Five Ancient Fibonacci Series In the Light of the Maya Long Count Series

By

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In collaboration with Charles William Johnson

The Fibonacci numbers form a continuous sequence defined by the two starting values so that each number is the sum of the two preceding numbers. The best known series starting with [1, 1, 2 ...n] runs like this for the first 14 numbers:

1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, **233**, **377...n**

If we take the ratio of two successive numbers in the above Fibonacci series and we divide each by the number preceding it, we will find the following series of numbers:

1/1 = 1, 2/1 = 2, 3/2 = 1.5, 5/3 = 1.666..., 8/5 = 1.6, 13/8 = 1.625, 21/13 = 1.61538

When we further investigate the ratio of the 14^{th} and the 13th term, 377 / 233, we receive **1.61802575**. This decimal value is very close to **Phi** which is given as 1.6180339... Phi is an unending irrational number.

1. **1.618**1802575 / **1.618**0339 = 0.99999 = **Phi** to 99.999%

When we continue increasing the figures in the Fibonacci series the ratio for each successive last pair of figures comes closer and closer to "**1.618** 034"...without ever actually reaching that value. **The Golden Mean** (Phi) is a unique ratio (**1:1.618**...) whose reciprocal 0.618034 and square 2.618034 have the same fractional mantissa as the number itself - i.e. **0.618**....Living structures when analysed for the proportion all incorporate **Phi**. It can also be found in planetary relations.

Vigor Berg introduced the Fibonacci series [296, 296,..., n] in Part III of **The Code behind the Maya Long Count** (CODE), viewable in the **Forum** of Charles William Johnson's website <u>www.earthmatrix.com</u> The series is as follows in part:

1 2 3 4 5 6 7 8 9 10 11 12 13

296, 296, **592**, **888**, **1 480**, **2 368**, 3 848, 6 216, 10 064, 16 280, 26 344, **42 624**, 68 968

http://earthmatrix.com/forum/pentagram/the_code.html

The purpose of that essay was an attempt to bring together the **Hebrew** letter value for **the Earth** (296) used in the **Old Testament** with the Holy **Greek** letter values of the **New Testament** namely the Greek words for **Godhead** (592), Jesus (888), Christ (1 480), and Jesus-Christ (2 368). The author had a

hunch that the biblical words could be connected to the synodic periods of the planet **Venus** and the sidereal orbits of the planet **Jupiter**.

The previous series shows that the **four** figures **592**, **888**, **1 480** and **2 368** are closely interconnected and sum to **5 328**. This figure can be mirrored by a square with the sides **1 332** and the perimeter **5 328**. There is also a **Pythagorean triangle** with the sides **1 332**, **1 776** and **2 220** that has the perimeter **5 328**. An **equilateral triangle** with the sides **1 776** will also have the perimeter **5 328**. The right **triangle** with the sides **888**, **444** x root **5** and **1 332** is worth mentioning because it contains the **Greek** letter values for Jesus (**888**) and **Alpha** and **Omega (1 332**).

The physician **C. G. Jung** used the word **Quaternity** for a **fourfold** representation of elements. This conception of Jung stands for the unity or wholeness of **four elements** of equal significance, as for example the four elements of creation: earth, water, air and fire. Other examples are the four directions of the compass, the four seasons, and the four phases of the Moon. A **square** can be seen to consist of four equal lines. The number **four** plays a decisive role as an ordering factor. A kind of oneness is also associated with the number four. There is an ancient text stating: "One becomes two, two becomes three and out of the third comes **the one** as **the fourth**." When we add 1, 2, 3 and **4** the result is **10** which according to cabalistic counting distills to 1+0 =one.

I am also going to use the word" **trinity**" with respect to the triangle with the sides **888**, **1 184**, **1 480** and the perimeter **3 552** because I believe that the figure **1 184** shows a complementary, mathematically aspect of Jesus (**888**) and Christ (**1 480**). However, the **equilateral triangle** with the sides **1 184** is also connected to the "trinity" of **3 552**.

An older aspect of the **Christian trinity** is the **Egyptian** triad of **Osiris**, **Isis** and **Horus**. In Egyptian mythology there is also a reference to **Seth**, the brother of Osiris, sometimes also referred to as the brother of Horus. Seth can be seen as the **shadow aspect** of Horus, or his **unconscious Self**. Horus is the son of Isis and Osiris and, like Jesus he can be seen as **the divine child**. In **Christianity**, the doctrine of the **Trinity** states that God is one being who exists, simultaneously and eternally, as a mutual indwelling of three "persons": the **Father**, the **Son**, (incarnate as Jesus of Nazareth) and the **Holy Spirit**.

The biblical spelling for the Greek words **Alpha** and **Omega** renders the letter value **1 332**. Jesus referred to himself as the Alpha and the Omega, as the Beginning and the End, possibly referring to an **era** or a **circle**. Then the **ratio** for the **area** / **perimeter** of the square of **1 332** equals:

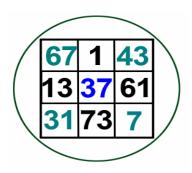
2. 1 774 224 square units (s.u.) / 5 328 = 333 s.u. 5 328 = 16 x 333
3. 333 s.u. = 9 s.u. x 37 = 3 x 111 s.u.

The figure **333** can be split into the figures **296 + 37**. These two numbers are of symbolic significance in the **gematria** of the **Bible**. The figures also appear in the **Fibonacci series** that starts with [37, 37, ...n] The interconnection of the figures **37** and **296** can be illustrated by a **diagram** that puts the number **37** into the middle

of a square of 3 x 3 numbers. This square usually consisting of the figures 1-9 is called the square of Saturn.

The **eight prime figures** that surround the central number **37** add up to **296**. One can say, that **"God's prime**," the number **37** is" embraced" by **the Earth** (**296**). The **sum** of all the **nine** figures adds up to **333**. When we add **any row of three figures** in the diagram we receive the figure **111**. It is up to the reader to find the **sum** of all the possible additions.

Figure 1



The **ratio** of the **13**th and the **12**th figure in the preceding **Fibonacci series** gives the **golden number**, usually called **Phi = 1.618**033988749895... This is an unending irrational figure. For any practical reasons it is not necessary to take more than 6 decimal points into account.

- 4. <u>68 968</u> = 1.6180555..... 42 624
- 5. <u>**1.618**0339....</u> = 0.99998665 = Phi to 99.999% **1.618**0555....

Charles William Johnson mentions the curious fact that the **reciprocal** of 0.99998665 equals 1.00001335. By **halving** the number we receive 0.5000**6674** [the mantissa reflects the gravitational constant: **6.6742** fractal]

When we let the figure **42 624** in equation 4 stand for **days** we can bring **astronomical aspects** into the picture.

- 6. **42 624** days / 73 = **583.890411** days
- 7. **42 624** days thus stand for **73** synodic periods of **Venus** of **583.890411** days.
- 8. **42 624** days correspond to **1 560** lunar orbits of 27.32166 days to 99.99%

In **Part II** of CODE Vigor Berg showed how **66 656 665 average** synodic periods of Venus of **583.890411** days, equal **106 560 000** tropical years of the Mayans.

9. 66 656 665 synodic periods of Venus = (5 x 31 x 43 x 73 x 1 37) periods

We note that the primes 31, 43 and 137 also are represented as fractals in the count

10. **26 000** tropical of 365.2420 days = **9 496 292** days

11. **9 496 292** days = (2 x 2 x 13 x **31** x **43** x **137**) days

The Mayan astronomers certainly observed that **10 656 Haab** equal **6 660** synodic periods of Venus of **584** days. The count **583.890411** days for a synodic period of Venus together with the Mayan code number, **1 314**, allows the calculation of the **Long Count** by using a ratio of **tropical years**.

12. <u>26 000 tropical years x 1 314 x 583.890411 days</u> = 1 872 000 days 10 656 tropical years

26 000 tropical years of the Mayans equal **9 496 292** days (c.f. equation 10) **9 496 292** = (2 x 2 x 13 x 31 x 43 x 137) days (c.f. equation 11)

[Note: The figure **1 872 000** days represents the Maya Long Count period. The 26 000 tropical / sidereal years may be considered to be the theoretical period for the Earth's precession (or the **Great Cycle**). In Western antiquity this period was also cited as being 25 920 years, called **The Platonic Cycle**.]

The **biblical wisdom** equates a day with a year. Instead of **10 656** Haab used in the example above we can show that **10 656 days** are relevant when the Holy Greek letter values **888** and **2 368** are used together with **36** and **8** Haab.

This equation can be rendered:

Five synodic periods of Venus of 584 days equals **2 920** days. When the denominator in equation 14 is changed to **584** and the code **1 314** is used we find the figure **5 328** which I referred to as the symbol for "the quaternity." (c. f. page 2)

Charles William Johnson has shown that 9 496 656 days stand for 26 000 sidereal years of 365.256 days.

- 16. **9 496 656** days = **9 360 000** days + 1 366 560 days /10
- 17. **9 496 656** days = (**2** x **2** x **2** x **2** x **3** x **3** x **3** x **13** x **19** x **89**) days

9 496 656 days, the product of 10 prime numbers, looks like a perfect count.

18. 9 496 656 days = 26 000 tropical years of the Mayans + 364 days

Vigor Berg believes that the Mayans left a clue to their **26 000 tropical years** in the equation 19 below which refers to the **four** Mayan time counts 260, 360, 365 and 3652420 days divided by their **code number 1 314 respectively 13 140 000.** The latter is used when there are no decimals in the equation.

19. <u>260 x 360 x 365 x 3652420 days</u> = **9 496 292** days = **26 000 tropical years 13 14**0 000

This equation made up of **four Mayan time counts** can also be connected **John 1.1** of the **Bible**, which has the **Greek** letter value **3 627.** [**3 700** -73]

20. <u>260 x 360 x 365 x 365.2420 days</u> = **3 440 344** days **3 627**

We note that **344 0344** is a "twin number" like 819 819 and 6 665.6665.

- 21. 3 440 344 = 10 001 x 344
- 22. 3 440 344 = 4 0004 x **86** = [2 x 2 x 2 x 43 x 73x137]

Thus we find a "twin number" (40 004) multiplied with the **Hebrew** letter value for **Elohim** (86). The corresponding Greek word is **Theos** has the **Greek** letter value 284. We also note that the **Greek** letter value for **John 1:1**, 3 627, equals 39×93 and this has reflective symmetry, the same as in **Genesis 1:1** where the **Hebrew** letter value amounts to 2 701= 37×73

23. The Hebrew Elohim (God) + the Greek Theos = 86 + 284 = 370

The number **370** is of significance in the **Square of the Sun** and in the **Greek Triangle**. The **top triangle** in this construction has the sides **222**, **296** and **370** and the **perimeter 888**.

Let us now have a new look at 42 624 the 12th number in the Fibonacci series

24. 42 624 days / 37 = 1 152 days

Charles William Johnson has shown that **1 152** is part of the Maya Long Count series numbers: (36, 72, 144, 288, 576, **1 152**, 2 304 ...) that share relevancy to many historically significant numbers in different ancient reckoning systems and to the physical make-up of matter-energy. When the figure **1.152** is used as **a multiplier** then Egyptian feet are turned into British Imperial feet.

25. The Long Count 1 872 000 days = **1 152** x1 625 days

- 26. **1 152** days x **37² = 1 577 088** days
- 27. **42 624** days **x 37 = 1 577 088** days
- 28. **1 577 088** days / **4 332.58926** days = 364.0058878

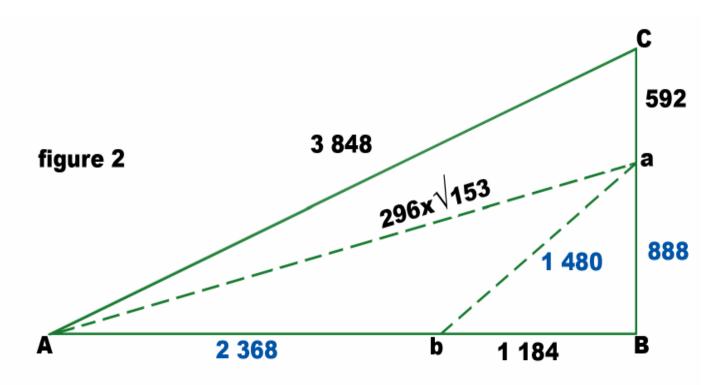
[4 332.58926 days = the average sidereal orbit of Jupiter]

29. 364 / 364.0058878 = 0.999983825 [364 sidereal orbits of Jupiter to 99.998%]

1 577 088 days = 364 sidereal orbits of Jupiter

- 30. 1 577 088 days / 2 701= 583.890411 days [one synodic period of Venus]
- 31. **1 577 088** days = **2 701** synodic periods of Venus of 583.890411 days.

The first sentence of the **Bible** has the **Hebrew** letter value **2 701** a value that can be factored as 37×73 or as $73 \times 74 / 2$. The **12**th prime number is **37** while the **21**st prime number is **73**. Vigor Berg believes that **2 701** is a reference to the synodic periods of Venus.



When the **first Fibonacci** series on page one is complemented by another Fibonacci series starting with [148, 148, ...n], then the **Pythagorean Theorem** can also be brought into the picture. The astronomer **Johannes Kepler (1571-1630)** called **Phi** and the **Theorem of Pythagoras** as the two great treasures of geometry. Let us now consider the interaction of the two nearly related Fibonacci series.

	1 2	3 4	5 6	7 8	9	10	11	12
 	148, 148		,	, 1 924, 3 1 , 1 480, 2 3	, ,		13 172, 10 064,	
	12	13	14	15	16			
I	34 484,	55 796,	90 280	146 076	236 356			

II 26 344, 42 624, 68 968, 111 592, 180 560

We notice that the **sum** of **5 032 +3 848**, the **9**th term of the **first** *Fibonacci* series, and the **7**th term of the second series, **results** in **8 880** which can be seen as "the **17**th figure" born out of "**16** preceding figures". The **sum** of all the numbers from **1 -17** equals **153**. (cf. John 21 of the Bible)

We further find:

32. **5 032** = 3 552 + **1 480** = (**2 368** + **1 184**) + **1 480**

The right **triangle ABC** (figure 2) with the proportion **5:12:13** and the sides **1 480**, **3 552** and **3 848** has the perimeter of **8 880**.

We notice the Pythagorean Theorems to be found in the triangle and the two series:

33.	3 552 ² + 1 480 ² = 3 848 ²
34.	$1\ 184\ ^2+\ 888^2=1\ 480^2$
35.	$1 \ 480^2 + 3 \ 552^2 = 3 \ 848^2$
36.	$592^2 + 444^2 = 740^2$

We thus in figure 2 find that the right triangle **bBa** with the sides **888**, **1 184** and **1 480** is superimposed onto the right **triangle ABC** with the sides **1 480**, 3 552 and 3 848. The **area** of the larger triangle **ABC** relates to the smaller triangle **bBa** as **2 628 480** square units / **525 696** square units = **5 / 1**. The **area** of the right triangle **ABa** equals:

37. The area of ABa = 3 552 x 888 / 2 = 1 577 088 square units

38. The area of the triangle Aba = 1 051 392 square units

The combined area of the two triangles ABC and bBa equals:

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39. 2 628 480 + 525 696 square units = 3 154 176 square units = 1 776<sup>2</sup> s.units.
40. 3 154 176 = 1 577 088 x 2,
41. 1 577 088 = 2 x 788 544, 788 544 = 888<sup>2</sup>
42. 3 145 175 = 4 x 888<sup>2</sup> = 1 776<sup>2</sup>
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The right triangle with the sides **111**, **148** and **185** has a perimeter of 444. The **area** of the triangle equals **8 214** square units. **8 214** days are **45 years** of 365.0666 days. Thus the **area** of a **right triangle** whose sides are multiples of 37 can symbolically be translated into years of "365".

43. 3 154 176 days = 8 640 years of 365, 06666666... days
44. 3 154 176 days = 96 x 32 856 days (32 856 = area of triangle in CODE Part II)
45. 3 154 176 days = 364 sidereal orbits of Jupiter to 99.998%.
46. 3 154 176 days = 2 701 synodic periods of Venus of 583.890411 days.
47. 3 154 176 days = 115 446 sidereal Moons of 27.32166 days to 99.9999%
48. 3 154 176 days = 115 446 sidereal Moons = (2 x 3 x 71 x 271) sidereal Moons.

We also find that the when the line **Aa** in the right triangle **ABC** is multiplied by the synodic Moon (29.53059 days) we receive **296** synodic years of **365.242199** days to 99.99%.

49. 296 x root of 153 x 29.53059 days = 108 120.8747 days = 296 years to 99.99%.
50. 108 120.8747 days = 3 661 synodic moons to 99.9998%

A parallel can be drawn between the **Hebrew** letter value for **the Earth** (**296**) and 296 **practical years** of **365** days. When we multiply by 296 the rounded off synodics for **Earth** (365), **Venus** (21 600 days / 37) and **Mars** (780 days) by 296 and divide the product by the **common denominator** for the three Mayan counts **260**, **360** and **365** days (26 x 365 x 36 = **341 640** days) we receive the following result:

51. <u>296 x (365 x 21 600 x 780) days</u> = 144 000 341 640 days x 37

The proportion for the lines CB / aB = 5 / 3 in the right triangle ABC is called the **Mercy Seat**, the **atonement** piece in the Bible. (Exodus 25:17-22.The seat is mentioned as having the ratio 2.5 / 1.5 cubits)

In the mythological context of **Egypt** the larger triangle **ABC** can be seen as **Isis** joining together the dismembered parts of **Osiris** and giving birth to the primeval values **888**, **1 184**, **1 480** which later are to develop into the right triangle with the sides of **5 328**, **7 104** and **8 880**. This new triangle is demonstrated in **Part III** of **CODE** where the sides **5 328**, **7 104** and **8 880** form a right triangle inside a larger right triangle with the sides **8 880**, **21 312** and **23 088** [**26** x **888**]. The relationship between the larger and the smaller triangle equals 5 / 1. With the extended Pythagorean Theorem of Charles William Johnson the significance of the term **10 656** ³ is made obvious.

- 52. $5328^3 + 7104^3 + 8880^3 = 10656^3$
- 53. $10\,656^3 = 4 \times 10\,656 \times 5\,328^2$
- 54. **5 328**² / **3 = 9 462 528**
- 55. **9 462 528 = 10 656** x **888 = 888**² x **12**
- 56. **[9 360 000** days + **9 462 528** days] / **2** = **9 411 264** days (This count equals today's figures for the precession **25 767** years)

"Equinoctial precession is a circular motion of <u>Earth's</u> rotational axis with respect to the 'fixed' stars, also known as <u>lunisolar precession</u>. It is caused by the <u>torque</u> of the <u>Sun</u> and <u>Moon</u> on the Earth's rotational bulge. The axis precesses with a period of approximately **25,770** y (Beatty *et al.* 1990)." According to modern calculations the precession seems to be slowing down. This is possibly due to the fact that the **Sun** forms a binary System with **Sirius**.

A count with a reference to the **Hebrew** letter value (**2 701**) of the first sentence of the Bible and the rounded off value **21 600** days/ **37** for a synodic period of Venus allows the following count for the precession.

57. <u>6 x 2 70 1 x 21 600 days</u> = 9 460 800 days 37

This equation reveals the symbolic value of the figures **37**, **2 701** and **60** biblical years (Tun). The number **37** is the **12th** prime number. The result of equation 57 is also in agreement with the count of **72 Haab** for **one degree** of the precession:

- 58. **72** x **365** days x 360 = **9 460 800** days
- 59. <u>**9 460 800** days</u> = 25 902, 8 synodic years 365.242199

This count is slightly longer than the figures quoted today. Anyhow, also the modern day figures are approximation and allow +- 100 years.

Vigor Berg believes that the count of **936 0000** days is to be included in any calculation of the precession. The **arithmetic mean** of **9 460 800** days and **936 0000** days equals **9 410 400** days:

60. <u>**9 410 400** days</u> = 25 764, 8 synodic years for the precession. 365.242199

This count is well in line with the count (25 767 years) mentioned in equation 56.

The **two Fibonacci series** also allow a reference to the **Hebrew** letter value **112** standing for **Jehova Elohim**. The **sum** of the figures **1-112** equals **6 328**. By adding **112** to the prominent figures of the two Fibonacci series we find:

61. **112+ 296 + (888 + 1 184 +1 480) + 2 368 = 6 328** 6328 is an anagram of 2 368

The sum of the Greek letter value for Jesus-Christ (2 368) and the Mayan Day of Creation, day 3 960, also results in 6 328.

62. **3 960 + 2 368 = 6 328**

In **Part III** of Code Vigor Berg pointed out that the **anagram** of Jesus-Christ **times** the Greek **Alpha** and **Omega** (**1 332**) well agrees with the count of **444** Mayan Calendar Rounds. (8 427 120 days = 32 412 Tzolkin)

- 63. **6 328** x **1 332** days = **8 428 896** days
- 64. **444** Mayan Calendar Rounds = **444** x **18 980** days = **8 427120** days.
- 65. **949** days x 8 880 = 8 427 120 days (949 days is a Mayan count)
- 66. 8 428 896 days 8 427 120 days = 1 776 days = 2 x 888 days

The Mayan figures are interwoven with **Greek** and **Hebrew** letter values!

67. **26** x **888** x 365 days = 8 427120 days (The letter value for **JHVH** is **26**)

68. The **square** inserted into the **circle** with the **circumference** of **9 360 000** day units measures **8 426 960** day units.

69. 8 426 960 days = 23 088 Haab to 99.998%

70. 8 426 960 days / 8 427120 days = 0.99998

Thus there is an agreement of **99.998%** between the two main values.

The "Quaternity" (5 328) and the "Trinity" (3 552) result in 8 880 which in Greek gematria is referred to as "risen Jesus." In Part III of CODE Vigor Berg showed in the Forum of Charles William Johnson <u>http://earthmatrix.com/forum/pentagram/the code.html</u> how the triangle with the sides of 5 328, 7 104 and 8 880 represents part of a larger right triangle with the sides of 8 880, 21 312 and 23 088. The area of the larger triangle 94 625 280 square units is five times larger than the smaller one.

The **five Fibonacci series** that are dealt with in this essay, highlight the **golden number**, Phi, which is found in the ratio of the **14**th and **13**th term in the **five** series. When the series are combined they can also illustrate **the Pythagorean rule**. The extension of this rule has been worked out by Charles William Johnson in. <u>www.earthmatrix.com</u> The Maya Long Count and the Extension of the Pythagorean Theorem.

Let us now consider the extension of the Pythagorean Theorem extended to the cube, as proposed by **Charles William Johnson** on <u>http://earthmatrix.com/serie56/maya56.htm.</u> **The extended Pythagorean Theorem** is expressed as the cubic expression of four terms. The three terms in a Pythagorean triangle having the **3:4:5** proportions will as a cubic expression with four terms show that the last term is eight times larger the first term cubed.

 $a^3 + b^3 + c^3 = d^3$ where $d^3 = 8 \times a^3$ [see <u>http://earthmatrix.com/serie56/maya56.htm</u>]

71. $888^{3} + 1 \ 184^{3} + 1 \ 480^{3} = 1 \ 776^{3} = 8 \times 888^{3}$ $888^{3} \times 8 = \ 444^{3} \times 8 \times 8 = 222^{3} \times 8 \times 8 \times 8$ $222^{3} = 111^{2} \times 888$ $111^{2} \times 888 = 37 \times 333 \times 888 = 10 \ 941 \ 048$ $10 \ 941 \ 048 = 111 \times 111 \times 888$ $10 \ 941 \ 048 = 111 \times 111 \times 888 = 37 \times 37 \times 37 \times 6 \times 6 \times 6$

When we divide the **14**th term with the **13**th term in the **first** Fibonacci series we find:

- 72. <u>55 796</u> = 1.618026 34 484
- 73. <u>**1.618**026</u> = 0.999995117 = **Phi** to 99.999%

1.6180339

This value for Phi, 1.618026 is slightly more exact than the value given in equation 1.

The two Fibonacci series above can be complemented with a **third** series, [74, 74,...n] This special series may be called "**The Solar Hierarchy** of the **Multiples** of **74**." The **magic square of the Sun** (9 x **74**) evolves as "the taking of form" by the **doubling** of the figure **37**. The proportion **4:5** is found in **The Square of the Sun** where the **sum** of the inner **16** figures (**296**) is surrounded by **20** outer figures summing up to **370**. The "**completion**" of the figures is found in the right **triangle** with the sides **222**, **296**, **370** and the **perimeter 888**.

- 74. $222^3 + 296^3 + 370^3 = 444^3$
- 75. $444^3 = 8 \times 222^3 = 3 \times 37 \times 888^2$

The ratio of **296** / **370** in **The Square of the Sun** equals **4** / **5**. The proportion **4** / **5** can be seen as complementary to the biblical proportion of **3** / **2**. Let us now look at the three series [74, 74, ..., n], [148, 148, ..., n] and [296, 296, ..., n]

	1	2	3	4	5	6	7	8	9	10	11	12	13
 	74,			148,	296 ,	444,	740, [•]	1 184,	1 924,	3 108,	5 032,	10 656, 8 140, <u>6 216,</u> 25 012	13172
		1	4	1	5	16		17	18				
 		21	312 ,	34	484,	42 62	24, 68	3 968 ,	146 0 111 5 191 2	92,			

We notice that the **12th** term in the **first series** equals **10 656.** This gives, "on an average," the value **888** for the first **12 terms** of the series [74, 74, ...n] The ratio for the **14th** and **13th** term in **the first series** gives:

- 76. <u>27 898</u> = **1.618**025751 = **Phi** to 99.999% 17 242
- 77. <u>**1.618**025751</u>... = 0.999994963 = **Phi** to 99.999% **1.618**0339...

We have used the ratios involving the **12th**, **13th** and **14th** term of the different Fibonacci series. Strangely enough the figures 12, 13 and 14 can be combined to the figure **121 314**. This figure counted in days equals **28** sidereal orbits of **Jupiter** to 99.999%. The sidereal orbit of **Jupiter** equals on an average **4 332**.58926 days.

78. **121 3 14** days / **4 332.58926** days = 28.00034638

79. 28 / 28.00034638 = 0.999987629 = 99.999%

80. <u>121 314 days</u> = 4 332.642857 days 28

81. 121 314 days equal 4 440 sidereal Moons of 27.32166 days to 99.995%!

The figure **10 656** in the first series plus the two figures lined up under it, **8 140** and **6 216**, result in the sum of **25 012** = $13 \times 13 \times 148$.

82. 26 x 26 x 37 = 25 012 = 26 x 962
83. 25 012 days = 847 (7x11x11) synodic Moons to 99.998%

We notice that the figures **148**, **222**, **370** and **592** stand in the same proportion to each other as the Greek letter values **592**, **888**, **1 480**, **2 368**. By adding a **fourth Fibonacci** series starting with [37, 37, ... n] we find that the four proportions **1:1.5**: **1.6666..**: **1.6** are also present in the four figures **74**, **111**, **185**, **296**. Finally the zero can be taken into the proportions by a Fibonacci series starting with [370, 370,... n].

When we **sum** the **four** main figures of the series 370, 370, <u>740, 1 110, 1 850, 2 960</u> then the four underlined figures show up with the above proportions. The sum of the four figures equals **6 660**.

The four underlined figures and their sum 6 660 can be expressed differently.

- 84. **740 + 1 110 + 1 850 + 2 960 = 6 660**
- 85. **6 660** is the **perimeter** of an **equilateral triangle** with the side **2 220**.
- 86. **6 660** is the **perimeter** of Pythagorean **triangle** with the sides **1 665**, **2 220** and **2 775**
- 87. **6 660** is the **perimeter** of a **rectangle** with the sides **1 850** and **1 480**.
- 88. 6 660 is the square with the side 1 665
- 89. **6 660 is the perimeter of a pentagon with the sides of 1 332**
- 90. 6 660 is the perimeter of a heaxagon with sides of 1 110.
- 91. **6 660** synodic periods of **Venus** of **584** days equal a "triangle of time" with the sides **2 664**, **3 552** and **4 440** Haab (perimeter =**10 656** Haab)
- 92. 6 660 synodic periods of Venus of 584 days equal 10 656 Haab.
- 93. 6 665.6665 synodic periods of Venus of 583.890411 days equal 10 656 tropical years of the Mayans.

The extended Pythagorean Theorem for the equation 91 equals:

- 94. 2 664³ Haab + 3 552³ Haab + 4 440³ Haab = **5 328**³ Haab
- 95. **5** $328^3 = 2664^3 + 3552^3 + 4440^3$
- 96. **5** $328^3 = 27 \times [888^3 + 1184^3 + 1480^3]$
- 97. **5** $328^3 = 27 \times 1776^3$
- 98. **1 776³** x 27 = 1 332 x **10 656²**

99. **10 656²** x 1 332 = 1 332 x 144 x 888²

100. **888**² x 1 332 x 144 = $18 \times 888 \times [12 \times 888^2]$

101. **5** $328^3 = 6 \times 6 \times 6 \times 888 \times 888 \times 888$

Let us finally consider **a fifth series** added to the four series. A **fifth** Fibonacci series starting with [592, 592,n] will have the **four main** figures **1 184**, **1 776**, **2 960** and **4 736** the sum of which equals = **10 656**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	37.	37.	74.	111.	.185.	296	481.	777.	1 258.	2 035.	3 293.	[5 328],	8 621.	13 949
II														[10 656]
111					148,	148,	296,	444,	740,	1 184 ,	1 924,	3 108,	5 032,	8 140
IV							2 96,	296,	592 ,	888 ,	1 480 ,	2 368 ,	3 848,	6 216
V									592,	592,	1 184	1 776 ,	2 960 ,	4 736

	15	16	17	18	19	20	21
-	~~	~~ - / ~					
I	22 570,	36 519	59 089,	95 608,	154 697,	250 305,	405 002
II	17 242,	27 898	45 140,	73 038 ,	118 178,	191 266,	309 444
III	13 172,	[21 312] 34 484,	55 796 ,	90 280,	146 076,	236 356
IV	10 064,	16 280	26 344,	[42 624] ,	68 968,	111 592,	180 560
V	7 696,	12 432	20 128,	32 560,	52 688,	[85 248] ,	137 936

The 12^{th} figure of the first series above equals 5 328. The average of the first 12 figures equals 5 328 / 12 = 444

- 102. 12 x 444 = **5 328** = the "quaternity"
- 103. 8 x 444 = 3 552 = "the trinity"
- 104. 20 x 444 = 8 880 = "wholeness"

The 12th figure in the second series equals 10 656.

- 105. The average of the 12 first figures equals 10 656 / 12 = 888
- 106. The 12th figure in the third series equals 21 312
- 107. The average of the 12 first figures equals 21 312 / 12 = 1 776

The 12th figure of **the fourth** series equals **42 624** 108. The average of the 12 first figures equals **42 624** / **12 = 3 552** 109. The 12th figure of **the fifth** series equals **85 248** 110. The average for the 12 first figures equals **85 248** / **12 = 7 104**

The **progression** of the **five series** is thus **444**, **888**, **1 776**, **3 552**, **7 104** The progression for the average of the 12 first numbers in the five Fibonacci series can be written 1, 2, 4, 8, and 16. 111. Each of the **five Fibonacci series** has four consecutive figures the **ratios of** which are **1:1**, **5: 1.666**...:**1.6**

For the **first** series they are **74,111,185**, and **296** the sum of which is **666** For the **second** series they are **148**, **222**, **370** and **592** " " **1 332** For the **third** series they are **296**, **444**, **740**, and **1 184** " " **2 664** For the **fourth** series they are **592**, **888**, **1 480** and **2 368** " " **5 328** For the **fifth** series they are **1 184**, **1 776**, **2 960**, **4 736**. " " **10 656** The consecutive five ratios above show the progression 1, 2. 3. 4. 5.

We notice that the four consecutive figures in the fifth Fibonacci series equal 10 656.

When the Greek letter value **2 368** is seen as "the **Alpha** of a "new Round" or of a **new Platonic Month**, then the **four figures** building on the above proportions will historically be the following:

112. 2 368, 3 552, 5 920 and 9 472 the sum of which equals 9 x 2 368.

The sum of the four figures adds up to the figure 21 312 which is the 12th figure in the third Fibonacci series. The right triangle with the sides 5 328, 7 104, 8 880 has the perimeter 21 312. Also an equilateral triangle with the sides 7 104 (8 x 888) will have the perimeter 21 312. The parallel to the right triangle ("the trinity") with the sides 888, 1 184, 1 480 will thus be the new triangle with the sides 1 776, 2 368 and 2 960.

The large right triangle with the sides **8 880**, **21 312** and **23 088** is discussed in Part III of CODE in the Forum of Charles William Johnson, <u>http://earthmatrix.com/forum/pentagram/the code.html.</u> Within this large triangle is also the smaller right triangle with the sides **5 328**, **7 104** and **8 880**. The hypotenuse **23 088** (**26** x **888**) contains the **Hebrew** letter value for Jehova and the **Greek** letter value for Jesus. The **Greek** letter value of **John 1:1 - 5** equals **23 088**. The **square** inserted into **circle** with the circumference of **36 000** Tzolkin equals **26 000** biblical years (Tuns).

As mentioned before the **square** with the **perimeter 21 312** builds on the **quaternity** the **basic** square with the perimeter **5 328**. The **ratio** for the **area** of the two squares equals **16** / **1**. A **circle** drawn around the four corners of the square with the perimeter **5 328** will have the **circumference** of **23 681**.20813 when 22 / 7 is used for Pi.

113. $5328 \times \text{root of } 2 \times 22 = 23681.20813$ (when Pi = 22/7)

114. **<u>23 680.00000</u>** = 0.999948983 = **23 680** to 99.99% 23 681.20813

23 680 is the **circumference** of above circle to 99.99% This result builds on the Pyramid Pi (22 / 7).

The circumference of the **circle**, **23 680**, can be seen as the "spiritual elevation" of the **square** with the perimeter **21 312** which is inserted into the circle with the circumference of **23 680**. This allows an accuracy of 99.96% for the geometry.

115. **21 312** x 1.1111.... = **23 680**

116. **21 312** days equal **780** sidereal **Moons** of 27.32166 days to 99.99%

117. 21 312 days equal 365 / 10 synodic periods of Venus of 583.890411 days

The **Great Pyramid** at Giza is a symbol for the "spiritual elevation" of Earth. The inner temperature of the **Great Pyramid** equals **37** degrees Celsius. The measurements of the Great Pyramid are the signature of spiritual Man. When the height of the Pyramid is extended downwards then the **circumference** of a **circle** with the **diameter** $[2 \times 481.090909..feet]$ will equal the **perimeter** of the **base (3 024 feet)** when Pyramid Pi (22 / 7) is used. This approximation allows the ancient equation "as above so below"

118.
$$2 \times 481.090909.$$
feet x 22 = **3 024** feet
7

The ratio of one **base side** (**756 feet**) to the **height** of the Pyramid (481.090909 feet) equals **11/7** This measurement reflects the **diameter** of the **Earth** / **radius** of (Earth + Moon). This is the ratio **7 920** miles / (**3 960 + 1 080** statute miles). The **ratio** of the diameter of **the Earth** / diameter of **the Moon** equals **11/3**

119. **7 920** miles / **2 160** miles = **11/3**

The measurements of the pyramid thus reflect "the marriage of Earth and Moon."

- 120. **3 024 feet** times root of three = **5 237**.721642 feet
- 121. **5 237**.721642/ **5 238** = 0.999946858
- 122. **5 237.**721642 feet equals **5 238 feet** to 99.99%

5 238 and 3 024 are the axis of a mandorla, often referred to as a Vesica Pisces.

Vigor Berg sees in the feet measurements of the Great Pyramid a reference to **378** days which equal a synodic period of **Satur**n. Thus the **perimeter** of the base **3 024** feet equals in days **8** synodic periods of Saturn of 378 days. There may also be a reference to the **Hebrew** letter value of **Jehova Elohim** (112) in the base perimeter of the Great Pyramid which is $27 \times 112 = 3 024$. The area of the base equals:

123. $756^2 = 571536 (1512 \times 37)$ square feet.

124. A Mayan count for 400 synodic periods of **Saturn** equals **151 200** days.

125. **151 200** days = **378** synodic periods of Jupiter (of 399 days) + **378** days.

Here Jupiter is defined by Saturn's synodic period of 378 days.

Saturn' s central position may mirror a pre-Christian view.

The ancient Greeks put Jupiter first. Christianity probably reinforced the shift from **Saturn** to **Jupiter** and **Venus** as revealed in the New Testament by the Holy Greek **letter values**. In the Cosmos however both planets are of equal significance. In the **sidereal** dance between Jupiter and Saturn, Saturn creates a Pentagram in a circle of about 60 Tun.

The synodic periods of Jupiter and Saturn lead to a conjunction every 7 253.4525 days (on an average). When the Sun is in opposition to the conjunction then a year + 12.84899 days later The Sun will once again oppose Saturn and 20.79215 days later the Sun opposes Jupiter again, The catch up time for Saturn (378.0919 day - 365.242) = **12.84899** days. The catch-up time for required for Jupiter to oppose the Sun again is (398.88405 days—378.0919days) = **20.79215** days.

126. The ratio **20.79215** days/ **12.84899** days = **1.618**19337

- 127. 1.618034 /161819337 = 0,999901534
- 128. The Ratio is thus **Phi to 1** to 99.99%

The architect of the Great Pyramid **at Giza** also left the golden number, **Phi**, in the construction. The **area** of **four visible triangle sides** of the Pyramid relates to **the "hidden" area of the base** as **Phi / 1**. The distance from the **midpoint** of the base to the nearest side equals **378** feet

According to the Pythagorean rule **the height** of the visible triangle side is **611.82715** feet.

129. 481.090909^{2} feet + 378^{2} feet = 374332.4627^{2} feet 130. Root of **374332.4627**² feet = **611.827151** feet

Each side of the Great Pyramid has the triangular area of 231 270.6631 feet

The visible area of the four sides of the Pyramid equals 925 082.6523 square feet.

132. 4 x 231 270.6631 square feet = **925 082. 6523** square feet

The base area of the Great Pyramid I (756 feet)² = **571 536** square feet The ratio (area of the visible triangle sides / area of the base square) equals:

133. <u>925 082. 6523 square feet</u> = **1.618**590347 571 536 square feet

The golden ratio is also found in the relationship of the **height** (611.827151 feet) of each triangle side to **half base side** (378 feet) of the Great Pyramid.

134. <u>611.827151 feet</u> = **1.618**59034

378 feet

In the Fibonacci series 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233...the ratio between the 11^{th} and 10^{th} term **89 / 55** best mirrors the Phi value that is deposited in the Great Pyramid. The findings are to be seen an approximation due to the fact that The four base sides are said to differ slightly in length

The **Greek** letter value, **3 168**, is attributed to the name **Lord Jesus-Christ**. This value is also prevalent as a factor in the **circumference** of the Earth expressed in Imperial feet

135. (**32** x **1 296** x **3 168**) feet = **131 383 296** Imperial feet which is the great ancient . Meridian over the poles.

The factor **3 168** is also to be found in the Egyptian measurement for the polar circumference of the Earth (114 048 000 Egyptian feet.

136. (**3 168** x 36 000) Egyptian feet = **114 048 000** Egyptian feet.

An Egyptian foot equals 1.152 British feet.

Let us have a look at the quaternity 5 328 again

The ratio for the area of the square 5 328 / perimeter of the square equals:

137. **5** 328² / 21 312 = 1 332

This figure is associated with the **Greek** letter values for **Alpha** and **Omega** When we draw a circle through the four corners of the square 5 328 we find that the **ratio** for the area of the **circle** / area of the **square** equals **Pi** / **2** when Pi = 22 / 7.

138.
$$\frac{(5 \ 328/2 \ x \ root \ of \ 2)^2 \ x \ 22}{5 \ 328^2 \ x \ 7} = Pi /2$$

The **Greek** letter value for **Lord Jesus-Christ** equals **3 168**. When this **value** is counted in British feet then it allows the ratio **22 / 21** when compared with the base perimeter of the Great Pyramid (**3 024** feet)

139. The ratio for **3 168** feet and **3 024** feet = **3 168 / 3 024 = 22 / 21**.

These two values, **3 168** and **3 024**, can be seen as the relationship between a circle of circumference **22** and an equilateral triangle with a perimeter of **21**. The diameter of the circle is **7** and the side of the triangle equals **7**. A circle with the diameter **7** will have the circumference **22** when **22** / **7** is used for Pi. The circle is a symbol for the spiritual dimension while the square symbolically is equated with Earth and also with civilisation. There are very slight length differences in the four base sides. When we let the perimeter stand for **3 024** feet then each side of the base will be **756** feet. The exact length **756** feet is found in the south base which is associated with the Egyptian goddess Re.

140. **756** feet = $[3^3 \times 1^3 \times 6^3 \times 8^3]$ feet

The sacredness of the Greek letter value **3 168** is thus connected to the Great Pyramid which mirrors the measurements of the Earth and the Moon. A **square** around the **disc** of the **Earth** will, slightly rounded off, measure **31 680** statute miles. A square around the disc of the Moon will, slightly rounded off, measure **8 640** statue miles. A circle with the circumference **31 680** miles will measure **10 080** miles when Pi is 21/7. The combined **diameter** of the Earth and the Moon equals:

141. 7 920 miles + 2 160 miles = **10 080** miles (90 miles x **112**)

When we consider the values of the **fifth Fibonacci series** and the four main figures **1 184**, **2 368**, **3 552** and **4 736** we can see that **2 368** doubled becomes **4 736**. Vigor Berg showed in **Part II** of Code in the **Forum** of **Charles William Johnson** <u>http://earthmatrix.com/forum/pentagram/code behind the maya long count.html</u> that **2 368** doubled and counted in Haab will lead to the Long Count of **1 872 000** days when the ratio **13 / 12** is used together with the Venus guotient **2 700 / 2 701**.

We may also consider the four following counts.

143. 888 x 12 x 260 000 days = 1 480 1 872 000 days

When we multiply the three figures of "the Trinity" and use the Venus quotient 2 700 / 2701 and use 583.890411 as the common denominator we find:

144. <u>888 x 1 184 x 1 480 x 2 700</u> = 2 664 000 = **300** x 8 880 583.890411 x 2 701

When we use the "Quaternity" in the same way we find:

When the **three** best known **Greek** letter values of **The New Testament** are used as in the next equation the result is $(10 \times 1 \ 480)$ Tun.

143. <u>888 x 1 480 x 2 368 x 2 700</u> = 5 328 000 = 10 x 1 480 Tun 583.890411 x 2 701 This latter count confirms the "Quaternity" of [592 + 888 + 1 480 + 2 368 = 5 238] one thousand times. [5 328 x 1 000 = 5 328 000]

When we multiply the **Greek** letter values for **Cosmos** and **risen Jesus** then we find that the two letter values result in 5 328 000.

144. **[600 x 8 880] = 5 328 000**

145. **5 328 000 days = 9 125** synodic periods of **Venus** of **583.890411 days**

146. **5 328 000 days = 1 230 sidereal orbits of Jupiter** to 99.98%

147. 5 328 000 days = 495 sidereal orbits of Saturn to 99.96%

148. **5 328 000 days = 195 010** sidereal **Moons** to 99.9999%

149. 5 328 000 days = 37 x 144 000 days = 14 800 Tun

By using **23 680** Haab together with the Venus quotient **2 700 /2 701** and the ratio, **13 / 12**, the count of **36 000** Tzolkin is revealed.

150. <u>23 680 x 365 days x 13 x 2 700</u> = 9 360 000 days = 36 000 Tzolkin 12 x 2 701

This equation points to the **probability**, that we are approaching the end of a **Great Circle** of **26 000** biblical years which correspond to **36 000** Tzolkins of the Mayans.

The ancients calculated the circumference of the Moon as:

151. 12 x 12 x 12 x 12 x 12 x 12 x 12 feet = 35 831 808 Imperial feet

This almost exact value **honours** the dimensions of the **Moon** measured with two highly symbolic figures **12** and **7**. The Moon is usually associated with Yin.

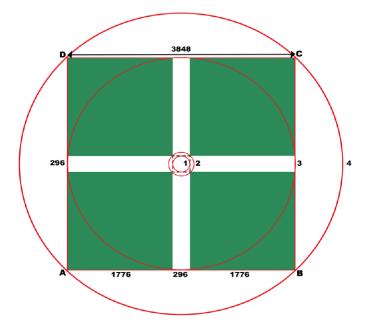
The origin of the feet is unknown it is much older then commonly believed. 5 280 feet make an English mile. 5 280 feet = $[(10 \times 11 \times 12 \times 13 - (9 \times 10 \times 11 \times 12)]$

Figure 2 can be presented in another way that illustrates the Yin aspect. When we let **3 848** stand for a side of a square we can illustrate that a white cross with the width, **296**, in that square will have the area **1 480**^{2}. The cross is surrounded by **four squares** each having the area of **1 776**^{2} square units. The total area of the four squares is **3 552**^{2}

The **first** number of the **fourth** Fibonacci series is **296**. When we to this figure add the three figures which make up the sides of the large triangle in the construction called **The Greek Triangle** (Code Part II) we receive:

296 + (**888** + **1 184** + **1 480**) = **3 848**

In figure 2 the hypotenuse of the larger triangle is **3 848**. The minor triangle has the hypotenuse **1 480**. We find that **3 848**² - 3 552² = **1 480**² The geometric projection of the equation (**1 480**² + **3 552**² = **3 848**²) allows the drawing of a square and a cross with the width of 296.



The area of the four green squares equals 3 552 ² square units. The perimeter of ABCD = 4 x 3 848 = 15 392 (4 x 37 x 104) 15 392 also equals the **perimeter** of the white Cross The ratio area/ perimeter = 962 (37 x 26) units The area of the white cross equals 1 480² square units The **ratio** for the area ABCD / the area of The white cross days equals = $6.76 = 2.6^2$ The ratio of the **area** of the white cross / the area of the inner square(1) = 25. The ratio between the area of the **square ABCD** and the area of the **center square**

 $3848^2 / 296^2 = 169 = 13^2$

The triangle with the sides 888, 1 184 and 1 480 Allows the equation $888^2 + 1184^2 = 1480^2$ which projected out in a similar construction as given above will have a cross with the width of 296 and the area 888^2 The four squares surrounding the cross will have the area 1184^2 The ratio of outer square/ inner square = 1480^2 / 296² = 25 The inner square is thus 4% of the outer square.

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Diagrams by Helene Berg

Vigor Berg In collaboration with **Charles William Johnson** September 11th 2007

References to the writings of Joseph Turbeville Hugh Harleston Jr. John Martineau John Michell