

MATHEMATICS OF THE GREAT PYRAMID

The Great Pyramid of Giza is a precise mathematical structure based on the mathematical ratio of PHI (ϕ) and PI (π).

Since PI can be accurately stated in terms of PHI, we shall base our mathematics on PHI (ϕ).

THE SACRED CUT, OR GOLDEN SECTION

PHI is an unending ratio. This mystical number is as old as history. What is known as normal phyllotaxis or leaf distribution in plants is represented by a curious system of numbers known as a summation series; also called the Fibonacci series. The succeeding terms beginning with the lowest whole number are obtained by adding together the two preceding terms.

Thus: 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584 ... etc. This produces the ratio of PHI or 1.6180334 ... etc., which is obtained by dividing any one term of the summation series by its predecessor. The higher the terms, the closer the ratio to PHI.

For example:

	A	1	1	2/1	= 2.0000000	
	B	2	2	3/2	= 1.5000000	
	C	3	3	5/3	= 1.6666666	
	D	4	5	8/5	= 1.6000000	
	E	x	5 - 8	13/8	= 1.6250000	
	F	x	6 - 13	21/13	= 1.6153846	
	G		7 - 21	34/21	= 1.6190476	
	H		8 - 34	55/34	= 1.6176470	
	I	x	9 - 55	89/55	= 1.6181818	- PHI - BEGINS
	J		10 - 89	144/89	= 1.6179775	1999
	K	x	11 - 144	233/144	= 1.6180555	X
	L		12 - 233	377/233	= 1.6180257	144000 C.P.S.
	M	-	13 - 377	610/377	= 1.6180371	ONE SOUND FREQUENCY
	N		14 - 610			
	O		15 - 987			

IN THE BEGINNING THE WORD (26 LETTERS) &

JES-US - 5
1/2 ALPH - M

55 'NO. OF MAN.'

THE 'SOUND' CHANGES FROM.

- The series continues on and on. PHI is also known as the SACRED CUT. This is represented by the fact that it is the exact ratio in which we can divide a line AC by B in such a manner that AC/AB = 1.618 ... is the same as AB/BC = 1.618 ... This magic ratio was used in the Renaissance by all the great Masters and is considered to be the most aesthetic proportion. The body of man is divided by this ratio. The sacred five pointed star's diagonals divide each other by this ratio. These proportions occur throughout nature.



PI expressed in terms of PHI is as follows

$$\phi^2 = \phi + 1 \quad 1.618033989^2 = 2.6180339 \times 1.2 =$$

$$\pi = \phi^2 \times 6/5 \quad 3.141640788$$

TRUE

$$\pi = 3.141592654 \quad \% \text{ error} = 0.0015\%$$

the radius, the higher the rotational velocity. It is another example of how Nature moves from the outside inwards in terms of increasing energetic effect and of generating power. In the eye of the tornado or a cyclone, there is an upward movement - suction. Suction and pressure are the two forces here interacting, each being the counterpart of the other, the opposite sides of the same coin which, taken together represent the wholeness or united, undivided phenomenon. They could thus be viewed as two discrete entities emanating from a single generative principle.

In terms of dialectic thinking, which seeks to fathom the extremes of logical thought, they could also be interpreted as the two counter-concepts of argument (thesis) and counter-argument (antithesis). According to the German philosopher, George W. F. Hegel (1770-1831), dialectic thinking refers "to the process of thought by which such contradictions are seen to merge themselves in a higher truth that comprehends them".¹ The existence of this higher truth or unifying principle, however, appears to have eluded general scientific thinking, which conceives of reality more in terms of laws than mutually interactive reciprocities.

Perhaps therefore we need to adopt a more dialectic approach to our appraisal of the dynamics and forces of reality. This should encompass both thesis and antithesis, the two apparently conflicting elements that find their synthesis or wholeness in their mutual combination and interaction. However, there seems at present to be what might be called a 'scientific Berlin Wall' separating these opposing, but complementary magnitudes (see fig. 4.6), which in the light of the above should perhaps be advantageously dismantled as its namesake already has.

Dialectically speaking we could therefore say that: **heat x cold = unity = the wholeness.**

Indeed it requires no great stretch of the imagination to realise that the condition of health, reproductive and otherwise, of all life-forms is founded on the delicate balance between heat and cold specific to the organism in question. Some types of fruit and seeds cannot germinate properly unless they have been exposed to frost. Life therefore is

not merely a question of heat, but also of inseparable counterpart - cold.

Fig. 4.6 lists a few examples of such reciprocities, in which, generally speaking, there is the quantifiable aspect and antithesis a quantifiable aspect, both of which are represented in the equation formulated by Walter Schaubberger, which incidentally is the simplest equation for the rectangular hyperbola (see fig. 11.4):

$$\frac{1}{n} \times n = 1 = \text{unity} = \text{wholeness}$$

where $1/n$ stands for the quantitative aspect and n for the qualitative aspect and n itself equal to any integer or whole number from zero to infinity.

Thus if $n = 2$, then $\frac{1}{2} \times 2 = 1$
 or if $n = 3$; $\frac{1}{3} \times 3 = 1$
 or if $n = 1,000,000$; $\frac{1}{1,000,000} \times 1,000,000 = 1$

The answer is always 1, echoing Albert Einstein's observation that "Nature is the embodiment of the simplest conceivable mathematics", and indeed the actual mathematics could not be simpler, representing as it does the reciprocal relationship between the two terms. Viktor Schaubberger maintained that any given phenomenon always has its counterpart or counter-aspect, and both components should always be taken into account. The manifestation of all natural forces is the result of the interaction between two opposites, neither of which ever reaches totality in the lower realm of duality (the physical world), for they can only become total when they unite within the unifying, non-physical, governing principle.

In the physical world each component of a pair of forces can only attain 96% of its boundary or extreme condition. Once the point is reached, then its opposite force gradually begins to gain strength. It is an action similar to the Chinese concept of Yin and Yang. When Yang reaches the point of exhaustion (96% of its capacity), then Yin intervenes and gradually increases its strength. As a case in point, in the creation of

DIALECTIC UNITY

OR WHOLENESS

THESIS x ANTITHESIS = SYNTHESIS

Dialectic thinking is imperative for comprehension of the whole.

Such thinking may best be represented by the simplest equation for the hyperbola, formulated by Walter SCHAUBBERGER:

$$[n = \text{zero}] \quad \frac{1}{n} \times n = (1) \text{***} = \text{DIALECTIC UNITY} \quad (n = \text{infinity})$$

The scientific BERLIN WALL, dividing what are not LAWS, but RECIPROCAL CONSTANTS

$\frac{1}{n}$	n	
MATTER	SPIRIT (Energy)	= (1) - dialectic unity.
EGOISM	ALTRUISM	= (1)
ZERO	INFINITY x	= (1)
CHAOS	ORDER x	= (1)
QUANTITY	QUALITY	= (1)
SPECIALISATION	GENERALISATION	= (1)
ANALYSIS	SYNTHESIS	= (1)
CONSERVATION	ANTI-CONSERVATION	= (1)
GRAVITATION	LEVITATION	= (1)
CENTRIFUGENCE	CENTRIFUGENCE	= (1)
ELECTRICISM	MAGNETISM x	= (1)
EXPANSION	IMPRESSION	= (1)
PRESSURE	SUCTION	= (1)
LIGHT	DARKNESS	= (1)
HEAT	COLD	= (1)
OXYGEN	CARBONES	= (1)
YANG	YIN	= (1)
MALE	FEMALE	= (1)
POSITIVE	NEGATIVE	= (1)
POSITIVE T-G	NEGATIVE T-G	= (1) T-G = temperature gradient
DISTANCE	INFORMATION DENSITY	= (1)
STRIKELength	PITCH	= (1)
WAVELENGTH	FREQUENCY x	= (1)
STRAIGHT LINE	POINT x	= (1) Extreme values of the circle x
RADIUS	CURVATURE	= (1)
RADIUS	ANGULAR VELOCITY	= (1)
TANGENT 0°	COTANGENT 0°	= (1)

RIGHT SIDE
 $\frac{2}{3}$ TO $\frac{3}{2}$ ON
 LEFT SIDE

***The symbol (1) represents a sometimes inexpressible unity.

In the physical universe, each of the above aspects can only attain 96% of its extreme potential. Were one ever to reach its extreme, transcendental state, then its counterpart would cease to exist in the physical world also. Both would then become transcendental and thus mutually indistinguishable and inseparable.

CALIFORNIA, JULY 1988

Fig. 4.6