

Appendix B

Sefer Yetzirah and the Meru Hypothesis

Genesis and Sefer Yetzirah (2001)

This is the first verse of the Hebrew text of Genesis.

GENESIS 1:1

Read Right to Left ←

בראשית ברא אל-הים את השמים ואת הארץ

HaAretz | v'et | HaShemayim | et | Elokim | Bara | B'reshit
 The Earth | and Essence (of) | The Heavens | Essence (of) | "God" | (He) Creates | In the Beginning

English letters shown are operational equivalents, NOT phonetic equivalents, of the Hebrew letters.

Below is the spiral pattern that allows all of the letters of the first verse of Genesis to be paired.

Notice that there are two different sets of letters (I and II, below), which are paired on this spiral form of the first verse of Genesis:

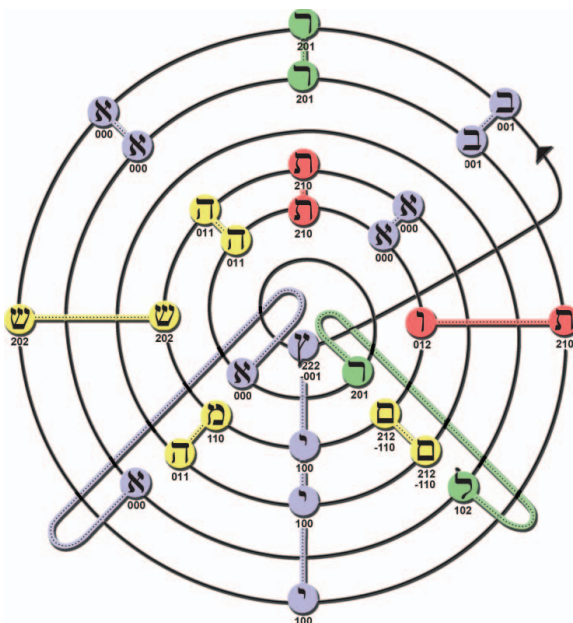


Figure B-I Autocorrelation of Genesis 1:1

I. There are 4-pairs of letters in the first set:

- Resh* (201) ר is paired with *Lamed* (102) ל,
- Tav* (210) ת is paired with *Vov* (012) ו,
- Heh* (011) ה is paired with *Mem* (110) מ,
- and *Yod* (100) י is paired with *Bet* (001) ב

These letters come in sets of three-of-one and one-of-the-other, and they are arranged in pairs determined by their base-3 positions in the alphabet.

These letters are also all arranged in the same *aaba* pattern (presented below.)

Notice that the Base-3 or *Trinary* count of each of these letter's positions in the alphabet is a *mirror image* of the letter it is paired with. Thus *Resh* (201) ר is paired with *Lamed* (102) ל. (201) is a mirror image of (102).

The eight letters in this group are:

ר ו ת ב ל י מ ה

The reason for this unusual order of the paired letters will become clear in the discussion below.

II. There are three letters, *Alef* (000) א, *MemFinal* (212) ם, and *Shin* (202) שׁ, which occur an even number of times in the first verse of Genesis. Thus they are paired only with themselves. Each of the six *Alefs* א pairs only with another א, the two *MemFinals* ם are paired with each other, and the two *Shins* שׁ are also paired with each other.

The three letters in this group are: א ם שׁ (*Alef, MemFinal, Shin*).

Note: There is also a third type of pairing which is not related to the above. The *ZadiFinal* זׁ pairs with the initial *Bet* ב to frame and encompass the whole first verse. (See illustration below.) This produces a "large," seventh, *Shabbos Alef* א (*Shabbos* being the seventh day of creation, different from the other six days because it is a day of rest rather than of active creation). This pairing is considered separately elsewhere.



Figure B-2 The seventh "Shabbos" א Alef connects the ends of Genesis 1:1

There are also two other features of note:

- III. The most compact and elegant spiral pattern that allows all of the letters of the first verse of Genesis to be paired has six turns (not counting the single turn through the middle that connects back to the start), with eight letter positions possible for each turn.
- IV. There are a total of twenty-eight Hebrew letters used in the first verse of Genesis. Because of duplications (which allow the letters to be paired), there are only twelve different letters used.

The *Sefer Yetzirah*—the Book of Formation (or Creation)—is one of the most important Kabbalistic references. It discusses the creation of the letters of the alphabet. There are no translations of this work that can be read in a way that actually accomplishes this task. As with many non-scriptural texts that have come down to us in manuscript form, it is not always possible to know unambiguously where the word divisions are. Thus there are many different readings possible from essentially the same text. This is true of many words and phrases in *Sefer Yetzirah*.

Here is the second verse of the first chapter of *Sefer Yetzirah* as given by R. Aryeh Kaplan, in his translation of this work (*Sefer Yetzirah: The Book of Creation in Theory and Practice*, Sam Weiser, York Beach, ME, 1990) on page 22:

a. Ten Sefirot of Nothingness	עֶשֶׂר סְפִירוֹת בְּלִי מָה	a
b. And 22 Foundation Letters:	וְעֵשְׂרִים וְשְׁתַּיִם אוֹתֵיּוֹת יְסוּד	b
c. Three Mothers	שְׁלֹשׁ אִמּוֹת	c
d. Seven Doubles	וְשִׁבְעַת כְּפֹלֵיּוֹת	d
e. And Twelve Elementals.	וְשְׁתַּיִם עֵשְׂרֵה פְּשׁוּטוֹת:	e

Note: Line numbers, a,b,c,d,e, have been added.

We will examine each line of this verse separately.

Line *a* reads:

עֶשֶׂר סְפִירוֹת בְּלִי מָה

Ten Sefirot of Nothingness.

Because the word divisions are not known unambiguously, we can run the letters together and then divide them differently:

עֶשֶׂר סְפִי רוֹתבְּלִימָה

When we examine this sequence we notice something unexpected:

The last 8-letters—**רותבלימה**—are exactly the same letters that form the aaba pattern in the first verse of Genesis. They form the first class (the four pairs of set I, above) of letters on our spiral diagram of Genesis 1:1. This identification is entirely unexpected; it is unknown in any prior reference that has come down to us.

We can also understand the other two words that remain. *A-SaR* **עשר**, “Ten,” can be identified with the 3,10 torus knot. The 3,10 knot has ten points. It consists of a *circle* or *ring* woven like an umbilicus (modeled as a tetrahelical column).

The *Resh* **ר** denotes *reaching* and extension; the *Shin* (or *Sin*) **שׁ** denotes a *Tetrahedron* (the 3-heads of the *Shin* correspond to the 3-sides of the tetrahedron); the *Ayin* **ע** denotes a *circle* or *ring*. (*Ayin* literally means *eye* or *well*; its old form is a *circle*.) *S-R* **שר** can denote an umbilicus in Hebrew. Our geometric letter analysis of *A-SaR* **עשר** is shown below.

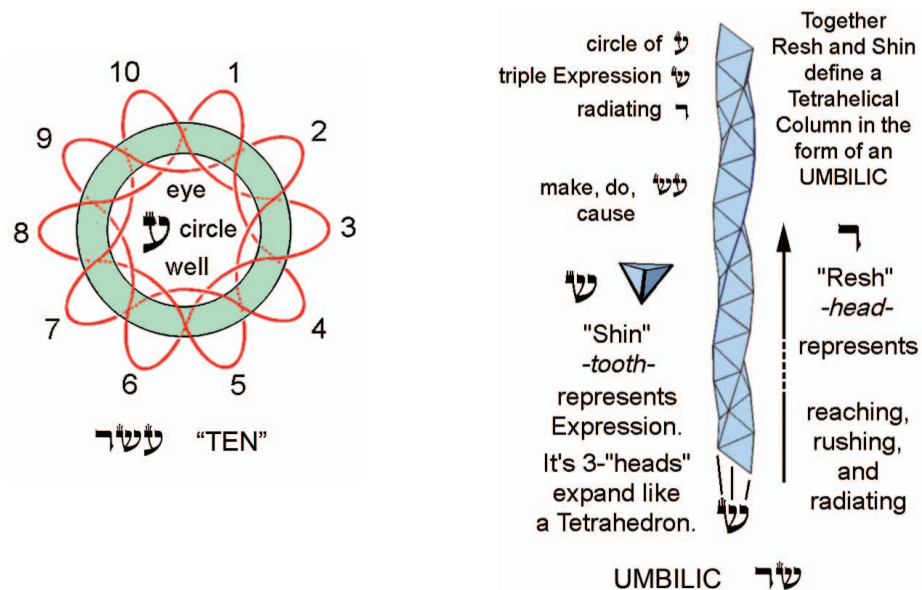


Figure B-3 *A-SaR* **עשר** “TEN” designates a circular umbilicus

The next word *SuFI* **ספי** refers to the 3,10 torus knot in its *spherical* form.

The *Samek-Pe* **סה** (“wool”) root has been identified with a spherical form in some references and our geometric analysis suggests that it refers directly to the *Ain Sof* **איף סף** in Kabbalah, to the *SuFI* **ספי** dancer in the poet Rumi’s description of the *Mevlevi Sufi Round Dance*, to the *SoFla*—the wisdom aspect of God in Christian teachings, and to the *storm cloud* or whirlwind called *SuFah* (which appears in Exodus).

The Meru Foundation model of *Continuous Creation* (see Appendix M) is a spherical form of the 3,10 Torus Knot.

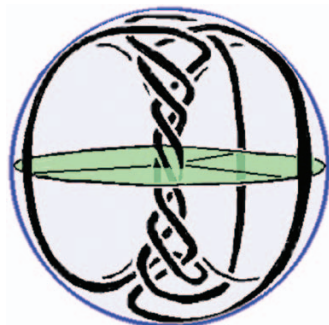


Figure B-4 ספ"י—“SuFI” Model of *Continuous Creation*

- Ain SoF (Hebrew—God in Kabbalah)
- SuFah (Hebrew—Storm or Whirlwind)
- SoFla (Christian— Wisdom of God)
- SuFI (Muslim—Rumi’s Round Dance)

The *SuFI* ספ"י model of *Continuous Creation* above divides the sphere into six model human hands. These hands cast shadows which are all of the *Rashi*-style *Merubah* Hebrew letters. (See Chapter 7.) Thus, if this interpretation is correct, *Sefer Yetzirah* really does describe the formation of the Hebrew letters.

Here is *SuFI* ספ"י letter by letter: SaMeK כ designates a *SMoKe ring*; Pe פ is a mouth or speech; Yod י is a hand. The letters come from a hand taken from a Torus knot—a smoke ring. They are intended for speech.

Continuous Creation is a modern model of physical creation derived from the geometry of the first verse of Genesis, the path (or way) to meditational Unity, and the archetypal *Hero’s Journey* in the world.

Taken together עשר ספ"י “Ten Spheres” designates the spherical form of the 3,10 Torus knot representing *Continuous Creation*. The next eight letters that follow are, in fact, the letters in the first verse of Genesis that actually produce the spherical form of the 3,10 Torus Knot when they are paired. (The 3,10 Torus Knot is directly related to the six-turn spiral pattern of Genesis 1:1.)

Line *b* says:

וְעֵשְׂרִים וְשְׁתַּיִם אֹתוֹת יְסוּד

“And twenty-two foundation letters”

There are twenty-two triangular faces—one for each of the Hebrew letters—on each of the three ribbons of a unit turn *tetrahelical* column. (See Figure B-3.) The unit tetrahelical column contains 33-tetrahedra. This enables the unit tetrahelical column to model the thirty-three vertebrae of the human spinal column—the “foundation” of the human body.

The next line, *c*, mentions the three *mother* letters which are later identified in *Sefer Yetzirah* as Aleph א, Mem מ, and Shin ש.

“Three Mothers” שְׁלֹשׁ אִמוֹת

In the first verse of Genesis there are three letters that form the second set of pairs. They are *Alef* א, *MemFinal* מ, and *Shin* ש. We do not have a ready explanation for the use of the *final* form of *Mem* מ instead of the more commonly used *medial* form of *Mem* מ, but otherwise these three letters are the same as the *Three Mothers* שְׁלֹשׁ אִמוֹת mentioned in this verse.

Line *d* refers to:

“And Seven Doubles” וְשִׁבְעַת כְּפֹלֹת

If we examine the word *K’Phulot* כְּפֹלֹת we find that it does not exactly mean “doubles.” *K’Phulot* can also refer to multiplication (which is an *unfolding* process). It can refer to a 2-dimensional surface area.

The “Seven Doubles” refer to the seven areas of the 7-color map on the torus, as discussed in Chapter 5.

The final part of the verse, line *e*, says:

“And Twelve Elementals” וְשְׁתַּיִם עֲשָׂרָה פְּשׁוּטוֹת

These are the 12-different *single* letters (*P’shotot* פְּשׁוּטוֹת means “*simples*” or “*elementals*”) used in the first verse.

Twelve spheres packed around a center sphere form a *cube-octahedron*. This form defines the geometric shape of the model of *Continuous Creation*.

The upper half of the model of *Continuous Creation* consists of three model *Hands*. There are three *thumbs* in the center and a total of 12-*fingers* on the equator of the sphere of *Continuous Creation*.

These twelve spheres or *fingers* can be identified with:

the twelve *Tribes* in Judaism,
the twelve *Apostles* in Christianity,
the twelve *Imams* in Islam,
the twelve *Knights* around the Round Table,
the twelve *Months* of the solar year,
the twelve *Houses* of the astrological Zodiac, and the circle of
twelve *Dancers* of Rumi's *Round Dance*
—among many other examples.

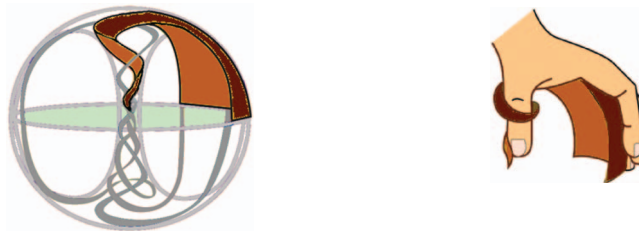


Figure B-5 *Continuous Creation and First Hand*

Left: 3,10 torus knot model of *Continuous Creation* showing one *First Hand* model hand
Right: Left-hand model hand showing four fingers on equator

V. Conclusions

If we compare the second verse of the first chapter of *Sefer Yetzirah*, understood as above, with the letter sequence of the first verse of the Hebrew text of Genesis, we find that the verse from *Sefer Yetzirah* is describing the essential features of the letter text of Genesis.

- What is most important is that we have identified the sets of letters that we found are paired in Genesis with a poorly understood letter sequence—**רוּת) בְּלִי מֵהַ**—in the *Sefer Yetzirah*.
- B’li-mah **בְּלִי מֵהַ** does not mean “*without what*,” as it is translated by some, nor does it mean “*Nothing*,” as translated by Rabbi Kaplan and others. (See quotation below.) It might even indicate the *space* in which creation takes place, because the root letters, B(v)-L-I-M-E are very close to the root letters of the English word “*VoLuME*.”
However, if this analysis is correct, the letters simply list the *aaba* base-3 letter pairs in the first verse of Genesis.
- This *explicitly* confirms that the patterns Meru Foundation has found in the Hebrew letter text of Genesis were known to the author(s) of the *Sefer Yetzirah*.

- The word or words (sources differ as to whether these letters are one word or two) B'li-mah בלי מיה are now seen to be part of a sequence beginning with the last three letters of the previous word—רויה. The rest of the second verse of *Sefer Yetzirah* can also be seen to be describing essential features of the first verse of Genesis.
- It also provides direct understanding—perhaps for the first time in our age—of what the *Sefer Yetzirah* is really about—the *formation* of the Hebrew alphabet AND the *Continuous Creation* of our consciousness and of the cosmos as outlined by the letter sequences in the Hebrew Bible.

Here is what Rabbi Aryeh Kaplan says about בלימה *Beli-mah*, (page 25, *Sefer Yetzirah*, Sam Weiser, 1990):

Of Nothingness:

The Hebrew word here is *Beli-mah* (בלימה). This word can also be translated as meaning closed, abstract, absolute or ineffable.

This word occurs only once in scripture, in the verse, 'He stretches the north on Chaos, He hangs the earth on Nothingness (*Beli-mah*)' (Job 26:7). According to many commentaries, the word *Beli-mah* is derived from the two words, *Beli*, meaning 'without,' and *Mah*, meaning 'what' or 'anything.' The word *Beli-mah* would then mean 'without anything,' or 'nothingness.'

According to this interpretation, the designation 'Sefirot of Nothingness' is used to indicate that the Sefirot are purely ideal concepts, without any substance whatever. Unlike letters which have form and sound, the Sefirot have no intrinsic physical properties. As such, they are purely conceptual.

Other sources state that Belimah comes from the root *Balam* (בלם), meaning 'to bridle.' This is found in the verse, 'Do not be like a horse or a mule, who do not understand, whose mouth must be bridled (*balam*) with bit and rein' (Psalms 32:9).

This second interpretation seems to be indicated by the *Sefer Yetzirah* itself, since it later says, 'Bridle (*balom*) your mouth from speaking of them' (1:8). According to this, *Belimah* would be translated as 'ineffable.' The text is speaking of 'Ten Ineffable Sefirot,' indicating that they cannot be described in any manner whatever.

We can see from Rabbi Kaplan's discussion that the meaning of *Belimah* is not clear. It is not even clear if *Belimah* is one word or two words. Our observation that the last three letters of the previous word, plus the letters that spell what *appears to be word* (or two words) Belimah, provides an explanation for the meaning of this "word." It is not really a word at all. It is merely a string of letters that determine the weave of the first verse of the Hebrew text of Genesis.

Sefer Yetzirah: T'li-GalGal-Lav

The pairing pattern of letters at the beginning of B'reshit (Genesis) leads to the *Continuous Creation* model (see the *Continuous Creation* poster in Appendix M), which consists of exactly six hands.

The *Continuous Creation* model can be described with unusual and extraordinary elegance and precision by examining its one-, two-, and three-dimensional symmetries. There is no more mathematically elegant and compact way to describe a fundamental form than to take but 3 "snapshots" of it, one in each of the three spatial dimensions. This is perhaps one of the most elegant mathematical descriptions possible, and to mathematicians it's immediately striking.

The model hand,
FIRST HAND,



is defined by the number and shape
 of the lines, the surfaces, and the
 volume of the form of
Continuous Creation.

Its *1-dimensional* quality is that
 the 3,10 Torus knot of *Continuous Creation*

consists of 3-loops:



Its *2-dimensional* quality is that
 the 3 loops form the edge of seven surface-areas
 —which make up the 7-color map that defines the torus:



Its *3-dimensional* quality is that
 the shape of its 3-D volume is defined by
 the 12-around-1 cubeoctahedral sphere-pack.

Thus,
 In *1-D*, it's *three-fold* and looks like
 a snake (*T'li*).

In *2-D*, it's *seven-fold* and looks like
 a "wheel of wheels"—a torus (*Gal-Gal*).

In *3-D*, it's *twelve-fold* and looks like
 a heart-shaped volume (*Lav*),
 that is defined by
 the 12 spheres of a cubeoctahedron.

VIEW OF
 2-HANDS



CUBEOCTAHEDRON



This is a unique identification. It includes identification of the descriptive words, *T'li*, *Gal-Gal*, and *Lav*, as well as their unique geometric relationship to the three numbers, 3, 7, and 12.

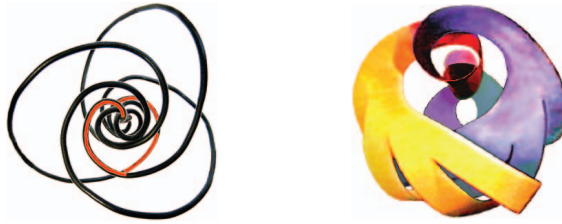


Figure B-6 3, 10 torus-knot showing heart forms

Left: Enhanced photograph of the 3,10 torus knot displays a swirl of traditional heart-shapes (highlighted in red)

Right: *Heart of Hands* formed by left-right pair of four-finger Hand Models.

Figure B-7 (opposite) is an outline of the Sefirotic Tree showing its relationship to the Tree of Life, the model hand, and the inverted-T geometry. The Tree of Life can be considered a “minyan” where each of the *sefirot* takes a different “wing position” in the wholeness of the “flock.”

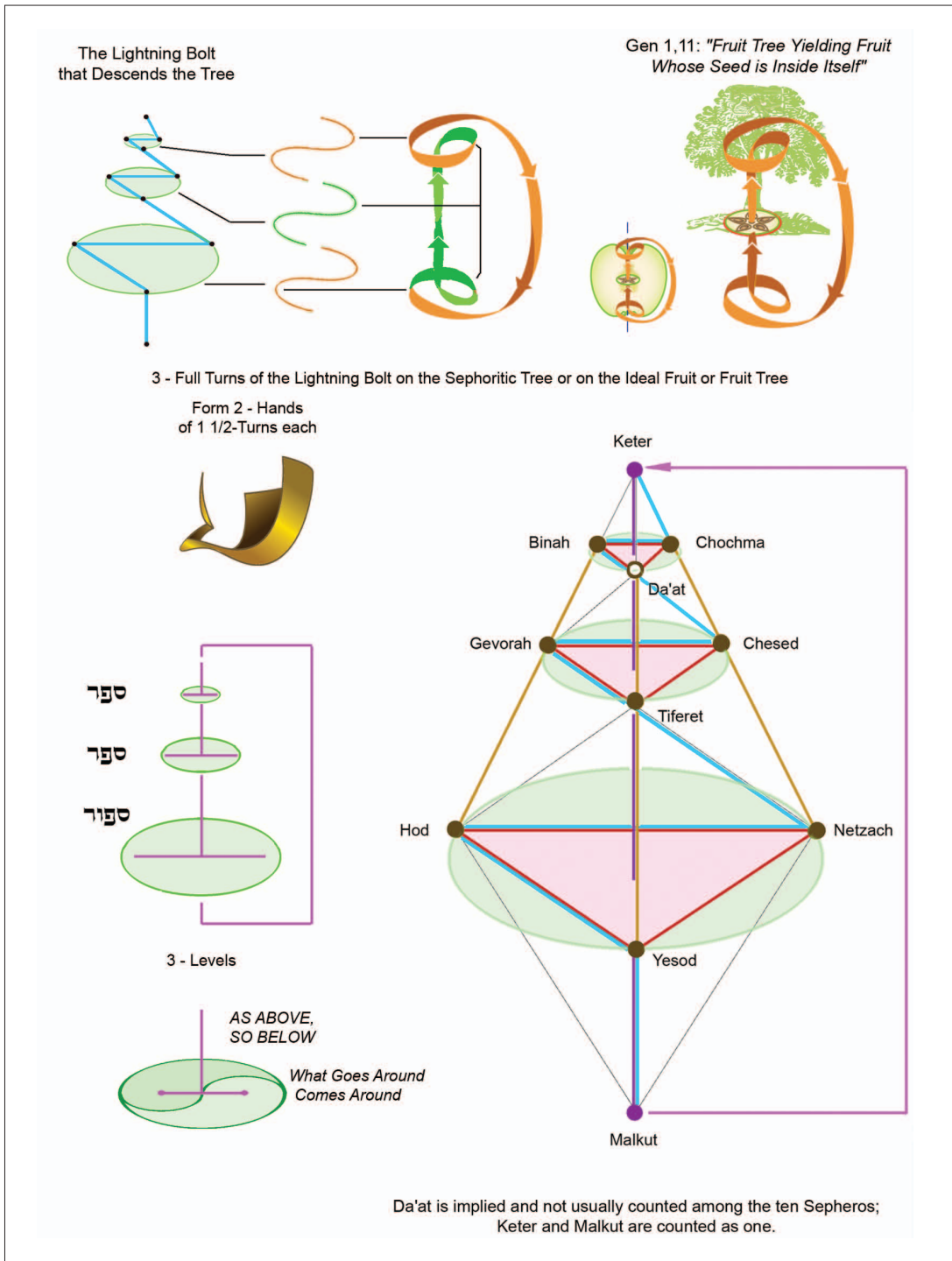


Figure B-7 An outline: The Ten Sefirot on the Tree of Life with Malkut linked to Keter