblical Wheels of Ezekiel, the number one is the only common factor among the primordial elements of Earth ( $=2^x$ ), Water ( $=3^y$ ), Wind ( $=5^z$ ), and Fire ( $=7^3$ ), implying that God is part of all objects and beings. Similarly, Ki's number is 5, is the only god-number that divides evenly into all the other Anunnaki Godnumbers. Figure 12 translates the Old Babylonian 22-letter Abjad God Table of Figure 3 into its Sumerian Base-60 version based on the same three mathematical progressions.

The oldest legible Sumerian literature (ca. 2600 BCE) is the Kesh Temple Hymn (TCS 3 169:31). It should be clear that this hymn is structured by the God Table. The mathematics of **Figure 3** and **Figure 12** make sense of this hymn, which has been translated from the original cuneiform as follows:

Temple, 'great shine' reaching heaven. True great temple reaching heaven. Temple, great crown reaching heaven. Temple, rainbow reaching heaven. Temple, whose gleam stretches into 'Heaven's Midst', Whose foundation is fastened on the Apsu. (Horowitz, 1998: p. 308)

**Figure 12**'s God Table precisely shapes and structures Assyriologist Samuel Noah Kramer's following summary of creation. It is a compilation of Kramer's numerous cuneiform translations and wide-ranging knowledge of Sumerian literature.

"The earth, they thought, was a flat disk, heaven, a hollow space enclosed at top and bottom by a solid surface in the shape of a vault. Just what this heavenly solid was thought to be is still uncertain... Surrounding the 'heaven-earth' on all sides and at top and bottom was the boundless sea, in which the universe somehow remained fixed and immovable... In this primeval sea was somehow engendered the universe, the 'heaven-earth', consisting of a vaulted heaven superimposed over a flat earth and united with it..." (Kramer, 1981: p. 76).

-		HAR	MONIC S	SERIES	======>						
2				I	BASE 10						
T		10.00	1:2=d	1:3=a	1:4=d	1:5=f#	1:6=a	1:7=c			
M		2:1=d	2:2=d	ALC: N	2:4=d	2:5=f#	2:6=a	2:7=c			
Ē		3:1=g	12=0	3:3=d	3:4-g	3:5-6	3:6=d	3:7=f			
IC		4:1=d	4:2=d	4·3=a	4:4=d	4:5=f#	4:6=9	4:7=c			
SE		5:1=b <sup>b</sup>	5:2=b	b 5:3-1	5:4=b <sup>b</sup>	5:5=d	5:6=f	5:7=ab			
æ		6:1=g	6:2=g	6:3=d	6.1=9	6:5=b	6:6=d	6:7=f			
B		7:1=e	7:2=e	7:3=b	7:4=e	7:5=g#	7:6=b	7:7=d			
11											
11					BASE 60	)					
11					Tigris River						
11		60/00	1/60	2/30 Heav	3/20 4/	15 5/12 ault"	6/10	7/~8.6			
ij		60/1	60/60	20/30 18	0/20 240	/15 300/12	2 360/10	420/~8.6			
ï	Eup	30/2	30/120	60/60 9	0/40 120	20 150/2/	180/20	210/~17.2			
ii –	hra	20/3	20/180	40/90 6	60/60 80	45 100/3	6 120/30	140/~25.8	Boundless Sea		
	tes	15/4	15/240	20/120 4	5/80 60	60 75/4	B 90/40	105/~34.4	Doundless dea		
Ÿ	Riv	12/5	12/300	24/150 3	6/100 48	75 60/6	0 72/50	84/~43			
	er	10/6	10/360	20/180 3	40	90 50/7:	2 60/60	70/~51.6			
		~8.6/7	~8.6/420 ~	17.2/210 ~25	.8/140 ~34.4	105 ~43/8	4 ~51.6/70	~60/~60			
				Bou	ndless Sea						

Figure 12. The sumerian god table.

With the discovery of all three types of mathematical progressions and means integrated into a single table, **Figure 12** models the Sumerian belief in a flat earth, clearly sitting between heaven and the subterranean waters of a boundless sea. Heaven became "a hollow space enclosed at top and bottom by a solid surface in the shape of a vault". Without an understanding of Sumer's mathematical model, Kramer's summary of creation makes little sense because it is essentially a verbal description of the Sumerian God Table.

The most historically significant Sumerian document is the Sumerian King List from the Third Dynasty of Ur. It lists eight kings who ruled before the great flood. Many scholars consider these early rulers to be mythical because of their implausibly lengthy reigns. However, it will be demonstrated that these implausibly lengthy reigns refer to "years in heaven" rather than "years on earth". The Sumerian King's List defines what we might alternately call the "Clock of Heaven and Earth". Understanding the difference between years in heaven and years on earth begins with the knowledge that composite numbers can be factored into base-60 "regular" numbers, i.e., prime numbers 2, 3, and 5, which are the only prime number factors of 60.

Various composite number constructs model religious symbols and writings by disguising the prime-number divinity of sonic integer ratios with composite numbers. This accounts for the implausible ages of divinely inspired Biblical patriarchs, as well as the implausibly long reigns of Sumerian Kings. The age of Biblical patriarchs and the reigns of Sumerian kings must be factored into lowest terms to understand them as musical constructs. This methodology structures both the Clock of Earth and the Clock of Heaven.

A clock is the oldest base-60 artifact, because it is the best way to model nature mathematically as a function of time. The link between time and nature is based

on the twelve factors of 60, including: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, and 60. For example

- Lunar tides alternate about every six hours;
- Days/nights average twelve hours each; a day/night cycle is 12 double-hours, not 24;
- A lunar month is approximately 30 days;
- A 360-day solar year is approximately 12 lunar months of 30 days each.

Sumerian King List reigns have been listed in Figure 13(a), which are associated with additional numeric detail in Figure 13(b) and Figure 13(c). The integer ratio sounds in Figure 13(c) organizes the eight Kings according to the integer ratios of 3, 4, 5, and 6. The King List solves the Kabbalistic tradition's Sabbath riddle describing a "circle and the square inscribed within" the fourth quadrant of Figure 14(a). Figure 14(b) derives from quadrant IV to describe the "Clock" that guides the earthly realm of man from the 360:720 octave, where 360 Days = 1 Earthly Year. This provides strong evidence that Sumer understood the reciprocity of heaven and earth in terms of sonic ratios. They also understood how the simple integers of a clock tied the microcosm of the soul to the macrocosm of the cosmos by observing the precession of the equinox. The oldest base-60 artifact—the clock—measures time on Earth to guide the affairs of men, and time in Heaven to measure the affairs of the gods.

		/	Cre	eator God Nar	nes & Nun	nbers Guiding I	Reigns		
		E	n <mark>ki:</mark>	Water =	40*720° =	28,800 years			
		E	nlil:	Wind =	50*720 <sup>0</sup> =	36,000 years			
0 Companie – King Lint Daire		A	Anu:	Heaven = 6	50*720° =	43,200 years			
8 Sumerian King List Reigns	3	F	Enki: Water = 4		0*7200 =	28 800 years			
1) Alilim	28,800	years							
2) Alalgar	36,000	years E	Enlil: Wind = 50		0*720 <sup>o</sup> =	36,000 years			
3) Enmenlu-Anna	43,200	years E	Enki: Water = 40*720° = 28.800 years						
4) Enmengalana	28,800	years							
5) Dumuzi	36,000	years s	Sin: Moon = $30*720^\circ$ = 21,600 years						
6) Ensipazi - Anna	28,800	years s	Sin: Lunisolar = $31*600^{\circ}$ = 18,600 years						
7) Enmendur - Anna	21,000	[21,600] years	Utu: Sun $= 20^{\circ} * 18 = 360^{\circ}$						
8) Ubar-Tutu	18,600	) years Ki: Ear		anna: venus = $15^{\circ} \times 24 = 360^{\circ}$ Ki: Earth = $5^{\circ} \times 72 = 360^{\circ}$					
(	(a)				(b)				
Years On Earth	(72)	216		288	360	432	(864)		
Days in Heaven	(1)	3		4	5	6	(12)		
King List Reigns		21,600 (3 * 72)		28,800 (4 * 72)	36,000 (5 * 72)	43,200 (6 * 72)			
Early King List		Enmendur-Anna		Alulim Enmengal-Anna Ensipazi-Anna	Alalgar Dumuzi	Enmenlu-Anna			
			(c)	спыраді-Алла					

**Figure 13.** (a). The Reign of Eight Sumerian Kings Measured in Base-60 SARS units of 3600 revealing a 6:8:10:12 musical proportion. (b) Seven Creator Gods Guided Eight Sumerian Kings within the Clock of Earth. (c) Reducing Composite Number "Reigns" to Integer Ratio Proportions 3:4:5:6 or 6:8:10:12.



Figure 14. (a) Clock of Heaven & Earth. (b) Clock of Earth (360:720). (c) Clock of Heaven (432:864) & Twelve Ages of Man.

Man's "window" into the Heavenly realm can be observed during the Vernal Equinox (first day of Spring) as the background stars drift 50 seconds of arc per year. After 72 years the stars drift one degree in the sky (50 seconds  $\times$  72 years = 3600 seconds = 60 minutes = 1°). It takes 72 years on Earth for the background stars to drift by 1° which is equivalent to a Day in Heaven. This is known as the Precession of the Equinox. Historians have traced knowledge of Precession to the Old Babylonian Period. This analysis of the Sumerian King List proves that Sumer had an earlier knowledge of this phenomenon (Schatz, 2012: pp. 67-72). Think of the 72 years that measures a 1° drift of the stars as the second hand of Heaven's Clock. The hour hand in the Clock of Heaven is equivalent to a heavenly month, which is equivalent to 360°/12 or 30°  $\times$  72 Earth years = 2160 years on Earth. This is equivalent to one of the 12 Ages of Man (i.e., the Age of Pisces, the Age of Aquarius, etc.). To travel a full circle of 360° is equivalent to all 12

Ages of Man which Plato called a "Great Year" of  $360^{\circ} \times 72$  Earth years = 25,920 Earth years. If each "Age of Man" in the Heavenly Clock was analogous to one hour on an Earthly Clock, then a Great Year would be analogous to a 12-hour Day in Heaven (Campbell, 1974: p. 74). There are some who will see this as insight into the words in 2 Peter 3:8-9, "with the Lord a day is like a thousand years, and a thousand years are like a day". Saint Peter simplified the numbers a bit.

The first 39 lines of the Sumerian King List describes eight kings who ruled over five cities, stating: "After the kingship descended from heaven, the kingship was in Eridu." These eight Kings are often thought to be mythological, but the oldest section of the list becomes realistic by reducing the reigns of these eight kings into their lowest integer ratio values as the first six integers. The key to understanding the King List is Figure 13(c) which explains the Sumerian King's implausibly long reigns are reducible to the string theory integer ratios of 3, 4, 5 and 6. Smallest integer form are "disguised" by the god-numbers in Figure 13(b), where each reign can be factored into one of four god-numbers (Sin = 30, Enki = 40, Enlil = 50 and Anu = 60) multiplied by the  $720^{\circ}$  as the upper limit of the 360:720 octave container of Quadrant IV. As Earthmother of the gods, Ki's god-number of 5 is the only common factor among all the other base-60 god-numbers. Analogously, the God of Abraham's number = 1 is the only common factor of an Abjad number system. The 432:864 octave in Figure 14(a) models Figure 14(c) to define the Twelve Ages of Man as the Clock of Heaven, based on the movement of the Sun in relation to the background stars. The fact that Sumer understood the Twelve Ages of Man implies that they understood the precession of the equinox centuries before the Old Babylonian period (Schatz, 2012: pp. 60-103). The Clock of Heaven is described by the "Twelve Ages of Man" bisected by the seven aspects of the World Soul (the eighth tone describes octave duplication of the first). Table 1 describes the vibrational essence of the World Soul constructed from the primordial element Water (=  $log_{3n}$ ). It bisects the Clock of Heaven, just as man's soul bisects man's bodily "container" within the earthly realm of Figure 14(b).

The Akkadian Ark Tablet. After defeating the Sumerian city states during his brief reign (c. 2334-2279 BCE) Sargon of Akkad built an empire from a mix of Sumerian and Semitic-speaking people. After the Gutians defeated Sargon, the Gutian dynasty only lasted about one century until they were defeated by King Ur-Nammu, founder of the Third Dynasty of Ur. Aryan Elamites are then said

432	486	512	576	648	729	768	864
D	E	F	G	А	В	С	D
D	С	В	А	G	F	Е	D
3 <sup>3</sup>	3 <sup>5</sup>	3 <sup>0</sup>	3 <sup>2</sup>	3 <sup>4</sup>	3 <sup>6</sup>	3 <sup>1</sup>	3 <sup>3</sup>
	432 D D 3 <sup>3</sup>	<ul> <li>432 486</li> <li>D E</li> <li>D C</li> <li>3<sup>3</sup> 3<sup>5</sup></li> </ul>	432     486     512       D     E     F       D     C     B       3 <sup>3</sup> 3 <sup>5</sup> 3 <sup>0</sup>	432       486       512       576         D       E       F       G         D       C       B       A         3 <sup>3</sup> 3 <sup>5</sup> 3 <sup>0</sup> 3 <sup>2</sup>	432       486       512       576       648         D       E       F       G       A         D       C       B       A       G $3^3$ $3^5$ $3^0$ $3^2$ $3^4$	432486512576648729DEFGABDCBAGF $3^3$ $3^5$ $3^0$ $3^2$ $3^4$ $3^6$	432486512576648729768DEFGABCDCBAGFE $3^3$ $3^5$ $3^0$ $3^2$ $3^4$ $3^6$ $3^1$

Table 1. The sonic triple progression defining the sumerian king list's cosmic soul.

to have destroyed Ur ca. 2004 BCE and briefly ruled the city of Ur. By the 19<sup>th</sup> c.BCE, the influence of Semitic Amorites like Abraham grew in southern Mesopotamia. A proper understanding of the Sumerian King List should help prepare the reader for the sonic mathematics of the Ark Tablet as translated by British Museum Assyriologist Irving Finkel. According to Finkel, this is the only cuneiform tablet with precise instructions describing how to build the Ark that saved all life from the devastation of the Great Flood. The Ark Tablet provided instructions for building the Ark in the form of a very large round boat called a coracle (Finkel, 2014: p. 125). Coracles were commonly used as water taxis in ancient Iraq. Despite not fully grasping how King List integer ratios structure the Clocks of Heaven and Earth, Dr. Finkel intuits that the implausible reigns of Sumerian kings in SAR units of 3600 resembles the dimensions of the circular Ark (Finkel, 2014: pp. 108+250) (Figure 15).

In a discourse on the question of the Ark's shape, Finkel speculates that Noah's Akkadian predecessor, Atrahasis, built the circular vessel as described in the Akkadian Ark Tablet. Finkel also describes a square Ark built by Noah's Babylonian predecessor Utnapishti. When it came to the Bible's oblong Ark, Finkel speculated that "...Utnapishti at Nineveh ended up tweaking a square ark out of a circular one, another and unknown cuneiform edition tweaked that a little further into an oblong, convinced that a cubic boat would never work..." (Finkel, 2014: p. 153). The Sumerian List's Quadrant IV (Figure 14(a)) was structured by YBC 7289 (Beery & Swetz, 2012), which later became incorporated into the Abraham mathematics that defines the "circle and square inscribed within". The King List documentation of this symbolism was lost, and the relevance of YBC 7289 to religious writings was also lost. The "circle and square inscribed within" became the sacred key to understanding God's Sabbath (Schatz, 2012: pp. 91-94, 199-203; Sperling & Simon, 1984: p. 23).



**Figure 15.** (a) Finkel's "Ark Before Noah" was built for a PBS special from a proportional reduction of the base-60 numbers in Finkel's text (Finkel, 2014: pp. 123-183). (b) This circular configuration beneath the deck was built to house the animals in 360 cubicles (Prigg, 2014), as reflected in Finkel's statement that "the ark is variously attributed three hundred and sixty cells or chambers..."

In summary, deciphering the reigns of the Sumerian King List as sonic integer ratios clarifies a great deal of religious literature within the Levant and Mesopotamian, including the oldest Neo-Sumerian version (ca. 2100 BCE) of the Epic of Gilgamesh, as well as its Old Babylonian 18<sup>th</sup> c. version. The seven aspects of the soul that defines the diameter/diagonal bisecting the "circle and square inscribed within" in **Figure 14(a)** also models the 7 aspects of the soul in Gilgamesh XI: 57-65 (Finkel, 2014: p.131), where we read: "I set in place her body, I gave her six decks, I divided her into 7 parts ..."

The mathematical details of the Biblical Caduceus (**Figure 9(b**)) demonstrates that Abraham's God Table shapes and structures circular constructs as well as the pyramidic constructs in **Figures 4-7**. A "Wheel of Order" or "Navel of Order" construct appears within the Rig Veda's Riddle of the Sacrifice, Hymn 1.164 (McClain, 1976: pp. 9-12, 33-42). This was originally defined by the Sumerian King List's Quadrant IV (**Figure 14(a) & Figure 14(b**)) followed by the Akkadian Ark's coracle. Within the Rig Veda, becomes the Hindi creator born from a Lotus spiraling from Vishnu's navel that defines the Navel of Order (360:720) (**Figure 16(a) & Figure 16(b**)). When the universe dies Brahma is born again within the "Cycle of Yugas" (432:864) (Schatz, 2012: pp. 89-91).



(a)



**Figure 16.** (a) *Göbekli Tepe* "bed" of 12 serpents and 3 serpent "nadis" (b) Hinduism depicts Brahma as the World Soul born from a (circular) Lotus, emanating from Vishnu's Navel as he lay upon a bed of 12 serpents.

"The Twelve-spoked wheel of Order rolls around and around the sky and never ages. Seven hundred and twenty sons in pairs rest on it, O Agni... Twelve Fellies, one wheel, three naves—who has understood this? Three hundred and sixty are set on it like poles that do not loosen." (Donniger, 1981: pp. 71-81).

The concentric circles of the "Wheel of Order" appear repeatedly throughout history as the underlying mathematical/sonic structure of Plato's metaphysics, and the Bible's metaphysics, all of which derived from Göbekli Tepe's "God" and "Gate" symbols (Seyfzadeh & Schoch, 2019).







**Figure 17.** (a). The founders of Plato's Atlantis were Poseidon and his five pairs of twin sons. They appear in (a) as the 360:720 octave (6! = 720) to define the central island. This construction is common to the Book of Creation, the Rig Veda, Plato's Atlantis Myth, and Göbekli Tepe. Radial lines extend through succeeding generations to the outer ring. The outer ring defines a 2520:5040 octave (7! = 5040) as the fourth generation and "sea wall"—filled with confusion leading to its downfall (McClain, 1978: pp. 85+104+108). Unlike Atlantis, Magnesia (e) followed strict "musical laws" that brought order to the city. (b) Çatal Höyük—Navel of Order (c) Göbekli Tepe - Navel Mountain (d) Plato's Atlantis was structured by Just Tuning (i.e., duple, triple, and quintuple progressions) which generates a 360:720 Octave container of man's body and soul before he is able to "open the Gate" to Heaven. (e) Plato's city of Magnesia was structured by Archytas Tuning (i.e., duple, triple, quintuple, and septimal progressions) which generates a 2520:5040 Octave "container" of holy man who has successfully opened the "Gate" to reveal a central clear path to "God." The mathematics of the "Gate" (**Figure 18(a)**) and "God" (**Figure 18(b)**) first appear in the pillar carvings and architecture of Göbekli Tepe (Schatz, 2022).



**Figure 18.** (a) The Sonic Theology of Göbekli Tepe's Closed "Gate". (b) The Sonic Theology of Göbekli Tepe's Open Path to "God".

## **5.** Conclusion

There are many who believe that religion has brought nothing but division and conflict into the world, but this paper attests to the fact that there is a profound common ground as the metaphysical foundation of the world's various religions. The oldest extant source to clearly identify this common ground is Abraham's *Sefer Yetzirah* (Book of Creation). By deciphering the "Secret of Knowledge" from Abraham's mathematical riddles the author has uncovered what appears to be history's oldest mathematical table, i.e., the "231 Gates" or "God Table". The mathematics of sound emanating from God's "Voice" documents the "eternal truth", which Natufians carved into the pillars and pillar enclosures of the world's oldest religious temple at Göbekli Tepe, "…before the truth of God was divided by competing or hostile religions after the Flood…" (Churton, 2021: p. 101). This "truth" became the foundation of all subsequent monotheistic, he-

notheistic, and polytheistic religions. In Abrahamic monotheistic theology one God created the universe in 7 days, but in Sumerian polytheism 7 gods, known as the Anunnaki, created and controlled the 7 key aspects of creation. In addition to recovering the common ground among all religions, the cutting edge of modern theoretical physics appears to be pointing civilization toward an empirical God. The original conceptualization of the God of Abraham derives from the ancient string theory of the God Table. In 1984, ancient string theory evolved into the foundation of superstring theory, while in 1995 superstring theory evolved into m-Theory, which then became the leading candidate for a modern Theory of Everything. Modern theoretical physicists are hard at work to empirically prove that modern string theory defines a Theory of Everything. Both ancient and modern string theory defines a Theory of Everything based on the inner vibrational essence of all objects and beings. Call it God, or call it m-Theory, history's clerics simply never understood the "Secret of Knowledge" that reduces the Intelligent Design debate into a matter of semantics. Archaeological evidence that the "God Table" was carved into the pillars and architecture of Göbekli Tepe should help demonstrate that religion and science have always been tightly coupled to one another throughout history, and they have never, in fact, been mutually exclusive. In this century, civilization is much closer to realizing the existence of an empirical God than ever before. Whether a person chooses to refer to God and Creation in religious terms, or in the mathematical and scientific terms of a Theory of Everything, has become a matter of personal preference. Interfaith discussion can finally embrace the common ground that structures all religion, metaphysics, and science.

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The author declares no conflicts of interest regarding the publication of this paper.

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